

SECTION 5

1996/97 CAPITAL PLAN AND BUDGET AND THE PROJECTED FIVE YEAR CAPITAL PLAN

INTRODUCTION AND PROGRAM GOALS

The 1996/97 Capital Budget is proposed in the context of a Five Year Capital Plan anticipated to support Stanford's programmatic requirements and future directions, while preserving our physical assets. This section describes the key elements of the Five Year Capital Plan, identifies the projects expected to come forward for concept approval in 1996/97, and specifies the amount of capital expenditure planned for next year. The full detail of the Five Year Capital Plan is shown in Appendix B.

Although capital planning and budgeting have been going on at Stanford for most of its history, it has only been in the last three years that the University has produced a multi-year comprehensive Capital Plan and Budget. The first such plan was developed in 1993/94 and grew out of the effort to address three fundamental university-wide planning goals: 1) to support the facilities needs of the most promising academic program directions; 2) to complete the seismic strengthening program begun after the Loma Prieta earthquake in 1989; and 3) to address the University's deferred maintenance backlog while building adequate funds for planned maintenance into the facilities budget.

Having established these goals—and having verified our commitment to them for each of the last three years—it is important to acknowledge that there are not major changes to the plan each year. There are several important actions, however, taken annually in updating the plan. First, there is a careful review of each project in the plan. Any additional project must undergo an extensive review by the Provost's Office and the relevant school or department. Second, a "new" fifth year is added to the plan, incorporating appropriate and affordable projects. Third, there

is a detailed review of the funding structure for the plan. Because the projects are supported by gifts, university reserves, and debt, a careful analysis balancing fundraising strategies and the judicious use of debt needs to be developed for each new project.

Before the first comprehensive plan was developed in 1993/94, there were several programs underway aimed at addressing some aspects of these goals. However, the full scope of the effort had not been planned at that time. With the 1993/94 Plan and subsequent additions and deletions, we are well on our way to achieving the three broad goals.

Looking back on the current year, the capital planning effort achieved several important milestones. In Science and Engineering, it saw the opening of the Gates Computer Science Building and the completion of the CIS Extension. Major progress was made in earthquake repair and seismic strengthening with the completion of Geology and Language Corner buildings and other smaller unreinforced masonry buildings in the Main Quad. In the deferred maintenance area we continued to reduce the backlog of work, while adding funding to the facilities budget to support a larger planned maintenance program.

For 1996/97, we anticipate a continuation of the high level of construction activity seen in 1995/96. Much of the work in the Science and Engineering Quad (SEQ) will peak next year with construction of the Regional Teaching Facility, the Statistics Building, and considerable infrastructure. In addition, work will continue on the unreinforced masonry buildings and in the deferred maintenance areas. Housing and Dining Services' multi-year Capital Improvement Plan will move into its fifth year with a renovation effort of a major dormitory—Lagunita Court.

Looking beyond 1996/97 and toward the end of the decade, the outcome of this comprehensive effort will be a largely rebuilt campus. Although a good deal of work remains, once completed, this will be a major achievement at a time when Stanford has been pressed financially on a number of fronts. The three goals set forth at the start of the decade will have been achieved and this plan will have addressed, as we must, those code compliance issues related to access for disabled persons, the use of hazardous materials, and fire and life safety.

FIVE YEAR CAPITAL PLAN - A LOOK AT THE NUMBERS

The following charts provide a financial overview of the Five Year Capital Plan.

Overview (Charts 1 and 2)

Charts 1 and 2 show the anticipated capital activity over the next five years by project category

and funding source. We anticipate that \$708.3 million of construction will be done over five years. We have identified about \$388.8 million in the form of gifts in hand, pledges, university reserves, unrestricted budget support and government support to finance the construction. We expect to pay for the remainder with gifts to be raised and debt.

As shown on Chart 1 and 2, capital expenditures will be concentrated in 1996/97 and 1997/98. A major portion of the construction in 1996/97 will be in the Academic Program Development area, with work peaking on the SEQ. In addition, the Schwab Center for Management Education and new student housing in Governor's Corner will be completed.

Type of Space (Chart 3)

As Chart 3 indicates, the work is split approximately two-thirds on renovation and one-third on

CHART 1

CAPITAL EXPENDITURES by Project Category

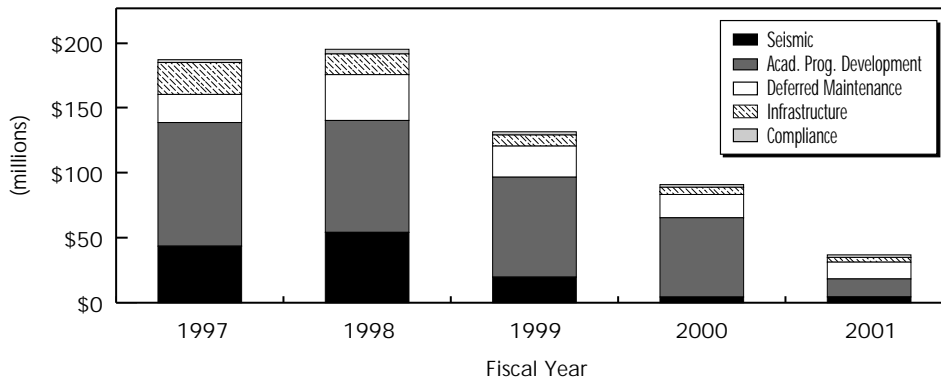
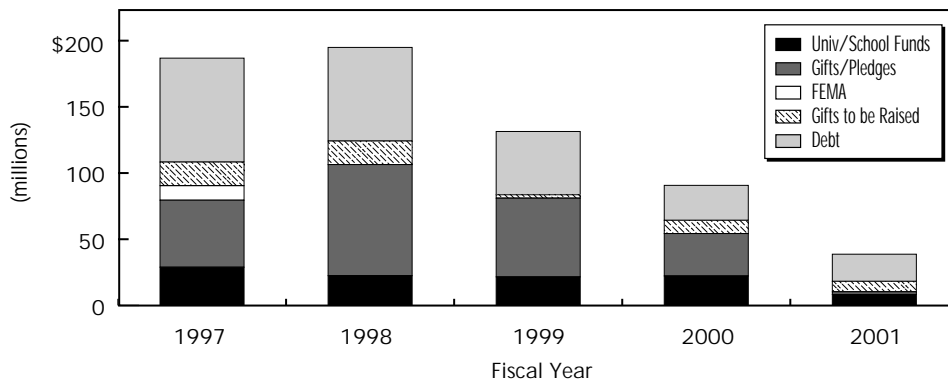


CHART 2

CAPITAL EXPENDITURES by Funding Sources



new construction over the period of the Five Year Capital Plan. We expect to add approximately 700,000 square feet of new space to the campus over the next five years, including those projects currently underway. Of the total activity, about half will be for the renovation of existing academic buildings or the development of new academic space; the remaining activity will be in non-academic space.

Total Investment in Plant (Chart 4)

The adequacy of investment in the plant has been an important capital planning issue in higher education. Accounting rules only require that the provision for depreciation be based on the historic cost of plant assets rather than replacement cost.

We are often asked how investment in existing plant assets compares to the depreciation charge adjusted to reflect replacement cost (Replacement Cost Annual Charge).

Chart 4 shows the relationship between the Replacement Cost Annual Charge, and Total Investment in Plant, which includes two components: Investment in Existing Plant Assets and Additions to Plant. On average, Investment in Existing Plant Assets exceeds the Replacement Cost Annual Charge for the first three years of the Five Year Capital Plan. Investment in Existing Plant Assets peaks in 1998/99 with the completion of several large seismic projects and phasing in of three new SEQ buildings which replace three

CHART 3

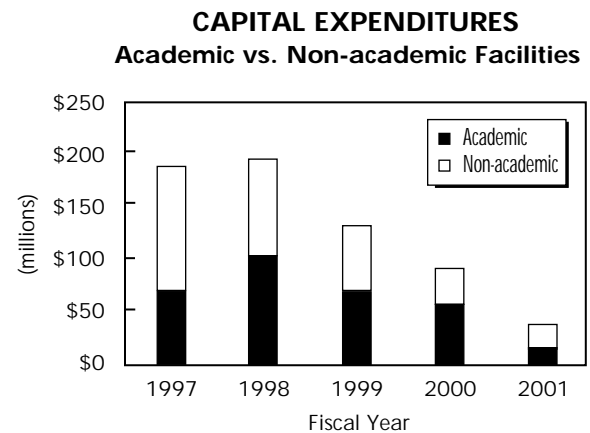
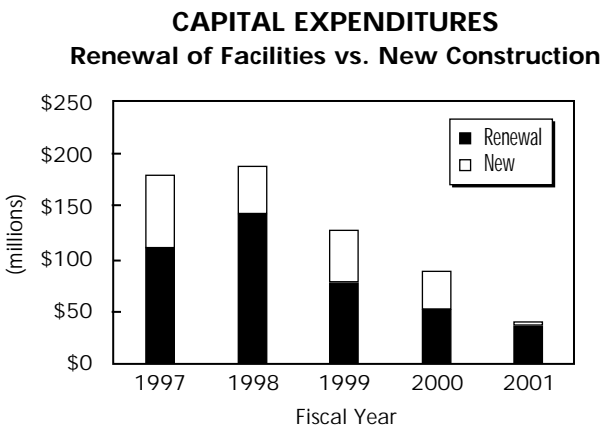


CHART 4

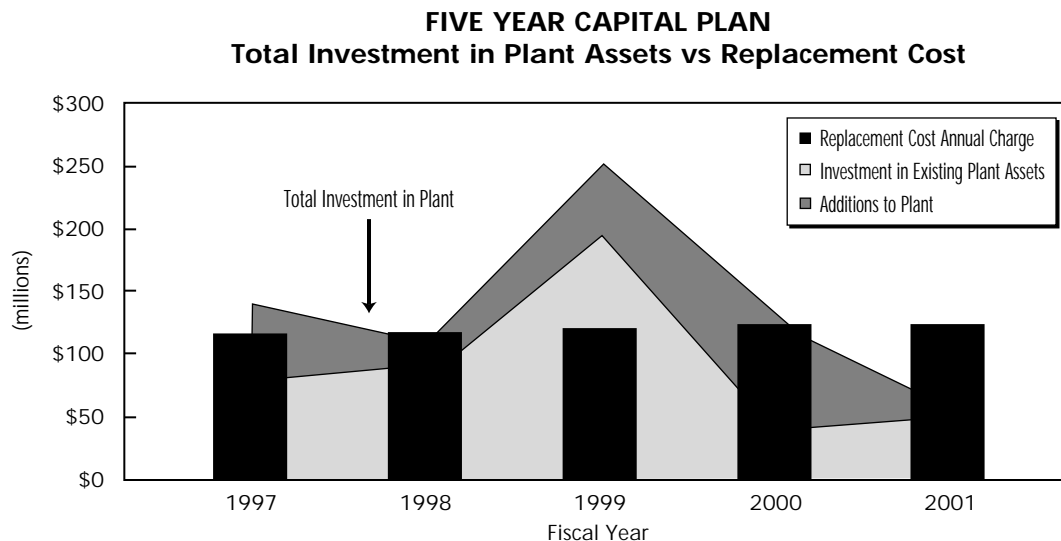
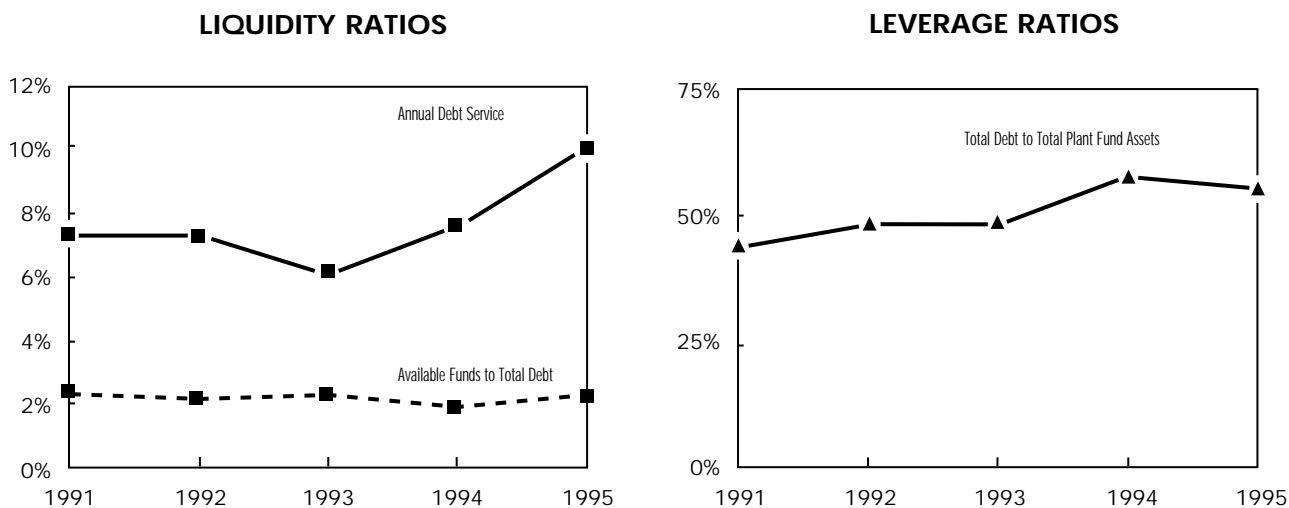


CHART 5

demolished buildings. In 1999/2000 Additions to Plant comprise a larger share of the Total Investment in Plant with the opening of the Center for Clinical Sciences Research (CCSR). The sharp drop in Total Investment in the last year of the Capital Plan 2000/01 is explained in part by the uncertainty of forecasting capital projects five years out.

Key Debt Ratios (Chart 5)

Some of the key financial ratios monitored by the rating agencies when assigning bond ratings are shown on Chart 5.

- Annual Debt Service is a short term liquidity ratio measuring annual debt service expense to unrestricted revenues.
- Available Funds to Total Debt is a long term liquidity ratio comparing available unrestricted funds—unrestricted fund balances, the market value of quasi-endowment (FFE) fund balances and unrestricted plant fund balances—to outstanding debt.
- Total Debt to Plant Fund Assets measures leverage against plant assets.

These financial ratios remain within the range of AAA rated institutions. It should be noted that most private colleges and universities, including

Stanford, will adopt new accounting standards for 1995/96 that will significantly impact the format of financial reporting. The new rules require that promises of future gifts be recorded in financial statements and that capital gains on endowment be reported in the operating statement. In response to this change, the rating agencies will replace the key financial ratios they use in assigning ratings.

FIVE YEAR CAPITAL PLAN - PROGRAMMATIC INITIATIVES

In this section we describe several of the most significant initiatives of the Capital Plan: the Center for Clinical Sciences Research, Green Library West, the Regional Teaching Facility in the Science and Engineering Quad, Encina Hall and the Institute for International Studies, Seismic Projects, the Schwab Center for Management Education, Student Housing, and Deferred Maintenance projects. These are projects that either have just been approved and are significant in Stanford's capital plan, or they will be coming forward for Trustee approval in 1996/97.

Center for Clinical Sciences Research

The School of Medicine's Center for Clinical Sciences Research (CCSR) building will include about 215,000 gross square feet, housing a total of

83 faculty representing 11 different departments in 3 inter-departmental research centers. The CCSR centers include a Cancer Research Center, the Center for Clinical Immunology at Stanford, and a Center for Applied Human Gene Therapy. Organized in this way, the faculty in the CCSR will be uniquely positioned to function at the boundaries between the basic scientists in the Beckman Center for Molecular and Genetic Medicine and the faculty clinicians providing innovative clinical interventions in the planned SHS Cancer Treatment Center.

The CCSR is budgeted at a total project cost of \$88.7 million, the largest single building project in Stanford history. The project will be funded from a combination of gifts (\$76.1 million) and university funds (\$12.6 million).

The CCSR faculty program will also enable the School of Medicine to address the seismic deficiencies of the Edwards Building in a cost-effective manner. The CCSR will permit the Edwards Building laboratories to be vacated and reused as “dry” academic space for new and relocated programs. The code-related costs of the building’s seismic work will be reduced considerably in this way. In addition, the office space to be created will enable the School to vacate rented space both on Welch Road and in SHS.

In these ways, the CCSR represents a significant advance in the School of Medicine’s academic, capital, and financial plans.

Green Library West

The West Wing of Green Library has been closed since the 1989 Loma Prieta earthquake. Reconstruction was to have begun during the 1995 calendar year, but has been delayed due to the bankruptcy of the original project architect. Preliminary interior demolition has uncovered greater earthquake damage than previously believed, and the University has adopted more stringent structural standards in the aftermath of the Kobe and Northridge earthquakes. These factors have contributed to a budget increase of \$4 million for a total project cost of \$44.5 million. The restored building will house Special Collections,

extensive patron services such as the Humanities Resource Center, and stacks. In addition to traditional printed resource materials, the building will support the delivery of state-of-the-art digital resources for research and instruction.

Regional Teaching Facility in the Science and Engineering Quad

Construction of the Science and Engineering Quad, scheduled for completion in late 1998, has begun with the installation of utilities for the new buildings and the relocation of the occupants of Sequoia Hall, scheduled for demolition in July, 1996. The Regional Teaching Facility, one of the hallmarks of the Science and Engineering Quad, will be completed in time for the first classes to be held in Fall Quarter, 1997. The new teaching building replaces Bloch Hall, home to instruction primarily in the Physics Department. The new building is geared towards instruction in all the sciences and engineering, and is designed to support sophisticated classroom demonstrations and instructional technologies.

Encina Hall and the Institute for International Studies

The Institute for International Studies (IIS) provides an institutional base for innovative, policy-relevant research that is international in character. The 1995/96 Capital Plan discussed plans by IIS to raise funds for new space to house this rapidly growing program. At that time it was anticipated that IIS would renovate the Bakewell Building and construct a new building over a five year period. In the past year these plans have changed, and a revised plan for IIS is under design.

The East Wing of Encina Hall, built in 1891 as the first men’s dormitory, was heavily damaged by fire in 1972, suffered further damage in the 1989 earthquake, and has been closed ever since. The East Wing will be restored for IIS, which will occupy it and two floors of the center wing. Although not included in this project, it is anticipated that the South Wing, also closed in 1989, will be repaired in the period covered by the 1997 - 2001 Capital Plan.

Seismic Projects

During 1995/96 construction will be completed on the Language Corner and on Geology Corner, with the generous assistance from the Pigott and Braun families. The restoration of Building 30 (the new Language Center) is well underway, with completion scheduled in 1995/96. With the completion of these three restoration projects, all Main Quad buildings closed by the 1989 Loma Prieta earthquake will have been reopened.

Work continues apace on the Unreinforced Masonry (URM) Seismic Strengthening Program. During 1995/96 construction will be completed on Buildings 70, 90, 100 and 110 on the Main Quad, along with the arcades that form Memorial Court. The program for 1996/97 includes Buildings 10, 40, 50, and 240 on the Main Quad, and Building 500 on the Engineering row. The University remains on track to complete the URM program by 1999. Of the major campus buildings covered by this program, only the Bakewell and Brown buildings (formerly the Athletics administration building and Encina Gym) are intended to be closed in the year 2000, and Old Chemistry will remain closed.

Given the progress on the URM program, the University is now able to turn attention to selected buildings of other construction types that may be at risk in an earthquake. Seismic strengthening is planned in 1996/97 for the Mitchell Earth Sciences Building and the first of five Escondido Village mid-rise apartments.

The Schwab Center for Management Education

Executive education is a significant component of the Business School's program. During recent years competition for participants in executive programs has intensified, with many institutions offering dedicated hotel-like living facilities. The Schwab center will improve the competitiveness of the GSB in this regard as it will be the principal living facility for these programs in the summer. It will then be used by graduate students during the regular academic year. The cost of the project will be \$28.5 million, to be funded with gifts and debt.

Student Housing

Housing and Dining Services is in the fourth year of a twelve year Capital Improvement Program (CIP) intended to address deferred maintenance, code compliance, and major programmatic improvements in all areas of the student housing system. The CIP has been developed within a planning constraint that the combined room and board rate cannot increase more than 1% over projected inflation for each of the years of the program. Over the next five years, the CIP will focus on several major program areas. The most significant single project is the construction of a new graduate residence near Governor's Corner. This facility will add 100 graduate beds and is the last increment of new housing affordable in the CIP. In the seismic area, there will be major work in the Escondido Village high rises and in several of the smaller units. Over the next five years the CIP will continue to renovate major undergraduate residences. To date, Florence Moore, Stern, and Wilbur have been renovated. Plans are underway to address Lagunita, Branner, and Crothers over the next several years.

Deferred Maintenance Projects

In 1994 a study of Stanford's deferred maintenance backlog was conducted by outside consultants. They identified about \$100 million in backlog across the University, of which about \$40 million was confined to the central campus. The backlog was focused on three categories of projects: safety and property loss prevention, code requirements, and advanced deterioration. In addition, the consultants recommended expansion of the University's planned maintenance program to address life cycle maintenance and anticipated deficiencies.

Over the past two years Stanford has made good progress on reducing the deferred maintenance backlog. About half of the \$40 million backlog on the central campus has been eliminated. The other half will be addressed in the 1997 and 1998 capital budgets. Planned maintenance budgets have been increased steadily over the past three years, although it will likely be several years before the planned maintenance budget is fully

funded at the level recommended by the outside consultants.

Outside of the central campus, about \$65 million in deferred maintenance work has been identified in the Five Year Capital Plan. The bulk of this is in Housing and Dining Services and will be addressed as part of their Capital Improvements Plan.

CAMPUS INFRASTRUCTURE

The Campus Infrastructure System is composed of two entities: the Stanford Infrastructure Program (SIP), which includes the Transportation Program, and the Capital Utilities Program (CUP), which includes the Networking and Communications Program. All of these programs work to address the need for new and restored infrastructure that is generated by new buildings and their related populations, as well as the continued renewal of the campus facility base. The Five Year Capital Plan includes \$85.5 million for infrastructure support of the academic program needs or 12% of the projected \$708.3 million expenditures. Although there are varying funding sources for these programs, the responsible managers work together to ensure systematic coordination and integration among programs and projects.

Consistent with existing procedures, all infrastructure programs and their capital projects greater than \$750,000 will be forwarded annually to the Board of Trustees separately.

Stanford Infrastructure Program (SIP) for the Campus and Transportation Program:

The Stanford Infrastructure Program (SIP) consists of projects and programs proposed and developed for the betterment and general support of the University's academic community and its physical plant. The infrastructure system is in direct support of the academic missions of teaching and research and the overall vitality of the institution.

SIP is supported by a 9% charge on most building projects. The amount to be spent in 1996/97 for

the SIP program is \$6.2 million and includes: roads, paths, storm sewers, improvements to public indoor spaces, landscape, lighting, outdoor art, and signs, as well as the advance planning efforts that support each of these. Within SIP, the Transportation Program includes: improvements for the parking and bicycle systems, campus transit system improvements and pedestrian zone safety improvements.

Capital Utility Program (CUP) and Networking and Communications Program:

The Capital Utility Program contains projects that will improve and enhance the campus utility systems. Projects included in this category construct and improve the components of the main distribution systems. The program is driven by four conditions: system wear out, regulatory compliance codes, system expansion, and system controls. The budget for the 1996/97 CUP program is \$16.4 million. On the horizon for the next five years is to complete the Utility Master Plan and address facility growth projections and their demand requirements on the Central Plant Facility.

Over the next five years, networking and communications projects will upgrade the data backbone and complete SUNet service to all campus buildings. Communication services—voice, data and video—will need to be extended to all new buildings, especially those in the new Science and Engineering Quad, where a new Electronic Communications Hub will be located. New applications in telephony will allow Stanford to further leverage its existing investment in its telephone switch which currently provides a seamless interface to the entire campus, medical center, student residences, and off-site clinics and departments.

PROJECTED FUNDING, 1997-2001

Appendix B details the sources and uses of funding for the Five Year Capital Plan as described above. Several points of explanation are in order about the various sources of funds:

Identified Funds

Over half of the \$708.3 million in projected capital expenditures have already been identified. The majority of the funds identified are gifts received or pledged, to be supplemented by future unrestricted budget allocations, current fund balances, and recoveries from FEMA.

Gifts to be Raised

8% of the projected expenditures will be funded from gifts to be raised. We have had most generous support from our friends to accomplish this ambitious plan. Successful fundraising continues to be essential to the completion of the Five Year Capital Plan, and we believe we can achieve our gift targets by the end of the decade.

Debt

Approximately one-third of the projected expenditures will be funded by debt. Of the \$262.3 million in projected debt, \$138.9 million will be serviced by the budgets of auxiliaries and service centers, principally Housing and Dining Services and Utilities. \$100.2 million will be supported by the Unrestricted Budget. The remaining \$23.3 million will be supported by Schools.

Debt requirements: We have used approximately \$115 million of the proceeds from the \$150 million 30 year bond issued in March of 1994. \$50 million of the proceeds were used to refinance outstanding debt for projects already on the books. In April the Board authorized borrowing of up to \$150 million to meet the requirements of the Plan. Depending on market conditions, we will likely be borrowing in the next several months. We are confident that we can retain our AAA bond rating with the incremental borrowings.

1996/97 CAPITAL PLAN AND BUDGET

As described previously, the Five Year Capital Plan includes projects that have already been approved and are in process as well as projects yet to be approved and anticipated over the five year

period, 1997 to 2001. Inclusion of a project in the Capital Plan does not obviate the standard approval process through the Board of Trustees. The same is true of the Capital Budget for any given fiscal year. The following descriptions refer to the tables on the next three pages.

Projects to be Presented for Concept Approval in 1996/97

The Capital Plan for 1996/97 consists of \$81.5 million in projects anticipated to be presented to the Board for concept approval in 1996/97. The table on the next page lists the specific projects to be presented in 1996/97.

Projected Expenditures Anticipated in 1996/97

The Capital Budget for 1996/97 is composed of \$186.7 million of anticipated expenditures for projects already in design, approved, or currently underway. (It also includes expenditures on projects anticipated for concept approval.) The table on page 46 lists the major projects on which funds will be expended in 1996/97.

Projects Completed in 1995/96

We made major progress in 1995/96 in meeting our long range capital planning goals with the completion of \$113.3 million of projects. Two-thirds of the amount was invested in academic buildings, the Gates Computer Science Building and the CIS Extension, the remainder was invested in earthquake repair and the seismic strengthening program.

1996/97 Capital Plan: Projects to be Presented for Concept Approval

(in millions)

Project	Cost	Sources of Funds		
		Identified	Gifts to be Raised	Debt
EQ Repair & Seismic Risk Mitigation				
1-160 Political Sciences	\$12.3	\$3.9		\$8.4
1-240 German Studies	2.9	0.2		2.7
1-250 Asian Languages	2.6			2.6
2-510 Mechanical Engineering Back Lab	1.3			1.3
Durand	6.2			6.2
Mitchell Earth Sciences	2.0			2.0
Subtotal	\$27.3	\$4.1		\$23.2
Academic Program Development				
Library Technical Services Building	\$9.0		\$3.0	\$6.0
Daper Women's Softball Field	1.0	\$0.4	0.6	
Daper Astro Turf Field	1.0		1.0	
Lucas Center Expansion	2.0	1.0	1.0	
Memorial Auditorium Upgrades	2.0			2.0
Housing and Dining CIP	22.8			22.8
Subtotal	\$37.8	\$1.4	\$5.6	\$30.8
Infrastructure				
Capital Utilities Program	\$16.4			\$16.4
Stanford Infrastructure Program	3.3*			
Transportation Program	2.9*			
Subtotal	\$16.4			\$16.4
Total	\$81.5*	\$5.5	\$5.6	\$70.4

*Funding for Stanford Infrastructure Projects (SIP) and Transportation Program Projects is already included in the target costs of other projects and, to prevent double counting, is not included in subtotals or totals.

1996/97 Capital Budget: Projected Expenditures

(in millions)

Project	Cost	Sources of Funds		
		Identified	Gifts to be Raised	Debt
EQ Repair & Seismic Risk Mitigation				
Green Library	\$14.5	\$14.5		
Hanna House	2.0	0.6	\$1.4	
Museum	5.5	5.5		
Museum	3.5	3.5		
1-010 President/Provost	1.5	1.2		\$0.3
1-040 English	1.0	1.0		
1-050 English	1.2			1.2
1-160 Political Sciences	2.8	2.8		
1-240 German Studies	0.8	0.3		0.5
1-250 Asian Languages	1.0			1.0
2-500 Mechanical Engineering Office	0.5			0.5
2-510 Mechanical Engineering Back Labs	0.3			0.3
2-570 HTGL	2.9			2.9
5 Escondido Village Bldgs	0.9			0.9
Durand Building	3.1			3.1
Lagunita	1.0			1.0
Mitchell Earth Sciences	1.0			1.0
Subtotal	\$43.5	\$29.4	\$1.4	\$12.7
Academic Program Development				
Electrical Engineering	\$3.5	\$3.5		
McCullough Annex	2.4	2.4		
McCullough	2.8	2.8		
Statistics	3.0	3.0		
Regional Teaching Facility	4.3	4.3		
S. Service Road	2.3			\$2.3
SEQ Courtyard	0.5	0.5		
SEQ Site Pres & Utilities	8.5	1.4	\$2.0	5.1
Varian	3.9	2.1		1.8
CCSR	2.1	2.1		
Lucas Center Epansion	2.0	1.0	1.0	
Governor's Corner	12.2			12.2
Schwab Center for Management	17.5			17.5
GSB Expansion	2.0		2.0	
Library Technical Services Bldg	2.0		2.0	
Encina East	2.0		2.0	
DAPER Astroturf Field	1.0		1.0	
DAPER Tennis Stadium Expansion	3.2	3.2		
DAPER Stadium Improvements	3.0	3.0		
Engineering Lab Renovations	0.9	0.9		
H&S Lab Renovations	3.9	3.9		
Memorial Auditorium Upgrades	2.0			2.0
Libraries and ITSS	1.3	1.3		
Other Renovations	1.8	1.8		
Alway-3	1.5	1.3	0.2	
Urology Phase III	1.0	0.3	0.7	
Neurosurgery: Long Term Office	1.5	1.5		
Med School Renovations	3.1	3.1		
Subtotal	\$95.0	\$43.2	\$10.9	\$40.9
Deferred Maintenance				
University Deferred Maintenance	\$6.7	\$1.7		\$5.0
Medicine Deferred Maintenance	0.5	0.5		
University Facil Renewal	8.9	8.9		
Medicine Facil Renewal	0.9	0.9		
H&DS Deferred Maintenance	4.6			4.6
Subtotal	\$21.5	\$11.9		\$9.6
Infrastructure				
Networking & Comm Services	\$1.5			\$1.5
Utilities Expansion	11.5			11.5
Utilities System Control Impr.	0.7			0.7
Utilities Wear-Out	2.6			2.6
Develop Serra Axes	1.0		\$1.0	
Redevelop SUMC Entry	4.1	0.1	3.4	0.6
Restore Quad Features	3.1		1.0	2.1
Subtotal	\$24.5	\$0.1	\$5.4	\$19.0
Compliance				
Placeholder for ADA	\$1.1			\$1.1
H&DS Asbestos & ADA	0.1			0.1
Health & Safety	1.0	\$1.0		
Utilities Regulatory Compliance	0.1			0.1
Subtotal	\$2.2	\$1.0		\$1.2
Total	\$186.7	\$85.6	\$17.7	\$83.4

1995/96 Capital Plan: Projects Completed

(in millions)

Project	Cost
EQ Repair & Seismic Risk Mitigation	
Language Corner	\$13.2
Geology Corner	11.0
1-110 Anthropology	4.1
2-540 Civil Engineering	3.3
1-090 Philosophy	3.3
1-100 Linguistics/Anthropology	2.8
1-070 Humanities	1.8
Language Center (1-30)	1.6
Subtotal	\$41.1
Academic Program Development	
Gates & Computer Sciences	\$38.5
CIS Extension	18.3
Stauffers	10.9
DAPER Stadium Parking Lot Improvement	1.7
Museum Site Clearance	1.6
DAPER Ford Center Landscaping	1.2
Subtotal	\$72.2
Total	\$113.3

