

SECTION 4

CAPITAL BUDGET AND 3-YEAR CAPITAL PLAN

This section outlines Stanford's 2008/09 Capital Budget and 2008/09–2010/11 Capital Plan. The Capital Budget represents \$680.2 million of cash outlays and associated funding of the Capital Plan for the next year. The Capital Plan forecasts \$2.8 billion in construction and infrastructure projects and programs that are currently under way or planned to begin over the next three years.

THE CAPITAL BUDGET, 2008/09

The 2008/09 capital budget, at \$680.2 million, is the largest the university has ever undertaken, and it represents a 76% increase over the 2007/08 capital budget. It reflects the university's significant capital initiatives, including expenditures for six of the eight SEMC buildings, the new Graduate School of Business (GSB) campus, the Munger Graduate Residences, the new John A. and Cynthia Fry Gunn Building (SIEPR), and various infrastructure projects and programs. The projected 2008/09 expenditures reflect only a portion of the total costs of the capital projects, as most projects span more than one year. The table below highlights the major capital projects in the plan, the project costs that will be incurred in the 2008/09 capital budget, as well as the fraction of the project that is expected to be completed by the end of 2008/09.

The magnitude of the capital budget is based the assumption that funding availability will align with approved project schedules. However, it is the policy of the university to have the funding identified before beginning construction. As a result, the capital budget has historically been substantially higher than actual spending. In fact, actual expenditures have averaged only 63% of the budget over the past seven years. These lower than planned expenditures are mostly due to project deferrals due to funding gaps. Many of the projects in the 2008/09 capital budget have funding identified, staff assigned, and have received preliminary Board of Trustees approval. Therefore,

MAJOR CAPITAL PROJECTS – PERCENT OF COMPLETION 2008/09*

[IN MILLIONS OF DOLLARS]

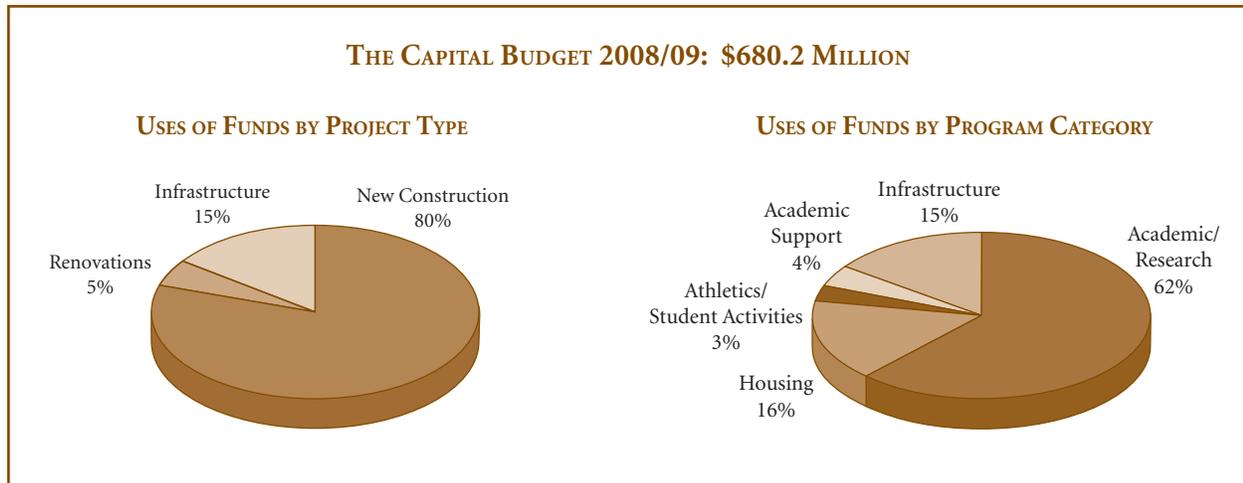
	Capital Budget 2008/09	Estimated Project Cost	Estimated Percent Complete 2008/09
School of Engineering and Nano Centers	100.8	192.7	70%
Graduate School of Business - New Campus and Parking Structure	99.9	370.0	55%
Stanford Institutes of Medicine #1	85.0	201.5	58%
Munger Graduate Residences	72.7	227.0	100%
Learning and Knowledge Center	53.0	144.2	80%
John and Cynthia Fry Gunn (SIEPR) Building	21.0	32.0	100%
Maples Parking Structure	19.3	38.6	100%
Law School Clinics and Faculty Office Building	15.0	71.2	35%
Olmstead Road Staff Rental Housing	13.6	14.3	83%
Stanford Athletics Practice Gymnasium	12.6	14.8	100%
Mechanical Engineering Building	10.6	14.9	59%
Stanford Avenue Faculty Homes	10.5	33.4	14%

* Includes Projects in Design and Construction with construction start date and forecasted expenditures greater than \$10 million in 2008/09.

we expect that the actual expenditures in 2008/09 will be much closer to the budget than in the past.

SOURCES AND USES

Sources of funds are anticipated to be a combination of current funds (existing reserves and fund balances), gifts in hand, pledged and to be raised, short-term, medium-term, and permanent debt. The university typically uses debt on projects as the last source of funds. The mix of funds for the Capital Budget will be impacted by the timing of gift receipts.



Of the \$680.2 million in the overall capital budget, 62% will be spent on Academic/Research projects. Housing, Infrastructure, Academic Support, and Athletics/Student Activities will represent 16%, 15%, 4%, and 3%, respectively. An estimated 80% of the budget will be spent on new construction projects. The majority of these expenditures are for the SEMC buildings, the GSB New Campus and Parking Structure and the Munger Graduate Residences. Another 5% will be spent on renovation projects such as Panama Mall, Crothers/Crothers Memorial and the Visitor Information Center. The remaining 15% will be spent on infrastructure projects and programs, including the Investment in Plant – Maintenance, R&DE's Capital Improvement Program, and the Capital Utilities Program (CUP).

Capital Facilities Fund

A crucial new source of funds for capital projects is the Capital Facilities Fund (CFF). In June 2007, the Board of Trustees approved an increase in the target endowment payout rate from 5.0% to 5.5%. The increased payout is planned for a minimum 5-year period with a rolling 3-year window. The additional payout frees up unrestricted funds, which we have sequestered in the CFF to support major facilities projects.

Transfers to the CFF will average \$140 million per year across the university, generating approximately \$700 million over the next five years for major capital projects and infrastructure. To date, approximately \$173 million of CFF funding has been committed to projects, of which \$151 million will be spent in 2007/08 and 2008/09 as shown in the table.

CAPITAL FACILITIES FUND (CFF)

Funding Sources and Committed Uses of Funding [IN MILLIONS OF DOLLARS]

	2007/08	2008/09
Sources of Funding		
Formula Units		
School of Medicine	21.5	22.4
Graduate School of Business	6.7	7.0
Hoover Institution	4.1	4.3
Presidential Funds	16.0	16.7
Non-formula	81.8	85.3
Total Funding	130.1	135.7
Committed Uses of Funding		
Learning and Knowledge Center	0.9	7.7
Stanford Institutes of Medicine #1	6.9	
Redwood City Campus	15.3	6.9
Y2E2 Building	2.4	4.5
Porter Drive Expenses	6.7	7.0
Nano Center	12.4	
School of Engineering Center	5.0	
Munger Graduate Residences	36.5	2.9
Visitor Information Center	4.9	
Biology		5.0
East Campus Childcare Facility		5.4
Cubberley Seismic Renovation		5.4
Other Projects	12.2	3.1
Total Commitments	103.2	47.9
Annual Uncommitted Balance	26.9	87.8
Cummulative Uncommitted Balance	26.9	114.7

Central CFF funds are allocated for purposes difficult to support through restricted sources, and thus reduce the call for general funds serviced debt. Among other uses, the CFF is funding the enhanced sustainability features of several of the SEMC buildings, and will be a principal source of funds for the Redwood City Campus project.

The formula units determine uses of their CFF funds according to their highest priority.

CAPITAL BUDGET IMPACT ON 2008/09 OPERATIONS

The 2008/09 Projected Consolidated Budget for Operations includes incremental debt service and O&M expenses for projects completing in 2008/09. Additionally, this budget includes an incremental increase in debt and O&M expenses for projects completing in 2007/08 that were operational for less than 12 months in 2007/08.

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, and amortized 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 costs, and administrative costs, and is reset annually. The projected blended rate for 2008/09 is 5.2%.

The projected incremental internal debt service funded by unrestricted funds, including formula units, in 2008/09 is \$3.6 million. This amount includes the additional debt service on the energy retrofits of Gates and Gilbert, the Forsythe Power Upgrade, the Emergency Generators & Fueling project and other smaller capital projects and programs, offset by a reduction of 0.5% in the budgeted interest rate. It excludes interest charges on debt backstopping gift receipts and annual lease payments. This additional debt service brings the total annual internal debt service borne by the unrestricted university budget to \$43.7 million, 2.8% of unrestricted revenues, general funds, and designated funds.

Total internal debt service, including that borne by auxiliaries and service centers, will increase from \$133.2 million to \$142.7 million.

The university will incur additional O&M and utilities costs of approximately \$1.7 million. This is mostly due to the completion of the Jerry Yang and Akiko

Yamazaki Environment and Energy Building (Y2E2), the John A. and Cynthia Fry Gunn Building (SIEPR), Forsythe Renovation, the Lorry Lokey Stanford Daily Building, Parking Structure 6 (as part of the Munger Graduate Residences), and smaller infrastructure maintenance costs.

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 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 longer-term 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 tend to change over time as some projects prove more feasible than others given evolving funding realities and academic priorities.

A major issue affecting the Capital Plan is cost escalation in the construction market. Escalation over the last few years has proven to be a significant risk to project budgets, particularly in the area of subcontractor labor. To mitigate this risk, many of the Capital Plan's large project budgets carry a specific line item for near-term escalation. If such escalation is realized, this could increase the project cost compared to historical trends.

At \$2.8 billion, this year's Capital Plan is 17% higher than the prior year's \$2.4 billion plan. Consistent with prior years, several projects show large percentages of their funding sources as Gifts to Be Raised. The Office of Development has determined that these are feasible fundraising plans, although their time frames could change. "Resources to be Identified" includes funds yet to be fully identified, with the expectation they will come from a combination of gifts, the schools, and department and university reserves.

STRATEGIC INITIATIVES

The following strategic initiatives are integral to this year's Capital Plan and are described in more detail below.

PROJECTS

- Science, Engineering, and Medical Campus (SEMC)
- Redwood City Campus
- Stanford University Medical Center (SUMC)

PROGRAMS

- Sustainability at Stanford
- Space Charge and Space Utilization Studies
- Furniture and Workplace Program

PROJECTS

Science, Engineering and Medical Campus

As mentioned in prior years, the Science, Engineering and Medical Campus (SEMC) initiative consists of eight new buildings to be designed and constructed over the next decade. The buildings include Astrophysics (which was completed in 2006); the Jerry Yang and Akiko Yamazaki Environment and Energy Building (Y2E2) (which was completed in 2007); Biology; the School of Medicine Learning and Knowledge Center (LKC); the Stanford Institutes of Medicine #1 (SIM 1); and three additional buildings to be located in the new Science and Engineering Quad (SEQ 2): the School of Engineering Center (SOE Center), the Nano Center, and Bioengineering/Chemical Engineering.

This year's Capital Plan includes the costs of six of the eight SEMC buildings, together with associated connective elements, utilities and demolition projects. It also includes a line item for contingency risk. SEMC costs included in this plan are \$794.9 million, or 29% of the total plan expenditures.

The following are descriptions of the SEMC buildings that have recently been completed or are currently under way:

Stanford Institutes of Medicine

The School of Medicine (SoM) long-range plan calls for the development of new research facilities that will focus on institutes. The SoM has developed five Institutes of Medicine as follows: the Cancer Center, the Institute for Stem Cell Biology and Regeneration

SEMC PROJECT SUMMARY¹

[IN MILLIONS OF DOLLARS]

Project	Completion	Cost
Stanford Institutes of Medicine #1	2010	201.5
School of Engineering and Nano Centers	2010	192.7
Learning and Knowledge Center	2010	144.2
Bioengineering/ Chemical Engineering	2013	136.9
Biology	2011	114.6
Contingency		5.0
Total		794.9

¹ Excludes Astrophysics and Y2E2 which were completed in 2006 and 2007, respectively.

Medicine Institute, the Cardiovascular Institute, the Neurosciences Institute, and the Immunity Transplantation and Infection Institute. The Stanford Institutes of Medicine (SIM 1) building, the first of three institute-based buildings planned by the school, will house the Stem Cell Biology and Regenerative Medicine Institute (SCBRM) and the Cancer Center. Researchers from other SoM institutes will occupy the building as well. SIM 1 is part of the SEMC initiative and establishes a critical direction for the development of the campus over the next 20 years.

The SIM 1 building will be 200,000 gross square feet, built south of the CCSR building along Campus Drive, with a basement and three above grade floors of research labs and other support facilities. This building will be connected to other nearby research facilities via a tunnel. The design for SIM1 builds on the 'architectural kit of parts' for the School of Medicine that was established in the Clark Center design, which serves as a transition between the design guidelines for the main campus and the design guidelines for the Medical Center. The three-story building has a primary structural framework of stone, precast columns, an aluminum window system, and a cardinal red metal overhang element similar to the Clark Center and the LKC. A pattern of stone and glass openings is similar to the main campus. Like the LKC and other buildings in the SEMC, SIM 1 has extensive sustainability features.

School of Engineering Center (SOE Center)

The SOE Center, at the heart of the new SEQ 2, will be the headquarters for the School of Engineering and a

major destination for the West Campus. The project began construction in 2008 and is anticipated to be complete in 2010. The Center will be an inspiring, vibrant environment, embodying the School of Engineering's values of entrepreneurship and innovation, depicting the School's rich history and connections to Silicon Valley, and serving as a living example of the future of engineering.

The SOE Center is located on the southern portion of the former HEPL building site. The 140,000 gsf building will house the Dean's office, the Management Science and Engineering department, the Institute for Computational and Mathematical Engineering, classrooms for the Stanford Center for Professional Development including a 300-seat auditorium, the Engineering Library, a student-friendly café, a conference center and a group of communal and collaborative spaces called "the Commons." The new building will be three stories above grade with a basement. Prompted by the success of Y2E2, the SOE Center will also include aggressive sustainability goals which are described in the School of Engineering section of chapter two.

Nano Technology Center (Nano Center)

The Nano Center is located on the northern portion of the former HEPL building site. The project began construction in 2008 and is anticipated to be complete in 2010. The 105,000 gsf building will house a broad spectrum of laboratories including a Nano patterning lab, optical facilities, optical materials lab, a flexible cleanroom, electronics lab, crystal shop, and biological research labs. The building will also support the Ginzton Laboratory and the proposed Institute for Nanoscience and Technology. The new building will be three stories above grade with a basement and sub-basement housing low vibration laboratories. Natural ventilation and daylighting strategies will be employed throughout the Nano Center, as in the Y2E2 building.

The Nano Center will feature the most advanced equipment available to explore matter at the nanoscale, such as an e-beam lithography tool and an atomic force microscope. Much of this equipment will be located underground to provide the stringent control of vibration, light, and cleanliness that is essential for nanoscale research. The Nano Center will make these labs available to approximately 70 researchers from all over campus, including leaders in the natural and physical sciences, engineering, and

medicine who are exploring nanoscale properties and devices with potential applications as diverse as water purification, energy conservation, transportation, and national security. The Nano Center will complement the nearby Stanford Nanocharacterization Lab and Stanford Nanofabrication Facility. Sustainability goals for the building are covered in the Dean of Research section of this book.

Learning and Knowledge Center (LKC)

The LKC is currently under construction on the site cleared by the Fairchild Auditorium demolition. The project began construction in 2008 and is anticipated to complete in 2010. The 118,000 gsf LKC building will house a conference center, classrooms, student study and social areas, and medical simulation and virtual reality environments on four floors above grade and a basement level. The LKC will be an active hub for the School, providing supportive environments for learning, knowledge development, and public assembly with an emphasis on access to information resources throughout.

A cornerstone of the new education space will be the flagship facility of the Center for Immersive and Simulation-based Learning, located in the basement of the LKC. This center is expected to accomplish the following:

- Provide an integrated environment for hands-on learning of clinical, procedural, cognitive and interpersonal skills using models, standardized patients, and mannequin simulators as well as virtual and haptically intervened simulations and settings,
- Simulate a range of medical environments such as clinic, patient room, intensive/critical care unit, delivery room, neonatal intensive care unit, emergency department, and operating room,
- Facilitate the integrated experience of patient care as well as enabling the development of discrete skills,
- Focus on medical students while supporting interns, residents, Continued Medical Education/Continued Education Units, and allied health professionals,
- Enable learning along a continuum of training, beginning in the early years of medical school and continuing to the seasoned practitioner,
- Encompass evaluation as well as education and training, and

- Support research on pedagogy, new technologies, and human performance.

Sustainability features of LKC are covered in the Medical School section of chapter two.

Redwood City Campus

Due to GUP limitations pertaining to core campus development, the university is exploring options for relocating certain administrative and non-academic programs to off-campus sites, thus reserving core campus space for Stanford's highest academic priorities and objectives.

In 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 eight buildings (with 536,569 gsf) on 29.4 acres. In addition, the Stanford Hospital and Clinics (SHC) acquired an adjacent parcel with four buildings (with 360,000 gsf) on eleven acres, currently being developed for outpatient clinics. In March 2008, the University acquired an adjacent 5 acre parcel of land. This parcel will be incorporated into the overall campus plan.

Redevelopment of this site will be required, and Phase I construction will commence over the next 2-5 years, with Phase I occupancy targeted by 2012. The University is currently in the early phases of campus and site planning, program scoping, and conversations with Redwood City, with a formal application expected to be submitted in 2008. There are 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. Concept and Site Approval was granted by the Board of Trustees in October 2007 in the amount of \$379 million. This approval is based on an early estimate for a first phase of development which is anticipated to include the demolition of the existing buildings and approximately 558,000 gsf of new office and amenity space as well as parking and connective elements.

Stanford University Medical Center

To assure their combined ability to serve the community and Stanford effectively, the School of Medicine, Stanford Hospital and Clinics and Lucile Packard Children's Hospital are currently engaged in an entitle-

ment process with the City of Palo Alto for renewal and replacement of existing Medical Center facilities.

The entitlement process involves requesting rezoning to create a new hospital zone in Palo Alto which would allow the development of approximately 1.3 million square feet of net new hospital, clinic and medical office space. As part of this development, 248 net new hospital beds would be added. In addition, the revised zoning would allow for an increase in the height limit of buildings from 50 feet up to 130 feet. Since last fall, representatives of the two hospitals, the School of Medicine, and the university have been working together to manage the entitlement process. The formal project application was submitted in August 2007 and the target date for the City Council hearing on the final environmental impact report (EIR) and approval of the Development Agreement is the first quarter of 2009.

PROGRAMS

Sustainability at Stanford

Stanford is committed to advancing sustainability in the design, construction, and operation of campus facilities. Increases in the efficiency of new buildings, existing buildings, and utility supply programs are being pursued to reduce Stanford's use of non-renewable resources and minimize our environmental impact.

Effective February 2008, the sustainability standards for new buildings were increased to reduce energy demand by 30% below the American Society of Heating, Refrigerating and Air-Conditioning Engineers (ASHRAE) standard 90.1 (2004 edition), and reduce water usage to 25% below that of comparable existing buildings on campus.

Successful programs to reduce energy and water use in our existing buildings through minor capital and operational improvements will continue. Examples include the Energy Retrofit Program (ERP) that is funded through reinvested utility cost savings and the Energy Conservation Incentive Program (ECIP) which provides financial incentives for building occupants to conserve energy. Additional efforts include major capital retrofit projects in buildings with significant energy consumption to reduce energy waste and the associated greenhouse gas (GHG) emissions.

Work to increase efficiency and reduce the environmental impact of campus utility supply systems continues. A major effort to identify and prioritize options for

a long-term reduction of campus GHG is expected to be completed this year. This GHG reduction plan will incorporate the advanced efficiency standards for new buildings and improvements to existing buildings noted above, plus potential changes to campus energy supply strategies over the long term.

Work to advance sustainability also includes the use of the recently focused and empowered Sustainability Working Teams. These teams bring together campus operations leaders, those with specialized knowledge in these areas of sustainability, and key stakeholders to systematically examine and improve sustainability at all levels of Stanford campus operations. These teams work in close concert with Stanford's Sustainability Working Group, founded in 2006, and are identifying and implementing other improvements to campus green building practices, including examining energy supply and GHG programs, water use, green purchasing, food service, recycling, and transportation, amongst others.

The recently completed Y2E2 building, which is the first building in the SEQ2 Quad, exemplifies Stanford's sustainability commitments. The building is projected to use 56% less energy and 90% less potable water for fixtures than comparable buildings. The building also used fly ash as a construction material, incorporated the use of recycled steel and renewable wood, included uncarpeted floors in many areas, and employed photovoltaic panels on portions of the roof.

Space Charge and Space Utilization Studies

Beginning in 2007/08, Stanford's non-formula schools pay a charge for the use of office space. The goal of the space charge is to establish awareness that space is not a free good and to provide an incentive and guidelines to use space as efficiently as possible. To offset the charge, schools will receive budget allocations based on how much office space they need according to the space guidelines that have been developed for the campus.

Since the inception of the efficiency program, several schools have begun actively pursuing options to reduce their space charge:

- The School of Earth Sciences is in the process of completing a master space plan study. The study will identify and address underutilized office space, plan strategies to accommodate growth, and address space problems in the common areas of each building.

The net result will be a reduced space charge and an achievable plan for aligning the School's facilities with its long-term strategic goals.

- The Vice Provost for Undergraduate Education (VPUE) is embarking on a project to renovate Sweet Hall. Once completed, VPUE will significantly reduce its space usage by housing an additional 70 employees in spaces designed to support students, lecturers, and staff. Sweet Hall plans currently reflect that 12% of the office spaces will be private offices and 88% will be shared offices or cubicles. The spaces will be sized according to the space guidelines. This is a much higher percentage of shared space than the average on campus, and is a model for future campus spaces.
- The School of Humanities and Sciences completed a 're-stack' in the Main Quad during the summer of 2007. In this project, a series of departmental moves organized where programs were housed and brought many departments into alignment with the space guidelines.
- The School of Education will begin a space study of the Cubberley Building in spring 2008. The goal will be to better use space, reduce the space charge, and determine if any of the physical changes needed can coincide with the seismic retrofit of the building planned for summer 2009.

In addition to the space charge initiatives above, detailed utilization studies have been conducted for all of the schools and several administrative units. These studies provide a valuable tool for examining each school's use of space, diagnosing problems, and proposing corrective actions to better use existing space.

Furniture and Workplace Program

The Furniture and Workplace Program at Stanford is a holistic approach to furniture and workplace planning at the university. The program emphasizes furniture and workplace practices that will accomplish the following objectives:

- Support the university space guidelines,
- Promote ergonomic and healthy work environments,
- Maximize sustainability in furniture choices,
- Create high quality, durable, and long-term furniture solutions,

- Enable flexibility in design so that furniture can be reused, moved, and changed to meet changing program needs, and
- Leverage Stanford's overall buying power in furniture purchasing in order to achieve better service and more competitive pricing.

This new approach is particularly important for Stanford at this time because of the unprecedented scope of furniture and workplace project volume represented in the current \$2.8 billion Capital Plan.

The program was based on a comprehensive review that resulted in the selection of two preferred vendors. The vendors were chosen for their broad product portfolio, multiple services, commitment to sustainability, array of resources, adherence to the initiatives of the university, and competitive pricing.

Finally, in support of the university's sustainability initiative, the furniture program is reviewing four levels of sustainable practices: materials used to manufacture furniture products, certifications of end-products, recycled content from a post and pre-consumer perspective, and best practices of the furniture providers.

These concepts, together with the space guidelines, will become the platform from which we initiate our workplace planning in the coming years.

THE CAPITAL PLAN, 2008/09 – 2010/11

Stanford's central campus, including the Medical School but excluding the hospitals, has more than 670 major buildings providing more than 13 million gsf of physical space. The physical plant has a historical cost of \$4.9 billion and an estimated replacement cost in excess of \$6 billion.

The Capital Plan includes a forecast of Stanford's annual programs designed to restore, maintain, and improve campus facilities for teaching, research, housing, and related activities. The plan also outlines Stanford's needs for new 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.

Projects listed in the Capital Plan meet any one of the criteria established for Board of Trustees level approval as follows:

- Total project cost of \$10 million and above,
- New building construction,
- Projects that use 5,000 or more new square feet within the academic growth boundary,
- Changes in land use, and
- Projects with major exterior design changes.

Expenditures in the 2008/09–2010/11 Capital Plan, which includes major construction projects in various stages of development and numerous infrastructure projects and programs, total \$2.8 billion. The table below provides a comparison of the last three Capital Plans.

BUDGET PLAN YEAR

[IN MILLIONS OF DOLLARS]

	2006/07	2007/08	2008/09
Design/			
Construction	1,083.4	1,377.4	2,068.3
Forecasted Projects	930.2	739.7	420.0
Infrastructure	211.1	252.1	280.0
Total	2,224.7	2,369.2	2,768.3

Projects in Design and Construction

Projects in Design and Construction represent \$2.1 billion (75% of the plan). These projects are under the purview of the Board of Trustees. Construction of these projects is contingent on securing funding; \$651.2 million, or 31% of these project costs remain to be fundraised or are funds to be identified.

Project costs in Design and Construction have increased by \$690.9 million from 2007/08. The Redwood City Campus has moved into this category (\$379 million). In addition, the GSB campus has increased in cost by \$95 million as a result of more detailed planning. Major new projects added to this category include the Law School Clinics and Faculty Office Building (\$71.2 million), Maples Parking Structure (\$38.6 million), Stanford Avenue Faculty Homes (\$33.4 million), Mechanical Engineering Building (\$14.9 million), Stanford Athletics Practice Gymnasium (\$14.8 million), Olmsted Road Staff Rental Housing (\$14.3 million), the Golf Club House (\$8.7 million), and the East Campus Child Care Facility 2 (\$5.4 million).

Forecasted Projects

Forecasted projects are those anticipated to receive Board of Trustees approval over the next three years. These projects total \$420 million and represent 15% of the plan. As with the projects in Design and Construction described above, these projects are contingent on funding. For this group of projects, a total of \$240.5 million, or 57% remains to be fundraised or to be identified. Due to this funding challenge, many of these projects may not be completed for a number of years.

Project costs within this category have decreased by \$319.7 million from 2007/08 for a number of reasons. First and most significantly, as mentioned above, a large cohort of major initiatives moved into the Design and Construction category or were completed. At the same time, new projects have been added to the plan. These include the New Undergraduate Dining Hall (\$22 million), the Crothers/ Crothers Memorial renovation (\$20 million), Stanford Auxiliary Library (SAL) 3 Phase 2 (\$14 million), and the Green Dorm (\$12.7 million). Some of the other projects in this category also include adjusted cost estimates.

Infrastructure

Stanford's ongoing efforts to renew its infrastructure are reflected in a budget of \$280 million (10% of total Capital Plan expenditures). Infrastructure programs include the Investment in Plant – Maintenance Program, the Capital Utilities Programs and Projects (CUP), R&DE's Capital Improvement Program, Building Energy Retrofit Program, the Stanford Infrastructure Program (SIP), GUP Mitigation, Information Technology & Communications Systems, and the Storm Drain projects. GUP mitigation and SIP projects are funded through construction project surcharges.

Infrastructure costs have increased in this year's Capital Plan by \$27.9 million. This increase is mostly due to the inclusion of the Searsville Substation (\$23 million) and a \$10.9 million increase year-over-year in the Investment in Plant – Maintenance Program.

Investment in Plant – Maintenance Program

This program includes deferred and planned maintenance for building subsystems. The planned costs and funding are detailed by area and total \$90.6 million. This represents a three-year forecast of available funding to address maintenance needs.

Capital Utilities Program and Projects

The three-year plan allocates a total of \$43 million to the CUP program to improve electrical, steam, water, chilled water, and wastewater utility systems. Capital Utilities projects of \$49 million include a Replacement Boiler plant (\$26 million) that will allow decommissioning and removal of four existing boilers in the Central Energy Facility. Additionally, the new Searsville Substation (\$23 million) will address the projected electrical demand growth requirements for the university for the next 50 years.

R&DE Capital Improvement Program

The Residential & Dining Enterprises Capital Improvement Program (CIP) is intended to address 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 anticipated over the next three years total \$50.9 million. The plan includes continuation of the code compliance upgrades of various Row Houses, repairs to the Escondido Village slab heating system and utilities infrastructure, as well as a range of bathroom renovations. The Crothers/Crothers Memorial project is additional to these CIP totals, and is listed in the Forecasted projects page.

Building Energy Retrofit Program

In the first phase of a comprehensive energy reduction program, 12 of Stanford's largest energy-intensive buildings were studied with the goal of energy consumption reductions. The buildings studied represent \$13 million of energy expenses per year, or nearly 26% of the total campus energy expense. The studies resulted in energy retrofit projects that are in varying stages of implementation.

The table on the next page summarizes the status of these projects and early results.

As these projects are completed or underway, the next group of buildings is being selected for the energy retrofit studies and implementation program. This will entail an additional review of 13 buildings, which together consume \$7.6 million in energy each year, or an additional 15% of Stanford's total energy usage.

Stanford Infrastructure Program (SIP)

The SIP consists of planning and transportation projects and programs for the improvement and general support of the university's academic community,

BUILDING ENERGY RETROFIT PROGRAM

Project	Retrofit Status	Estimated Annual Consumption Savings
Stauffer I – Chemistry	Complete	35%-40%
Gordon & Betty Moore Materials Research	Complete	11%
Paul Allen Center for Integrated Systems (CIS)	Complete	11%
Forsythe (George) Hall	Complete	To Be Determined
Stauffer II - Physical Chemistry	Under construction	To Be Determined
Gates Computer Science	Under construction	To Be Determined
Beckman Center for Molecular and Genetic Medicine	Planning (50% construction documents)	To Be Determined
Gilbert Biological Sciences	Planning	To Be Determined
Center for Clinical Sciences Research (CCSR)	Under Study	To Be Determined
Lucas Center	Under Study	To Be Determined
Cantor Center for Visual Arts	Under Study	To Be Determined
Herrin Hall – Biology	Cancelled – Planned Demolition	

hospitals, and physical plant. SIP expenditures are expected to total \$12.3 million over the next three years. SIP projects include the construction parking structures, campus transit improvements, parking lot infrastructure improvements, site improvements, landscape design and enhancements, bicycle, cart and pedestrian paths, lighting, signage, and outdoor art. Medium-term debt may be used to bridge timing differences between the collection of the fee and the scheduled expenditures.

GUP Mitigation

The Capital Plan provides for \$10 million in capital expenditures for mitigation measures required by the GUP and Community Plan approved by Santa Clara County in December 2000. Funding is generated by an internal fee levied on capital projects that increase school/department campus space allocations.

Information Technology and Communication Systems

A total of \$9.7 million has been allocated for upgrades to network and communication systems.

Storm Drains

The ongoing storm drain program includes projects for installing detention facilities that will mitigate increased peak flow runoff from development of the West Campus, projects to recharge groundwater, and projects to improve minor drainage deficiencies and restore capacity in the existing storm drain system. In addition, new storm water quality regulations require site design measures and new runoff treatment

facilities to minimize contamination conveyed to natural water bodies from small storms.

Other Stanford Entities

In an effort to present a comprehensive view of all planned construction on campus, the capital planning process has included LBRE's Real Estate division, Stanford Hospitals and Clinics (SHC), Lucile Packard Children's Hospital (LPCH), and the Stanford Linear Accelerator Center (SLAC). Although the Capital Plan tables at the end of this section do not include these other entities (with the exception of Stanford Avenue Faculty/Staff housing), we have included brief descriptions of their capital programs below:

Real Estate Division

FACULTY AND STAFF HOUSING – The Real Estate division continues to coordinate the planning and jurisdictional approvals for new rental and for-sale housing units for faculty and staff of the university. Stanford Avenue Faculty/Staff housing is now being planned, which will add low-density, single-family attached homes near El Camino Real. These units will help meet 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. New developments include a 460,000 square foot campus at the intersection of Foothill Expressway and Hillview Avenue which is now fully occupied by VMware. In addition, the Real Estate division is nearing completion

of a new 75,000 square foot building for SAP, another important Research Park tenant. Under a recently approved land use development agreement, known as the Mayfield Agreement, the Real Estate division will be master planning the conversion of some commercial sites on the edges of the Research Park to residential sites by the year 2013, when the underlying ground leases expire.

SAND HILL ROAD HOTEL/OFFICE BUILDING – Development is progressing on this 21-acre project, with building construction well underway. Construction on a university-funded, 120-room hotel began late spring 2007. The university continues to work with Rosewood, the hotel operator, on pre-opening activities. Office leasing on the donor-funded 100,000 square foot office building has exceeded original expectations, with 75% of the office space newly leased at attractive rates. The balance of the office space is also in high demand with several interested prospective tenants. Both the office and the hotel are expected to be completed by spring 2009.

SHC and LPCH

For information about the hospitals, please refer to the earlier section in this chapter under Strategic Initiatives and Stanford University Medical Center.

SLAC

For SLAC, the capital planning focus is on the construction of the Linac Coherent Light Source, an extensive project totaling \$315 million, funded by the Department of Energy. The project is well underway, and will be completed in 2009. The project includes experimental halls, beam line and undulator facilities, and service buildings.

Overall Summary

A summary table of the 2008/09-2010/11 three-year Capital Plan appears on the next page.

To differentiate between the estimated costs of the three-year Capital Plan and the forecasted spending to complete its projects and programs, an additional table, Capital Plan Cash Flows, is included along with the Capital Plan Summary. This table forecasts the expenditure outflow of the Capital Plan based on project and program schedules. Included are projects and programs in Design or Construction or anticipated to receive Board of Trustees approval in the next three years. Related cash expenditures are anticipated to be spent over a period extending beyond 2013/14.

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 2013/14). The Capital Plan Impact on Budget table 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.).

The tables at the end of this section provide a detailed list of the projects included in the Capital Plan. The Capital Plan tables do not include the capital projects of the Stanford Hospitals and Clinics (SHC), Lucile Packard Children's Hospital (LPCH), the Real Estate division (with the exception of Stanford Avenue Faculty/Staff housing), or SLAC. The text summarizes these projects in order to present a comprehensive view of all planned construction on Stanford lands.

The following section addresses the Capital Plan's funding sources; the uses of funds by program category (e.g., Academic/Research, Housing, etc.) and by project type (e.g., new construction, renovation, etc.), projects planned by other Stanford entities, and resource constraints.

CAPITAL PLAN FUNDING SOURCES

As the chart on the following page shows, Stanford's Capital Plan relies on several funding sources: current funds (which include the Capital Facilities Fund), gifts, debt, and other (which represent anticipated funds from the California Institute of Regenerative Medicine). Depending upon fundraising realities and time frames, 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. As illustrated in the chart, 29% of the plan is anticipated to be funded from gifts in hand or pledged and 17% is from gifts to be raised, for a total of 46%. This is consistent with last year's trend, where 48% of the plan came from these fundraising categories.

USES OF FUNDS BY PROGRAM CATEGORY

As the chart on the following page shows, the Capital Plan is divided into the following program categories: Academic/Research, Housing, Athletics/Student

SUMMARY OF THREE YEAR CAPITAL PLAN 2008/09–2010/11

[IN MILLIONS OF DOLLARS]

	Project Funding Source										Annual Continuing Costs	
	Estimated Project Cost	Capital Budget 2007/08	Current Funds ¹	Gifts		University Debt			Other ²	Resources To Be Identified ³	Debt Service	Operations, Maintenance & Utilities
				In Hand or Pledged	To Be Raised	Service Center/ Auxiliary Debt	Academic Debt					
Projects in Design & Construction	2,068.3	562.0	361.2	699.2	263.7	118.6	198.0	40.0	387.5	23.7	38.0	
Forecasted Projects	420.0	35.9	75.0	91.0	204.3	13.5			36.2	0.9	5.3	
Total Construction Plan	2,488.3	597.9	436.2	790.3	468.1	132.1	198.0	40.0	423.7	24.6	43.3	
Infrastructure Programs	280.0	82.2	112.9			147.4	19.7			14.7		
Total Three-Year Capital Plan 2008/09–2010/11	2,768.3	680.2	549.1	790.3	468.1	279.5	217.7	40.0	423.7	39.3	43.3	

¹ Includes funds from university and school reserves, and the GUP and SIP programs.² "Other" funds represent government and grants.**CAPITAL PLAN CASH FLOWS**

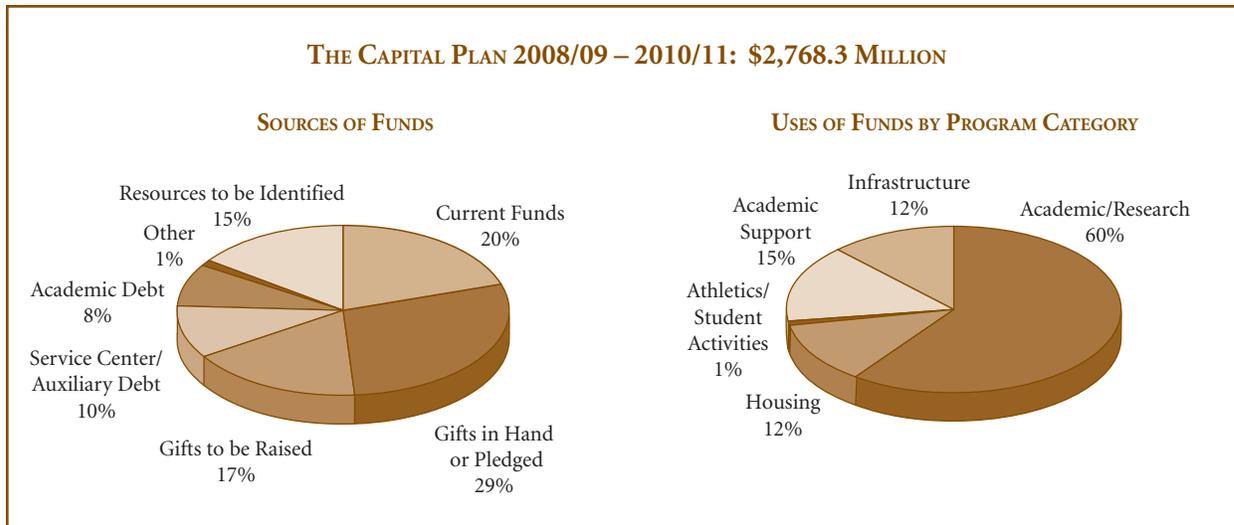
[IN MILLIONS OF DOLLARS]

	2007/08 & Prior	2008/09	2009/10	2010/11	2011/12	2012/13	2013/14 & Thereafter	Total
Projects in Design & Construction	415.3	562.0	507.8	210.3	270.3	97.1	5.5	2,068.3
Forecasted Projects	9.7	35.9	110.3	200.9	59.9	3.3		420.0
Total Construction Plan	424.9	597.9	618.1	411.2	330.2	100.4	5.5	2,488.3
Infrastructure Programs		82.2	74.3	76.0	7.4	26.5	13.6	280.0
Total Three-Year Capital Plan 2008/09 - 2010/11	424.9	680.2	692.4	487.2	337.6	126.9	19.1	2,768.3

CAPITAL PLAN IMPACT ON BUDGET

[IN MILLIONS OF DOLLARS]

	2009/10	2010/11	2011/12	2012/13	2013/14 & Thereafter	Total
Debt Service						
General Funds		0.2	2.0	3.4		7.7
Formula and Other Schools		1.3	1.9	5.7		8.9
Auxiliary		12.0	1.6	1.7		15.3
Service Center		1.3	1.4	1.5	3.2	7.4
Total Debt Service		14.9	6.9	12.3	5.3	39.3
Operations and Maintenance						
General Funds		1.2	5.8	4.7	12.2	28.1
Formula and Other Schools			6.7	4.6		11.3
Auxiliary		3.2	0.6		0.1	3.9
Service Center						
Total Operations and Maintenance		4.4	13.0	9.3	12.2	43.3



Activities, Academic Support, and Infrastructure. The majority of this year's Capital Plan funds are allocated to academic/research programs at 60%, comparable to last year's Capital Plan at 57%.

USES OF FUNDS BY PROJECT TYPE

As the following chart shows, projects also can be analyzed as follows: new construction, renovation, or infrastructure. The vast majority of the Capital Plan's projects fall into the new construction category (80% consistent with last year's plan at 81%).

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 2007/08 to 2014/15) totals \$39.3 million annually (excluding

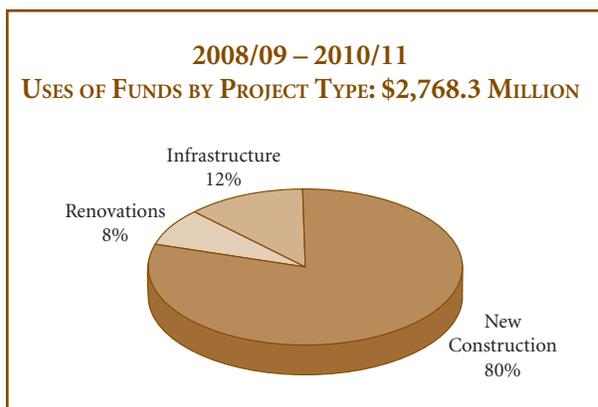
debt service for debt backstopping the receipt of gifts). Of this amount, \$7.7 million will be serviced by general funds, \$22.7 million by auxiliary or service center operations, and \$8.9 million by formula schools (the GSB and the SoM).

The additional operations, maintenance, and utilities (O&M) costs expected at the completion of all projects commencing in the three-year period total \$43.3 million per year. Of this amount, \$28.1 million will be serviced by general funds, \$3.9 million by auxiliary and service center operations, and \$11.3 million by the formula schools.

General funds pay a portion of the debt service on capital projects, as well as paying 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

As of February 2008, the university had approximately \$387 million of debt available to support capital projects, including \$241 million of taxable commercial paper, \$92 million of tax-exempt commercial paper and \$54 million of unexpended bond proceeds. The university increased the taxable commercial paper program to \$350 million in February 2008 and is in the process of increasing the tax-exempt commercial paper program by \$150 million to \$300 million. An additional \$82 million will become available through fiscal year-end 2008/09 from internal amortization on debt-funded projects.



A total of \$605 million of permanent debt will be required to finance:

- \$409 million to complete projects already approved or under construction,
- \$90 million for projects forecast to be approved in 2008/09, and
- Up to \$106 million remains to finance construction on the Sand Hill Road Hotel and office buildings.

Additional debt funding will be required to finance the Faculty and Staff Housing program. The portfolio of debt-subsidized mortgages increased \$28 million in 2007 and \$10 million year-to-date to \$301 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 2008/09 will require an additional \$141 million in permanent debt and \$500 million to bridge timing differences between gift receipts and capital expenditures. 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 and GUP limitations.

Total university debt outstanding at fiscal year end 2007 was \$1.4 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 (GUP) 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 15 years at an average rate of approximately 135,000 gsf per year. Funding constraints have slowed this projection. The Capital Plan includes 706,857 gsf of new GUP square feet currently in Design and Construction and 105,610 net new GUP square feet in forecasted projects. In addition 21,000 new GUP square feet is shown in the Infrastructure category, for the replacement boiler plant. These square footage amounts, along with gsf previously allocated, bring the total GUP 2000 gsf expended or committed to approximately 833,000. 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 and with the other housing projects listed in the Capital Plan, Stanford will add a total of 1,210 net new graduate student beds since approval of the GUP. This will enable the University to construct up to 1,499,999 gsf of new academic space, consistent with the GUP requirements.

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.

2008/09–2010/11 CAPITAL PLAN
PROJECTS IN DESIGN & CONSTRUCTION
 [IN MILLIONS OF DOLLARS]

	School/ Department	Fiscal Year Project Schedule	Estimated Project Cost	Capital Budget 2008/09	Current Funds ¹	Project Funding Source				Annual Continuing Cost			
						In Hand or Pledged	To Be Raised	Service Center/ Auxiliary Debt	Academic Debt	Other ²	Resources to be Identified ³	Debt Service	Operations, Maintenance & Utilities
Science, Engineering and Medical Campus (SEMC) Projects ⁽⁴⁾													
	SOM	2008-10	201.5	85.0	26.8	80.5	49.2						
	SOE	2005-10	192.7	100.8	39.4	103.4	25.0	5.0				4.3	
	SOM	2006-10	144.2	53.0	72.4	24.4	29.4	25.0				4.4	
	SOE	2005-13	136.9	1.0	5.0	49.5	52.4	18.0				2.4	
	H&S	2009-11	114.6	8.0	5.0	56.5	38.0	30.0				2.6	
	Contingency		5.0	1.0				15.0				3.1	
	PRES/PROV	2008-12	379.0	11.4		5.0					379.0	8.9	
	GSB	2006-11	370.0	99.9	45.0	226.6	23.5	75.0				4.6	
	R&DE	2005-09	227.0	72.7	96.5	50.5	80.0					3.1	
Underground Garage (1,227 spaces) (\$35.0)													
Enabling Projects (\$21.5)													
	SLS	2008-11	71.2	15.0		23.0	18.2					1.6	
	LBRE	2008-09	38.6	19.3				30.0				0.2	
	LBRE-RE	2008-11	33.4	10.5	33.4			38.6					
	DOR	2007-09	32.0	21.0	0.5	29.5	2.1					0.7	
Panama Mall Renovations													
	SOE	2007-10	22.5	5.1	22.5								
	SOE	2008-10	17.9	3.8	2.9	15.0							
	SOE	2007-10	14.9	10.6			14.9						
	DAPER	2008-09	14.8	12.6		14.8						0.3	
	DAPER	2008-09	14.3	13.6		14.3						0.1	
	PRES/PROV	2006-10	9.3	4.7	0.8						8.5	0.2	
	DAPER	2003-10	8.7	4.4		0.1	8.6					0.1	
	PRES/PROV	2007-09	6.7	3.3	5.6		1.1						
	PRES/PROV	2008-10	5.4	4.7	5.4							0.8	
	SOE	2008-09	4.0	0.5		2.5	1.5					0.1	
	VPSA	2007-09	3.8	0.3	3.8							0.1	
Subtotal – Projects in Design & Construction			2,068.3	562.0	361.2	699.2	263.7	118.6	198.0	40.0	387.5	23.7	38.0

¹ Includes funds from university and school reserves and the GUP and SIP programs.

² "Other" represents funding from California Institute for Regenerative Medicine.

³ Anticipated funding for this category is through a combination of gift raising and school, department and university reserves yet to be identified.

⁴ Associated connective elements, utilities and demolitions are included in each project budget. Excludes the completed Astrophysics and Y2E2 (Environment & Energy) buildings.

**2008/09–2010/011 CAPITAL PLAN
FORECASTED CONSTRUCTION PROJECTS**

[IN MILLIONS OF DOLLARS]

	School/ Department	Fiscal Year Project Schedule	Estimated Project Cost	Capital Budget 2008/09	Current Funds ¹	Project Funding Source				Annual Continuing Cost			
						In Hand or Pledged	To Be Raised	Service Center/ Auxiliary Debt	Academic Debt	Other ²	Resources to be Identified ³	Debt Service	Operations, Maintenance & Utilities
Performing Arts Center Phase 1 — Concert Hall	PRES/PROV	2009-12	163.0	11.4	50.0	63.0						1.9	
Art to the Old Anatomy Building	H&S	2009-12	70.9	5.0	30.0	40.9						1.4	
Encina Renovation	DOR	2009-11	47.5	1.4		47.5							
Cummings Replacement	HOOVER	2009-13	38.0	1.1		38.0						1.1	
800 Welch Road (Blood Center)	SOM	2009-13	23.0	0.5	8.0	15.0						0.3	
New Undergraduate Dining Hall	R&DE	2009-10	22.0	4.6			3.5				18.5	0.2	
Crothers / Crothers Memorial Renovation	R&DE	2008-10	20.0	4.2	10.0		10.0					0.7	
Stanford Auxiliary Library 3 - Phase 2	SUL	2010-13	14.0		14.0							0.5	
Green Dorm (47 beds)	SOE	2009-13	12.7	0.3	3.0						9.7	0.1	
Panama Mall Renovations	SOE	2009-12	9.0	7.5	1.0						8.0		
Buildings 02-520 and 02-524 Renovations (\$8.0)													
Building 02-560 (\$1.0)													
Subtotal – Forecasted Projects			420.0	35.9	75.0	204.3	13.5	198.0	40.0	36.2	0.9	5.3	
SUBTOTAL – CONSTRUCTION PLAN			2,488.3	597.9	436.2	468.1	132.1	198.0	40.0	423.7	24.6	43.3	

¹ Includes funds from university and school reserves and the GUP and SIP programs.

² “Other” represents funding from California Institute for Regenerative Medicine

³ Anticipated funding for this category is through a combination of gift raising and school, department and university reserves yet to be identified.

2008/09–2010/11 CAPITAL PLAN
INFRASTRUCTURE PROJECTS & PROGRAMS

[IN MILLIONS OF DOLLARS]

	School/ Department	Fiscal Year Project Schedule	Estimated Project Cost	Capital Budget 2008/09	Current Funds ¹	Project Funding Source				Annual Continuing Cost			
						In Hand or Pledged	Gifts To Be Raised	University Debt		Resources to be Identified ⁶	Other	Debt Service	Operations, Maintenance & Utilities
								Service Center/ Auxiliary Debt	Academic Debt				
Investment in Plant (Planned Maintenance) ²													
Non-Formula/Admin	LBRE	2009-11	52.3	17.4	52.3								
R&DE ³	R&DE	2009-11	17.6	5.2	17.6								
Formula	SOM/GSB	2009-11	14.6	6.2	14.6								
DAPER	DAPER	2009-11	6.1	1.8	6.1								
Utilities ⁴	LBRE	2009-11											
Roads ⁵	LBRE	2009-11											
Subtotal-Investment in Plant (Planned Maintenance)			90.6	30.7	90.6								
Capital Utilities Program (CUP)													
System Expansion	LBRE	2009-11	20.0	6.1		20.0					1.9		
System Replacement	LBRE	2009-11	16.9	4.5		16.9					1.6		
Controls	LBRE	2009-11	2.4	0.7		2.4					0.2		
Regulatory	LBRE	2009-11	3.9	2.4		3.9					0.4		
Subtotal-CUP			43.0	13.5		43.0					4.1		
Capital Utilities Projects													
Replacement Boiler Plant	LBRE	2010-15	26.0			26.0					1.7		
Searsville Substation	LBRE	2011-13	23.0			23.0					1.5		
Subtotal-Capital Utilities Projects			49.0			49.0					3.2		
R&DE Capital Improvement Program ³	R&DE	2009-11	50.9	21.9		50.9					4.2		
Building Energy Retrofit Program	Various	2006-11	13.0	9.4					13.0		1.7		
Stanford Infrastructure Program (SIP)	LBRE	2009-11	12.3	4.0	12.3								
GUP Mitigation Costs - CI Trails	LBRE	2005-11	10.0		10.0								
Information Technology & Communications Systems	ITS	2009-11	9.7	2.3		4.5			5.2		1.3		
Storm Drains	LBRE	2009-11	1.5	0.5					1.5		0.1		
Subtotal – Infrastructure Projects & Programs			280.0	82.2	112.9	147.4		19.7			14.7		
Total Capital Plan			2,768.3	680.1	549.1	790.3	468.1	217.7	40.0	423.7	39.3	43.3	

¹ Includes funds from university and school reserves and the GUP and SIP programs

² Investment in Plant represents funding available by area.

³ R&DE Capital Improvement Program generally includes program and code upgrades vs. Maintenance which includes subsystem replacement.

⁴ Included under CUP - System Replacement below.

⁵ Additional "Roads" Planned Maintenance included in SIP Program below (\$200K/year).

⁶ Anticipated funding for this category is through a combination of gift raising and school, department and university reserves yet to be identified.

