

CAPITAL BUDGET AND THREE-YEAR CAPITAL PLAN

Stanford's Capital Budget and three-year Capital Plan are based on a projection of the major capital projects that the university will pursue in support of the academic mission. The Capital Budget represents the anticipated capital expenditures in the first year of the rolling three-year Capital Plan. The Capital Plan includes projects that are in progress or are expected to commence during that three-year period. Both the Capital Budget and the Capital Plan are subject to change based on funding availability, budget affordability, and university priorities.

The university has been in the midst of the largest construction program in its history, addressing the need to replace and upgrade many aging facilities. At \$1.9 billion, the Capital Plan is 24% larger than last year's plan. This year's plan includes significant projects in the areas of academic research, housing, and infrastructure. The 2011/12-2013/14 Capital Plan includes the new Bioengineering/Chemical Engineering building, a new concert hall, several School of Medicine projects (including plans to lease 255,124 gross square feet of Stanford Research Park space), the repurposing of the vacated Graduate School of Business complex, and a new building for the arts. Housing projects include the addition of the new Escondido Village Comstock Graduate Housing and Rains Houses Renovation projects. The Capital Plan also includes \$558 million for the new Campus Energy System Improvements projects.

The Capital Plan reflects the significant investment that Stanford is making in its facilities, driven by the academic priorities for teaching, research, and related activities described in Chapter 2, and the initiatives of the administrative and auxiliary units that support the academic mission, described in Chapter 3. This chapter includes a discussion of the 2011/12 Capital Budget, provides an overview of the capital planning process, describes current strategic initiatives, and presents the 2011/12-2013/14 Capital Plan and related constraints.

THE CAPITAL BUDGET, 2011/12

The 2011/12 Capital Budget at \$455.5 million reflects the university's significant capital projects including the Bioengineering/Chemical Engineering building (BioE/ChemE), Bing Concert Hall, West Campus Recreation Center, Jill and John Freidenrich Center for Translational Research (Freidenrich Center), Campus Energy System Improvements (CESI), Stanford Research Computing Facility, Satellite Research Animal Facility (SRAF), tenant improvements at 3155 and 3165 Porter Drive, and various infrastructure projects and programs. The projected 2011/12 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 major capital projects with sig-

MAJOR CAPITAL PROJECTS - PERCENT OF COMPLETION 2011/12¹

[IN MILLIONS OF DOLLARS]

| | COSTS IN 2011/12 | ESTIMATED PROJECT COST | ESTIMATED PERCENT COMPLETE 2011/12 |
|--|------------------------|------------------------------|---|
| Bioengineering/ Chemical Engineering | 71.3 | 211.4 | 47% |
| Bing Concert Hall | 53.5 | 111.9 | 100% |
| West Campus Recreation Center | 26.3 | 35.5 | 93% |
| Jill and John Freidenrich Center for Translational Research | 16.6 | 21.3 | 100% |
| Central Energy System Improvements | 65.9 | 558.0 | 12% |
| Stanford Research Computing Facility | 19.1 | 42.3 | 50% |
| Satellite Research Animal Facility (SRAF) | 12.5 | 27.5 | 69% |
| 3165 Porter Drive Tenant Improvements | 17.7 | 22.0 | 100% |
| 3155 Porter Drive Tenant Improvements | 11.9 | 15.0 | 100% |
| | 294.6 | 1,044.9 | |

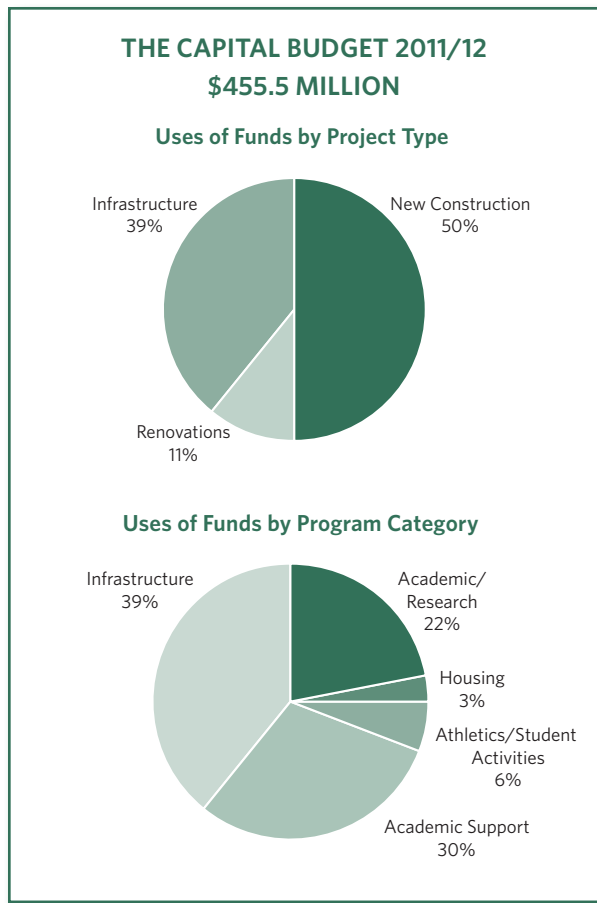
¹ Includes projects scheduled to be in construction and with forecasted expenditures greater than \$10 million in 2011/12.

nificant expenditures which will be incurred in the 2011/12 Capital Budget, as well as the percentage of the project expected to be complete by the end of 2011/12.

The magnitude of the Capital Budget is based on the assumption that funding availability will align with approved project schedules. Historically, the Capital Budget has been substantially higher than actual spending due to project deferrals caused by funding gaps. In fact, the last decade's actual expenditures were 69% of the total budgeted. This has been less of a factor in the three past years because most of the projects in recent Capital Budgets have funding identified, staff assigned, and Board of Trustees approval. However, expenditures in 2011/12 may be lower than these averages due to the higher level of Gifts to be Raised and Resources to be Identified.

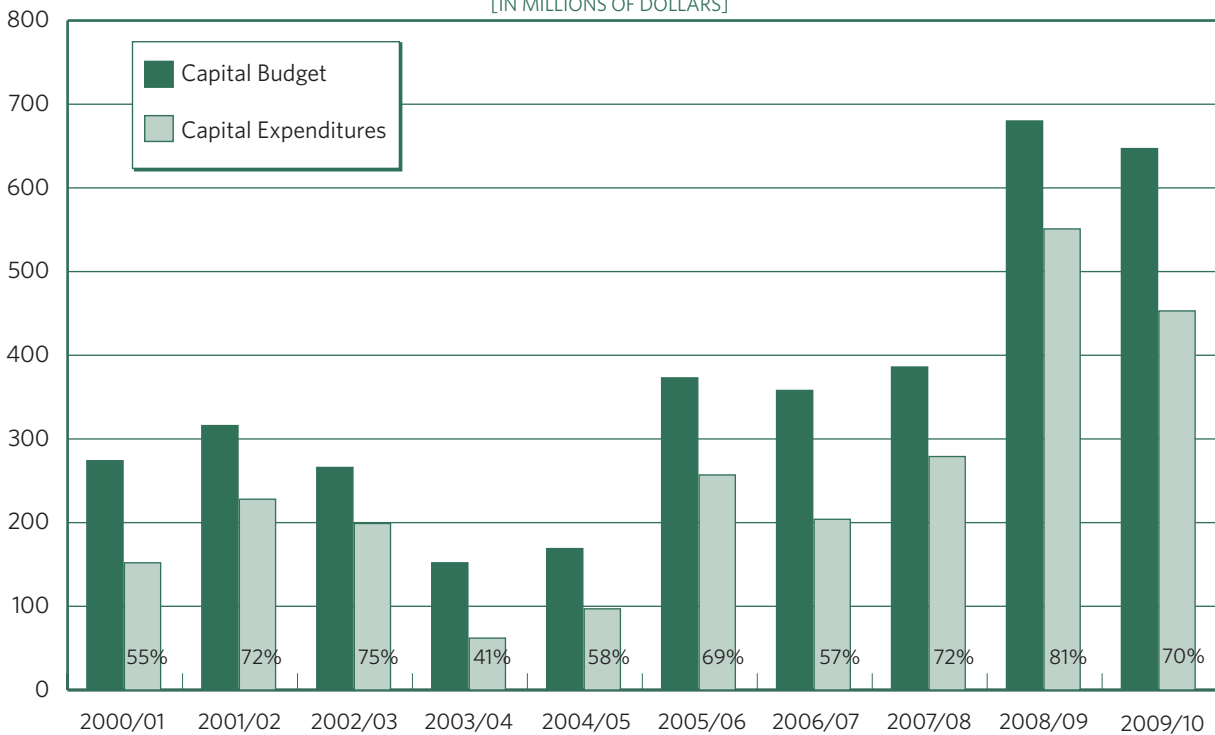
Sources and Uses

Sources of funds for the Capital Budget will be a combination of Current Funds (which include the Capital Facilities Fund (CFF), funds from university and school reserves, GUP and SIP programs, and a subvention from the Hoover Institution), gifts, and debt. The university typically allocates



CAPITAL BUDGET VS. EXPENDITURES 2000/01 to 2009/10

[IN MILLIONS OF DOLLARS]



debt to projects in the absence of other available funding. The mix of project funding will be impacted by the timing of gift receipts, which may be bridge financed with medium-term debt.

Of the \$455.5 million in the overall Capital Budget, as shown in the upper pie chart on the facing page, an estimated 50% of the budget will be spent on new construction projects. Infrastructure “project types” comprise 39% of the upper pie. The remaining 11% of funds will be spent on renovation projects. As shown in the lower pie chart on the facing page (capturing Uses of Funds by Program Category), approximately 39% will be spent on infrastructure projects. These include CESI, the Investment in Plant Program (Planned Maintenance), R&DE Capital Improvement Program (CIP), Capital Utilities Program (CUP), and the General Use Permit (GUP) Mitigation Program. Academic Support comprises 30% of the categorical picture in the lower pie chart, Academic/Research comprises 22%, Athletics/Student Activities represents 6%, and Housing comprises 3%.

Capital Facilities Fund

A crucial source of funds for capital projects is the CFF. In June 2007, the Board of Trustees approved an increase in the target endowment payout rate from 5.0% to 5.5%. The additional 0.5% payout releases unrestricted funds, which are held in the CFF to support major facilities projects.

Transfers to the CFF will be \$81.8 million in 2010/11 and \$85.9 million in 2011/12 with commitments of \$35.9 million in 2010/11 and \$56.5 million in 2011/12, as shown in the adjacent table.

Non-formula CFF funds are allocated to projects that are difficult to support through restricted sources, and thus reduce the call for debt serviced by general funds. Among other uses, non-formula CFF is providing funding for the Stanford Auxiliary Library III Phase 2 (\$14.8 million), West Campus Recreation Center (\$11 million), Stanford Research Computing Facility (\$10.6 million), and enhanced sustainability features for the BioE/ChemE building (\$5 million). Loan repayment of \$19.1 million from the Olmsted Terrace Faculty Homes is anticipated in 2010/11.

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

CAPITAL FACILITIES FUND (CFF)

Funding Sources and Committed Uses of Funding

(IN MILLIONS OF DOLLARS)

| | 2010/11 | 2011/12 |
|--|-------------|-------------|
| Sources of Funding | | |
| Formula Units | | |
| School of Medicine | 10.7 | 11.4 |
| Hoover Institution | 3.6 | 3.8 |
| President's Funds | 9.3 | 9.3 |
| Non-Formula | 58.2 | 61.4 |
| Total Funding | 81.8 | 85.9 |
| Committed Uses of Funding | | |
| Various Projects Funded by President's Funds | 9.3 | 9.3 |
| Foundations in Medicine 1 (FIM1) | 2.0 | 6.7 |
| Lane/Alway | 5.2 | |
| Various School of Medicine Projects | 9.4 | 2.9 |
| Hoover Institution Project | 3.6 | 3.8 |
| West Campus Recreation Center | 11.0 | |
| Stanford Research Computing Facility | 6.3 | 4.2 |
| Bioengineering/Chemical Engineering | 5.0 | |
| Emergency Power and Management Programs | 3.1 | 0.8 |
| Stanford Auxiliary Library III, Phase 2 | 2.3 | 11.8 |
| School of Education Building Reimbursement | (4.9) | |
| Olmsted Terrace Faculty Homes Loan Repayment | (19.1) | |
| Bing Concert Hall (O&M) | | 7.0 |
| Biology | | 5.0 |
| Crown Quad | | 5.0 |
| Other Projects | 2.7 | |
| Total Commitments | 35.9 | 56.5 |
| Annual Uncommitted Balance | 45.9 | 29.4 |
| Balance at Beginning of Year | 38.2 | 84.1 |
| Uncommitted Balance | 84.1 | 113.5 |

Capital Budget Impact on 2011/12 Operations

The 2011/12 Consolidated Budget for Operations includes incremental debt service and operations and maintenance (O&M) expenses for projects completing in 2011/12. Additionally, this budget includes an incremental increase in debt service and O&M expenses for projects completing in 2010/11 that were operational for less than 12 months.

Capital projects requiring debt are funded from internal loans that are amortized over the asset life in equal installments (principal and interest). The budgeted interest rate (BIR) used to calculate internal debt service is a blended rate of interest expense on debt issued for capital projects,

bond issuance costs, and administrative costs. The BIR for 2011/12 is 4.5%.

The projected incremental internal debt service funded by unrestricted funds, including formula units, in 2011/12 is \$3.6 million. This amount includes the additional debt service on the Knight Management Center, William H. Neukom (Neukom) Building, the Beckman Energy Retrofit, and other smaller capital projects and programs. It also includes interest on debt required to bridge finance gift receipts for the Jen-Hsun Huang Engineering Center, Center for Nanoscale Science and Engineering, Jerry Yang and Akiko Yamazaki Environmental and Energy Building, Knight Management Center, Li Ka Shing Center for Learning and Knowledge, Lorry I. Lokey Stem Cell Research Building, and Neukom Building. This additional debt service brings the total annual internal debt service borne by the unrestricted university budget to \$58.4 million.

Consolidated internal debt service, including that borne by formula units, auxiliaries, service centers, Faculty Staff Housing, and real estate investments is projected to increase from \$157.9 million to \$164.6 million. In addition, annual lease payments are projected at \$22.9 million in 2011/12.

The university will incur additional O&M costs in 2011/12 of approximately \$3.7 million, of which \$344,000 will be funded by the Bing Concert Hall endowment. These O&M costs are primarily attributed to the 2011/12 completion of the Bing Concert Hall, the 3160 Porter Lease, and the prior year completions of the Neukom Building and Parking Structure 7 (PS7), which were operational for less than 12 months in that year. The O&M costs are offset by projected savings resulting from the demolition of the Terman and Ginzton buildings.

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 beyond the three-year period, with budget impacts for operations, maintenance, and debt service commencing at construction completion. The plan includes forecasts of both cash flow and budget impacts by year, demonstrating the impact of projects beyond the three-year plan (see tables on page 74).

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 the needs and funding sources that may emerge over the long-term horizon are difficult to anticipate. Over the longer-term forecast, plans tend to evolve as various projects prove more feasible than others based upon shifting funding realities and academic priorities.

In the 2009/10–2011/12 Capital Plan, the university delayed or suspended \$1.1 billion in planned capital projects due to the impact of the global financial crisis. Each capital planning cycle, the delayed or suspended projects are reviewed to determine feasibility and funding changes. As a result of this review, the current plan includes the reactivation of \$135.8 million in projects, with \$3.4 million in associated O&M expenses. The remaining delayed and suspended projects will continue to be reevaluated annually, and are detailed on the facing page.

Strategic Initiatives

The following university strategic initiatives are integral to this year's Capital Plan and are detailed below:

- Science, Engineering, and Medical Campus (SEMC)
- Sustainability and Energy Management (SEM) / Campus Energy System Improvements (CESI)

Science, Engineering, and Medical Campus

Over the course of the SEMC initiative, the university has invested in the upgrade of aging facilities for the science, engineering, and medical programs.

The SEMC consists of eight new buildings, six completed, one in planning and one delayed:

- Astrophysics (completed in 2006)
- Jerry Yang and Akiko Yamazaki Environment and Energy Building (Y2E2) (completed in 2007)
- Lorry I. Lokey Stem Cell Research Building (SIM 1) (completed in 2010)
- Jen-Hsun Huang Engineering Center (Huang) (completed in 2010)
- Center for Nanoscale Science and Engineering (Nano) (completed in 2010)
- Li Ka Shing Center for Learning and Knowledge (LKSC) (completed in 2010)

2011/12-2013/14 CAPITAL PLAN REACTIVATED, DELAYED, SUSPENDED AND CANCELLED PROJECTS

[IN MILLIONS OF DOLLARS]

| | ESTIMATED | | | |
|---|-----------------------|--------------|--------------|-----------------------------|
| | SCHOOL/ DEPARTMENT | PROJECT COST | DEBT SERVICE | OPERATIONS & MAINTENANCE |
| Reactivated Projects | | | | |
| McMurtry (Art) Building | H&S | 67.0 | | 1.4 |
| Hoover Office Building (Cummings Replacement) | HOOVER | 45.6 | | 1.5 |
| Stanford Auxiliary Library III, Phase 2 | SUL | 14.8 | | 0.4 |
| Madera Grove Children's Center/Mulberry House | PRES/PROV | 4.6 | | 0.1 |
| Access Control Enterprise System (ACES) - Phase 2 | PRES/PROV | 3.8 | | |
| Total - Reactivated Projects | | 135.8 | | 3.4 |

| | ESTIMATED | | | |
|---|-----------------------|--------------|--------------|-----------------------------|
| | SCHOOL/ DEPARTMENT | PROJECT COST | DEBT SERVICE | OPERATIONS & MAINTENANCE |
| Delayed Projects | | | | |
| Foundations in Medicine (FIM) 1 | SOM | 172.7 | 2.1 | 2.3 |
| Biology Building (SEMC project) | H&S | 86.1 | 1.0 | 1.9 |
| Encina Renovation | DOR/H&S | 67.2 | 2.7 | |
| Old Chemistry Classrooms with Library | H&S | 55.0 | 1.8 | 1.2 |
| Panama Mall Renovations | SOE | 20.8 | | 0.1 |
| Buildings 02-520 and 02-524 Renovations (\$12M) | | | | |
| Durand Phase 4 (\$6.8M) | | | | |
| Building 02-560 (\$2M) | | | | |
| Public Safety Building | PRES/PROV | 16.6 | | 0.4 |
| Green Dorm (47 beds) | SOE | 16.0 | | 1.3 |
| Golf Club House, Pro Shop, Cart Barn | DAPER | 10.4 | | 0.1 |
| Multiple Non-Board of Trustee Level Projects | Multiple | 13.0 | 0.2 | 0.1 |
| Subtotal - Delayed Projects | | 457.7 | 7.8 | 7.4 |

| | | | | |
|---|-----------|--------------|-------------|------------|
| Suspended Projects | | | | |
| Redwood City Campus Master Plan Phase 1 | PRES/PROV | 379.0 | 18.5 | 8.9 |
| Memorial Auditorium Renovation | PRES/PROV | 63.2 | | |
| Subtotal - Suspended Projects | | 442.2 | 18.5 | 8.9 |

| | | | | |
|---|------|--------------|--|------------|
| Cancelled Projects | | | | |
| Meyer Replacement | SUL | 46.1 | | |
| Maples Parking Structure | LBRE | 40.0 | | 0.2 |
| Mechanical Engineering (Building 630 Replacement) | SOE | 14.9 | | 0.4 |
| Subtotal - Cancelled Projects | | 101.0 | | 0.6 |

| | | | | |
|--|--|----------------|-------------|-------------|
| Total - Delayed, Suspended and Cancelled Projects | | 1,000.9 | 26.3 | 16.9 |
|--|--|----------------|-------------|-------------|

- Bioengineering/Chemical Engineering (BioE/ChemE) (in planning)
- Biology (delayed)

This year's Capital Plan includes the BioE/ChemE building, one of the two remaining SEMC projects. At \$211.4 million, the BioE/ChemE project is the final component of the Science and Engineering Quad 2 (SEQ 2). This building and its associated connective elements and fit-ups will facilitate interdisciplinary study through the placement of two related programs—Bioengineering and Chemical Engineering—in one location. The building will be predominantly comprised of wet laboratories and associated support spaces designed for intensive research for each of the departments. Included in the building scope are classrooms, faculty offices, and conference spaces.

The 196,315 gross square foot (gsf) BioE/ChemE building will match the architectural character of the neighboring Y2E2 building, and the Huang Engineering and Nano Centers. The Ginzton Laboratory will be demolished to clear the site. Mass excavation of the site will commence in 2011, with expected completion by 2014.

Sustainability and Energy Management / Campus Energy System Improvements

Stanford is committed to advancing sustainability in the design, construction, and operation of campus facilities. The reduction of overall energy consumption and the use of cleaner energy sources are integral to creating a sustainable campus. Stanford continues a decade-long commitment to energy conservation and efficiency.

Existing energy-saving strategies are expected to decrease energy consumption through 2011. In 2012, additional demand from new buildings may require enhanced conservation efforts. Stanford currently receives most of its energy from the Cardinal Cogeneration plant. The contract for energy services from this plant expires in 2015, at which time it will be 28 years old and near the end of its useful life. The university is now exploring options for replacing the plant through the new CESI project.

Options being considered for this major capital utilities project range from a new like-kind, natural gas-fired cogeneration and steam supply system, to a fully electric heat recovery plant with a campus-wide steam to hot water conversion, to hybrids of the two. In most scenarios, a new central energy plant would be constructed in a new loca-

tion on the west side of campus, and the old plant would be phased out and demolished to make way for future academic development. Also included is an upgrade of the high voltage electrical infrastructure to support campus growth and added central plant load. Estimated costs for CESI are \$558 million.

Stanford is also pursuing approaches to reduce the use of non-renewable resources and minimize environmental impacts. Under the university's sustainability standards, new buildings are required to use 30% less energy and 25% less water than building codes require. This is achieved through a combination of building orientation relative to the sun, adept space use planning and building operation scheduling, and use of efficient electrical and mechanical equipment. In addition, use of native drought-tolerant landscaping and non-potable or reclaimed water for irrigation and other suitable applications, education and training of building occupants, and other measures will contribute to improved conservation and sustainability goals. Existing buildings that have been identified as the largest energy-intensive facilities on campus are being renovated to meet the Whole Building Energy Retrofit Program sustainable standards (please see the discussion on page 70 for further information). Minor capital and operations improvements are funded through the Energy Retrofit Program (ERP). The Energy Conservation Incentive Program (ECIP) provides incentives for schools and other units to decrease energy use.

Across the university, Sustainable Working Teams are collaborating to advance sustainable approaches to operations in other areas such as green purchasing, food service, recycling, and transportation. Revised long-term master plans for increased sustainability efforts in the areas of campus water use and transportation are in draft form and under review within SEM at this time.

THE CAPITAL PLAN, 2011/12-2013/14

Stanford's central campus, including the Medical School but excluding the hospitals, has approximately 700 major buildings providing 15.3 million square feet of physical space. The physical plant has an historical cost of \$6.3 billion and an estimated replacement cost in excess of \$7 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 the challenging constraints of limited development entitlements, available funding, and budget affordability.

Projects listed in the Capital Plan are those approved by the provost. Many of the projects are under the purview of the Board of Trustees. Board-level approvals are required for any of the following:

- 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
- Projects with major exterior design changes

Expenditures in the 2011/12-2013/14 Capital Plan, which include major construction projects in various stages of development and numerous infrastructure projects and programs, total \$1.9 billion. The table below provides a comparison of the last three Capital Plans.

COMPARATIVE CAPITAL PLANS

[IN MILLIONS OF DOLLARS]

| | 2009/10 | 2010/11 | 2011/12 |
|---------------------|----------------|----------------|----------------|
| Design/Construction | 1,427.0 | 795.9 | 495.3 |
| Forecasted | 79.6 | 221.8 | 1,106.1 |
| Infrastructure | 294.0 | 498.0 | 275.8 |
| Total | 1,800.6 | 1,515.7 | 1,877.2 |

Projects in Design and Construction

Projects in Design and Construction represent \$495.3 million (26% of the plan). Construction of these projects is contingent on fundraising of \$111 million (22%) and identifying resources for the \$70.3 million funding gap (14%). Ten projects are listed in this category, as shown in the related table on page 77.

The cost of projects in Design and Construction decreased by \$300.6 million from 2010/11 as a result of the completion of certain projects offset by the addition of new projects. Completed projects include the Knight Management Center and PS7 (\$345.3 million), Neukom Building (\$63.9 million), Olmsted Terrace Faculty Homes (\$28.6 million), Nano Fit-up (\$17.7 million), Olmsted Road Staff Rental Housing (\$16 million), Huang Fit-up (\$14 million), and the

Cognitive and Neurobiological Imaging (CNI) Center (\$7.5 million). Offsetting these decreases is \$20.5 million from the Manzanita Undergraduate Housing project that was previously listed in the Forecasted Projects section. The Rains Houses Renovation (\$49.8 million) and the West Campus Recreation Center (\$35.5 million) are two new Capital Plan projects that further offset decreases by \$85.3 million. The Stanford Auxiliary Library III Phase 2 (\$14.8 million) was reactivated from the Delayed and Suspended Projects list.

Forecasted Projects

Forecasted Projects are those anticipated to receive Board of Trustees approval over the next three years. These projects total \$1.1 billion (59% of the plan) and are listed on page 78. As with the projects in Design and Construction described above, these projects are contingent upon funding. For this group of projects, a total of \$75.4 million (7%) remains to be fundraised and \$174.4 million (16%) requires funding to be identified.

Project costs within this category have increased by \$884.3 million from 2010/11, as a number of new and existing projects have either been added to the plan or moved into the Forecasted Projects category. The most significant impact to this figure is the new CESI initiative, which carries a project cost of \$558 million. Additional projects added to the Forecasted Projects section are the Escondido Village Comstock Graduate Student Housing and Parking Structure (\$175 million), Satellite Research Animal Facility (\$27.5 million), 1651 Page Mill Road Tenant Improvements (\$23 million), 3165 Porter Drive Tenant Improvements (\$22 million), 3155 Porter Drive Tenant Improvements (\$15 million), Crown Quad Renovation (\$15 million), Sports Center Expansion (\$14 million), Forsythe Data Center Phase 4 Electrical Upgrade (\$5 million), and North Campus Electronic Communications Hub (\$4.3 million). The Hoover Office Building (\$45.6 million) was reactivated from the Delayed and Suspended Projects table in the 2011/12 Capital Plan.

Infrastructure

Stanford's ongoing efforts to renew its infrastructure, excluding the CESI initiative, are reflected in a budget of \$275.8 million (15% of the plan). Infrastructure costs have decreased from last year's Capital Plan by \$222.2 million, due to the CESI initiative now reflected in Forecasted

Projects. Infrastructure programs include the Investment in Plant Program (Planned Maintenance), R&DE's Capital Improvement Program (CIP), GUP Mitigation Program, Capital Utilities Program (CUP), Whole Building Energy Retrofit Program Group 2, Stanford Infrastructure Program (SIP), Information Technology & Communications Systems, Emergency Generators, Lagunita Diversion Facility Remediation, and Storm Drain projects. GUP mitigation and SIP projects are funded through construction project surcharges. The other categories of projects are funded by central funds or debt.

Investment in Plant - Planned Maintenance Program

Annual Investment in Plant assets represents the maintenance funds planned to be "invested" to preserve and optimize Stanford's existing facilities. These projections are based on the life cycle planning methodology, the key concept being that life expectancies of facility subsystems are known and, as a result, maintenance schedules can be predicted. This year's Planned Maintenance Program also includes \$5 million in pathway, outdoor structures, and grounds. The planned costs and funding total \$117.6 million and are detailed by area on page 79.

R&DE Capital Improvement Program

R&DE's CIP initiative is intended to address health and safety issues, 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 \$43.4 million. The plan includes continuation of the code compliance upgrades of various Row Houses, repairs to the Escondido Village slab heating system and infrastructure, as well as bathroom and kitchen renovations. In an effort to reduce deferred maintenance within R&DE facilities, a Backlog Reduction Initiative (\$27.1 million) will be under way to upgrade critical building systems and components. Upon completion of CIP building renovations, the facilities are maintained through the Stanford Housing Asset Renewal Program (SHARP) and the Dining Asset Renewal Program (DARP).

GUP Mitigation

Funding for GUP mitigations is generated by an internal fee levied on capital projects that increase school/department campus space allocations. The fee provides funding

necessary for implementation of Santa Clara County GUP requirements and recommendations including trails, storm water management, transportation demand management, protection of biological resources and other programs. Additionally, GUP fees fund new parking spaces.

Stanford reached agreement with Santa Clara County on the implementation of the required trails in the County and other jurisdictions. Santa Clara County segments were permitted for construction and began in 2005. Construction was suspended when the Committee for Green Foothills sued the County and Stanford over the adequacy of the Environmental Impact Report (EIR). The litigation was resolved on February 11, 2010 by a California Supreme Court ruling in favor of Stanford University and Santa Clara County to proceed with development of the trails located in the foothills along Page Mill Road. The total estimated cost for all trails is \$21.7 million.

Capital Utilities Program

The \$20.1 million three-year plan improves electrical, steam, water, chilled water, and wastewater utility systems. The annual CUP program covers the areas of system expansion (\$11 million) and system replacement (\$9.1 million). The university annually budgets for the replacement of systems that are nearing the end of their useful life and expands systems as required by campus growth.

Included in the replacement and expansion process are distribution pipes, conduits, switchgear, Central Energy Facility (CEF) production equipment, software and hardware for metering and monitoring utility systems, and water systems. The CUP program is significantly less than in prior years in anticipation of the CESI initiative, which will subsume many energy-related CUP projects in the next few years.

Whole Building Energy Retrofit Program Group 2

The Whole Building Energy Retrofit Program seeks to reduce energy consumption in Stanford's largest energy-intensive buildings. The program began in 2003/04 with studies of the top 12 energy using buildings, representing \$15.9 million of energy expenses per year, or nearly 36% of the total campus energy expense. It has now been expanded to include the top 26 energy using buildings, representing an additional \$9.2 million of energy expenses (total of \$25.1 million) per year and 60% of the total campus. The retrofits completed thus far have delivered a discounted payback of

WHOLE BUILDING ENERGY RETROFIT PROGRAM

| PROJECT | RETROFIT STATUS | ESTIMATED ANNUAL CONSUMPTION SAVINGS | EARLY RESULTS |
|--|--------------------|--------------------------------------|---------------|
| Stauffer I - Chemistry | Complete | 38% | 46% |
| Gordon & Betty Moore Materials Research ¹ | Complete | 32% | 10% |
| Paul Allen Center for Integrated Systems (CIS) | Complete | 15% | 14% |
| Forsythe (George) Hall ² | Complete | 8% | 0% |
| Stauffer II - Physical Chemistry | Complete | 38% | 43% |
| Gates Computer Science | Complete | 29% | 27% |
| Beckman Center for Molecular and Genetic Medicine | Construction | 43% | |
| Gilbert Biological Sciences | Construction | 34% | |
| Cantor Center for Visual Arts | Construction | 13% | |
| Bing Wing (Green Library West) | Construction | 16% | |
| Psychiatry Academic and Clinic Building | Design | 56% | |
| Packard Electrical Engineering | Design | 26% | |
| Mitchell Earth Sciences | Design | 25% | |
| Green Earth Sciences | Study | | |
| Clark Center | Study | | |
| Arrillaga Alumni Center | Study | | |
| Jordan Hall | Not started | | |
| Varian Physics Laboratory | Not started | | |
| Mechanical Engineering Laboratory | Not started | | |
| Green Library East | Not started | | |
| Sweet Hall | Not started | | |
| RAF 1 | Not started | | |
| RAF 2 | Not started | | |
| Lucas Center | Delayed to 2011/12 | | |
| Center for Clinical Sciences Research (CCSR) | Delayed to 2012/13 | | |
| Herrin Hall - Biology ³ | Cancelled | | |

¹ Construction scope reduced from original survey.

² Equipment installed as part of the Forsythe Hall retrofit uses less energy, however, the installation of additional computing equipment has offset the energy savings achieved by the retrofit

³ Planned for demolition.

3.3 years and Pacific Gas and Electric rebates of \$440,000. An additional \$1.85 million in PG&E rebates are anticipated for projects in construction.

The table above summarizes the status of these projects, expected annual savings, and early results. It should be noted that early results may not be indicative of expected long-term improvements due to the imprecise nature of estimating potential energy savings from major renovations as well as the time needed for the changes to take full effect. Where results vary significantly from expectations (more than $\pm 5\%$) and after at least one full annual building cycle

has passed, troubleshooting will continue until any identified problems are addressed and expectations are met or exceeded. This troubleshooting will be undertaken unless unforeseen building changes or weather patterns, though unlikely, materially affect the design intent of the retrofit.

Stanford Infrastructure Program

The SIP consists of campus 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 \$12.2 million

over the next three years (excluding funding for replacement parking spaces). SIP projects include the construction of campus transit improvements, parking lot infrastructure improvements, site improvements, landscape design and enhancements, bicycle, cart and pedestrian paths, lighting, signage, and outdoor art.

Information Technology and Communication Systems

The university's computing and communications systems provide comprehensive data, voice and video services to the campus community. Over time, these systems must be improved and/or replaced so that a consistently high level of service can be maintained. Additionally, new technologies are implemented that provide more efficient, faster, and/or more cost-effective solutions. For 2011/12-2013/14, a total of \$8.3 million has been allocated for upgrades to these critical university systems.

Emergency Generators

Comprehensive emergency preparedness planning includes the installation of emergency generators at major housing and dining facilities throughout campus. In the 2011/12-2013/14 Capital Plan, the cost of the emergency generators program is \$2.4 million.

Lagunita Diversion Facility Remediation

The Lagunita Diversion Facility on San Francisquito Creek consists of a dam, water diversion facilities, and a fish ladder to allow passage primarily for steelhead. Water diversion operations were discontinued at this facility in the 1980s because of repeated collapse of the diversion channel and the facility's replacement by a downstream pump station diversion facility. The State of California Department of Fish and Game has expressed concerns about the facility's adequacy for fish passage, and Stanford has proposed removal of the entire dam and diversion facility as part of the Habitat Conservation Plan, currently under review by federal agencies. The university estimates that the remaining project costs to remove the facility and stabilize the creek's banks will be \$1 million.

Storm Drains

The ongoing storm drainage program includes projects for improving and expanding the capacity of the campus storm drainage system, replacing deteriorated pipes, and improving drainage around buildings. In addition, increasingly

stringent storm water quality regulations are necessitating new storm water treatment approaches such as bioswales, bioretention, and storm water capture to minimize contamination conveyed to natural water bodies from common storms. These treatment approaches will be incorporated on new building sites by those projects, where feasible. This program covers campus-wide storm water treatment facilities that meet these requirements beyond those met by new building projects. The estimated cost for the program for 2011/12-2013/14 is \$900,000.

Other Stanford Entities

In an effort to present a comprehensive view of university planned construction, the capital planning process has included real estate investments, the Stanford Hospital and Clinics (SHC), Lucile Packard Children's Hospital (LPCH), and the SLAC National Accelerator Laboratory. Although the Capital Plan tables at the end of this chapter do not include these other entities, brief descriptions of their capital programs follow:

Real Estate Investments

Under an approved land use development agreement with the City of Palo Alto, 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 2014, when the underlying ground leases expire. The Real Estate group has begun the early planning phase for these development projects; detailed plans and project costs will be determined in future years.

Stanford Hospital and Clinics and Lucile Packard Children's Hospital

The Stanford University Medical Center (SUMC) is requesting entitlements in Palo Alto to create a new hospital zone, which would allow development of approximately 1.3 million square feet of net new hospital, clinic, and medical office space. Approval of the SUMC entitlements would permit the renovation and expansion of Stanford Hospital and Clinics, the Lucile Packard Children's Hospital and the building of new medical school facilities. In addition, the new zone would allow for an increase in the height limit from 50 feet to 130 feet. The estimated project costs of the Stanford Hospital and Clinics and the Lucile Packard Children's Hospital are \$2 billion and \$1 billion, respectively.

Since the fall of 2006, representatives from the two hospitals, the School of Medicine, and university administration (including Land, Buildings and Real Estate, Public Affairs, and the Office of the General Counsel) have worked together to manage the entitlement process. The formal project application was submitted in August 2007. The City Council hearing on the final Environmental Impact Report (EIR) and approval of the Development Agreement is now targeted for May 2011.

SLAC National Accelerator Laboratory

In February 2011, the SLAC National Accelerator Laboratory completed its Long-Range Development Plan with its vision to consolidate research activities, upgrade infrastructure, and/or demolish and renovate facilities. In 2011/12, the Research Support Building (RSB) and Infrastructure Modernization project, totaling approximately \$97 million funded by the Department of Energy (DOE), will begin at the SLAC National Accelerator Laboratory campus and is scheduled for completion by 2014. The enabling projects include the construction of a new 64,000 gross square foot building to house accelerator research staff at the RSB, renovation of two mission-support buildings, and the demolition of 64,000 square feet of substandard buildings and trailers.

Additional projects within the Long-Range Development plan include renovation of office space and construction of new laboratory space for the Stanford Institute for Materials and Energy Science (SIMES) program, construction of a new Science and User Support Building, and the construction of the Linac Coherent Light Source II (LCLS-II) facilities (see Chapter 2 SLAC National Accelerator Laboratory section for additional project details).

SLAC National Accelerator Laboratory is collaborating with the university to determine a feasible solution for a scalable, efficient and high density scientific research computing facility as data centers at both SLAC and on campus are currently operating at maximum capacity.

Overall Summary

A summary table of the 2011/12-2013/14 three-year Capital Plan appears on page 74. Included are projects and programs in Design and Construction, Forecasted, and Infrastructure that are anticipated to commence in the next three years.

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. These 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 university's operating 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 university budget over a period beyond the three-year plan based on actual project completion dates. A table entitled Capital Plan Impact on Budget is included with the Capital Plan Summary and Capital Plan Cash Flows table to forecast the budget impact by area of responsibility (e.g., general funds, formula schools, etc.).

The tables at the end of this chapter provide a detailed list of the projects included in the Capital Plan. The accompanying text summarizes these projects in order to present a comprehensive view of all planned construction on Stanford lands.

The following sections address the Capital Plan funding sources and uses, along with resource constraints.

Capital Plan Funding Sources

As the first chart on page 75 shows, Stanford's Capital Plan relies on several funding sources including Current Funds (which include the Capital Facilities Fund, funds from university and school reserves, GUP and SIP programs and a subvention from the Hoover Institution), gifts, and debt. Depending upon fundraising realities and time frames, some projects will prove more difficult than others to complete. As a result, it is possible that additional projects on the Capital Plan—beyond those already delayed or suspended—will have to be cancelled, delayed, or scaled back in scope.

For any projects relying on Gifts to be Raised, the Office of Development has determined that fundraising plans are feasible, although the time frames for the receipt of gifts are subject to change. Resources to be Identified includes

SUMMARY OF THREE-YEAR CAPITAL PLAN 2011/12-2013/14

[IN MILLIONS OF DOLLARS]

| | ESTIMATED PROJECT COST | CAPITAL BUDGET 2011/12 | CURRENT FUNDS ¹ | PROJECT FUNDING SOURCE | | | | | ANNUAL CONTINUING COSTS | |
|--|------------------------------|------------------------------|-------------------------------|------------------------|-----------------|---|------------------|---|-------------------------|--|
| | | | | GIFTS | | UNIVERSITY DEBT | | RESOURCES TO BE IDENTIFIED ² | DEBT SERVICE | OPERATIONS & MAINTENANCE ³ |
| | | | | IN HAND OR PLEGDED | TO BE RAISED | SERVICE CENTER/ AUXILIARY DEBT | ACADEMIC DEBT | | | |
| Projects in Design & Construction | 495.3 | 183.4 | 74.2 | 220.8 | 111.0 | 9.2 | 9.8 | 70.3 | 1.2 | 8.9 |
| Forecasted Projects | 1,106.1 | 160.6 | 108.9 | 45.2 | 75.4 | 621.0 | 81.2 | 174.4 | 48.6 | 14.1 |
| Total Construction Plan | 1,601.4 | 344.0 | 183.1 | 266.0 | 186.4 | 630.2 | 91.0 | 244.7 | 49.8 | 23.0 |
| Infrastructure Programs | 275.8 | 111.5 | 149.7 | | | 92.0 | 23.3 | 10.8 | 8.2 | 0.3 |
| Total Three-Year Capital Plan 2010/11-2012/13 | 1,877.2 | 455.5 | 332.8 | 266.0 | 186.4 | 722.2 | 114.3 | 255.5 | 58.0 | 23.3 |

¹ Includes funds from university and school reserves and the GUP and SIP programs. Also includes the \$20 million Hoover subvention for the McMurtry (Art) Building.

² Anticipated funding for this category is through a combination of school, department, university reserves, and other sources.

³ Operations & Maintenance includes planned and reactive/preventative maintenance, zone management, utilities, contracts, grounds and outdoor lighting.

CAPITAL PLAN CASH FLOWS

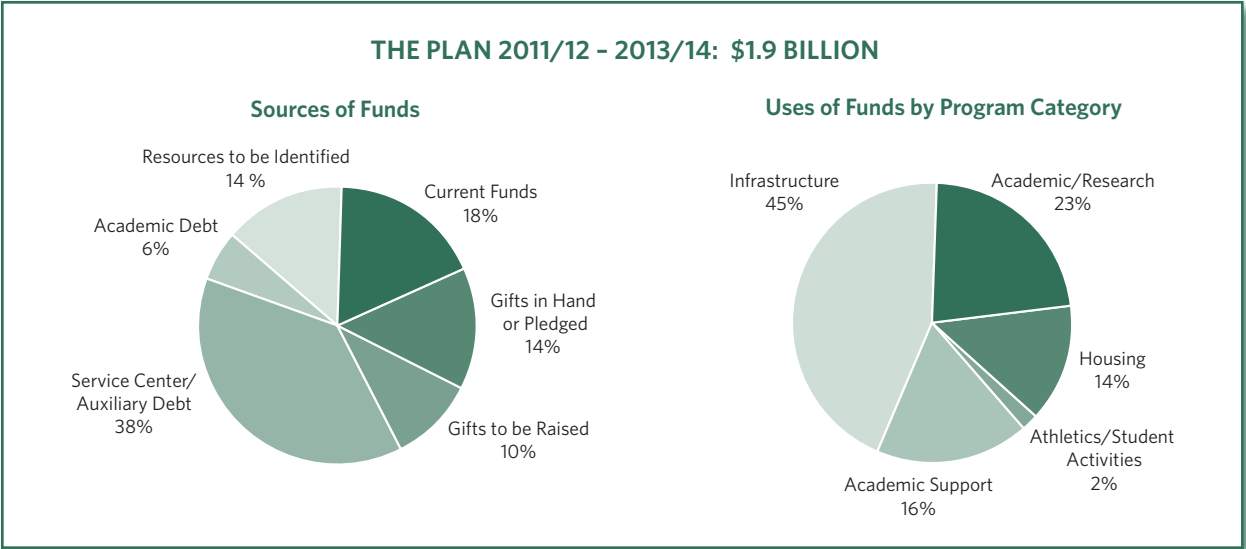
[IN MILLIONS OF DOLLARS]

| | 2010/11 & PRIOR | 2011/12 | 2012/13 | 2013/14 | 2014/15 & THEREAFTER | TOTAL |
|--|-----------------|--------------|--------------|--------------|-------------------------|----------------|
| Projects in Design & Construction | 126.3 | 183.4 | 78.7 | 79.5 | 27.4 | 495.3 |
| Forecasted Projects | 12.1 | 160.6 | 330.4 | 309.8 | 293.2 | 1,106.1 |
| Total Construction Plan | 138.4 | 344.0 | 409.1 | 389.2 | 320.6 | 1,601.4 |
| Infrastructure Programs | 11.0 | 111.5 | 88.9 | 62.9 | 1.6 | 275.8 |
| Total Three-Year Capital Plan 2011/12-2013/14 | 149.4 | 455.5 | 498.0 | 452.1 | 322.2 | 1,877.2 |

CAPITAL PLAN IMPACT ON BUDGET

[IN MILLIONS OF DOLLARS]

| | 2012/13 | 2013/14 | 2014/15 & THEREAFTER | TOTAL |
|---|------------|------------|-------------------------|-------------|
| Debt Service | | | | |
| General Funds | | 2.0 | 0.6 | 2.6 |
| Formula and Other Schools | 2.3 | 1.2 | | 3.5 |
| Auxiliary | 0.6 | 2.1 | 5.6 | 8.3 |
| Service Center | 0.6 | 1.1 | 41.9 | 43.6 |
| Total Debt Service | 3.5 | 6.4 | 48.1 | 58.0 |
| Operations and Maintenance | | | | |
| General Funds | 2.5 | 1.9 | 12.5 | 16.9 |
| Formula and Other Schools | 1.2 | 0.1 | | 1.3 |
| Auxiliary | 0.3 | 0.9 | 2.5 | 3.7 |
| Service Center | 0.3 | 0.2 | 0.9 | 1.4 |
| Total Operations and Maintenance | 4.3 | 3.1 | 15.9 | 23.3 |



funds yet to be fully identified, with the expectation that funds will come from a combination of school, department and university reserves, and other sources.

Uses of Funds by Program Category and Project Type

The chart above divides the Capital Plan activity into program categories—Academic/Research, Infrastructure, Academic Support, Housing, and Athletics/Student Activities—with the largest category being Infrastructure at 45% of the Capital Plan. The chart below breaks out the same activity into project types—New Construction, Infrastructure, and Renovations—with Infrastructure and New Construction comprising 45% and 43% of the plan,

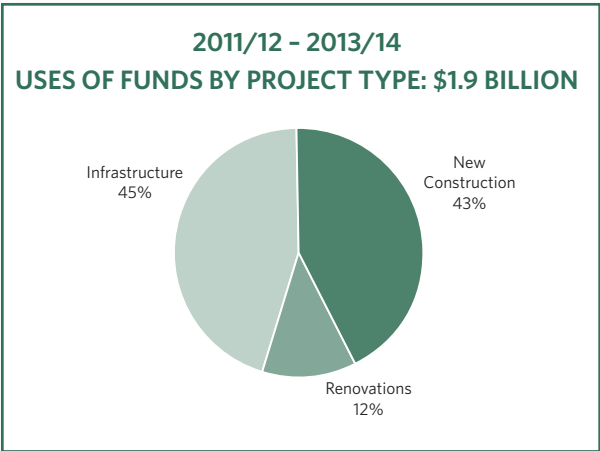
respectively. Notably, because of the completion of several major projects during 2010/11, Academic/Research has a relatively smaller portion of activity compared to last year’s Capital Plan with a decline from 45% to 23% of the plan. Conversely, the Infrastructure portion of the plan—whether viewed as a program category or a project type—will increase from 33% of last year’s plan to become 45% of this year’s plan due to the inclusion of the CESI initiative.

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 2011/12 to 2018/19) totals \$58 million annually (excluding debt service for debt bridge financing the receipt of gifts). Of this amount, \$2.6 million will be serviced by general funds, \$51.9 million by auxiliary or service center operations, and \$3.5 million by formula schools (the GSB and SoM).

The additional O&M costs expected at the completion of all projects commencing in the three-year period total \$23.3 million per year. Of this amount, \$16.9 million will be serviced by general funds, \$5.1 million by auxiliary and service center operations, and \$1.3 million by the formula schools. O&M and debt service on capital projects compete directly with other academic program initiatives.



Debt Capacity

As of May 2, 2011 debt available to finance capital projects and faculty mortgages is estimated at \$763 million, including \$269 million of taxable commercial paper, \$218 million of tax-exempt commercial paper, \$40 million of unexpended tax-exempt bond proceeds and \$236 million unexpended taxable bond proceeds. In addition, through fiscal year-end 2010/11, \$106 million from internal amortization on debt-funded projects will become available to lend to projects and \$101 million in forecasted pledge payments will retire debt issued to bridge finance the receipt of gifts.

The Capital Plan will require a total of \$746 million of debt:

- \$243 million to complete projects already approved or under construction,
- \$319 million for projects forecast to be approved in 2011/12,
- \$184 million to bridge finance the receipt of gift pledges for projects under construction.

Additional debt will be required to finance the Faculty Staff Housing program. As of May 2, 2011 the portfolio of debt-subsidized mortgages had increased by \$11 million to \$388 million.

Projects identified in the three-year Capital Plan commencing after 2011/12 will require an additional \$524 million in long-term debt. Debt for these projects has not been committed and allocations will be evaluated in the context of debt capacity, affordability, viability of the funding plan, and GUP limitations.

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 gross square feet 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 included the following:

- Creation of an academic growth boundary to limit the buildable area to the core campus

- Approval of a sustainable development study (SDS) before new construction is developed beyond one million gross square feet. (The SDS was approved by Santa Clara County in April 2009.)
- Construction of 605 units of housing for each 500,000 gross square feet 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. The total GUP square footage allocation was originally projected to be expended over 15 years at an average rate of approximately 135,000 gross square feet per year. Subsequent experience has lengthened this projection.

The 2011/12–2013/14 Capital Plan includes 356,850 gross square feet of GUP square feet currently in Design and Construction and 120,338 net GUP square feet in Forecasted Projects. This square footage, along with gross square feet previously allocated, brings the total GUP 2000 gross square feet expended or planned to over one million. Given the university's longer-term capital forecast, coupled with funding and affordability challenges and ongoing scrutiny of expansion, the current GUP allocation may extend through 2025.

With the completion of the Escondido Village Conversions and various housing unit credits, Stanford will have added 1,448 net new housing linkage units since approval of the GUP. The completion of these units will enable the university to construct up to 1.5 million gross square feet of new academic space under the GUP. The construction of square footage beyond this amount will require additional housing units.

CAPITAL PLAN PROJECT DETAIL

The tables on the following three charts show projects grouped within three categories: Projects in Design and Construction, Forecasted Construction Projects, and Infrastructure Projects and Programs.

**2011/12-2013/14 CAPITAL PLAN
PROJECTS IN DESIGN & CONSTRUCTION**

[IN MILLIONS OF DOLLARS]

| | SCHOOL/ DEPARTMENT | FISCAL YEAR PROJECT SCHEDULE | ESTIMATED PROJECT COST | CAPITAL BUDGET 2011/12 | CURRENT FUNDS ¹ | PROJECT FUNDING SOURCE | | | | ANNUAL CONTINUING COSTS | | | |
|--|-----------------------|------------------------------------|------------------------------|------------------------------|-------------------------------|--------------------------|--------------------------|--------------------------------------|-----------------|---|-----------------|--|--|
| | | | | | | IN HAND OR PLEGDED | GIFTS TO BE RAISED | SERVICE CENTER/ AUXILIARY DEBT | UNIVERSITY DEBT | RESOURCES TO BE IDENTIFIED ² | DEBT SERVICE | OPERATIONS & MAINTENANCE ³ | |
| | | | | | | | | | | | | | |
| Bioengineering / Chemical Engineering | | | | | | | | | | | | | |
| Base Building | SOE/SOM | 2005-14 | 175.3 | 67.5 | 5.0 | 95.5 | 65.0 | | 9.8 | | 0.6 | 4.4 | |
| Connective Elements | SOE/SOM | 2005-14 | 3.5 | 2.0 | | 3.5 | | | | | | | |
| Fit-up | SOE/SOM | 2011-14 | 32.6 | 1.8 | | | 32.6 | | | | | | |
| Bing Concert Hall | PRES/PROV | 2009-12 | 111.9 | 53.5 | 35.7 | 75.1 | 1.1 | | | | | 2.4 | |
| Rains Houses Renovation ⁴ | R&DE | 2011-15 | 49.8 | 0.9 | | | | | | 49.8 | | | |
| West Campus Recreation Center | DAPER | 2011-13 | 35.5 | 26.3 | 11.0 | 24.5 | | | | | | 0.9 | |
| Jill and John Freidenrich Center for Translational Research | SOM | 2010-12 | 21.3 | 16.6 | 0.5 | 8.5 | 12.3 | | | | | | |
| Manzanita Undergraduate Housing (100-125 units) ⁴ | R&DE | 2010-14 | 20.5 | 0.3 | | | | | | | | | |
| Arrillaga Family Dining Commons | R&DE | 2009-12 | 20.3 | 3.5 | 5.1 | 6.0 | | 9.2 | | | | 0.4 | |
| Stanford Auxiliary Library III, Phase 2 | SULAIR | 2011-13 | 14.8 | 8.2 | 14.8 | | | | | | 0.6 | 0.3 | |
| Stanford Center at Peking University | DOR | 2008-12 | 5.2 | 1.7 | 0.6 | 4.6 | | | | | | 0.4 | |
| Madera Grove Children's Center/Mulberry House | PRES/PROV | 2008-12 | 4.6 | 1.2 | 1.5 | 3.1 | | | | | | 0.1 | |
| Subtotal - Projects in Design & Construction | | | 495.3 | 183.4 | 74.2 | 220.8 | 111.0 | 9.2 | 9.8 | 70.3 | 1.2 | 8.9 | |

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

² Anticipated funding for this category is through a combination of school, department, university reserves, and other sources.

³ Operations & Maintenance includes planned and reactive/preventive maintenance, zone management, utilities, contracts, grounds and outdoor lighting.

⁴ Projects are on hold pending program and/or funding development.

**2011/12-2013/14 CAPITAL PLAN
FORECASTED CONSTRUCTION PROJECTS**

[IN MILLIONS OF DOLLARS]

| | SCHOOL/ DEPARTMENT | FISCAL YEAR PROJECT SCHEDULE | ESTIMATED PROJECT COST | CAPITAL BUDGET 2011/12 | CURRENT FUNDS ¹ | PROJECT FUNDING SOURCE | | | ANNUAL CONTINUING COSTS | | | |
|---|-----------------------|------------------------------------|------------------------------|------------------------------|-------------------------------|--------------------------|--------------------------|--------------------------------------|-------------------------|---|-----------------|--|
| | | | | | | IN-HAND OR PLEGGED | GIFTS TO BE RAISED | SERVICE CENTER/ AUXILIARY DEBT | UNIVERSITY DEBT | RESOURCES TO BE IDENTIFIED ² | DEBT SERVICE | OPERATIONS & MAINTENANCE ³ |
| Campus Energy System Improvements (CESI) ⁴ | | | | | | | | | | | | |
| | LBRE | 2012-17 | 247.8 | 11.6 | | | | 247.8 | | | 16.0 | |
| | LBRE | 2012-19 | 215.1 | 21.9 | | | | 215.1 | | | 16.1 | |
| | LBRE | 2012-14 | 40.8 | 13.0 | | | | 40.8 | | | 2.6 | |
| | LBRE | 2012-14 | 39.3 | 12.5 | | | | 39.3 | | | 2.9 | |
| | LBRE | 2012-13 | 15.0 | 6.9 | | | | 15.0 | | | 1.1 | |
| | R&DE | 2012-15 | 155.0 | 8.3 | | | | 54.0 | | 101.0 | 3.5 | 1.7 |
| | LBRE | 2012-15 | 20.0 | 1.1 | 20.0 | | | | | | | 0.8 |
| | PRES/PROV | 2012-14 | 51.0 | 2.3 | | | | | | 51.0 | | 3.5 |
| | PRES/PROV | 2012-14 | 20.0 | 1.1 | | | | | | 20.0 | | 1.7 |
| | H&S | 2012-15 | 67.0 | 2.5 | 20.0 | | 30.6 | 14.0 | | | | 1.4 |
| | HOOVER | 2013-16 | 45.6 | 0.5 | | | 3.2 | 42.4 | | | | 1.5 |
| | DOR/ITS | 2011-13 | 42.3 | 19.1 | 10.6 | | | | | | | 1.5 |
| | SOM | 2012-13 | 27.5 | 12.5 | 8.0 | | | | | | | 1.5 |
| | SOM | 2013 | 23.0 | 2.1 | 23.0 | | | | | | 1.2 | 0.1 |
| | SOM | 2012 | 22.0 | 17.7 | 7.1 | | | | | | 1.4 | 0.7 |
| | SOM | 2012 | 15.0 | 11.9 | 4.9 | | | | | | 0.9 | 0.5 |
| | SLS | 2012-14 | 15.0 | 3.6 | 5.0 | | 5.0 | 5.0 | | | | 0.2 |
| | DAPER | 2012-14 | 14.0 | 0.8 | | | | 14.0 | | | | 0.1 |
| | ITS/AS | 2011-12 | 9.0 | 8.4 | | | | 9.0 | | | 0.6 | 0.1 |
| | SUSE | 2013-15 | 8.6 | 0.2 | 2.2 | | 6.4 | | | | | 0.1 |
| | ITS/AS | 2014-15 | 5.0 | | 4.3 | | | | 5.0 | | 0.3 | 0.1 |
| | ITS/AS | 2012-13 | 4.3 | 0.9 | 3.8 | | | | | | | 0.2 |
| | PRES/PROV | 2010-13 | 3.8 | | | | | | | | | |
| | | | 1,106.1 | 160.6 | 108.9 | 45.2 | 75.4 | 621.0 | 81.2 | 174.4 | 48.6 | 14.1 |
| | | | 1,601.4 | 344.0 | 183.1 | 266.0 | 186.4 | 630.2 | 91.0 | 244.7 | 49.8 | 23.0 |
| | | | | | | | | | | | | |

¹ Includes funds from university and school reserves and the GUP and SIP programs. Also includes the \$20M Hoover subvention for the McMurtry (Art) Building.

² Anticipated funding for this category is through a combination of school, department, university reserves, and other sources.

³ Operations & Maintenance includes planned and reactive/preventative maintenance, zone management, utilities, contracts, grounds and outdoor lighting.

⁴ CESI O&M included in CUP - see Infrastructure table.

2011/12-2013/14 CAPITAL PLAN INFRASTRUCTURE PROJECTS & PROGRAMS

[IN MILLIONS OF DOLLARS]

| | SCHOOL/ DEPARTMENT | FISCAL YEAR PROJECT SCHEDULE | ESTIMATED PROJECT COST | CAPITAL BUDGET 2011/12 | CURRENT FUNDS ¹ | PROJECT FUNDING SOURCE | | | | ANNUAL CONTINUING COSTS | | | |
|---|-----------------------|------------------------------------|------------------------------|------------------------------|-------------------------------|--------------------------|--------------------------|--------------------------------------|------------------|---|-----------------|--|-------------|
| | | | | | | IN HAND OR PLEGGED | GIFTS TO BE RAISED | UNIVERSITY DEBT | | RESOURCES TO BE IDENTIFIED ² | DEBT SERVICE | OPERATIONS & MAINTENANCE ³ | |
| | | | | | | | | SERVICE CENTER/ AUXILIARY DEBT | ACADEMIC DEBT | | | | |
| Investment in Plant (Planned Maintenance) | | | | | | | | | | | | | |
| Non-Formula/Admin | LBRE | 2012-14 | 51.3 | 16.7 | 51.3 | | | | | | | | |
| Formula | SOM | 2012-14 | 23.3 | 5.9 | 23.3 | | | | | | | | |
| R&DE (SHARP/DAR) ⁴ | R&DE | 2012-14 | 30.0 | 8.3 | 30.0 | | | | | | | | |
| DAPER | DAPER | 2012-14 | 10.8 | 4.1 | | | | | 10.8 | | | | |
| Utilities ⁵ | LBRE | 2012-14 | | | | | | | | | | | |
| Roads | LBRE | 2012-14 | 2.2 | 0.3 | 2.2 | | | | | | | | |
| Subtotal-Investment in Plant (Planned Maintenance) | | | 117.6 | 35.3 | 106.8 | | | | | | | 10.8 | |
| R&DE Capital Improvement Program ⁴ | R&DE | 2012-14 | 70.5 | 39.9 | 3.1 | | 67.4 | | | | | 4.2 | 0.2 |
| GUP Mitigation Programs | LBRE | 2005-12 | 21.7 | 10.7 | 21.7 | | | | | | | | |
| Trails | LBRE | 2012-14 | 2.5 | 0.8 | 2.5 | | | | | | | | |
| Water-Related Programs | | | 24.2 | 11.5 | 24.2 | | | | | | | | |
| Subtotal-GUP Mitigation Programs | | | | | | | | | | | | | |
| Capital Utilities Program (CUP) | LBRE | 2012-14 | 11.0 | 3.8 | | | | 11.0 | | | | 0.8 | |
| System Expansion | LBRE | 2012-14 | 9.1 | 5.2 | | | | 9.1 | | | | 0.8 | |
| System Replacement | | | 20.1 | 9.0 | | | | 20.1 | | | | 1.6 | |
| Subtotal-CUP | | | | | | | | | | | | | |
| Whole Building Energy Retrofit Program Group 2 | Various | 2012-14 | 18.6 | 6.9 | | | | | 18.6 | | | 1.8 | |
| Stanford Infrastructure Program (SIP) | LBRE | 2012-14 | 12.2 | 4.0 | 12.2 | | | | | | | | |
| Information Technology & Communications Systems | ITS | 2012-14 | 8.3 | 2.8 | | | | 4.5 | 3.8 | | | 0.5 | |
| Emergency Generators | EH&S | 2012-14 | 2.4 | 0.8 | 2.4 | | | | | | | | |
| Lagunita Diversion Facility Remediation | LBRE | 2012-13 | 1.0 | 1.0 | 1.0 | | | | | | | | |
| Storm Drains | LBRE | 2012-14 | 0.9 | 0.3 | | | | | 0.9 | | | 0.1 | 0.1 |
| Subtotal - Infrastructure Projects & Programs | | | 275.8 | 111.5 | 149.7 | | | 92.0 | 23.3 | | 10.8 | 8.2 | 0.3 |
| TOTAL CAPITAL PLAN | | | 1,877.2 | 455.5 | 332.8 | | | 722.2 | 114.3 | | 255.5 | 58.0 | 23.3 |

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

² Anticipated funding for this category is through a combination of school, department, university reserves, and other sources.

³ Operations & Maintenance includes planned and reactive/preventive maintenance, zone management, utilities, contracts, grounds and outdoor lighting.

⁴ R&DE Capital Improvement Program generally includes program and code upgrades vs. Planned Maintenance which includes subsystem replacement.

⁵ Included under CUP - System Replacement below.

