



## Section 3

# Capital Plan and Budget

**T**his section outlines Stanford University's 2004/05–2006/07 Capital Plan and the 2004/05 Capital Budget. The Capital Plan forecasts \$976.8 million in construction and infrastructure projects and programs that are currently underway or planned to begin over the next three years. This section also includes the 2004/05 Capital Budget, which represents \$168.9 million of cash outlays and associated funding of the Capital Plan for the next year.

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### CAPITAL PLANNING OVERVIEW

#### CAPITAL PLANNING AT STANFORD

Stanford's Capital Plan is a three-year rolling capital project forecast with budget commitments made to the first year, and then only for projects with fully identified funding. The plan is set in the context of a longer-term (10 year) capital forecast for the university. The details of the longer-term forecast (particularly funding sources and schedules) are less clear than those of the three-year plan, as we cannot anticipate all of the needs that may emerge over the long-term horizon. In addition, project plans inevitably change over time, particularly over a 10-year period, as some projects prove more feasible than others and as funding realities and academic priorities evolve.

#### CONSTRAINTS AND LIMITATIONS

##### Affordability and Debt:

As was the case last year, this year's Capital Plan has been significantly affected by affordability constraints, debt capacity limits, and challenging fundraising prospects for capital projects. For several projects, a large portion of the funding required is listed either as fundraising goals compiled by the Office of Development (Gifts in Hand/Pledged or Gifts to Be Raised) or as Resources to Be Identified. The Resources to Be Identified are expected to come from sources other than

fundraising targets and might include additional school or departmental reserves. In some cases it will be possible to raise all of the funds required for projects, while in others, the challenges of the economic environment will result in projects being scaled back, delayed or even cancelled. The university's debt capacity also has decreased in this economic climate, so our very limited supply of available debt has been carefully allocated throughout the Capital Plan, primarily for life safety and code compliance issues, ongoing university facilities operations, and new housing requirements under the General Use Permit (GUP).

##### Housing Linkage:

One of the key conditions of approval in the 2000 General Use Permit is that for each incremental 500,000 gross square feet (gsf) of new academic buildings, Stanford is required to construct a minimum of 605 units of housing. A significant constraint in the Capital Plan is that not all of the funding necessary for this housing has been identified.

#### SCIENCE, ENGINEERING, AND MEDICAL CAMPUS

A major part of the Capital Plan is the Science, Engineering, and Medical Campus (SEMC) initiative. This broad initiative involves a series of eight buildings — Varian 2, the School of Engineering Center (SOE Center), two School of Medicine buildings (the School of Medicine Information and Learning Environment (SMILE) and the Stanford Institutes of Medicine #1 (SIM #1)), Environment and Energy, Biology, Photonics, and Bioengineering/Chemical Engineering. These buildings are being planned as a coherent grouping to be located on the western campus near the Science and Engineering Quad.

Five of these buildings are included in the 2004/05–2006/07 Capital Plan: Varian 2, Environment and Energy, SMILE, SOE Center, and Biology. The forecasted capital need for these buildings (\$301.6 million)

was determined by our cost benchmarking process and reflects the desire to lower our capital costs. These five buildings represent nearly one-third of the total Capital Plan. The development of the SEMC initiative is heavily dependent upon a successful fundraising campaign, the details of which are being developed.

### **ANNUAL INVESTMENT IN PLANT ASSETS**

Historically, as part of the Capital Plan process, the university performed a high-level review of the adequacy of the investment in our 14.7 million gsf of facilities and compared this investment to the university's annual replacement depreciation. In other words, once a year we asked ourselves if we were keeping up with maintaining our buildings appropriately and avoiding a buildup of deferred maintenance.

Given the potential risk of deteriorating facilities, the university decided this past year to perform a comprehensive and detailed analysis of the adequacy of our investment in both facilities and the campus infrastructure. The university also recognized the need for a tool that accurately assesses both the current condition as well as the future capital requirements necessary for renewal and replacement of the physical plant.

We selected a Life Cycle Planning method, which is based on the key concept that buildings and infrastructure subsystems have known life cycle expectancies, and therefore that maintenance schedules can be predicted. This exercise led to the implementation of a database that will forecast planned maintenance renewal needs for 50 years.

The results of this analysis show that the university's deferred maintenance of \$46.8 million is low compared to that of most institutions. This is attributable to the extensive renovations made as a result of the Loma Prieta earthquake and the \$40.0 million fund allocation approved by the Board of Trustees in 1995 to reduce deferred maintenance. Additionally, increased funds have been provided for planned maintenance since 1995.

The 10-year forecast for planned maintenance for all campus facilities and infrastructure is \$521.8 million, bringing the total deferred and planned maintenance needs over the next 10 years to \$568.6 million. The university has identified potential funding sources and adjustments of \$484.3 million to meet these needs, resulting in a funding shortfall of \$84.3 million or an

average of \$8.4 million annually. This shortfall is in the areas of housing and dining, utilities (due to debt constraints) and school and department centrally funded maintenance programs. On its own, the centrally funded maintenance program has a \$58.0 million gap or an average of \$5.8 million per year. The university is looking for ways to close this funding gap and has increased general funds for planned maintenance by \$1 million for 2004/2005.

The university will coordinate annual updates to the life cycle database, taking into consideration the completion of the yearly maintenance programs and the reassessment of system conditions and lives resulting from physical inspections. Though this methodology is not an exact science, it provides a good approximation of the university's needs to maintain the physical environment in a condition to fully support teaching and research. The annual results will be reported to management and incorporated into the annual budget and capital planning process.

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### **THE CAPITAL PLAN, 2004/05 – 2006/07**

Stanford's central campus, including the Medical School but excluding the hospitals, has approximately 675 major buildings providing almost 15 million gsf of physical space. The physical plant has an historical cost of \$3.9 billion and an estimated replacement cost of approximately \$5.5 billion.

The Capital Plan is a forecast of Stanford's annual programs designed to restore, maintain, and improve campus facilities for teaching, research, housing, and related activities. Stanford's needs for new and improved teaching and research facilities emerge every year and are planned in a coordinated manner across the university. The Capital Plan carefully balances institutional needs for new and renovated facilities with challenging constraints of limited development entitlements, available funding, and affordability.

The 2004/05-2006/07 Capital Plan, which includes 29 major construction projects in various stages of development and numerous infrastructure projects and programs, totals \$976.8 million. The total cost of the plan falls between last year's Capital Plan, which totaled \$837 million and the previous year's plan, which totaled almost \$1.1 billion. The table below compares the last three years.

<b>Budget Plan Year</b> [in millions of dollars]			
	2002/03	2003/04	2004/05
Design/			
Construction	319.9	173.3	256.7
Forecasted	531.7	567.0	594.6
Infrastructure	216.0	96.8	125.5
<b>Total</b>	<b>1,067.6</b>	<b>837.0</b>	<b>976.8</b>

As shown in the above table, the projects in Design and Construction have increased by \$83.4 million over last year's plan. This is largely the result of the following Forecasted projects moving into Design and Construction: Varian 2, formerly listed as HEPL Endstation Buildout (\$34.2 million); Arrillaga Family Recreation Center (\$23 million); Bakewell Seismic Renovation (\$6 million); and the Graduate Community Center (\$3.8 million). In addition, the Stanford-in-Washington project (\$7.6 million) is new to the Capital Plan, and the Law Student Housing project has increased in scope by \$9.7 million.

The Forecasted projects shown in the above table have increased by \$27.6 million, for the following reasons:

- The Stone Building renovations now listed in the plan are significantly more extensive in scope and include a major renovation to accommodate part of the SMILE program, adding just over \$100 million from last year's plan.
- A major new science building has been added to the plan: the Environment and Energy Building (\$72.2 million). This building, together with the Varian 2, SMILE, SOE Center, and Biology projects are part of the Science, Engineering and Medical Center (SEMC) group of projects.
- A variety of medium sized projects have been added to the plan. These include the Blood Center (\$12 million), SEMC Regional Utilities (\$10 million), Maloney Field Bleachers (\$4 million), Roble Hall renovation (\$11 million) and Crothers (\$15.2 million) renovation. Other existing projects have also increased slightly in cost estimates.

These project increases, which amount to about \$247 million, have been partially offset by projects moving from the Forecasted phase to Design and Construction phase (as discussed above), by project deferrals, and by reductions in scope for some projects (these total about

\$220 million). Deferred projects include the Public Safety Annex (\$3.1 million) and the Lou Henry Hoover renovation (\$7.6 million). The SMILE, Biology, and SOE Center projects have decreased in size and are based upon new benchmark cost targets developed in the last year. They therefore show lower cost estimates than in last year's Capital Plan. In summary, increased costs in the Forecasted project category amount to about \$247 million and deferred/decreased costs amount to about \$220 million, leaving a net change of about \$27 million.

Infrastructure projects have increased by \$28.7 million due primarily to the additions to the plan of the Sand Hill Road project (\$22.2 million) and Campus Drive widenings (\$6.6 million), as well as a clearer sense of additional parking requirements (an increase of \$7.8 million). The Capital Utilities Program (CUP) has been held constant and other programs have been deferred where possible.

A summary table of the three-year Capital Plan and expenditures by fiscal year is displayed on the next page. In addition, a detailed list of projects is provided in the tables at the end of this section. These tables list only those projects that require approval by the Board of Trustees – that is, projects \$3 million and above in cost.

The Stanford Hospitals and Clinics, Lucile Packard Children's Hospital, and Stanford Management Company are not included in the Capital Plan tables due to their independent organizational structures. In order to present a comprehensive view of all planned construction on Stanford land, they are mentioned in the text.

The projects in the Capital Plan are divided into three parts.

- **Design and Construction** – The 12 projects in Design and Construction represent \$256.7 million (26%) of the plan. Some of these projects went to the Board of Trustees for concept approval as recently as April 2004 and now are in design. Construction on other projects is contingent on securing funding.
- **Forecasted Construction Projects** – Forecasted projects include our proposed projects, listed by anticipated Board of Trustee concept approval date and by project size. Total forecasted projects include 17 projects totaling \$594.6 million (or 61% of the plan). Of these projects, \$86.9 million in funding is identified (\$13.6 million in current funds,

**SUMMARY OF THREE YEAR CAPITAL PLAN 2004/05-2006/07**  
**(IN MILLIONS OF DOLLARS)**

	Estimated Project Cost		Project Funding Source					Annual Continuing Costs			Project Expenditures Anticipated Cash Outlay Service					
	2004/05	2005/06	Current Funds <sup>1</sup>	Gifts		University Debt Service Center/ Auxiliary Debt	Resources To Be Identified <sup>2</sup>	Debt Service	Operations Maintenance & Utilities	Through 2003/04	2004/05	2005/06	2006/07	Thereafter		
				Capital Budget	Project Cost										Hand or Pledged	To Be Raised
Projects in Design & Construction Forecasted Projects	256.7	89.8	48.7	110.6	27.5	21.6	38.1	10.2	4.4	3.2	47.0	89.8	89.6	30.3		
Total Construction Plan	594.6	35.7	13.6	23.0	443.9	11.0	39.3	63.8	4.2	9.5	1.8	35.7	106.9	158.5		
Infrastructure Programs	851.3	125.6	62.3	133.6	471.4	32.6	77.4	74.0	8.6	12.7	48.8	125.6	196.5	188.8		
Infrastructure Programs	125.5	43.4	48.0			35.3	30.1	12.0	6.5	0.2		43.4	54.0	28.1		
Total Three-Year Capital Plan 2004/05-2006/07 before Internal Charges	976.8	168.9	110.3	133.6	471.4	67.9	107.4	86.0	15.1	12.9	48.8	168.9	250.5	216.9		
Less: Stanford Infrastructure Surcharge <sup>3</sup>	(35.3)	(4.7)	(35.3)													
GUP Entitlement Fee <sup>3</sup>	(49.0)	(0.6)	(49.0)													
Total Three-Year Capital Plan 2004/05-2006/07 after Internal Charges	892.5	163.6	26.1	133.6	471.4	67.9	107.4	86.0	15.1	12.9						

<sup>1</sup> Includes funds from university and school reserves, and current GUP and SIP funds.  
<sup>2</sup> Anticipated funding for this category is through a combination of gift raising and school, department and university reserves, and GUP and SIP funds yet to be identified.  
<sup>3</sup> SIP and GUP fees are charged to capital projects. The funds collected are expended on capital projects within the SIP and GUP programs. The SIP/GUP charges to the buildings have been eliminated to avoid double counting.

\$50.3 million in debt, and \$23.0 million in gifts in hand or pledged). This amounts to 15% of the total project costs. Of the remaining funds, \$443.9 million needs to be fundraised and \$63.8 million needs to be identified from sources other than those already mentioned. Due to these funding challenges, construction of many of these projects may not be completed for a number of years. Only those projects with an anticipated concept approval in 2004/05 and a funding plan are considered budget commitments in this rolling three-year plan.

- Infrastructure Projects and Programs** – These projects and programs include a new parking structure and the Sand Hill Road project, as well as a number of utility systems, information technology and communication systems, compliance programs, and GUP mitigations. These projects and programs comprise the remaining \$125.5 million (13%) of the Capital Plan.

In the following section we address the Capital Plan from several different perspectives: its funding sources; the use of funds by program category (e.g., academic/research, housing); the use of funds by type of project (e.g., new construction, renovation); other Stanford projects; and the Capital Plan's resource constraints.

### CAPITAL PLAN FUNDING SOURCES

Stanford's Capital Plan relies on several funding sources: current funds, gifts, service center/auxiliary debt, and academic debt. For a number of projects not all of the funding sources are known, and this portion of their

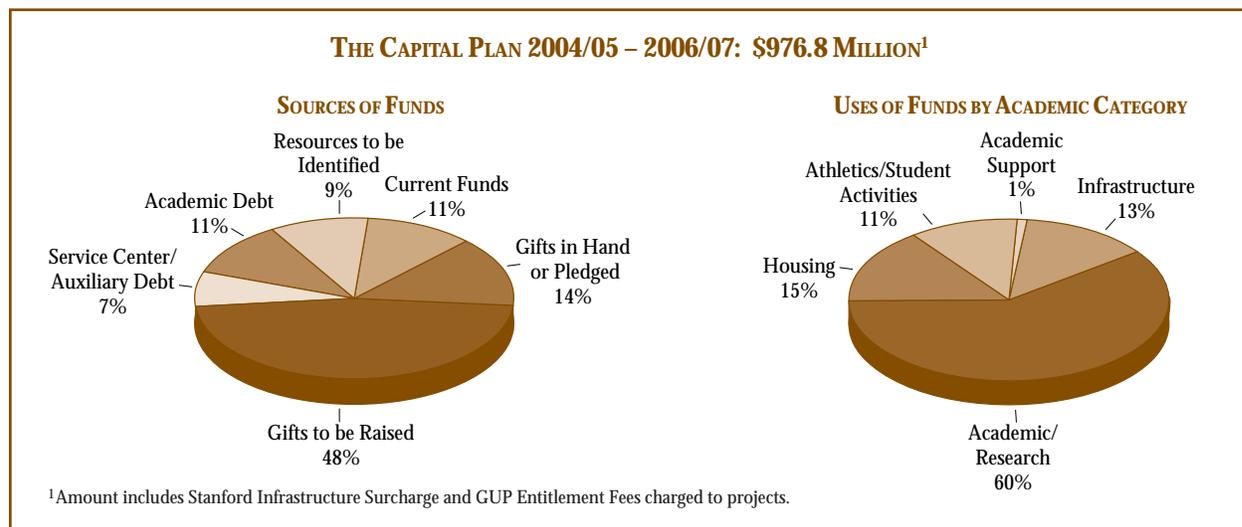
costs is shown in the Resources to Be Identified column. Although it is our expectation that some of these resources will be identified, it is possible that they may not, and that some projects will have to be cancelled, delayed, or scaled back in scope. The chart below outlines the funding sources for the Capital Plan.

### Current Funds

The three-year forecasted plan anticipates that \$110.3 million, or 11% of the Capital Plan, will be funded through current funds. These include school, department, and university reserves as well as assessments from GUP Entitlement Fees and the Stanford Infrastructure Program (SIP). GUP Entitlement Fees are assessments levied on capital projects that increase the school's/department's current core campus space allocation. These fees provide funding for conditions established under the 2000 GUP and the Community Plan. SIP assessments are levied on all capital projects and fund parking, transportation, and campus planning programs.

### Gifts

The three-year Capital Plan includes gifts of \$605.0 million (62% of the Capital Plan). These gifts are a combination of gifts in hand or pledged (\$133.6 million or 14%), and gifts to be raised (\$471.4 million or 48%). The Office of Development participated in the Capital Plan process and determined that the gift targets listed are feasible. However, given historical levels of annual giving for buildings, it is likely that the gift timetable will be stretched out.



## Debt

Debt funding reliance has dropped significantly in recent years, although it remains one of the key financing sources for the Capital Plan. The amount of debt to be allocated was carefully considered after prioritizing university needs and assessing our ability to service the debt. Approximately 18% of projected expenditures in the plan will be funded by \$175.3 million of debt. Of this amount, \$67.9 million is auxiliary and service center debt, principally Residential and Dining Enterprises and the Capital Utilities Program. Another \$107.4 million is academic debt.

## Resources to Be Identified

As mentioned above, given the constraints of the economic climate at this time, not all of the funding sources are known for the projects in the Capital Plan. The Resources to Be Identified category amounts to \$86.0 million in the plan, or 9% of the total funding required. While it is possible that funds will be identified within this category, it is not clear at this time that this funding need will be met.

## USES OF FUNDS BY PROGRAM CATEGORY

The Capital Plan is divided into the following program categories: Academic/Research, Housing, Athletics/Student Activities, Academic Support, and Infrastructure.

The chart on the previous page shows these uses by academic category.

### Academic/Research

Academic/Research projects directly support Stanford's teaching and research mission and include buildings that have offices, classrooms and laboratories used by faculty, students and staff. The 17 Academic/Research projects in the plan amount to \$594.0 million, or 60% of the total plan.

### *Projects in Design and Construction:*

The following seven projects are currently in design and construction within the current three-year plan:

- The Varian 2 building, formerly listed as an Endstation Buildout project, will house Hansen Experimental Physics Laboratory (HEPL) and Astrophysics programs in 69,805 gsf located between the current Varian building and the Moore Materials Research building. This building is part of the SEMC initiative.

- The School of Medicine's Lucas Center Expansion will extend the existing MSLS/Lucas Building underground to accommodate innovative research with a new high-field magnet and Molecular Imaging Center. The project involves an addition of 20,520 gsf.
- The Kavli Institute for Particle Astrophysics and Cosmology is a 25,000 gsf state-of-the-art research facility being developed at SLAC.
- The Knoll Seismic Renovation is planned to upgrade this historic building (19,000 gsf) to meet current seismic requirements, address deferred maintenance and ADA requirements, and meet program needs for music performance and studio space in the Music Department.
- The Stanford-in-Washington project is a renovation and addition to the School of Humanities and Sciences' Washington, D.C. facility.
- The renovation of Building 500 will create a home for the Humanities and Sciences' Archaeology Center, as well as upgrading the building to current seismic, MEP, ADA, and life safety codes. Building 500 is one of the remaining unreinforced masonry (URM) buildings to be renovated on campus. In addition, a second floor with an additional 5,890 gsf will be created within the building.
- A new building for CSLI (the Center for the Study of Language and Information)-Media X and EPGY (the Education Program for Gifted Youth) is being planned adjacent to Ventura and Cordura Halls. The building (12,000 gsf) will house faculty, visitors, postdoctoral students, graduate students, and staff from both of these independent research center programs.

### *Forecasted Construction Projects:*

Additional Academic/Research projects planned for Trustee concept approval in the next three years include both new and renovated buildings and a major utilities project.

Science, Engineering and Medical Campus (SEMC) buildings forecasted include a new School of Medicine Information and Learning Environment building (SMILE) (120,000 gsf requested), a new Environment and Energy building (120,000 gsf requested), the School of Engineering Center (130,000 gsf requested), and a new Biology building (100,000 gsf requested). An extensive utilities project is required to support this initiative.

Other projects in the Medical School include seismic and infrastructure upgrades of the Grant, Lane, Edwards and Alway buildings (414,000 gsf), 95,000 gsf of renovations in these same buildings to accommodate the SMILE program needs, and the Blood Center, a 50,000 gsf project being developed off-campus in collaboration with the hospitals.

Other forecasted Academic/Research projects on campus include a new GSB classroom building (gsf to be determined), a renovation and upgrade of the Old Bookstore (the former Career Planning and Placement Center) for the School of Education (8,328 gsf), and a renovation and upgrade of the Old Anatomy building for the Art Department (gsf to be determined).

### **Housing**

Housing projects represent \$146 million, or 15% of total Capital Plan expenditures. These projects reflect the efforts of the university to provide more affordable housing for graduate students and to upgrade existing facilities for both graduate and undergraduate students. The conditions of the General Use Permit also require the university to build new housing as academic space is built. The Capital Improvement Program (CIP) is intended to address deferred maintenance, seismic upgrades, code compliance, and major programmatic improvements in all areas of the student housing system. Several CIP projects are anticipated in the coming years, although most of these projects fall below the \$3 million limit and are not included in this plan.

#### ***Projects in Design and Construction:***

The Law School Student Housing project is planned to provide up to 600 units of housing for law students (total gsf to be determined), located adjacent to the Law School academic campus. This housing facility is key to the integrated learning environment of the school, which is a hallmark of the school's identity.

#### ***Forecasted Construction Projects:***

Future housing projects include a Manzanita III Hall and Dining project, which will add 125 new undergraduate beds in addition to a new dining facility, as well as renovations to Roble and Crothers Halls.

### **Athletics/Student Activities**

The Athletics/Student Activities category covers those facilities that support campus athletics and recreation functions, and other non-academic resources/services for students. Projects supporting Athletics/Student

Activities represent \$105.4 million, or 11% of total Capital Plan expenditures.

#### ***Projects in Design and Construction***

The following three projects are in Design and Construction:

- The Maples Pavilion renovation will expand the existing facility by 18,200 new gsf and renovate the existing space in order to better meet the needs of the sports teams that use the facility and the fans that attend sports events. The building's systems, seismic, and code needs will be addressed as well.
- The new Arrillaga Family Recreation Center (74,796 gsf) will be located on the former site of the Encina Gymnasium. This facility is designed to house a variety of Stanford's recreation and club sports as well as an academic resource center, the Health Improvement Program and a sports medicine clinic.
- The new Graduate Community Center, located in Escondido Village and comprising 12,000 gsf, will become a focal point of graduate student life, housing social, academic, multipurpose and administrative spaces.

#### ***Forecasted Construction Projects:***

Additional projects planned in the near future for Athletics include the Maloney Field Bleachers project and a renovation of the Golf Clubhouse and related facilities. In the student activities area, the planned renovation of the Old Union, Clubhouse, and Nitery (90,486 gsf) will create additional student activity and support space.

### **Academic Support**

The Academic Support category consists of facilities that help support the academic mission of the university. This category generally includes administrative space, as well as facilities such as libraries and museums. Academic Support projects total \$6 million, or 1% of the plan.

#### ***Projects in Design and Construction***

There is one academic support project underway.

The Bakewell building (17,000 gsf), built in 1928, will be seismically renovated to house the Admission, Financial Aid, and Visitor Information Services areas.

#### ***Forecasted Construction Projects:***

There are no forecasted projects in this category.

## Infrastructure

Stanford's ongoing efforts to renew its infrastructure are reflected in a \$125.5 million budget (13%) in the Capital Plan. The majority of the infrastructure programs are for Parking Structures and Road Systems, Information Technology and Communication Systems, and the Capital Utility Programs (CUP). The remaining programs include GUP Mitigation and other infrastructure projects and programs, as described below. Note that the GUP mitigation and the Stanford Infrastructure Program are funded through construction project surcharges.

### *Sand Hill Road Widening and Related Improvements*

This infrastructure project is the last component of a series of projects required to accommodate the development of the western part of the campus.

The completion of the project will provide improved safety and circulation while relieving traffic congestion along the Sand Hill Road corridor and the approaches to the western campus.

### *Parking*

Approximately \$15 million will be spent on the new East Campus Parking Structure, which will provide approximately 1,000 parking spaces both to provide a net increase in parking for the Law School Housing project and to replace those spaces displaced by the new housing facility.

Parking is generally funded through a combination of funds from the Stanford Infrastructure Program and GUP Entitlement Fees. SIP provides funding for parking that has been displaced, and the GUP Entitlement Fees fund increases in the net number of parking spaces on campus. The maximum net increase in parking allowed under the 2000 GUP is 2,300 spaces, most of which are attributable to planned increases in on-campus student housing.

### *Information Technology & Communication Systems*

A total of \$30.2 million has been allocated for information systems applications, infrastructure development, and upgrades to networks and communication systems.

### *Capital Utility Program*

The three-year plan allocates a total of \$30 million for CUP projects. These projects aim to improve and enhance electrical, steam, water, chilled water, and wastewater utility systems. The program is driven by

four conditions: system expansion, system replacement, system controls and regulatory requirements.

### *GUP Mitigation Costs*

The three-year Capital Plan addresses capital expenditures for GUP mitigation. These planned expenditures represent the conditions of approval under the General Use Permit and Community Plan approved by Santa Clara County in December 2000. Expenditures planned to meet these conditions total \$16.3 million and relate to Campus Drive Widening, trail easements, childcare and water conservation. Funding for these expenditures will be generated by an internal fee. This fee will be levied on capital projects that increase the school's/department's current core campus space allocation.

### *Stanford Infrastructure Program (SIP)*

SIP consists of campus planning and transportation projects and programs proposed and developed for the improvement and general support of the university's academic community and physical plant. SIP expenditures are expected to total \$7.5 million over the next three years. SIP projects include the construction of small increments of additional parking, campus transit improvements, parking lot infrastructure improvements, site improvements, bicycle and pedestrian paths, lighting, and outdoor art.

### *Compliance and Other*

A total of \$4.3 million has been allocated toward the ongoing implementation of the East and West Campus Storm Drain Improvements program and ADA barrier removal.

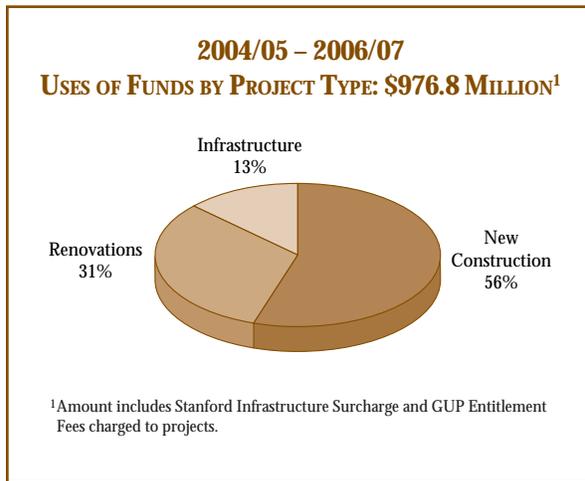
## USES OF FUNDS BY PROJECT TYPE

### **New Construction**

Of the 29 major construction projects, the three-year forecasted plan anticipates 15 new buildings. These projects account for \$544.3 million or 56% of the three-year plan, ranging in size from \$3.8 million to \$99.8 million. These buildings will support academic and research programs, as well as increasing student housing and athletics/student activities facilities.

### **Renovations**

As is illustrated in the chart on the next page, renovation projects in the Capital Plan represent \$307.1 million, or 31% of the total project costs over the three-year period. Three of the renovation projects (Building 500/510, Bakewell, and CPPC) represent



the final phase of the unreinforced masonry (URM) building seismic upgrades. The URM program has been a significant part of the Capital Plan since the 1989 Loma Prieta earthquake. The remaining projects include major renovations of some of Stanford's older buildings, including the Old Union.

### Infrastructure

Infrastructure projects and programs totaling \$125.5 million comprise the remaining 13% of the Capital Plan.

### OTHER STANFORD ENTITIES

In 2004/05, as has been true for the last two years, the Capital Planning process has included all Stanford entities. Due to their independent organizational structures and specific Board delegations, projects managed by the Stanford Management Company and Stanford Hospital and Clinics (SHC) have not been included in this Capital Plan/Budget. A brief description of these projects follows:

#### Stanford Management Company

**Faculty and Staff Housing** – The Stanford Management Company (SMC) continues to plan both rental and for-sale housing units for faculty and staff of the university over the next ten years.

**Stanford Research Park** – Although the local real estate market and economic environment have softened, the Research Park continues to be a desirable location for corporations. The Stanford Management Company recently completed an agreement with a major corporation to redevelop a 32 acre site. In addition, SMC is evaluating redeveloping sites on the edges of the Research Park for housing.

### Stanford Hospital and Clinics (SHC)

SHC has completed the Center for Cancer Treatment and Prevention/Ambulatory Care Pavilion, a 218,000 gsf project. In addition, the Lucile Packard Children's Hospital (LPCH) has commenced a significant interior renovation project to support current program needs. The School of Medicine, SHC, and LPCH also are engaged in a long-range planning effort that will outline and coordinate the space and program needs of the three entities over time.

### CAPITAL PLAN CONSTRAINTS

#### Affordability

The additional internal debt service costs expected at the completion of all projects commencing in the three-year forecasted plan (completion dates will range from 2004/05 to 2009/10) total \$15.1 million annually. Of this, \$7.4 million will be paid by unrestricted funds, \$6.1 million will be serviced by auxiliary or service center operations, and \$1.6 million will be paid by formula schools (the Graduate School of Business and the School of Medicine).

The additional operations, maintenance, and utilities (O&M) costs expected at the completion of all projects commencing in the three-year plan total \$12.9 million per year. Of this amount, \$7.5 million per year will be paid by unrestricted funds, \$1.8 million will be covered by auxiliary and service center operations, and the remaining \$3.6 million will be paid by the formula schools.

General funds of the university pay a portion of the debt service on capital projects, as well as the O&M costs. These capital-related costs compete directly with other academic program initiatives. The current forecast for the general funds portion of the Consolidated Budget for Operations includes these projected costs.

#### Debt Capacity

The university is currently in the process of raising \$150 million of tax-exempt debt. The proceeds will refinance \$93.6 million of long-term tax-exempt commercial paper outstanding and restore capacity to the \$150 million tax-exempt commercial paper program. Total university debt outstanding is projected to be \$1.35 billion at the end of 2003/04.

Once the \$150 million financing is completed, the university will have approximately \$343.4 million of capacity to finance capital projects including \$137 million of unused taxable commercial paper

capacity, \$150 million of unused tax-exempt commercial paper capacity and \$56.4 million of unexpended bond proceeds. An additional \$42 million is expected to become available through fiscal year-end 2004/05 from internal amortization on previous debt-funded projects.

We will require a total of \$233.7 million to finance:

- \$131.8 million to complete projects currently committed or under construction,
- \$63.3 million for forecasted projects commencing in 2004/05, and
- \$38.6 million for projects under \$3 million and financed equipment.

Additional funding is likely to be needed in 2004/05 to finance the Faculty Staff housing mortgage portfolio following a surge of mortgage refinancings that resulted in an \$11 million decline in the mortgage portfolio in 2002/03. In each of the four years prior to 2003, the mortgage portfolio grew by an average of \$35 million. Future growth in the portfolio is difficult to predict due to the uncertainty in local real estate prices and mortgage interest rates, both of which appear to be increasing.

Projects identified in the three-year Capital Plan commencing after 2004/05 will require an additional \$112 million in debt. It is important to note that these projects are not currently committed and will be evaluated in the context of debt capacity and GUP limitations. On a pro-forma basis, we expect to be in compliance with the university's debt policy at fiscal year-end 2004/05.

**Entitlements**

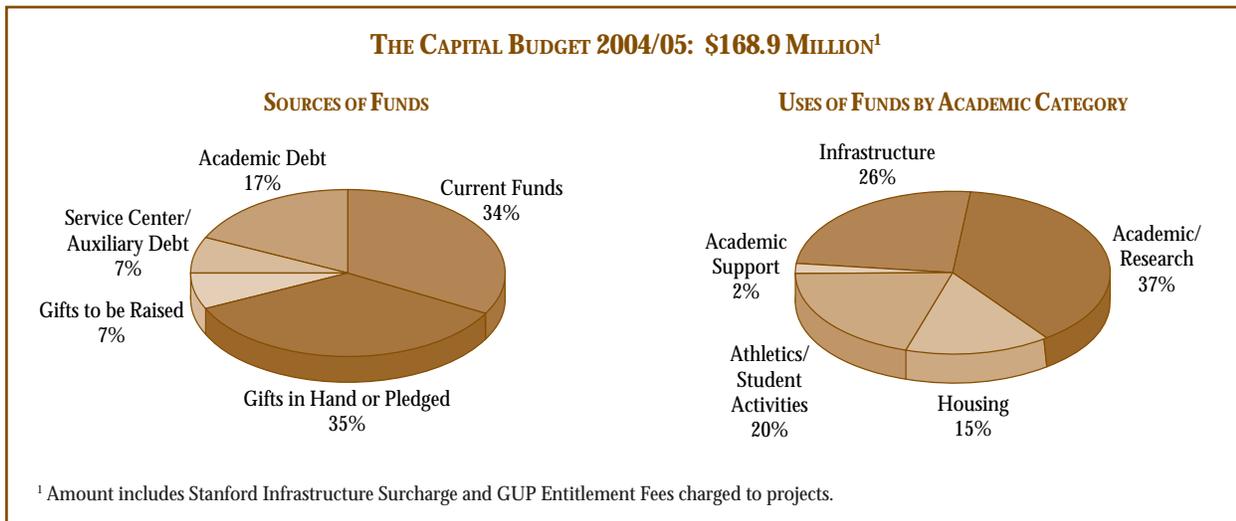
The Stanford campus comprises 8,180 acres, which fall within six jurisdictions. Of this total, 4,017 acres, including most of the central campus, are within unincorporated Santa Clara County.

In December 2000, Santa Clara County approved a General Use Permit that allows Stanford to construct up to 2,035,000 additional gsf of academic-related buildings on the core campus. The GUP also allows for the construction of up to 2,000 new student-housing units and over 1,000 units of housing for postdoctoral fellows, medical residents, faculty, and staff.

**Conditions of approval include:**

- The creation of an academic growth boundary to limit the buildable area to the core campus.
- The approval of a sustainable development study before new construction is developed beyond one million gsf.
- The construction of 605 units of housing for each 500,000 gsf of new academic building.

Given the stringent requirements imposed by the new GUP and the increasingly difficult entitlement environment, Stanford carefully manages the allocation of new growth. We originally projected that our GUP square footage allocation would be expended over 15 years – which would be at a rate of approximately 135,000 gsf per year. Funding constraints have slowed this GUP square footage projection; as of April 21, 2004, GUP square footage included in county building permits to date totaled approximately 73,000 gsf. Additional



projects approved by the Board of Trustees but not yet at the building permit stage amount to nearly 75,000 gsf. The three-year forecasted Capital Plan shows a projected usage of nearly 458,000 GUP square feet (which includes these already approved projects). This, of course, is a forecast that could change over time and that presumes funding sources will be available as forecasted.

## THE CAPITAL BUDGET, 2004/05

The 2004/05 Capital Budget represents capital expenditures for the upcoming fiscal year in the amount of \$168.9 million. Most of these expenditures reflect only a portion of the total costs of the capital projects listed, as most projects have a duration exceeding one year.

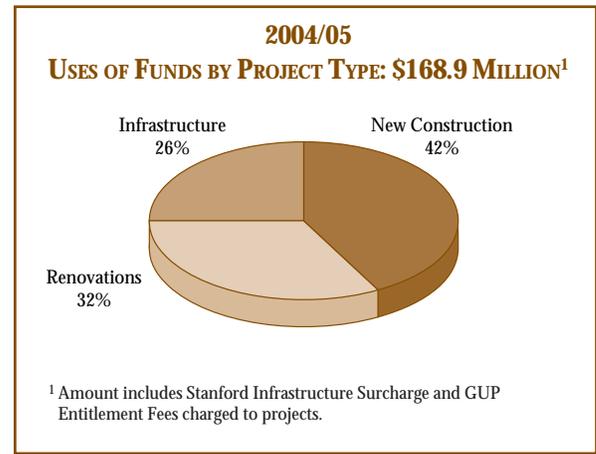
### SOURCES AND USES

A breakdown of the Capital Budget's sources and uses of funds is presented in the charts on the previous page. Gifts and Debt represent 42% and 24% of the budget, respectively. Current funds (i.e., existing university reserves and fund balances) represent the remaining 34% of the funding.

Of the total \$168.9 million Capital Budget, 37% will be spent on Academic/Research projects. Infrastructure, Athletics/Student Activities and Housing projects will represent 26%, 20%, and 15% of the total budget respectively. Academic Support projects represent the remaining 2%. An estimated 42% of the budget will be spent on new construction projects. The majority of these expenditures are to fund the Law Student Housing, Varian 2, and Arrillaga Family Recreation Center buildings. Another 32% will be spent on renovation projects such as the Maples Pavilion renovation. The remaining 26% will be spent on infrastructure projects and programs, including the Sand Hill Road Widening project. Other infrastructure initiatives in 2004/05 include Information Technology and CUP programs.

### CAPITAL BUDGET IMPACT ON 2004/05 OPERATIONS

The 2004/05 Projected Consolidated Budget for Operations includes incremental debt service and O&M expenses for projects completing in 2004/05. Additionally, this budget includes an incremental increase in debt and O&M expenses for projects completing in 2003/04 that were operational for less than 12 months in 2003/04.



As noted in Section 1, Stanford borrows funds from capital markets and lends the proceeds to fund capital projects and programs. These capital projects and programs repay the funds plus interest over the remaining life of the projects. These payments are known as internal debt service. Stanford is responsible for accumulating these funds for repayment to the external lender. The interest rate for internal debt service is calculated annually as a blended interest rate of all interest expense and bond issuance costs. The projected blended rate for 2004/05 is 5.4%.

The projected incremental internal debt service funded by unrestricted funds in 2004/05 is \$278,803. This amount represents the additional debt service on five capital projects and programs. This additional debt service brings the total annual internal debt service borne by the unrestricted university budget to \$34.3 million, equal to approximately 4% of unrestricted revenues.

Total internal debt service, including auxiliaries and service centers, will increase from \$110.1 million to \$112.5 million, an increment of \$2.4 million.

Additional O&M costs of approximately \$192,000 will be funded by general funds. The Lucas Center, Maples Pavilion renovation and the Graduate Community Center will add approximately \$600,000 and will be funded through auxiliary and Medical School operations.

## CAPITAL PLAN PROJECT DETAIL

Tables showing the details for projects in Design and Construction, Forecasted Projects, and Infrastructure Projects and Programs follow on the next three pages.

**2004/05-2006/07 CAPITAL PLAN  
PROJECTS IN DESIGN & CONSTRUCTION**  
[IN MILLIONS OF DOLLARS]

	School/ Department	Fiscal Year Project Schedule	Estimated Project Cost <sup>1</sup>	Capital Budget 2004/05	Project Funding Source				Annual Continuing Costs			
					Current Funds <sup>2</sup>	Gifts		University Debt		Resources To Be Identified <sup>3</sup>	Debt Service	Operations Maintenance & Utilities
						Gifts in Hand or Pledged	To Be Raised	Service Center/ Auxiliary Debt	Academic Debt			
Law Student Housing (600 units) and common space New Building (\$90.0)	SLS	2003-06	99.8	24.0	18.4	40.0	19.8	21.6		1.5	1.0	
Historic Building Relocations (\$4.1) Utilities (\$3.9)												
Law School/Campus-Parking & Service Access (\$1.8) Varian 2 (formerly Endstation Buildout) New Building (\$32.0)	SEMC <sup>(4)</sup>	2004-07	34.2	6.8					24.0	1.7	0.8	
Endstation III Buildout (\$1.5) HEPL Demolition (\$0.7)												
Maples Pavilion Renovation	DAPER	2003-05	29.0	17.4		29.0					0.3	
Arrillaga Family Recreation Center	DAPER	2003-05	23.0	13.8		18.0	5.0				0.4	
Lucas Center Expansion	SOM	2003-05	22.8	5.7		22.8					0.2	
Kavli Institute for Particle Astrophysics & Cosmology	SLAC	2003-05	10.0	5.5		8.5	1.5				0.1	
Knoll Seismic Renovation	H&S	2003-05	9.8	5.9		1.0			1.3	0.1		
Stanford-in-Washington	H&S	2004-07	7.6	1.5		7.6					0.1	
Bakewell Seismic Renovation	PRES/PROV	2004-05	6.0	4.2					6.0	0.5	0.1	
Building 500/510 Archaeology	H&S	2003-05	5.8	2.9					5.8	0.5	0.1	
CSLI-Media X/EPGY Annex Building	DOR	2003-05	5.0	1.2		3.8	1.2				0.1	
Graduate Student Community Center	VPSA	2003-05	3.8	0.9		2.8			1.0	0.1	0.1	
Subtotal - Projects in Design & Construction			256.7	89.8	48.7	110.6	27.5	21.6	38.1	4.4	3.2	

<sup>1</sup> Costs reflect Board of Trustees approvals.  
<sup>2</sup> Includes funds from university and school reserves, and current GUP and SIP funds.  
<sup>3</sup> Anticipated funding for this category is through a combination of gift raising and school, department and university reserves, and GUP and SIP funds yet to be identified.  
<sup>4</sup> SEMC denotes Science Engineering Medical Center projects, a series of buildings being planned over the next several years.  
 Funding for these projects is being planned as a combination of debt, reserves, and fundraising; detailed breakdowns are not yet listed.

**2004/05-2006/07 CAPITAL PLAN  
FORECASTED CONSTRUCTION PROJECTS**

[IN MILLIONS OF DOLLARS]

	School/ Department	Fiscal Year Project Schedule	Estimated Project Cost <sup>1</sup>	Capital Budget 2004/05	Project Funding Source					Annual Continuing Costs		
					Current Funds <sup>2</sup>	Gifts		University Debt		Resources To Be Identified <sup>3</sup>	Debt Service	Operations Maintenance & Utilities
						Hand or Pledged	To Be Raised	Service Center/ Auxiliary Debt	Academic Debt			
Stone Buildings Renovation SMILE Backfill (\$67.0) Infrastructure (\$31.0)	SOM	2005-09	117.3	1.2			67.0	19.3		31.0	1.6	
Structural/Seismic Upgrades (\$19.3) Environment and Energy Building School of Medicine Information and Learning Environment (SMILE)	SEMC <sup>4</sup>	2005-08	72.2	3.6			72.2					2.3
Art to the Old Anatomy Building	SEMC <sup>4</sup>	2005-08	63.5	2.2			63.5					2.6
Old Union/Clubhouse/Building 590	H&S	2005-07	51.5	12.6			31.5					1.0
GSB Classroom Building	VPSA	2005-07	37.6	1.9			20.0					1.7
Manzanita III Hall & Dining (125 units)	GSB	2005-07	36.8	1.8			36.8			17.6		0.8
Blood Center (Hillview Avenue)	R&DE	2005-07	20.0	0.9		12.0	20.0					0.3
SEMC Regional Utilities	SOM	2005	12.0	8.7			10.0					
Maloney Field Bleachers	SEMC <sup>4</sup>	2005-06	10.0	2.5			4.0					
Old Bookstore Renovation (formerly CPPC Renovation)	DAPER	2005-06	4.0	0.2			2.0					
2004/05 Subtotal	SUSE	2005-07	4.0	0.2		1.6	0.4					
School of Engineering Center (SOF Center)			428.8	35.7		13.6	305.3			48.6	3.3	7.0
Biology Building	SEMC <sup>4</sup>	2006-10	70.3				70.3					1.7
Golf Club House, Pro Shop, Cart Barn Renovation	SEMC <sup>4</sup>	2006-10	61.4				61.4					0.7
Roble Hall Renovation (2005/06)	DAPER	2006-07	8.0				7.0					0.1
2005/06 Subtotal	R&DE	2006	5.3				5.3		5.3		0.5	
Crothers and Crothers Memorial Roble Hall Renovation (2006/07)			145.0				138.7		5.3		0.5	2.5
2006/07 Subtotal	R&DE	2007	15.2						5.7		0.5	
Subtotal - Forecasted Projects	R&DE	2007	20.9						5.7		0.5	
SUBTOTAL - CONSTRUCTION PLAN			594.6	35.7		13.6	443.9		11.0	39.3	4.2	9.5
			851.3	125.6		62.3	471.4		32.6	77.4	8.6	12.7

<sup>1</sup> Estimated project costs are based on 2003 cost benchmarks, with some exceptions: SOM has provided Stone infrastructure and seismic estimates, housing estimates are from R&DE, and athletics estimates are from DAPER.

<sup>2</sup> Includes funds from university and school reserves, and current GUP and SIP funds.

<sup>3</sup> Anticipated funding for this category is through a combination of gift raising and school, department and university reserves, and GUP and SIP funds yet to be identified.

<sup>4</sup> SEMC denotes Science Engineering Medical Center projects, a series of buildings being planned over the next several years.

Funding for these projects is being planned as a combination of debt, reserves, and fundraising; detailed breakdowns are not yet listed.

**2004/05-2006/07 CAPITAL PLAN  
INFRASTRUCTURE PROJECTS & PROGRAMS**

[IN MILLIONS OF DOLLARS]

	School/ Department	Project Schedule	Estimated Project Cost	Capital Budget 2004/05	Project Funding Source				Annual Continuing Costs			
					Current Funds <sup>1</sup>	Gifts in Hand or Pledged	To Be Raised	University Debt		Resources To Be Identified <sup>2</sup>	Debt Service	Operations Maintenance & Utilities
								Service Center/ Auxiliary Debt	Academic Debt			
Parking Structures and Road Systems												
Sand Hill Road Widening & Related Improvements	SMC-FSH	2004-06	22.2	11.1								
East Campus Parking Structure	FAC OPS	2005-06	15.0	3.0				22.2		12.0	2.2	0.2
Subtotal-Parking Structures and Road Systems			37.2	14.1				22.2		12.0	2.2	0.2
Information Technology & Communications Systems												
Administrative Systems	ITSS	2005-07	20.0	6.8								
Communications and Networking Systems	ITSS	2005-07	10.3	2.1				5.3	4.9		1.0	
Subtotal-Systems			30.2	8.9				5.3	4.9		1.0	
Capital Utilities Program (CUP)												
System Expansion	FAC OPS	2005-07	15.3	5.5				15.3			1.5	
System Replacement	FAC OPS	2005-07	11.9	3.6				11.9			1.2	
Controls	FAC OPS	2005-07	1.9	0.7				1.9			0.2	
Regulatory	FAC OPS	2005-07	0.9	0.2				0.9			0.1	
Subtotal-CUP			30.0	10.0				30.0			3.0	
GUP Mitigation Costs												
Campus Drive Widening	FAC OPS	2005-07	6.6	2.2				6.6				
Trail Easements	FAC OPS	2005-06	6.0	3.0				6.0				
Childcare	FAC OPS	2005-07	2.8	0.9				2.8				
Water Conservation System	FAC OPS	2005-07	1.0	0.3				1.0				
Subtotal-GUP Mitigation			16.3	6.4				16.3				
Stanford Infrastructure Program (SIP) <sup>3</sup>	FAC OPS-UA/PO	2005-07	7.5	2.5				7.5				
Compliance and Other												
East & West Campus Storm Drains	FAC OPS	2005-07	3.0	1.2							0.3	
ADA Barrier Removal	FAC OPS	2005-07	1.3	0.3								
Subtotal-Compliance and Other			4.3	1.5							0.3	
Subtotal - Infrastructure Projects & Programs			125.5	43.4				35.3	30.1	12.0	6.5	0.2

<sup>1</sup> Includes funds from university and school reserves, and current GUP and SIP funds.

<sup>2</sup> Anticipated funding for this category is through a combination of gift raising and school, department and university reserves, and GUP and SIP funds yet to be identified.

<sup>3</sup> Parking Structures are listed separately.