# STANFORD UNIVERSITY BUDGET PLAN 2006/07

This Budget Plan was approved by the Stanford University Board of Trustees June 15, 2006. Distribution of this document is made in the interest of greater understanding of the University's Budget and the processes through which it is annually determined.

This publication can also be found at: http://www.stanford.edu/dept/pres-provost/budget/plans/plan07.html



## SECTION 3 CAPITAL PLAN AND BUDGET

his section outlines Stanford's 2006/07–2008/09 Capital Plan and 2006/07 Capital Budget. The Capital Plan forecasts \$2.2 billion in construction and infrastructure projects and programs that are currently underway or planned to begin over the next three years. The Capital Budget represents \$357.6 million of cash outlays and associated funding of the Capital Plan for the next year.

## **CAPITAL PLANNING OVERVIEW**

## **CAPITAL PLANNING AT STANFORD**

Stanford's Capital Plan is a three-year rolling plan with budget commitments made for the first year, and then only for projects with fully identified and approved funding. Cash flow expenditure forecasts for these projects, however, extend well beyond the three-year period. Budget impacts for operations, maintenance, and debt service commence at construction completion. The plan includes tables forecasting both cash flow and budget impacts by year, demonstrating the longer than three-year impact of the plan.

The Capital Plan is set in the context of a ten-year capital forecast for the university. The details of this 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 and funding sources that may emerge over the long-term horizon. Additionally, plans inevitably change over time as some projects prove more feasible than others given the fact that funding realities and academic priorities evolve.

A major issue affecting the Capital Plan is the uncertainty in construction markets in the areas of materials and contractor services. Escalation over the last year has proven to be a significant risk to project budgets, particularly in the area of subcontractor labor. We also expect to see claims of escalation due to hurricanes Katrina, Rita, and Wilma, specifically related to materials such as petroleum based products (asphalt, roofing), modulars (for surge), and lumber. According to contractors and industry experts in construction cost estimating, we can expect to see escalation range from 6% - 10% over the next year. To mitigate this risk, many of the Capital Plan's large project budgets carry a specific line for near-term escalation of 8% per year. This will likely increase the project cost per square foot for many projects compared with historical trends.

This year's Capital Plan has grown to \$2.2 billion, up from \$1.3 billion in the previous year. As we describe below, this growth is due to the inclusion of major strategic initiatives. Consistent with prior years, several projects show large portions of their funding sources as Gifts to Be Raised. The Office of Development has determined that these are feasible fundraising plans, although the timeframes by which they are achieved could change.

## **MAJOR STRATEGIC INITIATIVES**

The following are the major strategic initiatives included in this year's Capital Plan.

## **PROJECTS**

- Science, Engineering, and Medical Campus (SEMC)

   now shown in the plan with seven of the eight buildings totaling \$803.6 million (Astrophysics is excluded as it will be completed in 2005/06);
- Graduate School of Business new campus and parking structure (\$275 million);
- Redwood City campus redevelopment (\$180 million);
- Performing Arts Center (\$98.5 million);
- Panama Mall renovations (\$72.2 million); and
- Undergraduate Housing and Dining Master plan
   Phase I (\$67 million).

## PROGRAMS

- Annual Investment in Plant Assets Maintenance (\$93.7 million); and
- Building Energy Retrofit Program (\$15 million).

These initiatives are described below.

## **P**ROJECTS

## Science, Engineering, and Medical Campus (SEMC)

A significant part of the Capital Plan is the SEMC. This initiative consists of eight new buildings to be designed and constructed over the next decade. The buildings include Astrophysics (which will be completed in summer 2006); Biology; the School of Medicine Learning and Knowledge Center (LKC); the Stanford Institutes of Medicine #1 (SIM #1); and four buildings to be located in a new Science and Engineering Quad (SEQ 2): Environment and Energy (E&E), the School of Engineering Center (SOE Center), the Ginzton Laboratory replacement, and Bioengineering/Chemical Engineering.

This year's Capital Plan includes the costs of seven of the eight SEMC buildings, together with associated connective elements and demolition projects. It also includes budget line items for escalation and contingency risks. SEMC costs included in the Plan are \$803.6 million, or 36% of the total plan expenditures.

The following table summarizes the entire SEMC initiative, including Astrophysics. The initiative is heavily dependent upon a successful fundraising campaign. The funding structure for the SEMC initiative has been designed to meet the overall needs of the projects as a group. This funding plan will likely be modified to reflect actual fundraising results. The permanent debt budgeted for the SEMC initiative, excluding Astrophysics, is \$142.1 million; current funds, fundraising, and federal, state, and grant funds will support the remainder of the initiative. Depending on the results of the fundraising efforts and schedule of pledge payments, short term debt may be required to backstop gifts.

The university has developed a master plan for SEQ 2 which addresses site limits, massing, connective elements, fenestration, and color and material palettes. The plan illustrates how architectural compatibility and overall campus consistency will be achieved in this important new campus quadrangle. The plan also prescribes certain requirements for the future designers

#### **SEMC PROJECT SUMMARY**

[IN MILLIONS OF DOLLARS]

Project	Completion	Cost
SEQ 2 Buildings		
E&E	2008	113.8
SOE Center	2009	61.7
Ginzton Replacement	2009	54.5
Bioengineering/		
Chemical Engineering	2011	114.8
Subtotal		344.8
School of Medicine Building	<u>s</u>	
LKC	2009	85.9
SIM #1	2010	162.1
Subtotal		248.0
Other Buildings		
Astrophysics	2006	34.6
Biology	2010	61.5
Subtotal		96.1
Connective Elements & Utili	ties	
SoM/Biology	2011	51.2
SEQ 2	2011	26.1
Subtotal		77.3
Demolitions	2011	7.4
Escalation risk		40.4
Contingency risk		24.2
Total		838.2

of each individual building, outlines the connective elements that define the quad, and establishes a cost and phasing strategy that will enable Stanford to achieve this vision over time. A variety of building demolitions will be required to achieve the plan, and are included in the overall costs.

The priorities for the SEQ 2 master plan were established by an ad hoc committee of the Board of Trustees. These include: accommodating the functional requirements of the program; achieving a balance between cost and aesthetics; achieving a high degree of consistency among the buildings; and pursuing a sustainable design.

In addition, Stanford has developed a site and building plan for the School of Medicine (SoM). The plan's primary purpose is to establish a sense of order and identity for the school in addition to locating two new buildings. It addresses existing circulation, service, and delivery challenges and identifies future building sites.

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## Graduate School of Business – New Campus and Parking Structure

This year's Capital Plan includes, for the first time, the vision for a new campus for the Graduate School of Business (GSB), planned for Serra Street across from the Schwab Center. The plan for this campus is to create a dynamic living/learning environment by locating the entire GSB program on a single site.

The new campus, estimated at \$275 million (12% of the plan) including 340,000 gross square feet (gsf) of new buildings as well as underground parking for approximately 1,000 spaces, is in early design. An ad hoc committee has been working with the school to develop the design strategies and academic priorities for the new campus. The campus will reflect the mission and culture of the GSB by developing spaces that foster collaboration and team based education; providing multi-disciplinary educational and research opportunities within Stanford and the corporate community; stimulating entrepreneurship; and supporting Executive Education. The campus design will incorporate the spirit of Stanford architecture and create a sense of place for the school.

Detailed design development will take place on this important new campus initiative. The plan and associated issues will be presented to the Board of Trustees, leading to a concept approval request in the next year.

#### Redwood City Campus Redevelopment

Due to GUP limitations on core campus development, the university has studied options for relocating administrative programs to off-campus sites, thus reserving core campus space for Stanford's highest academic priorities and objectives. The timing of this effort is important and is viewed as an institutional priority.

In September of 2005, the university acquired the Mid-Point Technology Park (Mid-Point) at a cost of \$78.5 million. Mid-Point is in Redwood City, approximately seven miles from the Stanford campus. The site includes 536,569 gsf, which encompasses eight buildings, on 29.4 acres. In addition, the Stanford Hospital and Clinics (SHC) has acquired an adjacent parcel that includes approximately 360,000 gsf, encompassing four buildings on eleven acres, to be developed for outpatient clinics.

Redevelopment of this site will be required and will commence over the next 3-5 years. We are currently in the early phases of campus and site planning, program scoping, and conversations with Redwood City. There will be many issues to be addressed, including the vision for this new campus, the program for the campus buildings, traffic, environmental and other community impacts, costs of site redevelopment, and phases of redevelopment over time. The \$180 million redevelopment cost estimate for the university portion of the site (8% of the Capital Plan) is based on an early estimate for a first phase of development which might include about 300,000 gsf of office space, a parking garage, a community center building, and connective elements.

Redevelopment planning for this project will continue in 2006, and updates will be provided in next year's Capital Plan.

## **Performing Arts Center**

As part of a major arts initiative, the university plans to build a new Performing Arts Center estimated at \$98.5 million (4% of the Capital Plan) and encompassing 100,000 gsf. The center is envisioned to contain two performance venues designed to the latest technical and acoustical standards, capable of hosting the finest performing arts groups and individual performers from around the world. The center will be located near Frost Amphitheater, with convenient parking for patrons of its vibrant cultural and intellectual programs.

Early programming is underway for the center, and an architectural competition is likely to be undertaken in order to achieve a distinctive and elegant building design. The academic arts departments — Music, Drama/Dance, and Art/Art History (which include Film and Media Studies) — as well as Stanford's Lively Arts program, the Cantor Art Center, Stanford Events, and the Stanford Institute for Creativity and the Arts (SICA) are working collaboratively to develop the program, vision, and design for the new center.

#### Panama Mall Master Plan

The School of Engineering's Panama Mall master plan (\$72.2 million and 3% of the Capital Plan) appears for the first time in the plan this year. This plan is related to the construction of the new School of Engineering Center (described in the SEMC section above) and has been developed to meet the needs of engineering departments located on Panama Mall. The project will renovate, update, and add to program spaces within the school in order to provide 21st century teaching and research facilities.

The plan includes the following:

- Renovation of the Durand Building for Aeronautics and Astronautics and Materials Science and Engineering;
- Renovation of McCullough and Moore Halls for existing and future Geballe Laboratory for Advanced Materials faculty;
- A replacement of Building 630 for Mechanical Engineering; and
- Renovation of the Peterson Building to house the new Hasso Plattner Institute of Design and Mechanical Engineering's Design Division which will be displaced from Terman Engineering Center (scheduled to be demolished).

The plan will also examine how to better link the buildings in the Panama Mall area by using connective elements, creating improved outdoor spaces, and linking the spaces to one another. Details of the plan, particularly related to cost and timing, will be developed over the next year.

## Undergraduate Housing and Dining Master Plan - Phase 1

The key goals of the Undergraduate Housing and Dining Master Plan Phase 1 initiative include creating additional undergraduate beds, providing quality program spaces, and enhancing the spirit of the undergraduate community. Preliminary studies include a renovation of Crothers/ Crothers Memorial, construction of a new east campus dorm housing 125 net additional beds and associated common space (previously known as Manzanita III), and construction of a new dining facility that ultimately could serve Toyon Hall, Crothers/Crothers Memorial and the new east campus dorm. A resident fellow unit as well as two graduate student living quarters are planned to provide program leadership for the new undergraduate facility. On the Row, the Green dorm (50 net new beds) will provide additional undergraduate housing as well. The proposed plan also includes the opportunity to develop the space between Encina Commons and Crothers/Crothers Memorial as a quad that could serve as the hub for this undergraduate community. The anticipated project cost for this initiative is \$67 million. Additional details about this plan will be forthcoming as planning proceeds.

## PROGRAMS

#### Annual Investment in Plant Assets

While the majority of this Capital Plan and Budget section focuses on capital projects, it is important also to address the long term adequacy of the investment in Stanford's physical plant. The central questions from a fiduciary and management perspective are:

- (1) "Are we investing enough capital to preserve and optimize the existing facilities?"
- (2) "Do we understand the level of investment required to renovate buildings and infrastructure that have reached the end of their useful lives?"

Over the past several years we have developed answers to those questions that are both credible and comforting. We have a model that allows a good understanding of the investments required, and assuming continued investment at historical levels, the plant will be adequately supported. (Note: last year's Capital Plan included New Development in this program. We have refined this analysis to include existing plant only.)

With annual updates to tools capable of assessing the condition of both Stanford's facilities and its infrastructure systems, we continue to assess the university's level of deferred maintenance and projected planned maintenance based on the lives of building and infrastructure subsystems. Additionally, in order to address the need for program changes or code upgrades, the analysis continues to include plans for long-term facilities renovation.

As a result, the Annual Investment in Plant Assets analysis currently includes average annual financial projections (in 2005/06 dollars) in the following two areas:

- MAINTENANCE both deferred and planned replacement of facilities subsystems (e.g. roofing, HVAC equipment/controls, electrical equipment, interior finishes); and
- RENOVATION the complete renovation of facilities, addressing both program and code upgrades, which are not included in Maintenance.

#### Maintenance

The Maintenance projection is based on the life cycle planning method. The key concept here is that if life expectancies of facilities subsystems are known, then maintenance schedules can be predicted. In 2003/04 the university implemented a database including all campus buildings and infrastructure subsystems, assigned lives to these subsystems, and projected replacement costs when these lives ended. The result of this implementation was a Maintenance database that assesses deferred maintenance and forecasts planned maintenance for fifty years.

The Maintenance database is updated annually by resetting the clock on subsystem lives that were replaced during the previous year and reassessing the remaining lives of subsystems through physical inspection by facilities managers. The updated results, looking forward ten years (a time horizon consistent with long term capital planning), is an average of \$45.9 million in maintenance costs per year.

## Renovation

Forecasting the need to renovate buildings that are at the end of their program or physical life continues to be more challenging and subjective than the Maintenance analysis. For every campus building, the Renovation analysis identified the date of original construction, building type (e.g. lab, housing, classroom), expected life, renovation costs (based on current benchmarks) and practical realities such as the preservation of historical buildings. Given the longevity of Stanford's buildings, the analysis was based on a ninety-year horizon. It forecasts an average of \$76.1 million in facilities renovation costs annually over the next ninety years. Projected demolitions reduced the forecasted renovation costs. Major renovations were treated as replacements, resetting the Maintenance and Renovation age clocks to zero.

Although the analysis was performed on a universitywide basis, it was segregated into the following areas:

- Nonformula schools and administrative units (Nonformula/Admin) (8,123,784 gsf)
- Residential and Dining Enterprises (R&DE) (4,196,744 gsf)
- Formula Schools (School of Medicine, Graduate School of Business) (1,642,073 gsf)
- Department of Athletics, Physical Education, and Recreation (DAPER) (428,199 gsf)
- Utilities distribution and generation (Utilities) (Infrastructure)
- Roads, landscaping, and hardscape (Roads) (Infrastructure)

The financial responsibilities and funding sources of these areas are as follows:

- Nonformula/Admin Shared between general funds and individual schools and departments
- R&DE, Formula Schools, and DAPER Responsibility of the individual units
- Utilities Capital Utilities Program (CUP) service center
- Roads General funds and the Stanford Infrastructure Program (SIP)

General funds and reserves may be used to fund projects directly or to fund debt service on debt-funded projects.

The following table summarizes the total Annual Investment in Plant Assets forecasted by area:

## ANNUAL INVESTMENT IN PLANT ASSETS [IN MILLIONS OF DOLLARS]

		Average Annual
Maintenance	Renovation	Investment
n 19.1	40.7	59.8
12.8	10.0	22.8
4.0	16.2	20.2
1.3	3.9	5.2
7.1	5.3	12.4
1.6		1.6
45.9	76.1	122.0
	Maintenance n 19.1 12.8 4.0 1.3 7.1 1.6 45.9	Maintenance         Renovation           n         19.1         40.7           12.8         10.0           4.0         16.2           1.3         3.9           7.1         5.3           1.6         45.9

## Funding

#### Historical Funding

Over the past ten years the university has invested an average of \$139.5 million per year (escalated to 2005/06 dollars) in capital maintenance and renovation projects. The following table shows the funding sources for this investment:

## HISTORICAL ANNUAL FUNDING BY SOURCE [IN MILLIONS OF DOLLARS]

Annual Average Percent Debt 64.5 46.2% Gifts 19.8 14.2% 46.6 33.4% Reserves 8.6 6.2% Other (e.g., government grants, FEMA) Total 139.5 100.0%

Though historical trends may not be indicative of the future, particularly with the Loma Prieta Earthquake influencing both the investment timing and the funding (e.g. gift raising and FEMA) in the past ten years, it is worth noting that overall the average annual investment needs are similar to the past.

Applying these historical funding trends to the projected needs of \$122.0 million results in the following:

## PROJECTED ANNUAL FUNDING BY SOURCE [IN MILLIONS OF DOLLARS]

		Annual
	Average	Percent
Debt	56.4	46.2%
Gifts	17.3	14.2%
Reserves	40.7	33.4%
Other (e.g., government grants, FEMA)	7.6	6.2%
Total	122.0	100.0%

The university's aggregate incremental debt capacity is projected at \$107 million per year, (assuming a 9.25% MEP return, a 5.0% payout, and a 20% leverage ratio) which is 90% above the projected trend of \$56.4 million. Gift raising for facilities remains a high priority. Gift raising has historically been more successful for new academic buildings and more challenging for housing and renovation projects. Reserves from schools, departments, general funds, facilities reserves, and President's Funds have contributed to capital projects. To a lesser extent, this is also true of funds from the National Institutes of Health, the National Science Foundation, and the Howard Hughes Medical Institute.

## General Funds Maintenance Funding

The Nonformula/Admin and Roads areas rely primarily on general funds. Total general funds contributions for these two areas were increased by \$3 million over the past two years and another \$1.3 million in 2006/07. Of the \$19.1 million in Nonformula/Admin maintenance needs, \$6.6 million represents interior finishes and built-in equipment needs that are funded directly by the nonformula schools and administrative units. General funds contribute \$10.3 million, leaving a funding gap of \$2.2 million. Of the \$1.6 million in Roads maintenance needs, \$350,000 is funded by the SIP and \$550,000 is funded by general funds. The remaining funding gap is \$700,000.

## Conclusion

Stanford's significant capital facilities investments in the 1990s have addressed most of the deferred maintenance on campus. The maintenance model indicates a modest budgetary shortfall, which will be funded over the next few years. The various areas within Stanford face different and sometimes difficult challenges in funding adequate plant investment.

Stanford will continue to increase funding to maintain the quality of facilities and accommodate program growth. This additional funding will likely come from general funds (for maintenance), school and department unrestricted reserves, debt allocations (particularly for areas that can service debt, such as formula schools and service centers), and a continued facilities emphasis as a core element of Stanford's comprehensive gift raising campaign.

## **BUILDING ENERGY RETROFIT PROGRAM**

Stanford's twelve largest energy using buildings have been selected for energy consumption reduction projects. These twelve laboratory buildings represent over \$15 million of energy expense per year, or nearly 25% of the total campus energy expense. Improvements in heating, ventilation, and air-conditioning (HVAC) technology have made it practical to retrofit these older lab buildings from constant volume air systems to variable air systems (the current standard) while maintaining occupant comfort and safety. Other projects include lighting retrofits, motor conversions, and control upgrades. The estimated energy savings is over \$4 million per year.

## THE CAPITAL PLAN, 2006/07 - 2008/09

Stanford's central campus, including the Medical School but excluding the hospitals, has more than 670 major buildings providing approximately fourteen million gsf of physical space. The physical plant has a historical cost of \$4.2 billion and an estimated replacement cost in excess of \$6 billion.

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

Expenditures in the three-year 2006/07–2008/09 Capital Plan, which includes thirty major construction projects in various stages of development and numerous infrastructure projects and programs, total \$2.2 billion, an increase from last year's \$1.3 billion Capital Plan. The table below provides a comparison of the last three Capital Plans.

### BUDGET PLAN YEAR

[IN MILLIONS OF DOLLA	ARS]		
	2004/05	2005/06	2006/07
Design/			
Construction	256.7	275.1	1,083.4
Forecasted	594.6	852.5	930.2
Infrastructure	125.5	87.4	211.1
Mid-Point Campus	l		
Acquisition		86.0	
Total	976.8	1,301.0	2,224.7

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

As shown in the above table, Design and Construction costs have increased by \$808.3 million in this year's plan. This is largely the result of the SEMC group of projects moving from the Forecasted category into Design and Construction (these projects total \$803.6 million). Additional projects have moved into this category, including the LKC renovation (\$42 million), 1050 Arastradero (\$20.2 million), and Roble Hall renovation (\$18 million). Projects that will be completed and will have rolled off the plan include Astrophysics (\$34.6 million), Kavli Institute (\$10.7 million), and Barnum Family Center (\$5.8 million).

#### **Forecasted Projects**

Forecasted costs have increased by \$77.7 million since last year. New projects that have been added to the plan include the GSB new campus (\$275 million), Redwood City campus redevelopment (\$180 million), Performing Arts Center (\$98.5 million), Panama Mall renovations (\$72.2 million), Cummings Replacement (\$31 million), and the SIEPR building (\$18.5 million). The total cost of these new projects amounts to \$675.2 million; this total has been offset by the SEMC projects (listed as \$563.5 million in last year's plan) moving into the Design and Construction portion of the plan, together with other more modest changes.

#### **Infrastructure Projects**

Infrastructure costs have increased by \$123.7 million. This increase is due mostly to the Investment in Plant Assets program (\$93.7 million), a new building energy retrofit program (\$15 million), and costs of the trails construction (\$20.1 million).

#### Redwood City Campus

The acquisition of Mid-Point was included in the 2005/06 Capital Plan, and the redevelopment of the site is included in the current plan.

#### **Overall Summary**

A summary table of the 2006/07-2008/09 three-year Capital Plan appears on the next page. As mentioned previously, the 2006/07-2008/09 Capital Plan has grown significantly from the 2005/06-2007/08 Capital Plan, due to the inclusion of major strategic initiatives described above. It is important to understand that, while these new initiatives appear in the three-year Capital Plan, their related expenditures, cash flows, and budget impacts extend well beyond the three-year period.

To differentiate between the projected value of the three-year capital plan and the forecasted spending to complete the projects and programs, a new table, Capital Plan Cash Flows, has been included along with the Capital Plan Summary. This table forecasts the expenditure outflow of the Capital Plan based on project and program schedules. Although the Capital Plan includes projects and programs in design or construction or anticipated to receive concept approval in the next three years, related cash expenditures are anticipated to be spent over a period extending beyond 2011/12.

Operating (including utilities), maintenance, and debt service costs will impact the budget once the construction is substantially complete. Although the Capital Plan summary shows the full budget impact of all completed projects, it is important to note that this impact aligns with the project completion schedule and will be absorbed by the budget over a period in excess of six years (beyond 2011/12). A new table, Capital Plan Impact on Budget, has been included along with the Capital Plan Summary and Capital Plan Cash Flows to forecast the budget impact by area of responsibility (e.g. general funds, formula schools, etc.).

## SUMMARY OF THREE YEAR CAPITAL PLAN 2006/07-2008/09

(IN MILLIONS OF DOLLARS)

				Pr	oject Fund	ing Source			Annual Co	ontinuing Costs
				Gifts		Univers	ity Debt			
	Estimated Project Cost	Capital Budget 2006/07	Current Funds <sup>1</sup>	In Hand or Pledged	To Be Raised	Service Center/ Auxiliary Debt	Academic Debt	Other <sup>2</sup>	Debt Service	Operations, Maintenance & Utilities
Projects in Design & Construction	1,083.4	211.6	172.7	203.6	351.7	113.0	189.2	53.2	21.8	18.8
Forecasted Projects	930.2	91.5	76.5	35.5	510.0	7.5	300.7		23.4	13.8
Total Construction Plan	2,013.6	303.1	249.2	239.1	861.7	120.5	489.9	53.2	45.2	32.6
Infrastructure Programs	211.1	54.5	107.9			83.2	20.0		9.6	
Total Three-Year Capital Plan 2006/07-2008/09	2,224.7	357.6	357.1	239.1	861.7	203.7	509.9	53.2	54.8	32.6

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

<sup>2</sup> "Other" funds represent government and private foundation grants.

## CAPITAL PLAN CASH FLOWS

(IN MILLIONS OF DOLLARS)

	2005/06 & Prior	2006/07	2007/08	2008/09	2009/10	2010/11	2011/12 & Thereafter	Total
Projects in Design & Construction	103.3	211.6	226.5	328.9	149.5	45.1	18.5	1,083.4
Forecasted Projects	15.0	91.5	272.1	277.0	204.1	53.1	17.4	930.2
Total Construction Plan	118.3	303.1	498.6	605.9	353.6	98.2	35.9	2,013.6
Infrastructure Programs	13.4	54.5	60.3	72.9	5.0	5.0		211.1
Total Three-Year Capital Plan 2006/07-2008/09	131.7	357.6	558.9	678.8	358.6	103.2	35.9	2,224.7

## CAPITAL PLAN IMPACT ON BUDGET

(IN MILLIONS OF DOLLARS)

				2011/12 &	
2007/08	2008/09	2009/10	2010/11	Thereafter	Total
2.1	3.1	2.5	14.9	2.7	25.3
0.5	2.2			9.9	12.6
2.5	8.6	1.3			12.4
1.5	1.5	1.5			4.5
6.6	15.4	5.3	14.9	12.6	54.8
0.1	2.5	2.3	6.0	2.7	13.6
1.2		3.1	4.6	5.3	14.2
0.7	3.8			0.3	4.8
2.0	6.3	5.4	10.6	8.3	32.6
	2007/08 2.1 0.5 2.5 1.5 6.6 0.1 1.2 0.7 2.0	2007/08         2008/09           2.1         3.1           0.5         2.2           2.5         8.6           1.5         1.5           6.6         15.4           0.1         2.5           1.2         0.7           0.7         3.8           2.0         6.3	2007/08         2008/09         2009/10           2.1         3.1         2.5           0.5         2.2         2.5           2.5         8.6         1.3           1.5         1.5         1.5           6.6         15.4         5.3           0.1         2.5         2.3           1.2         3.1         3.1           0.7         3.8         2.0	2007/08         2008/09         2009/10         2010/11           2.1         3.1         2.5         14.9           0.5         2.2         -         -           2.5         8.6         1.3         -           1.5         1.5         1.5         -           6.6         15.4         5.3         14.9           0.1         2.5         2.3         6.0           1.2         3.1         4.6           0.7         3.8         -           2.0         6.3         5.4         10.6	2011/12 &           2007/08         2008/09         2009/10         2010/11         Thereafter           2.1         3.1         2.5         14.9         2.7           0.5         2.2         9.9         9.9           2.5         8.6         1.3         1.5           1.5         1.5         1.5         1.5           0.6         15.4         5.3         14.9         12.6           0.1         2.5         2.3         6.0         2.7           1.2         3.1         4.6         5.3         0.3           2.0         6.3         5.4         10.6         8.3

The Capital Plan schedule is dependent on the timing and success of fundraising. As a result, it is possible that some projects will have to be cancelled, delayed, or scaled back in scope, all of which could affect the Capital Plan, associated cash flows and budget impacts.

The tables at the end of this section provide a detailed list of those projects included in the Capital Plan. The Capital Plan tables do not include the capital projects of the SHC, Lucile Packard Children's Hospital (LPCH) or Stanford Management Company (SMC) due to their independent organizational structures. The text summarizes these projects in order to present a comprehensive view of all planned construction on Stanford lands.

The projects in the Capital Plan are listed in three categories:

- DESIGN AND CONSTRUCTION The fourteen projects in Design and Construction represent \$1.08 billion (49% of the plan). Some of these projects received Board of Trustees concept approval as recently as April 2006 and now are in design. Construction of other projects is contingent on securing funding; \$351.7 million, or 32% of these project costs, remain to be fundraised.
- FORECASTED CONSTRUCTION PROJECTS These sixteen proposed projects are listed by size. They will cost a total of \$930.2 million (42% of the plan). Of this funding, \$420.2 million, or 45%, is in hand (\$76.5 million in current funds, \$35.5 million in gifts in hand or pledged, and \$308.2 million in permanent debt). There remains \$510 million to be raised. Due to these funding challenges, many of these projects may not be completed for a number of years and may require debt to backstop gifts. Only those projects with an anticipated concept approval in 2006/07 and a viable funding plan are considered budget commitments in this rolling three-year plan.
- INFRASTRUCTURE PROJECTS AND PROGRAMS These projects and programs include initiatives to address investment in plant and building energy retrofit projects, as well as the capital utilities program, the R&DE Capital Improvement program, and GUP mitigations. These projects and programs account for \$211.1 million (9%) of the Capital Plan.

The following section addresses the Capital Plan's funding sources; the uses of funds by program category (e.g., Academic/Research, Housing) and by project type

(e.g., new construction, renovation); projects planned by other Stanford entities; and resource constraints.

## **CAPITAL PLAN FUNDING SOURCES**

Stanford's Capital Plan relies on several funding sources: current funds, gifts, debt, and other (government, state, and grant funding). Depending upon fundraising realities and timeframes, some projects will prove more difficult than others to complete. As a result, it is possible that some projects will have to be cancelled, delayed, or scaled back in scope. The chart on the next page outlines the funding sources for the Capital Plan.

#### **Current Funds**

We anticipate that \$357.1 million, or 16% of the Capital Plan, will come from current funds. These include school, department, and university reserves, as well as GUP Entitlement Fees and the SIP. GUP Entitlement Fees are assessments levied on capital projects that increase the school's/department's 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 other campus infrastructure programs.

## Gifts

The Capital Plan includes gifts of \$1.1 billion (50% of the plan). These are a combination of gifts in hand or pledged (\$239.1 million, or 11%) and gifts to be raised (\$861.7 million, or 39%). 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 extended, and as a result may require debt backstopping or delay projects.

## Debt

Debt funding is a key financing source for the Capital Plan. The amount of debt to be allocated takes into consideration the university's debt capacity and ability to service debt from current funds. The permanent debt component in the Capital Plan has more than doubled, to \$713.6 million (up from \$350.6 million in last year's plan). Debt represents 32% of the funding of the total Capital Plan. As mentioned previously in this section, this is due primarily to the large SEMC group of projects and other significant initiatives included in the plan. Of this debt amount, \$203.7 million is



auxiliary and service center debt, principally for R&DE and the CUP. Another \$509.9 million is academic debt, serviced by unrestricted revenues. In addition, debt may be required to bridge timing differences between the receipt of gifts and capital expenditures.

## Other

A portion of the Capital Plan (\$53.2 million) is from Federal, State, and grant funding for School of Medicine projects. The most significant portion of this (\$50 million) is Proposition 71 Stem Cell funding from the California Institute for Regenerative Medicine (CIRM).

## 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 above shows the uses of plan funds by program 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 Academic/Research projects in the plan amount to \$1,442.9 million, or 65% of the total.

## Projects in Design and Construction:

The following eleven projects are now in Design and Construction:

SEMC Buildings:

- Stanford Institutes of Medicine (SIM #1) building, a 200,000 gsf medical research building targeted for completion in 2009/10;
- Bioengineering/Chemical Engineering building, a 158,271 gsf building for a new engineering program, targeted for completion in 2010/11;
- Environment and Energy Building, a 166,565 gsf building for interdisciplinary work on the environment, targeted for completion in 2007/08;
- Learning and Knowledge Center, a 120,000 gsf building to house state-of-the-art teaching and learning facilities for the School of Medicine, targeted for completion in 2008/09;
- School of Engineering Center, a 126,217 gsf building which will be the core teaching and learning space for the School of Engineering, targeted for completion in 2008/09;
- Biology Building, a 100,000 gsf building to house the Biology department of Humanities and Sciences, targeted for completion in 2009/10;
- Ginzton Replacement, a 101,850 gsf building which will replace the current Ginzton laboratory space with current research facilities, targeted for completion in 2008/09;
- Connective element projects and an array of building demolitions are also a part of the SEMC program in the Capital Plan.

### Other Buildings:

- LKC Renovation, a 72,681 gsf renovation of the Lane and Alway buildings in the School of Medicine to provide library and other spaces linked to the new LKC building program, targeted for completion in 2010/11;
- 1050 Arastradero, a building renovation in the Stanford Research Park (73,000 gsf) to house research space for the School of Medicine;
- Stanford in Washington Renovation and Expansion, a \$10.2 million project located at Stanford's academic facilities in Washington, DC;
- Boswell Fish Facility, a 5,000 square-foot renovation of space at the Medical School for new research facilities.

#### Forecasted Construction Projects:

Forecasted projects within the formula schools/areas include the Graduate School of Business new Campus and Parking structure; Stone complex renovations of infrastructure, seismic and utility systems in the Medical School; and a Cummings replacement for the Hoover Institution. In Engineering, Panama Mall renovations appear on the plan. In Humanities and Sciences, the Art to the Old Anatomy Building project is included in the plan; and in the Dean of Research area, the new SIEPR building is listed.

#### Housing

Housing projects represent \$245 million, or 11% 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. Residential and Dining Enterprises' 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 and is listed this year on the infrastructure page of the plan, totaling \$35.4 million (a combination of a portion of the Investment in Plant - Maintenance and CIP).

#### Projects in Design and Construction:

The Munger Graduate Residences are planned to provide 600 units of housing for law and other graduate

students, located adjacent to the Law School academic campus. This housing facility is key to the integrated learning environment that is a hallmark of the school's academic program. The project provides a substantial number of new beds, contributing to the GUP requirements. It also includes parking and a variety of enabling projects. The Roble Hall renovation project, also in Design and Construction, is an extensive renovation of this undergraduate residence hall.

#### Forecasted Construction Projects

Future housing initiatives include the projects listed under the Housing and Dining Master Plan Phase 1. These include a new East Campus Dorm (formerly known as Manzanita III), which will add 125 net new undergraduate beds; renovations to Crothers and Crothers Memorial; a new East side dining facility near Crothers and Crothers Memorial, and a new Mayfield Row House (designed as a Green Dorm), which will add 50 net new undergraduate beds.

## Athletics/Student Activities

The Athletics/Student Activities category covers those facilities that support campus athletics, recreation, and other nonacademic resources/services for students. Projects supporting Athletics/Student Activities represent \$37.5 million, or 2% of total Capital Plan expenditures.

#### Projects in Design and Construction

In the student activities area, the planned renovation of the Old Union, Clubhouse, and Nitery (82,292 gsf) will create additional student activity and support space.

#### Forecasted Construction Projects

In Athletics, the Golf Club House, Pro Shop, and Cart Barn will provide renovated facilities for the Stanford golf program and community. The White Plaza Landscape/Circulation Re-Design project will fundamentally improve this area of campus for student programming, circulation, and activity 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 \$288.2 million, or 13% of the plan.

## Projects in Design and Construction

There are no academic support projects in design and construction.

## Forecasted Construction Projects

There are four forecasted projects in this category: the Redwood City Campus Redevelopment project, which is intended to provide key administrative space to Stanford; the Performing Arts Center, planned to add 100,000 gsf of arts space to the campus; the Public Safety Building, a 15,560 gsf building to replace the current public safety facilities, and a new Childcare Center (estimated at 8,000 gsf) planned to be located on the eastern side of campus.

#### Infrastructure

Stanford's ongoing efforts to renew its infrastructure are reflected in a budget of \$211.1 million (9% of total Capital Plan expenditures). Infrastructure programs include the Investment in Plant – Maintenance Program, the CUP, R&DE's Capital Improvement Program, GUP Mitigation, Building Energy Retrofit Program, Information Technology & Communications Systems, and SIP projects. GUP mitigation and SIP projects are funded through construction project surcharges.

#### Investment in Plant – Maintenance Program

Included for the first time in the Capital Plan is the maintenance component of the Annual Investment in Plant Assets (described in detail above). This program includes the deferred and planned maintenance plan for building subsystems. The planned costs and funding are detailed by area and total \$93.7 million. This represents a three-year forecast of available funding to address the maintenance needs.

#### Capital Utilities Program:

The three-year plan allocates a total of \$43.6 million for CUP projects to improve electrical, steam, water, chilled water, and wastewater utility systems. The CUP is driven by four factors: system expansion, system replacement, system controls, and regulatory requirements. A \$12.3 million Cooling Tower and Support building is planned to meet the increased chilled water loads predicted over the next seven years, with additional expenditures planned beyond the ten-year forecast.

#### R&DE Capital Improvement Program

Residential & Dining Enterprises' CIP is intended to address infrastructure/deferred maintenance systems, life and health safety, seismic upgrades, code compliance, energy conservation and sustainability measures, and major programmatic improvements in the student housing and dining physical plant. CIP projects totaling \$35.4 million (a combination of a portion of the Investment in Plant - Maintenance and CIP) are anticipated over the next three years. The plan includes continuation of the code compliance and seismic upgrades of five Row Houses and the Escondido Village heating system; Florence Moore kitchen and servery renovation for infrastructure and code compliance; and the beginning of a multi-year phased refurbishment of the Row House kitchens.

#### **GUP** Mitigation:

The Capital Plan provides for \$20.1 million in capital expenditures for mitigation measures required by the GUP and Community Plan approved by Santa Clara County in December 2000. These expenditures are for trail construction and easements. Funding will be generated by an internal fee levied on capital projects that increase school/department campus space allocations. Short term debt may be used to bridge timing differences between the collection of the fee and the scheduled expenditures.

#### Building Energy Retrofit Program:

As mentioned earlier in this section, this is a \$15 million energy retrofit program with an estimated energy savings of over \$4 million per year.

## Information Technology and Communication Systems:

A total of \$6.5 million has been allocated for upgrades to networks and communication systems.

## Stanford Infrastructure Program:

The SIP consists of planning and transportation projects and programs for the improvement and general support of the university's academic community, hospitals, and physical plant. SIP expenditures are expected to total \$5.3 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.

## Uses of Funds by Project Type

## New Construction

Major new construction projects account for \$1,643.3 million or 74% of the three-year plan, ranging in size from \$3.5 million to \$275 million. These buildings

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will support academic and research programs, as well as student housing and academic support facilities.

#### Renovations

As illustrated in the chart above, renovation projects in the Capital Plan represent \$366.3 million, or 16% of the total project costs over the three-year period. The Old Union renovation is an extensive project designed to upgrade one of the oldest buildings on Stanford's campus. Other extensive renovations include the Stone Complex and LKC renovations at the School of Medicine, Panama Mall renovations in the School of Engineering, and the renovation of the Old Anatomy building for the Art Department.

#### Infrastructure

Infrastructure projects and programs, including the White Plaza Landscape/Circulation Redesign Project, totaled \$215.1 million and account for 10% of Capital Plan expenditures.

## **OTHER STANFORD ENTITIES**

For the last several years, the Capital Planning process has included all Stanford entities. This Capital Plan and Budget do not, however, include projects managed by Stanford Management Company (SMC), Stanford Hospital and Clinics (SHC), or Lucile Packard Children's Hospital (LPCH) due to their independent organizational structures and specific Board delegations. Brief descriptions of these projects follow.

#### Stanford Management Company

FACULTY AND STAFF HOUSING – SMC continues to plan both rental and for-sale housing units for faculty and staff of the university over the next ten years. Stanford Avenue Faculty/Staff housing is now being planned, to add approximately 40 units in this area. These units will help to meet the GUP entitlement housing linkage requirements.

STANFORD RESEARCH PARK - The Research Park continues to be a desirable location for a variety of corporations, creating a dynamic environment throughout boom and bust real estate cycles. Despite the relatively soft market in Silicon Valley, SMC executed an agreement in 2004 with a Research Park company to redevelop a 29-acre site with a new 460,000 square foot campus. Currently under construction, this project represents the largest office/R&D development to occur in the Silicon Valley since 2001. In addition, SMC is working in concert with another Research Park tenant to entitle a new 75,000 square foot expansion facility. Under a recently approved land use development agreement, known as the Mayfield Agreement, SMC will be master-planning the conversion of some commercial sites on the edges of the Research Park to residential in the near future.

## Stanford Hospitals and Clinics/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 are also engaged in a longrange planning effort that will outline and coordinate the space and program needs of the three entities over time. As discussed above, SHC is actively developing clinic programs at the Redwood City campus.

## **CAPITAL PLAN CONSTRAINTS**

#### Affordability

The incremental internal debt service expected at the completion of all projects commencing in the three-year plan period (completion dates range from 2006/07 to 2011/12) total \$54.8 million annually (excluding financing costs for debt backstopping). Of this amount, \$25.3 million will be serviced by general funds, \$16.9 million by auxiliary or service center operations, and \$12.6 million by formula schools.

The additional operations, maintenance, and utilities (O&M) costs expected at the completion of all projects commencing in the three-year period total \$32.6 million per year. Of this amount, \$13.6 million will be serviced by general funds, \$4.8 million by auxiliary and service center operations, and \$14.2 million by the formula schools. General funds pay a portion of the debt service on capital projects, as well as O&M costs. These capitalrelated 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**

As of March 2006, the university had approximately \$293.9 million of capacity from existing debt programs to finance capital projects, including \$1.4 million of unexpended bond proceeds, \$150 million of taxexempt commercial paper, and \$142.5 million of taxable commercial paper. An additional \$90.1 million will be available through fiscal year-end 2006/07 from internal amortization on previous debt-funded projects.

A total of \$522.4 million will be required to finance:

- \$201.7 million to complete projects already approved or under construction, of which \$96 million is required to complete prior year projects no longer displayed in the three-year plan;
- \$320.7 million for projects to be approved in 2006/07.

Additional funding will be required to finance the Faculty Staff Housing mortgage portfolio. The portfolio of subsidized mortgages increased \$11 million in 2005 and \$3.8 million year to date to \$245.1 million. Rising real estate prices will continue to fuel the demand for the subsidized loan programs.

Projects identified in the three-year Capital Plan commencing after 2006/07 will require an additional \$287.1 million in permanent and temporary debt to backstop gifts. The debt for these projects has not been committed and will be evaluated in the context of debt capacity, affordability, and the viability of the funding plan, as well as GUP limitations.

Total university debt outstanding at fiscal year end 2005 was \$1.3 billion. The pro-forma leverage ratio is in compliance with the university's debt policy.

## 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 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 following:

- 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 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 fifteen years at an average rate of approximately 135,000 gsf per year. Funding constraints have slowed this projection. The Capital Plan includes 522,709 gsf of new GUP square feet currently in Design and Construction and 169,711 net new GUP square feet in Forecasted projects. The Cooling Tower project, listed in the infrastructure category, totals 7,500 gsf. Of course, this forecast could change over time, and it presumes funding sources will be available as forecasted. Given funding challenges and closer scrutiny of the expenditure of GUP square feet, we believe the current GUP allocation will last until 2025. The strategic movement of administrative office space to the Redwood City campus will also help to conserve GUP square footage for academic priorities on the main campus.

With regard to the housing requirement listed above, the Munger Graduate Residences are planned to add 600 net new graduate student beds. With the construction of the Munger residences, Stanford will have added a total of 1,033 net new graduate student beds since approval of the GUP. The Undergraduate Housing and Dining Master Plan Phase 1 is expected to add 125 net new beds in the East Campus new dorm, plus 50 net new beds in the Green Dorm. The Stanford Avenue Faculty/Staff housing plan will add 40 net new units as well. The completion of these projects will increase the total to 1,248 net new beds, which will enable the university to construct up to 1,499,999 gsf of new academic space.

#### THE CAPITAL BUDGET, 2006/07

The 2006/07 Capital Budget represents capital expenditures of \$357.6 million for the upcoming fiscal year. 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 below. Gifts and Debt represent 61% and 21% of the budget, respectively. Current funds (i.e., existing university reserves and fund balances) represent 17%, with the remaining 1% from grants.

Of the \$357.6 million, 48% will be spent on Academic/ Research projects. Housing, Infrastructure, Academic Support, and Athletics/Student Activities will represent 25%, 15%, 9%, and 3%, respectively. An estimated 62% of the budget will be spent on new construction projects. The majority of these expenditures are to fund the E&E building and the Munger Graduate Residences. Another 22% will be spent on renovation projects such as the Old Union complex, 1050 Arastradero and Roble Hall. The remaining 16% will be spent on infrastructure projects and programs, including Investment in Plant – Maintenance Program and CUP.

## CAPITAL BUDGET IMPACT ON 2006/07 Operations

The 2006/07 Projected Consolidated Budget for Operations includes incremental debt service and O&M expenses for projects completing in 2006/07.



Additionally, this budget includes an incremental increase in debt and O&M expenses for projects completing in 2005/06 that were operational for less than twelve months in 2005/06.

As noted in Section 1, Stanford issues debt in the public markets to finance capital projects and programs. Internal loans are then applied to projects, which amortize the debt over the project life in equal installments (principal and interest). The budgeted interest rate used to calculate internal debt service is a blended rate of all external interest expense, bond issuance cost, and administrative costs and is reset annually. The projected blended rate for 2006/07 is 5.74%.

The projected incremental internal debt service funded by unrestricted funds, including formula units, in 2006/07 is \$4.5 million. This amount represents the additional debt service on fourteen capital projects



and programs offset by the retirement of debt on older projects. It excludes interest expense on gift backstopping and assumes no change in the budgeted interest rate of 5.74%. This additional debt service brings the total annual internal debt service borne by the unrestricted university budget to \$42.3 million, 4.0% of unrestricted revenues.

Total internal debt service, including that borne by auxiliaries and service centers, will decrease from \$132.9 million to \$128.3 million. The decrease is attributable to internal loans maturing and a one-time \$10.4 million early principal repayment offset by increases for the new Astrophysics building and the renovation of the Old Union. General funds will cover additional O&M costs of approximately \$1.1 million mainly due to the completion of the new Astrophysics building and including costs related to renovations of the Old Union Complex, the Black Community Center, Stanford in Washington, the Barnum Center, and smaller infrastructure maintenance costs.

## **CAPITAL PLAN PROJECT DETAIL**

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

							Project F	unding Source			Annual Co	ontinuing Cost
						Gift	s	Universit	y Debt			
		Fiscal Year	Estimated	Capital		In Hand		ervice Center/				Operations,
	School/	Project	Project	Budget	Current	or	To Be	Auxiliary	Academic		Debt	Maintenance
	Department	Schedule	Cost <sup>1</sup>	2006/07	Funds <sup>2</sup>	Pledged	Raised	Debt	Debt <sup>3</sup>	Other <sup>4</sup>	Service	& Utilities
Science, Engineering and Medical Campus (SEMC) <sup>5</sup> Projects <sup>6</sup>	SEMC	2005-11	803.6	104.4	150.0	138.5	323.0		142.1	50.0	9.9	14.4
Stanford Institutes of Medicine #1 (\$162.1), completion 2009/10	SOM											
Bioengineering / Chemical Engineering (\$114.8), completion 2010/11 Environment and Energy Building (\$113.8), completion 2007/08	SOE/SOM DOR											
Learning and Knowledge Center (\$85.9), completion 2008/09	SOM											
School of Engineering Center (\$61.7), completion 2008/09	SOE											
Biology Building (\$61.5), completion 2009/10	H&S											
Ginzton Replacement (\$54.5), completion2008/09	DOR											
SOM/Biology Connective Elements/Utilities (\$51.2), completion 2010/11												
SEQ 2 Connective Elements/Utilities (\$26.1), completion 2010/11												
SEMC Demolition Projects (\$7.4), completion 2010/11												
Escalation Risk (\$40.4)												
Contingency (\$24.2)												
Munger Graduate Residences (600 units) and Enabling Projects	SLS	2005-08	160.0	57.0	8.0	47.0	10.0	95.0			6.6	2.4
Graduate Housing (\$103.5)												
Underground Garage (1227 spaces) (\$35.0)												
Enabling Projects (\$21.5)												
LKC Renovation - Lane & Alway Building Renovations	SOM	2006-11	42.0	1.1	5.3		16.6		20.1		1.7	
Old Union Complex Renovation	VPSA	2005-07	25.0	11.5	4.0				21.0		1.9	
1050 Arastradero	SOM	2006-07	20.2	18.9	4.2	10.0			6.0		0.5	1.2
Roble Hall Renovation <sup>7</sup>	R&DE	2006-07	18.0	14.1				18.0			1.2	0.7
Stanford in Washington (SIW) Renovation and Expansion	H&S	2004-07	10.2	2.8		8.1	2.1					0.1
Boswell Fish Facility Renovation	SOM	2006-07	4.4	1.8	1.2					3.2		
Subtotal - Projects in Design & Construction			1,083.4	211.6	172.7	203.6	351.7	113.0	189.2	53.2	21.8	18.8

Costs reflect Board of Trustee approvals.

<sup>2</sup> Includes funds from university and school reserves, the GUP and SIP programs and \$50 million from President's Funds for the SEMC Projects.

<sup>3</sup> Includes \$16.4 million from School of Medicine for the SEMC Projects.

<sup>4</sup> "Other" funds represent government and private foundation grants.

<sup>5</sup> SEMC represents the Science. Engineering and Medical Campus 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 gifts.

The Astrophysics Building (\$34.2 million) will be completed in Fall 2006, so it has been removed from the SEMC group of projects. Debt service for this building has been included in debt service projections.

<sup>7</sup> Roble Hall Renovation includes \$2.9 million spent in Summer 2005 for seismic, structural and fire-life safety improvements.

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(IN MILLIONS OF DOLLARS)							Project	Funding Source			Annual C	continuing Cost
						Gif	ts ,	Universit	y Debt			\$
		Fiscal Year	Estimated	Capital		In Hand		Service Center/				Operations,
	School/	Project	Project	Budget	Current	or	To Be	Auxiliary	Academic		Debt	Maintenance
	Department	Schedule	Cost	2006/07	Funds <sup>1</sup>	Pledged	Raised	Debt	Debt	0ther <sup>2</sup>	Service	& Utilities
Graduate School of Business - New Campus and Parking Structure	GSB	2006-11	275.0	8.3			275.0					5.6
Redwood City Campus Redevelopment	PRES/PROV	2007-10	180.0	20.0					180.0		12.6	3.6
Performing Arts Center	PRES/PROV	2007-10	98.5	8.0			98.5					1.6
Stone Complex												
Infrastructure & Seismic	SOM	2007-12	96.7	6.5	10.9				85.8		7.2	
Utilities	SOM	2007-08	27.1	8.1	0.9				26.2		2.2	
Panama Mall Renovations	SOE	2007-12	72.2	11.3	57.2	15.0						
Undergraduate Housing and Dining Master Plan - Phase I <sup>3</sup>	R&DE	2007-08	67.0	20.0			52.0	7.5	7.5		1.3	1.4
New East Campus Dorm (125 net new beds)												
Crothers and Crothers Memorial Renovation												
Crothers and Crothers Memorial/East Campus Dining												
Green Dorm (50 net new beds)												
Art to the Old Anatomy Building	H&S	2007-09	42.0	2.7			42.0					0.8
Cummings Replacement	HOOVER	2007-11	31.0				31.0					
Stanford Institute for Economic Policy Research (SIEPR) New Building	DOR	2007-09	18.5	1.0		14.5	4.0					0.4
Golf Club House, Pro Shop, Cart Barn Renovation	DAPER	2008-09	8.5			1.0	7.5					0.1
Public Safety Building	PRES/PROV	2007-08	6.2	2.3		5.0			1.2		0.1	0.2
White Plaza Landscape/Circulation Re-Design	VPSA	2007-08	4.0	1.0	4.0							
Childcare (East Campus)	PRES/PROV	2006-08	3.5	2.3	3.5							0.1
Subtotal - Forecasted Projects			930.2	91.5	76.5	35.5	510.0	7.5	300.7		23.4	13.8
SUBTOTAL - CONSTRUCTION PLAN			2,013.6	303.1	249.2	239.1	861.7	120.5	489.9	53.2	45.2	32.6
<sup>1</sup> Includes funds from university and school reserves, and the GUP and SI	P programs.											

<sup>2</sup> "Other" funds represent government and private foundation grants.

<sup>3</sup> Undergraduate Housing and Dining Master Plan also includes the Roble Hall Renovation listed on the Projects in Design & Construction page and the R&DE Capital Improvement Program listed on the Infrastructure Projects & Programs page.

FORECASTED CONSTRUCTION PROJECTS 2006/07-2008/09 CAPITAL PLAN

(IN MILLIONS OF DOLLARS)												
							Project F	unding Source			Annual C	Continuing Cost
						Gifts		University	Debt			
	School/ Department	Fiscal Year Project Schedule	Estimated Project Cost	Capital Budget 2006/07	Current Funds <sup>1</sup>	In Hand or Pledged	To Be Raised	iervice Center/ Auxiliary Debt	Academic Debt	Other <sup>2</sup>	Debt Service	Operations, Maintenance & Utilities
Investment in Plant (Maintenance) <sup>3</sup> Non-Formula/Admin	L&B	2007-09	50.7	16.9	50.7							
R&DE <sup>4</sup> SOM	R&DE SOM	2007-09 2007-09	29.8 11.7	7.1 3.9	17.5			12.3			1.0	
DAPER	DAPER	2007-09	4	2								
ounues Roads <sup>6</sup>	L&B L&B	2007-09	1.5	0.5	1.5							
Subtotal-Investment in Plant (Maintenance)			93.7	28.4	81.4			12.3			1.0	
Capital Utilities Program (CUP) Surfam Examision												
opacent trapation Cooling Tower 5	L&B	2007-09	12.3	6.9				12.3			1.0	
Other System Expansion Projects	L&B	2007-09	12.4	1.8				12.4			1.0	
System Replacement	L&B	2007-09	14.8	2.6				14.8			1.2	
Controls	L&B I e-D	2007-09	1.9	0.6				1.9			0.1	
Areguator / Subtated / CTD	гол	60-1007	42.6	C.U				43 E			0.4 2 E	
JUDIOIai-COF			40.0	7.71				40.0			C.C	
R&DE Capital Improvement Program <sup>4</sup> GUP Mitrigation Costs	R&DE	2007-09	23.1	5.8				23.1			3.0	
Trails - S1	L&B	2006-07	8.9	1.1	8.9							
Trails - C1	L&B	2009	11.2		11.2							
Subtotal-GUP Mitigation			20.1	1.1	20.1							
Building Energy Retrofit Program	Various	2006-10	15.0	1.0					15.0		1.1	
Information Technology & Communications Systems	ITS	2007-09	6.5	2.2				4.2	2.3		0.7	
Stanford Infrastructure Program (SIP)	L&B	2007-09	5.3	1.8	5.3							
Storm Drains and Other	L&B	2007-09	3.8	2.0	1.1				2.7		0.3	
Subtotal - Infrastructure Projects & Programs			211.1	54.5	107.9			83.2	20.0		9.6	

 $^{1}\,$  Includes funds from university and school reserves, and the GUP and SIP programs.  $^{2}\,$  "Other" funds represent government and private foundation grants.

Investment in Plant represents funding available by area.
 R&DE Capital Improvement Program generally includes program and code upgrades vs. Maintenance which includes subsystem replacement.
 Included under CUP - System Replacement below.
 Additional "Roads" Maintenance included in SIP Program below (\$350K/year).

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INFRASTRUCTURE PROJECTS & PROGRAMS 2006/07-2008/09 CAPITAL PLAN

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