

SECTION 3

1999/00 CAPITAL BUDGET

INTRODUCTION

The 1999/00 Capital Budget is produced in the context of a three-year Capital Plan. The Capital Plan represents the ongoing efforts of the University to restore, maintain, and improve campus facilities for teaching, research, and related activities. It encompasses projects that will begin between 1999/00 and 2001/02. The Stanford campus is a unique resource that helps shape and define much of University life. Our principal goals in capital planning are to protect and extend the useful life of existing facilities; create appropriate new facilities, where necessary, to support the work of faculty, students, and staff; and integrate facilities and support systems into a coherent, effective, and attractive campus.

As Stanford's academic programs evolve, demands for new and improved facilities continually arise. Proposals for new capital projects come into the planning process in a variety of ways. Many are developed as part of on-going maintenance and enhancement programs. Other projects arise because of issues relating to new building codes or changes of use. Still other projects develop out of new programmatic initiatives of the faculty and, occasionally, the interest of donors.

Institutional Needs

Among the issues that dominate capital planning in the coming years are the need for new and improved technical facilities for scientific and medical research, the requirement by Santa Clara County to complete seismic compliance of unreinforced masonry (URM) buildings by 1999/00, and the high demand for

graduate student housing. These academic and institutional needs must be met for Stanford to remain at the forefront of teaching and research, as detailed below.

NEW AND IMPROVED SCIENCE RESEARCH AND TEACHING FACILITIES – Stanford's academic excellence stems, in part, from the new and improved technical research and teaching facilities that are built in response to evolving faculty initiatives. The three-year Capital Plan includes several capital projects related to changing and growing programs, as well as innovations in scientific and medical research methods.

The Bio-X Project will foster the integration of leading-edge research in basic, applied, and clinical sciences, while enhancing collaboration among researchers from the schools of Humanities and Sciences, Engineering, and Medicine. Additionally, the Mechanical Engineering Department Project and the Chem/Bio Project will provide facilities for intensive research to be conducted in class H-8 level environments. Both of these projects will be financed primarily by University debt and gifts and will provide additional program space for the Mechanical Engineering, Chemistry, and Biology Departments.

As a result of changes in curriculum and educational models, several teaching facilities and laboratories in the School of Medicine have become outdated for their principal function or have reached the end of their current life. The Grant, Alway, Lane and Edwards (GALE) projects propose to renovate several laboratories, provide enhanced teaching and student library facilities, and improve administrative space in the School of Medicine.

These renovations will extend the useful lives of the oldest buildings in the Medical Center complex.

SEISMIC COMPLIANCE – In accordance with our agreement with Santa Clara County following the 1989 Loma Prieta earthquake, Stanford plans to retrofit or vacate all unreinforced masonry (URM) buildings by 1999/00. The Capital Plan includes several seismic renovations, including the Art Gallery, Building 360, Building 160, and the Bakewell Building.

DEMAND FOR HOUSING – The high cost of housing in the Bay Area has created substantial problems for the University's graduate students, post-doctoral students, medical residents, and faculty members. In the Capital Plan, the Escondido Village Housing Project will provide 508 additional graduate student housing units on which construction will begin this year. With an additional 231,776 square feet of housing units, this project utilizes a major portion of the remaining development capacity permitted by Santa Clara County.

Constraints

The Capital Plan reflects careful balancing of these needs within the constraining factors of limited entitlements, debt capacity, and affordability.

ENTITLEMENTS – Limitations on new development on Stanford's campus were established by Santa Clara County in 1989 under the General Use Permit (GUP). The GUP governs the extent to which Stanford is entitled to build on campus (measured by additional gross square footage) and to add to its daily population (students, faculty, staff, visitors, etc.). The three-year Capital Plan fully allocates the remaining 474,000 permitted additional gross square feet. Negotiations with Santa Clara County and the City of Palo Alto are currently underway to allow for the construction of future facilities after the present GUP expires.

DEBT CAPACITY – The Board of Trustees limits the University's overall annual debt level. The Debt

Policy limits the debt to an amount which is the lesser of: 1) a total debt level up to 20% of the Unrestricted and Temporarily Restricted Net Assets, or 2) a total debt level on which interest payments are less than 5% of Total Revenue. Because the bond markets are in a period of historically low interest rates and because of the economies of scale of large bond offerings, management has anticipated the need for debt by issuing bonds for academic capital projects and the Sand Hill Road project. Management estimates that the first Debt Policy limit described above could be a constraint in 1999/00 and is monitoring the limit closely.

In addition to the overall debt limits, the Debt Policy imposes an internal constraint, for management purposes, on the level of internal debt service repayments on academic capital projects (exclusive of SLAC, auxiliaries and service centers) to 5.0% of unrestricted revenues (i.e., general funds revenues plus designated revenues). For 1999/00, these internal repayments for debt service on academic projects will be \$21.7 million, including debt service on commercial paper. This equals 3.1% of unrestricted revenues. The proposed three-year plan includes \$134.0 million of debt to pay for academic projects. At the substantial completion of the proposed three-year plan, these internal repayments of debt service will be \$33.2 million, or 4.2% of unrestricted funds. The impact of this internal constraint is that the University will have approximately \$77 million in remaining debt capacity for projects supported by central funds after funding the three-year Capital Plan. Over time, additional capacity will be developed as debt is paid down and unrestricted funds increase. The three-year Capital Plan is the result of management's efforts to balance the need for new facilities with available debt capacity.

AFFORDABILITY – The debt service on projects financed by debt and the operations, maintenance and utility costs (O&M) on capital projects are expenditures partially paid for by the general funds of the University. Capital-

related costs compete directly for this limited resource against academic program initiatives. The additional debt service costs expected for academic projects in 1999/00 are \$3.2 million, and the additional continuing debt service costs expected at the completion of the three-year plan are \$10.7 million. These costs are borne by the unrestricted budget. (Total debt service, including auxiliaries and service centers, will increase \$5.9 million in 1999/00.) The additional O&M costs expected for 1999/00 are \$2.7 million, and the additional continuing O&M costs expected for the three-year plan are \$13.2 million. An assessment of the financial impact of all capital projects is performed to ensure affordability in relation to the available general funds of the University.

CAPITAL PROGRAM FINANCING

The 1999/00 Capital Budget totals \$300.6 million. The tables on pages 38-40 detail all capital projects and infrastructure programs along with their total project costs, project schedule, and projected 1999/00 expenditures.

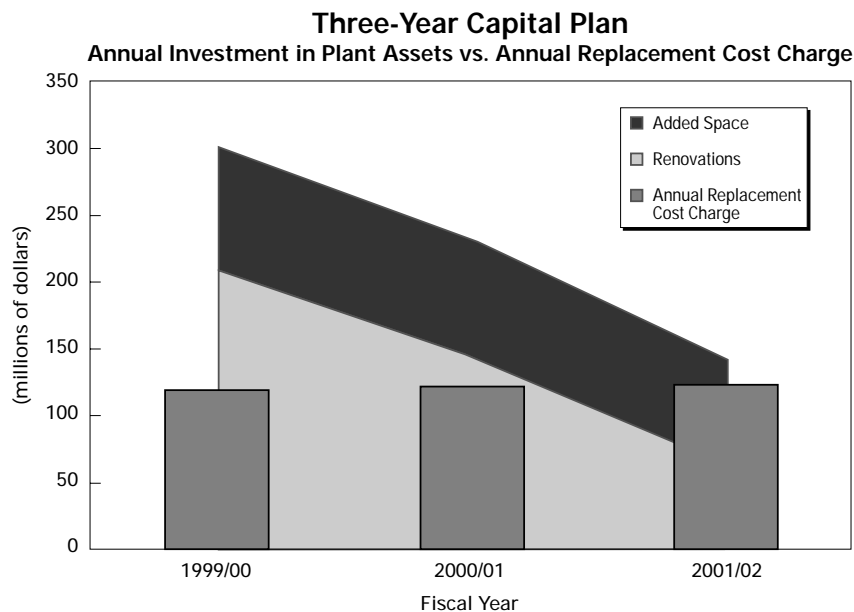
The first table, “1999/00 Capital Budget Projected Expenditures and Sources of Funds,” details the sources of funds for the 1999/00 expenditures for these projects and programs and the amount of University debt financing

(\$42.0 million) needed to fund the balance. Construction financing is used to cover the debt portion until the project is complete. At completion, the project is financed with long-term debt.

The tables on pages 41-42 refer to the Three-year Capital Plan. They show those capital projects anticipated over the next several years along with anticipated funding sources. The tables also include the budget impact of this long-range plan on both University debt service and O&M costs. The projects are divided into three major categories: Projects in Design & Construction (\$341.3 million), capital projects related to the University’s Infrastructure Programs (\$104.9 million), and Planned Construction Projects (\$393.8 million), for a total three-year Capital Plan of \$840 million.

Total Investment in Plant (refer to graph below)

We are often asked how much we are investing in the plant relative to how much would be required on a replacement cost basis. Depreciation charges in our financial statements are based on the historical cost of the asset and use the average life of a broad class of assets. We have developed a proxy for the annual replacement charge based on a combination of market values for each asset, and depreciation schedules which reflect the useful life of each type of facility.



1999/00 Capital Budget Projected Expenditures and Sources of Funds

(in millions)

Expenditures	Project Schedule	Estimated Project Cost	Projected 1999/00 Expenditures
Projects in Design and Construction			
Aquatics Complex - Phase I	1999-00	\$12.5	\$10.0
Art Gallery Seismic Renovation	1999-01	7.5	5.0
Building 360 Seismic & West Gate Renovation	1998-00	4.0	4.0
Center for Clinical Science Research (CCSR)	1996-00	108.7	40.7
CIP Program Year 7 under \$3 million	1999	1.7	1.7
Encina Central/IIS Consolidation	1999-00	6.0	0.3
Escondido Village Graduate Housing - Phase I	1999-00	67.5	40.0
Escondido Village Renovations - CIP Program Year 7	1999	5.7	5.0
Graduate School of Business - Main (Bldg. 350)	1999-00	16.5	0.1
Lake Houses Renovations - CIP Program Year 7	1999	10.5	1.0
McCullough Annex	1996-00	27.0	4.0
Mechanical Engineering Dept. Laboratory	1999-03	33.5	4.0
Mudd Chemistry Interim Upgrade	1999	2.2	
Athletics Boathouse	1999-00	5.0	3.0
Stanford Alumni Center/Office of Development	1998-01	33.0	20.0
Subtotal-Projects in Design and Construction		341.3	138.8
Infrastructure Programs (See Table on page 39)	2000-02	104.9	39.7
Planned Construction Projects (See Table on page 40)	1998-03	393.8	122.1
Total Capital Budget		\$ 840.0	\$ 300.6
Sources of Funds			
Current Funds and Reserves			\$ 130.0
Gifts			56.0
Debt			
Auxiliaries/Service Centers			72.6
University			42.0
Total Sources of Funds			\$ 300.6

In 1999/00, the estimated annual replacement cost is \$119 million compared to an annual investment in facilities of \$300 million. This investment in plant includes the work funded

through the Capital Budget, as well as the ongoing and planned maintenance costs in the Consolidated Budget for Operations.

1999/00 Capital Budget Projected Expenditures - Infrastructure Program Detail
 (in millions)

Infrastructure Programs	Project Schedule	Estimated Project Cost	Projected 1999/00 Expenditures
Capital Utilities Program (CUP)			
Wear-Out	2000-02	\$ 11.2	\$ 2.9
Controls	2000-02	2.9	1.3
System Expansion	2000-02	12.6	8.3
Regulatory	2000-02	1.7	0.7
Subtotal-CUP		28.4	13.2
Systems			
Applications	2000-02	15.0	8.1
Infrastructure	2000-02	4.5	1.5
Communications Facilities	2000-02	10.9	3.5
Subtotal-Systems		30.4	13.1
Compliance and Other			
ADA Upgrades	2000-02	6.0	2.0
Emergency Generators	1999-02	2.8	0.7
Stores Renovation	2000	2.2	2.2
Storm Drains	1999-00	1.5	0.5
Subtotal-Compliance and Other		12.5	5.4
Stanford Infrastructure Program (SIP)			
Campus Landscaping and Planning Projects			
Circulation Projects	2000-02	8.0	3.9
Landscape Projects	2000-02	5.2	2.1
Outdoor Lighting Systems	2000-02	0.2	0.2
Outdoor Art Program	2000-02	0.1	0.1
Subtotal-Campus Landscaping and Planning Projects		13.5	6.3
Parking and Transportation Services			
Parking System	2000-02	18.1	1.7
Transit Related	2000-02	2.0	0.0
Subtotal-Parking and Transportation Services		20.1	1.7
Subtotal-SIP		33.6	8.0
Total Infrastructure Programs		\$ 104.9	\$ 39.7

1999/00 Capital Budget Projected Expenditures - Planned Construction Projects Detail
 (in millions)

Expenditures	Project Schedule	Estimated Project Cost	Projected 1999/00 Expenditures
Planned Construction Projects¹			
Aquatics Complex - Phase II	2000-01	\$ 3.3	
Bakewell Seismic Renovation and CPPC Demolition	2001-03	5.0	
Bio-X - Phase I	1999-02	110.0	0.3
Branner Seismic Renovation - CIP Program Year 9	2001	8.0	
Bridge Demolition	2001	1.0	
Building 160 Seismic Upgrade & TI's (Learning Lab)	1999-03	25.0	5.0
CCSR Core Labs Buildout	2000	3.0	2.8
Chem/Bio - Phase I	1999-01	30.0	5.0
CIP Program Year 8 under \$3 million	2000	2.1	
CIP Program Year 9 under \$3 million	2001	1.7	
Cowell Health Center Seismic Renovation	2000-02	7.0	1.0
Encina Gymnasium Renovation	2000-02	12.0	3.0
Encina West - Poli Sci Renovations	1999-00	5.0	5.0
Escondido Village Renovations - CIP Program Year 8	2000	6.0	
Escondido Village Renovations - CIP Program Year 9	2001	6.0	
Grant/Alway/Lane/Edwards Renovations	2001-03	135.0	79.0
High Wire Press Relocation (off-site)	2000-02	9.0	4.0
HRP Anatomy Wings Demolition	2001	2.0	
Jasper Ridge	2000-01	5.0	1.0
Knoll Seismic Renovation	2000-02	8.0	1.5
Lab Renovations	2000-01	5.0	5.0
Library Collections Storage	1999-00	9.3	7.0
Old Chem Building Demolition	2000	3.0	0.5
Stern Kitchen Consolidation - CIP Program Year 9	2001	4.0	
Tower House Renovation and Bing Nursery School	2000-02	2.0	2.0
Toyon/Branner Dining Halls Upgrade-CIP Program Year 9	2001	2.5	
Toyon Eating Clubs Demolition	2001	1.0	
Toyon Eating Clubs Replacement - CIP Program Year 9	2001	2.5	
Toyon Seismic Renovation - CIP Program Year 8	2000	9.0	4.0
Wilbur Kitchen Consolidation - CIP Program Year 8	2000	4.0	4.0
Wilbur Modulars Removal	2001	1.0	
Less: Stanford Infrastructure Surcharge ²		(33.6)	(8.0)
Total Planned Construction Projects		\$ 393.8	\$ 122.1

1 These projects are in various stages of planning. Scope, schedule, and estimates may be revised. These projects are all subject to funding approval.

2 Represents 9% surcharge on capital projects. See Infrastructure Programs for project expenditures.

Three-Year Capital Plan Detail, 1999/00 - 2001/02 (dollars in millions)

Construction Plan	Project Schedule	Estimated Project Cost	Project Funding Source				Annual Continuing Costs	
			Current Funds ¹	Gifts ²	Serv Ctr/Aux Debt	University Debt	University Operations & Debt Service	Maintenance
Projects in Design and Construction								
Aquatics Complex - Phase I	1999-00	12.5	3.5	9.0				0.5
Art Gallery Seismic Renovation	1999-01	7.5	1.5			6.0	0.5	
Building 360 Seismic & West Gate Renovation	1998-00	4.0				4.0	0.4	
Center for Clinical Science Research (CCSR)	1996-00	108.7	22.6	76.1		10.0	0.8	3.4
CIP Program Year 7 under \$3 million	1999	1.7			1.7			
Encina Central/IIS Consolidation	1999-00	6.0	5.0	1.0				
Escondido Village Graduate Housing - Phase I	1999-00	67.5			67.5			0.3
Escondido Village Renovations - CIP Program Year 7	1999	5.7			5.7			
Graduate School of Business - Main (Bldg. 350)	1999-00	16.5	16.5					
Lake Houses Renovations - CIP Program Year 7	1999	10.5			10.5			
McCullough Annex	1996-00	27.0		20.8		6.2		1.2
Mechanical Engineering Dept. Laboratory	1999-03	33.5	0.5	15.0		18.0	1.4	0.6
Mudd Chemistry Interim Upgrade	1999	2.2				2.2	0.2	
Athletics Boathouse	1999-00	5.0			5.0			0.2
Stanford Alumni Center/Office of Development	1998-01	33.0	3.0	30.0				0.9
Subtotal		341.3	52.6	151.9	90.4	46.4	3.3	7.1
Planned Construction Projects								
Aquatics Complex - Phase II	2000-01	3.3	1.5	1.8				
Bakewell Seismic Renovation and CPPC Demolition	2001-03	5.0				5.0	0.4	
Bio-X - Phase I	1999-02	110.0		110.0				3.6
Branner Seismic Renovation - CIP Program Year 9	2001	8.0			8.0			
Bridge Demolition	2001	1.0	1.0					
Building 160 Seismic Upgrade & TI's (Learning Lab)	1999-03	25.0		15.0		10.0	0.9	
CCSR Core Labs Buildout	2000	3.0	3.0					0.1
Chem/Bio - Phase I	1999-01	30.0		10.0		20.0	1.5	1.4
CIP Program Year 8 under \$3 million	2000	2.1			2.1			
CIP Program Year 9 under \$3 million	2001	1.7			1.7			
Cowell Health Center Seismic Renovation	2000-02	7.0	4.0		3.0			
Encina Gymnasium Renovation	2000-02	12.0		12.0				
Encina West - Poli Sci Renovations	1999-00	5.0	5.0					
Escondido Village Renovations - CIP Program Year 8	2000	6.0			6.0			
Escondido Village Renovations - CIP Program Year 9	2001	6.0			6.0			
Grant/Alway/Lane/Edwards Renovations	2001-03	135.0	95.0			40.0	3.6	0.3
High Wire Press Relocation (off-site)	2000-02	9.0	9.0					
HRP Anatomy Wings Demolition	2001	2.0	2.0					
Jasper Ridge	2000-01	5.0		5.0				0.1
Knoll Seismic Renovation	2000-02	8.0		8.0				
Lab Renovations	2000-01	5.0	5.0					
Library Collections Storage	1999-00	9.3	9.3					0.2
Old Chem Building Demolition	2000	3.0	3.0					
Stern Kitchen Consolidation - CIP Program Year 9	2001	4.0			4.0			
Tower House Renovation and Bing Nursery School	2000-02	2.0		2.0				
Toyon/Branner Dining Halls Upgrade-CIP Program Yr 9	2001	2.5			2.5			
Toyon Eating Clubs Demolition	2001	1.0	1.0					
Toyon Eating Clubs Replacement-CIP Program Yr 9	2001	2.5			2.5			
Toyon Seismic Renovation - CIP Program Year 8	2000	9.0			9.0			
Wilbur Kitchen Consolidation - CIP Program Year 8	2000	4.0			4.0			
Wilbur Modularity Removal	2001	1.0	1.0					
Less: Stanford Infrastructure Surcharge ³		(33.6)	(33.6)					
Subtotal		393.8	106.2	163.8	48.8	75.0	6.4	5.7
Total Construction Plan		735.1	158.8	315.7	139.2	121.4	9.7	12.8
Infrastructure Programs (See Table on page 42)	2000-02	104.9	55.3	6.0	31.0	12.6	1.0	0.4
Total Three-Year Capital Plan		840.0	214.1	321.7	170.2	134.0	10.7	13.2

1 Includes funds from University and school reserves, and the Stanford Infrastructure Program.

2 Includes gifts that have been identified, pledged and those gifts to be raised.

3 Represents 9% surcharge on capital projects. See Infrastructure Programs for project expenditures.

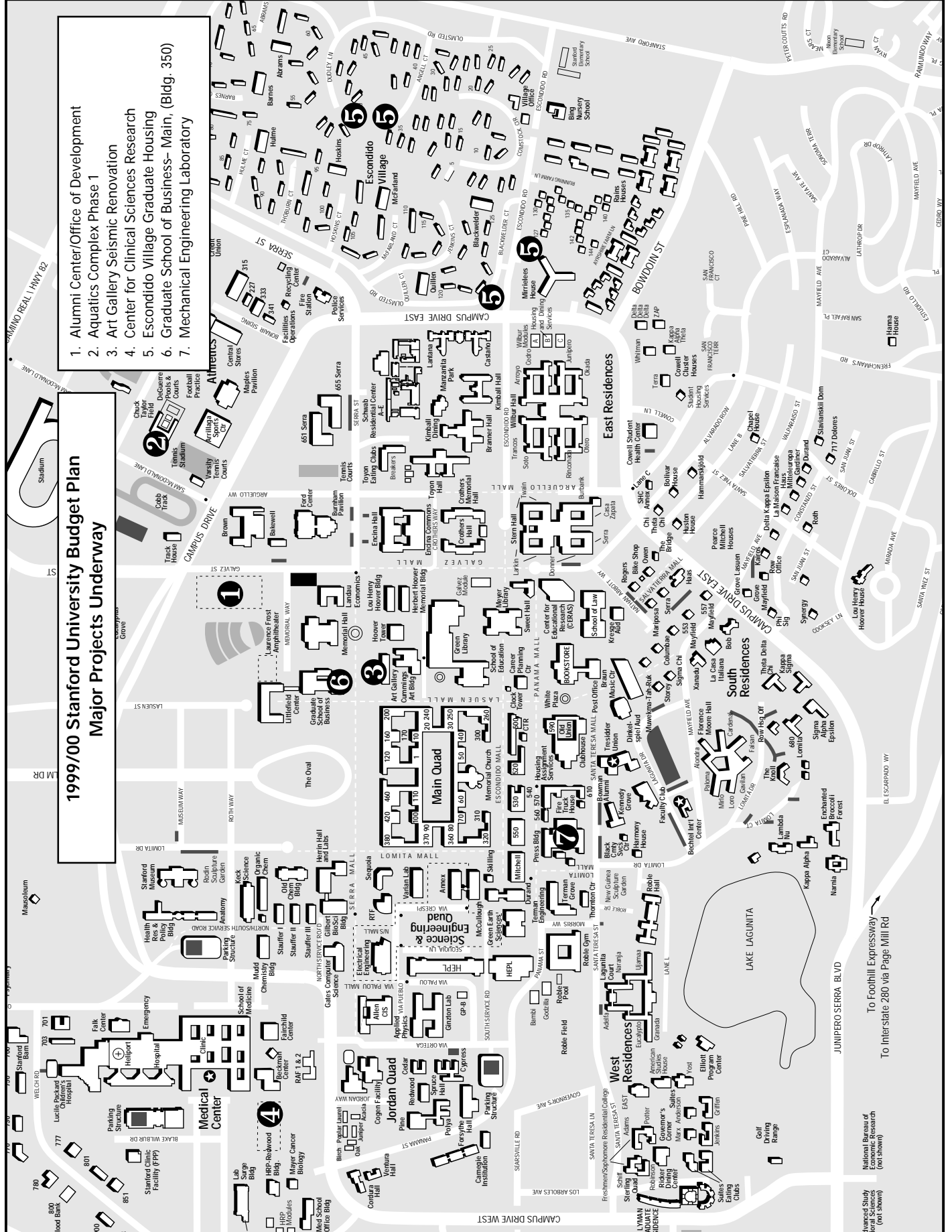
Three-Year Capital Plan Detail for Infrastructure Programs, 1999/00 – 2001/02

(in millions)

Infrastructure Programs	Project Schedule	Estimated Project Cost	Funding Source				Budget Impact	
			Current Funds	Gifts	Serv Ctr/ Auxiliary	University Debt	University Debt Service	Operations & Maintenance
Capital Utilities Program (CUP)								
Wear-Out	2000-02	\$11.2			\$11.2			
Controls	2000-02	2.9			2.9			
System Expansion	2000-02	12.6			12.6			
Regulatory	2000-02	1.7			1.7			
Subtotal-CUP		28.4			28.4			
Systems								
Applications	2000-02	15.0	\$15.0					
Infrastructure	2000-02	4.5	4.5					
Communications Facilities	2000-02	10.9		\$6.0	2.6	\$2.3	\$0.2	
Subtotal-Systems		30.4	19.5	6.0	2.6	2.3	0.2	
Compliance and Other								
ADA Upgrades	2000-02	6.0				6.0	0.5	
Emergency Generators	1999-02	2.8				2.8	0.2	
Stores Renovation	2000	2.2	2.2					
Storm Drains	1999-00	1.5				1.5	0.1	
Subtotal-Compliance and Other		12.5	2.2			10.3	0.8	
Stanford Infrastructure Program (SIP)								
Campus Landscaping and Planning Projects								
Circulation Projects	2000-02	8.0	8.0					\$0.1
Landscape Projects	2000-02	5.2	5.2					0.2
Outdoor Lighting Systems	2000-02	0.2	0.2					
Outdoor Art Program	2000-02	0.1	0.1					
Subtotal-Campus Landscaping		13.5	13.5					0.3
Parking and Transportation Services								
Parking System	2000-02	18.1	18.1					0.1
Transit Related	2000-02	2.0	2.0					
Subtotal-Parking and Transportation Services		20.1	20.1					0.1
Subtotal-SIP		33.6	33.6					0.4
Total Infrastructure Programs		\$104.9	\$55.3	\$6.0	\$31.0	\$12.6	\$1.0	\$0.4

1999/00 Stanford University Budget Plan Major Projects Underway

1. Alumni Center/Office of Development
2. Aquatics Complex Phase 1
3. Art Gallery Seismic Renovation
4. Center for Clinical Sciences Research
5. Escondido Village Graduate Housing
6. Graduate School of Business- Main, (Bldg. 350)
7. Mechanical Engineering Laboratory



To Foothill Expressway
To Interstate 280 via Page Mill Rd

National Bureau of
Advanced Study
Research (not shown)

PROJECTS IN DESIGN AND CONSTRUCTION

A number of significant capital projects, currently in the design or construction phases, are described below. Projects are reported at various stages of completion. The scope and final cost of a project are not fully defined until the Santa Clara County agencies have approved all plans and a general contractor has submitted a *guaranteed maximum price* for the project. Projects reported to the Board of Trustees for construction approval have the necessary controls in place to report a dependable price or budget. Projects in all other phases of delivery are reported with the best information available at the time and are subject to change. Please refer to the map on the previous page for site locations.

AQUATICS COMPLEX – PHASE I

This project will provide for a new 50-meter training pool with moveable bulkhead, a new diving pool with two one-meter diving boards, two three-meter diving boards, and a diving tower with platforms at the one, three, five, seven and one-half, and 10 meter levels. The new diving tower design provides for widened platforms to allow for future competition use by synchronized divers. Phase I of this project, totaling \$12.5 million, has been made possible by gifts to the Department of Athletics and is scheduled to be completed in December of 2000. The second phase of the Aquatics Complex is scheduled for completion in 2001 and will include the replacement of the existing short-course competition pool, decking, and filter and chemical control systems.

ART GALLERY SEISMIC RENOVATION

The Art Gallery was constructed in 1916 and has always housed the Art Department, including studios and classrooms, photography labs, and gallery space. It is a one-story unreinforced masonry (URM) building with a partial basement, totaling approximately 13,000 gross square feet. The County of Santa Clara requires

that the Art Gallery be upgraded seismically or vacated by the year 2000. In addition to the seismic upgrade, the gallery space will be renovated, the HVAC system will be upgraded to meet the ventilation needs of the photography labs, and ADA (Americans with Disabilities Act) access to the Gallery will be constructed. The historical arcades will be restored. This project, currently estimated at \$7.5 million, will be largely financed by University debt.

CENTER FOR CLINICAL SCIENCES RESEARCH (CCSR)

The Center for Clinical Sciences Research will provide critically needed academic space for the School of Medicine's teaching and research programs in Cancer, Immunology, Human Gene Therapy, and Human Anatomy. In this facility, the faculty will be uniquely positioned to function at the boundaries between basic scientific research and clinical research, and to provide fundamental new insights into the nature of disease and develop new techniques of treatment. Construction began in the summer of 1997 and will be completed in Spring 2000. We are currently in negotiations with a new general contractor which may have financial implications on the forecasted project costs.

ESCONDIDO VILLAGE GRADUATE HOUSING – PHASE I

The availability of affordable housing on campus is essential to the University's ability to recruit graduate students and researchers. In response to the immediate demand for on-campus housing, the Provost made the provision of additional graduate student housing a high priority this year. The Escondido Village Graduate Housing project will add 508 housing units within the existing Escondido Village. This additional 231,776 square feet is currently estimated at a project cost of \$67.5 million and will be completed in 2000. In the future, Phase II will add another 508 units of in-fill graduate student housing to Escondido Village.

GRADUATE SCHOOL OF BUSINESS – MAIN (BUILDING 350)

This project involves the renovation of the existing Graduate School of Business main structure, including the expansion of the computer lab, addition of an internal service elevator and hall, and upgrade of the Arbuckle Cafeteria Lounge. Additionally, plans include improvements to the student and faculty services offices, expansion of the entry lobby, renovation of the student lounge, and provision of acoustical attenuation of the primary corridors and Bishop Auditorium lobby. The first floor will be updated to accommodate relocated News & Publications, Human Resources, and accounting departments. The second floor requires minor remodeling and general low-level renovations at selected locations. The renovated areas will also be brought up to current ADA and building code standards where required. Construction work will be completed during the summer of 1999.

MECHANICAL ENGINEERING DEPARTMENT LABORATORY

The proposed new Mechanical Engineering Department Laboratory is intended primarily to house research programs that will position the department for leadership in critical emerging fields of mechanical engineering. The research areas that have been targeted are Advanced Manufacturing and Design, Bio-Mechanical Engineering, Combustion Science and Engineering, Microscale Engineering, Project-Based Instruction and Undergraduate Research and Collaborative Research. The two-story building will be built on a portion of the existing Press Building site, totaling 48,000 gross square feet and will be completed by 2002. The new building resolves the existing code compliance problems in Building 570 by providing H2/H7 space for research, which requires large inventories of toxic and/or flammable gases, and completes seismic and mechanical code upgrades. Building 500 shop and engine lab and Building 510 back lab will be vacated by

Mechanical Engineering and returned to the Provost. The seismic strengthening of Building 570 has been staged to allow continued occupancy of the space. This entire project is expected to be completed in 2003.

STANFORD ALUMNI CENTER/OFFICE OF DEVELOPMENT

The new Alumni Center will provide contiguous offices for the Alumni Association and the Office of Development (OOD), enhancing collaboration between the organizations and providing major public space for alumni. The Alumni/OOD Building complex is composed of three connected building elements of three stories each, with hospitality, administrative, and office space. The main building will serve as the welcoming entrance for University alumni. Inside, alumni will find hospitality areas, including a great hall (which can accommodate 400-450 people for reunion dinners, donor events, wedding receptions, etc.), a reading room, history room, cafe, and a business/conference center. This project has been made possible by gifts raised by the Office of Development. The building is scheduled for completion in the fall of 2000.

CAPITAL IMPROVEMENT PLAN IN HOUSING AND DINING SERVICES

In 1999/00, year eight of the 15-year Capital Improvements Plan (CIP), Toyon Hall will undergo seismic retrofit, and Wilbur Dining Hall will be remodeled. Additionally, as in previous CIP years, 170 Escondido Village apartments are planned for seismic retrofits and renovation. These projects are anticipated to total \$19.2 million.

The CIP renovation program is intended to reduce the differences in quality between older residences and those built in the past eight to ten years. This is accomplished by replacing finishes and furnishings, attending to critical code compliance and deferred maintenance issues, providing aesthetic and landscape improvements where possible, and providing

functional improvements such as in-room access to SUNet and dining services upgrades as applicable.

Infrastructure Programs

Stanford's on-going effort to renew its infrastructure is managed through the programs described below.

CAPITAL UTILITY PROGRAM

The Capital Utility Program (CUP) contains projects that will improve and enhance electrical, chilled water, steam, water, and sewage systems. Projects meet one of four criteria: system wear-out, regulatory issues and code compliance, system expansion, and system controls. The budget for the CUP program in 1999/00 is \$13.2 million. The largest portion of this, approximately \$8.3 million, will be used for system expansion to accommodate growth in the campus and increased demand for utilities.

SYSTEMS

As new buildings and major renovations come online, new utilities are needed to service those buildings. In addition to traditional utilities such as electricity and chilled water, an increasingly important utility is the Infrastructure and Communications Facilities, which supply voice, data, and video communications to the buildings. This portion of the 1999/00 Capital Budget includes \$3.5 million to cover the costs for conduit, inter-building and intra-building cabling for all communications.

The budget for systems infrastructure programs also includes \$9.6 million for information systems applications and infrastructure development.

STANFORD INFRASTRUCTURE PROGRAMS

The Stanford Infrastructure Program (SIP) consists of projects and programs proposed and developed for the improvement and general support of the University's academic community and physical plant. The campus infrastructure 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, and is subdivided into 5% for the SIP-Campus Program and 4% for SIP-Transportation programs.

The SIP-Campus Program proposes to spend up to \$6.3 million in 1999/00, which will be spent on improvements to roads, paths, storm drains, outdoor art, outdoor landscaping and signs, as well as advance planning efforts that support each of these.

The SIP-Parking and Transportation Program proposes to spend up to \$1.7 million in 1999/00 for the implementation of a revised transportation plan which provides for the construction of additional parking, including planning for at least one parking structure, campus transit improvements, parking lot infrastructure improvements, and enhancements to support bicycle use.