1999-2000

Budget for Current Operations

UNIVERSITY OF CALIFORNIA
Office of the President
October 1998

THE PRESIDENT'S MESSAGE

With the extraordinary support of the Legislature and the Governor we start the last year of the decade strong and poised to meet the challenges of the next century. The current year's budget is spectacular – the most generous budget the University has had in many years – and I am deeply indebted to the Governor and the Legislature for their support.

The funding levels provided in the budget are eloquent testimony to the State's commitment to providing Californians with access to an outstanding higher education. The budget also provides a strong affirmation of the University of California's role as a research university and the importance of UC research in sustaining the California economy. In addition, the Governor and the Legislature have placed a general obligation bond measure on the November ballot which, if approved by the voters, will help fund the University's critical facilities needs over the next four years. We will use these funds to ensure that our buildings are safe and can withstand earthquakes; that our research and instructional facilities meet the needs of changing technologies and evolving academic programs; and that our campuses can accommodate substantial enrollment growth, particularly in the crucial fields of engineering and science.

The University stood strong through a decade marked by a deep and prolonged recession, staggering unemployment rates, and budget cuts of nearly $500 million. We were able to do so because of the commitment of the entire University community to stay the course, and the commitment of the State to work with us to ensure the educational opportunity so essential to California's future.

After years of budget cuts and fee increases, the University has achieved a level of stability. There have been no mandatory systemwide fee increases since 1994-95, and in the current year fees for undergraduate resident students will be reduced by five percent – a dramatic turnaround from the nearly doubling of fees in the early part of the 1990s.

UC has remained excellent and affordable over the past four years because of a remarkably successful compact between UC and the State, an agreement marked by mutual commitment and accountability. We are continuing to work with the Governor on a new compact that would build upon the success of this first funding agreement. A new compact would provide the University with the fiscal resources needed to maintain quality and grow. In return, the University is prepared to make important commitments that range from guaranteeing students access to the University and to the classes they need to graduate, to ensuring the productivity of our faculty. The Governor recently stated his intention to unveil a new compact this Fall that "maintains California's commitment to excellence for the University of California and the California State University Systems."

We are continuing to build other avenues of fiscal support. For a fourth consecutive

year, the University has raised a record amount in contributions from alumni and friends, a milestone which continues our distinction as a leader in philanthropy among the nation's colleges and universities. At the federal level, the Congress and the President have placed a renewed emphasis on university research and appear committed to providing substantial increases in funding, especially for those agencies that support much of our faculty's research.

The goal's of our proposed 1999-2000 budget are California's goals – to educate a growing and diverse population, prepare young people for a knowledge-based economy, and find answers to some of the most pressing problems faced by our society today. 1999-2000 will be a year of doing and a year of planning.

We have an ambitious agenda. Of paramount importance is meeting increased student demand, driven in part by California's robust economy. This year's budget provides funding for 6,000 more students than were funded in the previous year. We know that there are even larger numbers of new students on the way – 45,000 or more – and we need to be prepared to continue providing a space for every eligible California high school graduate wishing to attend the University of California.

In the decade ahead we will open a tenth campus, the first new campus in over thirty years. We will look closely at enrollment projections and our ability to accommodate student demand within the constraints of our approved long-range development plans. We will explore alternatives for accommodating future growth, whether it be by making better use of technology or developing off-campus centers.

Working with our colleagues in K-12 education, the California Community Colleges, and the California State University we will intensify our efforts to meet another challenge: improving the academic preparation of California's K-12 population, a population marked by increasing diversity and disparate educational opportunity. Bolstered by a stunning increase in funds for outreach, we will build upon the strategies of our successful student-centered academic programs, such as MESA and Puente; while also embarking on new strategies. Among those strategies will be the development of at least one on-campus charter school and expanded partnerships with K-12 schools that seek to involve teachers, parents and students in a common commitment to raise academic achievement throughout California. We will turn to the expertise of our faculty to explore the root causes of poor educational performance, and we will rigorously evaluate our programs to ensure we are accomplishing our goals.

The University will also aggressively reach out and expand its teacher preparation programs. We must use our resources to train more teachers, especially in areas such as math and science where there is a shortage of qualified K-12 teachers. We will offer incentives for students with bachelor's degrees to pursue careers in education by shortening the time it takes to earn a credential and engage in classroom instruction.

Finally, the University will continue to make significant contributions to California's economic well-being through research programs and attention to State workforce

needs. California has the most knowledge-based and technology-driven economy in the world. The University is investing in research initiatives to push the frontiers of discovery. Building new facilities to accommodate targeted growth in engineering and computer sciences, two fields directly connected with California's future prosperity, will be essential to our success. And we are exploring new ways to respond to the continuing education needs of California's adult population as it adapts to this changing economy.

Educating the State's citizenry and continuing to add to the society's body of knowledge remains at the core of our mission. The University will work vigorously – with the State, our colleagues in education, and the business community – to achieve our goals: California's goals.

Richard C. Atkinson, President
October 1998

UNIVERSITY OF CALIFORNIA

FOREWORD

The University of California was founded in 1868 as a public, State-supported land grant institution. It was written into the State Constitution as a public trust to be administered under the authority of an independent governing board, The Regents of the University of California. There are nine campuses: Berkeley, Davis, Irvine, Los Angeles, Riverside, San Diego, San Francisco, Santa Barbara, and Santa Cruz. All of the campuses offer undergraduate, graduate, and professional education; one, San Francisco, is devoted exclusively to the health sciences. 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 in all parts of the State. The University's Agricultural Field Stations, Cooperative Extension offices, and the Natural Reserve System benefit people in all areas of California. In addition, the University provides oversight of the three Department of Energy Laboratories. In addition, the University is planning for a tenth campus in Merced.

Organization of The Regents' Budget

The Introduction and Summary provide an overall perspective on the major policy issues, specific objectives, and priorities for 1999-00. The subsequent sections discuss programs in more detail and provide fuller justification of requests for funding increases. The budget is structured to accommodate the reader who does not go beyond the Executive Summary or who wants information on selected topics only. Therefore, important themes are repeated throughout the budget.

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INTRODUCTION TO THE 1999-00 BUDGET

The University's annual budget is a statement of resources needed to maintain access and ensure the continued excellence of University programs. Funding requests in the budget reflect both long-term and short-term academic program objectives that have been identified and reaffirmed in the University's ongoing planning process. The budget is developed through a decision-making process that involves faculty, students, administrators, and The Regents.

University Missions

The University's fundamental missions are teaching, research, and public service. Undergraduate instructional programs are available to all eligible California high school graduates and transfer students from the California Community Colleges who wish to attend the University of California. The California Master Plan for Higher Education designates the University as the primary State-supported academic agency for research with exclusive jurisdiction in public higher education over instruction in law and graduate instruction in medicine, dentistry, and veterinary medicine. Sole authority among public higher education institutions is also vested in the University to award doctoral degrees in all fields, except that joint doctoral degrees with the California State University may be awarded.

The Master Plan was comprehensively reviewed in March 1985, first by a blue-ribbon citizens' commission and later by the Joint Legislative Committee for Review of the Master Plan for Higher Education. Subsequently, the Legislature approved and the Governor signed legislation that reaffirms the University's missions.

University Programs

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.

UC faculty are well represented in the membership of prestigious organizations such as the National Academy of Sciences and among winners of the Nobel Prize and Guggenheim Fellowships. In this past year three UC faculty were awarded the National Medal of Science, the nation’s highest honor for groundbreaking scientific research. In May of 1997 eleven University of California scientists and researchers were among 60 new members elected to the National Academy of Sciences, bringing the University’s total membership in the academy to 267. Since 1939, UC professors and researchers

have been awarded 32 Nobel Prizes, more than any other public university worldwide. In 1997, two UC professors won Nobel Prizes, one for chemistry and another medicine. The Fields Medal, an award widely regarded as the Nobel Prize of mathematics and given once every four years, was awarded to four UC faculty this past year.

In their 1997 book, *The Rise of American Research Universities: Elites and Challengers in the Postwar Era*, authors Graham and Diamond found that UC is in the forefront of research productivity and in creating new knowledge. The book ranked Berkeley number one, and Santa Barbara number two, with the six other general campuses ranked in the top 26 among the nation's public research universities. The Graham-Diamond book reinforced the findings of the most recent rankings of the prestigious National Research Council. Analyzing the doctoral programs of 274 universities, the Council ranked over 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.

In an unprecedented survey, the National Science Foundation (NSF) showed that the University of California and its affiliated national laboratories produce more research leading to patented inventions than any other public or private research university or laboratory. This study, which is the most thorough examination to date of the scientific foundation of American patents, highlights the importance of publicly financed scientific research.

All of these distinctions are evidence of the University's preeminence 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 the benefits to the State of supporting a public university of national and international distinction. These benefits are discussed in the sections that follow.

Instruction

Instructional programs at the undergraduate level transmit knowledge and skills to students and also develop their appreciation of the creative process and their ability to acquire knowledge and evaluate evidence outside the structured classroom environment. At the graduate level, students experience with their instructors the processes of developing and testing new hypotheses and fresh interpretations of knowledge. Education for professional careers, grounded in an understanding of relevant sciences, literature, and research methods, provides individuals with the tools to continue intellectual development over a lifetime and to contribute to the needs of a changing society.

Research

As one of the nation's preeminent research institutions, the University provides a unique environment in which leading scholars and promising students strive together to expand fundamental knowledge of human nature, society, and the natural world. The University's basic research programs 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. A stimulating research environment at the University attracts outstanding faculty, enhancing the quality of education available to students at all levels. The University, with the support of the State, is now expanding its research partnerships with industry.

Public Service

Through its public service programs, the University disseminates research results and translates scientific discoveries into practical knowledge and technological innovations that benefit California and the nation. Through these programs, the faculty and students apply their knowledge and special skills that help to solve the problems of today’s society.

SUMMARY OF THE 1999-00 BUDGET REQUEST

The University's 1999-00 budget plan, which builds upon the successful strategies of the last several years, was developed in anticipation of a new four-year compact with higher education that is currently being negotiated with the Governor. A new compact would provide the University with fiscal stability and the resources needed to maintain access to an affordable quality education.

The goals of the University's 1999-00 budget plan are to fund enrollment of an additional 4,000 students, which represents a 2.7 percent workload growth; maintain competitive faculty salaries; continue to fund the University's merit program which is key to recruiting, retaining and rewarding the best faculty and staff; and to provide for other inflationary adjustments. The 1999-00 budget plan provides funding to operate and maintain new space as well as increased funding for deferred maintenance, ongoing building maintenance, instructional technology, and instructional equipment.

The 1999-00 budget plan includes funding, in addition to increases in the base budget that are anticipated to be part of a new compact, for several initiatives including: (1) funds to offset the five percent reduction in mandatory systemwide fees for graduate academic students in 1999-00, consistent with SB 1896 (Peace) which was signed by the Governor on September 22nd; (2) a multi-year plan to address the critical resource needs of our libraries; (3) a major technology initiative to accelerate campus access to the Internet2 for educational purposes and cooperative research efforts with private industry; (4) expansion of the University's Cooperative Extension programs designed to take the results of agricultural research from the University's laboratories to the State's agricultural industry; (5) expansion of the successful Industry-University Cooperative Research Program, consistent with the University's original plan; and (6) the development of a statewide center to provide access for research and educational purposes to the data being collected on California's environment through remote sensing technology.

If the State's fiscal situation permits, the University will request that the State continue to provide the $70 million that was appropriated in 1998-99 to support deferred maintenance, instructional technology, instructional equipment and library materials – core needs of the University.

Consistent with the provisions of Assembly Bill 1318 (Chapter 853, Statutes of 1997), which reduced mandatory systemwide fees for resident undergraduates by five percent in 1998-99 and froze fees for California residents enrolled in graduate academic and professional school programs at 1997-98 levels for two years, the 1999-00 budget does not include increases in mandatory systemwide fees. Conforming with legislative intent, the University's budget plan includes a request that additional state funds be provided to replace the revenue that would have been generated if these fees had been increased.

The University's budget request, which is described in this document, is the minimum needed to maintain quality, to be able to offer a space to all eligible California high school graduates, and to provide the classes students need to graduate. The budget plan does not address all of the University's pressing financial problems, nor does it seek funding to recover losses incurred during the early 1990s.

Historical Perspective

The University of California experienced budget reductions of about 20 percent 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 percent. 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 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 came virtually 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 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. A complicated mix of political and demographic forces and 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.

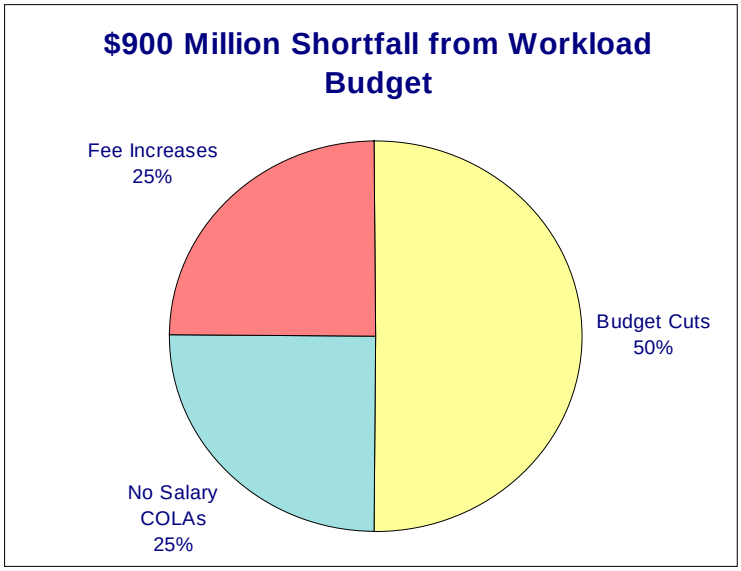
1990-91 Through 1993-94

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 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 had to make budget cuts totaling $433 million, equivalent to roughly one out of every five dollars in its State general fund budget in 1989-90. In addition, normal salary cost-of-living increases could not be provided for employees and salaries were cut on a temporary basis one year. Student fees were raised, though significant increases in financial aid helped to mitigate the impact.

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 there had been inflation of over 25 percent and enrollments had grown by about 6,500 students in the

interim. Or consider that the University's budget would be 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, initially, in ways that reflected the limited nature of its options in the short term. As illustrated in Display 1, about half of the loss was taken through budget cuts, approximately another quarter by providing no salary cost-of-living increases for employees, and the remaining quarter was made up through student fee increases accompanied by increases in student financial aid.

DISPLAY 1



Display 2 shows that University budgets were cut by $433 million. Of the total cut, $53 million represents a cut made in 1994-95 in order to restore base salary levels following a one-time salary reduction in 1993-94. The University's February 1994 report, Program Impact of Budget Reductions, provides detail on the impact of the budget cuts. During this time, the University's general fund workforce declined by a net total of around 5,000 full-time equivalent (FTE) employees. While much of this decline occurred through early retirements, a more humane approach than layoffs, the result was that many fewer people were 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 maintenance. Administration, especially, was assigned deep cuts both on the campuses and in the Office of the President. In addition, purchase of scholarly journals

DISPLAY 2

Permanent Cuts to Campus and Office of the President Budgets
1990-91 through 1993-94 (Including impact on 1994-95)

			Cuts (millions)
1990-91	5% cuts in research, public service, and administration.	$	25
1991-92	Workforce reductions in both instructional and non-instructional programs; cuts in nonsalary budget; undesignated cut.		120
1992-93	Permanent cut of $200 million phased in over two years.		200
1993-94	Reductions in campus and Office of the President budgets, resulting in further workforce reductions. Part of the cut was based on hospitals and health sciences clinical programs; remainder of the cut was to be accommodated through improved management efficiencies.		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

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 California Master Plan for Higher Education by continuing to offer a place to all eligible California resident students seeking admission at the undergraduate level and to provide the classes they needed.

Display 3 shows that faculty and staff received no cost-of-living salary increase for three years in a row, and in the third year salaries were cut by 3.5 percent for one year. In addition, in 1991-92, staff received no merit increase and faculty merits were delayed for one year.

Display 4 shows that student fees increased by about 125 percent over the four years. However, student financial aid also increased. As shown in this display, financial aid grants from University funds increased by over $97 million on a permanent basis over the four-year period.

The measures described above represented near-term responses to sudden budgetary losses. Recognizing that these cuts would have lasting effects, the University began looking for long-term solutions to maintaining access and the quality of its academic programs.

DISPLAY 3

COLA (Range) and Merit Increases
1990-91 through 1994-94

		% Faculty	% Staff
1990-91	COLA	4.8	5.0
	Merit	2.0	2.0
1991-92	COLA	0	0
	Merit	0	0
1992-93	COLA	0	0
	Merit related to 1991-92	2.0	0
	Merit for 1992-93	2.0	2.0
1993-94	COLA	0	0
	Merit	2.0 (full year)	2.0 (half year)
	Pay Reduction*	-3.5	-3.5

*1993-94 only: base salary levels were restored in 1994-95.

DISPLAY 4

Undergraduate Resident Student Fees
Registration, Educational, and Miscellaneous Campus Fees
1990-91 through 1993-94

1989-90 Total Fees	$1,634
1990-91 increase	+186
1991-92 increase	+666
1992-93 increase	+558
1993-94 increase related to 1992-93 budget cut (Implementation deferred to 1993-94)	+455
1993-94 increase related to 1993-94 budget cut	+175
1993-94 average increase in campus-based fees	+53
1993-94 Total Fees	$3,727

Amount of new financial aid provided from UC sources

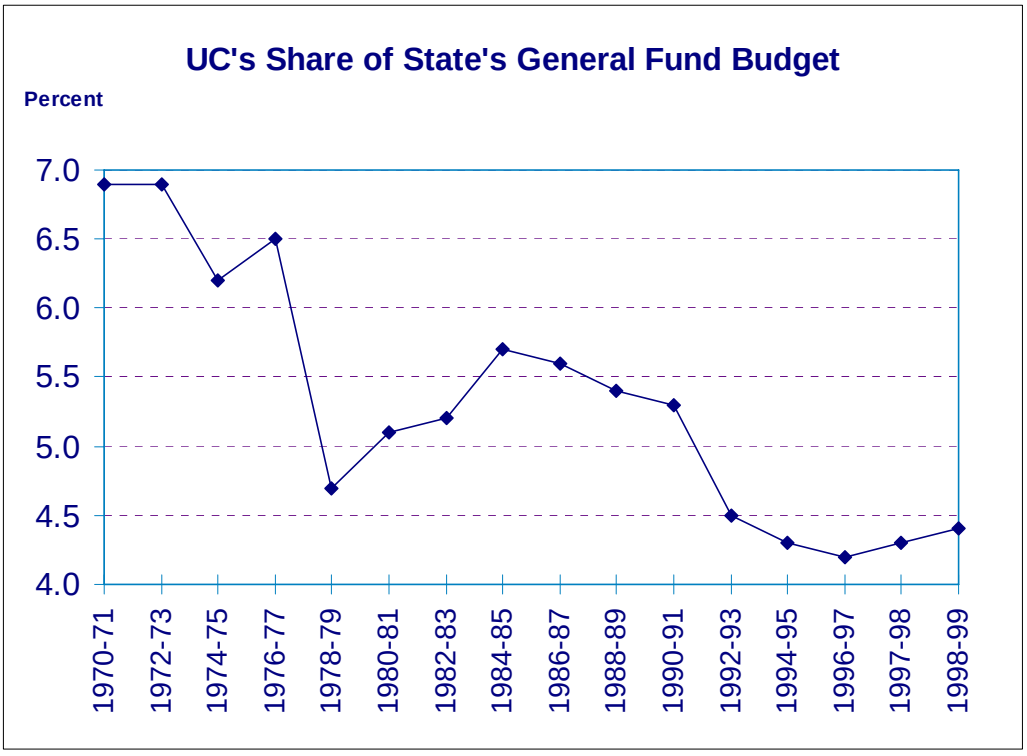
	Amount ($ in millions)
1990-91	$5.9
1991-92	26.0
1992-93	26.6
1993-94	39.1
Total	$97.6

1994-95

In 1994-95, after four years of steady erosion, the University finally stopped losing fiscal ground. The State provided the University with a budget increase instead of a decrease for the first time in four years, an increase of about three percent 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 (3%) was provided for the first time since 1990-91. The student fee increase was held to ten percent through a compromise agreement to fund deferred maintenance with debt financing. Increases in financial aid accompanied the fee increase, helping to offset the impact on needy students. 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 percent. A one-time shift of State-funded Clinical Teaching Support from the teaching hospitals, recognizing temporary net gains, helped to meet urgent one-time needs in several critically underfunded areas such as deferred maintenance, instructional equipment replacement, and library books.

While the 1994-95 budget represented a substantial improvement over the previous years, the University nonetheless remained in a precarious financial condition. Its share of the State general fund budget was at the lowest point in 20 years (see Display 5). It was almost as low in the late 1970s and early 1980s, but in those days it

DISPLAY 5



was possible to recover from a low point. Recovery seemed much less likely in 1994-95 given the stalled California economy and the increasing share of the State budget consumed by workload growth in prisons, health and welfare programs, the K-12 schools, and the community colleges. Adding to the problem were the constitutional or statutory protections most of those programs enjoy, compared to higher education's unprotected status.

Governor's Four-Year Compact with Higher Education: 1995-96 Through 1998-99

A major turning point came with the introduction of the Governor'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 1995 Budget included a compact with higher education covering the four years through 1998-99. Its goal was to provide fiscal stability and allow for growth through a combination of State general funds and student fee revenue. The compact committed to provide general fund budget increases averaging four percent a year over the four year period ending in 1998-99. The compact included general student fee increases averaging about ten percent a year as well as 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 budget. Additional financial aid was to be provided through the State's Cal Grant Program. The compact provided additional funds to cover debt service related to capital outlay projects and deferred maintenance.

Based on the premise that there is a continuing need for efficiencies in order to maintain student access and program quality within available resources, the compact also 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.

In January 1995, the University developed a 1995-96 budget plan based on the Governor's compact. The plan received widespread support in the Legislature and was generally approved. The only change concerned the proposed ten percent student fee increase. A compromise agreement was worked out among the Governor, the

Legislature, and the University which provided that there would be no general student fee increase in 1995-96; instead, an additional $28.5 million in State funds was provided to help offset the loss of fee revenue. The added funds represented about three-quarters of the revenue that would have been generated by a ten percent student fee increase net of financial aid, leaving the University with a budget shortfall of $9.5 million. This shortfall was dealt with through one-time actions, pending restoration of the funds in 1996-97.

1996-97 Budget

The University's 1996-97 budget plan was developed on the basis of the compact; and again, received widespread support in the Legislature. In addition to providing the University with $82.9 million under the compact, the Legislature and the Governor provided an additional $27 million in State general funds so that UC students would not have a general fee increase in 1996-97. The 1996 State Budget Act also provided funding, above the compact, for several high priorities. These priorities included $5 million for the first phase of the Industry-University Cooperative Research Program, $1 million for the California Supercomputer Center, and $1 million to expand the University's academic outreach programs. The 1996 State Budget also included $147 million in general obligation bonds to support the University's capital outlay program and an additional $5 million in general obligation bonds for high priority deferred maintenance projects.

1997-98 Budget

The University's 1997-98 budget, the third consecutive budget to be developed on the basis of the compact, received widespread support by both houses of the Legislature during the budget process. The 1997-98 budget provided the University with $78.5 million under the compact and an additional $37 million in State general funds so that UC students would not have a general fee increase for a third consecutive year. The 1997 State Budget Act also provided funding to support the California Supercomputer Center ($2 million), expand student academic outreach ($1 million), and make permanent the $5 million for the Industry-University Cooperative Research Program. In addition, funds were provided for several initiatives. These initiatives included $4.9 million to begin planning for the tenth campus and to expand academic programs in the San Joaquin Valley, $4.5 million for the UCSF-Fresno Rural Health Initiative, and $1.1 million for other legislative initiatives. The 1997 State Budget also included $150 million in State general obligation bonds to support the University's capital outlay program and an additional $21.7 million in State general obligation bonds to be used to match Federal Emergency Management Agency (FEMA) funds to replace the earthquake-damaged medical center at UCLA.

As a result of a court-ordered payment to the Public Employees Retirement System (PERS), the State found it necessary to make last-minute cuts of more than $1.5 billion. As a result, the University's 1997-98 budget included a one-time undesignated cut of $9.5 million.

1998-99 Budget

The University's 1998-99 budget plan was developed on the basis of the four-year compact with higher education and recognized the enactment of AB 1318 (Ducheny) which provided for a five percent reduction in mandatory systemwide fees for California residents enrolled in undergraduate programs.

The final 1998-99 State Budget Act provides the University with an increase of $270 million in permanent State general funds and an additional $70 million in one-time funds to address critical infrastructure needs. As a result, the University's 1998-99 State general fund budget totals $2.519 billion, an increase of $340 million (15.6% increase) over 1997-98. Because a portion of the State funding increase offsets a loss of student fee revenue, the University's real spending from a combination of State funds and fee revenue will rise 11.4 percent in 1998-99.

In addition to providing the University with approximately $93 million under the compact (includes restoration of the one-time undesignated cut of $9.5 million), an increase of $9.5 million for debt service on capital outlay projects and annuitant health benefits, and $62 million to "buy out" a proposed fee increase of 10 percent and to reduce mandatory systemwide fees by five percent for resident undergraduate students, the Legislature and the Governor augmented the University's 1998-99 budget plan for a number of very important programs including:

- $23 million to fund the 3,200 students the University had projected it would overenroll in 1998-99; and $6 million to support an additional 800 undergraduate students enrolled in engineering and computer sciences. In total, the 1998-99 budget provides funding to support 6,000 more students than were supported in 1997-98.

- $33.5 million to expand the University's outreach program. This $33.5 million is in addition to the $5 million of University funds the Legislature and the Governor asked the University to reallocate internally, which brings the total increase in outreach funds to $38.5 million in 1998-99. The Governor and the Legislature agreed on a specific expenditure plan for outreach which includes funding for student academic development programs (such as Puente, MESA and EAOP), K-12 school partnerships, outreach programs in the Central Valley, expansion of services to community colleges to promote transfer, informational outreach, charter schools, professional school outreach, and the long-term evaluation on the effectiveness of the outreach programs. The budget requires a one-to-one match from participating K-12 schools for the student academic programs and for the K-12 school

partnerships. With the $31 million in required matching funds, total outreach spending will be about $137 million in 1998-99, exceeding the University's funding goals recommended by the Outreach Task Force.

- Funding for other important outreach programs includes preservation of the $12.2 million for the California Subject Matter Projects; $1.5 million to expand the UC ArtsBridge program and $1.5 million to expand the Teaching Internships in Math and Science program;

- $6.5 million for the start-up of academic programs and planning for the Merced campus, including $1.5 million in one-time funds to develop satellite learning centers. With this augmentation, the total core funding for the Merced campus will be $10 million in 1998-99.

- Nearly $30 million in new funds to expand the University's research programs including $5 million to increase funding for the Industry-University Cooperative Research Program, bringing State support for this program to $12 million in 1998-99; $16.8 million for medical research related to alcohol and substance abuse; $2.75 million for agricultural research; $2 million for neurodevelopmental research; $400,000 to match federal funds for the International Thermonuclear Experimental Reactor; and $265,000 for enology and viticulture research.

- $2.5 million to increase enrollment at the School of Veterinary Medicine and to establish a clinical site in Southern California; $1 million to help pay for the space needs of the UCSF Fresno Rural Health Program; and, $3 million for other program improvements including research relating to CalWORKS, the Teratogen Information Service and Clinical Research Program, and the Drew School of Medicine.

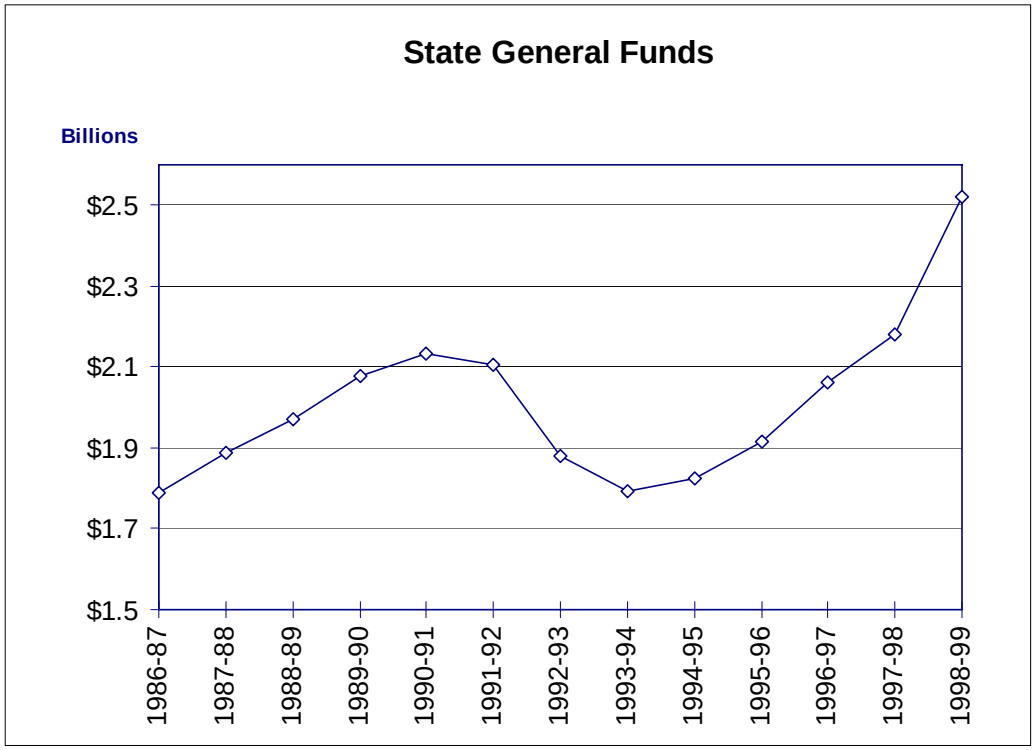
The final 1998-99 budget also includes $70 million in one-time funds for critical infrastructure needs including deferred maintenance, instructional equipment, instructional technology, and library materials.

The increases to the University's 1998-99 budget were the result of being included in the Governor's January budget, proposed by the Governor as part of the "May Revise", negotiated with the legislative leadership as part of the negotiations on the overall State budget, or included as legislative augmentations which were approved by the Governor.

1999-00 through 2002-03: A New Compact

While the University has not recovered the fiscal ground lost in the 1990s, the University was helped enormously by the four-year compact introduced by the Governor as part of his January 1995-96 budget. The compact, which proved to be remarkably successful, provided the University with the fiscal stability needed to begin planning for the future.

DISPLAY 6

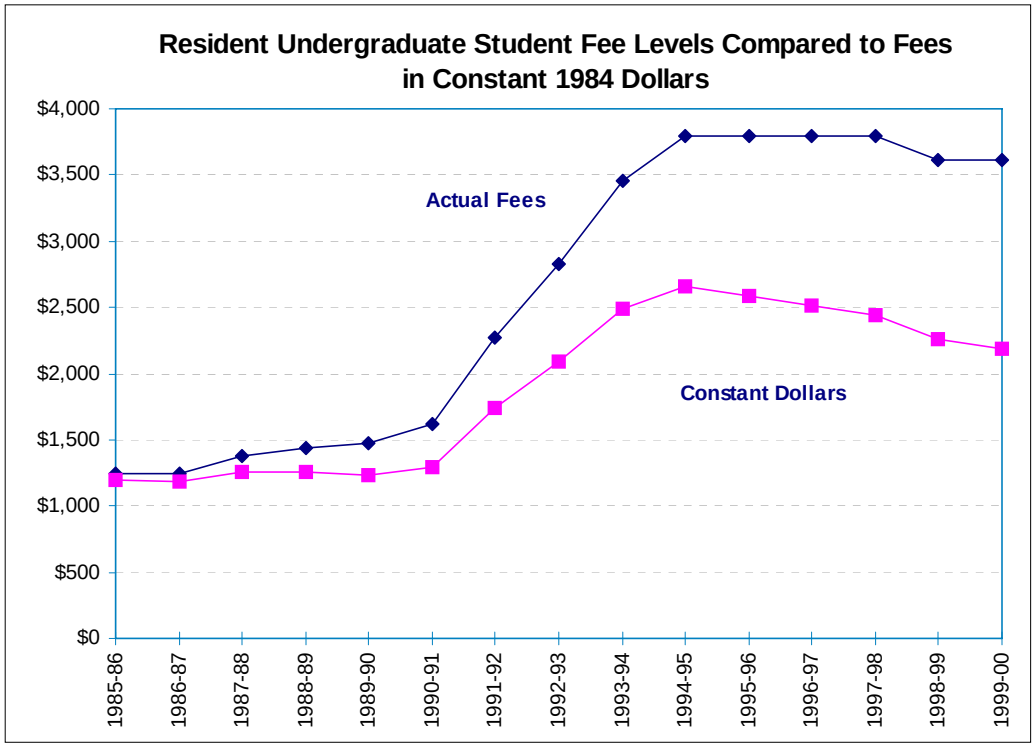


Display 6, which tracks State general funds appropriated to the University since 1986, shows the consistent increases of State general funds received by the University beginning with the 1995-96 budget.

The State has provided funding under the compact that has allowed the University to maintain the quality, accessibility, and affordability that are the hallmarks of California's system of public higher education. Both the State and the University have exceeded their commitments under the compact. The University has enrolled more students than provided for in the compact, and the State has provided the funding. The average time it takes to earn a degree is decreasing. Graduation rates are at an all-time high. Teaching loads for faculty have risen.

The State has provided funding above the level envisioned in the compact to support high priority programs including outreach and research, and to provide students with relief from fee increases. Since the compact, there have been no increases in mandatory systemwide fees, and resident undergraduate students will see a five percent decrease in 1998-99. Display 7 shows what has happened to student fee levels over time.

DISPLAY 7



Recognizing that this compact of mutual commitment and accountability has worked well for UC, students and the State, the Governor is working with the University on a new four-year compact. The discussions include a funding plan which would provide, beginning July 1, 1999, the University with:

- an annual average increase of four percent;
- funding, provided at the agreed-upon marginal cost, for all enrollment growth (which is expected to range from two to three percent annually);
- funds for unavoidable costs including debt service related to capital outlay and annuitant health benefits;
- one-time funding, contingent upon the State's fiscal situation, for high priority needs such as deferred maintenance, equipment and instructional technology;
- funding for special initiatives or programs as approved by the Governor and the Legislature; and,
- $210 million a year for capital outlay, consistent with the $2.5 billion general obligation bond measure on the November ballot (Proposition 1A).

With respect to fees, the discussions regarding a new compact assume annual

increases in mandatory systemwide fees consistent with the growth in the California per-capita personal income, with the caveat that the State could choose to "buy out" proposed fee increases.

In turn, the University would commit to honor several important goals to maintain the quality of academic programs and help California remain competitive in the global economy. These include agreements to:

- continue to admit all eligible California high school graduates wishing to attend the University;
- maintain increased faculty teaching loads to provide students with the classes they need to graduate in a timely manner;
- maintain improved student outcomes with respect to graduation and retention rates;
- maintain competitive faculty salaries, with an emphasis on merit-based salary programs;
- ensure students have a smooth transition from one segment of public higher education to another and increase the number of California Community College students who transfer to the University;
- expand outreach programs to improve the academic preparedness of K-12 students, especially students from disadvantaged backgrounds;
- increase the use of public-private partnerships to further the economic development of the State;
- maintain the physical plant and improve utilization of facilities;
- increase regional collaboration; and,
- place a priority on producing graduates who will meet California's workforce needs, including well-trained teachers and engineers and computer scientists.

Planning for the Longer Term Beginning in 1999-2000

Consistent with its commitment to maintain access under the Master Plan, the University is continuing to focus its planning process on long-term enrollment growth. In 1999-00, the University expects to enroll 151,000 full-time equivalent (FTE) students on the eight general campuses, and is expecting moderate growth of about 2 to 3 percent annually through 2010.

Given the capacity of each campus as defined in their approved long-range development plans (LRDP), the University expects to be able to accommodate 40,000 new students at existing campuses and an additional 5,000 students at the Merced campus. Based on the latest projections of average annual growth, there could be between 5,000 and 10,000 more students than can be accommodated at UC, depending upon the University's success in increasing the number of California Community College students transferring to the University and the projected growth in graduate student enrollment. The University plans to look at a number of options to address this enrollment growth and report to The Regents by February 1999.

Undergraduate projections are based largely on estimates of the number of California high school graduates and the proportion of admitted students who choose to enroll at UC, together with projections of transfer students. On an annual basis, the University monitors the key demographic and financial indicators as well as studies and policy changes that affect enrollment. One factor affecting enrollment projections is the actual rate of UC eligibility of public high school graduates.

This past fall, the California Postsecondary Education Commission (CPEC) completed a new high school eligibility study, based on 1996 high school seniors, which indicates that 11.1 percent of California high school graduates meet all requirements of admission and are fully eligible for the University. CPEC also found that an additional 9.4 percent are "potentially eligible," which means these students are missing some aspect of the admissions requirements. Most of these students are ineligible for admission to the University because they did not take one or more of the required Scholastic Assessment Tests (SAT).

The "potentially eligible" category has created some confusion which has led to some disagreement about the size of the pool from which the University is accepting students. From an admissions standpoint, only those who fulfill all of the requirements are considered. However, no matter how the pool is determined, the University is enrolling about 7.4 percent of California public high school graduates. In the late 1980s, when there was no issue about the size of the eligibility pool, the University enrolled about 7.2 percent of public high school graduates. While the University is committed to making adjustments in eligibility requirements to meet the Master Plan guidelines of accepting the top 12.5 percent of California high school graduates, the University is likely to continue to enroll about 7.4 percent of the California public high school graduates. The faculty, through its Board of Admissions and Relations with Schools (BOARS), is addressing concerns regarding eligibility for freshman admission to the University raised as a result of the CPEC eligibility study and is expected to make recommendations to The Regents in January 1999.

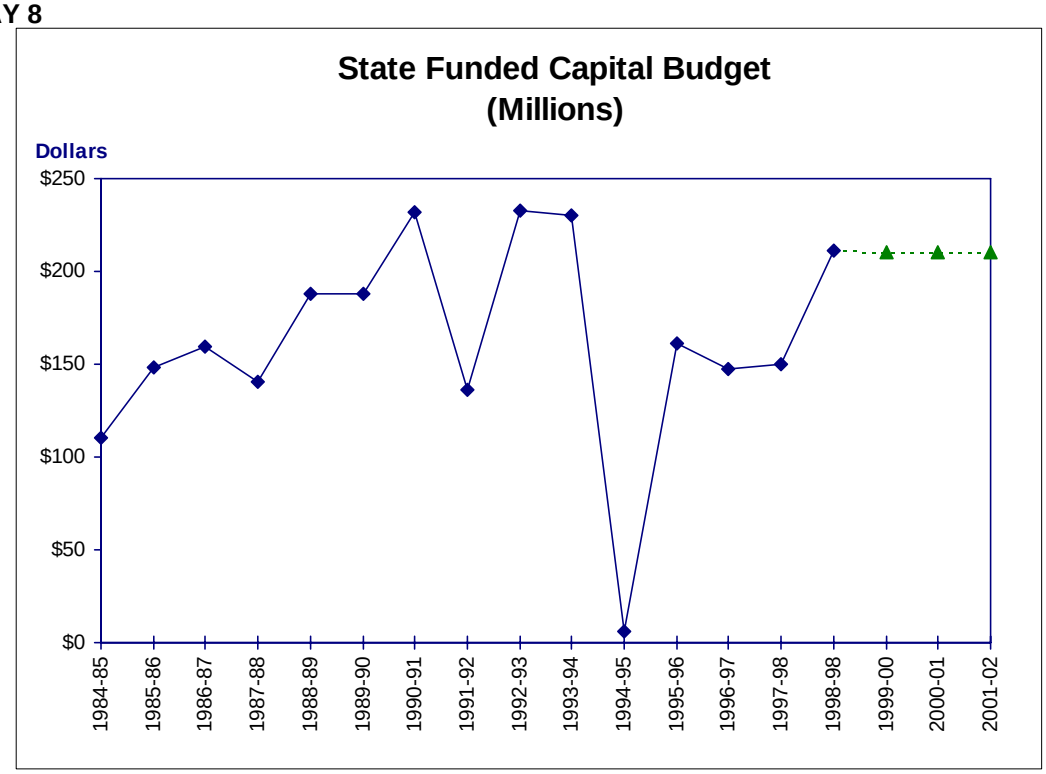
At the graduate level, growth is planned by projecting the needs of higher education, the State and the nation, and balancing that assessment with the State's and the federal government's willingness to provide sufficient resources to support it.

To accommodate the projected enrollment growth, the University at a minimum will

need funding increases to support enrollment growth, maintain competitive faculty salaries, provide salary and merit increases for other employees that maintain the University's merit program, and meet fixed cost increases and inflation in the nonsalary budget.

The University is very concerned that the capital resources will not be sufficient to support the renewal and modernization of existing facilities and to accommodate growth. The Legislature and the Governor have placed a measure on

DISPLAY 8

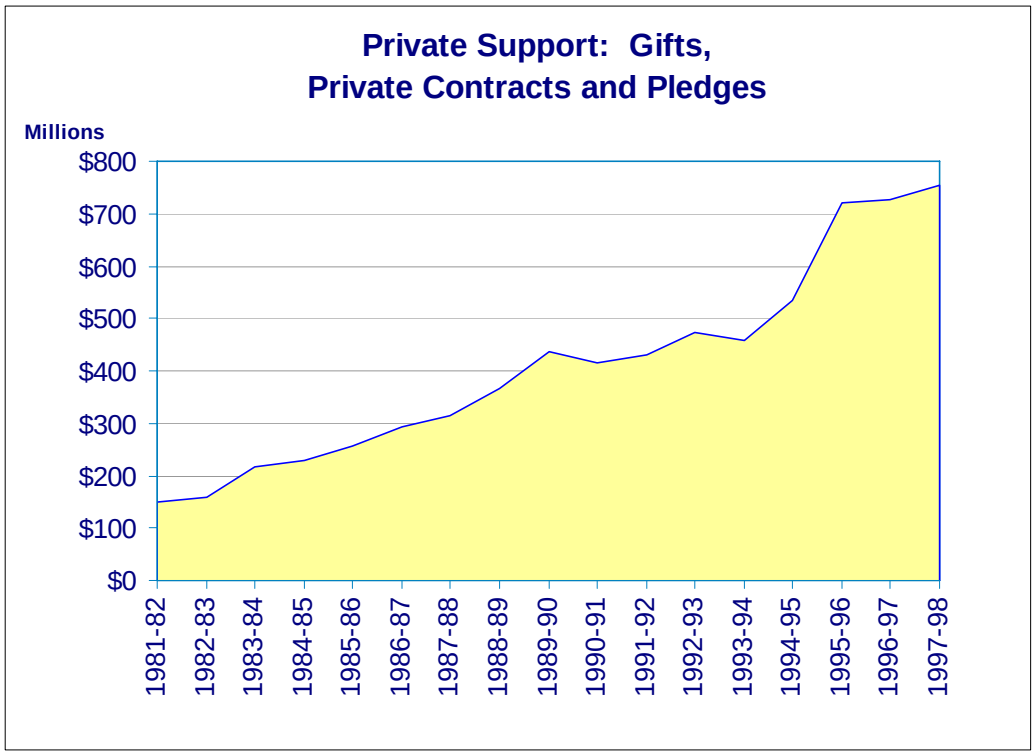


the November ballot that would provide higher education with $2.5 billion in general obligation bonds over four years. The University's share will be about $210 million a year. While this level of funding is substantially more than the $150 million (see Display 8) a year the State has been providing to support the University's capital improvement program, it is less than the $250 million a year the University needs from the State.

The University has already recognized that the State would not be able to meet the full annual capital outlay needs, estimated to be about $400 million, and has committed to meeting a portion of this need through private fundraising and by using a portion of the increase in State and UC general funds to pay for debt service on long-term financing. The University is concerned that the $210 million a year that will be available for capital outlay, assuming the voters approve Proposition 1A in November, will leave a number of the campuses short of adequate space needed to accommodate projected enrollment growth.

The University continues to be aggressive in searching out and developing non-State revenue sources, particularly private funds. As shown in Display 9, the University received more than $700 million in gifts, private grants and pledges (note: these are not expenditures) for the third consecutive year in 1997-98.

DISPLAY 9



While there is support at both the executive and congressional level for significant increases in federal research funds, uncertainty about the proposed source for the funding increases leaves the actual outcome in doubt. Great concern remains with respect to federal funding for the University's teaching hospitals. Increases in the rate of federal Medicare and Medicaid funding provided for educational institutions are expected to be significantly less than previously authorized.

Overview of the 1999-00 Budget Request

This budget document discusses how the base budget is spent as well as the need for funding increases. As indicated earlier, University budgets have already been cut by a total of $433 million and additional budget savings totaling $40 million related to productivity improvements have been made. This budget does not seek to restore this funding nor does it seek to solve all of the University's pressing financial problems.

Some of these needs – such as funding for libraries and technology – are discussed in terms of high priority initiatives that would be funded in addition to increases in the base budget that are anticipated to be part of a new four-year compact.

To the extent the State has the available resources, the University will also request that the $70 million provided in 1998-99 for deferred maintenance, instructional technology, instructional equipment, and library collections be continued in 1999-00.

Display 10 identifies the components of the 1999-00 request for a budget increase totaling $189 million for fixed costs, workload and program growth anticipated to be funded as part of a new compact. Each component is discussed in more detail below. The display also identifies proposed fund sources to meet the basic budget request, including an increase in State general funds of $144 million comprising: (1) $94.4 million which represents a four percent increase to the base budget; (2) $31.6 million to fund enrollment growth at the agreed-upon marginal cost, and (3) $18 million to offset the revenue associated with holding fees constant for another year.

Also included in the budget is a proposal to increase nonresident tuition by 4.5 percent ($420) which is approximately the estimated growth in the California per-capita personal income. Statewide policy calls for consideration of the following in setting the level of nonresident tuition: (1) the total nonresident charges imposed by the public salary comparison institutions and (2) the cost of instruction. With a $420 increase, total fees and tuition charged to nonresident students at the University will continue to be less than projected tuition and fees at the public salary comparison institutions.

The total requested budget increase from all fund sources is about 5.8 percent when calculated on a base that includes programs funded from State and UC General funds and student fees (Educational Fee, University Registration Fee, and the Fee for Selected Professional School Students).

FIXED COSTS AND ECONOMIC FACTORS

Continuation Cost of 1998-99 Salary Increases

The 1998-99 budget includes funding to support an average salary increase of two percent for University employees and an additional 2.5 percent parity salary increase

DISPLAY 10

UNIVERSITY OF CALIFORNIA
1999-2000 Budget Request
($ millions)

1998 99 State General Fund Budget (estimate)	$2,359 (a)
1998-99 State and UC General Fund Budget (estimate including student fee income)	3,269 (a)

PROPOSED INCREASES IN EXPENDITURES

Fixed Costs	
Continuation costs of 1998-99 salary increases	$15.4
Merit increases for faculty and staff	37.1
Funds equivalent to a 2% cost-of-living salary adjustment for faculty and staff	33.3
Market adjustment for faculty, cooperative extension specialists, and information technology professionals	4.8
Funds to support increases in benefits costs for faculty and staff	6.0
Price increase of 3% for non-salary budgets	18.8
Workload and Program Growth	
Enrollment growth (4,000 FTE students)	
State funds	$31.6
Student fee funds (including financial aid)	14.5
Operation and maintenance of new space	3.0
Professional school expenditures (including financial aid)	2.5
Deferred maintenance (debt service)	6.0
Ongoing building maintenance	4.0
Instructional technology	6.0
Instructional equipment	6.0
TOTAL increase in expenditures (State and UC General Funds)	***$189.0 (5.8%)***

PROPOSED INCREASES IN INCOME

State general funds (4% increase to the base)	$94.4
State general funds for enrollment growth (at marginal cost rate)	31.6
Revenue equivalent to a 4.5% increase in mandatory systemwide fees for existing and new students (net of financial aid)	18.0
Increase in fee income related to increase in enrollment	14.5
UC General Fund income (including 4.5% increase in nonresident tuition)	28.0
Increase in income from Fees for Selected Professional Schools	2.5
TOTAL increase in income (State and UC General Funds)	***$189.0***

CONTINUED FUNDING FOR CORE NEEDS

To the extent the State has the available resources, UC will request that the funds provided in 1998-99 for deferred maintenance, instructional technology, instructional equipment and library materials be continued in 1999-2000. ***$70.0***

(a) Does not include debt service for capital outlay or one-time funding provided in 1998-99

for faculty only, both effective October 1, 1998. Because 1998-99 funding is sufficient to pay the salary increases for only nine months, from October through June, full-year funding must be provided in 1999-00.

Merit Salary Increases for All Eligible Employees

Funding for merit salary increases, which are increases within existing salary scales, is again among the University's highest budget priorities. The merit salary program recognizes and rewards excellence and is critical to the preservation of quality. Merit salary increases are not automatic. Academic merit salary increases are awarded only after extensive review of individual achievements. Staff merit salary increases are awarded to eligible individuals on the basis of performance.

Cost-of-Living Salary Increase on 10/1/99

The University is requesting funding to support an average two percent salary increase for University employees. The budget plan also includes a request for an additional 0.2 parity adjustment for faculty only to maintain competitive faculty salaries in 1999-00.

Historically, requests for faculty salary increases have been based on salaries at eight institutions used for salary comparison and requests for staff salary increases have been based on equivalent treatment with State employees. The University's goal is to maintain competitive faculty salaries by providing the average of the salaries provided at the comparison institutions, and through a combination of merits and COLAs, to provide salary increases for other employees that, on average, at least keep pace with inflation.

This year's budget also seeks to provide a salary adjustment for two categories of employees – cooperative extension specialists and information technology professionals – whose salaries lag significantly behind the market. Actual 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).

Market Adjustments Effective 10/1/99

Faculty Parity Salary Increase. Funding for an additional 0.2 percent parity salary increase for faculty only is requested to maintain faculty salaries at the average salary level of the eight comparison institutions. With funding for normal merit increases, a cost-of-living salary increase averaging two percent, and a parity salary increase averaging 0.2 percent, preliminary estimates indicate that salaries of University faculty will remain competitive with faculty salaries at the comparison institutions. Updated projections will be available in November.

A lag in faculty salaries sends a negative message about the University across the

nation, making it more difficult to recruit and retain individuals who meet UC's traditional high standards. Nothing is more certain to undermine quality than a persistent inability to offer competitive salaries. Maintenance of the University's historic position in the marketplace is absolutely essential if its quality is to be maintained.

Adjustment for Cooperative Extension Specialists. The University is requesting funding equivalent to a five percent increase for Cooperative Extension Specialists. This group of academics, which are recruited from the same pool of faculty as other ladder rank faculty, was not eligible for earlier parity adjustments for faculty. Thus, their salaries have fallen behind the marketplace in which the University competes for faculty.

Market Adjustment for Information Technology Professionals. The University is requesting funding equivalent to a five percent market adjustment for information technology (IT) professionals as the first step in a multi-year plan to provide competitive salaries for this group of University employees. With the use of technology commonplace in the workplace and advanced technology found throughout the University's teaching and research programs, the University has found it increasingly difficult to maintain a stable and qualified information technology workforce. The difficulty in recruiting information technology professionals is linked to salary lags relative to the market and the escalating use of technology across all industries and business settings, public and private.

Increases in Benefit Costs

The University is requesting funding for increases in the cost of health and dental insurance for its employees. This request is based on estimated cost increases of about 5.5 percent. Notwithstanding the success of the University in reducing the cost of health benefits in recent years and a commitment to continue efforts to control costs, employee benefit costs are expected to increase over the next several years.

Price Increases

In order to offset the impact of inflation on the nonsalary budget and maintain the University's purchasing power, funds are requested to cover price increases averaging 3 percent. Although the University purchases many commodities – library materials, technical supplies, specialized equipment – whose costs exceed current inflation estimates, the request for funding is limited to estimates of general inflationary increases.

Workload

Funding for Enrollment Growth of 4,000 FTE Students

The University is committed to maintaining access under the Master Plan. Throughout the years of budget cuts, the University managed to keep its historic promise to the citizens of California by continuing to offer admission to all eligible Californians applying at the undergraduate level and providing a quality education.

The University is seeking $31.6 million in State funds, or $7,900 per student, to support an increase of 4,000 FTE students, bringing total budgeted general campus enrollment to 151,000 in 1999-00. The $7,900 per student is based on a negotiated agreement with the State regarding the level of support the State is willing to provide for each new budgeted student. The added funding will provide salary and benefits for additional faculty positions; related instructional support such as clerical and technical personnel, supplies and equipment; support for teaching assistant positions; institutional support; and support for libraries and student services.

Included in the proposed enrollment growth of 4,000 FTE students are 200 FTE students who would enroll in classes during the summer in order to earn their teaching credential as part of the University's efforts to attract well qualified students into the teaching profession by shortening the time it takes to earn a credential and engage in classroom instruction. Under this program, students with bachelors degrees – especially in areas with unmet need in the K-12 schools such as math and science – will be offered the opportunity to earn their teaching credentials over two summers and to teach in the intervening year using an emergency credential. Helping to meet the growing need for highly qualified K-12 teachers is an integral part of the University's role in working with California schools and students.

Also within the overall enrollment growth proposed in 1999-00, the University is proposing to target growth of 800 FTE students in engineering and computer and information sciences. This is the second year of an eight-year plan which would increase enrollment in these fields by 800 students annually through 2005-06. This will bring total enrollment in these fields to about 24,000 students. The University's proposal to increase the number of students in these disciplines is in direct response to student and industry demand. Demand continues to outpace supply and the competition for graduates is increasing at a time when there are not adequate numbers of qualified students to meet industry's current workforce needs.

By 1999-00, UC enrollments will be at an all-time high. Given annual growth in budgeted enrollments and an 18.7 to one student-faculty ratio, the University will be functioning with about the same number of faculty by 1999-00 as it did in 1990-91 under the historic ratio of 17.6:1, while accommodating 9,000 more students.

Professional School Expenditures Funded by Professional School Fees

For general campus programs, State funds will be supplemented with income from the Fee for Selected Professional School Students, which will be used to help fill vacant positions and meet related instructional costs in the schools of business/management,

law and the school of theater/film/television at Los Angeles. Income from the Fee for Selected Professional School Students will be used for these same purposes in the schools of medicine, dentistry, optometry, pharmacy, nursing and veterinary medicine, thereby treating the health sciences equivalent to the general campuses with respect to net budget cuts.

New Space To Be Maintained

The University is requesting $3 million to support basic maintenance of additional space to be occupied in 1999-00 by programs eligible for State funding.

Ongoing Building Maintenance

Consistent with the concept supported by the Legislature to fully fund ongoing building maintenance over a number of years, the University is requesting an increase of $4 million for ongoing building maintenance. The $4 million represents the University's continued commitment to continue with its multi-year plan to properly fund the University's building maintenance program, which even with this increase will be be underfunded by more than $45 million annually. This continues to be a high priority for The Regents and the Legislature.

Deferred Maintenance and Facilities Renewal

The 1999-00 budget plan continues to place an emphasis on rebuilding and maintaining the University's physical plant. The combined effects of annual underfunding for ongoing building maintenance, the lack of permanent funding for deferred maintenance, and the fact that only a fraction of the University's capital improvement budget is used to replace worn-out building systems has resulted in a backlog of deferred maintenance projects that in 1997-98 exceeded $500 million. The 1999-00 budget proposes, for a second year, to use $6 million of the increase in UC general funds (income from nonresident tuition) as debt service to pay for the long-term financing of deferred maintenance and infrastructure projects totaling $60 - $65 million (depending on market conditions at the time of financing).

The University's goal is to reduce significantly the backlog of deferred maintenance projects as well as stem the flow of new deferred maintenance projects.

Instructional Technology

The 1999-00 budget plan includes $6 million, as part of its continuing plan, to support the escalating use of technology which is a critical element of the University's continued commitment to maintain the quality of its teaching and research programs. The University estimates that, at a minimum, it needs to increase funding for instructional

technology by $50 million. UC campuses are providing students with connections from libraries, laboratories and dorm rooms to the Internet and the World Wide Web. Students use electronic mail to communicate with faculty and web browsers to access on-line course information and to register.

Instructional technology allows faculty to bring their subject matter alive in ways that have not been possible previously. The University remains committed to high-quality instructional programs and to ensuring that curriculum decisions regarding course content and presentation are based on intellectual and academic considerations that are not constrained by technology bottlenecks.

New investments are required. A fully functional digital environment for teaching and learning is not a steady state that can be achieved with a one-time expenditure. The rapid evolution of hardware and software requires a continuous cycle of replacement and upgrade, and technology-enhanced teaching and learning requires recurring expenditures for maintenance and support.

Instructional Equipment

The University's 1999-00 budget plan includes $6 million as the first step in a four-year plan to fully fund the replacement of aging and obsolete equipment, a critical component of the University's teaching and research programs. Even with this increase, the University estimates an annual shortfall of $17.2 million, and a cumulative backlog that exceeds $200 million.

The instructional program is compromised when equipment is not adequate to teach students. The need for equipment is especially acute in the engineering and sciences, highly technical fields in which the University expects to see significant enrollment growth through 2005-06.

FUNDING FOR INITIATIVES ABOVE THE ANTICIPATED COMPACT LEVELS

The University is requesting funding for several initiatives critical to the University's teaching, research, and public service missions. Funding for these initiatives would be in addition to increases in the base budget that are anticipated to be part of a new four-year compact.

Funding for Initiatives Above the Anticipated Compact Levels
(millions)

Funding to offset fee reduction in SB 1896	$ 3.5
Library Initiative	7.5

Technology Initiative
UC-Industry Internet2 Infrastructure..... 5.0
Campus Internet2 Infrastructure..... 10.0
Agriculture Cooperative Extension..... 2.0
Industry-University Cooperative Research Program..... 5.0
California Remote Sensing Initiative..... 2.0

Funding to Offset Fee Reduction in SB 1896 (Peace)

The Governor has signed SB 1896 (Peace) which states legislative intent to reduce mandatory systemwide fees by five percent for resident graduate academic students in 1999-00, as AB 1318 (Ducheny) did for undergraduate resident students in 1998-99. The reduction applies only to California residents enrolled in graduate academic programs and in professional degree programs not subject to the Fee for Selected Professional School Students, and is contingent upon funding being appropriated by the State in the 1999-00 budget. The bill leaves the decision to the next Governor and Legislature to determine whether reducing fees for resident graduate academic students is of sufficient priority that it should be funded in the 1999-00 State Budget. SB 1896 also removes the freeze on the Fee for Selected Professional School Students.

Consistent with the provisions of the bill, the University is requesting that the State provide the University with $3.5 million, above the funding levels provided in the compact, to pay for the costs of reducing the mandatory systemwide fees by five percent for resident graduate academic students. A new plan to phase in fee increases for students enrolled in selected professional degree programs will be presented at the November Regents' meeting. The Regents will not be asked to take any action on fees until January, after it is known whether funding is provided in the Governor's budget to offset the fee reduction contained in SB 1896.

Library Initiative

With the goal of reducing an annual library budgetary shortfall that exceeds $39 million, the University's 1999-00 budget plan includes a request to provide $7.5 million as the first phase of a multi-year plan to address the needs of the campus libraries' print

collections, continue the development of the digital library, and increase the sharing of library materials across campuses.

Over the last decade, the combined effects of reduced budgets and inflation, particularly the significant increases in the costs of acquiring library materials, have eroded the ability of the University's libraries to adequately support the University's academic programs. At the same time, there have been rapid advances in technology that promise enormous improvements for our libraries; a promise that can be achieved over time by investments in technology and in the acquisition and creation of knowledge in digital form. For the foreseeable future, electronic information resources will complement, rather than supplant, traditional collections, requiring the University to support existing collections and services in parallel with the development of digital library services.

Technology Initiative

Internet2, the next generation national high-speed electronic highway, will be able to deliver information in ways more varied and with greater reliability and speed than is possible with today's congested Internet. CalREN2 will link California universities to each other and to the Internet 2 to provide shared access to high-performance research instruments, distributed computation on massive databases; telemedicine and collaborative pharmaceutical research; interactive seminars; and a host of other activities. To ensure that faculty and students can connect to these advanced communication networks, and to encourage cooperative research initiatives with industry, the University is requesting $15 million, above the levels anticipated to be provided in the compact, to enhance the University's network infrastructure.

Campus Internet2 Infrastructure. The University was a founding member of the national Internet2 initiative, and of the consortium of California universities that is building CalREN2, California's leading electronic highway that brings Internet2 to the doorstep of the campuses. The University is requesting $10 million to ensure that faculty and student have full access to the advanced services of Internet2 and CalREN2 by completing the connections from the doorstep of the campuses to the desktops of faculty and students. This requires an upgrade of the campus networks and support infrastructure, and for staff to support faculty and student access.

UC-Industry Internet2 Infrastructure. The University is requesting $5 million to expand access to CalREN2 to encourage and facilitate faculty collaboration with researchers in industry. The new capabilities of the Internet2 and CalREN2 extend, with few exceptions, only to the academic community due to current funding and policy constraints. However, much will be gained by extending the reach of CalREN2 to a broad range of private industry. Thus, the $5 million in State funds will be used to leverage matching funds from industry to develop partnerships with industry which will play an essential role in speeding the transfer of UC's research to industry, providing UC faculty and students access to resources and instrumentation only available in

industry, and facilitating student internships with California industry by diminishing the importance of physical location. Participation in such a research process and mastery of the skills and the analytical rigor that it engenders will be lifelong assets for students, regardless of their field of study.

The proposed funding will allow the two major CalREN2 hubs in Northern and Southern California to be connected with an electronic highway down the Central Valley and will expand network connections at UC campuses to accommodate traffic from private partners for defined research purposes, and to interconnect the University's growing presence in the Central Valley at Merced and Fresno.

Cooperative Extension

The University is requesting $2 million to restore the extra five percent cut made to Cooperative Extension programs in the early 1990s. This will allow the University to emphasize high priority programs and develop new county- and campus-based programs to address the emerging issues and challenges facing California agriculture.

The University's cooperative extension programs range from technical assistance to farmers to nutritional education for low-income families and 4-H programs for youth. The Cooperative Extension programs are designed to develop applications of research knowledge and bring about their uses by people located in communities beyond the University, and to bring problems and issues back for exploration and research in agriculture which is a $26.8 billion industry and accounts for nearly one in ten jobs in California. It is an industry that is highly dependent upon University research.

Industry-University Cooperative Research

The University is requesting $5 million as the final increment in the four-year plan to build the program's annual budget to $40 million. Under the plan, the $40 million was to have been phased in over time to reach targets of $20 million annually in State and University support. Matching industry funds will provide the additional $20 million annually.

The program was established in 1996-97 to foster collaborative research in targeted fields critical to California's economy. Collaborative public-private ventures are vital to ensuring the research necessary for the developments of new technologies and products that create economic growth. The Industry-University Cooperative Research Program differs from other competitive grant research programs in that it provides California with a mechanism to make targeted investments in areas of research that are of strategic importance to the California economy. There are five program areas, each of which focuses on an area of the global economy where California is poised for or has recently attained worldwide leadership, including biotechnology, digital media, semiconductor manufacturing, communications, and information sciences.

To date, two-thirds of the participating firms are small businesses and more than one-third have fifty or fewer employees. In 1998-99, the program expects to leverage the $15 million in State and University funds to generate more than $16 million in funds from private industry.

California Remote Sensing Initiative

The University is requesting $2 million to establish a statewide center that would provide access for research and educational purposes to the significant amounts of data being collected on California's environment through remote sensing technology.

The data collected via remote sensing techniques can have important ramifications for understanding and predicting regional consequences of such climate variations as El Nino, or to geological changes such as earthquakes. All are of critical concern to California, but too often there is a gap between academic research and practical applications.

The CRSI will bring academic researchers together with government agency representatives to bridge the communication gap between the two sectors. Together they will enable the transition of the use of remote sensing from a research tool to an operational tool for the benefit of the State in managing its natural resources.

CONTINUED FUNDING FOR CORE NEEDS

If the State's fiscal resources permit, the University will request that the $70 million provided in 1998-99 to address critical needs in deferred maintenance, instructional technology, instructional equipment, and library collections be continued in 1999-00.

While the 1999-00 budget request includes multi-year funding proposals to address annual shortfalls in funding for these critical infrastructure needs, the magnitude of the budgetary shortfalls are so great that significant funding is needed to address annual budgetary and cumulative shortfalls as well as backlogs.

Instructional equipment. Many of the University's instructional programs rely heavily on equipment, but reliable, up-to-date equipment is most critical in the sciences, where 90 percent the equipment is used. Often equipment is the key to staying on the cutting edge of a particular discipline. The University estimates that it is underfunded by about $23 million a year, and has a backlog of equipment needs in excess of $200 million. Additional funds could be use to purchase the most critical equipment needed for our science and technology programs.

Instructional technology. The University estimates that it is funding only about half of what is needed to create and maintain the infrastructure and technical capability to operate and provide students with access to technology. Even a modest scenario would imply a permanent budget increase of $50 million to satisfy only the highest

priorities of individual campus plans which emphasize increases in technical support, classroom technology, and additional computer lab seats.

Deferred maintenance. Chronic underfunding of the University's ongoing maintenance budget (even with the $4 million increase included in the 1999-00 budget request, the annual shortfall will be about $45 million) has contributed to a backlog of deferred maintenance projects that in 1997-98 exceeded $500 million. Additional funding will allow the University to continue to make progress in reducing our backlog.

Library materials. The University's libraries face an annual budgetary shortfall of more than $39 million. Additional one-time funding will allow the University to make progress in addressing the shortfall which is largely the result of the gap between available financial resources and ongoing spiral of inflation in the cost of library materials.

Budget-Related Issues

Federal Funding

Federal funding is a major source of financial support for the University of California. The federal government provides nearly 55 percent of University research expenditures, over half of the financial aid its students receive, and about one-third of the net operating revenue of the teaching hospitals. The three Department of Energy Laboratories, for which the University has management responsibility, are entirely supported by federal funds.

The Congress and the President have reaffirmed their commitment to balance the federal budget in the current year. Because of favorable economic conditions in 1997, the Congressional Budget Office is projecting that there will be a surplus in 1998 – the first in over a generation. Thus, despite the dire predictions of the last several years, the outlook for federal support of research in the immediate future is relatively encouraging. The deep cuts in research did not materialize and nearly every major research-related federal agency fared relatively well in fiscal year 98. Even though the Congress and the President have reached agreement that research is a priority, there are notes of caution. There are uncertainties both with respect to the funding source for the proposed increases in the research programs (which, as currently proposed, are dependent upon yet-to-be enacted tobacco settlement legislation) and how the budget surplus will be used. As of this writing, it is not clear how the federal budget will be resolved.

As of this writing, Federal support for student aid programs also remains uncertain for 1999 in terms of both the reauthorization of the Higher Education Act (HEA) and the annual appropriations to fund the programs associated with the HEA. In general, however, anticipated changes in programs and funding levels are expected to have only marginal overall impact on UC students. However, University students will begin to see the benefits of the series of tax credits and benefits that were approved last year.

The University remains quite concerned about proposed changes in the federal Medicaid and Medicare programs which are expected to hit academic medical centers especially hard. The federal government currently accounts for about nearly one-third of the net operating revenue of the University's teaching hospitals. Under the provisions of the agreement to balance the budget, the Congress and the President are intending to slow the growth of Medicare in part, by capping or reducing payments to disproportionate share provides. This will directly affect the University. In addition, through Medicare, the government has traditionally reimbursed hospitals that are affiliated with medical schools for the costs incurred in training doctors. As part of the overall plan to balance the federal budget, reimbursement for these medical education costs will be reduced over several years.

Capital Improvements

The University's 1999-00 request for State funds for capital improvements is discussed in a companion volume to this operating budget document titled *1999-00 Budget for Capital Improvements.*

The University's 1999-00 capital budget request of $208.3 million in State funds is dependent upon approval of Proposition 1A, a general obligation bond measure, on the November ballot. This level of funding is essential to maintain progress on seismic and other life-safety improvements, to address essential infrastructure and building renewal needs, and to upgrade and expand academic facilities necessary to support the resumption of enrollment growth, particularly in the sciences and engineering.

The 1990-00 State capital budget request includes $1.3 million to equip two projects for which construction has already been approved by the State, and $207 million to fund 19 major capital projects. Of the 19 major capital improvement projects, funds are requested to support construction or complete design and undertake construction for six projects, and to begin design or continue design on 13 projects.

Nine of the 19 major capital outlay project funding requests address seismic life-safety hazards, which remains a University priority. Infrastructure renewal or expansion of essential capacity is the focus of four projects. Six projects involve improvements that address the shortage of academic space resulting from enrollment growth, including four projects that provide major new science and engineering buildings.

In 1998-99, the University was successful in reaching agreement with the State on a pilot project to accelerate the State-approval process for capital outlay projects. As a result, the 1999-00 request includes funding in a single year for the full cost of design and construction of three major enrollment-growth related projects, with authorization that reduces State processing requirements and allows accelerated implementation.

GENERAL CAMPUS INSTRUCTION

1998-99 Budget	
Total Funds	$1,422,307,000
General Funds	1,161,845,000
Restricted Funds	260,462,000
1999-00 Increase	
General Funds	$28,600,000
Restricted Funds	11,149,000

The general campus Instruction and Research (I&R) budget includes direct instructional resources associated with schools and colleges located on the eight general campuses. The major elements and their percentages of the I&R base budget are faculty and teaching assistant salaries, 60 percent; employee benefits, 10 percent; and instructional support, 25 percent, which includes salaries of some academic administrators, laboratory assistants, field work supervisors, and other supervisory, clerical, and technical personnel, as well as the costs of office and instructional supplies and equipment.

The 1998 State Budget provides funding for 6,000 more full-time-equivalent (FTE) students than were previously funded by the State. This includes funding for the 2,000 FTE enrollment growth consistent with the compact, an additional 800 undergraduate FTE in engineering and computer and information sciences to help address the State's workforce needs in targeted fields, and the 3,200 FTE the University projected it would overenroll in 1998-99. In addition, the University permanently budgets about $15 million in Lottery Funds for instruction. In 1998-99, the State also provided $20 million in one-time funding for instructional equipment replacement and $20 million in one-time funding for instructional technology. Pursuant to authority in the Budget Act, the University is reappropriating $15 million in excess UC general fund income for instructional equipment.

The University's 1999-00 budget plan includes $31.6 million for a general campus workload increase of 4,000 full-time equivalent students, $6 million for instructional equipment, and $6 million for instructional technology. If the State's fiscal situation allows, the University will ask the State to continue in 1999-00 the $20 million provided in 1998-99 for instructional equipment and for instructional technology.

Instructional Programs

Preserving access and quality are the hallmarks of the University's 1999-00 budget plan. Consistent with the California Master Plan for Higher Education, the University provides undergraduate, professional, and graduate academic education through the doctorate 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. Ideally, this means that the University should be able to accommodate all qualified undergraduates, and also provide graduate academic and professional instruction in accordance with standards of excellence, societal need, and available resources. To do this, the University must maintain a core of well-balanced, quality programs and also provide support for rapidly developing and newly emerging fields of knowledge, and for the exchange of that knowledge.

The University offers instructional programs spanning more than 150 disciplines from agriculture to zoology on its eight general campuses; the San Francisco campus offers health sciences programs exclusively. Courses offered within instructional programs are authorized and supervised by the Academic Senate of the University, which also determines the conditions for admission, degrees, and credentials. Undergraduate, graduate, and professional schools and colleges offer the bachelor's degree, master's degree, Ph.D., and professional degrees – nearly 600 degree programs in all. The University began awarding degrees in 1870, and since then has conferred more than one million degrees.

The University's undergraduate programs, especially lower division offerings, seek to accomplish several objectives: growth of general analytic and communication skills; exposure to a range of intellectual traditions; development of an appreciation of the great ideas, concepts, and events that have shaped cultures throughout the world; and preparation to work in a world that is increasingly knowledge-based. After students complete their general education requirements, customarily during their first two years, they choose a major in a particular area which is administered by an academic department. A major is designed to develop a depth of knowledge within a specialized area of study.

The purpose of graduate study is to inspire independence and originality of thought in the pursuit of knowledge. Doctoral students are expected to achieve mastery of a chosen field through advanced study and research. Master's degrees are awarded in recognition of several achievements, including satisfactory preparation for doctoral study and qualification for entry into professional fields such as business. Graduate degrees fall into two broad categories: professional, such as a master of business administration; and academic, in which degrees are awarded in recognition of a student's ability to advance knowledge in a given field of study.

Generally, courses are taught on one of the University's campuses. Currently UC Santa Barbara provides the only UC off-campus learning center, established in Ventura in 1972, where students are taught by regular UC faculty and instructors, either in person or interactively via closed-circuit television. Broadcast-quality, full motion video is transmitted from live classes on the Santa Barbara campus to the Ventura Center, and an audio connection is provided for students at the Ventura Center to ask questions and participate in live classroom discussions. Both e-mail and course Web sites further provide communication between students enrolled at the Ventura Center and their professors and fellow students. Videotapes allow students at the Ventura Center, many of whom work, to review lectures at times that fit into their schedules. The Ventura Center model is being examined as a prototype for off-campus educational centers at other UC campuses.

In addition to the University's regular academic-year offerings, students may enroll in courses through University Extension and during Summer Sessions. The University offered its first Extension courses to students beyond the immediate campus community more than 100 years ago. Since then, University Extension has grown into one of the largest continuing education providers in the country. The University's Summer Sessions offer a broad spectrum of degree-credit instruction, with each campus determining its own course offerings. University Extension and Summer Sessions are discussed more fully in their respective sections of this document.

The University is committed to maintaining the quality of its programs and, assuming the provision of adequate resources, to preserving student access as defined by the California Master Plan for Higher Education. Access remains meaningful, however, only if it provides the opportunity for a quality education and leads to a university degree that continues to enjoy broad recognition and respect. That the University still excels in this respect is demonstrated in various ways.

- In their 1997 book, *The Rise of American Research Universities*, Graham and Diamond conclude that the University of California as a system leads 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 ones.

- Another indicator of how well the University does when compared to other research institutions is the National Science Foundation study on the scientific foundation of American patents. The University produced more research leading to patented inventions than any other public or private research university or laboratory during the periods studied.

- The National Research Council reported that more than half of the University of California's doctoral programs ranked in the top 20 in their fields in terms of faculty quality – a record of performance unmatched by any university system in the nation (*Research-Doctorate Programs in the United States: Continuity and Change*, 1995).

- 23 UC faculty were named as Fulbright scholars to lecture, consult or conduct research abroad during the 1998-99 academic year. Current UC faculty include 17 Nobel laureates and 267 members of the prestigious National Academy of Science, more than any other college or university in the nation. In 1997, two more UC campuses were invited to join the prestigious American Association of Universities, bringing to six the number of UC campuses so honored.

New Faculty Positions and Related Support ($31,600,000 Increase)

Funding for enrollment remains a high priority for the University. Inadequate funding for the instructional program dramatically affects the University's ability to recruit and retain excellent faculty, which in turn affects the quality of the core academic programs.

Undergraduate admission to the University is based on a commitment to access under the Master Plan, which provides that the top 12.5 percent of California public high school graduates, as well as those transfer students from the California Community Colleges who have successfully completed specified college work, are eligible for admission to the University. Graduate and professional enrollment planning is based on assessments of State and national needs, program quality, and available financial support for students.

DISPLAY 1

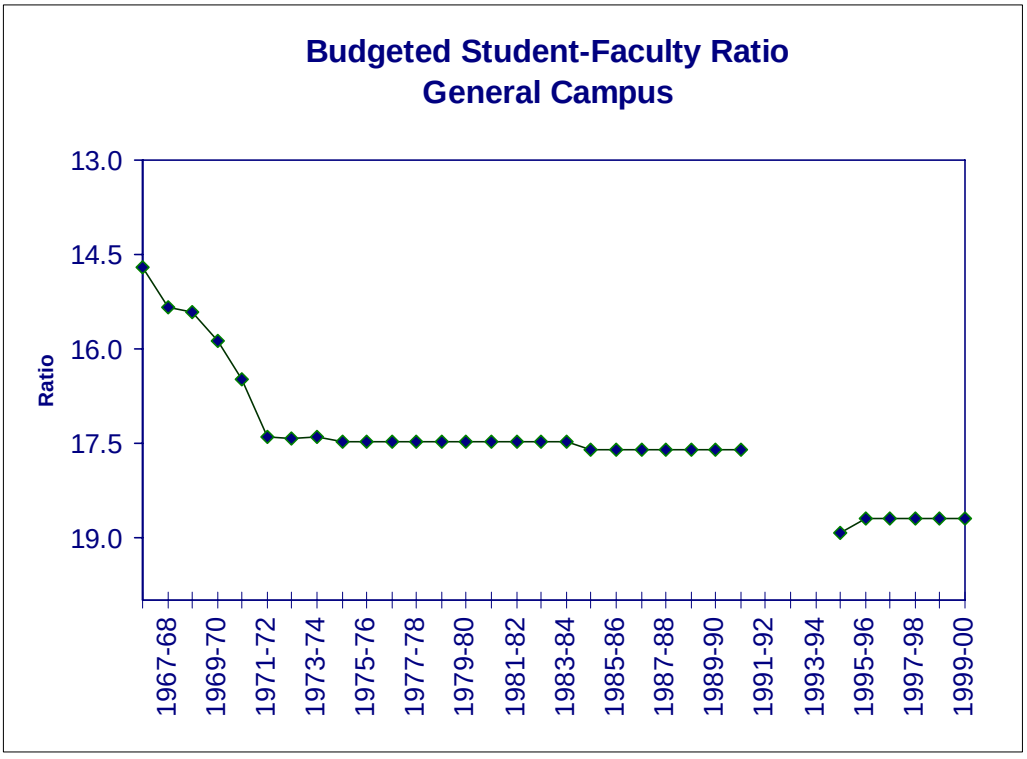
UNIVERSITY OF CALIFORNIA
Actual and Budgeted General Campus FTE Enrollment and Faculty

	Actual			Budgeted		
	Enrollment	Faculty	Ratio	Enrollment	Faculty	Ratio
1990-91	143,344	7,981	18.0:1	142,079	8,067	17.6:1
1991-92	143,808	7,686	18.7:1			
1992-93	141,507	7,620	18.6:1			
1993-94	139,478	7,582	18.4:1			
1994-95	139,415	7,067	19.7:1	137,481	7,260	18.9:1
1995-96	141,522	7,232	19.6:1	138,000	7,380	18.7:1
1996-97	142,783	7,358	19.4:1	139,500	7,460	18.7:1
1997-98	145,534	7,531	19.3:1	141,000	7,540	18.7:1
1998-99 (estimated)	147,900	7,861	18.8:1	147,000	7,861	18.7:1
1999-00 (proposed)	151,000	8,075	18.7:1	151,000	8,075	18.7:1

Display 1 shows what happened to the University's enrollments during the 1990s. Although the early 1990s were a time of dramatic reductions in State funding, actual enrollments dropped by only three percent and in subsequent years continued to exceed the level supported by the State. Instructional workload agreements with the State were essentially inoperative from 1991-92 through 1993-94. However, by 1998-99 enrollment was almost fully funded because of the augmentation provided in the 1998 State Budget. In 1999-00, UC general campus enrollments are expected to reach a new high of 151,000 full-time equivalent (FTE) students. Actual faculty levels in Display 1 are net figures that include faculty resignations and retirements as well as new hires; both State-funded permanent and temporary I&R faculty on the University's payroll are included.

Before the cuts of the early 1990s, the University's student-faculty ratio was 17.6:1. In 1994, the University and the Legislature agreed on supplemental budget language to phase in a funding ratio of one faculty position for every additional 18.7 FTE students added to the University's budgeted enrollment. This represents a further deterioration in the budgeted ratio, continuing the erosion that began in the 1960s, as shown in Display 2. UC's student-faculty ratio compares unfavorably to its eight comparison institutions, which currently average 17:1 at the public institutions and 10.4:1 at the private institutions. Even with full funding of the budgeted student-faculty ratio, the University will be at a competitive disadvantage.

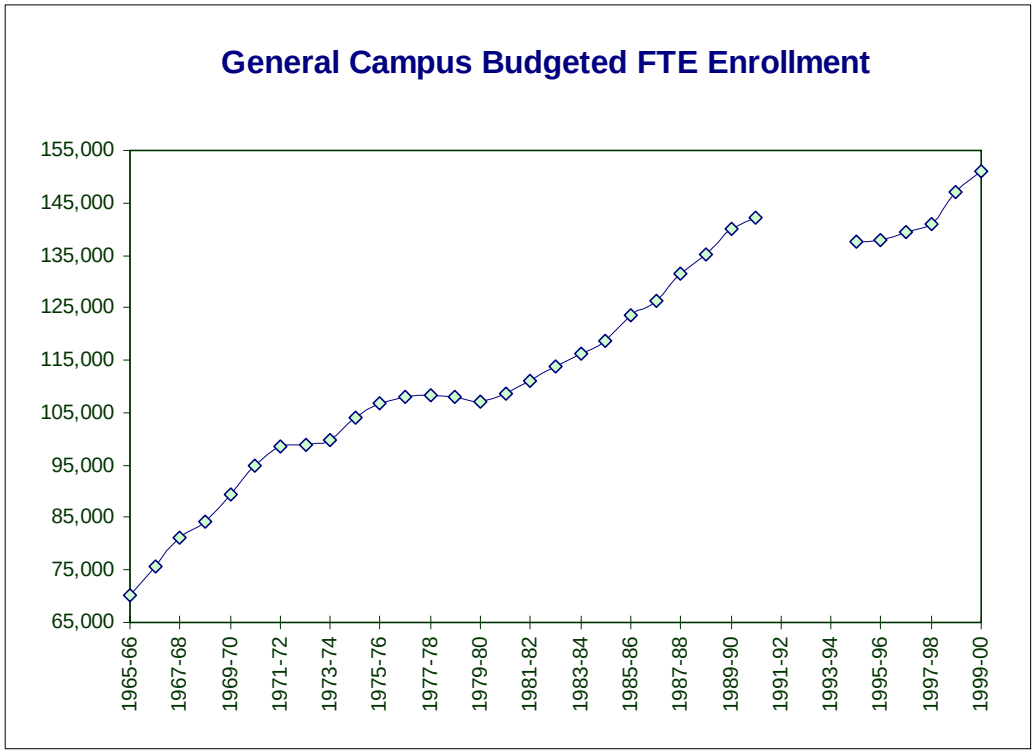
DISPLAY 2



The *actual* ratio of students to faculty during the 1990s – which ranged from 18.0:1 to 19.7:1 – was much higher than the budgeted ratio shown in Display 2 because the University continued to honor the Master Plan and to take more students than were funded by the State. Throughout the 1990s, University enrollment exceeded budgeted levels by as many as 4,700 FTE students in 1997-98, and threatened to undermine the quality of the University's academic programs. Recognizing that a high-quality education cannot be maintained unless funding is provided to support all of the students choosing to enroll in the University, the State provided funding for all 147,000 FTE students who were projected to enroll in 1998-99. Actual fall enrollment is expected to exceed the earlier projections.

For 1999-00, the University is requesting $31.6 million to support enrollment growth of 4,000 FTE. This represents a growth of about 2.7 percent, from 147,000 in 1998-99 to 151,000 FTE students. Enrollment has grown from 70,000 students in the mid-1960s to more than twice that number today (see Display 3).

DISPLAY 3



Of the 4,000 FTE student increase, 800 FTE student growth is targeted for engineering and computer and information sciences, 200 FTE student growth for students to accelerate progress toward earning a teaching credential by taking classes during the summer, and the balance for growth in other disciplines.

The State provides funding for each additional FTE student added to the University's current budgeted enrollment level based on an agreed-upon methodology (the marginal cost of instruction). For 1999-00, this methodology results in a marginal cost of $7,900 per FTE student. Thus, a general campus workload increase of 4,000 FTE students will require funding of $31,600,000 in 1999-00. Based on a student-faculty ratio of 18.7 to one, this will provide salary and benefits for 213.9 FTE faculty positions and related instructional support; instructional equipment; support for teaching assistant positions; institutional support; and support for libraries and student services. Tables in the Appendix contain campuses' final FTE enrollments in 1997-98 and budgeted FTE enrollments for 1998-99 and 1999-00.

Throughout the years of budget cuts, the University kept its historic promise to the citizens of California by continuing to offer admission to all eligible Californians applying at the undergraduate level and it managed, through extra efforts of its faculty, to provide quality education. The University needs to hire new faculty to accommodate planned enrollment growth and to fill faculty positions left vacant by retirements and other separations if the University is to maintain both student access and instructional quality.

For general campus programs, to help fill vacant positions and meet related instructional costs in the schools of business/management, law, and theater/film and television, State funds will be supplemented with income from the Fee for Selected Professional School Students (net of financial aid). Income from the Fee for Selected Professional School Students will be used for these same purposes in the health sciences (the schools of optometry, nursing, pharmacy, medicine, dentistry, and veterinary medicine), thereby providing equivalent treatment with respect to net budget cuts that the University received in the early 1990s. These fees are discussed more fully in the Student Fee section of this budget.

Initiative to Expand Professional Education for Teachers

Included in the proposed 4,000 FTE enrollment growth are 200 FTE students, with bachelor's degrees, who would enroll in classes during the summer following graduation in order to earn their teaching credential as part of the University's efforts to expand its professional teacher education program. This is an integral part of the University's role in working with California schools and students to help meet the growing need in California for more highly qualified K-12 teachers. The teaching profession can be enriched by high-achieving UC graduates, who are drawn initially from the top 12.5 percent of California's high school graduates.

Several factors are likely to exacerbate the teacher shortage. California's public school population is projected to increase more than 20 percent by 2006-07, according to the California Department of Finance. At the same time, a significant portion of the State's teachers will be retiring. One out of six California teachers is over 55 years of age. These two factors, plus the anticipated extension of class size reduction to include the lower grades, mean that by 2004 the State will need 20,000 new teachers annually –

twice the number currently receiving teaching credentials, according to the California Department of Education and the Commission on Teacher Credentialing.

The summer teaching credential program is intended to attract more well qualified students into the teaching profession by shortening the time it takes to earn a credential and engage in classroom instruction. Students with bachelors degrees, especially in areas with unmet need in the K-12 schools such as math and science, will be offered the chance to earn their teaching credential over two summers and to teach in the intervening year using a temporary emergency credential. About $1.6 million is requested to support the participation of 200 FTE students during the summer term following the 1999-00 academic year. Funding would be provided at the regular State-supported marginal cost of $7,900 per FTE student.

Engineering and Computer and Information Sciences Initiative

Of the 4,000 FTE enrollment growth, 800 FTE is targeted for enrollment growth in engineering and computer and information sciences as part of its 8-year plan to expand programs in these fields. The University's proposal is in direct response to student and industry demand, and will result in an increase in the numbers of degrees, especially advanced degrees, awarded in these fields to help address the workforce needs of California industry.

In 1997-98, enrollment in engineering and computer and information sciences was 17,700 FTE students, about 10 percent above budgeted levels. The University is committed to adding at least 800 students annually through 2005-06, for a total of 24,000 FTE students. Campuses have developed long-term enrollment plans which exceed this level by another 2,000 students and which can be supported only if adequate operating and capital resources are available. The State supported the first step in the multi-year plan in 1998-99 and provided $6 million to fund budgeted enrollment growth of 800 FTE undergraduate students. As the next step, additional growth of 800 FTE undergraduate and graduate students is planned for 1999-00.

The University is well-recognized for its role in the continued economic growth of the State and has a major role in helping to meet the State's need for a highly-trained workforce. Mid-sized California-based companies, as well as small companies and start-ups, the very companies that helped lead California out of the deep recession of the early 1990s, are gravely concerned about the availability of engineering and computer and information science graduates. Large companies share this concern as they seek to achieve a qualified and competitive workforce in an economy that is increasingly based on high technology.

California has historically produced insufficient numbers of engineers from its own colleges and universities and has been a major importer from other states and overseas. According to the Immigration and Naturalization Service and the American Electronic Association, foreign workers accounted for about one-half of the overall increase in technology workers in 1996. These streams of foreign workers are now

drying up, leaving many jobs unfilled here in California as attractive engineering opportunities become available elsewhere. In recognition of the problem facing high-technology industry throughout the nation, it appears that agreement has been reached by Congress and the President to nearly double the number of visas, on a temporary basis through 2001, for high-technology foreign workers.

There is a solid foundation within the University upon which to expand enrollment in engineering and computer and information sciences. Student interest is at an all-time high. Technology is driving demand for more employees with degrees in these disciplines. The Information Technology Association of America estimates that 190,000 high-tech jobs are now vacant. The Department of Commerce predicts the nation will need a million more information-technology workers by the year 2005 than will be available. A recent survey by the National Association of Colleges and Employers concluded that a wide range of industries expect to increase their recruitment efforts for new high-tech graduates. The National Research Council argues that as the country moves further into an information-based economy, demand will increase from non-engineering employers for engineers and computer scientists. Demand has been deepening not only in traditional employment sectors but also notably from film and entertainment, an industry leader in California's economic recovery.

At the same time that California's high-technology industry is experiencing remarkable growth, the number of California degrees in engineering and computer and information science has remained steady. There are not adequate numbers of students to meet industry's workforce needs, as demand continues to outpace supply and the competition for graduates is increasing. Targeting enrollment growth in the engineering and computer and information sciences is an investment in the State's economic future.

Instructional Technology Initiative ($6,000,000 Increase)

The University has a multi-year plan to increase State funds specifically targeted for instructional technology. The 1998 State Budget provides the University with $8 million for this purpose, plus $20 million in one-time funding. The University's 1999-00 budget plan proposes to increase permanent funding for instructional technology by $6 million. To the extent the State has available resources, the University will request that the $20 million provided in 1998-99 be continued in 1999-00 to allow campuses to move more quickly to ensure that students have adequate access to technology.

Technology is critical to the University's continued commitment to maintain the quality of its teaching and research programs. Technological competence is an essential skill for students to succeed in a high-technology and information-based economy. To compete for the best students and ensure they are able to benefit fully from the applications and services made possible by technology, the University is continuing to invest not only in infrastructure but also in technical support for faculty, staff and students so that these new systems can be used effectively.

- *Improved quality.* Instructional technology provides a margin of quality by, for example, allowing students to model and manipulate original data; and enhancing communication and collaboration among students and faculty. Technology can also be a tool to help students customize parts of their learning experience.

- *Increased access.* Technology makes it possible to share intellectual resources among campuses and to improve service to students who cannot easily spend long periods on campus.

- *Meeting new expectations.* Increasingly, students arrive at the University with experience in using digital technologies and the expectation that their formal education will be enhanced by technology. Many students have already mastered complex computer skills and view computers as basic tools. Other students arrive needing help to reach basic-level proficiency. Most students realize that employers are looking for college graduates with computer skills that exceed those of colleagues who graduated only a few years ago.

Examples of instructional technology include:

- Students in foreign-language classes use multimedia technology tools to learn grammar and vocabulary, write compositions with the aid of on-line dictionaries, and watch video clips of language in daily use;

- Students in an introductory demography class master sophisticated concepts and analytical techniques by analyzing on-line census data with spreadsheets;

- Students in engineering use a combination of video-conferencing and Web resources to take advanced engineering courses taught on other campuses;

- Faculty make routine use of class Web pages and e-mail to communicate curricular and other information to students and to provide access to primary data.

Technology dramatically improves data handling, process simulation, problem solving, creative presentations, and communication. New technologies are making possible unprecedented interaction with primary data and are enabling complex networks of communication among students and faculty. For students, these technologies create opportunities to grapple with real data and real problems early in their learning careers, linking them directly to the research enterprise. Participation in the research process and the mastery of the skills and analytical rigor that it engenders will be lifelong assets for graduates who seek professional opportunities and advanced degrees in any field.

In the past few years, digital applications have become so powerful and pervasive that faculty, students, and instructional staff risk being isolated from the academic mainstream if they do not have ready access to such electronic capabilities as e-mail, Web browsers, electronic journals and data banks, word-processing, and spreadsheet applications.

A conservative estimate is that the University currently spends an average of $120 million annually on all aspects of instructional technology for faculty, students, and staff. As a result:

- Over 80 percent of the University's dorm rooms are connected to the Internet (soon to reach 100%), as are over half the classrooms;

- The University provides 110,000 network connections, outstripping the number of telephone connections;

- Over 350 computer laboratories house over 11,000 workstations for student use, most with access to the Internet – one workstation for every 14 students.

This infrastructure must be renewed and upgraded constantly to reflect technological changes and steadily increasing demand for bandwidth, workstations, training, and support. Most components of the instructional technology infrastructure are recurring expenses. The rapid evolution of hardware and software requires a continuous cycle of replacement and upgrade, and technology-enhanced instruction requires recurring expenditures for maintenance and support.

The University plans to request increased funding every year to help narrow the gap between current funding from the State plus what the University has allocated from other fund sources, and what is needed in the longer-term. Among the gaps in funding are:

- training and direct support for students who use their own workstations;

- supplying faculty and staff with networked workstations, software, and support;

- equipping classrooms with technology; and

- outfitting and supporting computer labs for students.

Even a modest scenario would imply a permanent budget increase of $50 million to satisfy only the highest priorities of individual campus plans which emphasize increases in technical support, classroom technology, and computer lab seats but also continue to assume high levels of sharing between individuals, classes, and academic units.

In a more generous scenario, if technology were to permeate the curriculum fully, the ratio of students to computer lab seats would need to drop almost by half. Workstations would need to be replaced more frequently – every three years in the most optimistic case, compared with over four years today – to keep pace with the opportunities afforded by changing technologies. Classrooms would need to be connected to the network and to be equipped with projection and other equipment to make group work feasible in every class meeting. This more far-reaching scenario would imply more than doubling current annual expenditures.

From a budgetary standpoint, the key challenge is to view closing the gap between current and needed expenditures not as a one-time expenditure but as a permanent commitment to staying abreast of evolving technology and its relationship to higher education in the 21st century.

Instructional Equipment Initiative ($ 6,000,000 Increase)

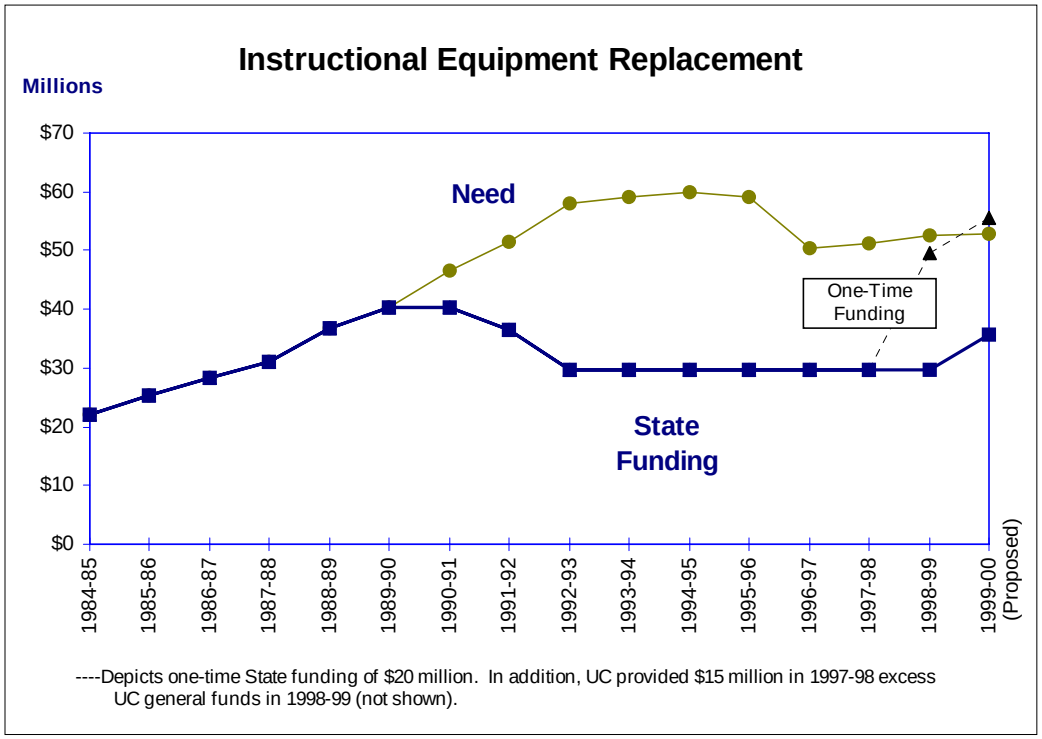
As the first step of a four-year plan to restore full funding for the replacement of its aging instructional equipment, the University is requesting $6 million. The University's need for Instructional Equipment Replacement (IER) is defined as the annual depreciation of instructional equipment, such as that used in foreign language or science laboratories, over the period of its useful life. The life span of most University instructional equipment is from 3 to 15 years, and by now much of the equipment still in use is obsolete.

The State began funding equipment depreciation in 1976-77, and provided full funding from 1984-85 to 1989-90. In 1990-91, State funding began to fall short of IER need and continued through 1998-99 resulting in an annual budgetary shortfall of more than $23 million and a cumulative shortfall of nearly $200 million. In 1998-99, the State provided the University with $20 million in one-time funding for instructional equipment, bringing the shortfall on a one-time basis to only $3 million (see Display 4). Also, in 1998-99 the University used $15 million in excess 1997-98 UC general fund income to help reduce the $200 million cumulative shortfall. Next year, in 1999-00, the University's IER permanent budget of $29.7 million would require an increase of $23.2 million to restore full annual funding. The proposed increase of $6 million in permanent funds plus temporary funds of $20 million would close the annual funding gap for 1999-00, and in addition would help to reduce the cumulative shortfall.

Funding of the University's instructional equipment needs is essential to maintain the high quality of the instructional program. IER funds can be used to leverage extramural funding for equipment that faculty can use not only in their research but in teaching graduates and advanced undergraduates. New equipment may be used in a student computer lab or to aid in a teaching presentation; it may be used to teach students how to operate the equipment itself, if it is important for them to learn those techniques; and it may be used by students who are working with faculty members on research, as part of the students' academic training.

The instructional program has been handicapped by the lack of funds for equipment, especially teaching carried out at the leading-edge of research. The need for equipment replacement funds in engineering and the sciences is especially crucial because: (1) laboratory sciences require more instructional equipment; (2) the equipment is more expensive; and (3) the rapid technological advances which result in a need to upgrade as well as replace existing equipment. The University is planning substantial growth in the sciences. One-third of the University’s enrollment growth by 2005-06 is expected to be in engineering and computer and information sciences; other science disciplines will also grow.

DISPLAY 4



Increasingly, students and faculty in genetic engineering, biotechnology, and other sciences are confronted by research problems that are not able to be solved using available instrumentation. Unless the University can provide high technology instructional equipment, it could lose its best faculty and students to other institutions that can provide the necessary facilities and equipment. This will weaken the University's instructional programs and reduce the University's ability to provide the highly skilled personnel needed for California's high technology industries.

Over time, full funding for instructional equipment replacement must be provided in order to maintain the quality of instructional programs and prevent academic programs from becoming seriously outmoded. Obsolete equipment ranges from equipment that is functional but lacks the capability and efficiency of modern replacements, to pieces that are of limited use because replacement parts are not available, or the equipment is costly to operate and maintain. However, the equipment is carried in the inventory because the University has not had the funds to replace it.

To accommodate the shortfall, departments have redesigned courses around less effective and outmoded equipment, eliminated experiments and exercises from laboratory sessions, increased laboratory class size because of equipment shortages and then reduced the length of lab sessions in order to offer more sections to meet student demand, and limited enrollments in some majors. All of these factors undermine the quality of the instructional program.

Long-Range Enrollment Planning: 2000 through 2010

During the first half of the 1990s, enrollment at the University dipped and then returned to about 143,000 FTE students, albeit at a higher student-faculty ratio. Beginning in 1997-98, and projected through 2010, the University is expecting moderate growth of about 2 to 3 percent annually, based on recent estimates of California high school graduates prepared by the Department of Finance's Demographic Unit.

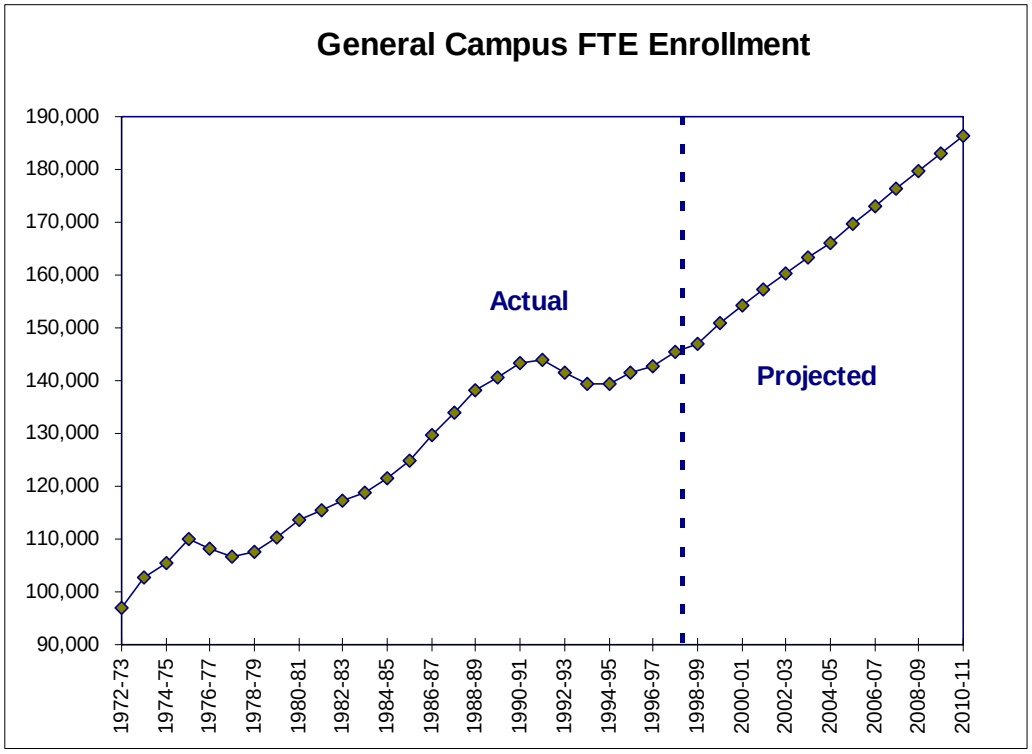
Given the capacity of each campus as defined in its approved Long-Range Development Plans (LRDP), the University expects to be able to accommodate 40,000 new students at existing campuses and an additional 5,000 students at the Merced campus. Based on projections of demand for UC enrollment, there could be between 5,000 and 10,000 more students than can be accommodated at the University, depending upon UC's success in increasing the number of California Community College students transferring to the University and on the University's plans for growth in graduate enrollments. Consistent with the following supplemental language included in the 1998 State Budget, the University plans to look at a number of options to address enrollment growth and report to the Legislature in March 1999.

> *Current Long Range Development Plans (LRDPs) are based on analysis and studies conducted in the mid-1980s. Expected growth at existing campuses is guided by targets designated in LRDPs approved by The Regents. Current enrollment projections from the Department of Finance indicate that UC's existing campuses will reach their LRDP enrollment targets by 2010 – earlier on at least four campuses – and there are indications that there will be more demand by 2010 than the existing and new Merced campuses will have the capacity to meet, given their LRDP targets. If it is determined that future enrollment demand is likely to be greater than expected capacity, it is the intent of the Legislature that UC evaluate options for accommodating future enrollment demand. These options should include, but not be limited to, development of a new campus, development of off-campus centers, and increasing LRDP targets of one or more existing campuses. It is the intent of the Legislature that these options be examined in the context of how best to provide access within available resources. In evaluating the option of establishing off-campus centers, it is the intent of the Legislature that UC use the Ventura Learning Center as an appropriate model and that emphasis is placed on meeting regional needs of potential off-campus center sites. The options considered should not be regarded as mutually exclusive. An off-campus center could be started initially which could eventually develop into a new campus, or a campus LRDP enrollment target could be expanded by establishing an off-campus center.*

Based on the State's continued commitment to higher education and in anticipation of a new compact which would provide funding for all enrollment growth, it is reasonable to assume that the University will be able to continue to provide access under the Master Plan. The University, however, is very concerned that the capital resources will not be

sufficient to support the renewal and modernization of existing facilities and to accommodate growth. The Legislature and the Governor have placed a measure on

DISPLAY 5



the November ballot that would provide higher education with $2.5 billion in general obligation bonds over four years. The University's share of the bond funds would be about $210 million a year. While the $210 million is substantially more than the $150 million a year the State has been providing to support the University's capital improvement program, it is less than the $250 million a year the University needs from the State. The University has already recognized that the State would not be able to meet the full annual capital outlay needs, estimated to be about $400 million, and has committed to meeting a portion of this need through private fundraising and by using a portion of the *increase* in UC general funds to pay for debt service on long-term financing. The University is concerned that the $210 million a year that will be available for capital outlay, assuming the voters approve Proposition 1A in November, will leave a number of the campuses short of adequate space needed to accommodate projected enrollment growth.

As part of its ongoing planning, the University annually monitors enrollment factors and assumptions in order to adjust, if necessary, projections of future enrollments at the undergraduate as well as the graduate academic and professional levels. K-12 continuation rates, freshman application rates from eligible California high school graduates, and demand for transfer from California Community College students are among the key demographic factors that affect the University's enrollment growth. The University also looks at fiscal projections for the State. Within this demographic and financial framework, the University currently is engaged in a consultative process to

review, and if appropriate to modify, existing enrollment plans for each campus through 2005-06. A report will be provided to The Regents by February 1999.

Planning for the Tenth Campus and Academic Programs in the San Joaquin Valley

Development of the tenth campus in Merced is part of the University's strategy to increase its enrollment capacity and provide the benefits of a research university to Californians in the San Joaquin Valley. The University has targeted the official opening of the campus site in Merced for fall 2005, with growth to 5,000 students projected by 2010.

The 1998-99 budget includes an appropriation of $11.4 million related to development of the Merced campus, an increase of $6.5 million from the level of funding provided in 1997-98. The appropriation has two components: (1) $9.9 million in the base budget for planning and startup costs associated with academic programs to be offered in the San Joaquin Valley and planning, startup costs, and ongoing support for the Merced campus; and (2) $1.5 million in one-time funding to establish distributed learning centers for on-site and distance learning instruction. The one-time funds will be used to support the development of (a) the Merced Tri-College Center, which involves new instructional facilities to be shared by the University, Merced College, and California State University, Stanislaus, located on the Merced College campus; (b) development of distance learning facilities in Modesto; and (c) a third center targeted for the Bakersfield area.

The core funding will be used to continue the development of academic programs; site planning, including the campus Long Range Development Plan and associated environmental analyses; support for initial campus staff and faculty; and other one-time program development costs.

Academic Planning and Program Development. Development of instruction and research programs in the San Joaquin Valley is underway, both to expand the educational opportunities that can be offered in the San Joaquin Valley before the campus site in Merced is opened and also to build the foundation of initial research and instructional programs for UC Merced.

The principles guiding the development of these programs and planning for the campus as a whole are as follows:

- UC Merced will be expected to achieve the excellence in teaching, research and public service that characterizes existing UC campuses.
- Strong graduate and research programs will mesh with high quality undergraduate programs.

- The campus will be a network, not simply a single place, linking its students and the people of the San Joaquin Valley with the educational resources of the University, the State, nation, and world.

- Education will be enhanced by sophisticated technology which will enrich teaching and research and link the campus to the world.

- The campus will be a model for an expanded level of intercampus cooperation, within the University and UC-managed National Laboratories and with California State Universities, California Community Colleges, and the California K-12 schools.

- UC Merced will reflect the San Joaquin Valley – its landscape, history, resources, and diverse cultures – both in its physical development and in unique features of its curriculum.

- The campus will be designed to contribute to intellectual development within the campus and the community, and to be a model of appropriate physical development that incorporates environmental stewardship of the site.

Throughout its history, the University of California has built new campuses, such as San Diego, Davis, and Riverside, on a strong research base. One focus of academic planning for the tenth campus is to identify strategies which will create a strong research identity for UC Merced that can lead to outstanding academic programs. The University's multicampus research organizations and its ties to the U.S. Department of Energy's Lawrence Livermore National Laboratory offer possible pathways. By tapping the talent and research networks of these organizations, UC Merced can take the first steps down the road to research and academic preeminence. The first three collaborations are in progress:

- *Lawrence Livermore National Laboratory partnership*: Joint research relationships might focus on (1) environmental sciences, including restoring healthy air and productive soil, and designing non-polluting transportation; (2) computer and information science, including bioinformatics, and (3) engineering, stressing development of advanced technologies. These partnerships could help start strong physical sciences and engineering programs at UC Merced.

- *Sierra Nevada Research partnership*: A coalition of the University's multicampus research organizations would focus on (1) water and watersheds, (2) air quality, (3) climate change, (4) fire ecology, (5) biodiversity, (6) population growth and development, and (7) resource management and policy, using high technology tools such as computer databases and remote sensing. These efforts could be the foundation for outstanding biological science programs at UC Merced.

- *Social Sciences, Humanities and Arts (Community and Policy) partnership*: A second coalition of UC multicampus research organizations will undertake social sciences and humanities initiatives that capitalize on the San Joaquin Valley's

diversity of peoples and cultures. A special focus is providing a policy link to scientific studies.

With the establishment of the new UC Center in Fresno, four UC campuses now offer extension courses and certificate programs in several locations in the San Joaquin Valley and a new UC Merced Extension and Summer Session program is being developed. Initiatives are underway with other UC campuses to deliver degree programs in the San Joaquin Valley using distance learning facilities. Expansion of K-12 teacher training programs continues; the Lawrence Hall of Science Great Explorations in Math and Science Program (GEMS) is establishing a new program in Bakersfield, building on its successes in Fresno; and the UC Center has partnered with the Fresno Unified School District's Science Teacher Training Program to expand its programs to teachers in Merced County and throughout the San Joaquin Valley.

Physical Planning and Site Development. Joint planning for the 11,000 acre University Community which surrounds and includes the 2,000 acre campus site was initiated this past year. Representatives of six organizations are preparing a development concept for this new community, which will include identification of transportation corridors, infrastructure and public service requirements and financing strategies, and a regional approach to environmental preservation and mitigation. The organizations involved in this collaborative planning process are the University; the County of Merced, which has planning jurisdiction for these properties; the Virginia Smith Trust and the Cyril Smith Trusts, owners of the property to be developed adjacent to the campus; the City of Merced, which is adjacent to the area comprising the University Community; and the Merced Irrigation District, which operates major water facilities within the area.

Identification of the development concept for the University Community and implementation strategies are anticipated by winter 1999. The County of Merced will then undertake a formal process to revise its General Plan to reflect this concept. At the same time, the University will initiate its work on a Long Range Development Plan (LRDP) for the Merced campus, based in part on the principles outlined in the development concept for the University Community. Technical studies of the campus site are underway, including topographic, geotechnical, biological resources, and hydrology surveys. The development of a master plan for provision of utilities and development of infrastructure systems, including roads, will be undertaken during 1999. It is anticipated that the campus LRDP, and associated environmental analyses required by state and federal law, will be completed by fall 2000.

If approved, Proposition 1A, a general obligation bond measure on the November ballot, will provide $55 million to help fund the initial capital development for the campus. It is anticipated that this funding will be required in the 2000-01 budget year, the third year that bond funding would be available. A substantial portion of these funds would be used for site development and infrastructure projects. The 2,000 acre campus site is undeveloped and requires full development of infrastructure and utilities, including site grading; storm drainage and sewers; roads, service access, and walkways;

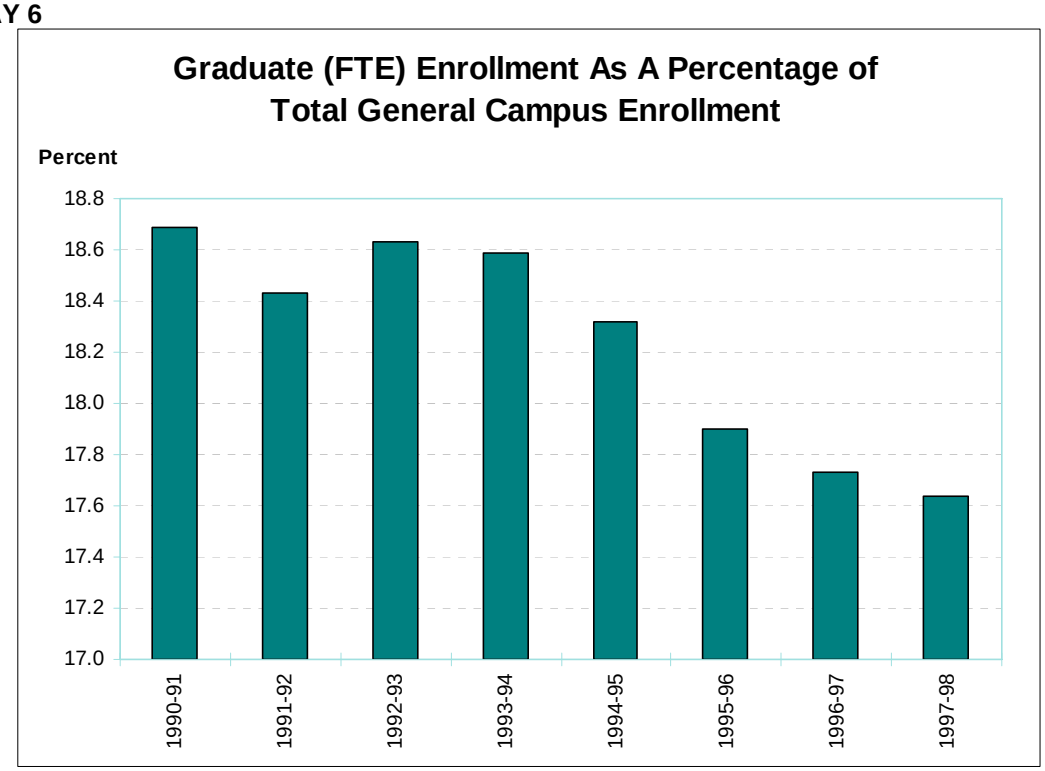
underground utilities distribution; provision of water and wastewater reclamation; and central plant utilities. In addition, this initial complement of capital funds will provide funding for design of the initial buildings to be constructed on the campus for instruction, research, and administrative support activities. Additional capital funding from potential future bond issues and other state sources will be necessary to provide the full complement of buildings, and infrastructure necessary to open the campus by fall 2005.

Graduate Academic and Professional Enrollment

The University has been reexamining the future of graduate academic and professional education at the University of California, and anticipates providing a report to The Regents in early 1999. UC graduate education programs are of the highest quality as measured by unparalleled national rankings, high selectivity, strong placement records, and unrivaled federal research support. More than one-third of all UC doctoral programs rank in the top ten nationally. Job placement of new UC Ph.D. recipients exceeds the national rates.

Currently, 17.6 percent of the students on UC general campuses are enrolled at the graduate level, a drop from 18.7 percent in 1990-91. Most of the decrease in percentage of graduate students was due to substantial growth in undergraduate enrollment and the relative stability of graduate enrollment.

DISPLAY 6



Among the conditions that will be addressed in the report to be presented to The Regents in early 1999 are:

- As a high-technology state, California's dependence on highly educated workers will increase. The service sector, which now outpaces manufacturing in the U.S. economy, requires more technical expertise than ever before because of the advent of computers and the flood of available information. The University's graduate programs prepare highly skilled professionals for industries that are important to California. As much as a third of the University's long-range enrollment growth could come from engineering and computer and information sciences. Also, the life sciences, especially in the pharmaceutical sector and biotechnology, are growth areas of industry to which the University is responding by developing plans for enrollment growth.

- Graduate education is already the University's most effective technology transfer mechanism. This role will become more important, as emerging industries continue to locate near university settings in order to capitalize on collaborations with faculty and graduate students and to be near sources of future employees. Industries have grown up around each of the University's campuses, many of them spun off from research originally developed by UC research teams or in partnership with local firms, some of which were started by UC alumni.

- California and the nation will need more faculty to teach the surge of undergraduates expected to enter higher education in the early years of the 21st century. By 2010,

undergraduate growth at the University and at the California State University could require 7,000 faculty, assuming current student-faculty ratios, plus those required to replace retiring faculty. Because about six years are required to educate doctoral students, the University will need to enroll adequate numbers of new doctoral students very soon.

- Providing adequate support for graduate students remains a major concern. Continuing federal and State support will be essential as will increased industry and donor contributions if graduate enrollments are to grow.

- California must prepare its business and social leaders to apply their academic education to rapidly changing conditions in an international economy. Campuses are targeting growth in programs for business, technical, and public policy professionals trained to work in Asia, Latin America, and other areas of the world. Some experts predict that people will change careers three or four times during their lifetime. Consequently, continual learning opportunities, especially at the masters and advanced certificate levels, will be needed to ensure that California's future workforce is able to adapt.

As one response to address workforce needs, the University is launching a new degree initiative that will expand UC's advanced degree programming for working adult professionals, the Master of Advanced Study (M.A.S.). With this new degree, the University is recognizing the need among professionals for the latest knowledge related to their work. The new M.A.S. program will offer UC-quality instruction in a manner that accommodates the schedules of working adults. Adding to worker's knowledge during the course of their careers is becoming critical as new professions are emerging, multiple career changes are becoming common, and the workplace is evolving to an information-based economy. The University has an important contribution to make in meeting this need for advanced degrees.

The program will feature a number of interdisciplinary offerings to meet the changing needs of California's workforce. Some course tracks will be career-oriented and responsive to specific workplace needs, while others will enable individuals to pursue advanced studies in the liberal arts. This initiative will allow campuses to develop a variety of course tracks under a single degree title (the M.A.S.) and will incorporate nontraditional means of structuring courses and delivering instruction. For instance, some courses might be offered on worksites in coordination with companies, schools or government agencies; others might be designed to fit particular professional schedules, such as intensive programs during the summer for educators; and others might include Internet-based instruction.

Currently, the University offers full-time masters degree programs in the liberal arts and professions, as well as part-time, self-supporting programs on some campuses in business administration, education, engineering, and public health. The new degree program will offer working adults an additional, convenient set of options for attaining an advanced degree congruent with their professional and personal interests. Many of the

University's peers in the private sector, including Stanford, Chicago, Harvard and Johns Hopkins, offer similar types of programs in the liberal arts.

Accomplishments Under the Compact with Higher Education

In January 1995 the Governor proposed a four-year compact with higher education designed to provide the University and California State University with a framework for budgetary stability. Both the State and the University have more than honored their commitments in the compact. The State has provided funding above the levels proposed in the compact to fund enrollment growth, "buy out" proposed fee increases, pay for a five percent reduction in fees for California residents enrolled in undergraduate programs in 1998-99, and to support several high priority teaching, research and outreach programs. In turn, the University has focused on maintaining access for qualified students, providing the classes students need to graduate in a timely manner, and working cooperatively with other segments of higher education. The University takes these commitments seriously and is proud of its accomplishments which include:

- Consistently meeting and exceeding the enrollment goals of the compact;
- Improving time to degree and graduation rates which have never been higher;
- Providing required courses, partly through increased faculty teaching efforts, and ensuring that there are no institutional barriers that prevent students from moving quickly through their programs;
- Improving access for freshman admissions to the University through Pathways and for California Community College transfers through Project ASSIST;
- Increasing transferability of courses between the other segments and the University through such efforts as expanded counselor training institutes, transfer center programs, and transfer information such as that offered through Project ASSIST's Web site;
- Offering more joint activities, including doctoral programs, with California State University; and,
- Making productivity improvements totaling $40 million.

Student Access. The University is maintaining its commitment to the Master Plan to provide a place on one of the UC campuses to all eligible California high school graduates who wish to attend, and in most years has enrolled more students than funded by the State. Campuses received applications for fall 1998 admission from over 49,600 California high school seniors, up from the previous year and up 6.4 percent since 1991. Of those admitted, nearly 26,200 California high school graduates are planning to attend the University, up about 1,800 or nearly 7.3 percent over 1997.

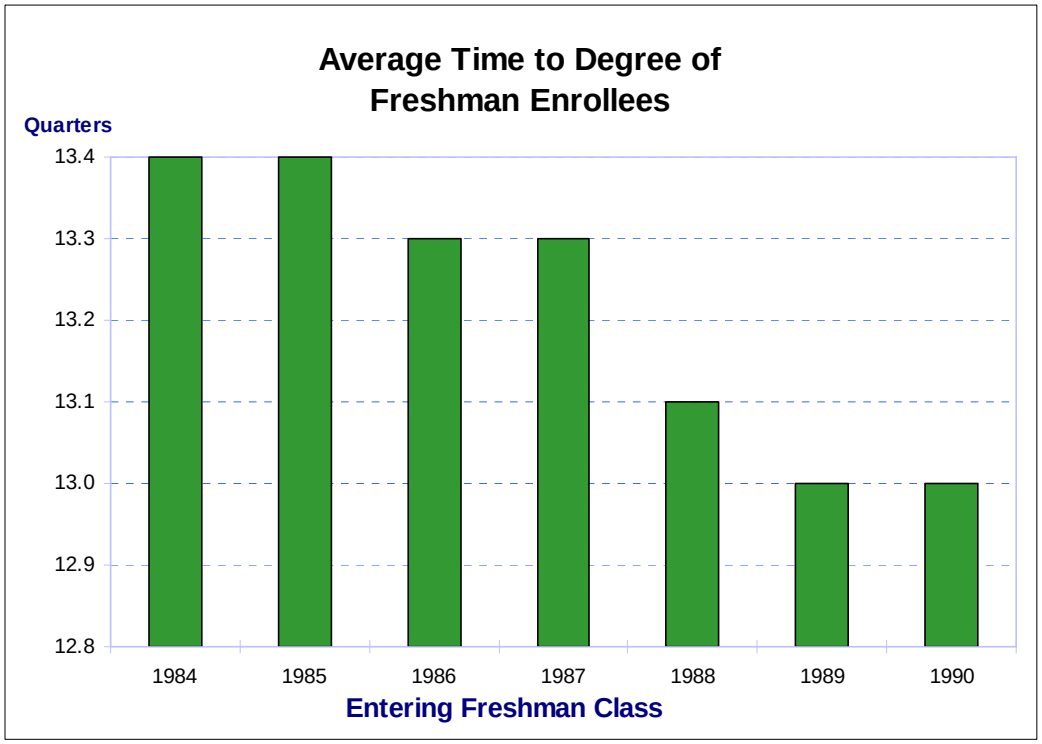
The University is examining ways to ensure that it can continue to provide access to all eligible students. One effort to maintain access is Pathways, the University's new Web-based application and advising system. Pathways allows prospective applicants to explore each campus, receive admissions and financial aid information, and initiate their application for admission by completing forms at the Web site. Moreover, students are able to communicate on-line with the University regarding admissions questions. All California high school students were able to apply to the University through Pathways since the fall 1997 admission cycle. In the future, new components will be added to the system which will allow students to store a cumulative record of their achievements in a safe location on-line, to compare courses they are taking with UC requirements, and to directly communicate with the University regarding their academic progress.

Timely Graduation. In the 1950s, only half of the University's new freshmen graduated within six years following matriculation. Today, more than three-quarters of freshmen who enter the University can be expected to earn a baccalaureate degree within six years. The proportion of undergraduates who graduate from the University is at an historic high point: 38 percent take four years or less to receive their baccalaureate degree and 70 percent graduate within five years.

Today, more students are graduating, and they are graduating faster. Four-year graduation rates have improved from 31 percent of the 1984 entering freshman class to 38 percent of the 1992 freshman cohort. Those who do not graduate in four years typically require only one more academic quarter to earn their degree, as reflected by the fact that 70 percent of the 1992 entering freshman class received a baccalaureate degree within five years, up from 67 percent of the 1984 entering freshman class. Also, three-quarters of those students who transfer to the University from the California Community Colleges will earn a UC baccalaureate degree within four years.

Persistence rates – the proportion of an entering class of students who return to enroll in their second and subsequent years – also have shown gains over the past decade. The proportion of freshmen who returned to enroll in their second year increased from about 88 percent of the 1984 cohort to 92 percent of the 1996 cohort. Two-year persistence increased from 76 percent of those entering in fall 1984 to 83 percent of those entering in fall 1995 (the most recent data available).

DISPLAY 7



The University continues to have a good record with respect to the amount of enrolled time it takes a student to complete an undergraduate program. As shown in Display 7, time to degree has dropped from 13.4 enrolled quarters (where a four-year degree equals 12 quarters) for the 1984 entering freshman class to 13.0 for the 1990 freshman cohort (the most recent data available). The University is continuing its efforts to ensure that there are no institutional barriers that would keep students from moving expeditiously through their curricula and graduating in four years if they so desire.

All eight of the general campuses have implemented “finish-in-four” plans which have as their primary goal the provision of information to students that will enable students to make plans and decisions which will result in completing a degree in four years. Finish-in-four initiatives are only one of several actions that the University has taken to enable students to complete their degrees in a timely fashion. Some campuses have recently undertaken systematic examinations of all of their student advising systems or made changes to enhance advising. Campuses continue to ensure course availability by sustaining increases in faculty teaching effort, creatively managing the curriculum and its delivery, recalling retired faculty, using technology, and cooperating across campuses in instructional delivery.

In March 1998, the University submitted its fifth annual report to the Legislature titled *Undergraduate Instruction and Faculty Teaching Activities*. The report describes faculty efforts to maintain and improve the quality of undergraduate education even in a constrained budgetary context. UC faculty have worked hard to provide required

courses and to sustain interaction with undergraduate students. The average 1996-97 primary class teaching load shows substantial improvement over 1990-91 levels. In 1996-97 the Universitywide average primary class teaching load was 5.0 classes per FTE faculty. These data reflect a gain of 10.7 percent over the average workload of 4.5 classes per FTE faculty in 1990-91. In the final analysis, this faculty commitment is the most important factor that has made it possible for the University to preserve its instructional program through the worst of the budget shortfalls, and, with renewed budgetary stability, to begin to prepare for the future.

Faculty time-use studies have shown that UC faculty members devote on average over 60 hours per week to University-related activities, including about 26 hours of instructional activities, 23 hours of research and creative activity, and about 12 hours of University and public service and professional activity. Surveys reported by the National Center for Educational Statistics show similar faculty work-weeks and time spent on teaching at other public research universities.

Intersegmental Cooperation. At the graduate level, the University has established several joint programs with the California State University (CSU). A wide range of UC academic departments collaborate with CSU in the California Pre-Doctoral Program, which encourages CSU's best masters students to pursue doctoral training at the University. Various UC and CSU campuses offer joint doctoral programs in education, public health, and geography. For example, UC Davis and CSU Fresno offer a Joint Doctoral Program in Educational Leadership. Other joint programs have been established between UC San Diego and San Diego State University, UCLA and Los Angeles State University, UC Berkeley and San Francisco State University, and UC Santa Barbara and San Diego State University.

UC Merced includes the creation of distributed education centers that feature arrangements with other institutions of higher education in the Valley. The UC Center in Fresno is the first of the network of distributed education centers. A second center, the Merced Tri-College Center, is scheduled to open in 1999. At this center, the University, CSU Stanislaus and Merced College will share classroom and office space.

At the undergraduate level, the University and the California Community College (CCC) systems have entered into a Memorandum of Understanding (MOU) which seeks to increase the number of CCC students transferring to the University. The MOU calls for joint efforts to improve information and services to CCC students intending to transfer to the University. Increased outreach, a more seamless financial aid system, more data sharing between the systems, and strengthened academic advising will help increase the numbers of transfers to UC. The 1998 State Budget provides $3.5 million to expand outreach services to CCC students to promote transfer to UC. This outreach effort is discussed more fully in the Public Service section of this budget.

The MOU sets a target of 14,500 new CCC students transferring to the University by 2005-06, up from 10,200 students transferring in 1997-98. Enrollment increases will be part of the University's annual budget requests to the State for enrollment growth.

The MOU will build upon existing UC-CCC collaborative efforts which help students successfully manage the transfer process. Currently, the University provides: (1) transfer-specific training institutes for CCC counselors; (2) expanded articulation with the CCC through inter-institutional transfer agreements; (3) increased access to transfer information to students throughout the State; and (4) co-sponsorship of the Transfer Center Program.

To make sure that up-to-date and accurate information about transfer preparation and application are widely available at CCC, the University (in cooperation with CSU) sponsors in the fall the *Ensuring Transfer Success* Counselor Institute and each spring several intensive two-day workshops exploring all major aspects of the process. Experts from each UC campus and from the system office discuss recent changes and trends in transfer application and enrollment; provide detailed campus-by-campus information on how to prepare for specific majors; explain the University's financial aid process; and explore new developments in articulation and use of technology to keep abreast of changes on a regular and frequent basis.

Most UC campuses now offer "contracts" to individual CCC students that guarantee the student a space after the successful completion of a prescribed set of courses. For many students this "contract" helps to set goals and inspires confidence that their good efforts will be rewarded which in turn promotes higher achievement.

All 106 CCCs now receive a complete review of their entire curriculum every year, identifying which courses will provide academic credit that meets requirements for transfer to the University. Also, all UC campuses now have approved the use of the Intersegmental General Education Transfer Curriculum (IGETC) which satisfies all UC general education breadth, and allows transferring students who complete the CCC curriculum to enroll in courses for their major upon entry to the University, reducing their time-to-degree significantly. Finally, in a review that has resulted in new transfer eligibility requirements taking effect in fall 1998, UC faculty recommended a greater emphasis on CCC coursework rather than high school eligibility and specified in more detail the elements of a CCC curriculum that will help to ensure students' academic preparation for upper division work at the University.

In 1997, Project ASSIST (*Articulation System Stimulating Interinstitutional Student Transfer)* was integrated into a site on the World Wide Web, making articulation information available to students, counselors, and other transfer personnel throughout the state. Project ASSIST, which was developed by the University in concert with CSU and the CCC, is a statewide computerized articulation and transfer planning system that provides students and counselors access to information about the transferability of CCC course credits to specific University and CSU campuses. The database contains transfer agreements with local CCCs that provide the transfer student with a set of precise requirements necessary to satisfy admission to many of the specific majors or colleges on all UC campuses.

The Transfer Center Program was initiated in 1985-86 as an intersegmental program involving the University, the CSU, and the CCC to increase transfer rates. Transfer Centers are located on CCC campuses and serve as the focus of transfer activities. Center staff provide direct services to identify, encourage, and assist potential transfer students. The Center helps students prepare for upper division work by providing academic planning services and employing articulation agreements to ensure that CCC course work will be accepted for transfer.

In addition to building on these successful transfer program efforts, the newly-established MOU addresses some areas where greater attention is needed. These include identifying potential transfer students earlier, cultivating faculty-to-faculty dialogue, creating special financial aid packages for transfer students covering both pre- and post-transfer years, more part-time enrollment at University campuses, and closer alliances between University transfer outreach staff and CCC transfer centers.

The MOU stipulates that implementation is to be directed by an intersegmental committee consisting of University and CCC systemwide and campus administrators, Academic Senate representatives, and students. During the 1998-99 academic year, the Committee will be reviewing the current array of transfer-related admissions policies, procedures, and activities for both segments, in order to assess their effectiveness and make recommendations for improvement.

Changes in Admissions Policy

The University continues to be committed to offer a place to all eligible California public high school graduates who apply for admission. Every few years, the California Postsecondary Education Commission (CPEC) does a study of eligibility of California public high school seniors for UC and CSU admission. The most recent report, based on 1996 high school seniors and released in fall 1997, indicates that 11.1 percent of California high school graduates are fully eligible for the University (that is, these students meet all of the course, scholarship, and test requirements), below the 12.5 percent recommended by the California Master Plan for Higher Education. In addition to the 11.1 percent fully-eligible students, CPEC found that an additional 9.4 percent are "potentially eligible," i.e., eligible except for the fact that they did not take one of the tests required for admission.

The "potentially eligible" category has created some confusion which has led to some disagreement about the size of the pool from which the University is accepting students. From an admissions standpoint, only those who fulfill all of the requirements are considered. No matter how the pool is determined, the University is *enrolling* about 7.4 percent of California public high school graduates. This is similar to the late 1980s. At that time, there was no issue about the size of the eligibility pool, yet the University enrolled about 7.2 percent of public high school graduates. While the University is committed to making adjustments in eligibility requirements, it is likely to continue to enroll about 7.4 percent of the California public high school graduates.

The UC faculty, through its Board of Admissions and Relations with Schools (BOARS), is addressing concerns regarding eligibility for freshman admission to the University raised as a result of the CPEC eligibility study. BOARS expects that revised eligibility guidelines will be presented to The Regents in early 1999. Any changes approved by The Regents would be implemented no earlier than fall 2000, giving sufficient notice to students applying for admission to the University. Also, the University has agreed with the Legislature on the following supplemental report language regarding eligibility and will provide an interim report:

> *It is the intent of the Legislature that the University of California report to the legislative fiscal committees of each house by October 1, 1998 on actions it plans to take to meet the Master Plan goal of selecting students from among the top 12.5 percent of public high school graduates.*

To address the "potentially eligible" category of students, BOARS will recommend revising the University's academic index upon which eligibility is based, to be calculated from not only a combination of high school grade point average (GPA) and Scholastic Assessment Test (SAT) verbal and mathematical *reasoning* scores, but also from SAT *subject* scores which reflect knowledge of particular subjects and the ability to apply that knowledge. Students would need to provide GPA and both sets of SAT scores before an eligibility assessment could be made. Thus, the "potentially eligible" group would be eliminated.

UC's current admissions selection guidelines, which were issued by the University in 1996 and implemented in spring 1997, conform to Proposition 209, which went into effect in August 1997 as Section 31 of Article 1 of the California State Constitution. This constitutional amendment (which has a similar impact on the University's admissions policy as The Regents' Resolution SP-1 adopted in 1995), stipulates that the State, including the University, "shall not discriminate against, or grant preferential treatment to, any individual or group on the basis of race, sex, color, ethnicity, or national origin in the operation of public employment, public education, or public contracting."

Displays 8 and 9 display the ethnicity of general campus and health sciences students enrolled at the University in fall 1987 and 1997.

DISPLAY 8

Undergraduate Enrollment by Ethnicity
Fall 1987 - 1997

	1987	1997	Change	Percent Change
African American	5,124	5,003	(121)	-2%
American Indian	810	1,201	391	48%
Chicano	6,637	12,354	5,717	86%
Latino	3,607	4,841	1,234	34%
Subtotal	16,178	23,399	7,221	45%
Asian	18,659	36,239	17,580	94%
Filipino	3,821	5,659	1,838	48%
White/Other	72,616	56,173	(16,443)	-23%
International	2,378	2,806	428	18%
Decline to State	3,564	4,981	1,417	40%
Subtotal	101,038	105,858	4,820	5%
TOTAL	117,216	129,257	12,041	10%

DISPLAY 9

Graduate Enrollment by Ethnicity
Fall 1987 - 1997

	1987	1997	Change	Percent Change
African American	1,197	1,347	150	13%
American Indian	217	290	73	34%
Chicano	1,230	1,658	428	35%
Latino	846	1,219	373	44%
Subtotal	3,490	4,514	1,024	29%
Asian	3,330	5,974	2,644	79%
Filipino	229	552	323	141%
White/Other	25,395	22,651	(2,744)	-11%
International	5,222	4,924	(298)	-6%
Decline to State	2,449	1,990	(459)	-19%
Subtotal	36,625	36,091	(534)	-1%
TOTAL	40,115	40,605	490	1%

Note: Includes general campus and health sciences enrollment

HEALTH SCIENCES INSTRUCTION

1998-99 Budget	
Total Funds	$640,551,000
General Funds	288,259,000
Restricted Funds	352,292,000
1999-00 Increase	
General Funds	--
Restricted Funds	$17,800,000

The instructional program in the health sciences is conducted principally in fourteen health professional schools which provide education to students preparing for various careers in health care, teaching, and research. The health sciences schools are located on six campuses and include five schools of medicine, two schools of dentistry, two schools of nursing, two schools of public health, one school of optometry, one school of pharmacy, and one school of veterinary medicine. In addition, the University operates four programs in medical education conducted at Berkeley, in Fresno and Riverside, and at the Charles R. Drew University of Medicine and Science in Los Angeles. Professional and academic students, residents, postdoctoral fellows, students in allied health programs, and graduate students who will become teachers and researchers participate in the programs of the health sciences schools. The physical, biological, and behavioral science programs of the general campuses are important complements to the programs of the health sciences schools.

In order to operate the instructional program, the health sciences schools require faculty, administrative and staff personnel, supplies, and equipment. Faculty requirements are determined in accordance with student-faculty ratios which have been established for each type of school and for each of the categories of students enrolled in these schools. As examples, the historical budgeted student-faculty ratio for medical students is 3.5:1; for dentistry students, 4:1; and for pharmacy students, 11:1.

Faculty salary costs constitute about 64 percent of the total budget for the health sciences instructional program. Instructional support costs represent 14 percent of the program's budget. These costs include non-faculty personnel, equipment, and supplies, which are provided for each faculty position based on support levels determined for each school. The remaining 22 percent of the program's budget provides funding for other expenses including employee benefits, partial support of stipends paid to interns and residents, and a portion of malpractice insurance premiums.

In addition to the resources provided in the instruction budget, the cost of clinical training traditionally has been supplemented by physician and other professional fee income and by revenues generated by the medical centers. Financial support for medical education and clinical training has been declining as a result of recent changes in the organization and delivery of health services, including the growth of managed care and changes in the federal Medicare and Medicaid programs. There is a need to broaden the sources of financial support to help pay for the costs of medical education, and to expand the coverage to include the costs of teaching that are increasingly incurred in outpatient settings.

In 1996-97, the University was successful in obtaining $50 million in additional federal Medicaid funds to help support the medical education costs related to services provided to the State's Medi-Cal population. Under this program, the Medi-Cal Medical Education Supplemental Payment (MMESP) program, the medical centers received an additional $35 million in 1997-98. These funds, along with the graduate medical education payments that have long been a part of Medicare, have provided essential resources for the University and other teaching hospitals in support of their teaching and patient care missions. Unless extended by the Legislature, the enabling legislation for MMESP sunsets on June 30, 1999. The University is working with other teaching hospitals to develop an alternative all-payer, long-term funding model for supporting medical education that will replace MMESP. Until such a model can be developed and adopted by the State, however, the continuation of the Medi-Cal Medical Education Supplemental Payment program funding is essential.

The dramatic changes taking place in the health care delivery system continue to have a profound effect on health sciences education, on the content of the academic curriculum, on sites and locations utilized for clinical teaching and on the relationships between disciplines. The future agenda for the University health sciences will require the careful planning of enrollments and curricula to meet the future workforce and research needs of the State and the society. Continuing efforts will also be required to ensure that adequate financial and clinical resources are available to support quality education and research programs in medicine and other health sciences professions.

Health Sciences Enrollments Nationally and Within UC

The University's long-range academic planning for the health sciences is influenced by a variety of internal and external factors. External factors include the State's need for health professionals, federal and State policies for funding health sciences education, access to and reimbursement for health services for the poor, and the State's overall financial circumstances. These external factors have influenced health sciences enrollment planning at the Universitywide level which, in turn, has provided broad parameters for the internal, decentralized planning process through which campuses initiate proposals to address programmatic concerns.

National health care workforce projections are considered within the context of the University's health sciences planning process and have had a long history in this country. In the early 1970s, the Graduate Medical Education National Advisory Committee (GMENAC) predicted a shortage of physicians. By the early 1990s, however, projections warned of a national shortage of generalists and a significant oversupply of specialists by the year 2000.

More recent analyses, including a 1995 study published in the Journal of the American Medical Association and a 1997 report issued by the Center for the Health Professions at UCSF, support the notion the nation is on the verge of a significant oversupply of specialists and subspecialists. These analyses suggest that the current size of the generalist workforce falls within the range necessary for the future, and that the large expansion of the primary care workforce previously projected may not be required. These examples underscore the need to continually re-examine workforce projections for medicine and for all the health professions.

Health Sciences Enrollments in the University

After peaking in the early 1980s, budgeted enrollments in the health sciences remained relatively steady through 1997-98. Display 1 shows total University health sciences enrollment and the first-year class size for selected professional programs for the academic years 1970-71, 1981-82, 1989-90 and 1999-00 (budgeted). Display 1 also shows that after increases through 1981-82, enrollments began to decrease in large part due to budget cuts.

The 1998-99 State Budget includes an augmentation of $2.5 million to support an increase in the Doctor of Veterinary Medicine (DVM) entering class from 122 to 131, along with an increase of 30 veterinary residents. The actual DVM enrollment increase – nine students per year for each of the four years of the program totaling 36 – will be phased in over a number of years.

Except for possible increases in the graduate academic enrollment increases for selected programs in medicine, budgeted health sciences enrollments are expected to remain essentially steady through 2005. Within budgeted enrollments for the various schools and colleges, however, programs are being modified in response to workforce concerns. For example, among medical residents, there has been an increased emphasis on training primary care physicians and a concurrent reduction in the number of specialists trained.

DISPLAY 1

Health Sciences Year-Average Headcount Enrollments: Total Enrollment And First-Year Class Size for Selected Programs

	1970-71 Budget	1981-82 Budget	1982-83 Budget	1989-90 Budget	1999-00 Budget Plan	
Total Enrollment	7,015	12,750	12,217	12,022	12,064	(a)
First-Year Class Size:						
Medicine	429	652	622	622	622	
Dentistry	175	216	197	176	168	
Veterinary Medicine	83	129	122	122	131	(a)
Pharmacy	93	120	117	117	117	
Optometry	54	68	65	65	65	

(a) By agreement, the actual enrollment increase from 122 to the new budgeted level of 131 will be phased in over a multi-year period ending in 2007-08.

Planned Growth in the 1970s. In 1970, in response to the projected need for increased numbers of health care professionals, the University submitted a comprehensive ten-year plan for the health sciences to the State. In spring 1975, the University submitted a revised plan for the health sciences, based on an extensive reevaluation of programs and resource requirements and an attempt to provide a reasonable balance between the State's needs for health care professionals and the State's ability to finance the projected growth. This plan was accepted within the University and approved by the State. Operating budget resources to accommodate health sciences enrollment growth in the 1970s were provided by the State. Facilities to accommodate the enrollment growth were funded by a Health Sciences Bond Issue on the 1972 ballot. Enrollment levels envisioned in the 1975 plan were largely achieved by 1981-82.

The Reductions of the 1980s. By 1982-83, however, the State's fiscal problems and downward revisions of estimated future health workforce needs led to a number of decisions which significantly reduced the enrollment levels achieved as a result of the earlier plan. As a result of this and other factors discussed below, health sciences budgets were reduced by $12.6 million during the period 1982-83 through 1988-89, resulting in enrollment reductions totaling 1,193 students in existing programs. Some of this decline was offset by an increase of 384 students in selected or new programs, including 218 students in the Drew/UCLA Medical Education Program.

- *The 2.5 Percent Budget Reduction, 1982-83.* Among the actions taken in response

to the 2.5 percent reduction of the University's base budget included in the 1982 State Budget, was a cut of $3.6 million in the health sciences instructional programs. This cut required enrollment reductions totaling 388 students in medicine, dentistry, nursing, and veterinary medicine. These cuts were phased over a period of four years in order to allow enrolled students time to complete their degrees.

- *Loss of Federal Capitation Funds.* The federal government instituted a capitation grant program to encourage the expansion of enrollments in the health sciences beginning in 1972-73. The University budgeted these funds as an offset to State support. Although the University considered the basic educational costs of these programs to be primarily a State responsibility, federal income contributed significantly to their support. Federal capitation funds peaked at $6.4 million in 1974-75. Beginning in 1979-80, federal capitation funds were reduced significantly and by 1981-82, were eliminated for all health sciences schools except public health. In 1981-82, capitation funds for public health were also reduced significantly. The funding level for public health remained fairly constant until 1990-91, when the enabling federal legislation expired and capitation funds were phased out.

  As a result of losing federal capitation funds, the University reduced class sizes over a four-year period resulting in a total reduction of 140 professional students in the health sciences schools by 1985-86. This reduction was in addition to the enrollment reduction resulting from the 2.5 percent budget cut discussed above.

  Although the State recognized the elimination of the capitation funds and provided partial replacement funds totaling $3.3 million, the University's health sciences schools were left with a $2 million deficiency. To maintain the quality of the instructional programs in the health sciences schools, the University reduced all entering class sizes in 1982-83 by two-to-five students each, for a total reduction of 35 professional students.

- *Legislative Reduction of Non-Primary Care Residency Positions, 1982-83.* In 1983-84, legislation requiring a budget reduction of $2 million for medical residency positions in non-primary care specialties was passed, requiring elimination of 267 such positions in 1983-84. No residency positions could be eliminated in 1982-83 because applicants had already been accepted at the time of the legislative action.

- *Budget Reduction, 1983-84.* In addition to the enrollment reductions discussed above, further reductions were required due to elimination of certain fixed-cost funds from the University's 1983-84 budget. The 1984 State Budget Act restored only a portion of these funds; the remainder represented a permanent reduction of the University's budget. The University decided to take $5 million of this cut by reducing enrollment in the health sciences programs by 398 students and by reducing the budgets of the neuropsychiatric institutes by approximately 2.8 percent, phased over a four-year period beginning in 1985-86. The net reduction of 398 students included students in medicine (210 residents and 42 family nurse practitioners in a UCSD

based medical school program), dentistry (84 D.D.S. students and 21 residents), nursing (37 graduate professional students), and public health (50 B.S. students and 6 graduate professional students), partially offset by an increase of 24 graduate academic students in nursing and 28 graduate academic students in public health.

Budget Reductions in the Early 1990s. The State began to experience further fiscal problems in the late 1980s. These problems escalated in the early 1990s, eventually developing into a major fiscal crisis for the State. As part of an overall plan to accommodate over $400 million in budget cuts in the early 1990s, the University reduced total budgeted enrollments by 5,500 FTEs, which included 412 health sciences students. Although the 1992-93 Governor's Budget provided funding for new enrollment growth of 100 health sciences graduate academic students, the funding increase associated with this enrollment growth was more than offset by an undesignated cut of $224 million in the 1992 State Budget Act.

As one means of coping with cuts of this magnitude in such a short time frame, the University offered three early retirement programs. As a result, health sciences programs lost a number of senior faculty, and student-faculty ratios deteriorated. In order to maintain the quality of the health sciences instructional program, a substantial portion of the vacant faculty positions must be refilled. Income from the Fee for Selected Professional School Students (net of financial aid) is being used in part for this purpose.

Fee for Selected Professional School Students

The Fee for Selected Professional School Students was charged to first-time students in fall 1994 and became a permanent feature for that class and all subsequent classes in medicine, dentistry and veterinary medicine. Since fall 1996, a similar fee is being charged to students in nursing, optometry and pharmacy. In charging the fee, the University reconfirmed its commitment to maintain academic quality and enrollment in the designated professional school programs. An amount equivalent to at least one-third of the total fee revenue is used to provide financial aid to help maintain the affordability of a professional school education. The remaining revenue is used to sustain and enhance the quality of the professional schools' academic programs and student services, and to fund costs related to instruction. Income from the Professional School Student Fee is being used to help fill a portion of faculty positions vacated through early retirements and, thus, to support student enrollments now restored to 1990-91 budgeted levels. This financial structure treats health sciences and the general campus programs similarly with respect to net budget cuts. The Fee for Selected Professional School Students is discussed in more detail in the Student Fees section of this document.

Increasing the Training of Generalists

While the changing workforce requirements of a reformed health care system will affect all of the health sciences professions, initial projections have tended to focus on the

nation's supply of generalist and specialist physicians, and the extent to which the number and distribution of such physicians are consistent with foreseeable workforce needs. In response to the increasing emphasis on primary care at the national level and to a specific legislative initiative in California, the University undertook a planning effort related to the State's need for primary care physicians and the University's role in filling this need.

A first report in June 1993, titled *Changing Directions in Medical Education: A Systemwide Plan for Increasing the Training of Generalists*, outlined the University's plans to increase emphasis on primary care training for medical students and residents. These planned changes included, but were not limited to, changes in medical student admission processes and curriculum, increases in the number and proportion of primary care residency positions at each campus, and significant concurrent reductions in the total systemwide number of non-primary care positions.

At the request of the Governor, the University assessed its ability to accelerate the original timetable for achieving the planned increases in primary care residency training and planned decreases in non-primary care specialty training. In June 1994, the University submitted a second report which incorporated revised goals for 2001-02. These goals exceeded those identified in the first report by increasing the number of medical residents training in primary care specialties.

In response to a request from the Governor, the University also developed a memorandum of understanding with the Office of Statewide Health Planning and Development regarding issues related to the University's primary care training goals. Consistent with this document and the provisions of supplemental language adopted in conjunction with the 1994 State Budget, the University has provided a series of five annual reports to the Governor and the Legislature detailing progress toward meeting its primary care expansion goals. A sixth report is in progress.

Over the past five years, the UC medical centers have made significant progress toward meeting these and related goals. Highlights include:

- Targeted efforts by UC admissions to recruit students with a demonstrated commitment to caring for medically underserved communities within the State.

- Comprehensive curricular changes emphasizing core primary competencies, outpatient training, and the acquisition of skills required for effective practice in managed care and other future delivery settings.

- Increasing medical student interest in generalist specialties. Among the 1998 graduates of UC's five medical schools, nearly 60 percent selected primary care residencies, with nearly 20 percent of all seniors choosing family practice.

- Continuing growth in UC and UC-affiliated family practice programs, with a 1997-98 total of 739, a more than 40 percent increase over the 1992-93 base of 521.

- Reduction of 266 positions in non-primary care during the same five-year period, with further reductions planned to occur over the next several years.

For the 1997-98 academic year, systemwide enrollment data (provided in Display 2) show a total of 2,240 (51%) residents in primary care specialties, including 739 in family practice (17%). An additional 2,139 (49%) residents are training in non-primary care fields. In terms of the percentage mix between primary care and specialist, the percentage of residents in primary care residencies increased from 45 percent in the base year 1992-93 to 51 percent in 1997-98, and the University is on track in meeting its primary care-related goals for 2001-02 (55% primary care).

DISPLAY 2

PLANNED CHANGES IN NUMBER OF MEDICAL RESIDENTS (1)
Progress Toward Increasing the Number of Primary Care Residents

Medical Residents by Specialty: Number and Percent

1992-93 Base Year Compared with 1997-98 Actual and 2001-02 Projected

SPECIALTY	Base Year 1992-93		Actual 1997-98		Actual Change From 1992-93 Base		Target 2001-02	
	Number	Percent	Number	Percent	Number	Percent	Number	Percent
Family Practice	521	12%	739	17%	218	42%	885	20%
Other Primary Care	1413	33%	1501	34%	88	6%	1494	34%
Subtotal Primary Care	1934	45%	2240	51%	306	16%	2379	55%
Non-Primary Care	2405	55%	2139	49%	-266	-11%	1953	45%
GRAND TOTAL	**4339**	**100%**	**4379**	**100%**	**40**	**1%**	**4332**	**100%**

(1) Prepared for the University's June 1998 report titled, "Changing Direction in Medical Education: 1998 Update on Systemwide Efforts to Increase the Training of Generalist." (in progress)

Impact of Managed Care

The University's health sciences instructional programs operate in a dynamic and increasingly complex environment. While historical influences persist, long-range planning for the health sciences has been greatly influenced by changes in the organizational, financial and legal framework of much of the health care delivery system in the nation. Health care delivery is moving toward systems of integrated care that combine primary, specialty and hospital service at the same time that the insured population is increasingly enrolling in such systems to provide for their health care needs.

Managed care is the term broadly applied to this range of structural reorganizations and innovations aimed at improving patient health or reducing health care costs. Managed care delivery systems use primary care physicians, physician assistants and nurse practitioners to provide preventive and primary care intervention in outpatient clinical settings to reduce the subsequent need for more costly hospitalization and specialist services later on. This is affecting the University's health education program in two ways.

First, in anticipation of future health manpower needs, the University is producing more primary care physicians and allied health professionals, and fewer specialists; incorporating more training in outpatient settings for all medical students; and reexamining other aspects of traditional health sciences curricula.

Second, managed care is undermining the financial stability of the University's medical centers which have been a major source of funding for the University's five schools of medicine as well as programs in the other health sciences schools. Hospital revenues that exceed annual expenses, the "operating margins" of the medical centers, are used to modernize facilities, meet working capital needs, expand primary care networks, maintain up-to-date medical equipment, and support the patient volume needed to support health sciences instructional and research programs. With managed care's emphasis on cost containment and the provision of care in outpatient settings, inpatient days and revenues are declining. As managed care delivery systems evolve, cost-based and fee-for service reimbursements are being phased out in favor of competitively established, fixed-price payments. Generally, these negotiated rates do not recognize or support the higher costs of academic medical centers related to their teaching and research-related activities, and for their role in the health care delivery safety net for the poor.

Paying for the Costs of Health Sciences Education

Over the next few years, one of the major issues that the UC health sciences will continue to face is how to maintain high-quality training of doctors and other health care professionals in a price-sensitive, competitive, managed care environment. Strong academic medical centers are an essential part of this effort.

Medicare reimbursements currently recognize teaching costs but are expected to decline as a result of commitments to balance the federal budget. Despite substantial success in containing costs, the cost of services provided by academic medical centers are higher than non-teaching institutions. For example, there are the direct and indirect costs associated with training medical students and residents, and research and development costs associated with keeping the academic program current. Increasingly, the negotiated rates the teaching hospitals are forced to accept do not recognize these instructional costs, and there are reduced opportunities for offsetting the resulting reimbursement shortfall to charge-paying private patients. Unless current government subsidies for medical education are continued or alternative sources of funding are found to support education-related costs, enabling the medical centers to compete with non-teaching institutions for market share, the operating margins of the University's medical centers will decline, with negative consequences for the academic program.

Currently, there is pressure from accrediting bodies, managed care plans, and other policy makers to shift the locus of medical training from inpatient to outpatient care sites. While medical education costs in the outpatient setting are more difficult to quantify than those incurred in inpatient settings, the costs are expected to be similar or higher. There are fewer opportunities to involve teams of residents and medical students together (as can be done in inpatient settings). And, government funding for ambulatory care does not include the increments for teaching. The UCSF Medical Center has estimated that its cost of providing outpatient care in a teaching clinic is nearly double the cost in the average non-teaching setting.

The University is reviewing many options for funding medical and health sciences education in both the short-term and over the long-term. These are discussed in the Teaching Hospitals section of this document.

SUMMER SESSION

1998-99 Budget	
Total Funds	$32,200,000
General Funds	--
Restricted Funds	$32,200,000
1999-00 Increase	
General Funds	--
Restricted Funds	$1,932,000

In addition to the University's course offerings during the regular academic year, students may enroll in courses during the University of California Summer Session which is supported from student course and registration fees. Campuses offer between two and five sessions during the summer, lasting from four to nine weeks. Courses are offered both for degree credit and in selected specialized programs. Summer degree programs offer a broad spectrum of instruction, with each campus determining its own course offerings. Specialized programs provide refresher courses for new and continuing students and enable students to accelerate progress toward degrees. In addition, most campuses have special programs for new or potential students who have academic deficiencies. Instruction during summer sessions is provided by UC faculty, visitors from other universities, and lecturers. Over 400 Academic Senate faculty taught summer courses in 1997.

In 1997, there were approximately 53,000 registrations in Summer Session by students who wanted to accelerate progress toward their degree; to take courses that are hard to fit into their schedule during the regular academic year; to earn course credits to satisfy degree requirements while at home during the summer; and, while still in high school, to get a head start on college course work.

UNIVERSITY EXTENSION

1998-99 Budget	
Total Funds	$199,000,000
General Funds	--
Restricted Funds	199,000,000
1999-00 Increase	
General Funds	--
Restricted Funds	$9,950,000

UC Extension is the largest continuing education program in the nation, providing education to nearly half a million registrants between the ages of 24 and the early 50s 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.

UC 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 eight general campuses offer over 18,000 different courses, programs, seminars, conferences, and field studies throughout California and in a number of foreign countries. Over 200 courses are offered on the Web, allowing students to take the courses largely from wherever their computer is located. In addition to studying on-line, the Center for Media and Independent Learning, a statewide division of Extension, offers more than 180 high school, university, and professional development courses by mail, email, and fax.

Almost 60 percent of Extension's offerings are designed to serve the continuing educational needs of professionals. Over 380 certificate programs are offered in such areas as computing and information technology; graphics and digital arts; and health and behavioral sciences.

The other 40 percent of Extension's offerings provide degree-equivalent study in undergraduate education programs, and cultural enrichment and public service programs. Various kinds of 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. In addition to classes, Extension also organizes lecture series, summer institutes, public affairs forums, and other events for the general public.

RESEARCH

1998-99 Budget	
Total Funds	$348,529,000
General Funds	250,404,000
Restricted Funds	98,125,000
1999-00 Increase	
General Funds	--
Restricted Funds	--

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 strive to expand fundamental knowledge of the physical world, human nature and society. Knowledge discovered in the University's basic research programs has yielded a multitude of benefits, ranging from technological applications which increase industrial and agricultural productivity to insights into social and personal behavior which help improve the quality of human life. Through its public service activities, the University strives to improve the dissemination of research results and to translate scientific discoveries into practical knowledge and technological innovations which benefit the State and nation.

Economists attribute fifty percent 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 recent recession – in which California's high-technology sector played a key role – was due, in part, to the commercial impacts of research and training conducted by major institutions like the University of California. As California's economy continues to grow, it remains essential to continue to invest in the research necessary to fuel the creation of new products and processes which, when eventually developed in the marketplace, boost productivity and create jobs. As other states have launched aggressive and well-financed campaigns to lure away California’s high technology businesses, California has responded with the Industry-University Cooperative Research Program and other aggressive strategies including tax benefits to keep these businesses here and to attract more.

As it furthers fundamental knowledge and helps to sustain California's economy as evidenced by whole new industries that have been spun off, faculty research also enhances instruction in several significant ways. By engaging in research, an instructor keeps up with developments in the field and is able to communicate to students

firsthand the sense of excitement and adventure that accompanies the pursuit and discovery. Faculty research also stimulates change in the curriculum, improvement of teaching material, and development of new courses and even new disciplines, particularly in rapidly advancing fields like genetics, microelectronics, and information and computer sciences.

Moreover, it affords students the opportunity to develop research skills and work in a creative research environment, alongside top scholars engaged at the cutting edge of knowledge in their fields. For example, undergraduate students on all campuses are able to participate in research projects under the direct guidance of a faculty member. Programs such as the Student Research Program at Los Angeles and the Faculty Mentor Program at San Diego provide undergraduates with exposure to a university research setting, one-to-one contact with senior faculty, development of skills of inquiry and problem solving, and acquisition of knowledge in a discipline of interest.

Finally, through collaborative research with industry, it demonstrates to students how discoveries are transformed into public benefits, as well as the relevance of their education to future careers in industry.

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 measure and compare 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 leads 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 ones.

- Another indicator of how well UC does relative to other research universities is the National Science Foundation study on the scientific foundation of American patents. UC produced more research leading to patented inventions than any other public or private research university or laboratory during the periods studied.

Research Support

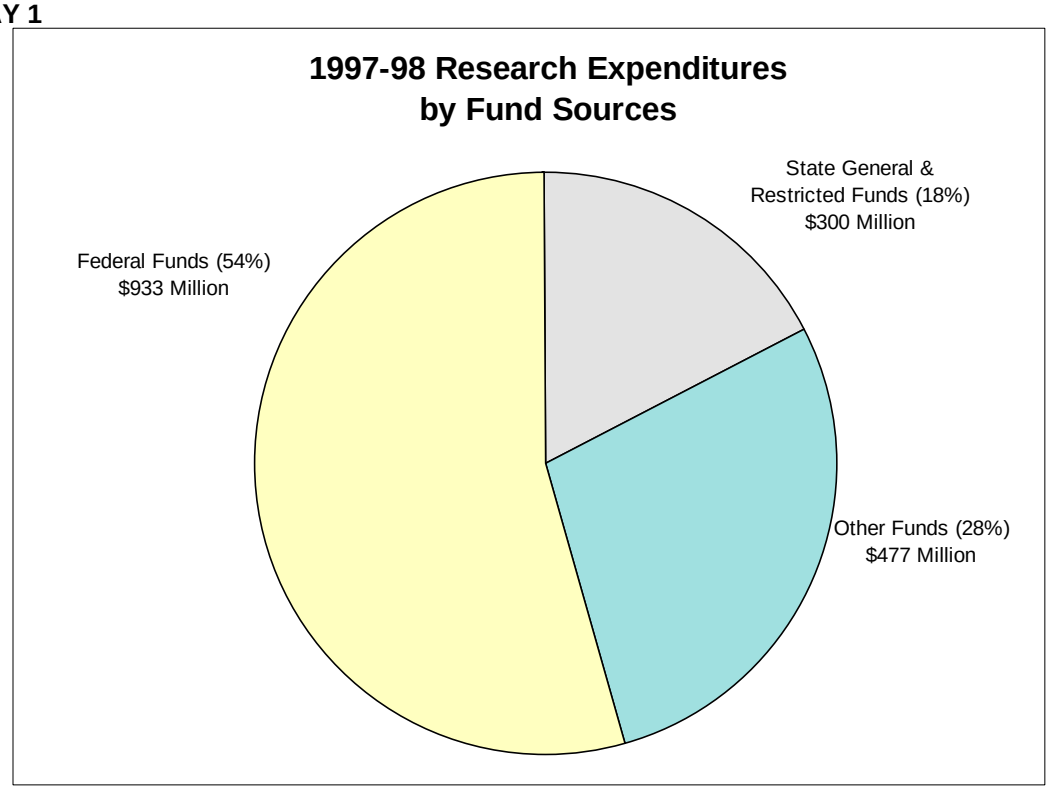
The 1998 State Budget reaffirms the State's recognition of the role of UC research in sustaining California's economy by providing an increase of nearly $30 million to support high-priority research programs at the University.

Among the research programs which received increased funding in 1998-99 are: (1) the Industry-University Cooperative Research Program, which will receive a total of $15 million in State and University funds and will raise an equivalent amount of industry

matching funds in 1998-99, to increase research partnerships between UC and industry in fields critical to the State's economy; (2) $16.8 million for medical research on substance and alcohol abuse; (3) $2.75 million to partially restore the extra five percent cut in State funding that agricultural research programs sustained in addition to the across the board cuts to all University programs in the early 1990s; and (4) $2 million for a center to conduct basic science research on various neurodevelopmental disorders and to develop effective treatments.

For many University research programs, State funds are the core that attracts extramural funds so necessary for the conduct of major research projects. As shown in Display 1, the University's research expenditures in 1997-98 included about $300 million in State funds and an additional $1.4 billion in non-State funds, a ratio of more than 4.5 to one.

DISPLAY 1



The University has maintained the vitality of its highly competitive research programs through effective management of the Organized Research base. The inherent difficulty the University has always faced in the funding of research is achieving a desirable balance between the need to accommodate initiatives in new and promising research areas and the need to maintain support for existing research programs that are strong and viable. To pursue one at the expense of the other is incompatible with the mission of an outstanding research university; both are essential. In attempting to achieve such a balance, the University has maintained a regular and extensive process of program review and reallocation of the Organized Research base. This has included the

establishment, disestablishment, or merger of ORUs, MRUs and other research activities; the internal reallocation of funds among units; and the redirection of research effort within existing units to address changing priorities. Moreover, promising new research programs have been supported through allocations of temporary resources as "seed money."

University research is supported from a variety of fund sources. Display 1 shows actual research expenditures, totaling $1.7 billion, by fund source for 1997-98. In 1998-99, research expenditures are projected to increase to approximately $1.9 billion. This includes $1.4 billion from extramural sources (i.e, federal government, private individuals, foundations, industry), $70 million from Regents' funds, $250 million from State general funds, and $98 million from restricted funds (State and non-State). The $98 million in restricted funds includes $33 million of endowment funding, and $30.5 million of State restricted funds. Examples of State restricted funds include approximately $17 million from special State funds to support a program on breast cancer research, and $11.6 million from special State funds to support a coordinated statewide program of tobacco-related disease research administered by the University.

In 1998-99, the University's research budget includes $250 million in State general funds. Of this, approximately 49 percent is allocated to Agriculture; 20 percent to single-campus Organized Research Units (ORUs); 6 percent to Multicampus Research Units (MRUs), which are ORUs involving several campuses; 22 percent to other research activities not formally constituted as ORUs or MRUs, such as the Universitywide programs in AIDS, microelectronics, Industry-University Cooperative Research Program, substance and alcohol abuse prevention, neurodevelopmental disorders, biotechnology, and toxic substances research; and three percent to individual faculty research.

Federal Funding

Federal funds are the University's single most important source of support for research, accounting for approximately 55 percent of all University research expenditures in 1997-98. Thus, the federal budget has important implications for the University’s research budget.

The President’s fiscal year 1999 budget request reflects an emphasis on investments in research as a priority, with a special commitment to support fundamental science, biomedical, and environmental research. The budget proposes an eight percent increase overall for basic research, including record level increases in basic research for several federal agencies of importance to the University. While the Congress appears supportive, there are notes of caution.

The funding source for the proposed research program increases in the President’s budget is a new revenue source, tobacco settlement revenue and requires implementing legislation. Despite the support from both Congress and the President, it is unclear how funding for research will get resolved because Congress is not likely to

enact tobacco legislation this year; and the alternative funding strategies, such as reducing funding for other domestic programs, are controversial and have prompted veto threats from the administration.

Balanced Budget Agreement

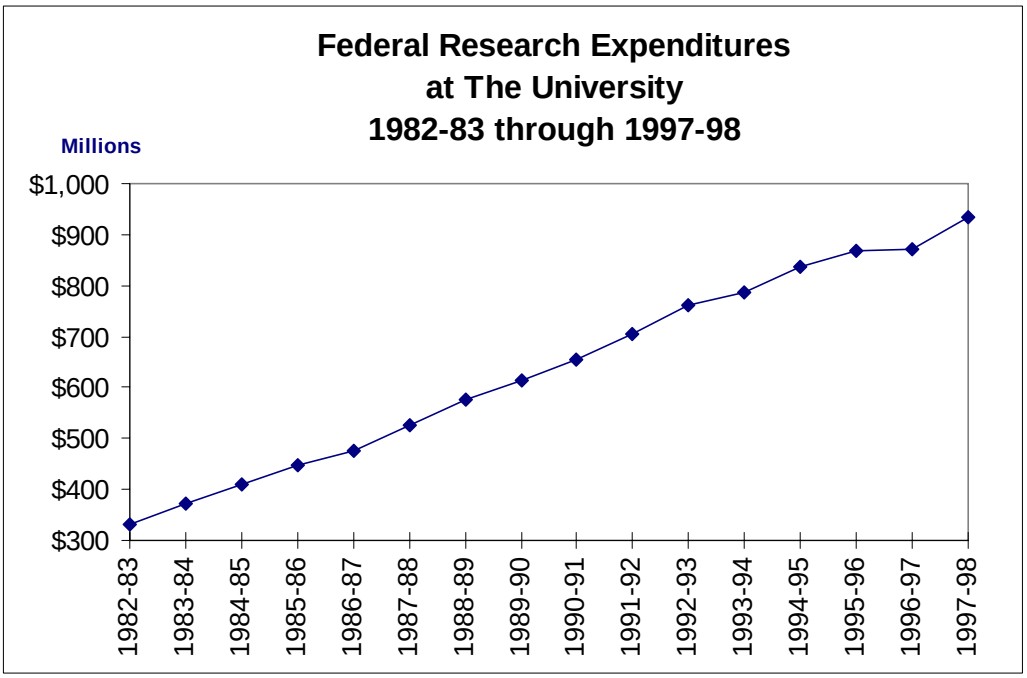
In 1997-98, facing a federal deficit that hovered in the $200 to $300 billion range, the President and Congress reached agreement to balance the federal budget by 2002. Of specific concern to the University was a part of the plan that envisioned no increases in overall domestic discretionary spending during this period because UC gets most of its federal research funds from this portion of the federal budget. This in combination with tight spending caps, led to predictions of dramatically reduced funding for University research.

Since the 1997 agreement, however, there has been a dramatic turnaround largely due to a stronger than expected economy, which caused federal revenues to increase more than projected. Adding to the turnaround has been fiscal restraint. As a result, the President's FY1999 budget proposes to balance the federal budget four years earlier than anticipated, and the Congressional Budget Office is anticipating a budget surplus for 1998 – the first federal budget surplus in a generation.

Trends in Research Funding

Display 2 illustrates trends in federal research funding for the University of California over a sixteen year period. In the decade between 1982-83 and 1992-93 federal support for research at the University grew dramatically. With a commitment to research established as a national priority by both the President and the Congress, annual federal research expenditures at the University increased by an average of almost ten percent during this period. After 1992-93, however, the focus of the federal

DISPLAY 2



government was on deficit reduction. As a result, while the University's expenditure of federal research dollars continued to increase, the rate of growth slowed down. Between 1992-93 and 1995-96 federal research expenditures at the University increased by an average of about four percent per year, and in 1996-97 they were essentially flat. For 1997-98, expenditures increased by seven percent.

Current Proposal

As previously noted, the FY1999 budget request reflects the President's emphasis on research as a priority. Of greatest importance to the University are the funding increases proposed for the National Institutes of Health (NIH) and the National Science Foundation (NSF). For NIH biomedical research, the budget proposes a record increase of $1.2 billion, or 8.4 percent over last year. This increase builds on the six and seven percent increases NIH received in the last two fiscal years, and already many in the Congress are calling for an even larger increase for 1999 and a doubling of the NIH budget in the next five years. NIH funding is critical to the University, constituting a little more than half of all federal research support at the University.

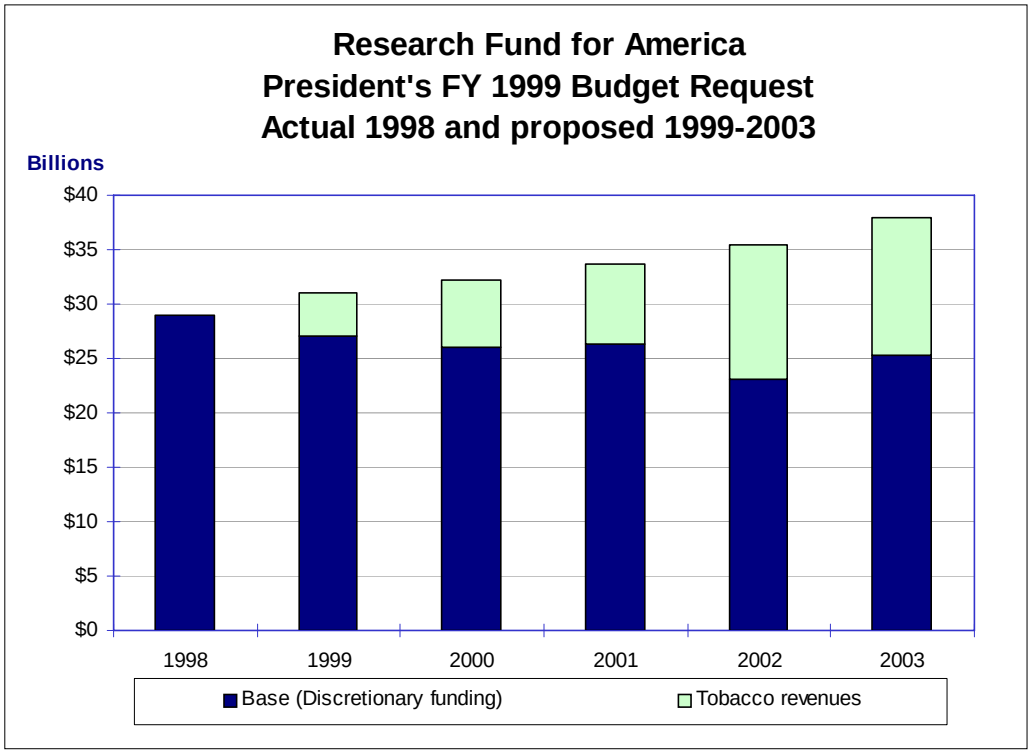
With respect to NSF, the second largest source of federal research funding for the University, the budget requests a record increase of 12 percent for NSF's basic research programs. This increase is truly significant when compared to last year's budget increase of almost 5 percent. The basic research programs at some federal agencies are not treated as well, and in the case of agriculture, cuts are proposed.

Nearly all federal support of research is funded through the discretionary portion of the

federal budget. The President's FY1999 discretionary programs budget proposals total $299 billion, $8 billion above the estimated spending cap agreed to as part of the Balanced Budget Agreement. Under the President's budget proposal, that $8 billion would be funded by new revenues not subject to the cap (i.e., tobacco revenue). Of the $8 billion exceeding the cap, $4 billion relates to the proposed increases for the *Research Fund for America*, the collective fund name given to non-defense research programs. This includes essentially all the requested increases for NIH, NSF, DOE (non-defense) and other key agencies which support the University's research programs.

Display 3 illustrates that the President's plan involves a dual strategy of reducing the current federal investment level over time, while increasing the amount of revenue stemming from the tobacco settlement. Without agreement on the tobacco revenue, or another revenue source, the proposed funding for research would fall below current levels.

DISPLAY 3



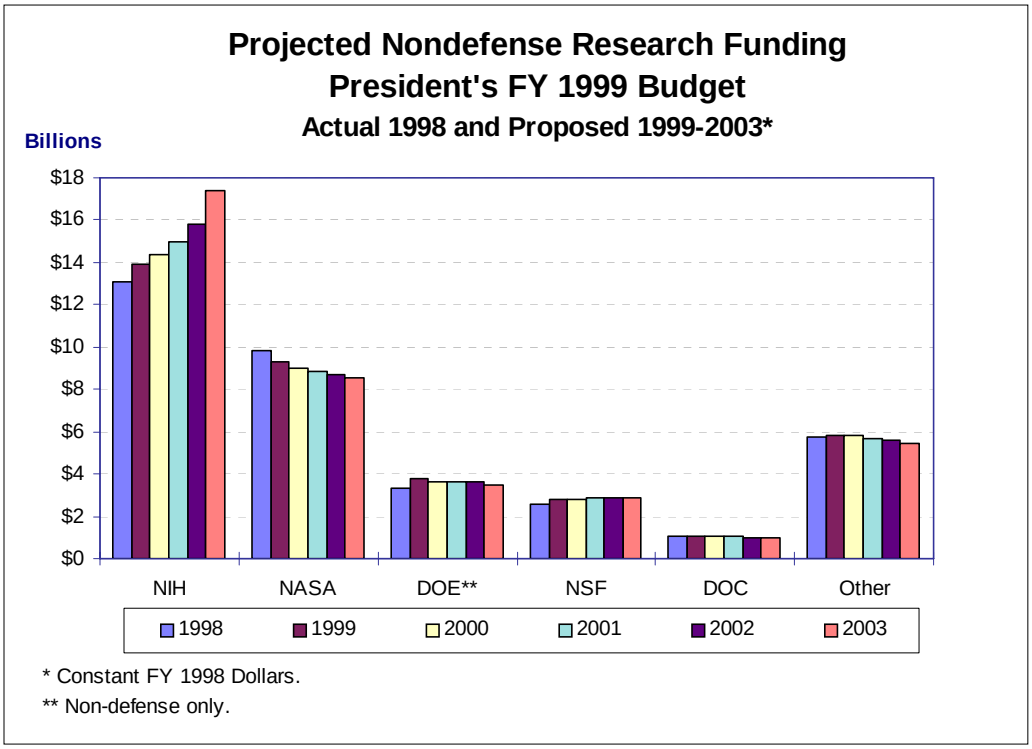
It is unlikely that a tobacco settlement will be approved this year. Thus, the Congress, in its 1999 appropriations bills has chosen to reduce funding for other domestic programs that are a high priority for the Administration to fund the research increases, prompting the President to consider the need to exercise his veto. Alternatively, there could be a last minute effort to spend funds from the projected surplus to allow both Congress and the Administration to receive some of their budgetary priorities.

Thus, while both the Administration and the Congress are supportive of funding increases for basic research programs (Congress has proposed to fund some programs at a higher level than requested by the President), the final outcome of the current budget negotiations is uncertain.

Future Trends in Research Funding to the Year 2002

If a solution to the current dilemma can be found, trends for FY 2000 and beyond are likely to favor NIH and to a lesser extent, NSF. At the same time, however, funding for most other research funding agencies is projected to increase only slightly or decline, and funding for DOD to decline sharply. According to American Association for the Advancement of Science (AAAS) analyses, the "...net result would be a federal research portfolio in the 21st century that would look significantly different from today:

DISPLAY 4



spending on defense research would be less than half the total portfolio for the first time since before World War II, while the spending for NIH's research effort would be almost as large as that for all other research funding agencies combined." (See Display 4)

University research has helped the nation become a world leader in emerging industries including semi-conductors, computer software, biotechnology, aerospace, communications, agriculture, digital media, and entertainment. The development of these advances is highly dependent on fundamental and applied research supported by the federal government's investment through agencies such as Departments of Agriculture, Commerce, Defense, Energy, Interior, and Transportation; the National Aeronautics and Space Administration; and the National Science Foundation, as well as the National Institutes of Health.

1999-00 Funding Request

The University is requesting funding, above the level anticipated by a new four-year compact, for three high-priority research initiatives.

Technology Initiative ($15,000,000)

The University has been involved in pioneering efforts to develop an advanced, high performance communication network that allow billions of bits of data per second to flow between computers which are critical to enabling faculty and student access to network services, such as the digital library, and for fostering research collaboration among UC faculty and students, and with industry researchers. In order to assure that faculty and students have the access they need, to encourage cooperative research initiatives with industry, and to keep UC and California at the forefront of the nation, the University is requesting funding in two parts, above the funding levels anticipated in the new compact, to enhance the University’s network infrastructure: $10 million for the Campus Internet2 Infrastructure Program, and $5 million for the UC-Industry Internet2 Infrastructure.

The University was a founding member of the national Internet2 project, and in the Consortium for Education Network Initiatives in California (CENIC) which is responsible for building an advanced electronic superhighway, called CalREN2 (California Research Network 2), that will link California universities to each other and to the next generation national high speed network, Internet2.

This advanced services network, built upon powerful fiber optic communications circuits, will be able to deliver information in ways more varied and with greater reliability than is possible with today’s congested Internet. It will also have a capacity hundreds of times faster than is now available. The planned infrastructure will be used to tackle some of the nation's most intractable scientific and engineering challenges such as the development of improved forecasts for climate and weather, and the creation of materials needed for a new generation of transportation and telecommunications networks and systems.

Campus Internet2 Infrastructure. The University is requesting an increase of $10 million to support faculty and student access to the advanced services of Internet2 and CalREN2. In recognition that access to network services is important to all disciplines, the funding will also be used to broaden the disciplinary base of faculty able to connect to campus networks and the resources available through these networks.

lnternet2 and CalREN2 furnish shared access to high-performance research instruments; distributed computation on massive databases; telemedicine and collaborative pharmaceutical research; interactive seminars; and a host of other activities. But the campuses must be able to access these networks, by completing the connections from the doorstep of the campuses to the desktops of the faculty and students. This requires an upgrade to the University's campus networks and support infrastructure.

The University of California is proud of its past contributions to national advances in networking, along with other California institutions. But the existing campus infrastructure must be enhanced and continuously maintained to allow the campuses to adapt and take advantage of the new network and new developments in technology to meet the evolving demands of research and education. The life-cycle of networking technology is an average of three years. Staff are also key to operating the network and providing support to faculty and students to enable them to take advantage of its capabilities. The new funding will provide a stable source of funding to renew and maintain the campus infrastructure to allow faculty and students to take full advantage of Internet2 and CalREN2 and the new generation of technology.

UC-Industry Internet2 Infrastructure. The University is requesting $5 million to support the UC-Industry Internet2 Infrastructure Program. This program is an initiative to expand CalREN2 in order to encourage and facilitate UC faculty collaboration with researchers in industry. State funds will be used to leverage matching funds from industry. The Industry Infrastructure Program builds upon the University's current successful efforts, such as the Industry-University Cooperative Research Program, which seek to increase cooperation with business. The partnerships would play an essential role in speeding the transfer of UC's academic research to industry, thereby enhancing companies' competitiveness and their contribution to the State's economy.

The new capabilities provided by Internet2 and CalREN2 extend, with few exceptions, only to the academic community due to current funding constraints. However, as with the first generation Internet, much will be gained by extending the reach of CalREN2 to a broad range of corporations. The $5 million proposed for funding in 1999-00 can expand the number of industry connections to CalREN2 made during 1998-99, including to medium-sized businesses.

The proposed funding will allow the two major CalREN2 hubs in Northern and Southern California to be connected with an electronic highway down the Central Valley and will expand network connections at UC campuses to accommodate traffic from private partners. Participating companies will pay for their access to the CalREN2 network.

This high-performance network segment will allow the transit of private industry research traffic to and from California's academic institutions for defined research purposes, and also interconnect the University's growing presence in the Central Valley at Merced and Fresno.

Besides speeding research transfer and maintaining industry competitiveness, there are other benefits to the University and to the State: gaining access to resources and instrumentation only available in industry; facilitating student internships with California's industry by diminishing the importance of physical location; and providing access for new industry partners to the California Supercomputer Center.

The UC-Industry Internet2 Infrastructure Program will be administered by the Office of the President in collaboration with the campuses. The Program will help to establish more partnerships between higher education and the industry in California, thereby strengthening the State's economic competitiveness.

Industry-University Cooperative Research Program ($5,000,000 Increase)

For 1999-00, the University is requesting an additional $5 million, above the levels anticipated in the compact, for the Industry-University Cooperative Research Program (IUCR), bringing the total annual public support for the program to $20 million. A minimum of $20 million will be provided by industry to support the IUCR program, consistent with the initial funding plan to phase in a permanent budget of $40 million over four years.

The IUCR was established in 1996-97 to foster collaborative research in targeted fields critical to California's economy. The 1998 State Budget provided an augmentation of $7 million, bringing the State's contribution to $12 million, which together with $3 million of University funds and an estimated $16.6 million in matching contribution from California industry, is enabling the IUCR to add two more matching grant programs in communications and information sciences to existing programs in biotechnology, semiconductor manufacturing, and digital media research.

The proposed $5 million increase will enable the further expansion of these programs. Industry interest has already exceeded the funding available for matching grants program. For example, in 1997-98, the program was unable to fund research proposals that would have generated an additional $8 million in matching funds from industry.

The IUCR program is one of the State's principal mechanism for making targeted investments in areas of research of strategic importance to the economy. To ensure California's future economic well-being, it remains essential to invest in new research necessary to fuel the creation of new products and technologies that will be developed in industry and boost productivity and jobs in the state. These joint research projects create new knowledge that helps keep California businesses competitive, accelerates

worldwide investment in the California economy, speeds creation of high paying jobs for Californians, and improves health, food production, and the environment in the State.

The competitive matching grant programs created by the IUCR program have been carefully selected by industry and University experts for their dual importance to California's economically important entrepreneurial high technology businesses and to the University's goals for expanding basic research and education. Each program focuses on an area of the global economy where California is poised for or has recently attained worldwide leadership, and aims to partner University researchers and students not only with established companies, but also with promising young companies. To date, two-thirds of participating firms are small businesses and more than one-third have fifty or fewer employees.

The programs are proving important to young faculty and to students. Nearly one quarter of participating faculty hold entry level or assistant professor appointments. Moreover, as the five programs expand, they will be creating unique research training opportunities for as many as 500 undergraduates, graduate students, and postdoctoral scholars each year. Matching grants have been awarded to investigators at each of the nine campuses.

The five grant programs currently supported by IUCR are as follows:

Biotechnology STAR Project (BioSTAR)*:* The BioSTAR Project, initiated in summer 1996, is aimed at collaborative private-public research in the State's $7 billion biotechnology industry. In its first two years, BioSTAR invested in 90 new research partnerships, including investigations on: "biocompatible" materials for surgical implants; more powerful antibiotics to fight increasingly pervasive antibiotic-resistant infections; new cancer drugs with greater specificity and fewer side effects; diagnostics and treatments for AIDS lymphomas and ADHD (attention deficient hyperactivity disorder); fruit and vegetable crops that are genetically resistant to plant viruses and nematode infections; and biomass conversion technology that turns rice straw into alternative fuel sources, such as ethanol. The 90 research projects are also providing training opportunities for 65 graduate students and postdoctoral investigators.

Digital Media Innovation Program (DiMI)*:* The DiMI program, launched in spring 1997, supports early stage research on critical problems in multimedia, such as interfacing data systems, compressing large volumes of data, creating multi-platform delivery systems for large and complex data sets, and developing effective tools for mining and representing data. California is home to 30 percent of the nation's multimedia firms. The results of the research funded through DiMI will help the State sustain its lead in this industry as new applications for digital technologies are developed through research.

Semiconductor Manufacturing Alliance for Research and Training (SMART): This program, initiated in Spring 1997, supports research that advances the highly sophisticated and precise process of manufacturing semiconductor and other electronic

materials. Among the 13 new research partnerships being funded in the first year are projects involving the design of environmentally clean manufacturing processes for the semiconductor and digital monitor industries, and the development of very thin semiconductor chips that can withstand the effects of bending, for use in place of bar codes and inventory control tags, and in consumer products such as “smart” credit cards.

Communications Research Program (CoRe): This grant program will be initiated in October 1998. The CoRe program will promote broad interdisciplinary research approaches to communications problems that involve software, microelectronics, satellite systems, and telecommunications issues, among others. For example, it will support research on new technologies that can reduce the cost of wireless communication, link wireless and wired networks to expand the capacity of communications systems, and contribute to the development of next-generation, high speed telecommunications backbone networks. CoRe will also emphasize research opportunities for students, to expand the workforce for California’s telecommunications industry.

Information Sciences Program for the Life Sciences: This program, scheduled to begin in October 1998, encourages interdisciplinary research at the confluence of revolutions in the life sciences and high-performance computing. The program builds research partnerships with California’s computer, information technology, bioscience, health care, advanced computing, and communications industries. Supported research will, for example, enable new methods of drug design by creating mathematical and statistical methods and software that link genome, protein, medical, epidemiological, and other databases to speed discovery of new drug targets and disease treatments.

California Remote Sensing Initiative Program ($2,000,000)

The University is requesting $2 million, above the level of funding anticipated in the compact, to establish a statewide center that would provide access for research and educational purposes to the significant amounts of data being collected on California's environment through remote sensing technology. The 1999-00 increment would be the first increment to be followed by additional requests as the program evolves.

The sources of remote sensing research information are vast and diverse and so are the related federally funded research efforts within UC. Satellites provide the most complete view of our planet and are an essential tool in weather prediction, climate forecasting, geology, ecology, ocean productivity, agriculture, hydrology, urban planning, disaster control, and global peace keeping efforts. In addition to satellites, however, some of the most important and technologically advanced tools are active ground based sensors that make very precise measurements of earth movement and energy flow.

The data collected via remote sensing techniques has important ramifications for understanding and predicting regional consequences of such climate variations as El

Nino, or to geological changes such as earthquakes. All are of critical concern to California, but too often there is a gap between academic research and practical applications.

The CRSI will bring academic researchers together with government agency representatives to bridge the communication gap between the two sectors. Together they will enable the transition of the use of remote sensing from a research tool to an operational tool for the benefit of the State in managing its natural resources. This transition will involve reviewing existing research results, developing new analyses from existing data sources, and suggesting possible foci for future federally funded research projects.

The California Remote Sensing Initiative (CRSI), led by the University of California, will integrate the activities of research institutes throughout the State, taking advantage of diverse sites and expertise throughout the UC system and over the entire state to focus on scientific, social and engineering issues affecting the State.

CRSI will cover a broad spectrum by focusing on one issue, or a related series of issues at a time. For example, the first issue area might be understanding and predicting regional consequences of large scale climate variability on 1) water resource management, 2) air pollution, and 3) the agricultural industry. Subsequent research agendas would be set by an executive steering committee comprised of UC leaders and representatives from State agencies.

The program will achieve its goal by: sponsoring conferences or ‘summits’ on issues of immediate interest to California; making scientific, social and economic databases accessible for research on applied problems; creating channels of communication regarding research results between University researchers/students and government and the private sector; and, offering flexible fellowships for State agency employees to spend time with UC researchers in collaborations at UC campuses.

This initiative will draw on the capabilities of UC, including existing programs such as the super computer center at UC San Diego, the national laboratories' facilities, and numerous campus-based projects with substantial extramural funding. Scholars in public policy, agriculture and social sciences would play an important role as well as those in engineering and physical and biological science disciplines.

Benefits to the State and the University include: a center dedicated to remote sensing as an operational tool focused on state priorities; a means of productive collaborations between UC-based scholars, government and industry that has a tremendous interest in the California physical environment, its stability, trends for change, and the human environment interface; and, more effective use of research results and databases.

CRSI also is an asset for faculty when competing for funding from federal programs, State programs, and foundations that are oriented to research that is applied for the public benefit. The number of federal and foundation grant programs in this category is increasing rapidly.

More broadly, the potential beneficiaries of the results of this initiative range from the State's multimillion dollar industries to individual citizens concerned about quality of life issues.

Benefits of Research

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 1997-98, the University spent nearly $1.3 billion dollars received from the federal government and private sources for research – over four times the amount provided from the State for research.

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 Corp. 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.

Partnerships With Industry

The Industry-University Cooperative Research Program (IUCR), established in 1996-97, has emerged as an important mechanism for making targeted investments in areas of

research that are of strategic importance to the California economy. This competitive matching grant program is modeled, in part, on the University's successful MICRO Program, which demonstrates UC's track record in using research partnerships to enhance economic development. Since its establishment in 1981, MICRO has played an important role in nurturing the development of California's world class microelectronics and computer industries. MICRO has brought more than $103 million in new private sector funding for University research and education. MICRO invests its annual $4.6 million funding from the University and State to attract industry to support UC research and training. MICRO awards funds to faculty-initiated research projects that are jointly supported by microelectronics companies. MICRO also provides graduate student fellowships to ensure an uninterrupted supply of well trained scientists and engineers for California's microelectronics industry. As an integral part of the IUCR program, MICRO helps ensure California's continued world leadership in microelectronics.

Agriculture

Agriculture, which in 1997 was a $26.8 billion industry and accounted for nearly one in ten jobs in California, is highly dependent on UC research. In a recent study on the payback of the State's investment in agricultural research, it was shown that farm production increased nearly 300 percent from 1949 to 1985, with almost half of this growth directly related to research. This correlation continues today, with UC researchers and Cooperative Extension county advisors helping the State's growers maintain a competitive edge in domestic and export markets through the development and adoption of new technologies and innovative farming practices. Agricultural exports generated $12 billion in 1996.

In recognition of the importance of agricultural research to the California's economy, the State's 1998-99 budget includes an increase of $2.75 million to partially restore the extra five percent cut in State funding that agricultural research programs sustained in addition to the across the board cuts to all University programs in the early 1990s.

A prime example of UC's research contribution to California agriculture is the success of the State's strawberry industry. California produces more than 80 percent of the nation's strawberries, with a 1996 crop value of $585 million. Average California yields

per acre are the highest in the world – more than twice the yields per acre in Florida and five times those in Oregon, the world's next two largest producers. Nearly 90 percent of California's strawberry acreage is planted in UC-developed varieties.

In attempting to further increase the productivity and diversity of California agriculture, UC scientists are currently applying genetic engineering technologies to areas of key significance. Examples include the cloning of disease resistant genes in plants; modifications of microbes to clean up toxic wastes; novel microbial insecticides; genetic improvement in photosynthetic efficiency and nutritional value of plants; and genetic

modification of plants for drought, heat, frost and salt resistance.

Medicine and Other Areas

UC medical research has led to dramatic improvements in the diagnosis and treatment of disease. The University has assumed a major leadership role in the battle against AIDS. Its researchers were among the first to describe the 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 our 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.

As previously noted, the 1998-99 State Budget includes an increase $16.8 million for medical research on substance and alcohol abuse, and $2 million for a center to conduct basic science research on various neurodevelopmental disorders and to develop effective treatments. Coordinated by the UCSF campus, the substance and alcohol abuse funds will be used to study the effects of alcohol on the brain, to develop ways of 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 $2 million of State funds for a neurodevelopmental center at UC Davis will be used to leverage gift funds and federal and state restricted contracts and grants to support research on the impact of these disorders on educational attainment and employment, and will guide effective medical, educational and social science interventions for individuals with such disorders.

In areas other than medicine, 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 the 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. California's changing transportation needs are being addressed by UC researchers forging ahead in new research areas such as roadway technologies, alternative fuels, and truck safety. Social science research is furthering our understanding of issues critical to California's social and political well-being. Examples include research on the local impact of the global economy, the changing distribution of ethnic and racial groups in the State,

implications of the aging of the population, and public responses to technological advances.

PUBLIC SERVICE

1998-99 Budget	
Total Funds	$181,988,000
General Funds	116,772,000
Restricted Funds	65,216,000
1999-00 Increase	
General Funds	--
Restricted Funds	--

Public service includes a broad range of activities organized by the University to serve local communities, students and teachers in the schools and community colleges, and the public in general. A prominent component of public service is the University's intersegmental outreach programs, designed to provide assistance to K-12 students and schools to encourage more students to become qualified for higher education. Cooperative Extension is the University's largest public service program. It provides to the citizens of California applied research and educational programs in agriculture and natural resources, family and consumer sciences, community resource development, and 4-H youth development. Campus public service, which is almost completely supported by user fees and other non-State fund sources, includes such activities as arts and lecture programs and community service projects. In addition, the University's public service programs include two health sciences programs jointly operated with other schools – the Charles R. Drew University of Medicine and Science and the California College of Podiatric Medicine.

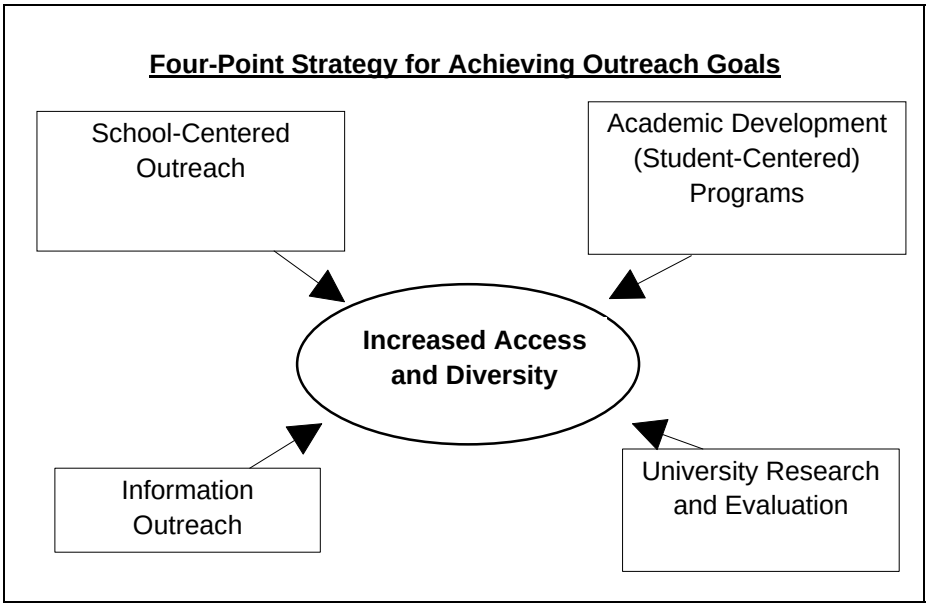
Outreach Programs

For more than thirty years, the University has been at the forefront of the nation's efforts to develop programs intended to assist disadvantaged students in gaining access to higher education. The continued development and expansion of outreach programs are among the highest priorities for both the University and the State of California as reflected in the $38.5 million increase provided by the State for these programs in the University's 1998-99 budget.

The goals of the University's outreach programs are to contribute to the academic enrichment of UC campuses through a diverse student body and to improve opportunities for California students in disadvantaged circumstances to achieve eligibility and to enroll at UC campuses. The University is meeting these goals through

academic development programs and activities to help prepare students, including those from disadvantaged backgrounds, for the academic demands of higher education; *school-centered partnerships* intended to foster long-term systemic change in low-performing schools; *information and recruitment programs* which include an aggressive program to provide better and more timely information to students, families, teachers, and counselors to improve planning and preparation for college; and *research and evaluation* to identify the root causes of educational disparity and to evaluate the effectiveness of the University's outreach programs (see Display 1).

DISPLAY 1



Over the years, the University's work with California's elementary and secondary schools has grown from a focus on traditional outreach and recruitment programs that encourage students to attend the University to an extensive array of programs across the nine campuses that benefit thousands of K-12 students and their teachers with a focus on programs that help improve the quality of K-12 educational programs.

The University views itself as a partner with elementary and secondary education as well as other postsecondary institutions, community groups, and business in its efforts to improve student preparation. This partnership is critical to the success of these programs. The importance of full partnership is evidenced by the requirement that all new State funds for student and school-centered programs must be matched by K-12 schools on a one-to-one basis.

The University plans to meet its outreach and diversity goals by using its resources (both in terms of funding and expertise) in combination with resources from the educational community, the corporate sector, and communities at large. Meeting these goals will benefit individual students from diverse and disadvantaged backgrounds and K-12 schools. Moreover, students who participate in the University's outreach programs

will be better prepared for all segments of higher education – the California State University, the community colleges, and private higher education institutions.

History and Overview

The University has a long-standing commitment to the goal of enrolling a student body that reflects the diversity of California. The University's existing outreach programs have been highly successful over the past 30 years, evidenced by the fact that these programs have contributed to creating the most diverse university student body in the nation. In July 1995, The Regents approved resolutions that prohibit the University from using race, religion, sex, color, ethnicity, or national origin as criteria for admission to the University or in its employment and contracting practices. At the same time, The Regents confirmed their commitment to diversity. Proposition 209, which was approved by the voters in November 1996 and went into effect in August 1997, stipulates that the State, including the University, "shall not discriminate against, or grant preferential treatment to, any individual or group on the basis of race, sex, color, ethnicity, or national origin in the operation of public employment, public education, or public contracting." Existing programs have been reconfigured to comply with both the Regents' resolutions adopted in 1995 as well as the provisions of Proposition 209.

Recognizing the potential impact of new admissions criteria on diversity in future student enrollment, The Regents established the Outreach Task Force to identify ways in which outreach programs can help to ensure that the University remains accessible to students of diverse backgrounds. The Outreach Task Force was asked to review current UC outreach efforts and recommend ways to improve and expand existing activities and create new programs. The Task Force began its deliberations in February 1996 and proposed goals and strategies for UC outreach that were adopted by The Regents in July 1997.

Funding for Outreach Programs

Prior Funding. Prior to implementation of the Outreach Task Force recommendations, the University estimated that approximately $60 million from all fund sources (including funds from other segments for specified programs) was being spent on the outreach programs which now form the components of the University's new outreach initiative.

Initial Augmentations: 1996-97 and 1997-98. The first augmentations for the new outreach initiative came in 1996-97, when the University committed $2 million of its own resources to launch the new outreach initiative. The State also contributed $1 million in that year. Because the Outreach Task Force recommendations were still being formulated, funds were temporarily allocated in 1996-97 and not permanently allocated until 1997-98. Therefore, 1997-98 was the first year in which augmentations for this initiative are reflected in the budget. In 1997-98, the University added another $1.5 million in new funding for this initiative and the State added $1 million, bringing the total new funding to $5.5 million.

1998-99 Augmentation for Outreach Programs. In recognition of the importance of increasing educational opportunities for students from educationally disadvantaged backgrounds, the State augmented the University's 1998-99 budget by $33.5 million for outreach programs. In addition, the University is contributing $5 million to outreach efforts for a total increase of $38.5 million in 1998-99.

The 1998-99 budget includes language that directs the expenditure of the $38.5 million as follows:

> "*. . .$38,500,000 is provided for outreach to be used to fund new and existing programs that are aimed at improving the chances for students from a wide diversity of backgrounds to become eligible for the University of California. Of this total, $15,000,000 is to expand student academic development programs, including MESA, Puente, and the Early Academic Outreach Program, so that these programs may increase the number of students who participate and may offer services such as college admissions test preparation programs, fee waivers for Advanced Placement tests, and an increased number of field trips for high school and middle school participants to visit college campuses. Also, $15,000,000 is provided for the expansion of K-12 school partnership programs to systemically reform partner schools in order to achieve long-term improvements in student success. Additionally, $1,000,000 is provided to expand both student academic development programs and K-12 partnership programs in the Central Valley. All of these new funds for student academic development and school partnership programs shall be matched on a one-to-one basis by the participating K-12 schools. In addition, $3,500,000 is provided for expansion of services to community college students to promote transfer; $1,000,000 is for informational outreach to students, families and K-12 teachers and counselors; $1,000,000 is for charter schools; and $500,000 is for outreach by professional schools to be matched on a one-to-one basis by those professional schools. $1,500,000 is provided for long-term evaluation of the effectiveness of outreach programs, specifically college graduation rates for students who participated in the K-12 programs, regardless of the college attended. "*

The detailed budget plan approved by the Legislature is shown in Display 2.

DISPLAY 2

1998-99 Outreach Augmentation

Program	1998-99 Augmentation Amount	
Student Academic Development Programs such as Early Academic Outreach, MESA, Puente	$ 15,000,000	(a)
School-University Partnerships	15,000,000	(a)
Community College Programs	3,500,000	
Central Valley	1,000,000	(a)
Graduate and Professional Schools, with an emphasis on Medicine and Law (includes matching funds from the schools)	500,000	
Charter Schools	1,000,000	
Information and Recruitment, including Cascades, Gateways	1,000,000	
Research and Evaluation	1,500,000	
Total	$ 38,500,000	

a) Requires a one-to-one match from participating K-12 schools.

When the matching requirement is taken into account, new funds for outreach programs will total more than $75 million in 1998-99 ($44 million in augmentations since 1997-98 and $31.5 million in K-12 matching funds), exceeding the funding goal of $60 million identified in the Outreach Task Force Report. Total funds for outreach will reach more than $137 million in 1998-99. Display 3 shows base budgets and the distribution of new funds from K-12 and higher education segments since the implementation of the Outreach Task Force recommendations.

Outreach Task Force Report

The underpinnings of the University's outreach initiatives stem from recommendations contained in the University's Outreach Task Force Report. The Outreach Task Force adopted two central goals for UC outreach: (1) contribute to the academic enrichment of UC campuses through a diverse student body; and (2) improve opportunities for California students in disadvantaged circumstances to achieve eligibility and to enroll at UC campuses. In this context, the Task Force developed recommendations regarding goals, outcomes, strategies, responsibility, evaluation, and resources which proposed to broaden the ways in which the University seeks to qualify more students from all sectors of the State's diverse population for admission to the University. In addition to recommending the expansion of the University's successful student-centered academic development programs, the plan focuses on "whole" school improvement – creating a learning environment in which all students, regardless of where they live and irrespective of race, gender, or family economic circumstances, have roughly the same opportunity to prepare for higher education.

DISPLAY 3

The Task Force recognized that the goal of improving the diversity of the University's student body had to be met within the context of current policies and laws which prohibit the use of race, religion, sex, color, ethnicity or national origin as criteria for admissions to the University.

A review of performance indicators by the Task Force showed that almost four out of every five students in low-performing schools are either African American, American Indian, or Latino – groups with historically low rates of UC eligibility and enrollment (see Display 4). The following are some of the characteristics used to categorize low-performing schools: (1) students have low Scholastic Assessment Test (SAT) scores, and low academic performance on nationally-normed standardized tests; (2) a high proportion of the students are from families receiving Aid to Families with Dependent Children; (3) students have limited English proficiency; and, (4) lower proportions of parents possess a high school diploma, a factor known to correlate strongly with college attendance for the next generation (see Display 4). While factors outside of the school also influence the eligibility and enrollment of students in higher education, it is clear that the role of the schools is critical and that collaboration with schools, particularly through teacher preparation and professional development, has the potential to provide the most effective single means by which the University can assist in providing all students with equitable opportunities for access to UC.

DISPLAY 4

Selected Characteristics of Top and Bottom Quintiles of California Public High Schools

Quintiles based on 1995 school-wide average SAT scores

	Top Quintile	Bottom Quintile
Number of schools	151	151
Percent urban	12%	54%
Percent suburban	69%	19%
Percent rural	19%	27%
Percent receiving Aid to Families with Dependent Children	5%	28%
Percent limited English proficiency	7%	31%
Percent father with high school diploma or higher	90%	36%
4-year completion rate	91%	78%
"a-f" enrollment rate	61%	48%
Percent of seniors taking SAT	56%	33%
Average SAT (combined) score	1007	715
Percent scoring 900+ on SAT	43%	6%
Percent scoring 3 or more on Advanced Placement exams	27%	6%
Percent of graduates attending UC	15%	4%
Combined percent Latino, Black and American Indian	17%	79%

Source: Derived from College Board, California Department of Education, and UC application data.

The Task Force proposed a four-point outreach strategy including: (1) expansion of academic development programs, (2) development of school-centered partnerships, (3) expansion of informational outreach efforts, and (4) establishment of a University research and evaluation component. Each of these is described in more detail below.

Student Academic Development Programs

Student academic development activities are aimed at enriching students' academic achievement in specific academic areas through special skills-building programs, tutoring, and group study; career counseling; parent involvement; mentoring; and field trips to UC campuses. The University's student academic development programs have been very effective in preparing students to enroll in higher education as measured by the number of program participants who subsequently become eligible for and enroll at UC and other postsecondary education institutions.

Consistent with the Task Force recommendations and the intent of the Legislature, UC will expand existing successful student-centered academic development programs such as EAOP, MESA, and Puente to reach more high school and community college students. Additionally, the Task Force recommended that academic development programs be created for students and families in primary schools that increase awareness of college preparation early in a student's education. Systemwide UC academic development programs will: (1) work to increase the number of UC-eligible program graduates from disadvantaged backgrounds by 100 percent between 1997 and 2002, and (2) increase the number of competitively eligible program graduates from disadvantaged backgrounds by 50 percent between 1997 and 2002.

Test Preparation Courses. During fall 1998, the University will provide, on a pilot basis, test preparation courses consisting of approximately 20 hours of instruction to selected high school seniors enrolled in its EAOP, Puente, MESA, and partner school programs. Improvements in the range of 50 to 100 points have been achieved by students in certain circumstances as a result of courses providing instruction and practice in test-taking techniques. Courses usually focus on making efficient use of test time, deciphering test formats, maximizing concentration, using calculators, and mastering disciplinary subject matter commonly covered or relevant to standardized tests.

Early Academic Outreach Program (EAOP). The University's Early Academic Outreach Program (EAOP) guides young people toward participation and success in postsecondary education and makes available academic resources that substantially improve their chances of achieving these goals. The participants are students whose economic and social circumstances make such achievement, without the benefit of the program, unlikely. Currently, the primary goal of EAOP is to increase significantly the number of educationally disadvantaged students who are eligible and competitively eligible for admission to the University of California. The program accomplishes its goal by identifying potential applicants at the junior high school level and assisting in their

preparation for postsecondary education. EAOP has established itself as an integral part of the fabric of the schools in which it operates. Its benefits extend far beyond the group of students participating in the program. EAOP staff serve as a vital link to assist schools in connecting with postsecondary resources and services. In 1996-97, EAOP provided services to 63,168 students in 471 schools. EAOP served students in 530 schools in 1997-98 with a total budget of $5.8 million. For 1998-99, EAOP's budget is being increased by $7 million for a total of $12.8 million.

Mathematics, Engineering, Science Achievement Program (MESA). The Mathematics, Engineering, Science Achievement Program (MESA) is designed to strengthen the mathematics and science skills of educationally disadvantaged students. The goal of MESA is to increase the number of these students who ultimately make their careers in mathematics- and science-based fields such as engineering, computer science, and the physical sciences.

MESA operates two pre-college programs. The MESA Schools Program (MSP) assists elementary through high school students with academic preparation, financial aid and academic counseling, parent involvement, collaborative study skills development, field trips to UC campuses, and career exploration. MESA pre-college teachers receive special training in science and mathematics that is used to benefit all students, not just MESA participants. MESA's Success Through Collaboration (STC), a partnership with American Indian education programs, the California Department of Education, industry, and others, offers a program similar to the MSP but with an emphasis on culturally relevant activities. In 1997-98, MESA established a new STC center and expanded MSP services to 375 pre-college students with further expansion planned for fall 1998. Recently, a new MESA STC site was established in partnership with the Coyote Valley Indian Education Center located in Redwood Valley near Ukiah.

At the four-year colleges and universities, the MESA Engineering Program (MEP) provides freshman orientation, academic and career counseling, group study methods, academic excellence workshops, and tutoring to engineering and computer science students. The MESA California Community College Program (MESA CCCP) provides academic assistance similar to the MEP so students can successfully transfer to four-year institutions and attain mathematics-based degrees.

Because of MESA's success in producing highly qualified professionals urgently needed by California industry, over 80 corporations are actively involved in supporting the program. The California MESA model has been replicated in seven states. Similar programs based on MESA have been established in seven additional states.

MESA receives funds through budget appropriations to the University, CSU, and the community colleges. MESA also receives support from the independent colleges, federal agencies, industry, private foundations and local school districts. Funding for MESA has been included in the University's budget since the program began in 1970 with the exception of two years (1983-84 and 1984-85) when funding was temporarily shifted to the State Department of Education. In 1997-98, MESA's budget was $10.4

million, including $4.2 million in the University's budget, $3 million in private and federal funds, and $3.2 million in other segments' budgets.

For 1998-99, MESA's budget is being increased by $4.1 million. In 1996-97, MESA served over 20,356 students, including 13,170 pre-college students from 379 schools in 99 school districts. In 1997-98, MESA served an additional 375 pre-college students with the STC program. In 1998-99 it is anticipated that MESA will serve approximately 17,000 pre-college students as well as 6,600 college students.

Puente. The Puente Project was established in 1981 to address the problem of low college persistence and transfer rates of Mexican American and Latino students to four-year colleges and universities. While originally established to meet the needs of that student population, Puente is open to all students. Puente is jointly sponsored by the University and the California Community Colleges and conducts programs in 38 community colleges and 18 high schools. State funds in the University's budget for Puente total $309,000. In addition, the program receives $1.094 million from the community colleges and $951,000 in private funds. It is anticipated that Puente will serve 7,100 students in 1997-98.

For 1998-99, Puente's budget is being increased by $1.650 million in State funds to expand the Puente programs into high schools participating in the University's school-centered partnership program. This will bring the total funds in UC's budget for Puente to $1.960 million in 1998-99.

The Puente program combines innovative teaching and counseling methods with community involvement to provide students with an accelerated writing class, sustained academic counseling, and role models and mentors from the professional community who inspire students to achieve academic and career goals.

Since its inception, Puente has trained over 400 teachers and counselors in Puente's effective methods for teaching writing skills and counseling educationally underserved students. Over 4,000 mentors have donated their time and other resources to Puente students. Community colleges with Puente programs transfer 44 percent more Latino students to the University of California than colleges without Puente.

The success of the Puente Project has been recognized nationally, most recently by the prestigious Innovations in American Government Award, jointly sponsored by Harvard University and the Ford Foundation. The Puente Project was selected because of its "exceptional program creativity, quality, and accomplishment."

In 1993, Puente began a four-year high school pilot program funded entirely by private foundations and local school districts. High school Puente has now expanded to 21 schools in 10 school districts, serving 2,250 students per year throughout California. Modeled on the community college program, High School Puente is comprised of a ninth and tenth grade college preparatory English class, taught by the same teacher; academic counseling in grades 9-12; mentoring; and extensive parent involvement.

New funds totaling $300,000 were provided in 1997-98 by UC ($150,000) and the California Community Colleges ($150,000) to support the infrastructure of the High School Puente Program.

High School Puente has also introduced a "peer mentoring program," in which Puente students who have completed the academic portion of the program mentor incoming Puente freshmen. The peer mentors also enroll in a community college class, for college credit, which covers elements of counseling, mentoring, and academic preparation. In addition to better preparing students for academic success, this class creates a valuable link between the K-12 and community college segments. As well, it becomes part of a sustained academic guidance program that serves students from ninth grade through the community college and into the University.

Central Valley Outreach Efforts. California has a substantial interest in assuring that students in the Central Valley fully participate in higher education. Students from the Central Valley have eligibility and participation rates at about half the statewide average at the University of California. The 1996-97 budget included $250,000 for outreach efforts in the Central Valley; the 1997-98 budget, an additional $250,000; and the 1998-99 budget provided an increase of $1 million for a total increase in funding over the past 3 years of $1.5 million.

The University's outreach efforts in the Central Valley have been very successful. After the expansion in academic development and information outreach to high schools and community colleges, there was an increase of 12.7 percent in UC enrollees from 1995 to 1996 (128 students) and an increase of 15.6 percent in from 1996 to 1997 (177 students) from students in the Central Valley. That represents a total increase in UC enrollees from the Central Valley of over 30 percent between 1995 and 1997.

While Central Valley outreach efforts will continue to include the successful student academic outreach programs, including MESA, Puente and EAOP, a variety of new activities have been established, including an increase in the number of field trips to various UC campuses by Central Valley students and educators and an increase in programs to help Central Valley community college students transfer to UC. School-centered partnership efforts to improve K-12 education in the Valley include programs to enhance A-F courses and improve articulation between middle and high schools. A long distance counseling program using video conferencing is being developed which will allow counselors to reach greater numbers of students in remote areas. Improvements in technology have allowed for improved student follow-up, data gathering, and analysis.

Currently, a comprehensive long-term plan is being developed which will promote even greater increases in the level of UC enrollment of Valley students. The plan entails an extensive information campaign to highlight the value of UC academic degrees and demonstrate how families can look ahead and prepare for UC enrollment. The plan also includes a broad program establishing relationships with schools throughout the Valley, enlarging and strengthening the full range of college preparatory resources

including A - F coursework, standards of student achievement, standardized test preparation workshops, and professional development for teachers. In addition, the plan includes academic advising and planning services, visits to UC campuses, tutoring and support, and Saturday and summer math and English academies to raise the level of student achievement for individuals from disadvantaged backgrounds.

UC Links is a Statewide network of after-school programs that provide computer-based educational resources and opportunities to K-12 youth who would not otherwise have access to them in their homes, schools, or neighborhoods. At sites throughout the State, UC undergraduate students work closely with K-12 children as they engage in computer activities that develop mathematics, science, and basic literacy skills. Academic courses taught by UC faculty engage undergraduates in classroom and practicum field experiences that connect theory and practice in child development and other research issues related to culture, language, and learning. The operation of program sites is coordinated by UC, CSU, and other university faculty, staff, and students, in collaboration with local K-12 teachers, parents and other community members.

Graduate and Professional Diversity Programs. In 1998-99, an additional $500,000 was provided for diversity programs in the schools of medicine and law to be matched on a one-to-one basis by each school. Of the total augmentation in 1998-99, $200,000 will be used for the development or expansion of postbaccalaureate reapplicant programs within the medical schools. Offered currently by the schools of medicine at Davis, Irvine, and San Diego, the programs assist students from educationally and socio-economically disadvantaged backgrounds in seeking admission to medical school by strengthening their science skills and by providing training in basic clinical skills, MCAT preparation, practice interviews, and re-application strategies.

Other activities designed to increase the diversity in the University's professional school programs include expansion of efforts to interest K-12 college-bound students in pursuing a pre-medical college program and to interest other highly qualified students in pursuing legal careers. Activities will include teacher education, curriculum development, improvement of students' science skills, and career planning. Medical and law schools will increase outreach at State and national conferences and will expand opportunities for highly qualified, prospective students to visit UC campuses. Some professional schools will develop on-line student counseling and mentoring programs. Medical and law schools will expand their advanced study skills workshops and GRE/pre-professional exam preparation workshops during the academic year and will step up their recruitment efforts by increasing student, faculty, and alumni communication with admitted applicants and improving financial support opportunities.

The University's efforts to ensure a diverse graduate student body among its Ph.D. and master's degree candidates have been successful over the last decade, evidenced by the fact that UC Berkeley and UCLA have consistently ranked among the top 20 higher education institutions in the number of Ph.D. degrees earned by underrepresented minority students. Nonetheless, the number of minority students in graduate academic

programs at UC remains low. For example, in all doctoral programs in the physical sciences and mathematics systemwide, only five percent (32 of 671) of those newly enrolled in 1997 were non-Asian minorities. In engineering and computer science, the proportion was four percent (31 of 707 enrolled).

Principal among the University's diversity efforts at the graduate and professional level are the following four components: (1) communication between UC faculty and faculty at other institutions about promising graduate students; (2) wide distribution to students of brochures, posters, and other materials about graduate study; (3) direct contact with potential applicants through campus and departmental visits, name exchanges, regional graduate school forums, and career days; and (4) faculty-led programs designed to provide summer and academic-year research experiences for undergraduates.

Graduate and professional school diversity was considered by the Outreach Task Force to be an important part of the University's outreach pipeline for students from educationally or economically disadvantaged backgrounds. The University defines educational and economic disadvantage at the graduate level as students whose educational goals were not adequately supported because their K-12 educational opportunities were limited and/or they came from poorer families.

The Task Force Report recommended that the University expand its summer and academic-year research internship programs. In these programs, promising college juniors and seniors who are educationally or economically disadvantaged are paired with faculty mentors in research designed to expose the students to a realistic graduate-level study and to prepare them for eventual enrollment in graduate or professional school. Students in these programs typically spend 30 or more hours per week working on research in a laboratory or library. Because faculty supervision and mentorship are key to these programs' success, faculty and students are matched according to mutual research interests. Seminars, lectures, and workshops provide skills enhancement and essential information about graduate study. Students are typically provided with a stipend or other financial support during their participation in these programs.

Programs to Help Strengthen K-12 Education

The University has long been engaged in extensive efforts to strengthen pre-collegiate education. There is a broad-based, systemwide commitment of UC faculty, staff, and students involved in research, teaching, and service activities related to K-12 education. As a long-term strategy, the Outreach Task Force recommended that UC campuses work intensively with a select number of regional partner schools that enroll significant numbers of disadvantaged students. The following programs contribute to the University's efforts to improve K-12 education.

School-centered Partnership Initiative. In 1998-99, the State provided an augmentation of $15 million to expand school-centered partnerships. In 1997-98,

partnerships were established at 38 high schools and their feeder middle and elementary schools. Priority was given to schools where average student performance on the SAT had fallen into the lowest two academic quintiles of schools statewide. Those efforts will be expanded to include at least 50 high schools in 1998-99 and their feeder elementary schools (450 schools in all). School-centered partnerships represent a new concept to introduce systemic change in K-12 schools that goes beyond the traditional types of student academic outreach efforts. Partnerships incorporate teacher-centered and curriculum-based programs aimed at training and developing teachers (such as through the California Subject Matter Projects described in detail below) and strengthening the academic foundation at partner schools where students' performance is below the Statewide average. Partnerships are intended to foster long-term, intensive relationships between UC campuses and partner schools.

The goal is to create a coordinated effort among programs and initiatives that are designed to ensure that students have access to high quality instruction and are able to meet high academic standards in A-F courses. Partnerships coordinate closely with student-centered academic development programs to ensure a "whole school" approach to improving educational opportunities for students. To achieve whole-school changes, partnerships provide a comprehensive array of resources and programs involving not only students, but also families, teachers, counselors, and administrators at each school site.

The Outreach Task Force calls for the number of UC-eligible students from partner high schools to double or increase by 4 percentage points, whichever is greater, between 1997 and 2002. In addition, the Task Force calls for the number of students from partner high schools who are competitively eligible for admission to increase by 50 percent, or two percentage points, whichever is greater between 1997 and 2002.

California Subject Matter Projects. The University has statutory responsibility to establish, administer and maintain, with the approval of a nine-member Concurrence Committee, a network of programs designed to enhance the professional development of teachers, principally from the K-12 segment. Collectively these programs are referred to as the California Subject Matter Projects (CSMPs). The network currently consists of six projects supported by the State, each addressing broad subject areas taught in K-12 schools. These six subject areas are: writing, reading and literature, mathematics, science, history-social science, and world history and international studies. The University is funding three additional projects in the areas of foreign languages, the arts, and physical education-health. The programs are provided through project sites which are geographically located to maximize statewide access.

A new governance and organizational structure was developed for the California Subject Matter Projects in response to concerns that the California Subject Matter Projects were not adequately supporting implementation of the statewide academic content and performance standards being developed for K-12 schools by the State Board of Education. The negotiations resulted in a new statute (AB 1734, Mazzoni) which reshapes several key aspects of the program, including:

- Reaffirms that the CSMP's first priority is to improve students' academic performance in relationship to content and performance standards, as approved by the State Board of Education, in the five core curriculum areas – reading, writing, mathematics, science, and history (including world history and international studies);

- Specifies that while no State funds may be used to support CSMPs in foreign languages, the arts, and physical education and health, other funds may be used for this purpose;

- Expands the membership, authority, and the role of the CSMP policy oversight body, referred to as the Concurrence Committee;

- Defines the membership, role and functions of Advisory boards to guide the management of each of the CSMPs;

- Reserves 75 percent of each regional CSMP site's "program slots" for teachers drawn from the lowest 40 percent of schools ranked according to their students' performance on Statewide standardized tests.

The California Subject Matter Projects are a central component of the University's K-12 partnership program established in 1997-98 to help improve educational opportunities for students at low-performing schools by strengthening the academic infrastructure. The Projects are also organized to support new teachers, especially those who are unprepared or underprepared in their academic discipline. This is particularly important in areas such as mathematics and science where there is a shortage of qualified teachers.

Typically, K-12 teachers are invited to participate in the projects' intensive training institutes with faculty and academic staff from the University and other institutions of higher education. Follow-up activities are provided for participants during the academic year. Participants share what they learn with colleagues in their districts by leading workshops and through other interactions during the academic year. Through this "teachers-teaching-teachers" approach, the projects provide an avenue for the participants to: (1) enhance their content knowledge of the specific discipline through intensive, long-term interaction with postsecondary faculty and other public school teachers, and exposure to key texts and relevant research; (2) acquire, critique, and share exemplary instructional practices, particularly those practices that are likely to improve instruction for students from diverse backgrounds; (3) become skilled in sharing knowledge with their colleagues on better ways of teaching and improving curriculum; and (4) serve as leaders in schools, districts, professional organizations, and statewide educational committees and activities promoting educational quality.

Participants are encouraged to remain involved with the projects as consultants and workshop leaders. Their continued involvement contributes to each project's development of a group of highly accomplished teacher leaders and professionals

across the State who are able to inform, reinforce, and advance ongoing educational reform efforts.

Funding for the California Writing Project, California Mathematics Project, and California Science Project has been included in the University's budget since these programs began in the 1970s and 1980s. The other projects were initially established and supported from Proposition 98 funds in the State Department of Education's budget. Beginning in 1996-97, all funds for these programs were directly appropriated to the University as part of a court settlement related to the California Teacher's Association vs. Gould lawsuit.

The Urban Community-School Collaborative provides "seed" grants for faculty research to help build and coordinate the collaborative efforts of the nine UC campuses on a local level so that resources of the UC campuses, local communities, school districts, and other institutions and agencies throughout the State are brought to bear on problems identified by individual communities. Established in 1990 to advance the University's role in urban K-12 education in response to the recommendations included in the report of the UC Task Force on Black Student Eligibility (1989), the Collaborative helps set up and sustain teams of community, school, and University representatives to address problems, through University research, identified by local constituents as relevant to the educational development of K-12 youth in their communities. A successful example is the University/Eastside Community Collaborative, a project in which UC Riverside students provide mentoring, tutoring, employment, and counseling to disadvantaged youth, was able to use $10,000 in "seed" money to leverage an annual grant of $500,000.

Education and Community Resource Centers. The University plans to establish a statewide network of Education and Community Resource Centers. In 1998-99, $600,000 will be provided to establish two centers, one each in Northern and Southern California. This program will be modeled after the University's Cooperative Extension program where the University works with communities to develop their capacity to address local issues and problems effectively. The program will establish storefront-type centers in economically disadvantaged urban and rural areas. The program will be one way of disseminating results of research funded by the Urban Community-School Collaborative. The program will also be used as part of the informational outreach and recruitment component of the University's overall outreach effort.

Through those centers the University will establish long-term relationships with the community to work collectively to address such critical issues as education, economic development, public health, and community safety. The work and identity of the centers will evolve over time to meet changing community needs and priorities. In making University resources more readily available to local schools and communities, these Centers will have three goals: (1) help strengthen local schools to improve student achievement and to raise college-going rates among local K-12 and community college youth; (2) conduct applied research toward the solution of problems that emerge from

the local schools and communities; and (3) offer and/or coordinate a range of services based on needs and priorities identified by the schools and communities.

Examples of the kinds of ongoing services that a center might make available, depending on the needs of the surrounding community, include public health-related and/or legal services, academic support activities for local youth such as tutoring and academic counseling; teacher professional development in local schools; technical assistance to address community concerns about issues such as the environment, transportation, economic development; and a clearinghouse for information about the University to schools and community members. As the centers develop, the University will expand its partnerships to include foundations, corporations and other colleges and universities.

Charter Schools. The Outreach Task Force encouraged the University to establish one or more on-campus high schools, or charter schools. The 1997-98 budget included budget bill language designating that $200,000 of the augmentation for outreach be used "for planning and development costs associated with establishing an outreach high school on the San Diego campus and other campuses of the University of California to serve students from low-income and underrepresented communities."

An augmentation of $1 million was provided in 1998-99 to establish an on-campus college preparatory Model Charter School on the San Diego campus for middle and high school students. The new funds are being used for a variety of purposes which include research and assessment of student outcomes, instructional equipment and supplies, custodial services, and maintenance and repair of the facilities. The majority of the resources to operate the school will be provided by the San Diego Unified School District, which approved the Charter in September 1998. In addition, private donors have committed over $9.6 million to the San Diego campus for construction of a facility for the Model Charter School, estimated to cost $13.1 million. The San Diego campus is confident that it can raise the remaining funds for capital needs.

The Model Charter School will begin operation in September 1999, with a total of 100 students divided among grades 6 through 8, and reach its steady state enrollment of 700 in 2003-04. San Diego's Model Charter School is designed as an intensive college preparatory school for low-income students who will be the first in their families to attend a four-year university. As a result of its affiliation with the San Diego campus, students will benefit from services provided by tutors, interns, and mentors trained through the campus' Teacher Education Program. Students will also benefit from access to libraries, teaching and research laboratories, visual and performing arts facilities and recreational facilities, partnerships with the School of Medicine's adolescent health program, the California Space Institute's KidSat program, the San Diego Supercomputer Center, the UCSC Birch Aquarium-Museum, and access to cultural and entertainment events. UCSD faculty and staff will participate in instruction, assessment, and research activities involving the charter school. Students who meet the eligibility criteria associated with the campus' Early Admissions Program will have opportunities to enroll in UCSD courses while attending high school.

UC Nexus K-12 Technology Initiative. Organized in mid-1997, UC Nexus supports exemplary campus-based projects designed to help teachers and students use computers, the Internet, and related technologies productively in standards-based teaching and learning activities. The UC Nexus website that is currently under development will provide electronic tools to facilitate communication between UC and K-12 faculty such as e-mail, chat tools, and on-line discussion tools, as they work together to prepare and assess learning materials for a wide range of disciplines and grade levels. In addition, the website will provide a central point of access on the Internet to information about UC's activities with K-12, including information about learning materials and best practices for using technology effectively in the classroom.

Thus, the UC Nexus website will facilitate teachers' and students' access to materials and other resources at all UC campuses that have not previously been available. For example, UC faculty and staff from the California Heritage Project and K-12 teachers from San Francisco and Oakland are using digitized on-line materials from the Bancroft Library to develop curriculum units and lesson plans about California history for different grade levels. In addition to collaborating face-to-face, project participants also work together through e-mail and chat tools offered on the prototype of the UC Nexus website. Eventually, the materials they develop will be available for all California teachers and students on the Internet and accessible through the UC Nexus website.

ArtsBridge. In 1998-99, the State provided $1.5 million to expand the ArtsBridge program to additional UC campuses and K-12 schools in California. The primary mission of ArtsBridge, established at the Irvine campus in 1996, is to restore the arts to educational curricula in local K-12 schools whose arts programs have been eroded by state and federal funding cutbacks. Funded in the past by private donations, ArtsBridge provides scholarships of up to $1,000 per quarter ($3,000) per year to qualified University of California graduate and undergraduate students to teach arts-related workshops in K-12 schools. ArtsBridge projects include visual arts – mural painting, puppet and mask-making, and set design; photography; drama; vocabulary development through dance and choral singing; literacy skills through story telling and story writing; music performances and instrumental rehearsals; and after-school clubs in the arts. An ArtsBridge scholar works with a class of thirty students for eight weeks per quarter, for a total of twenty-four weeks of instruction involving 90 to 100 children each school year. Beginning with seven scholarships in 1996, ArtsBridge funded thirty-eight scholars who were students at UC Irvine in 1997 working in elementary, middle, and high schools in sixteen cities in Orange County.

The newest phase of ArtsBridge focuses on the digital arts, bringing instruction and projects in the arts and technology to K-12 students and their teachers. Projects would improve students' and teachers' skills in using computers and to assist in the creation of multimedia teaching tools, including web page design. Digital ArtsBridge helps prepare students to compete more effectively for entry into advanced digital media study and for entry into the new careers in the entertainment and multimedia industries.

Community Teaching Internship for Mathematics and Science. In 1998-99, the State provided $1.5 million to expand the Community Teaching Internship for Mathematics and Science on a statewide basis. The program recruits and prepares mathematics, science, and engineering majors to teach in California's K-12 public schools. Undergraduate mathematics and science majors from the University of California, the California State University, and the California Community Colleges are placed as interns in urban public school classrooms where they tutor K-12 students and participate in supervised teaching experiences for which they receive a stipend. This proposal, modeled after the Community Teaching Fellowship Program, a successful University of California program, helps meet the University's goal to strengthen the academic foundation of schools through professional development for prospective teachers.

The program also addresses the acute teacher shortage in the area of mathematics and science. In 1997-98, over 100 mathematics majors were placed in disadvantaged schools in Los Angeles as a result of their participation in the program at the University of California, Los Angeles. With additional State funds provided in 1998-99 as well as contributions from private fund sources, the program will expand to the 8 general campuses of the University of California and support up to 450 additional interns in 20 regions in California.

Community College Programs

Community college partnerships include the early identification of potential transfers to UC and the engagement of these students in academic support and mentoring programs, such as the MESA Community College program and the Puente Project. Partnerships also include the articulation and dissemination of transfer requirements (especially academic major requirements) and expectations, faculty exchange programs (e.g. Graduate Teaching Fellowships in which UC doctoral students teach part-time under the supervision of a community college instructor), and dual admission programs which guarantee admission to selected students.

In 1997, the University and the California Community Colleges signed a Memorandum of Understanding which seeks to increase the number of community college students transferring to the University up to 14,500 students by 2005-06. In 1998-99, the State provided an augmentation of $3.5 million for the expansion of programs to promote the transfer of community college students to the University. Community college programs are described in the General Campus Instruction section of this document.

Information and Recruitment

The Task Force recommended an aggressive program of informational outreach to provide better and more timely information to students, families, teachers, and counselors to improve planning and preparation for college. The University will expand considerably its visits to K-12 schools and counseling to reach more students and their families, including those who may be characterized as disadvantaged. Through these efforts, the University will more carefully and thoroughly explain the requirements for eligibility and avenues for admission to all UC campuses, including the most competitive ones. The University will increase its efforts to reach families at the critical, early stages of their children's education to help them become more involved in the process for planning for college and to provide better information to them about the kind of academic and financial preparation needed for admission to UC.

Activities will include the development of comprehensive college counseling programs for potential students, public affairs programs, community and media relations activities such as community visits by University leaders, editorial visits and press conferences, telephone campaigns, direct-mail campaigns to targeted students, campus visits, visits of current UC students to their home schools, events with high-level campus administrators, and campus efforts to increase visibility. Recently, the President sent personal letters to over 13,000 high-achieving students throughout California inviting them, on the basis of academic work completed and standardized test scores attained, to consider the University of California for enrollment. A new component of the University's information and recruitment programs is Cascades, a program that encourages students to apply to multiple UC campuses, thus increasing their chances of being admitted to the UC system.

Graduate and professional schools will increase visits to national conferences, expand personal contact, use direct mail, and campus tours and receptions to attract highly qualified students. The law schools will establish community outreach legal clinics, participate in career-based outreach programs for undergraduates and employ direct mail techniques to reach students. Medical schools will work with K-12 students to promote science skills and expose children to the notion of medical careers. Faculty and students will visit colleges and universities to meet with potential applicants, stage campus conferences, and expand summer academic programs.

An increase in these efforts will help to convey the University's strong commitment to enrolling students from all backgrounds represented in California's diverse population. The goal is to increase the number of outreach contacts with elementary, middle school, high school, and community college students and families by 200 percent over the number of contacts now made with these groups.

Gateways provides an informational site on the internet for middle and high school students and their families who are interested in higher education. The data consists of information about participating University programs, pre-collegiate outreach programs, and students who participate in those programs. Gateways also provides a database for researchers and those interested in program evaluation.

Evaluation of Outreach Programs

The Outreach Task Force indicated the need for improved evaluation of outreach programs and directed the University to give far more systematic attention to this vital function and to evaluate and assess outreach programs in order to continuously improve the effectiveness of intervention strategies. The major objectives of the evaluation are to assess progress toward outreach goals, improve the quality of existing outreach efforts, and test the viability of new efforts. The University will evaluate the full range of its outreach programs and efforts, including school-centered, student-centered, and informational outreach programs. The evaluation will consist of a series of outcome-focused assessments targeted at different points along student paths to college and beyond – including early interventions in schools, admission to the University, and performance in the University. In 1998-99, the State provided $1.2 million to evaluate the University's outreach programs.

Research

The Outreach Task Force recommended using the University's research expertise to identify the root causes of educational disparity within California's school system from K-12 through postsecondary education. The University will encourage major research initiatives to look at the fundamental causes of the differences in educational achievement and attainment that exist within our society as well as identify and evaluate methodologies to address those disparities. There are already highly capable and interested faculty within UC who are currently working in these areas. This program will involve additional faculty, topics, and funding possibly leading to the formation of a multi-campus research unit or the reorganization of an existing multi-campus research unit. In 1998-99, the State provided $300,000 for the development of research programs related to disparities in educational achievement.

Cooperative Extension ($2 million increase)

The University is requesting $2 million to restore an extra five percent cut targeted to Cooperative Extension programs during the reductions in the University's State funded budget in the early 1990s. At that time, in addition to across-the-board cuts, an extra five percent cut was targeted specifically to research and public service programs, including Cooperative Extension. With new funds, the University will be able to begin to address the significant reductions in Cooperative Extension programs that occurred throughout the state, and to emphasize high priority programs and develop new county- and campus-based programs to address the emerging issues and challenges facing

California agriculture.

Extension has its roots in legislation which established the original land grant university concept. For nearly a century, since 1914, the University's Cooperative Extension programs have provided applied research and educational programs to Californians. These programs range from technical assistance to farmers to nutritional education for low-income families and 4-H programs for youth. The Cooperative Extension programs are designed to develop applications of research knowledge and bring about their uses by people located in communities beyond the University, and to bring problems and issues back for exploration and research. Agriculture, which in 1997 was a $26.8 billion industry and accounted for nearly one in ten jobs in California, is highly dependent upon UC research. For example, nearly 90 percent of California's strawberries (which account for more than 80 percent of the nation's strawberries) are the result of UC-developed varieties.

County-based, Cooperative Extension advisors address high priority agricultural, human and natural resources issues every day. For example, advisors are working with local growers and shippers to increase their competitive edge in world markets, with ranchers and water agencies to examine the relationship of cattle to water quality and drinking water supplies, with farm managers and fieldworkers to improve profitability and worker safety, and with low-income families and newly arrived immigrants to extend nutrition information and promote healthy diets and good eating habits.

Cooperative Extension operates on the basis of cooperative agreements between the University, the United States Department of Agriculture, and local county governments in California. Off-campus Extension Advisors are based in county offices throughout the State to provide noncredit educational opportunities for adults and youth. The Advisors are supported by campus-based faculty and Extension Specialists.

Cooperative Extension Programs are located on the Berkeley, Davis, and Riverside campuses and in more than 50 Regional and County offices throughout the State. Cooperative Extension programs are distributed across four major program areas, agriculture, food and nutrition, human and community development, and natural resources. Cooperative Extension tailors its programs to meet local needs. Thousands of volunteers extend Cooperative Extension's reach, assisting with nutrition and 4-H youth development programs.

Charles R. Drew University of Medicine and Science

Since 1973 the State has appropriated funds to the University to support a program of clinical health sciences education, research and public service operated by the Los Angeles campus in conjunction with the Charles R. Drew University of Medicine and Science.

The Charles R. Drew University of Medicine and Science is a private, nonprofit corporation with its own Board of Trustees. Drew University conducts educational and research programs in south central Los Angeles in collaboration with Martin Luther King, Jr. County Hospital, also known as King-Drew Medical Center, located in Watts. State general funds are provided to Drew under two separate contracts, each administered by the University. One contract relates to the 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 by Drew to provide funding for a prescribed list of health science educational, research and clinical public service programs in the Watts-Willowbrook community.

Between 1982-83 and 1990-91, State funding for the Drew programs did not include regular adjustments for inflation which resulted in a funding deficiency for Drew. In the annual Regents' Budgets for 1990-91, 1991-92 and 1992-93, the University requested a $500,000 compensatory adjustment in Drew's budget to begin to address the underfunding. None of these requests was funded by the State. Although the Drew programs were sheltered from the budget cuts assigned to UC programs between 1990-91 and 1994-95 (in fact, the University augmented the Drew budget by $340,000 from UC discretionary funds beginning in 1990-91), the negative effects of the earlier underfunding remained.

In 1996-97, Drew began to receive income from the Selected Fee for Professional School Students, which goes to support the instructional program at Drew. The fee is discussed in the Student Fee section of this document. Also, in recognition of the serious funding deficiency, the 1997 and 1998 State Budgets included augmentations for Drew. The 1997 budget augmentation was $500,000 and required the University to provide equivalent matching funds, for a total augmentation of $1 million. The 1998 augmentation provides an additional $1 million for Drew programs. This brings the current total State funding for Drew to $9.3 million dollars. Drew will receive the same fixed cost increases as other State-funded University programs for 1998-99.

California College of Podiatric Medicine

The 1974 State Budget Act provided $541,000 to support a program of basic and clinical health sciences education and primary health care delivery in the field of podiatry, to be developed and conducted cooperatively by the University of California at San Francisco and the California College of Podiatric Medicine. State funding has been provided to assure that the instruction provided by the only college of podiatric medicine in California will maintain a high level of quality and to assure support for essential programs in the areas of basic medical science, general medical and surgical science, clinical medicine and surgery, and educational support. The State has continued to support this program each year at its 1974-75 level of $541,000, with adjustments for inflation bringing the 1994-95 appropriation to $926,000. However, budget cuts allocated during the 1990s, due to reductions in State support for the University, eroded

the actual amount of funding available. The 1998-99 appropriation for this program is $877,000. As with Drew, Podiatry will receive the same fixed cost increases as other State-funded University programs for 1998-99.

ACADEMIC SUPPORT--LIBRARIES

1998-99 Budget	
Total Funds	$216,999,000
General Funds	174,192,000
Restricted Funds	42,807,000
1999-00 Increase	
General Funds	--
Restricted Funds	--

The University of California libraries are a vital academic resource, providing books, documentary materials, and other information resources required by UC students and faculty for effective study and research. In addition, the libraries provide services to students and faculty of other California colleges, universities, and public schools, to business and industry, and to the general public, both directly and through cooperative programs with other California libraries.

Over the last decade, the combined effects of reduced budgets and inflation, particularly the significant increases in the costs of acquiring library materials, have seriously eroded the ability of the University's libraries to acquire new knowledge and to adequately support the University's academic programs. At the same time, there have been rapid advances in technology that promise enormous improvements in the capability of academic libraries to acquire, store, manage, and deliver the information needed for teaching and research, a promise that can be achieved over time by investments in technology and in the acquisition and creation of knowledge in digital form. For the foreseeable future, electronic information resources will complement, rather than supplant, traditional collections, requiring the University to support existing collections and services in parallel with the development of digital library services.

The University's 1998-99 budget includes $4 million to support the California Digital Library (CDL), which was initiated in 1997-98 with an investment of $1 million in University funds. The State also provided the University with $10 million in one-time money in 1998-99.

With the goal of reducing an annual library budgetary shortfall that exceeds $39 million, the University's 1999-00 budget plan includes a request to provide $7.5 million as the first phase of a multi-year plan to address the needs of the campus libraries' print collections, continue the development of the digital library, and increase the sharing of library materials across campuses. In addition, if the State's fiscal resources permit the University will request that the $10 million provided for libraries in 1998-99 be continued in 1999-00.

BACKGROUND

In September 1996, the University initiated a major planning effort to establish a framework for the University libraries over the next five to ten years, including an identification of the organizational, budgetary, and functional changes required to sustain the vitality of the University's libraries, and the immediate actions that were necessary to take in support of such changes. One outcome was a series of recommendations that recognized the need to balance print and digital resources; develop innovative services to provide access to information resources regardless of format; and establish new partnerships between faculty, libraries, professional societies and publishers to develop viable alternative models of scholarly and scientific communication that can succeed in a new fiscal and technological environment.

The University is faced with the challenge of guiding a transition to a new environment, marked by rapid technological change and business uncertainty, in a manner that is economically sustainable for all parties and which leverages the diverse resources and capabilities of the nine UC campuses. To meet this challenge, seven strategies were recommended:

- Sustain and develop mechanisms to support campus print collections.
- Establish the California Digital Library (CDL).
- Strengthen resource sharing among the campuses and with other institutions.
- Collaborate with libraries, museums, other universities and industry.
- Develop an information infrastructure that supports the needs of faculty and students to disseminate and access scholarly and scientific information in a networked environment.
- Provide leadership in the national effort to transform the process of scholarly and scientific communication.
- Develop a culture that supports continuous planning and innovation for libraries and scholarly information.

1999-00 Funding Increase ($7,500,000)

The University's 1999-00 budget plan includes $7.5 million, above the funding anticipated in a new four-year compact, as the first step in a multi-year plan to address the more than $39 million budgetary shortfall facing the University's libraries. The funding would be used to sustain and expand campus print collections ($4 million), continue the development of the California Digital Library ($2.5 million), and increase the sharing of library resources among campuses ($1 million). The University will request similar levels of additional funding in each of the next two years.

The proposed multi-year plan builds upon the strategies that emerged from the Library Planning and Action Initiative Task Force and begins to address the serious financial problems facing the University's libraries. The Legislature recognized the seriousness of the problems facing the University's libraries and adopted the following supplemental language as part of the 1998-99 budget:

> ***Adequacy of Library Resources**. It is the intent of the Legislature that UC develop a strategy and a multi-year funding plan, including a request for additional state funding, to address the serious financial problems facing their libraries. The report should address the critical problems facing the university's ability to sustain and support their print collections (the traditional print library sources) and to develop a California Digital Library that extends to digital formats. It is the intent of the Legislature that UC provide a summary of their strategy and funding plan by March 15, 1999.*

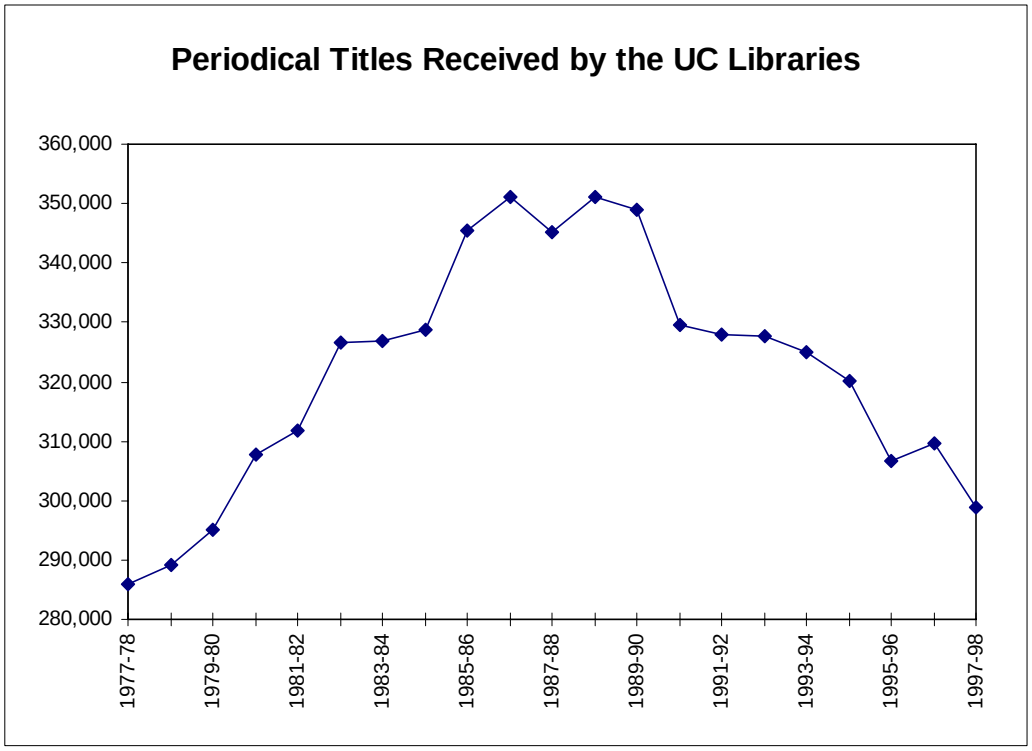
Consistent with the supplemental language, the University will provide the State with a summary of the problems facing the University's libraries and a multi-year strategy for addressing the problems in the Spring.

Print Collections ($4 million)

The traditional print collections will continue to be essential for teaching and learning and to the scholarly and research activities of students and faculty for the foreseeable future. Thus, annual increases to the collection budgets of the University's libraries will continue to be key while new models for scholarly and scientific communication that utilize new technology are developed.

From 1984 through 1997 the Consumer Price Index increased at an average annual rate of 3.7 percent, and the Higher Education Price Index at 4.2 percent. During the same period, the U.S. Periodical Price Index, an industry index of prices for periodicals published domestically, rose at an average annual rate of 9.7 percent, 2.6 times the rate of general price inflation. Owing to the gap between available financial resources and the ongoing spiral of inflation in the cost of library materials, annual periodical subscriptions by the UC libraries dropped from 351,000 in 1988-89 to less than 300,000 in 1997-98.

DISPLAY 1



While improved resource sharing and the creation of a shared digital collection are key strategies to leverage limited University resources in support of library collections, the print collections remain a critical component of the campuses' libraries. Although the quantity of information available in digital formats is growing rapidly, it still represents only a small portion of the total published literature and other content required to support teaching and research. And, the strategy of sharing resources across campuses to help maximize limited financial resources can work only if the print collections remain viable. Funds must be invested in the print collections that support core campus programs as well as the print collections of specialized resources to both maintain the richness of the campuses' libraries and to ensure a foundation for a cost-effective resource-sharing program.

The University's budget plan includes a proposal that only partially offsets the effects of inflation and prevents further erosion in purchasing power of the materials budget. Given the spiraling rate of increases for print materials the University must work with its colleagues in other academic institutions to convince the publishing community that the current business model for price increases is unacceptable to the academy and cannot be sustained.

California Digital Library ($2,500,000)

The University's groundbreaking effort, launched in October 1997, to create the California Digital Library (CDL) complements the proposed increase in funding for print resources by creating a shared Universitywide collection of high-quality digital content.

By bringing together technology and the quest for new knowledge, the CDL paves the way for a future when the distinguished library collections developed to support the teaching, learning, research and scholarship of the University's faculty and students will be available without regard to the conventional limits of time and space.

Among the benefits of the CDL are improved access to library materials on a round-the-clock basis; access to information available only in digital form; and the availability of innovative computer-based tools that will enable library users to more easily locate, access, and use a wide variety of digital information resources. As a collaborative effort of all UC campuses, the CDL will be able to utilize institutional strength to negotiate with external vendors, alleviate pressures on print collections, achieve economies of scale, and relieve the campuses of the need to provide additional support for the development of these digital collections. The CDL is also developing an education program focused on change in scholarly communication and the development of strategies for enhanced information use. Ultimately the CDL will provide increased access to the library resources of the University for all Californians.

Consistent with the original plan for developing the CDL, the first electronic collection is the Science, Technology and Industry Collection (STIC), which accounts for more than 80 percent of the published electronic literature currently available. The University's plan calls for continued expansion of the STIC collection to a broader array of scientific disciplines in 1998-99, together with identification of other priorities for the development of digital collections to cover all academic programs and disciplines.

Since its founding in October 1997, the CDL has made the digital versions of over 2,200 journals available to UC faculty, students and staff. Of these, about 680 titles represent paid subscriptions for electronic content, 270 are for titles that currently provide free access to the digital version for subscribers to the print journal, and about 1,250 are from publishers that are providing free access for testing and development in 1998, but for which the University expects to pay license fees in 1999-00. Many of these titles, previously purchased in print form by only a few campuses, are now available in digital form to faculty and students on all campuses on an equal basis. Development of the CDL Web site and planning for the incorporation of existing systems and digital resources into the CDL is well underway. The prototype CDL Web site is scheduled to be available for campus testing in November, 1998, and the production site expected to debut to the public in January, 1999.

Progress in implementing the CDL has met or exceeded the University's expectations. Available evidence suggests that collaborative services offered by the CDL, including vendor negotiations and licensing and the central development, implementation, operation and maintenance of systems and products, have allowed the campuses collectively to avoid significant additional costs. The CDL is documenting the magnitude of these benefits at this time.

The initial results, with development of the founding Science, Technology and Industry Collection, have encouraged the CDL to expand its scope and begin aggressive

development of digital collections, with the goal to achieve, by 2001-02, substantive digital coverage across all academic areas and UC academic constituencies. Plans to accomplish this goal will be shaped by the direction and rate of the development of digital technologies and related business models and will position the University to respond to new and unexpected opportunities that may arise owing to rapid change in this field. As part of the University's three-year library plan, the CDL will add materials to its collection in support of all academic programs in the following formats:

- *Published primary material in digital form***.** The University plans to add the equivalent of about 1,500 additional journal titles, at an estimated average cost (including purchase or license, processing, and systems support) of $1,000 per title, for a total cost of $1,500,000.

- *Secondary sources in digital form.* These sources include abstracting and indexing databases, finding aids, and other resources needed to provide users with effective access to CDL collections. The University plans to add the equivalent of ten additional titles, at an estimated average cost (including purchase or license, processing, and systems support) of $50,000 per title, for a total cost of $500,000.

- *Digital versions of unique and valuable materials.* The University plans to add the equivalent of 50,000 images, at an estimated average cost (including digitization, processing, and systems support) of $10 per image, for a total cost of $500,000.

The CDL has also begun to explore the technological, organizational, and financial issues involved in delivering electronic content through the CDL more broadly. Although this project, which represents a first step in exploring these issues, is still in the development phase, some significant benefits have already become evident. It is estimated, for example, that collective licensing of a major commercial database through the CDL saved 46 percent compared with the cost of separate licenses for each of the participating libraries.

Resource Sharing ($1,000,000)

Resource sharing can be an effective strategy to leverage limited resources and build diverse print collections systemwide. To achieve maximum benefit from this strategy it will be necessary to use technology to build new systems; create new funding models that, for example, recognize the extra costs campuses incur in sharing resources with the system; and simplify policies for intercampus sharing.

The CDL has a critical role to play in developing systems and services that provide technological support for sharing of print resources, and considerable progress has already been made in this direction. For example, the first phase of a new service called Patron-Initiated Requesting, which will permit authorized University users of the CDL to directly borrow material held at another campus without going through time-consuming and costly interlibrary loan procedures, will be available in Fall 1998.

The University's 1999-00 budget plan includes an increase of $1 million as the first step in a multi-year plan to expand and improve resource sharing by 1) developing systems and data to support resource sharing, 2) developing new resource sharing partnerships, 3) developing a plan that recognizes the costs to campuses that lend more than they borrow, and 4) planning, coordinating, and monitoring.

Systems and data to support resource sharing. Over the past 12 years, borrowing by the UC campuses from other libraries (including other UC campuses) has grown by 178 percent, to over 180,000 items per year. Within this overall growth, UC's borrowing from non-UC institutions has increased by 110 percent, and lending and borrowing among UC campuses has risen by 213 percent. The exceptional growth in intra-UC borrowing is undoubtedly due in large part to the availability and continued development of superior tools and services available to support resource sharing within the UC system, including the MELVYL on-line union catalog. To support expanded resource sharing, the University will need to enhance existing systems, databases and tools, such as the MELVYL system, and develop or acquire additional tools, such as the Patron Initiated Requesting service described above.

New resource sharing partnerships. In addition to promoting and facilitating resource sharing within UC, the University must improve its ability to borrow from non-UC sources. In 1996-97 only 25 percent of all items borrowed by UC libraries were supplied by non-UC lenders. To increase the University's ability to more effectively use the information resources of other institutions and organizations, the University will identify potential partners, negotiate mutually satisfactory resource sharing programs and financial arrangements with them, and extend to them the systems, databases, and tools that support enhanced resource sharing within UC.

Recognizing the needs of campuses that lend more than they borrow. Campuses that lend more to other UC libraries than they borrow incur extra costs that are not fully offset by the benefits they receive from resource sharing. In view of the severe financial problems faced by all UC libraries, it is necessary to compensate "net lender" campuses for a share of these additional costs in order to sustain the expansion of resource sharing and to encourage all campuses to build specialized collections for the purpose of cost-effective systemwide sharing.

Planning, coordinating and monitoring. The unprecedented expansion of cost-effective resource sharing capabilities and operations will require the development of new planning and management techniques and inter-institutional relationships. New systems and procedures will be needed to reliably monitor increased lending and borrowing activities and to forecast interlibrary transaction growth and distribution in order to project costs and system capacity. Resources will also be needed to identify potential external partners and to negotiate, monitor and administer resource sharing agreements. As new shared specialized collections begin to appear, it will be important to coordinate their development in relation to the collection characteristics of the other UC libraries and the academic programs and plans of the campuses.

The Library Budget

The University's library budget is divided into the following four categories representing the major activities of the libraries: acquisitions-processing, reference-circulation, library automation, and the California Digital Library.

Acquisitions-processing, which represents 56 percent of the budget, includes expenditures for library materials and binding and all staffing activities related to acquiring library materials and preparing them for use, such as ordering, receiving, and cataloging.

Reference-circulation, which represents 39 percent of the library budget, includes providing users with information and materials, managing circulation of materials, shelving and reshelving books, maintaining periodical and document collections, providing reference services, and instructing students and faculty in the use of the library and its printed and electronic information resources.

The systemwide Library Automation unit, which provides Universitywide bibliographic access to the resources of the University's libraries through the MELVYL on-line system, represents three percent of the total library budget.

The California Digital Library, described previously, represents two percent of the total budget.

In 1977, the University adopted a comprehensive library plan with the goals of improving library service and reducing the rapid rise in library costs. To achieve these goals, the plan recommended increased cooperation among the libraries of the University and creation of a library system that would serve all University users, regardless of campus or location.

Between 1977 and the late 1980s, the State provided most of the operating and capital resources called for in the library plan. Over the last decade, however, the ability of the existing library program and budget to support the University's academic program has been hampered by three principal factors: the State's fiscal difficulties which resulted in reduced overall funding for the University in the early 1990s, high inflation in the costs of published library materials, and growth in both enrollments and the number of approved academic programs requiring library support.

The Fiscal Difficulties of the State

During the early 1990s, the purchasing power of the University's library budgets eroded as a result of cuts to University budgets totaling $433 million. To cope with budget reductions while protecting the funds available to purchase materials, the libraries resorted to measures such as closing branch libraries; deferring equipment purchases and maintenance; and reducing operating hours, the number of reference librarians, and the public services available.

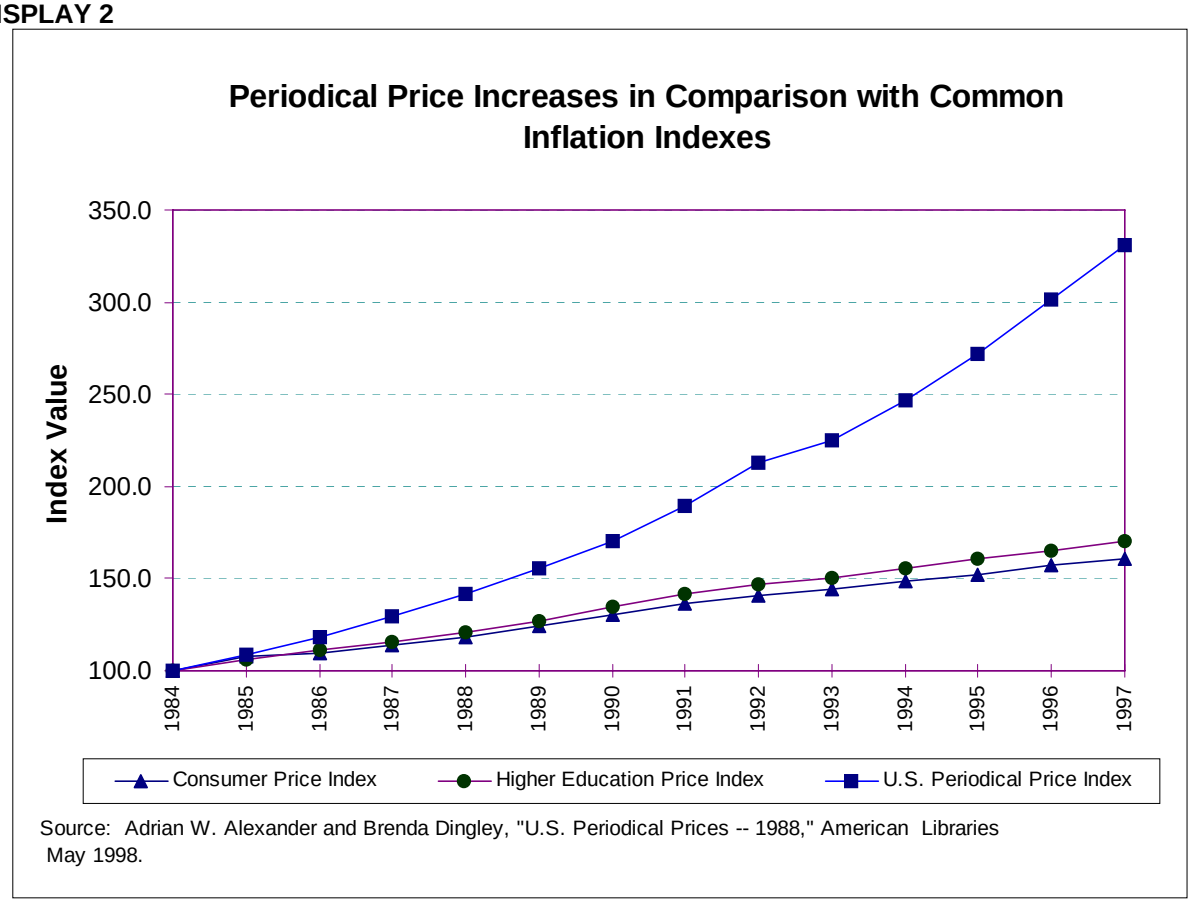
Inflation in Library Materials Costs

Over the last decade there have been extraordinary increases in the costs of many library materials, especially periodicals in the sciences, technology, engineering, and the health sciences. According to published industry statistics, U.S. periodical prices rose at an average annual compound rate of 10.8 percent per year between 1986 and 1998. The State has been unable to provide full funding to meet the impact of inflation on the library materials budget. Consequently, the libraries have lost over 45 percent of their purchasing power since 1989. The severity of this problem is manifested by serial cancellations estimated at over 50,000 titles since 1988.

Enrollment and Program Growth

Another factor affecting the quality of library service is the growth in enrollment and in the number of graduate programs offered by the University since the current budgeted library acquisition rate was established in the late 1970s. The budgeted acquisition rate of 614,000 volumes has not been adjusted despite significant increases in student enrollment and the addition of new graduate and professional degree programs. Even if inflationary costs had been fully funded during this period, the libraries would still find themselves unable to fully support the approved academic program of the University. The combined effect of these factors has resulted in an annual library budgetary shortfall that exceeds $39 million.

DISPLAY 2



Source: Adrian W. Alexander and Brenda Dingley, "U.S. Periodical Prices -- 1988," American Libraries May 1998.

Over its 130-year history, the University, with the ongoing support of the state, has built a remarkable library resource, second in size only to the Library of Congress. The University is committed to sustaining the greatness that has characterized the UC Libraries for over a century, even as it confronts the economic and technological forces that will reshape the understanding of library excellence in the new millennium. The library initiative proposed as part of the 1999-00 budget embodies that commitment and takes the first steps toward ensuring the ongoing value of this eminent resource in the 21st century.

ACADEMIC SUPPORT--OTHER

1998-99 Budget	
Total Funds	$402,157,000
General Funds	128,975,000
Restricted Funds	273,182,000
1999-00 Increase	
General Funds	--
Restricted Funds	$16,250,000

Included in the category Academic Support - Other are various support activities that are operated and administered in conjunction with schools and departments. These partially self-supporting activities provide basic clinical and other support essential to instructional programs, and contribute significantly to the quality and effectiveness of health sciences and general campus curricula. State support is an essential part of the income of these clinical activities.

Among the clinical facilities that support health sciences programs are 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, an optometry clinic at Berkeley, and two neuropsychiatric institutes (Los Angeles and San Francisco). In addition, a number of demonstration schools, 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.

Description of Programs

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 at San Francisco and Los Angeles 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.

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. In July 1981, the centers became an integral part of the University. 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 this field.

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. In 1998-99, the Davis campus will establish a new clinic in southern California. 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.

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. At the clinic, optometry faculty supervise students in the clinical aspects of the prevention, diagnosis, and remediation of problems of the visual system. 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.

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.

Demonstration schools serve as teaching laboratories for experimentation, research, and teacher training. The schools educate hundreds of 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 in this category include support for the arts and specialized physical sciences and engineering projects.

TEACHING HOSPITALS

1998-99 Budget	
Total Funds	$1,702,291,000
General Funds	38,754,000
Restricted Funds	1,663,537,000
1999-00 Increase	
General Funds	--
Restricted Funds	$38,904,000

The Role of The University Teaching Hospitals

The University of California has five campuses with Schools of Medicine, four of which have academic medical centers owned and operated by the University to support their clinical teaching programs. These include the programs located on the Davis, Irvine, Los Angeles, and San Diego campuses. The UCSF campus has an affiliation agreement with UCSF Stanford Health Care (a non-profit organization created when the UC San Francisco Medical Center merged with the Stanford University Health Services on November 1, 1997) to support its clinical teaching program. The core clinical experiences for health sciences students occur in these five academic medical centers. As the result of training more primary care physicians and fewer specialists in response to changes in the financing and delivery of health care, the University is developing more outpatient clinical training sites and primary care networks.

In addition to supporting the clinical teaching programs, the academic medical centers provide a full range of health care services and are sites for the development and testing of new diagnostic and therapeutic techniques. With their tripartite mission of teaching, public service, and research, UC's academic medical centers constitute 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 University's academic medical centers comprise one of the largest health care systems in California and one of the two largest Medi-Cal providers in the State. In 1998-99, the University medical centers will have a combined licensed capacity of 2,632 beds and are expected to generate more than 536,000 patient days and more than 2.6 million outpatient visits (this data excludes UCSF Medical Center).

Although the University medical centers have different origins and varying roles in their communities they all operate in highly competitive, yet diverse, markets. All are profoundly affected by the changes in the nation's health care delivery system and in public policies related to paying for this care.

While the University's medical centers are similar to other hospitals trying to survive in a price-sensitive, managed care environment, they have the added responsibilities that distinguish them as academic institutions. The costs associated with providing cutting-edge treatment, biomedical research that has the potential to affect millions of lives, the training of health care professionals, and providing a disproportionate share of the indigent care in California all combine to make it difficult for these medical centers to compete on the basis of price with health care providers that do not have teaching hospitals.

Academic medical centers, by their very nature, have the added costs of providing trainees with the necessary clinical experiences which increase the cost of patient care because trainees take longer to perform routine patient care tasks, use more diagnostic and therapeutic services and require faculty supervision. While limited funding for clinical training is currently provided through federal and State sources, none is provided by private insurers. Among the University's highest priorities is to continue to secure funding to help pay for the cost of providing a medical education in a clinical setting.

Three of the University's medical centers – Davis, Irvine and San Diego – are former county hospitals. These three hospitals have historically provided care to a disproportionately high percentage of Medi-Cal patients, as well as other indigents. Since most of these services are government-financed, these medical centers are extraordinarily vulnerable to changing public policies related to the funding and provision of health care for the poor.

As teaching hospitals, the University medical centers need to have an adequate and diverse patient base and sufficient funding to support the clinical instruction and research programs. With managed care becoming the primary system for delivering and financing health services, the University's medical centers, in total, have experienced a decrease in the number of inpatient days and have had to accept negotiated rates from private and some public payers that do not recognize the higher costs of providing a medical education in a clinical setting. Like all hospitals, the University's academic medical centers will be affected by federal Medicare and Medicaid funding proposals to slow the growth of future rate increases. Additionally, academic medical centers are expected to be directly affected by the proposed changes in federal Medicare medical education funding.

Over time, the University 's medical centers have pursued various solutions – some short-term and some more permanent – to address fiscal difficulties and avert permanent damage. Special capital and operating subsidies were provided to the three former county hospitals in the mid-1980s. Special funding is being provided to all

California hospitals, including the three former county hospitals, that treat a disproportionate share of Medi-Cal and low-income patients. The federal government has components within the Medicare program to help pay for medical education. In 1997, the University began to use State Clinical Teaching Support (CTS) funds to leverage additional federal Medicaid dollars to help support medical education costs incurred in providing services to Medi-Cal patients.

The future of the University's medical centers depends upon adequate funding for medical education costs and for providing care to the poor, as well as reimbursement strategies that recognize the medical centers' needs to maintain an operating margin sufficient to pay for debt, provide working capital and purchase state-of-the-art equipment. The future of these academic medical centers also depends on there being a sufficiently diverse and adequate patient base. There has been considerable legislative interest in and recognition of the financial difficulties facing the University's medical centers. Some of this interest has been generated by concerns over the University's continued ability to provide health care to the indigent population as the medical centers pursue various long-term strategies to ensure their fiscal viability while continuing to support the University's academic mission.

The following section reviews the changes in financial support for academic medical centers that have occurred over the last decade and how the medical centers are dealing with those changes, identifies the challenges that lie ahead, and briefly discusses the University's plans for dealing with these challenges.

History of Health Care Financing

Rising health care costs in the 1980s, demographic changes, and changing economic conditions caused the State, the Congress, and the private sector to initiate fundamental changes in the financing of health care services.

The traditional fee-for-service reimbursement system has almost completely been replaced by competitively established fixed-price payments, i.e., either capitated, per-diem, or global rates by diagnosis. As a result, hospital costs unique to academic settings (e.g., treating sicker patients, providing services to a disproportionate number of uninsured or under-insured patients, and providing a medical education in a clinical setting) are not fully reimbursed. In addition, there are reduced opportunities to cover these costs through higher charges to private paying patients, in part because the vast majority of patients are enrolled in managed care plans or other selective contracting plans which negotiate discounted rates.

Over a five-year period (1993-94 through 1997-98), the percentage of days accrued by patients covered by private payers decreased from 5 percent to 3 percent, while the number of days provided to patients covered by contractual or capitated arrangements increased from 23 percent to 40 percent.

Changes in Health Care Funding Policy

Changes in health care financing affecting the medical centers began in 1982-83 with reforms of the State Medi-Cal program that instituted selected hospital contracting for inpatient services at flat per-diem pricing, stricter eligibility requirements, and transfered responsibility for the Medically Indigent Adults (MIAs) from the State to the counties (funding for the MIAs was provided at less than the 70 percent of projected State expenditures for the base year 1982-83). The transfer of the MIA patients directly affected the three former county hospitals – Davis, Irvine and San Diego – because the local tax dollars used to subsidize hospitals operated by local government are not available to University-operated medical centers.

In 1982, private health care insurers were provided with the same ability as the State to contract selectively with health care providers on behalf of their enrollees.

At this same time, changes in federal Medicare payment policies for hospitals included a prospective payment system for inpatient care based on payments per case according to Diagnosis Related Groups (DRGs) rather than on actual hospital costs; limited payments for teaching costs; and phased out cost-based payment for capital improvements.

In the early 1990s the Department of Health Services (DHS) was given authority to hasten the transition of Medi-Cal payments from a fee-for-service to a managed care basis for about 2.5 million Aid to Families with Dependent Children (AFDC) beneficiaries and to expand the Medi-Cal managed care program. Under these programs, the provider agrees to treat the members of the Medi-Cal managed care plan for a fixed rate-per-member-per-month. The provider is at risk and is liable for any expenses incurred beyond the monthly capitated payments. Medi-Cal managed care programs are in various stages of implementation throughout the State. Upon full implementation, the University's medical centers will be at increased financial risk for managing the care of patients covered under these programs.

Special Subsidies for The Three Former County Hospitals

In the 1960s and early 1970s, the Legislature, which supported the University's education and research efforts but wanted the University to give a higher priority to providing medical care for the poor, requested that the University assume operation of three former county hospitals for the Davis, Irvine, and San Diego campuses. These hospitals were designated to serve as the principal inpatient training sites for the three new medical schools established at each of those campuses. The three hospitals, which have historically provided a disproportionately high percentage of indigent care, were plagued by financial problems from the very beginning. A review of the operations of the three medical centers resulted in agreement with the State, in which the State provided $86 million to fund cost-saving and revenue-enhancing capital outlay projects and equipment purchases and $28.6 million to mitigate operating losses for the Davis, Irvine and San Diego Medical Centers beginning in 1985-86.

Funding For Teaching

Medi-Cal Medical Education Funds. In 1995-96, the Legislature recognized the financial problems facing the University's medical centers and requested that the University identify the nature of the problems facing its centers. In 1996-97, the Legislature adopted additional supplemental language asking the University to develop options for dealing with the costs of providing medical education in a clinical setting.

The University reviewed many alternatives and successfully pursued an option to help fund graduate medical education costs through the Medi-Cal program by securing federal matching funds. In 1996-97, the University, working with the California Medical Assistance Commission (CMAC), the Department of Finance (DOF), and the Department of Health Services (DHS), developed a program, specifically for the University's Medical Centers, that allowed the University to use existing State general funds (Clinical Teaching Support) to leverage an additional $50 million in federal Medicaid funds in recognition of the cost of medical education incurred in the treatment of Medi-Cal inpatients.

The State approved legislation (SB 391 - Solis) to continue the program through 1998-99 and to expand the program to include other University teaching hospitals, the Children's Hospitals, and major (non-university) teaching hospitals.

In 1997-98, the University's four medical centers received a total of just less than $35 million. The reduced level of federal funding is attributable to the expansion of the Medi-Cal Medical Education program to include major teaching hospitals other than UC medical centers and the fact that the UCSF Medical Center is treated separately.

The University will seek to extend this program beyond June 30, 1999. At the same time, the University is continuing to work with the State on a broader, longer-term program to fund graduate medical education in outpatient as well as inpatient settings, and to include other health care professionals. As part of this effort, the University will also look at methods to identify teaching costs and allocate them to multiple payors.

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

The 1998-99 budget includes $48.6 million in CTS funds to support the University's academic medical centers (of which $11 million is included in the UCSF I&R budget and will be used to support the clinical teaching programs, provided by UCSF Stanford Health Care, at the San Francisco School of Medicine). While CTS funds represent less than 2.5 percent of 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, especially in light of generally lower reimbursement for patient care.

Funding for Treating Disproportionate Numbers of Medi-Cal and Indigent Patients

SB 1255 Funds. In 1989, the State established the Disproportionate Share and Emergency Services Fund, also known as the SB 1255 program. Through the SB 1255 program, public agencies which own eligible disproportionate share hospitals (DSH), including the University, voluntarily transfer funds to the State. These funds are used to secure federal Medicaid matching funds. The pool of funds is then distributed by the State to hospitals (public and private) that treat a disproportionate share of Medi-Cal and low-income patients. The Davis, Irvine and San Diego Medical Centers qualify as disproportionate share providers. The distributions result from negotiations between the University and the California Medical Assistance Commission (CMAC).

From May 1990 to June 1998, the University received about $138 million more than it transferred under this program. The continuation of this program, which has been a significant source of funding for the Davis, Irvine and San Diego Medical Centers, is uncertain in light of federal attempts to constrain Medicaid's growth. The elimination of the SB 1255 program would mean the loss of up to $10 million a year, on average, for each of these medical centers.

SB 855 Funds. In 1991-92, the State created a second vehicle, known as the SB 855 program, to provide supplementary payments to hospitals providing a disproportionate share of their inpatient services to Medi-Cal or other low-income patients.

The SB 855 program requires governmental entities with hospitals, such as counties, hospital districts and the University, which own eligible DSH hospitals, to transfer funds to the State Controller for deposit into the Medi-Cal Inpatient Payment Adjustment Fund. Unlike the SB 1255 program, these are mandatory transfers, the levels of which are determined by formula. These funds are used to secure matching federal Medicaid dollars. The pool of funds is then distributed by the State to all (public and private) disproportionate share hospitals. The distribution of SB 855 funds is derived by a formula based on previous year's data regarding the number of Medi-Cal days and the percentage of other low-income beneficiaries served.

The Davis, Irvine, and San Diego Medical Centers qualify as disproportionate share hospitals. During the period from 1991-92 through 1997-98 the University received more than $328 million over and above the dollars it transferred to the SB 855 Fund.

Beginning in 1993-94, distributions from the SB 855 program were subject to the federal provisions which set a ceiling on the distributions that could be made to individual

hospitals and, cumulatively, to each State.

In 1998-99, the net benefit to eligible disproportionate share hospitals is likely to be less than the amount received in 1997-98 (in 1997-98 UC's disproportionate share hopsitals received $51.9 million in SB 855 funds) because two supplemental payments were made in 1997-98 to maximize available federal funds by aligning federal funds from two federal fiscal years into the State's fiscal year. Although the cap on disproportionate share payments increased in 1997-98, some of the increase in funding was offset by a decrease in the number of inpatient Medi-Cal days. The total number of Medi-Cal inpatient days across the State is declining as managed care plans exert tighter controls on admissions and length of stay, and because the number of Medi-Cal eligibles is reduced statewide. The number of inpatient Medi-Cal days will decrease further if many legal and illegal immigrants are removed from the Medi-Cal rolls as a result of federal welfare and immigration reform. A continued decrease in Medi-Cal patients hinders the University's clinical teaching programs, and could potentially limit the University's ability to participate in the SB 855 and SB 1255 programs.

Funds from the SB 855 program account for about four percent of the total net revenue for the Davis, Irvine and San Diego medical centers.

Tobacco Tax Funds. In November 1988, voters approved Proposition 99 which imposed an additional tax on cigarettes and other tobacco products. Proposition 99 created six separate accounts from which funds are to be appropriated for specific purposes, including indigent care, the prevention and cessation of tobacco use, and the prevention and treatment of tobacco-related diseases. Funds from the Hospital Services and Unallocated Accounts are available for payment to public and private hospitals for the 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 1989, the State approved a plan (AB 75) specifying how the Proposition 99 (Tobacco Tax Funds) were to be distributed. Since 1989, there has been a decline in smoking and the use of other tobacco products which has reduced the total amount of Tobacco Tax Funds. In 1997-98, the University medical centers received a total of $5.8 million as compared to $14.6 million (including the one-time payment of $1.6 million) in 1989-90. The amount of Tobacco Tax Funds in 1998-99 is projected to decrease by five percent. Notwithstanding the decline, the Tobacco Tax Funds are an important source of revenue for the University's medical centers.

Meeting the State and University Budget Shortfalls

In the early 1990s, in recognition of the fact that the State provided more than $80 million of assistance by funding needed capital improvements during the 1980s, the University and the State turned to the medical centers to help alleviate some of the University's budgetary problems. At that time, the University was experiencing unprecedented cuts in its operating budget and the academic medical centers were

experiencing modest gains.

In 1992-93, the medical centers funded a $43 million shortfall in the University's operating budget. In 1993-94 and 1994-95, the State redirected $237 million in SB 855 transfer funds that would otherwise have been used to capture federal Medicaid dollars thereby reducing the total amount of SB 855 funds available for distribution. In addition, the University's share of SB 855 funds was reduced by $15 million on a one-time basis by the Legislature.

The University's plan for accommodating cuts in its 1993-94 State-funded budget included a cut to health sciences clinical activities, which resulted in both permanent and one-time cuts in Clinical Teaching Support (CTS) for the medical centers.

In 1994-95, the University and the State reached agreement to shift $18 million of State support from the medical centers on a one-time basis to help meet needs in critically underfunded areas in the general operating budget, i.e., libraries, instructional equipment, and deferred maintenance. The shift recognized actual and estimated operating gains at the medical centers during 1992-93 and 1993-94 which were above the five percent recommended by the Legislative Analyst, and supported by the Legislature.

In response to this action, the University undertook a study to look at the medical centers' needs for working capital, capital outlay and equipment, as well as a prudent reserve. The study concluded that future actions by the Legislature to limit the medical centers' ability to accumulate adequate reserves would make it even more difficult to compete in price-sensitive markets. Notwithstanding this, the 1995 State Budget Act redirected $5.5 million, a portion of the medical centers' net gain above five percent, in CTS funds to fund deferred maintenance on a one-time basis. The medical centers only achieved a 2.8 percent operating margin in 1995-96, and the $5.5 million of CTS funds was restored to the medical centers in 1996-97.

CURRENT ISSUES

Medicare and Medicaid Budgets. The federal government currently provides nearly one-third of the net operating revenue of the University's teaching hospitals through the Medicare and Medicaid programs. The University is concerned because substantial federal budgetary savings from the Medicare and Medicaid programs are part of deficit reduction strategies that will be used to balance the federal budget by the year 2002.

One of the federal budget objectives is to save the Medicare Trust Fund from bankruptcy for at least ten years by slowing the growth of Medicare spending by $116.4 billion over five years, and between $400 and $450 billion over ten years. Most of the program cuts, which are not expected to occur until after the year 2000, will directly affect providers rather than beneficiaries. The proposals to cap or reduce disproportionate share payments and direct and indirect medical education payments will directly affect the University's academic medical centers' fiscal condition.

The agreement to balance the federal budget is also expected to provide approximately $8.4 billion in net Medicaid savings over five years, by eliminating spending on a per-person basis and reducing disproportionate share payments to states.

A positive outcome is that direct and indirect medical education-related reimbursements formerly provided to HMOs, with no obligation to use the funding for the intended purpose, will now be "carved out" of the HMO reimbursements and made available to academic medical centers providing services to Medicare HMO members.

Impacts of Managed Care. Academic medical centers are profoundly affected by the dynamic changes in the delivery of health care services. These changes are the direct or indirect result of an increase in the percentage of the general population enrolling in "managed care plans" for health care coverage. When reimbursement was based on a fee-for-service, the medical centers were able to generate the patient volume and dollars needed to support teaching and research programs. Patients were attracted to the cutting-edge quality of the specialized treatments for complicated health problems offered by the medical centers, and employer-paid insurance and government programs covered the higher costs.

Managed care, in response to spiraling health care costs, seeks to reduce costs in two primary ways. First, managed care emphasizes prevention and primary care intervention in order to reduce the need for more costly hospitalization and specialist services later on. Primary care physicians serve as the first-line of treatment and act as "gatekeepers," coordinating care and controlling referrals to more costly specialized services. Some services that have traditionally been provided on an inpatient basis are now being provided in outpatient facilities as efforts are made to hold down costs. Improvements in procedures and technology will continue to allow for more services to be performed in an outpatient setting.

As a result of these trends, most of the University's medical centers experienced

decreases in the average length of stay and inpatient days during the 1990s which threatens their ability to generate revenue to cover costs and reduces the opportunities for teaching.

The medical centers are adopting a number of strategies to address the downturn of inpatient activity and to ensure they continue to have a diverse patient population in sufficient volume to support their teaching and research programs. These are discussed later in this section.

Consistent with the direction of health care delivery, the University's clinics show increases in outpatient visits. While there is pressure from accrediting bodies and other policy makers to shift the locus of medical training from inpatient to outpatient care sites, and the University's clinics are logical outpatient training sites, the cost of providing a medical education in the outpatient setting is expected to be similar or even higher than inpatient settings. Complicating the fiscal picture in this context is the fact that medical education costs for outpatient services are not recognized by Medicare or Medi-Cal. The University is working with the State to identify these costs of providing medical education in an outpatient setting, which are not currently reimbursed by either the State or the federal government.

The second way in which managed care seeks to control costs is by contracting with a network of preferred providers to deliver services at negotiated (discounted) rates. To compete successfully for these contracts, physicians are joining with hospitals and other providers to form integrated delivery systems that provide the full range of care from outpatient and lab services to inpatient and skilled nursing care. Integrated delivery systems offer a continuum of care and derive competitive advantages from economies of scale that can result in lower prices; data collection capabilities that can monitor outcomes over time, which can be an advantage in attracting patients; and convenience for insurers, who can negotiate with many doctors and multiple services as a group rather than an a one-on-one basis. Providers who remain outside these networks face a reduced market for their services, as more and more of the population use the managed care option for health care on either a voluntary or mandatory basis.

As major purchasers of medical services on behalf of Medi-Cal and Medicare beneficiaries, the State and federal government are encouraging the development of contractual arrangements with selected providers to provide services to these populations. Unless the negotiated rates recognize the special needs of academic medical centers and provide the necessary funding, the University's medical centers will not be able to recover full costs for providing the services.

Responding to the Challenges

The medical centers are adapting to the managed care environment by expanding their outpatient and primary care services to complement their existing inpatient services and

creating integrated delivery systems. This is enabling the centers to compete more successfully for commercial contracts and in turn, provide students with more exposure and training in the delivery of primary care services, and ensure a diverse patient population for clinical teaching and research purposes. An expanded primary care patient base is also expected to result in more referrals to the University's own inpatient and specialist services.

The University's academic medical centers are also responding by reducing costs through restructuring and improved efficiencies. The centers are developing stronger links with other providers, especially community hospitals and physicians in larger networks.

The following is a brief description of how each of the University's academic medical centers have or are responding to the changes in the health care industry.

UD Davis Medical Center: The Davis Medical Center adopted a number of different strategies within the past five years in response to changing market conditions. For example, in 1993, the UC Davis primary care network expanded to include 130 physicians who now serve approximately 250,000 patients in 18 different communities. The UC Davis Telemedicine Program now links physicians and hospitals in rural communities with specialists at UC Davis Medical Center, improving access among rural residents to specialty care and strengthening referral relationships.

To support these and other initiatives, UC Davis has made major investments in facilities and equipment in the past five years. The 370,000 square foot Lawrence J. Ellison Ambulatory Care Center, which opened in July 1998, allowed UC Davis to consolidate clinics that were scattered in several leased buildings near the hospital. A new central plant now provides low-cost power to the entire 140-acre medical campus. New research and office facilities have been completed, and the Davis Tower, an inpatient addition that replaces older portions of the medical center, will be completed early next year.

To enhance efficiency and effectiveness, the school and medical center have consolidated several key functions (financial services, information services, human resources, planning) and have developed an administrative and governance structure which allows the school and medical center to function as a fully integrated organization referred to as the UC Davis Health System. In parallel with this effort, several organizational changes have helped UC Davis physicians function more like a multi-specialty group in the private sector.

As a result of these and other efforts, inpatient and outpatient volume continues to grow, and UC Davis now has contractual agreements with nearly every major insurance carrier in the region.

UC Irvine Medical Center: Working with the Clinical Practice Group of faculty physicians, the Irvine Medical Center initiated a broad program of managed care

contracting and physician practice development. Among the other options being explored by the UCIMC are: (1) the development of its own provider network; (2) increasing the number of CalOPTIMA and County medically indigent services patients directed to UCIMC; and (3) increasing the reimbursement rates for services provided to CalOPTIMA patients.

To better serve patients, the medical center and medical group divisions were consolidated to allow patients to schedule and register for appointments with a single phone call to the Call Center.

Significant improvement in financial performance is attributed to revenue generated as a result of contracting and business development activities, continued funding by federal and State disproportionate share programs, and cost savings. Payer mix has improved, the result of referral relationships developed with community-based physicians and medical groups as well as hospitals and health systems.

Key to the medical center's strategy is the restructuring of the organization into an integrated clinical enterprise, called the UCI HealthSystem. Ultimately, the Medical Center, the Medical Group, and the College of Medicine will be fully integrated.

UC Los Angeles Medical Center: As part of its strategy to develop a foundation for an integrated health care system by expanding primary care to complement existing specialty services, UCLA's acquisition of Santa Monica Hospital in 1995 has led to a well-developed primary care network. The acquisition of the Santa Monica Hospital made it possible for the UCLA Medical Center and School of Medicine to create a strategic alliance in 1998 with Orthopedic Hospital that will help in developing a comprehensive program in the field of orthopedics. As part of its strategy, UCLA has aggressively established twenty primary care settings, an increase of fifteen in three years. UCLA has also executed an affiliation agreement with the Huntington Provider Group, the largest network of independent physicians and physician groups in the greater Los Angeles area. This affiliation has resulted in an increase in patient activity at the Westwood campus.

As a result of structural damage sustained during the 1994 Northridge earthquake, UCLA is continuing the planning phase to build replacement hospital facilities at both the Westwood and Santa Monica campuses. The majority of the funding will be provided by the Federal Emergency Management Agency (FEMA). The State has provided $44 million in matching funds. The new medical center will have fewer inpatient beds and expanded (outpatient) clinical facilities.

UC San Diego Medical Center: The UCSDMC strategy has focused on reducing its annual operating costs in order to be an attractive partner in network development. It is also critical to the medical center's participation in managed care contracting. Rather than attempting to partner by leasing facilities or staff to other health care systems as previously planned, the UCSD Medical Center will restructure its management service organizations and its health care network.

By July 1993, the medical center completed several capital improvements: the Tower and Modernization Project at its Hillcrest facility which converted outdated four-bed wards to double occupancy rooms, and the Thornton Hospital and the Perlman Ambulatory Center which increased access to more patients in the northern end of the county and provided more modern and attractive facilities.

The Healthcare Network was created, linking UCSD's facilities and faculty physicians with community practitioners and hospitals in a county-wide delivery system. In 1997, UCSD Medical Center agreed to participate in the Medicare Choices Demonstration to secure a Medicare "Risk" (HMO) contract directly with the Health Care Financing Administration of the Department of Health and Human Services.

UC San Francisco Medical Center: In 1997, the Regents approved the merger of the UCSF medical center with Stanford Health Services. Among the advantages of the merger are: (1) an improved ability to compete in a managed care environment and to negotiate more favorable provider contracts; (2) a reduction in costs associated by reducing duplication of capital investments; (3) the ability to sustain an adequate patient base to support the clinical education mission of the schools of medicine; and (4) consolidation of some programs to reduce costs and create efficiencies while maintaining quality. The November 1, 1997 merger created a separate non-profit corporation - UCSF Stanford Health Care – which will support the clinical teaching programs of the UCSF School of Medicine and the Stanford School of Medicine.

As UC medical schools and medical centers look to the future, the University remains committed to meeting previously established primary care residency training expansion goals, while striving to maintain a long tradition of excellence in health sciences education and responsiveness to societal health needs. Meeting these challenges successfully will require increasing collaboration among educators, teaching hospitals, managed care organizations, and others to ensure that the quality of patient care and medical education continue to meet the high standards of American medicine and modern society.

STUDENT FEES

Overview

There are two mandatory Universitywide fees currently assessed all registered students: the Educational Fee and the University Registration Fee. Income from these two fees is used to support student financial aid, student services programs, and a share of the University's operating costs, including instruction-related costs.

In the early 1990s, Universitywide mandatory student fees increased dramatically. The fee increases were one of the many ways in which the University was able to weather the fiscal difficulties of the early 1990s. As the State emerged from its economic difficulties, the Governor and the Legislature placed a renewed priority on higher education and, helped by a growing economy, "bought out" fee increases planned as part of the four-year compact with higher education.

Consistent with Assembly Bill 1318 (Chapter 853, Statutes of 1997), mandatory Universitywide fees for resident undergraduates are reduced by five percent ($190) in 1998-99 and these fees for resident graduate and professional school students, as well as for nonresident students, are maintained at the 1997-98 levels. Thus, total fees, including mandatory Universitywide and campus miscellaneous fees, across all nine campuses average $4,037 for resident undergraduate students. Resident graduate students will pay an average of $4,638 in these fees in 1998-99. Nonresident students will also pay the nonresident tuition fee and professional school students will also pay applicable professional school fees.

Based on the State's actions in each of the last four years to "buy out" proposed fee increases and fee reductions, the University's 1999-00 budget plan does not include changes in mandatory Universitywide fees. The University's budget plan does include $18 million in State funds to offset the revenue associated with keeping fees constant for another year. While the Governor has signed SB 1896 (Peace) which states legislative intent to reduce mandatory systemwide fees by five percent for resident graduate academic students in 1999-00, any fee reduction is contingent upon the funding being appropriated by the State. Consistent with the provisions of the bill, the University is requesting that the State provide $3.5 million, above the funding levels anticipated in the compact, to pay for the costs of reducing fees for resident graduate academic students and resident professional degree students who are not subject to the Fee for Selected Professional School Students in 1999-00.

All students seeking specified degrees in medicine, dentistry, veterinary medicine, law, business/management, pharmacy, optometry, nursing, and theater/film/television (at the Los Angeles campus only) are required to pay a professional school fee, as provided in the Fee Policy for Selected Professional School Students approved by The Regents in January 1994. As a result of AB 1318, no actions were taken to increase these fees in 1998-99 in accord with the phased schedule previously reviewed by The Regents. In addition to providing a five percent reduction in fees for resident undergraduate

students, the bill provided a two-year freeze in fees for resident students enrolled in graduate or professional school programs through 1999-00.

As noted above, the Governor has signed SB 1896 (Peace) which, in addition to expressing legislative intent to reduce mandatory Universitywide fees by five percent for resident graduate students, removes the freeze on fees for students subject to the professional school fee. A new plan to phase in fees to the average of the total fees charged at public comparison institutions for each degree program will be discussed with The Regents at the November meeting. The Regents will not be asked to take actions on fees until January, after it is known whether funding is provided in the Governor's budget to offset the fee reduction contained in SB 1896.

Finally, in addition to all mandatory Universitywide fees, campus-based fees, and any applicable professional school fees, nonresident students must pay nonresident tuition. For 1998-99, the nonresident tuition is $9,384. The University's budget plan includes a proposal to increase nonresident tuition by 4.5 percent ($420) which is the estimated growth in the California per-capita personal income.

Student Fees In the 1980s

In 1981-82 and 1982-83, reductions to the University's State-funded budget resulted in significant increases in fee levels, and student fees were used to fund programs previously supported from other sources, primarily State funds. In 1984-85, the State reversed the pattern of annual fee increases by approving a $70 per student reduction in student fees. In 1985, the State adopted a long-term student fee policy which provided for gradual and moderate fee increases and established guidelines for fee increase calculations, financial aid, notification to students of fee increases, and consultation with students.

In 1985-86 and again in 1986-87, mandatory Universitywide student fees were held at their 1984-85 levels. In each of these three years, the State provided an increase in general funds for student financial aid which, in turn, released an equivalent amount of student fee income to offset the 1984-85 fee reduction and to compensate for the impact of inflation on student services programs for those three years. In 1987-88, 1988-89, and 1989-90, student fees were increased by about 10 percent, four percent, and three percent respectively.

Student Fees 1990-91 through 1994-95

Historically, the combination of adequate State support and low student fees maintained the affordability of the University; financial aid programs also helped to maintain access for needy students. The commitment to low fees was eroded by the State's severe fiscal difficulties in the early 1990s and the resulting dramatic decline in State support for the University. The shortfalls in State funding were accommodated in three ways: about half through budget cuts, roughly a quarter by not providing employees with cost-of-living salary adjustments, and another quarter through general student fee increases. Thus, there was considerable volatility in fee increases during early 1990s.

Mandatory Universitywide fees increased significantly during this period – by 40 percent in 1991-92, 24 percent in 1992-93, and 22 percent in 1993-94. In 1994-95, the University was able to hold the fee increase to 10 percent because the State authorized the use of $25 million in debt financing for deferred maintenance which released general funds that substituted for fee income. Display 1 shows the annual fee levels since 1978-79.

Throughout this period, fees were accompanied by significant increases in financial aid which helped offset the impact of the fee increases on needy students. The commitment to financial aid, which is addressed in the Student Financial Aid section, has helped maintain the affordability of a UC education.

Student Fees 1995-96 through 1998-99

The 1995 Governor’s Budget proposed a four-year compact with higher education which provided for annual budget increases averaging 4 percent and student fee increases up to 10 percent annually. During the first three years of the compact the State provided the University with additional revenue above the proposed compact levels to “buy out” annual fee increases of about 10 percent.

In 1998-99, the final year of the compact, the State provides sufficient funds to “buy out” the equivalent of a 10 percent fee increase *and* to reduce mandatory Universitywide student fees by 5 percent for resident undergraduate students, consistent with AB 1318. Since 1995-96, then, there have been no increases in mandatory Universitywide student fees, and fees for resident undergraduate students have been reduced for 1998-99.

DISPLAY 1

Full page landscape

For 1998-99, University fee levels for undergraduate resident students are $1,068 less than the average fees for the University's four public salary comparison institutions. The University's fees for nonresident undergraduate and graduate students also remain less than the average fees for the comparison institutions. Display 2 shows the average resident and nonresident fees charged at the University's four public comparison institutions.

DISPLAY 2

University of California and Public Salary Comparison Institutions
Student Fees

	Undergraduate		Graduate	
	Resident	Nonresident	Resident	Nonresident
Public Salary Comparison Institutions 1998-99 Fees				
University of Illinois	$ 4,554	$ 11,370	$ 5,106	$ 11,982
University of Michigan	$ 6,489	$ 19,830	$ 10,192	$ 20,484
State University of New York	$ 4,510	$ 9,410	$ 5,970	$ 9,285
University of Virginia	$ 4,866	$ 15,814	$ 4,866	$ 15,814
1998-99 Average Fees for Public Salary Comparison Institution	$ 5,105	$ 14,106	$ 6,534	$ 14,391
1998-99 UC Fees	**$ 4,037**	**$ 13,611**	**$ 4,638**	**$ 14,022**
1999-00 Estimated Average Fees for Public Salary Comparison Institutions	*$ 5,310*	*$ 14,600*	*$ 6,795*	*$ 14,895*
1999-00 UC Fees with Proposed Increase in Nonresident Tuition	***$ 4,037***	***$ 14,031***	***$ 4,638***	***$ 14,442***

NOTE: The proposed fee level for resident graduate students does not reflect the 5% fee reduction provided for in SB 1896 (Peace) which was signed by The Governor.

For 1998-99, the mandatory Universitywide fees paid by resident undergraduate students are just over 25 percent of the actual cost of their education, with the State subsidizing most of the remainder. This proportion is significantly less than the 40 percent level recommended by the California Postsecondary Education Commission (CPEC), which has proposed that student charges be based on a percentage of the average cost of instruction.

As fees have increased over time, the percentage of additional fee income dedicated to

financial aid has increased commensurately, from 16 percent ten years ago to 33 percent at present. Financial aid provided to UC students through the Cal Grant program also has increased. Between the Cal Grant program and financial aid provided from student fee revenue, funds helped cover fee increases for UC students who demonstrated financial need.

During the period when fees increased, the percentage of new freshmen from low-income families – those with less than $30,000 parental income – did not decline. In Fall of 1997, the University is enrolling a slightly higher proportion of new freshmen from low-income families than it did in Fall 1991. The Student Financial Aid section of this budget provides a full discussion of financial aid, including State, federal, private, and University sources.

Policy on Adjustment of Student Fee Levels

In 1985, the State adopted a long-term student fee policy which provided for gradual and moderate fee increases and established guidelines for fee increase calculations, financial aid, notification to students of fee increases, and consultation with students. In addition, the policy provided for fee increases of up to ten percent when State revenues and expenditures were substantially imbalanced. Although The Regents adopted the policy in 1985, it was routinely suspended beginning with the 1991-92 budget. The policy was not reauthorized by the Legislature and is no longer in effect.

Discussions occurred at Regents' meetings in October and November 1993 regarding the need to establish a new student fee policy coupled with a formal financial aid policy. These discussions occurred within the context of the reduced State financial support for the University and an anticipated dramatic increase in student demand over the next 15 years. During these discussions, the necessity to generate additional revenue in order to maintain the academic quality of the University as well as student access was acknowledged. It was also recognized that, for California resident students, funding the cost of a UC education is a shared responsibility among the State, the students, and their families. Further, because student fees cover only a portion of the cost to educate students, it was understood that all students receive a substantial State subsidy, including those from high-income families who have the resources to contribute more. Data from a 1997-98 survey of students' expenses and resources indicate that about a third (34.1%) of undergraduates had parents with incomes above $72,000, while about 21 percent had incomes of $96,000 and above.

In January 1994, based on extensive discussions with the State and within the University community, The Regents approved a Student Fee and Financial Aid Policy that applies to the Educational Fee and University Registration Fee. The Policy recognizes that the commitment to low fees has been eroded by dramatic declines in State support, and specifically authorizes the use of Educational Fee revenue for general support of the University, including costs related to instruction. A goal of the Policy is to maintain access to a quality educational experience at the University for low-

and middle-income students without unnecessarily subsidizing high-income students.

Under the policy, the Educational Fee continues to be a mandatory charge assessed to all resident and nonresident students. The policy calls for the Educational Fee to be established annually based on the following factors: (1) the resources necessary to maintain access under the Master Plan, to sustain academic quality, and to achieve the University's overall missions; (2) the amount of support available from various sources to assist needy students in funding the cost of their education; (3) overall State general fund support for the University; and (4) student charges at comparable public institutions. The President is to solicit faculty and student views annually on the level of the Educational Fee. In addition to funding programs and services supported by the Educational Fee in past years (such as student financial aid and related programs, admissions, registration, administration, libraries, and operation and maintenance of plant), income generated by the Educational Fee is now used for general support of the University's operating budget.

The Policy also established a methodology for setting annual University Registration Fee levels that vary among the campuses within a range established annually by The Regents.

Finally, to assist students and their parents in planning for future educational expenses, the Policy provides for recommendations annually to the Board concerning the proposed levels for the Educational Fee and the University Registration Fee for the next academic year, and the anticipated fee levels for the following three years.

Educational Fee

The Educational Fee was established in 1970. Though the Educational Fee initially was designated to be used primarily for capital outlay purposes, in subsequent years, an increasing proportion of the Fee was allocated for student financial aid. In 1976, The Regents adopted a policy that Educational Fee income was to be used exclusively for support of student financial aid and related programs. The Regents modified that policy in 1981 following a reduction in State general fund support. As a result, the Educational Fee, which continued to fund student financial aid and related programs, also began to support social and cultural activities, counseling and career guidance, supplemental education (e.g., academic tutoring), and overhead (i.e., operation and maintenance of plant and general administration) associated with student services activities funded by student fee income.

In 1994, The Regents adopted a policy permitting the use of Educational Fee revenue for general support of the University’s operating budget, including costs related to instruction. As discussed earlier, the policy also established a methodology for setting annual Educational Fee levels.

University Registration Fee

The University Registration Fee is a charge made to each registered student for services which are necessary to students but not part of the University's programs of instruction, research, or public service. Included in these services are activities such as counseling, academic advising, tutorial assistance, cultural and recreational programs, and capital improvements which provide extracurricular benefits for students. Chancellors are authorized to determine specific allocations of Registration Fee income on their campuses, within appropriate University policies and guidelines. Each campus has a Registration Fee Committee, which includes a majority of voting student members, to advise the Chancellor on pertinent issues.

Between 1977 and 1988-89 the Registration Fee level differed by campus in order to allow each campus to meet specific program needs. This approach included the expectation that the Registration Fee could be increased differentially, up to a Universitywide ceiling, to meet future campus needs. However, the Registration Fee was frozen from 1984-85 through 1986-87. In 1987-88, the University began moving toward a uniform Registration Fee level among the campuses. The goal was achieved in 1989-90.

The Student Fee and Financial Aid Policy approved by The Regents in January 1994 no longer required the Registration Fee to be uniform across campuses beginning in 1995-96. Because there have been no increases in mandatory Universitywide fees, the Registration Fee level has remained the same since 1994-95. Programs supported from the Registration Fee continue to receive inflationary adjustments equivalent to what is provided to general fund and Educational Fee-funded programs (e.g., cost-of-living and merit salary increases, price increases, undesignated budget reductions).

Fee for Selected Professional School Students

Pursuant to the provisions of the 1990 State Budget Act, a Special Fee for Law School and Medical School Students of $376 per year was implemented for law and medical school students, effective 1990-91.

In January 1994, The Regents approved a Fee Policy for Selected Professional School Students. In approving the new fee policy, the University reaffirmed its commitment to maintain academic quality and enrollment in the designated professional school programs and recognized that earning a degree in these programs benefits the individual as well as the State. The policy provides that the fee for each selected professional program will be phased in to approximately the average of fees charged for that program by comparable high quality institutions across the nation. Until the fee is fully phased in, the level of the fee remains the same for each student for the duration of his or her enrollment in the professional degree program, with increases in the fee applicable to new students only. In addition, professional school students pay mandatory Universitywide fees and miscellaneous campus-based fees and, when

appropriate, nonresident tuition. The Special Fee for Law and Medical School Students is now combined with the Fee for Selected Professional School Students for law and medical students. Display 3 shows the fee levels previously approved by The Regents.

Display 3

Fees for Selected Professional School Students:
Annual Fee Levels by Year of First Enrollment*

	1994-95	1995-96	1996-97	1997-98
Medicine	$ 2,376	$ 3,376	$ 4,376	$ 5,376
Dentistry	$ 2,000	$ 3,000	$ 4,000	$ 5,000
Veterinary Medicine	$ 2,000	$ 3,000	$ 4,000	$ 4,000
Law	$ 2,376	$ 4,376	$ 6,376	$ 6,376
Business				
Berkeley, Davis, LA, Irvine	$ 2,000	$ 4,000	$ 6,000	$ 6,000
Riverside	$ 2,000	$ 3,000	$ 4,000	$ 5,000
Optometry			$ 2,000	$ 3,000
Pharmacy			$ 2,000	$ 3,000
Nursing			$ 1,500	$ 1,800
Theater, Film, & TV			$ 2,000	$ 2,000

* In addition, professional school students pay mandatory Universitywide fees and miscellaneous campus-based fees.

In 1997, the Legislature approved a measure (AB 1318) which was subsequently signed into law that provided a two-year freeze on fees for California residents enrolled in graduate academic or professional school programs. Thus, the planned professional school fee increases for 1998-99 that were previously reviewed by The Regents were not implemented and professional school fees will remain at the 1997-98 levels. The Governor has signed SB 1896 (Peace) which lifts the freeze on mandatory Universitywide fees for students subject to the professional school fee. A new plan to phase in fees to the average of the total fees charged at public comparison institutions for each program will be discussed with The Regents in November. No action on fees

will be requested until January after it is known what is included in the Governor's budget.

New revenue from the Fee for Selected Professional School Students will be generated in 1999-00 from new students paying previously approved fees. The new revenue (excluding revenue from the $376 for the Special Fee for Law and Medical School Students) will be nearly $2.5 million. Of that total, about $830,000 will be used for financial aid to maintain the affordability of professional school programs, and the remaining $1.6 million will be used by professional schools to maintain academic quality and enrollment levels, in accordance with the policy approved in January 1994. Fee income may be used to hire faculty and teaching assistants, for instructional and computing equipment, libraries, other instructional support, and student services. The amount of fee revenue resulting from new enrollments, including the amount to be set aside for financial aid, is shown in Display 4.

DISPLAY 4

1999-2000 Professional School Fee Income *

	Gross Fee Income	Return-to-Aid	Net Fee Income
1998-99 Budgeted Fee Income	$ 41,963,200	$ 13,987,600	$ 27,975,600
Increased Fee Income in 1999-2000: New students paying previously approved fees	$ 2,491,000	$ 830,333	$ 1,660,667
Total Fee Income	***$ 44,454,200***	***$ 14,817,933***	***$ 29,636,267***

* Excludes the $376 Special Fee for Law and Medical School Students

DISPLAY 5

Full page table

In every case, the fees for resident students enrolled in these selected professional schools are lower than the tuition and fees charged by comparable public institutions. Display 5 shows 1998-99 professional school fees at the University of California in relation to the University's four public salary comparison institutions. Because most of the University's four public salary comparison institutions do not offer degree programs in Veterinary Medicine and Optometry, additional public institutions are used for fee comparison purposes. For information only, the table also shows the 1998-99 tuition and fees at the University's four private salary comparison institutions. Because the private comparison institutions do not offer all of the professional degree programs that UC offers, the comparisons focus on medicine, law, and business administration.

Because of a concern about the ability of students with high debt to pursue public interest occupations, some professional schools are developing programs to assist students in meeting their loan repayment obligations after graduation. The University will continue to monitor the debt levels of students.

Nonresident Tuition

University of California students who do not qualify as California residents under Section 110.2, Matters Relating to Residency, of the Standing Orders of The Regents, are required to pay nonresident tuition. The annual charge is the same for each nonresident student regardless of level. In addition to paying nonresident tuition, out-of-state students must also pay the Educational Fee, the Registration Fee, miscellaneous campus fees and, if applicable, the Fee for Students in Selected Professional Schools.

In May 1992, The Regents adopted stricter requirements for establishing residency for tuition purposes. This action allowed the University to be consistent with the federal definition of "financial independence" and to give full weight to this factor in assessing whether undergraduate and graduate students should be classified as residents for tuition purposes. Effective fall 1993, students seeking classification as residents are considered financially independent if they satisfy one of the following criteria: is at least 24 years old; is a veteran of the U.S. Armed Services; is married; is a ward of the court; both parents are deceased; has legal dependents other than a spouse; is a graduate student and not claimed on another's income tax as a dependent for the immediately preceding tax year; or is a single undergraduate student who is financially self-sufficient and who was not claimed on another's income tax return as a dependent for the preceding two years.

State Policy on Adjustment of Nonresident Tuition

In 1988-89, the Legislature adopted Senate Concurrent Resolution 69 (Morgan) expressing its intent to adopt a long-term nonresident student fee policy. The resolution called on the California Postsecondary Education Commission (CPEC) to convene meetings of representatives from the University of California, the California State University, Hastings College of the Law, the California Community Colleges, the

Department of Finance, the Legislative Analyst's Office, and students to develop recommendations for a long-term nonresident student fee policy. The Advisory Committee convened by CPEC issued a report in June 1989, which concluded with the following recommendation:

> *As California's public postsecondary education segments annually adjust the level of nonresident tuition they charge out-of-state students, the nonresident tuition methodologies they develop and use should take into consideration, at a minimum, the following two factors: (1) the total nonresident charges imposed by each of their public comparison institutions and (2) the full average cost of instruction in their segment.*
>
> *Under no circumstances should a segment's level of nonresident tuition plus required fees fall below the marginal cost of instruction for that segment.*
>
> *In addition, each segment should endeavor to maintain that increases in the level of nonresident tuition are gradual, moderate, and predictable, by providing nonresident students with a minimum of a ten-month notice of tuition increases. Each governing board is directed to develop its own methodology for adjusting the level of nonresident tuition, but those methodologies should be consistent with this recommendation.*

The Advisory Committee's recommendations for adjusting the level of nonresident tuition subsequently were signed into law (Chapter 792, 1990). In addition, the legislation includes the proviso that "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 bill's provisions.

Nonresident Tuition Levels in the 1980s and 1990s

The nonresident tuition level is an important element in the University's ability to recruit outstanding graduate students. As shown in Display 6, between 1987-88 and 1991-92, nonresident tuition increased by nearly 80 percent reflecting the State's fiscal problems. However, these increases created a significant differential between the University's total tuition and fees and those charged at other public institutions and, in recognition of that differential, in the four years between 1992-93 and 1995-96 there were no increases in nonresident tuition. Even though the nonresident tuition fee did not increase during these five years, the number of students paying nonresident tuition declined in the early 1990s. Beginning with 1995-96, revenue from nonresident tuition has increased as the number of nonresident students paying the tuition fee has rebounded. Consistent with the Statewide policy on adjustment of nonresident tuition, The Regents approved a $695 increase in nonresident tuition for 1996-97, a $590 increase in 1997-98, and a

$400 increase in 1998-99. The total fees and tuition charged to nonresident graduate students in 1998-99 is about $370 below those charged at other public institutions.

DISPLAY 6

NONRESIDENT TUITION
1978-1999

Year	Tuition Level	Percent Change Over Previous Year
1978-79	$ 1,905	--
1979-80	2,400	26.0 %
1980-81	2,400	0.0
1981-82	2,880	20.0
1982-83	3,150	9.4
1983-84	3,360	6.7
1984-85	3,564	6.1
1985-86	3,816	7.1
1986-87	4,086	7.1
1987-88	4,290	5.0
1988-89	4,956	15.5
1989-90	5,799	17.0
1990-91	6,416	10.6
1991-92	7,699	20.0
1992-93	7,699	0.0
1993-94	7,699	0.0
1994-95	7,699	0.0
1995-96	7,699	0.0
1996-97	8,394	9.0
1997-98	8,984	7.0
1998-99	9,384	4.5
1999-2000	9,804	4.5

1999-00 Nonresident Tuition Increase

Consistent with the Statewide policy on nonresident tuition, the University's 1999-00 budget plan includes an increase of $420 (4.5%) in nonresident tuition. This is expected to generate about $5 million in new revenue.

With the proposed increase, the University's 1999-00 charges for nonresident graduate students will be $14,442, which is about $450 less than the projected average charged at other public institutions. Display 2 shows the 1999-00 projected average nonresident tuition and fees for graduate students at the four public salary comparison institutions. Consistent with State policy, future increases in UC nonresident tuition are anticipated to keep the University's charges at the level of the average charged at comparison institutions.

Miscellaneous Campus Fees

Other campus mandatory fees, also called miscellaneous fees, cover a variety of student-related expenses that are not supported by the Educational Fee or University Registration Fee. These miscellaneous fees help fund such programs as student government, sports and recreational facilities, and student health insurance. The level of miscellaneous fees varies from campus to campus and, in some cases, between graduate and undergraduate students. Generally, students must vote to establish or increase campus mandatory fees.

STUDENT SERVICES

1998-99 Budget	
Total Funds	$241,039,000
General Funds	--
Restricted Funds	241,039,000
1999-00 Increase	
General Funds	--
Restricted Funds	3,705,000

Student services programs and activities contribute to students' intellectual, cultural, and social development outside of the formal instructional process. Student services programs and activities include counseling and career guidance, tutoring, student health services, social and cultural activities, admission and registrar operations, financial aid and loan collection administration, and services to students with disabilities. Student services are primarily supported from student fee income. Each of these categories is briefly described below.

Counseling and Career Guidance

Students may visit a counselor concerning such issues as scholastic performance, choice of a major, personal concerns, assessing interests and aptitudes or exploring long-range career opportunities. Group counseling is provided on many campuses. In addition, campuses provide career planning and placement services which provide students and alumni with assistance in defining their career objectives, teach job search skills, and provide on-campus interviewing opportunities for summer or career employment.

Learning Skills Assistance

Campuses provide academic support services that offer tutoring and learning skills assistance to students at learning centers. Learning skills staff provide individual and group tutorial services in writing, mathematics, study skills, and preparation for graduate and professional school exams.

Social and Cultural Activities

Campuses offer a wide range of cultural and social activities to enhance 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

Student Health Services provide students with primary care and other services to keep students healthy. Services include general outpatient medical care, specialty medical care, and health education. On-campus services are supported primarily through student fees and fees-for-service. Graduate students on all campuses and undergraduate students on the Berkeley and Santa Cruz campuses have approved campus ballot initiatives requiring all students to have health insurance as a condition of attending the University.

Admissions and Registrar Operations

Campus admissions and registrar operations include the processing of applications for admission, enrollment and registration of students, scheduling of courses, maintaining and updating student academic records, preparing diplomas, and reporting statistics.

Financial Aid Administration

Campus financial aid officers 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, University, and private fund sources. Financial aid officers are required to comply with numerous federal and State regulations in administering these funds.

Services to Students With Disabilities

Currently, the University serves 4,600 students with disabilities. Services to these students are required by State and federal law and include mobility assistance, readers, interpreters, notetakers, tutors, provision of adaptive educational equipment, and disability-related counseling among other services. These services represent unavoidable costs that must be covered. Currently, this program is funded from student fees and other income available to the campuses. In November 1995, the California State Auditor reviewed the University's policies, guidelines, and practices for compliance with the Americans with Disabilities Act (ADA), which was enacted in 1990 to provide people with disabilities civil rights protection and access to benefits, services and programs. The State Auditor focused specifically on the adequacy of computer access for UC students with disabilities and concluded that the University provided students with disabilities adequate access to computers on all UC campuses.

STUDENT FINANCIAL AID

1998-99 Budget	
Total Funds	$228,134,000
General Funds	69,760,000
Restricted Funds	158,374,000
1999-00 Increase	
General Funds	--
Restricted Funds	$5,666,000

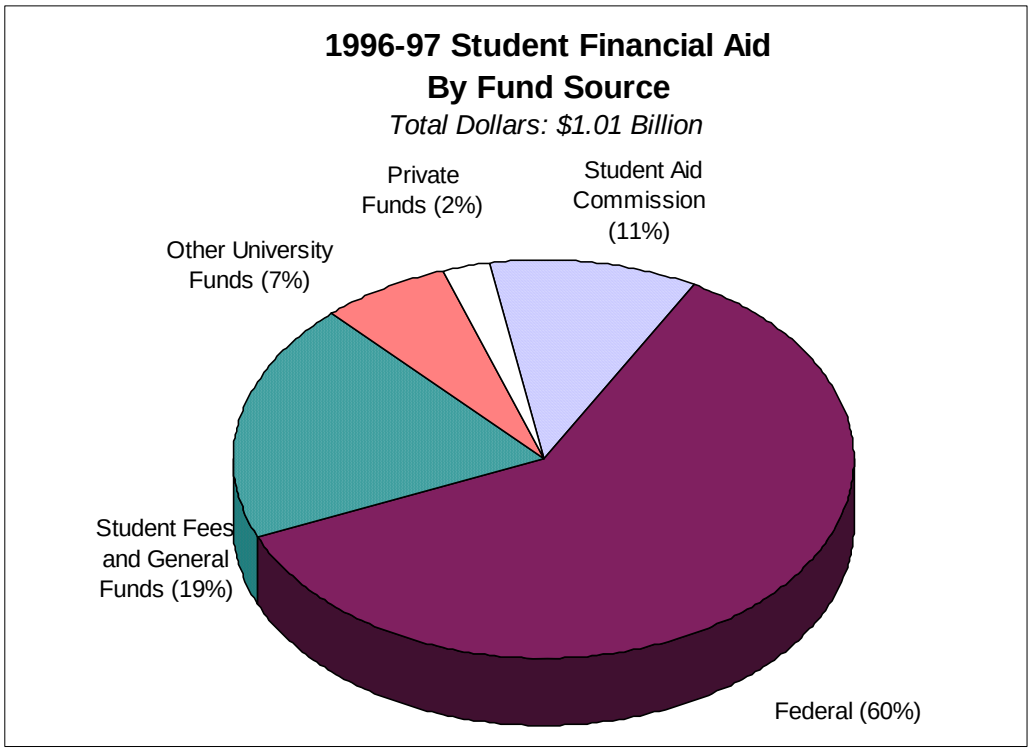
Financial aid plays an important role in making the University accessible to students by helping to ensure that cost is not a barrier to enrollment. The Regents reaffirmed their commitment to maintaining access under the California Master Plan for Higher Education when the University's financial aid policy was adopted in 1994.

The $228,134,000 for 1998-99 shown in the chapter heading above includes State general funds, funds from University student fees, and endowment funds; excluded from this amount are federal funds, private bank loans, Cal Grants and other aid provided directly to students.

UC students receive scholarships, fellowships, grants, loans, and work-study jobs to assist them in meeting the educational costs of attending the University such as fees, living expenses, books and supplies, and transportation. Financial assistance comes from four sources: the federal government; University funds, including student fees and State general funds, and endowments and other discretionary funds; the State through the Cal Grant programs; and private agencies.

University students received more than $1 billion in student aid in 1996-97. Display 1 shows the proportion each fund source contributed to the total amount of financial support provided to UC students in 1996-97.

DISPLAY 1



In 1996-97, about 66 percent of UC undergraduate students and 76 percent of UC's graduate students received financial aid. Over half of the financial aid UC students received was in the form of gift aid. Display 2 shows total financial aid expenditures for 1996-97 by the type of financial award and the source of funds for each.

Historically, the University has been committed to setting aside a portion of revenue from fee increases for financial aid for needy students. As fees increased over time and as the percentage of students with financial need increased, the percentage of revenue from fee increases dedicated to financial aid also increased, from 16 percent ten years ago to 33 percent at present. Current University policy requires that one-third of all new student fee revenue be set aside for financial aid. This is consistent with the agreements in the current four-year compact.

DISPLAY 2

1996-97 Student Financial Aid
by Type of Award and Fund Source
(in Millions)

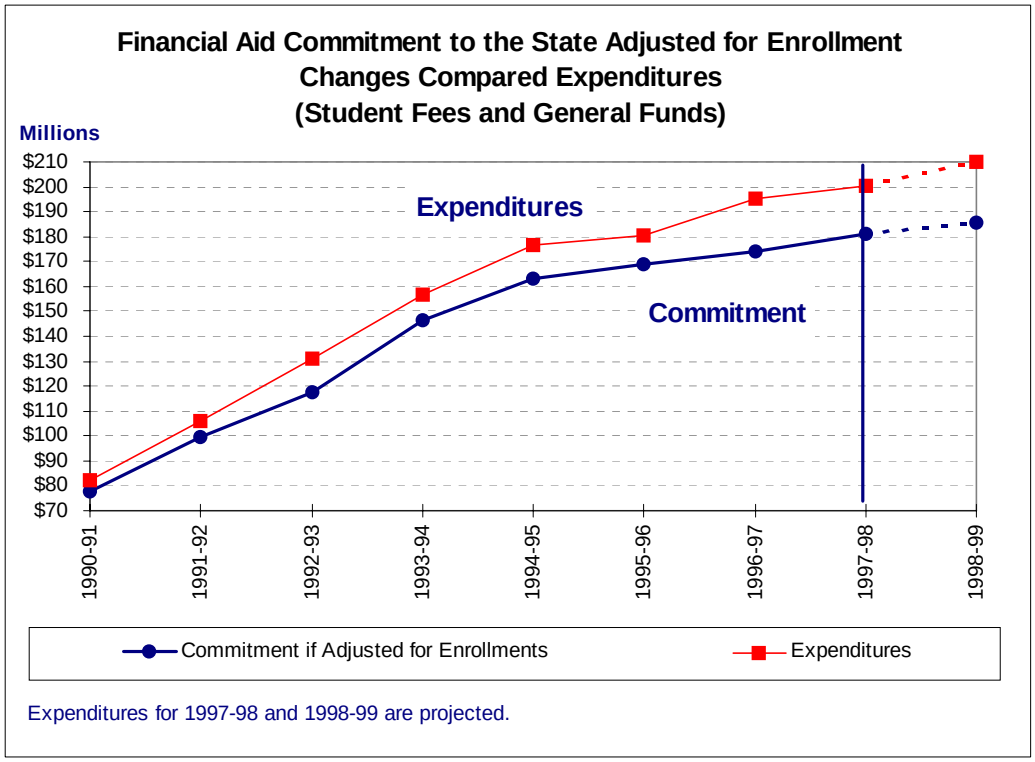
Program	Student Aid Commission	Federal	University Funds: State General Funds and Student Fees	University Funds: Other University Funds	Private Funds	Total
Scholarships, Grants, Fellowships						
Pell Grants		$ 76.5				$ 76.5
Cal Grant A	$ 78.6					78.6
Cal Grant B	29.9					29.9
Other	1.1	46.7	$ 192.1	$ 65.8	$ 22.6	328.3
Subtotal	$ 109.6	$ 123.2	$ 192.1	$ 65.8	$ 22.6	$ 513.3
Loans (All Students)						
Perkins Loans		$ 25.3				$ 25.3
FFELP/FDSLP		388.6				388.6
Other	$ -	58.3	$ 2.8	$ 1.0	$ 2.6	64.7
Subtotal	$ -	$ 472.1	$ 2.8	$ 1.0	$ 2.6	$ 478.5
Work-Study (All students)						
Federal		$ 16.7				$ 16.7
State	$ 0.3	-				0.3
University	-	-	$ 0.5	$ 0.2	-	0.7
Subtotal	$ 0.3	$ 16.7	$ 0.5	$ 0.2	$ -	$ 17.6
TOTAL	**$ 109.9**	**$ 612.0**	**$ 195.5**	**$ 66.9**	**$ 25.2**	**$ 1,009.5**

Totals do not add due to rounding.

Display 3 shows the minimum amount of financial aid required by the University's commitment to the State and the actual expenditures from State general funds and student fees for financial aid since 1990-91. The display shows that the University not only met its commitment to the State to provide sufficient financial aid for needy students, but exceeded that commitment. When enrollments declined in the early 1990s, the University did not reduce the level of funding for financial aid, even though the decrease in the number of students enrolled would have justified a corresponding decrease in financial aid.

In 1998-99, the State "bought out" a five percent fee reduction on mandatory Universitywide fees for resident undergraduate students. As part of the fee "buy-out," the State provided sufficient funds to maintain financial aid at previous levels, even though the decrease in fees would have justified a corresponding decrease in financial aid.

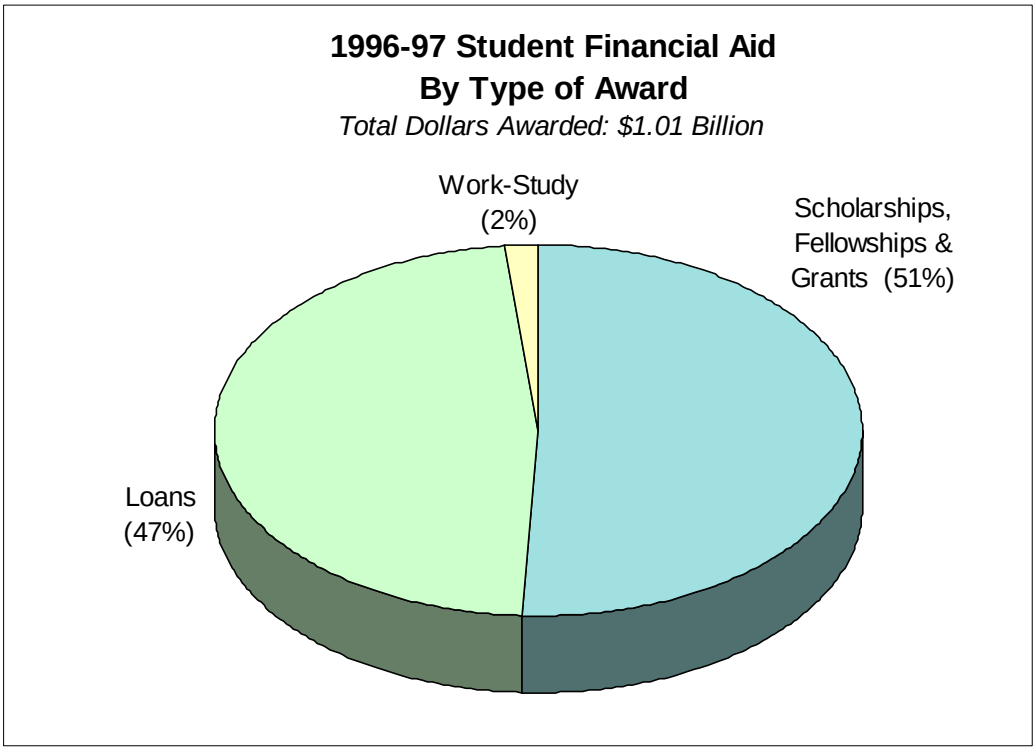
DISPLAY 3



In addition to setting aside at least one-third of new fee revenue for financial aid purposes, the University supplemented financial aid from fee income with other University funds. Looking at all University fund sources, funding for financial aid increased by nearly 125 percent between 1989-90 and 1996-97 (the most recent year for which final data are available).

The amount of financial aid provided in 1996-97 represents an increase of about $70 million, or 7.4 percent, over the amount received in 1995-96. Student loans comprised over half (58%) of the $70 million increase, principally at the undergraduate level. Growth in the University's gift aid programs accounted for another 22 percent of the increase. Display 4 shows the overall proportion of financial aid provided to UC students by the type of award.

DISPLAY 4



There were no increases in mandatory Universitywide fees or the Fee for Selected Professional School Students in 1998-99. Nevertheless, additional fee revenue will be generated because general campus enrollments increased, and there are more students subject to the Fee for Selected Professional School Students, resulting in an increase in budgeted University-funded financial aid of about $9.6 million in 1998-99.

Undergraduate Student Aid

The proportion of undergraduate students receiving some type of financial aid has grown steadily over the past few years, increasing from 63 percent in 1995-96 to 66 percent in 1996-97. Financial aid awards for undergraduate recipients averaged about $8,196 in 1996-97. Fifty percent of undergraduate aid was awarded in the form of "gift" aid (scholarships and grants) rather than "self-help" aid (loans and work-study). About 79 percent of all undergraduate aid was awarded on the basis of financial need in 1996-97, reflecting that undergraduate financial support is principally intended to provide access to a University education to those students who otherwise would be unable to afford to attend. Non-need-based support comprised the remaining 21 percent of undergraduate aid. The majority (76%) of non-need-based support is awarded in the form of loans, with scholarships comprising the remainder.

Graduate Student Aid

Graduate Academic Student Aid. Compared to undergraduate students, a greater proportion of graduate students receive financial support (76%), and their average annual financial aid award ($12,265), which excludes assistantships, is significantly higher. Because graduate students generally do not rely on parental support to meet educational costs and are more likely to have dependent family members, graduate students tend to have a greater need for financial support. Also, graduate students generally incur higher educational expenses and have higher student debt. The largest proportion of aid awarded to graduate academic students is in the form of fellowships and grants (51% in 1996-97) rather than loans and work-study. In addition, many graduate students receive financial support through appointments as teaching and research assistants. In 1996-97, approximately 18,000 graduate students received nearly $234 million from such appointments.

Professional School Student Aid. In 1994, The Regents approved a Fee Policy for Selected Professional School Students which was implemented beginning with the fall 1994 academic term. While some campuses have set aside more, the policy provides that an amount of funding equivalent to at least one-third of the total revenue from the Fee be used for financial aid to help maintain the affordability of professional school programs. The majority of the funds is used for grant and fellowship awards with some funds set aside for loan repayment assistance programs.

The remainder of this chapter: (1) outlines the goals of the University's financial aid policy and how student need for University aid is determined using the Education Financing Model; and (2) describes financial aid expenditures for 1996-97 by source of funds.

Financial Aid Policy

As discussed in the Student Fees section of this budget, UC fees increased significantly during the 1990s, largely due to major shortfalls in State funding for the University's budget. In January 1994, The Regents adopted a new University policy for setting fees which specified that at least one-third of new fee revenue will be used for financial aid purposes. Accompanying this policy was a new financial aid policy that calls for maintaining the affordability of the University and focuses on providing enough University financial aid to maintain accessibility for all students. Subsequently, in 1995, the Governor proposed a compact with higher education that provided stable funding for the University and also provided that at least one-third of new fee revenue be used for financial aid.

Education Financing Model

In response to the new Regental policy, the University developed the Education Financing Model (Model) which is used to determine undergraduate student aid funding needs, allocate undergraduate aid funds to the campuses, and guide the award of aid funds to undergraduate students. The Model is based on the following set of principles:

- The total cost of attendance (fees, living and personal expenses, books and supplies, and transportation) is considered in assessing financial need;
- Meeting the costs of attending the University is a partnership among students, parents, federal and state governments, and the University;
- All students should be expected to make some contribution toward their cost of attendance through work and/or borrowing;
- Students should have flexibility in deciding how to meet their expected contribution; and
- Campuses should have flexibility in implementing the Model to serve their particular student bodies and are encouraged to supplement centrally distributed financial aid funds with their own resources.

The formula for determining the amount of grant aid needed is shown in Display 5.

DISPLAY 5

Education Financing Model

	Student Expense Budget
Less	Reasonable Contribution from Parents
Less	Manageable Student Contribution from Working
Less	Manageable Student Contribution from Borrowing
Less	Federal and State Grant Aid
Equals	**University Grant Aid Needed**

Student Expense Budget. The total undergraduate educational expenses associated with attending the University are considered in assessing need. These expenses include direct educational expenses – fees, books and supplies – for a California

resident, plus a modest allowance for living, transportation, and miscellaneous expenses. A uniform method is used by the campuses to determine standard undergraduate student expense budgets. The method recognizes regional variations in costs and in student spending patterns.

Contribution from Parents. Parents are expected to help pay for the costs of attending the University if their children are considered financially dependent using the Federal definition of independence. The amount of the parental contribution is determined by a federally mandated formula for determining need, 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. If parents do not contribute the amount expected under the Federal need analysis standards, the student is expected to make up the difference through extra borrowing and/or work, or by reducing his or her expenses.

***Contribution from Work and Borrowing*.** Students are expected to make a contribution to their educational expenses from earnings and borrowing. The expected contribution should be manageable so that students are able to make steady progress toward completion of the baccalaureate degree and to meet loan repayment obligations after graduation. The Model provides ranges for loan and work expectations which are adjusted annually for inflation and periodically for market changes in student wages and expected post-graduation earnings.

Contribution from Federal and State Grant Aid. The University's goal is to provide grant support to needy students to cover the gap between the student's expense budget and the expected contributions from parents, student borrowing, and student work. Available Federal and State need-based grants are applied toward a student's grant eligibility.

Campus-based scholarships and grants from gifts, endowments, campus discretionary funds, the Regents' Scholarship Program, and scholarships and grants from outside agencies are excluded from the framework of the Education Financing Model. These funds generally are used to reduce the loan and work expectations of students.

The University began phasing in the Education Financing Model in 1997-98 and expects to fully implement the Model within three years.

Federal Aid

In 1996-97, UC students received $612 million in federal financial aid, which represented approximately 60 percent of all support awarded during that year. Overall, UC students received nearly nine percent more federally funded aid in 1996-97 than

they received in the previous year. This was principally due to increases (totaling approximately $40 million) in borrowing under federal loan programs. Borrowing through federal programs for University undergraduate and graduate students totaled $472 million in 1996-97. The significance of the federal student loan programs for University students is demonstrated by the fact that these programs comprised more than three-quarters (77%) of all federally funded aid and nearly one-half (47%) percent of total financial support received by University students in 1996-97. The unsubsidized loan program continues to be the fastest growing source of federal support for students, growing by 26 percent in 1996-97.

Taxpayer Relief Act of 1997

The Taxpayer Relief Act (TRA) of 1997 implemented a number of new provisions that will affect UC students and their families in future years. Key provisions of the Act are summarized below. The TRA included reporting requirements for institutions of higher education that impose significant new administrative tasks on the University. To comply with the reporting requirements, the University is contracting with an outside vendor to collect, maintain, and report the required data to the IRS and students and their families. The University also is working with members of Congress to modify the reporting requirements to be less burdensome.

Hope and Lifetime Learning Tax Credits. The Taxpayer Relief Act of 1997 established two new tax credit programs effective with the 1998 tax year, which provides 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 postsecondary education. The "Lifetime Learning" Tax Credit provides smaller tax credits, but taxpayers are not limited to payments made during the first two years of postsecondary education. In general, middle- and lower-middle-income students and their families will benefit from the two tax credit programs.

Penalty-free IRA Withdrawals. Penalty-free IRA withdrawals for undergraduate, graduate, and postsecondary vocational education expenses will now be permitted. Currently, withdrawals from IRAs prior to retirement are subject to early withdrawal penalties. This provision will permit students and their families to withdraw funds for educational purposes without penalty. This provision is intended to assist middle-income students and their families.

Education IRA. Taxpayers will be allowed to contribute $500 per year into a new Education IRA. Although contributions are not tax deductible, earnings on the IRA will be tax-free and no taxes will be due upon withdrawal if used for qualified higher education expenses. The Education IRA is phased out for families with incomes between $150,000 and $160,000. This provision is intended to assist middle-income students and their families.

Deduction of Student Loan Interest. A tax deduction for interest paid on student loans was reinstated. However, the deduction is limited to the first 60 months of repayment. Because eligibility for the deduction is phased out for taxpayers with higher incomes, middle-income and lower-middle-income borrowers with high debt levels will be the primary beneficiaries of the reinstatement of the tax deduction of student loan interest.

1999 Amendments to the Higher Education Reauthorization Act

As of this writing, Federal support for student aid programs remains uncertain for 1999 both in terms of the reauthorization of the Higher Education Act (HEA) and the annual appropriations to fund the programs association with the HEA. In general, however, anticipated changes in programs and funding levels are expected to only have a marginal overall impact on UC students. A summary of the proposed changes under consideration include:

***Increase in Pell Grant Awards*.** For 1999-00, the maximum levels in Pell Grant awards are proposed to increase by $150 to $3,150. If this occurs, the increase would result in $6.3 million of additional grant aid for the University's 42,219 undergraduate Pell Grant recipients.

Increase in the Federal Work-Study Program. An increase in federal work-study funding is also being considered, making it possible for federal dollars to pay a larger portion of a student's salary in certain jobs, particularly for work-study assignments involving teaching reading skills to elementary school students.

***Elimination of the State Student Incentive Grant (SSIG) Program*.** The State Student Incentive Grant program represents about four percent of the state's Cal Grant funding. A dollar-for-dollar matching program of grant assistance, the program was implemented in 1972 to encourage states to establish need-based student grant programs. All states have now established such programs, and SSIG funds may be converted to funding for outreach programs. In the past, the State has replaced amounts of SSIG in the Cal Grant programs that have been eliminated at the federal level.

***Perkins Loan Program Reduction*.** A reduction in the federal capital contribution to the revolving fund that finances the Perkins Loan Program is also possible. Over time, the funds available from this low-interest program would become scarce and needy UC students would be forced to borrow from higher cost sources of credit.

State Aid

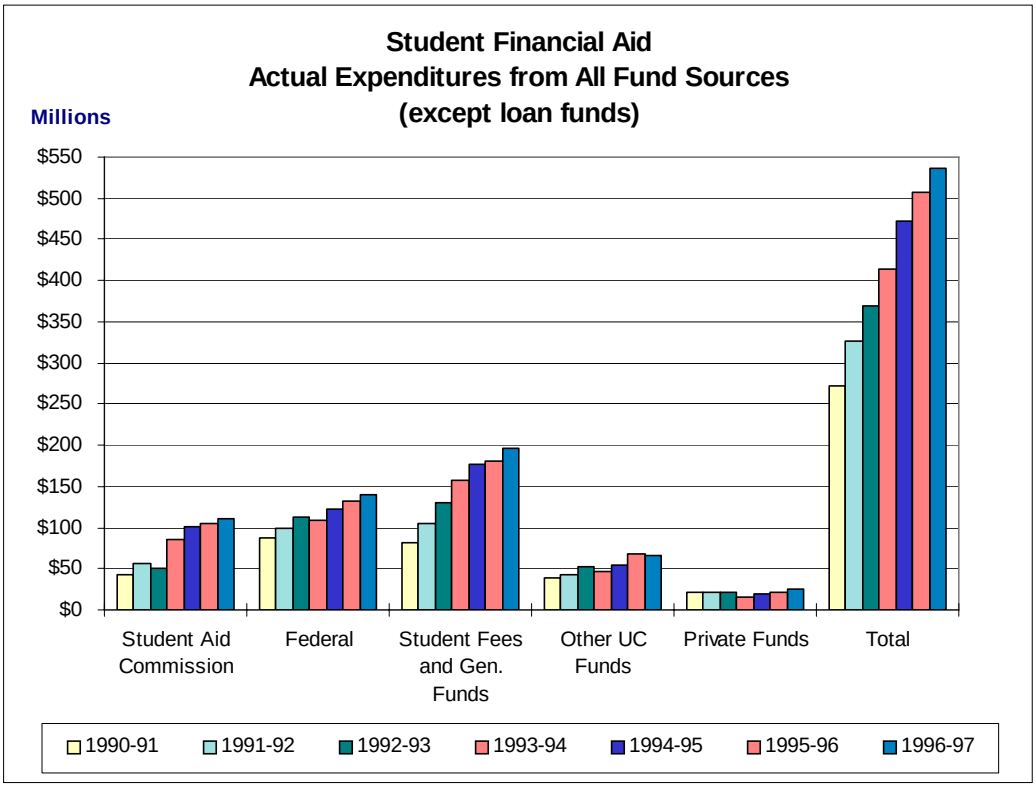
California university and college students receive financial support from a number of State programs. These programs are administered on behalf of the State by the California Student Aid Commission, including the Cal Grant A, B, and C programs; the

State Graduate Fellowship Program; and the State Work-Study Program. These programs are designed to promote access to postsecondary education and to foster student choice among California institutions of higher education as well as to encourage high academic achievement. In 1996-97, University of California students were awarded nearly $110 million in financial aid from these programs. The Cal Grant Programs, which together account for virtually all of that amount, are "portable" financial aid programs in which awards are made directly to students who carry the awards to the institutions they attend. The University continues to support full coverage of student fees for Cal Grant recipients at UC and CSU to promote both student access and student choice.

Cal Grant funding for UC students grew 29 percent from $85 million in 1993-94 to about $110 million in 1996-97. Because there have been no increases in mandatory Universitywide fees since 1994-95, increases in Cal Grant funding for UC students since that time have been modest. The 1998 State Budget provides an increase of $57 million (19%) for the Cal Grant program, including $15.1 million to add more than 5,000 Cal Grant A and B awards for financially needy students and $4.9 million to increase the maximum award for students attending independent institutions. UC students will receive about $3.3 million of this increase. An additional $10 million is provided to establish a new Cal Grant “T” program for students enrolled in teacher preparation programs. Display 6 shows the changes in financial aid expenditures from various fund sources, including expenditures from the Student Aid Commission for the University’s Cal Grant recipients since 1990-91.

For 1998-99, as part of the State’s efforts to improve K-12 education, the Governor and the Legislature approved Assembly Bill 2528 (Ducheny) which establishes a Teaching Intern Program within the California Work-Study Program, and appropriated $1 million for the program which will add about 1,000 new work-study positions to provide tutorial instruction to elementary and secondary students through pupil outreach activities. In addition, the Governor and the Legislature approved Senate Bill 1666 (Solis) which extends indefinitely the California Student Opportunity and Access Program (Cal-SOAP) which is administered by the Student Aid Commission. Cal-SOAP is an important program in maintaining diversity at our state's colleges and universities by providing disadvantaged students with the skills necessary to gain admittance to and succeed at institutions of higher education.

DISPLAY 6



University Funds

Student Fees and State General Funds

University student aid programs funded from student fee revenue and State general funds increased again in 1996-97. However, because there were no increases in mandatory Universitywide fees in 1996-97, the increase primarily reflected the additional aid related to professional school fees and increases in overall enrollment. The total amount of aid from student fees and State general funds ($195.5 million) increased by about $14.8 million (or about 8.2%). Thirty-six percent of enrolled undergraduate and 56 percent of enrolled graduate students received some form of financial assistance from the University aid programs. Educational Fee income is used to support both need-based and merit-based programs, while the State general fund income is statutorily restricted to the support of need-based financial aid. Display 6 shows the increases in financial aid expenditures from student fee revenue and State general funds since 1990-91.

Other University Aid

In addition to the Universitywide programs described above, University financial aid is also provided through various campus-based programs funded by endowment income, current gifts, repayments from University loans, and campus discretionary funds. In 1996-97, about $67 million in University aid from these sources was awarded to students of which nearly $66 million of aid was awarded in the form of fellowships, scholarships, and grants.

Private Agency Aid

Finally, private agencies and companies also provide student financial support through scholarships and other forms of aid. Small scholarships from a student's local PTA or Rotary Club are reported here alongside traineeships and fellowships from private companies (for example, Hewlett-Packard and IBM) and associations and foundations (for example, the National Merit Scholarship Foundation and the American Cancer Society). Nearly all funds in this category are awarded to students in the form of grant support. In 1996-97, more than $25 million was awarded to UC students from private agency programs, which represented 2.5 percent of the financial support students received during that year. Display 6 shows the increases in other University and private grant aid provided to UC students since 1990-91.

INSTITUTIONAL SUPPORT

1998-99 Budget	
Total Funds	$370,759,000
General Funds	240,523,000
Restricted Funds	130,236,000
1999-00 Increase	
General Funds	--
Restricted Funds	--

Institutional Support includes numerous campus and systemwide activities under five sub-programs. The sub-programs and examples of typical activities included in each are listed below.

- **Executive Management:** Offices of the President, Vice Presidents, Chancellors, and Vice Chancellors; planning and budget offices.
- **Fiscal Operations:** accounting, audits, 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.

The University is concerned about the steady erosion of its Institutional Support budget. Funding for administration has failed to keep pace with enrollment growth, general inflation, and the costs of new State and federal mandates.

Historically, State budgeting formulas did not provide additional administrative support to accompany enrollment growth, even though more students mean, for example, more recordkeeping related to students and employees, more purchasing, increased police and security requirements, and more faculty whose payroll records must be maintained and whose laboratories must meet environmental health and safety regulations. As a result, campus administrative capacities are only minimally adequate.

This historical lack of funding was compounded by the fact that State funds to cover general price increases fell far short of inflation during the mid to late eighties. During

that time, new expenditures in Institutional Support were mandated as a result of a growing body of State and federal laws and regulations covering areas such as environmental health and safety, collective bargaining, accommodation of disabled employees, fair employment practices, and increased accountability requirements. Failure to comply with these mandates can often result in fines and penalties or more severe sanctions.

Erosion of Institutional Support budgets during the 1980s was further compounded by the University's severe fiscal problems during the early 1990s. Due to the State of California's fiscal problems, the University experienced severe budgetary shortfalls during the early 1990s. As a result, University budgets were cut by $433 million, or about 20 percent of the 1989-90 State-funded budget. Further base budget reductions totaling $40 million occurred between 1995-96 and 1998-99 due to required productivity improvements under a four-year compact between the State and higher education. The budget cuts sustained in the early 1990s were deep and affected every aspect of University activity. In order to protect the instructional program as much as possible, campuses made deeper cuts in other areas. Institutional Support was assigned heavy cuts on the campuses. On the systemwide level, core administrative activities in the Office of the President were reduced substantially, including a 20 percent cut over the two-year period 1993-94 and 1994-95. The Office of the President took additional cuts related to the $40 million in productivity improvements achieved by 1998-99.

Looking at all fund sources, Institutional Support expenditures declined from 12 percent of total expenditures in 1971-72 to 11.5 percent in 1983-84. From 1983-84 to 1991-92, the percent fluctuated between 11 and 12 percent. By 1997-98, Institutional Support expenditures as a percentage of total expenditures had declined to slightly above 10 percent.

Notwithstanding the substantial budget reductions in Institutional Support, investments in technology have enabled the University to make significant progress in increasing the efficiency of University operations while maintaining or improving services. Examples of cost saving procedures and activities include: restructuring and consolidating administrative support functions, allowing administrative units and academic departments to reduce costs by sharing resources; implementing energy conservation measures; expanding use of the World Wide Web; developing an electronic system for undergraduate student applications, admissions, advising, and financial aid; negotiating contracts for the management and disposal of hazardous wastes, which will result in large cost reductions; automating interlibrary loan practices, generating savings and improving services; and reducing costs through the negotiation of software licenses.

As noted above, the four-year compact with higher education required productivity improvements totaling $40 million by 1998-99. A June 1998 report titled *1997-98 Budget Plan for Productivity Improvements* discussed ongoing efforts to streamline administrative processes and business practices as well as plans to achieve $10 million of productivity improvements within all functions of the University in 1997-98. This was the third annual report presented to The Regents describing planned efficiency improvements for the coming year and discussing achievements of the previous year. Productivity improvements apply to both academic and nonacademic activities.

The University will continue working to achieve efficiencies wherever practical. At the same time, The Regents' fiduciary responsibilities must be met and the University must continue to maintain appropriate management capability and accountability both at the campuses and centrally. This includes proper management of programs, expenditures, and investments.

OPERATION AND MAINTENANCE OF PLANT

1998-99 Budget	
Total Funds	$373,231,000
General Funds	330,359,000
Restricted Funds	42,872,000
1999-00 Increase	
General Funds	$13,000,000
Restricted Funds	--

The University maintains 44 million gross square feet of State-supportable space in 2,500 buildings, and more than 2,350 acres of improved grounds at the nine campuses and the agricultural field stations.

In 1998-99, $373.2 million is budgeted for the operation and maintenance of the University's physical plant. This includes $20 million in one-time funding that was provided from the State's General Fund for deferred maintenance. Of the total budgeted funds, 40 percent is for purchased utilities, 25 percent for building maintenance, 15 percent for janitorial services, and the balance for grounds maintenance, utilities operations, refuse disposal, fire departments, and plant administration. No funds are permanently budgeted for deferred maintenance.

1999-00 Funding Request ($13,000,000 Increase)

Providing adequate funding to maintain the University's physical plant continues to be among the University's highest priorities. A chronic shortfall in funding for building maintenance and the lack of permanent funds for deferred maintenance have combined to create a serious budgetary problem. If annual budget support for maintenance continues to be inadequate, as it has been for over 15 years, and if regular funding for systematic facilities renewal is not provided, then the backlog of replacement and repair projects that have been deferred will continue to grow each year.

The limited availability of State capital outlay dollars for building and infrastructure renewal has also been a significant constraint. The University's teaching and research programs are dependent upon adequate facilities and are directly affected when the infrastructure of a building fails. The University is faced with maintenance and renewal problems that cannot be adequately addressed with current resources, nor can resolution of these problems be achieved in one year.

Recognizing that these problems cannot be resolved in a single year, and that no single strategy can address these facilities needs, the University has a funding plan for 1999-00 that builds upon strategies that were begun last year:

- *Support for the operation and maintenance of new space.* A permanent increase of $3 million for new facilities that house State-supportable programs is included.

- *Increased funding for ongoing building maintenance.* An additional $4 million is included for ongoing building maintenance. This will be the third year of a multi-year strategy to fully fund ongoing maintenance.

- *Long-term financing for deferred maintenance.* The budget plan includes a proposal to use $6 million of the proposed increase in UC general funds (nonresident tuition) to pay for long-term financing of deferred maintenance. This is a continuation of the plan, first approved and initiated in 1998-99, to use debt-financing for deferred maintenance and facility renewal. Using this mechanism, the University expects to be able to fund projects totaling approximately $60 to $65 million.

- *Additional funding for deferred maintenance*. If the State's fiscal situation allows, the University will ask the State to continue the $20 million provided in 1998-99 for deferred maintenance in 1999-00.

Workload ($3,000,000 Increase)

For 1999-00, $3 million is requested to provide funds for 400,000 square feet of additional space that will be occupied by programs that are eligible for State support. Of the nine campuses and the agricultural field stations, four have large facilities that will be coming on-line in 1999-00: the Environmental Services Building at Davis, the Music Building at Irvine, the Gonda (Goldschmeid) Neurosciences Center at Los Angeles, and the Arts Facilities at Santa Cruz.

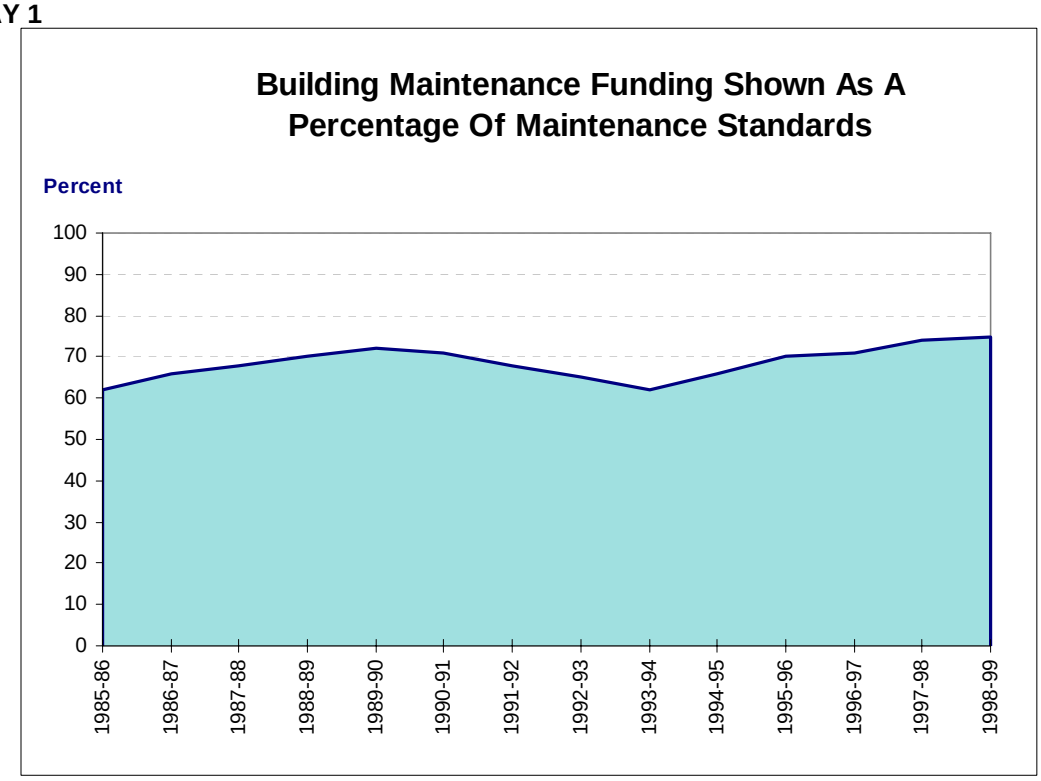
Building Maintenance ($4,000,000 increase)

The University's budget plan includes an increase of $4 million for building maintenance, which is consistent with the concept endorsed by the Legislature to fully fund ongoing maintenance over a number of years. During the 1980s, the University worked with the California State University, the Department of Finance, and the Legislative Analyst's Office to develop workload standards for the maintenance of the physical plant. These standards show that the University's building maintenance budget is currently underfunded by more than $45 million annually. Preventive maintenance and replacement of the University's aging physical plant and infrastructure are not properly funded, causing structural failures and equipment breakdowns. Emergency repairs consume an inordinate amount of available funds.

Growing recognition of the magnitude of the facilities problems led to extensive discussions with the Legislature during hearings on the 1996-97 budget. The Legislature proposed a plan to eliminate the annual shortfall in funding for ongoing building maintenance over a period of four years. The Legislature's plan proposed to augment the University's 1996-97 budget by $7.5 million, which was to be matched by University funds for a total annual increase of $15 million. In each of the following three years, the University was to use funds from within the compact for annual increases of $7.5 million for building maintenance. And finally, the Legislature's plan called for the State to provide an additional $7.5 million over and above the compact in each of these years. This plan was to have resulted in annual increases of $15 million for ongoing building maintenance.

However, the Governor vetoed the $7.5 million that was approved by the Legislature in order to provide an adequate reserve for the State. Notwithstanding this action, the University honored its commitment and included $7.5 million for building maintenance in 1997-98, and an additional $6 million in 1998-99, from funds provided within the compact.

DISPLAY 1



Deferred Maintenance and Facilities Renewal
($6,000,000 increase)

Dealing with the deferred maintenance and facilities renewal problem is one of the University's highest priorities. The University's 1999-00 budget plan includes $6 million in increased income from UC general funds (nonresident tuition) to pay for the long-term financing of at least $60 to $65 million in critical, high-priority deferred maintenance projects. The exact level of funding will depend on the market conditions at the time the bonds are sold. This strategy, first begun in 1998-99, will be continued over the next several years to provide a source of funding for deferred maintenance and facility renewal.

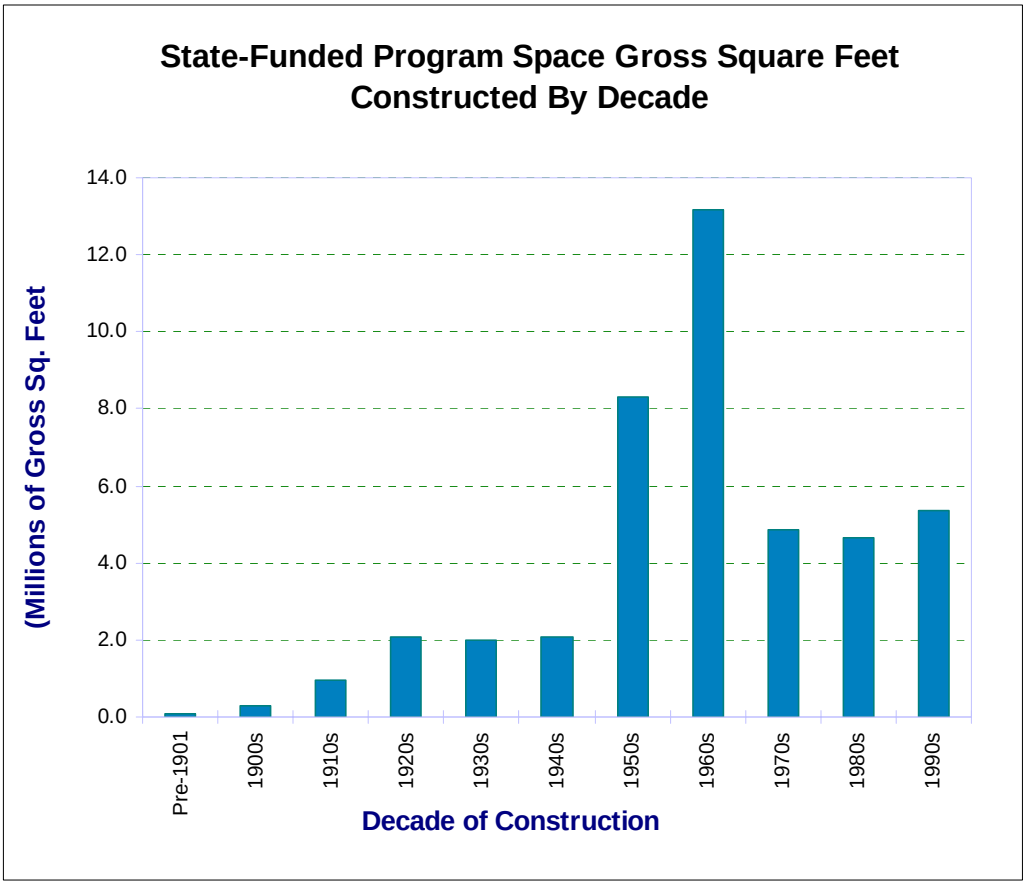
Normal use inevitably causes wear and tear on building systems to the point that their useful lives are exceeded and the systems must be replaced, regardless of how well they are maintained. Heating and ventilation systems, elevators, and roofs are a few examples of these systems. The periodic and systematic replacement of these systems is known as facilities renewal. If proper maintenance is not available for building systems on a timely basis, their useful lives are shortened. For example, even though a building is designed to last 50 to 100 years, its roof will have to be replaced every 25 years, and built-in equipment such as fume hoods and cold rooms need to be replaced over a 20- to 30-year cycle.

Over time, unfunded facilities renewal turns into an unfunded deferred maintenance backlog. Systems still need to be replaced, but it becomes more costly, and continued deferral increases the need for emergency repairs. This leads to the deterioration of the capital assets, and ultimately affects the quality of facilities provided for teaching and research. When laboratory and research space is outdated or substandard, the ability to attract and retain outstanding faculty and students is compromised.

There are a number of factors that have contributed to the deferred maintenance backlog. Funds for ongoing maintenance have been inadequate to properly maintain systems. There has been no systematic funding for facilities renewal, and no funds are permanently budgeted to reduce the deferred maintenance backlog. There are only limited funds in the capital budget to address the replacement of building systems, and there is resistance to using capital funds to address deferred maintenance. The magnitude of the problem is far beyond the University's ability to absorb within existing resources.

The age of University buildings is another major contributing factor. There was tremendous growth and expansion throughout the University during the 1950s and 1960s. Almost one-half of the space that now houses State-supportable programs was constructed during those two decades. Despite annual State capital outlay budgets of more than $200 million a year in the late 1980s, almost two-thirds of all State supportable space was built before 1970. The systems in these facilities, many of which are now 35 to 45 years old, have exceeded or will soon exceed their useful lives.

DISPLAY 2



Discussions on facilities renewal and deferred maintenance tend to focus on buildings, with less attention given to the infrastructure which constitutes the major support systems for the campuses. These are extensive, complex systems that are costly to maintain or replace. Examples of infrastructure are utility systems such as electricity and water distribution systems, roads, sidewalks, and bridges.

Identifying the Extent of the Problem

Funding for facilities renewal must be addressed in a systematic and predictable way if the University is to reduce significantly the backlog of deferred maintenance projects as well as stem the flow of new deferred maintenance projects,

The University needs a reliable, cost-effective method of determining its capital renewal needs. Rather than applying a simple depreciation model, or relying on costly facilities audits, the University has chosen to develop a mathematical budget model which can be applied equitably across all facilities. The intent is to have an analytical tool to predict renewal funding needs over time, and to estimate the current backlog of renewal projects. Using this model, the University will be able to compile consistent and comparable data for all nine campuses at a lower cost than by the more traditional method of surveying facilities.

The basic theory of the model is that a building can be "de-constructed" into the elements that need to be renewed or replaced on a periodic basis – such as electrical equipment, plumbing systems, or roofs. The model estimates the year in which renewal will be required for each element, based on the estimated life cycle of the component compared to the original construction date of the building. A profile of building components, and construction and renewal dates will be established for each of the buildings in the model. A different renewal cycle can be projected for each building component. The model can estimate annual renewal costs over whatever time period is chosen, for example: 10, 25, or 50 years into the future.

Funding History

Prior to 1994-95, the University's budget included nearly $20 million a year in permanent funding for deferred maintenance. While not sufficient to address the problem, it was a reliable and predictable amount of funding dedicated to deferred maintenance. In 1994-95, the State and the University reached agreement on a plan that redirected this permanent funding to help limit fee increases to no more than 10 percent.

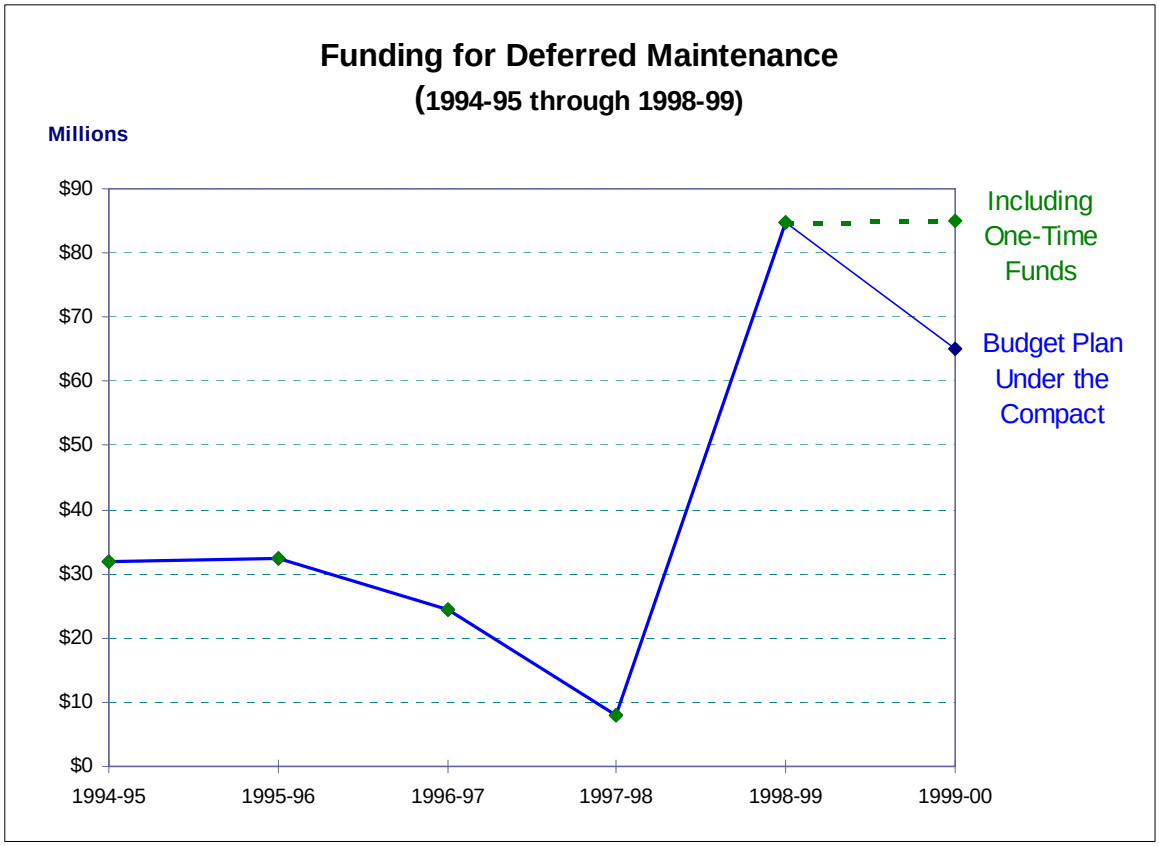
As a result of this agreement the State authorized the University to use $25 million in long-term financing in 1994-95 to pay for high priority deferred maintenance projects. A second authorization for $25 million was included in the 1995-96 budget. Consistent with the agreement with the State, repayment of the debt is included in the University's State-funded budget. The 1996 State Budget Act appropriated $5 million in general obligation bonds for deferred maintenance, and the University allocated $19 million in a combination of available one-time University funds and, consistent with the authority in the Budget Act, reappropriated excess UC general funds for deferred maintenance. In 1997-98, the University reappropriated $7.9 million in excess UC general funds for deferred maintenance.

In February 1998, the Regents approved a new approach to capital renewal that will provide significant levels of funding over the next several years. The Regents authorized the Treasurer to sell bonds that provided $64.8 million for deferred maintenance and capital renewal for 1998-99. The bonds will be repaid by using a portion ($6 million) of the 1998-99 increase in UC general funds (nonresident tuition). Only high priority projects with long-term benefits to the University are eligible to be funded through this mechanism. To assure that these funds will be spent judiciously,

the Office of the President has established a rigorous reporting and monitoring schedule. These procedures will ensure that funds are committed quickly for the University's most urgent capital needs.

In addition to the nearly $65 million in projects that will be funded through debt-financing, the State provided the University with $20 million in one-time funds for deferred maintenance in 1998-99.

DISPLAY 3



The University needs a sustained financial commitment from the State to provide permanent funding for capital renewal and deferred maintenance. Until permanent funding is provided, the University is again proposing, for the second year, that up to five percent of the increase in UC general fund income (nonresident tuition) be used for debt service for long-term financing of deferred maintenance and facilities renewal projects. The University will use $6 million to finance approximately $60 to $65 million for deferred maintenance and facility renewal projects. The exact level will depend on the market conditions at the time the bonds are sold.

Other Operation and Maintenance of Plant Functions

Janitorial Services. The 1998-99 budget provides funding at about 65 percent of the recommended standard for janitorial services. Under these circumstances, reasonable levels of cleanliness for both health and quality of life are difficult to maintain.

Utilities Maintenance and Operations. The 1998-99 budget provides funding at about

70 percent of the recommended standard.

Grounds Maintenance. The 1998-99 budget provides funding at about 60 percent of the recommended standard for grounds maintenance, which is an essential component of both safety and quality of life at the campuses.

Hazardous Materials and Toxic Site Remediation. The costs of disposing hazardous materials are of increasing concern. Materials not formerly regulated by Federal and State agencies are now defined as hazardous, and contribute to an increase in volume. Increasingly stringent requirements have added to the costs of handling, treatment, and disposal. Remediation of contaminated sites is expensive and urgent.

Purchased Utilities. The campuses have been engaged in energy-related projects to reduce consumption or to lower rates for many years. These projects have ranged from the installation of energy efficient lighting fixtures, motors and pumps, to large-scale projects involving co-generation, such as the Parnassus Central Utilities Plant replacement project at San Francisco.

In September 1996, the Governor signed AB 1890, a comprehensive bill to restructure the electricity industry over the next four years. Under the provisions of AB 1890, consumers in California will be able to purchase electricity from either their current utility or from another electricity supplier.

In 1998, the University and the California State University jointly entered into a four-year contract with Enron Energy Services, Inc. The Los Angeles and Riverside campuses are not participating because they are served by municipal utilities that are not required currently to compete in the "direct access" marketplace. Some campuses are participating only marginally because they have onsite cogeneration facilities, as in the case of San Francisco; or the campus has a contract with the federal government to receive electricity, as is the case of the Davis campus. Under the terms of the contract, Enron will provide additional services to participating campuses at no additional costs, including comprehensive energy audits and master plans designed to save energy, account and billing preparation, and metering services.

The full impact of deregulation will not be known until the restructuring of California's utilities is completed in 2002. It is too early to estimate the level of savings that will be realized from electricity deregulation. In the short run, savings that do accrue will be used to narrow the gap between what is currently budgeted for maintenance of the physical plant and the levels recommended by industry standards. The deregulation of the electrical industry would also be affected by Proposition 9 on the November ballot. The impact of Proposition 9, which would modify the actions taken by the Legislature and prohibit electric utility companies from recovering certain costs from ratepayers and would provide ratepayers with an additional 10 percent rate reduction, will depend on a court's interpretation regarding the initiative's provisions.

AUXILIARY ENTERPRISES

1999-2000 Budget	
Total Funds	**$--**
General Funds	**--**
Restricted Funds	**--**
2000-01 Increase	
General Funds	**--**
Restricted Funds	**$--**

Auxiliary enterprises are services that are primarily provided to students for specific charges. No State funds are provided for auxiliary enterprises. Auxiliary enterprises generate sufficient revenues to cover all of their direct and indirect operating costs. The annual budget is based upon income projections, and all budget increases are funded by corresponding increases in revenue.

During 1998-99, revenue from auxiliary enterprises will be approximately $481 million, and will be expended as follows: 60 percent for residence and dining services; 15 percent for parking operations; 5 percent for intercollegiate athletics; 15 percent for bookstores; and 5 percent for other expenditures.

The largest element in this budget program is student housing, comprised of approximately 29,082 residence hall spaces and 9,620 apartments with associated

dining and recreation facilities. These facilities will house about 45,000 students in 1998-99. They are available to single students and student families, and may also be used as conference and visitor housing during the summer months.

A subset of the housing element is faculty rental housing. Approximately 640 units are available at seven campuses: Berkeley, Irvine, Los Angeles, San Diego, San Francisco, Santa Barbara, and Santa Cruz. The units are self-supporting without subsidy from student rental income, and are made available to newly appointed faculty on the basis of criteria established by each campus.

A second major element is the parking program with approximately 91,860 spaces for students, faculty, staff, and visitors.

Faculty Housing Programs

The California housing market is a continuing deterrent to faculty recruitment efforts, particularly of junior faculty. Various programs to alleviate this problem have been implemented since 1978.

Home loan programs have provided mortgage loans with favorable interest rates and/or down payment requirements to more than 2,800 faculty members and other designated employees. In addition, the Salary Differential Housing Allowance Program has provided more than 1,000 faculty members with housing assistance during their first years of employment with the University, and the Mortgage Credit Certificate Program has furnished a federal tax credit for 51 faculty who were first-time home buyers.

The University continues to explore other faculty housing alternatives. Several campuses, in coordination with the Office of the President, 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. The Berkeley, Davis, Irvine, Los Angeles, Santa Barbara, and Santa Cruz campuses have completed or are in the process of completing projects which will provide over 900 units, including townhouses, condominiums, and single-family structures. No State funds are provided for faculty housing programs.

PROVISIONS FOR ALLOCATION

1998-99 Budget	
Total Funds	$80,536,000
General Funds	16,971,000
Restricted Funds	63,565,000
1999-00 Increase	
General Funds	--
Restricted Funds	$24,460,000

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 (i.e., cost-of-living, parity, and merit increases), employee benefit increases, and price increases, are held in provision accounts pending final allocation. Fixed cost increases for 1999-00 are discussed in this document under "Program Maintenance: Fixed Costs and Economic Factors."

The University's budgetary savings target is a negative appropriation that is permanently budgeted in provision accounts. The concept underlying the assignment of a budgetary savings target is that salary savings will accrue during the year as the result of normal employee turnover. Savings in the amount of the assigned target must be achieved each year in order to balance the budget. The University believes that the 2 percent target assigned in the mid-1970s was a reasonable target representing natural savings. However, the University's current budgetary savings target is 6 percent, which requires forced savings that must be achieved in ways that significantly diminish the resources available for conducting programs and maintaining quality.

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 1998-99, $90.6 million was appropriated to

the University for revenue bond lease payments.

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 provided in future years in the annual State Budget.

The 1998 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. Funds provided for these payments, while included in the University's main appropriation item for operating budget support, were in addition to the annual increase provided as part of the four-year compact. No increase in funding level is anticipated in 1999-00 because the State did not authorize additional long-term financing for deferred maintenance.

1999-00 Funding Request

The University is working with the Department of Finance and the State Treasurer to determine the appropriate amount required in 1999-00 for debt service related to major capital projects funded by lease revenue bonds. Consistent with the provisions of the compact, the University will request that funding for these capital-related costs be provided separate from the University's main appropriation for operating budget support. An exact figure for this appropriation will be determined later. The amount of funding needed for the debt service, related insurance premiums and State administrative costs will be available to be included in the 1999-00 Governor's Budget.

Cost Of Compliance With Recently Enacted Legislation (Amount to be Determined Later)

Each year the University identifies pending State legislation which, if enacted, would generate additional costs. During the legislative session, the University develops cost estimates for each bill and those estimates are submitted to the Department of Finance to be considered for funding in the subsequent year. Final estimates, however, cannot be determined until the Governor signs or vetoes legislation in late September.

The University intends to work with the Department of Finance to acquire funds in 1999-00 to cover the cost of implementing recently enacted legislation as well as additional legislative mandates that may be enacted during the current session.

PROGRAM MAINTENANCE: FIXED COSTS AND ECONOMIC FACTORS

1999-00 Increase	
General Funds	$115,400,000
Restricted Funds	--

This segment of the budget proposal includes funding for employee salary and related benefit adjustments, and for general and specific price increases required to maintain the University's purchasing power at present program levels.

1999-00 Budget Request

The University's request for a 1999-00 budget increase was calculated on a budget base of $3.269 billion, which includes programs funded from State and University general funds and student fees (Educational Fee, Registration Fee, and the Fee for Selected Professional School Students). This funding base is similar to those used for preparation of the University's past four budgets and the one used for review by the Department of Finance and the Legislature.

Funds required for program maintenance in 1999-00 are summarized in Display 1.

DISPLAY 1

Funds Required for Program Maintenance in 1999-00

Three months continuation cost of 1998-99 salary increases	$15,400,000
Merit salary increases for eligible employees	37,100,000
Funding equivalent to an average 2% cost-of-living salary increase for employees on 10/1/99	33,300,000
Market adjustment salary increases for faculty and other employees on 10/1/99	4,800,000
Employee health and dental benefits	6,000,000
3% price increases	18,800,000
TOTAL	**$115,400,000**

Continuation Cost of 1998-99 Salary Increases
($15,400,000 Increase)

The 1998-99 budget included funding equivalent to a two percent cost-of-living-adjustment (COLA) for eligible University employees effective October 1, 1998. In addition, ladder rank faculty were provided with a parity salary increase averaging 2.5 percent on the same date. Because 1998-99 funding was sufficient to pay the salary increases for only nine months, from October through June, full-year funding must be provided in 1999-00. The continuation cost for three months, including related employee benefits, is $15,400,000.

Merit Salary Increases ($37,100,000 Increase)

Funding for merit salary increases, which are increases within existing salary ranges, is again among the University's highest budget priorities. These merit salary programs are critical to the preservation of the excellence of the University.

Academic merit salary increases 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. Academic merit increases are never automatic. They are awarded on the basis of each individual's academic attainment, experience, and performance in teaching, research and creative work, professional competence and activity, and University and public service. The additional funding required to finance 1999-00 merits is equal to 1.76 percent of the academic salary base.

Staff merit salary increases are awarded on the basis of individual performance; they are never automatic. Eligible employees are considered for a merit increase once a year. Some staff positions are only eligible for performance based merit salary increases, which are funded from a pool created by combining funds for COLAs with those provided for merit increases. In 1999-00, the University will require an amount equal to 1.54 percent of the staff salary base to fund merits.

With the addition of related employee benefits, a total of $37,100,000 in State funds will be required to pay for normal merit increases in 1999-00.

Cost-of-Living Salary Increase on 10/1/99
($33,300,000 Increase)

The University is requesting funding equivalent to an average two percent COLA for eligible University employees.

Historically, requests for faculty salary increases have been based on faculty salaries paid at eight institutions used for salary comparisons, and requests for staff salary increases have been based on equivalent treatment with State employees. The

University is committed to maintaining competitive faculty salaries, and plans to provide increases that will maintain parity with the faculty salaries at the comparison institutions. For other employees, the current policy of at least keeping pace with inflation will be continued.

Funding for market salary increases for ladder rank faculty, Cooperative Extension specialists, and information technology employees is discussed later in this section.

Neither State nor University employees received a COLA in 1991-92 or in 1992-93. In 1993-94 and 1994-95, State employees received COLAs totaling 8 percent (5% in January 1994 and 3 percent in January 1995), while the University received funding for increases averaging three percent (October 1994). In 1995-96 the University received funding for a COLA averaging 1.5 percent, followed by COLAs averaging two percent in 1996-97, 1997-98, and 1998-99. No funding was provided for COLAs for State employees from 1995-96 through 1997-98, but 3 percent was made available in the 1998 State Budget Act.

Given the past COLAs for State employees and projected inflation, the University is requesting funding for an average two percent COLA salary increase for its employees effective October 1, 1999. The cost of this increase, including related employee benefits, is $33,300,000.

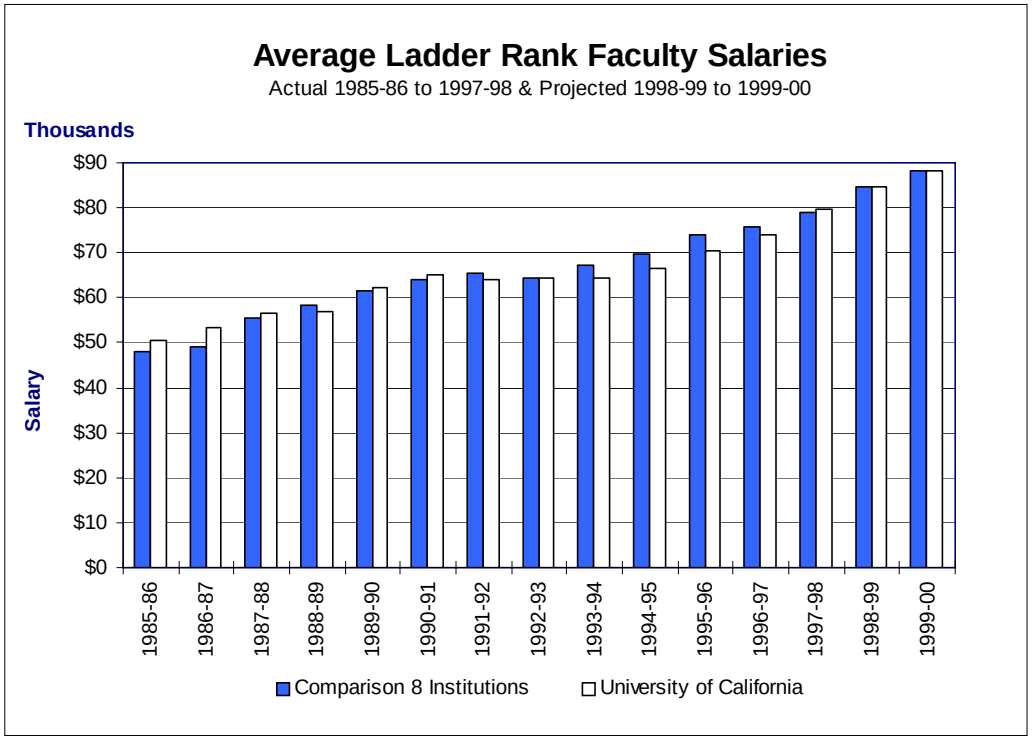
Actual salary and benefit actions for University employees may be subject to notice, meeting-and-conferring, and/or consulting requirements under the Higher Education Employer-Employee Relations Act (HEERA). Some staff positions are only eligible for performance based merit salary increases, which are funded from a pool created by combining funds for COLAs with those provided for merit increases.

Market Adjustment for Faculty and Other Employees
($4,800,000 Increase)

Market Adjustment for Faculty. With the COLA, merit, and faculty parity increases funded in 1998-99, the University expects to achieve parity with the average faculty salary level of the eight comparison institutions, after having lagged this group for several years. For 1999-00, the University estimates that in addition to merits, it will need a 2.2 percent increase in faculty salaries to maintain parity with its comparison institutions. Given the two percent COLA salary increase discussed above, an additional market adjustment for ladder rank faculty only, averaging 0.2 percent, is required to maintain parity with the average faculty salary level at the eight comparison institutions in 1999-00. This request is based on preliminary salary data from the comparison institutions. Updated projections will be available in November. The cost of a 0.2 percent market adjustment for ladder rank faculty, effective October 1, 1999, is $1,300,000.

Any lag in faculty salaries sends a negative message about the University across the nation, making it more difficult to recruit and retain those individuals who meet the University's traditional high standards. Maintenance of a competitive position in the salary marketplace is absolutely essential if the University's renowned quality is to survive. Display 2 shows average ladder rank faculty salaries for the University and the comparison from 1985-86 through 1999-00.

DISPLAY 2



Market Adjustment for Cooperative Extension Specialists. The duties of Cooperative Extension specialists parallel those of faculty to such an extent that they are generally recruited from the same pool of potential employees. Given this relationship, it is the University's intention to bring the salaries of the specialists to the level of faculty over a period of several years. For the first of these proposed increases, the University is requesting $500,000 to fund an additional salary increase averaging five percent, effective October 1, 1999.

Market Adjustment for Information Technology Professionals. The University is requesting funding for an additional salary increase averaging five percent for information technology professionals as the first step in a multi-year plan to provide competitive salaries for this group of University employees. With the use of technology common in the workplace, and advanced technology found throughout the University's teaching and research programs, the University has found it increasingly difficult to maintain a stable and qualified information technology workforce. The difficulty in

recruiting information technology professionals is linked to salary lags relative to the

market and the escalating use of technology across all industries and business settings, public and private. The cost of this market based salary increase is $3,000,000 effective October 1, 1999.

Academic and Staff Employee and Annuitant Benefits ($6,000,000 Increase)

The University is requesting funding for increases in the cost of health and dental insurance for its employees. This request is based on estimated cost increases of about 5.5 percent. Since the University utilizes a total compensation approach in which funding for salary increases and benefit costs are pooled, any increases in health and dental insurance costs greater than those assumed above would need to be funded from dollars that would otherwise be allocated for COLAs. Efficiency measures adopted by the University have been successful in reducing the cost of health benefits in recent years, and the University will continue its effort to control costs. However, employee benefit costs are expected to increase over the next several years.

For annuitant benefits, the University is requesting an amount that is equivalent to the funding provided for the State's annuitants.

Provisions for Price Increases ($18,800,000 Increase)

The University's 1999-00 budget request includes $18.8 million, a three percent increase, to offset the impact of inflation on nonsalary budgets and to maintain the University's purchasing power. Although the University purchases many commodities – library materials, technical supplies, specialized equipment – whose expected cost increases exceed current inflation estimates, the request for funding is limited to three percent to stay within budgetary guidelines.

The UCLA Anderson Forecast (September 1998) is projecting a 3.1 percent increase in the Consumer Price Index (CPI) for California. The CPI measures inflation on a particular "basket of goods" acquired by consumers. Many of the goods acquired by the University are not included or not given adequate weight in the calculation of the CPI. A different index, the Higher Education Price Index (HEPI), is often cited as a more accurate indicator of inflation, since it is based on a "basket of goods" applicable to the University. From 1983 to 1996, the HEPI was, on average, almost one percentage point higher than the CPI.

Increases significantly greater than three percent are anticipated for several major commodities. Based on an annual report from campus libraries, as well as data from the Department of Finance, the University anticipates increases of about 10 percent for subscriptions and 4.9 percent for serial services. Industry sources, including *The Bowker Annual* for 1998, confirm that the average annual increases in the costs of library materials will exceed 10 percent in 1999-00. Subscriptions and serial services represent more than 60 percent of the library materials budget. The purchase of library materials is one of the largest expenditures made each year. The University will also

experience higher cost increases for hazardous waste removal, medical and laboratory supplies, laboratory chemicals, agricultural chemicals such as fertilizers and pesticides, and paper and printing. The University purchases large quantities of all of these commodities.

Productivity Improvements

The University remains committed to, and continues to work toward, achieving productivity improvements. Savings that result from these efforts will be reallocated to meet some of the University's high priority needs, such as library materials, deferred maintenance, and instructional technology.

SPECIAL REGENTS' PROGRAMS

1998-99 Budget	
Total Funds	$119,962,000
General Funds	--
Restricted Funds	119,962,000
1999-00 Increase	
General Funds	--
Restricted Funds	$5,123,000

The following section discusses three fund sources, the University Opportunity Fund, the Off-the-Top Overhead Fund, and the Department of Energy (DOE) Laboratory Management Fee. The Management Fee is the annual compensation provided to the University for management and oversight of the DOE Laboratories at Berkeley, Livermore and Los Alamos and is discussed at the end of this chapter.

All federal contract and grant activity generates costs, which are divided into two basic categories – direct and indirect. Direct costs are those which can be identified as directly benefiting a specific contract or grant and, therefore, are charged directly to that contract or grant. Indirect costs are those 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, primarily State appropriations, with reimbursement later provided by the federal government. The University Opportunity Fund and the Off-the-Top Overhead Fund derive from this reimbursement.

The University has an agreement with the State regarding the disbursal of federal reimbursement of indirect costs. Pursuant to this agreement, the first approximately 20 percent of the reimbursement accrues directly to the University of California for costs directly related to federal contract and grant activity. This is the source of the University's Off-the-Top Overhead Fund. The remaining 80 percent of the federal reimbursement is used in two ways. Fifty-five percent is budgeted as University general funds and is used, along with State general funds, for general purposes such as faculty salaries. The remaining 45 percent is the source of the University Opportunity Fund and is returned to campuses primarily on the basis of how it was generated.

Approximately six percent of the indirect cost reimbursement is used to support systemwide programs such as research programs and the Education Abroad Program,

as well as systemwide administrative functions.

In 1990, the State approved legislation authorizing the use of indirect cost reimbursement for the acquisition, construction, renovation, equipping, and maintenance of certain research facilities, the related infrastructure, and financing of these projects. Under the provisions of the legislation, the University is authorized to use 100 percent of 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. Any reimbursement received in excess of what is needed to finance and maintain the facility is allocated as previously described. Of the eleven projects approved by the Legislature to be financed in this manner, eight have been completed, one project received gift funding and has been removed from the program, and the remaining two are nearing completion.

Off-The-Top Overhead Fund

The Off-the-Top Overhead Fund is used to support costs related to federal contract and grant activity in areas such as campus contract and grant offices, academic departments and Organized Research Units (ORUs). Although the discussion of the Off-the-Top Overhead Fund occurs here, expenditures from the Fund actually occur in various functions and are not included in this section.

University Opportunity Fund

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 under which campuses expend University Opportunity Funds.

Research

Campuses often use their University Opportunity Fund allocations to enhance their faculty recruitment efforts by providing support for such research needs as laboratory alterations, equipment, research assistants, field work, and debt service for new buildings. The adequacy of funding for these and other basic research needs has a substantial impact on the success of efforts to recruit and retain a high-caliber faculty. The level of research support that can be offered is often a pivotal factor in the success of efforts to recruit the most promising junior faculty members. The University must be in a position to offer a level of research support that is competitive with other institutions. In the physical and natural sciences, it is not unusual for the University to provide $200,000 or more in research support in the recruitment of a faculty member.

Research support is also critical in retention of distinguished faculty members, who regularly receive attractive offers from other institutions. Department chairs report that it is difficult, and occasionally impossible, to replace key faculty members lost to other

institutions with scholars of equal stature. Loss of a faculty member disrupts both the instructional and the research programs of the University. The future of the University is dependent upon the quality of its faculty. The use of the University Opportunity Fund for the recruitment and retention of distinguished faculty members will help to secure that future.

Since 1970, The Regents have used University Opportunity Funds to provide core support for high priority systemwide research programs not adequately funded from other sources. Such programs include the Keck Observatory, the Universitywide Energy Research Group, and the U.S.-Mexico Research Program. Some campuses use a portion of the University Opportunity Fund allocation as seed money for a continued and selective expansion of their research programs. They also use University Opportunity funds in combination with State and other University funds to address the special needs encountered by individual faculty members in the conduct of research, such as funding for equipment and supplies, text preparation, research assistants, and field work and travel.

Instruction

Allocations for instruction are designed to provide continuing incentives to explore new instructional approaches and programs. Innovative instructional activities are essential for maintaining dynamic, high quality academic programs. The Educational Abroad Program is typical of those funded. The Education Abroad Program furthers students' academic progress and enhances their communication skills, cultural enrichment, and understanding of the contemporary world through intensive involvement in a different culture. University Opportunity Funds help to support guest students on University campuses who are here as a result of reciprocal arrangements with foreign institutions that are hosting University of California students. This is an essential part of the operation of the Education Abroad Program, but is not supported by State funds.

Some campuses use Opportunity Funds to provide support for programs designed to give special recognition to excellence of undergraduate instruction or to support course evaluations to give faculty the feedback needed to improve teaching. In all, about $9.7 million is allocated annually to support instructional activities.

Institutional Support

Currently, a portion of the University Opportunity Fund is used to support administrative activities for which adequate State support has not been provided, for example, administrative computing and environmental health and safety. It is the University's long-term goal to significantly reduce University Opportunity Fund expenditures in such areas and to focus the Fund on activities which foster excellence in academic programs. Activities discussed below are typical of those funded in the Institutional Support category.

Funds are provided under Institutional Support to maintain and improve the University's

capabilities to attract external funding, primarily from private sources; such programs have been funded since the mid-1960s from a combination of various funds. Support is provided to meet alumni and development data processing requirements and for management information systems. Allocations from the University Opportunity Fund also provide support for the University's public safety and staff and management development programs.

Department of Energy Laboratory Management Fee

Contracts for University management and oversight of the Department of Energy (DOE) National Laboratories at Berkeley (LBNL), Livermore (LLNL) and Los Alamos (LANL) provide for direct charging of actual costs for the Laboratory Administration office, currently not to exceed $4.5 million and annual contract compensation of up to $25 million, plus the potential for an additional $2 million, dependent on performance.

Annual contract compensation is distributed in accordance with a Memorandum of Understanding between the University and the State Department of Finance. Of the total, $11 million is budgeted as UC general fund income and helps to fund the University's operating budget. The remaining funds are used to cover costs related to audit disallowances and for the two University research programs described below. The UC Directed Research and Development (UCDRD) Fund was developed to support high priority research needs at the Laboratories, with emphasis given to collaborative research with the campuses. The Complementary and Beneficial Activities (CBA) Fund was established to foster collaborative research efforts between the Laboratories and the UC campuses.

UC has recognized the benefits for the University as a whole of encouraging collaborations and has supported these efforts with funds derived from the DOE contracts for managing the Laboratories. The CBA Fund supports a number of collaborative research activities including two Multicampus Research Units, the Institute on Global Conflict and Cooperation (IGCC) and the Institute of Geophysics and Planetary Physics (IGPP). In addition, the Campus-Laboratory Collaborations (CLC) Program was established in 1994 to enhance and facilitate greater collaboration and cooperation between the UC campuses and the Laboratories. Supported by the CBA Fund, the CLC Program provides seed money to encourage initiation of long-term collaborative research programs. Continuing awards for 1998-99 totaled approximately $2 million, with seven projects funded in areas as diverse as novel materials design, radioactive waste management, and genomic characterization.

Funding from the UCDRD Fund is provided in support of research projects at each of the three Laboratories. Collaborative research with UC campuses is a high-priority use for these funds. UCDRD Funds at LLNL were used to aid the start-up of two institutes, both with strong links to UC: the Institute for Laser Science and Applications, and the Material Research Institute. LLNL also used funds to provide enhanced support to the CLC projects, assist a joint effort with the Keck Observatory to incorporate adaptive

optics technology, provide access to a new Laboratory computer system, and to support collaborative research solicited by five UC institutes (the Center for Accelerator Mass Spectrometry, the Institute for Scientific and Computing Research, and three institutes previously mentioned - IGPP, the Institute for Laser Science and Applications, and the Material Research Institute).

LBNL has used its funds to make a major equipment purchase for earth sciences research, to provide matching funds for the fabrication of a crystallography beamline at the Advanced Light Source, and to seed a major new research effort that is expected to link several Berkeley campus and LBNL disciplines, including structural biology and material research. LANL in collaboration with the UC campuses has agreed to sponsor the Los Alamos Neutron Scattering Center (LANSCE) professorships. These will be tenure track appointments at one of the UC campuses and combined with a joint appointment at LANL. This program will foster increased collaborative efforts between both faculty and students at the UC campuses and LANL. It is anticipated that the first appointment will be made on the San Diego campus in the 1998-99 academic year.

Studies in the areas of materials, bioscience, and earth and environmental sciences are funded through the Collaborative UC/Los Alamos Research Program (CULAR), while the Research Partnership Initiatives provides seed funding in areas of strategic importance to the Lab. The visiting Scholar Program supports longer-term research visits to the campuses or to the laboratory for LANL staff or faculty, respectively. UCDRD Funds at LANL have also been used to start a new program, the New Mexico Universities Collaborative Research Program, which is modeled after the CULAR Program and the four universities in New Mexico.

In addition to the above efforts, a number of other institutes and centers established at the Laboratories in recent years have resulted in increased collaboration with the UC faculty. These include, for example: the Los Alamos Neutron Scattering Center, the Center for Materials Science, the National High Magnetic Field Laboratory, the Institute for Nuclear and Particle Astrophysics and Cosmology, the High Performance Computing Center, the Center for Human Genome Studies, the Institute for Transactinium Sciences, the National Center for Electron Microscopy, and the Center for Advanced Materials. The Institute of Geophysics and Planetary Physics (IGPP), established at the Laboratories in the early 1980s, is the largest single conduit for research collaborations at both LANL and LLNL.

INCOME AND FUNDS AVAILABLE

General Fund Income and Funds Available

The programs described in the preceding pages will require general fund resources in 1999-00 of $3 billion, including $2.7 billion in State general funds, and $311 million in University general funds. University general funds are comprised of nonresident tuition, a portion of the federal indirect cost reimbursement, overhead on State agency agreements, and income from the application for admission fee and some other smaller fees.

Nonresident tuition will produce $122 million in University general fund income. This income estimate is based on the 1999-00 nonresident tuition level proposed in this budget and on the number of students expected. In addition, the application fee and a number of smaller fees will produce University fund income totaling $13.5 million.

Overhead on State agency agreements totaling $5.8 million will be used to help fund the University's budget.

Federal Indirect Cost Reimbursement

The University has an agreement with the State regarding the disbursal of federal reimbursement of indirect costs on federal contracts and grants. Pursuant to this agreement, the first approximately 20 percent of the reimbursement accrues directly to the University for costs related to federal contract and grant activity. This is the source of the University's Off-the-Top Overhead Fund. It is estimated that $58.0 million will be provided from this source in 1999-00.

The remaining 80 percent of the federal reimbursement is used in two ways. Fifty-five percent is budgeted as University general funds and is used, along with State general funds, to help fund the University's budget. It is estimated that $129.8 million will be provided from this source in 1999-00.

The remaining 45 percent is the source of the University Opportunity Fund and is returned to the campuses primarily on the basis of how it was generated. In addition, in 1990 the State approved legislation allowing special use of incremental indirect cost recovery generated by research activities in certain new research facilities. Under the legislation, 100 percent of the reimbursement can be used to pay for construction and maintenance of the research facility. In such a case, the designated indirect cost recovery is taken off the top of the total indirect cost reimbursement before any other split is made.

Contracts for University management and oversight of the Department of Energy national laboratories at Berkeley, Livermore and Los Alamos provide for annual contract compensation totaling up $25 million, and the potential for an additional $2 million for outstanding performance; and for direct charging of actual costs for the Laboratory Administration office, currently not to exceed $4.5 million. Annual contract compensation is distributed in accordance with a Memorandum of Understanding between the University and the State Department of Finance. Of the total, $11 million is budgeted as UC general fund income and helps to fund the University's operating budget. The remaining funds are used to cover costs related to audit disallowances and for two University research programs – the UC Directed Research and Development Fund and the Complementary and Beneficial research programs – which are to support high priority research needs and to foster collaborative research efforts between the laboratories and the campuses.

Restricted Fund Income and Funds Available

Other State Funds

In addition to State general fund support, the University's budget for current operations includes $59.3 million in appropriations from State special funds, including for example, $16.7 million from the Breast Cancer Fund, $20.1 million from the California State Lottery Fund, and $11.7 million from the Cigarette and Tobacco Products Surtax Fund to fund the Tobacco-Related Disease Research Program.

Student Fees

University student fees are discussed in detail in the Student Fees section of this document. Based on the number of students expected to enroll, income from mandatory Universitywide fees (Educational Fee and University Registration Fee), assuming no fee increase is currently projected to be $600.1 million in 1999-00.

Income from the Educational Fee is used to support student services, student financial aid, and a share of the University's operating costs, including instruction, libraries, operation and maintenance of plant, and institutional support. Income from the University Registration Fee is used to support counseling, academic advising, tutorial assistance, cultural and recreational programs, and capital improvements which provide extracurricular benefits for students.

UC student fees increased substantially during the early 1990s, largely due to major shortfalls in State funding for the University's budget. As discussed in the Financial Aid section of this document, financial aid grew substantially as well during this time. There have been no increases in the Educational Fee and the University Registration Fee fees since 1994-95. Income from these fees increased

from $576.1 million in 1996-97 to $586.1 million in 1997-98, an increase related to enrollment growth during this time. In 1998-99, mandatory Universitywide fees were reduced by five percent for California resident undergraduates. The effect of the fee reduction will be offset largely by enrollment increases and, as a result, fee income is expected to decrease only slightly to $585.6 million in 1998-99.

In 1999-00, income from the Fee for Selected Professional School Students will be approximately $44.5 million based on the number of students expected to enroll and the fee levels previously approved by The Regents. An amount equivalent to at least one-third of the revenue will be used for financial aid. Remaining fee income will be used to support the professional school programs. Fee income can be used to hire faculty and teaching assistants as well as for instructional and computing equipment, libraries, other instructional support, and student services.

University Extension and Summer Sessions are fully funded by student fees. These programs are constrained by the estimated fee income for any budget year.

Teaching Hospitals

The University's academic medical centers generally receive three types of revenue: (1) patient service revenue, (2) other operating revenue, and (3) non-operating 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 patient service revenue are government-sponsored health care programs (i.e., Medicare, Medi-Cal and the California Healthcare for Indigents Program), commercial insurance companies, contracts (e.g., managed care contracts) and self-pay patients. The rate of growth in revenues has slowed significantly in recent years due to fiscal constraints in government programs and the expansion of managed care.

Other operating revenues are derived from the daily operations of the medical centers as a result of non-patient care activities. The major source is Clinical Teaching Support, provided by the State to help pay for the costs of the teaching programs at the medical centers. Additional sources of other operating revenue are cafeteria sales and parking fees.

Non-operating revenues result from activities other than normal operations of the medical centers, such as interest income and income from disposal of equipment.

Medical Center revenues are used for the following expenses: salaries and benefits, supplies and services, depreciation and amortization, malpractice insurance, interest expense, and bad debts. Remaining revenues are used to meet a medical center's working capital needs, fund capital improvements, and provide an adequate

reserve for unanticipated downturns. The Teaching Hospital section of this document discusses the history of the financial problems confronting the medical centers and how those problems have been and continue to be addressed.

In 1999-00, expenditures of hospital income for current operations are projected to increase by $38.9 million or about 2.4 percent as the medical centers attempt to hold down costs in a price sensitive market. The modest increase is equivalent to the general increase in inflation.

Sales and Service

Income from sales and services from educational and support activities is projected to total $697 million in 1999-00, including the health sciences faculty compensation plans and a number of other sources of income, such as fine arts production income, publication sales, and athletic facilities user fees.

Endowment Income

The amounts shown in the Endowment category on the Income and Funds available schedule at the end of this section represent the expenditure of income earned on endowments, funds functioning as endowments, and life income funds. Endowments require that the principal be invested in perpetuity with the income used in accordance with terms stipulated by donors or determined by The Regents. Under trust law, endowment funds may not be invested in loans for projects within the University. The University is legally bound to keep the principal intact and to comply with donor restrictions. Guidelines have been issued to ensure that the University will not be bound by restrictions that are difficult to administer or that are in conflict with established goals or policies. Funds functioning as endowments are primarily gifts from donors that the University treats as endowments, i.e., the principal is preserved and only the income is expended. Life income funds are held in trust by the University with the income paid periodically to designated beneficiaries; the principal vests with the University and income payments cease upon the death of the beneficiaries.

Endowment and Similar Funds are invested by the Treasurer of The Regents. The vast majority of these funds participate either in the General Endowment Pool or in the High Income Pool. The General Endowment Pool is designed to promote capital growth along with steady increases of income. The High Income Pool portfolio is designed to produce a relatively high and stable level of current income.

In the ten-year period between 1987-88 and 1997-98, actual expenditures of endowment income increased from $33.8 million to $86.5 million, an increase of 155.9 percent. During the most recent five-year period expenditures increased 49.9 percent, from $57.7 million in 1992-93 to the $86.5 million in 1997-98. It is estimated that in 1998-99 expenditures will be $105 million and the University is

projecting expenditures of $119 million in 1999-00.

The primary sources of the preceding discussion of endowment income and policies are the University's Accounting Manual and the Financial Highlights section of the 1996-97 Financial Report presented to The Regents in the Fall of 1997. The annual comprehensive report covering the University's 1997-98 financial activities will be presented to The Regents later this fall.

Auxiliary Enterprises

Auxiliary enterprises are non-instructional support services provided primarily to students in return for specified charges. Services include residence and dining services, parking, intercollegiate athletics, and bookstores. Faculty housing is also an auxiliary enterprise. No State funds are provided for auxiliary enterprises. Budget increases for each service are matched by corresponding increases in revenue. Revenue from auxiliary enterprises has increased from $449.6 million in 1995-96 to an estimated $500.7 million in 1999-00.

Extramural Funds

Extramural Funds are provided for specified purposes by the federal government, usually as contracts and grants; through State agency agreements; and through private gifts and grants from individuals, corporations, and foundations. The majority of these funds are used for research and student financial aid.

Research

In 1997-98, federal research expenditures at the University amounted to approximately $933 million. While UC researchers receive support from virtually all the federal agencies, the National Institutes of Health and the National Science Foundation are the two most important, accounting for approximately seventy percent of the University's federal research contract and grant awards in 1996-97. In addition to the funding of research contracts and grants, federal funds entirely support the Department of Energy Laboratories, for which the University has management responsibility. In 1997-98, this support amounted to approximately $2.7 billion.

Federal funds are the University's single most important source of support for research, accounting for approximately 55 percent of all University research expenditures in 1997-98. In the decade between 1982-83 and 1992-93 federal support for research at the University grew dramatically. With a commitment to research established as a national priority by both the President and the Congress, annual federal research expenditures increased by an average of almost ten percent during this period. After 1992-93, however, the focus of the federal government was

on deficit reduction. While research expenditures continued to increase, the rate of growth slowed down. Between 1992-93 and 1995-96 federal research expenditures at the University increased by an average of about four percent per year, and in 1996-97 they were essentially flat. For 1997-98, expenditures increased by seven percent.

While basic research appears to be faring relatively well in the appropriations bills currently under consideration in the Congress, the outcome of the federal budget is uncertain as of this writing. One source of the uncertainty relates to the whether the Congress and Administration can agree on a funding source to pay for the proposed increases in basic research funding.

Student Financial Aid

In 1996-97, UC students received $612 million in federal financial aid, which represented more than half (60%) of all support awarded during that year. Overall, UC students received about nine percent more federal funded aid in 1996-97 than they received in the previous year. This was principally due to increases of approximately $40 million in borrowing under federal loan programs. The significance of the federal loan programs for UC students is demonstrated by the fact that these programs comprised more than three-quarters (77%) of all federally funded aid and nearly one-half (47%) of the total financial support received by UC students in 1996-97. 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, where the federal government subsidizes up to 75 percent 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 section of this document discusses these and other programs. It also discusses the potential impacts on federal financial aid that could result from the 1999 amendments to the Higher Education Act (HEA) and pending 1999 appropriations to fund the programs associated with the HEA.

Private Gifts and Grants

Private gifts and grants are received from alumni and other friends of the University, campus-related organizations, corporations, foundations and other nonprofit entities. In 1997-98, expenditures of private gifts and grants to the University totaled $ 512.7
million, an increase of 10.3 percent over 1996-97 expenditures of $464.9 million. Expenditures have increased by 144.3 percent in the ten-year period since 1987-88,

when expenditures were $209.9 million. In 1997-98, the University received $754.5 million in donations and pledges, the fourth consecutive year of record-breaking fund raising.

Approximately 96 percent of gifts are designated by the donor for a specific purpose. Research is the largest category for which private gifts and grants are provided, followed by campus improvement projects (e.g., purchases of buildings, equipment and land, or construction or renovation of buildings or other facilities) and financial aid to students (e.g., scholarships, fellowships, awards, and prizes).