

CHAPTER 2

ACADEMIC UNITS

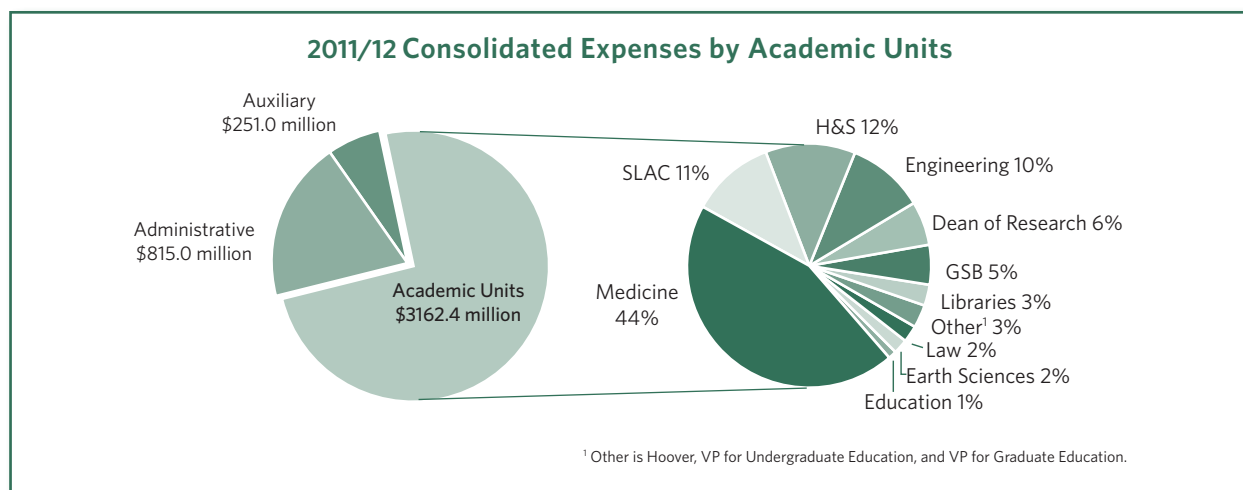
OVERVIEW OF ACADEMIC UNITS

This chapter summarizes programmatic and financial activity for each academic unit. It focuses particularly on financial conditions in each unit. The revenue expectation in 2011/12 for these academic units comprises about 78% of the university total revenue. Overall, the academic units project an operating surplus of \$77.1 million. After transfers to facilities and endowment, the unit budgets overall will be virtually balanced with a \$30.6 million surplus.

CONSOLIDATED BUDGET FOR OPERATIONS, 2011/12: ACADEMIC UNITS

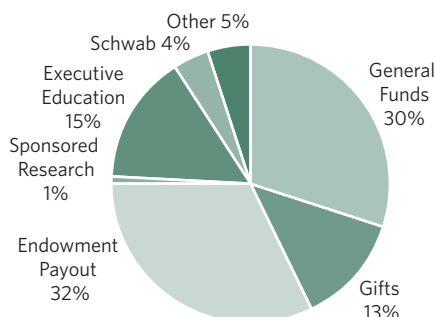
[IN MILLIONS OF DOLLARS]

	TOTAL REVENUES AND TRANSFERS	TOTAL EXPENSES	RESULT OF CURRENT OPERATIONS	TRANSFERS (TO)/FROM ASSETS	CHANGE IN EXPENDABLE FUND BALANCE
Academic Units:					
Graduate School of Business	163.3	155.3	8.1	(2.0)	6.1
School of Earth Sciences	52.2	49.9	2.3	(3.0)	(0.7)
School of Education	43.3	43.2	0.1	(1.4)	(1.3)
School of Engineering	327.0	316.8	10.2	(1.8)	8.4
School of Humanities and Sciences	408.6	393.1	15.5	(7.1)	8.4
School of Law	68.7	65.1	3.6	(3.5)	0.1
School of Medicine	1,438.6	1,394.3	44.3	(27.4)	16.9
Vice Provost Dean of Research	190.5	196.1	(5.6)	4.2	(1.5)
Vice Provost for Undergraduate Education	42.7	41.2	1.6	(1.6)	(0.0)
Vice Provost for Graduate Education	3.7	5.7	(2.0)	(0.2)	(2.2)
Hoover Institution	45.5	43.0	2.6	(3.4)	(0.8)
Stanford University Libraries	101.0	104.4	(3.4)	0.8	(2.6)
SLAC	354.3	354.4	(0.1)		(0.1)
Total Academic Units	3,239.4	3,162.4	77.1	(46.5)	30.6



GRADUATE SCHOOL OF BUSINESS

2011/12 Consolidated Revenues \$163.3 Million



[IN MILLIONS OF DOLLARS]

	2009/10 ACTUALS	2010/11 PROJECTION	2011/12 PLAN TOTAL
Total Revenues	157.3	155.9	163.3
Expenses			
Salaries and Benefits	86.4	93.0	96.8
Non-Salary	49.0	57.6	58.5
Total Expenses	135.4	150.5	155.3
Operating Results	21.9	5.3	8.1
Transfers From (to) Endowment & Other Assets	1.0	(25.0)	(2.0)
Transfers From (to) Plant	(6.1)	(4.0)	0.0
Surplus / (Deficit)	16.8	(23.7)	6.1
Beginning Fund Balances	67.0	82.2	58.5
Ending Fund Balances	82.2	58.5	64.5

Programmatic Directions

The coming year will mark a milestone in the history of the Graduate School of Business (GSB), as it will be the first full academic year of operations at the newly completed Knight Management Center. After three years of construction, the Knight Management Center was dedicated as the new home for the GSB in April, 2011. The state-of-the-art complex offers flexible classroom spaces for hands-on experiential learning, small-group leadership labs, and team-based learning, which is critical for the innovative MBA curriculum. It engages faculty and students across the university, as well as alumni, global executives, and the broader world community.

The GSB Program in Innovation and Entrepreneurship (PRIE), which launched in January of 2011, is a four-month academic program for individuals formulating, developing and commercializing ideas. This innovative program provides exposure to both the fundamentals of business and the practical aspects of identifying, evaluating, and moving business ideas forward. The program uniquely combines current Stanford master's, Ph.D., M.D., and post-doc students with Silicon Valley innovators, scientists, and engineers. This is the only part-time program offered at

the GSB. The first session was very well received and the quality of the students exceeded expectations. This program will continue next year, and the intent is to enroll 60 students during the 2011/12 academic year.

One of the goals at the GSB is to expand the global presence of the school without building facilities abroad. To support this effort, the GSB faculty has begun to participate in faculty study trips during 2010/2011. The purpose of these trips is to increase the breadth and depth of faculty knowledge and to learn more about the culture, history and business climate of the country visited. The faculty also meets with local alumni and business leaders to learn about businesses and industries in which they are interested. Three trips will be conducted each year, and will include 12-15 faculty members on each trip. The trip is exclusive to faculty and a few senior staff who assist with trip administration. The plans are to visit India and China annually, as these are areas of strategic importance in the world. The location of the third trip will be decided by the faculty each year. Brazil has been selected to be the third location in 2011/12. Feedback from the faculty has shown these trips to be excellent development efforts that strengthen the faculty both individually and as a whole.

When the new MBA curriculum was developed, the GSB leadership determined that 110 tenure line faculty were needed to optimally deliver the components of the program. However, in spite of aggressive recruitment efforts during the 2009/10 academic year, the overall faculty level has remained flat in 2010/11 at 100. This is partially due to retirements, other departures, and a different recruiting environment. The GSB continues to recruit aggressively this year and hopes to have the full complement of 110 faculty in place for 2011/12. At the same time, the school plans to grow the Ph.D. program from 100 to 110 students, resulting in one Ph.D. student per faculty member.

Consolidated Budget Overview

The 2011/12 GSB consolidated budget for operations shows total revenues of \$163.3 million and expenses of \$155.3 million. After transfers for funding relocation costs associated with the move to the Knight Management Center, the consolidated budget is better than break-even at approximately \$6.1 million.

GSB revenues for 2011/12 are projected to grow slightly. Tuition increases will contribute to the overall revenue growth, as will a slight increase in expendable giving. Tuition revenue for degreed programs is expected to increase 6.1% over the current budget plan. The tuition for first year MBAs will increase by 3.9%, which is similar to the increases in prior years. Sloan students' tuition will remain flat. The main driver of the tuition growth is the result of small growth in class size for the MBA program, and greater growth for Sloan due to increased capacity at the Knight Management Center. The school forecasts executive education revenues to remain relatively flat, as the program experienced 10.5% growth over the last two years.

Endowment income is expected to increase 9.2% due to the planned payout rate from the university, payout from new gifts received in 2010/11, and payout from a planned investment of \$25 million of unrestricted reserves during 2010/11 for the Knight Management Center. During the 2009/10 academic year, the endowment provided 34% of overall funding for the school, particularly in the areas of teaching, research, and fellowships. In addition, the school expects an increase of 3% in expendable gifts over the current year-end projection. The GSB has been extremely fortunate in that alumni have been able to show continued generosity and

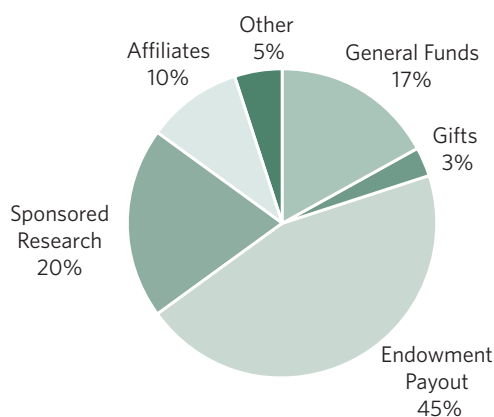
support of the school for both ongoing operations and the Knight Management Center.

GSB expenses are projected to increase by about 3% in comparison to the 2010/11 year end projection, excluding onetime expenses associated with the move to the Knight Management Center. Part of the growth is due to plans for increasing faculty as part of the longer term goals of the school to support the curriculum. The school intends to increase financial aid support at the same rate as tuition increase. The school will also incur incremental costs (estimated at \$1.9 million) associated with running operations at the Knight Management Center. Another incremental expense will be the debt service associated with the new buildings. The school is anticipating \$48 million of long term debt associated with the Knight Management Center, and a full year of debt service will be incurred in 2011/12.

The school expects 2011/12 reserves will show an increase of \$6.1 million over the projected ending balance for 2010/11. In addition to the increased operating expense at the Knight Management Center, the school continues to fund relocation costs for the central university staff formerly located on Serra Street at a cost of about \$4.0 million per year. This commitment reduces to \$2.0 million per year starting in 2012 as the school will vacate the Knight and Littlefield buildings which will be utilized by the university.

SCHOOL OF EARTH SCIENCES

2011/12 Consolidated Revenues \$52.2 Million



[IN MILLIONS OF DOLLARS]

	2009/10 ACTUALS	2010/11 PROJECTION	2011/12 PLAN TOTAL
Total Revenues	52.9	51.4	52.2
Expenses			
Salaries and Benefits	31.1	33.5	35.5
Non-Salary	14.7	14.1	14.4
Total Expenses	45.9	47.6	49.9
Operating Results	7.0	3.8	2.3
Transfers From (to) Endowment & Other Assets	(0.9)	(2.1)	(2.0)
Transfers From (to) Plant	(1.7)	(1.0)	(1.0)
Surplus / (Deficit)	4.4	0.7	(0.7)
Beginning Fund Balances	37.9	42.3	43.0
Ending Fund Balances	42.3	43.0	42.3

Programmatic Directions

The School of Earth Sciences (SES) has engaged in strategic planning discussions focused on research and educational directions for the next decade. Several critical growth opportunities emerged that will distinguish Stanford Earth Sciences for the next generation.

In addition to the school's current areas of strength in energy resources, environmental and ecosystems sciences, and solid Earth sciences, geobiology poses the greatest opportunities. New disciplines emerge relatively infrequently, and few are as game changing for the study of Earth as is geobiology. Just as the integration of physics and chemistry with geology shaped the study of the planet in the twentieth century, biology is shaping it today. Geobiology addresses a range of fundamental questions at the interface between the biological and the physical Earth sciences. Stanford has a unique blend of expertise and facilities that will enable the development of a distinctive geobiology program unlike anything peer institutions can achieve. The School of Earth Sciences is poised to begin that development. With the help of incremental resources from the university, the school will search for one geobiology faculty member in 2011/12 and two more in successive years.

Equally, if not more, important is the school's commitment to diversifying its community. This is a national problem for the Earth sciences, with very few underrepresented minorities (URMs) receiving undergraduate or graduate degrees in these fields. For the past several years, SES has been developing a comprehensive diversity program and investing significant school resources in it, particularly in graduate student fellowships. In 2010/11, with corporate support, the school created the Office of Multicultural Affairs (OMA), which focuses on a range of efforts to improve the pipeline of diverse students and scientists to the Earth sciences. OMA's programs focus on student, postdoctoral scholar, faculty, and staff diversity; university-to-university collaborations; and international partnerships.

In 2011/12, with critical support from the university, the OMA will implement a full suite of activities, ranging from a summer residential program for URM undergraduates from other institutions to a "mini-sabbatical" program encouraging URM faculty from other institutions to spend two to four weeks at Stanford. SES will also bolster its Diversity Incentive Fund (DIF), which provides incremental graduate aid to departments for diversifying their pools of new graduate students. Critical incremental funding will allow

the school to increase by more than 30% the number of DIF fellowships awarded next year, and by 2013/14 SES hopes to have a fully implemented program with a steady state of 25 diversity fellowships.

The school has also earmarked resources to create a DIF for faculty hiring. Much like the university's Faculty Incentive Fund, the school's faculty DIF provides incremental resources for faculty hires of women and other URMs. All departments in the school are encouraged to identify top scientists from underrepresented groups as possible target-of-opportunity hires. Over the next several years SES hopes to add at least two incremental faculty through this effort.

SES hopes that these programs, taken together, will have demonstrable, long-term impact on the diversity of its overall population and yield a community more reflective of the diversity of American society.

As mentioned last year, the financial crisis and ensuing budget reductions interrupted the school's growth plans. With the economic climate substantially improved, Earth Sciences is looking forward to resuming faculty hiring in 2011/12. In addition to conducting the search in geobiology and potentially making a diversity hire or two, SES will recruit for faculty in energy resources and land and water use.

Consolidated Budget Overview

The 2011/12 consolidated budget shows total revenues and transfers of \$52.2 million and expenses of \$49.9 million. However, after estimated transfers to plant funds and endowment principal, the consolidated budget shows a deficit of \$700,000. Restricted revenues in 2011/12 are projected to increase 2.5% over the expected 2010/11 levels, growing by \$1.0 million. Endowment income is expected to grow 4.3%, or \$0.9 million, including \$150,000 of income from new gifts anticipated in 2011/12. All other types of restricted revenue, including sponsored research, are expected to remain relatively flat. Expenses are projected to increase 4.8%, or \$2.3 million, due primarily to salary increases, additional graduate aid allocated specifically to support junior faculty, increased spending for the diversity program, and a modest planned increase in staff and faculty. The school's accumulated balances are projected to decrease \$700,000 during 2011/12. Much of the decrease is anticipated in endowment. The school draws on its endowment balances to

pay for faculty start-up costs and facilities projects, as well as for the additional graduate student support for junior faculty. It is expected that future budgets will be balanced as a result of increased fund raising and growth in endowment payout.

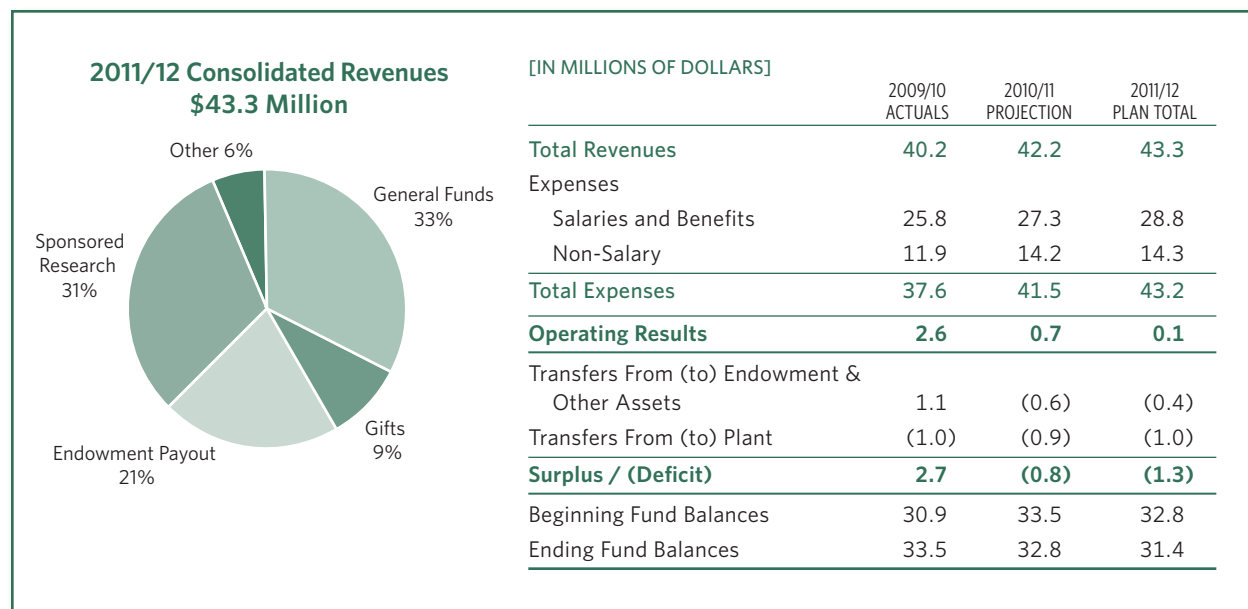
The year-end projection for 2010/11 shows an ending balance of \$43 million, with a net increase of \$700,000 across all fund types. Endowment fund balances will increase, primarily due to the change in payout restrictions on a number of fellowship funds. Designated balances are projected to increase as well, due to continued strong corporate support. Starting in 2010/11, school-sourced graduate aid has been funded through the operating budget as part of the school's efforts to have that budget more accurately reflect its true annual budget for core operations. Therefore, the operating budget for 2010/11 will have grown by about \$6.0 million (from its 2010/11 consolidated forecast), and corresponding expenses in restricted funds will decline.

Capital Plan

Earth Sciences' 2011/12 capital plan focuses on a handful of efforts aimed at using the school's limited space resources as efficiently as possible. Lack of adequate wet lab space has become an increasingly vexing problem as the school's facilities age and no longer meet current demands for power, cooling, air handling, etc. Therefore, the school will consolidate and renovate several laboratories in Green Earth Sciences to accommodate new faculty. SES will also examine the utilization and location of its classrooms and teaching labs with the hope of improving instructional spaces and freeing up much-needed laboratory space in Green.

Other efforts will focus on improvements to Branner Library, in collaboration with the University Libraries, and provision of adequate temporary and permanent space for the Center for Computational Earth and Environmental Sciences (CEES), the school's high-performance computational facility. CEES is fast outgrowing available capacity in Mitchell; the school is working with university partners to develop Stanford's Research Computing Facility with the hope of relocating CEES there by 2014. Finally, in recognition that it is running out of space to meet current and future demands, Earth Sciences will enter the planning stage for a new building.

SCHOOL OF EDUCATION



Programmatic Directions

In spite of a significant reduction in general funds two years ago, the School of Education has continued to grow, fueled primarily by restricted revenue generated by a network of interrelated, faculty-led centers. The university's K-12 Initiative has led to the formation of two new centers: the Center in Support of Excellence in Teaching (CSET) and the Center for Education Policy Analysis. Both encompass work focusing on improving leadership in education. In addition, School of Education faculty have successfully grown several other centers that explore issues around equity, opportunity, assessment, student stress, technology, organizations, and youth.

These centers, along with the Stanford East Palo Alto Charter School, bring together faculty and students with common interests from across the university. All are committed to research that can inform policy and practice. CSET and the charter school embed research in innovative programs designed to improve education leadership, teaching, and learning. The goals are to provide direct service to the community, develop models of effective programs to improve leadership and teaching, and develop and disseminate new knowledge. These new activities are earning Stanford's School of Education a reputation as a leader in education reform.

The school is committed to supporting these important areas of research while building faculty capacity and expanding and improving the student experience. As the demands for research, practice, teaching, and interdisciplinary efforts increase, a primary challenge has been—and will continue to be for the foreseeable future—helping faculty balance their many commitments. The school has benefited from a 20% increase in its faculty base over the past decade, which has enabled it to expand into developing fields and establish joint positions with other academic areas of the university. Recent and anticipated faculty appointments include affiliations with the Woods Institute for the Environment, the Center on Comparative Studies in Race and Ethnicity, Jewish Studies, and the Freeman Spogli Institute for International Studies. The school also hopes to bring aboard a cognitive neuroscientist, a move that will expand research in the science of learning. While these appointments broaden the school's footprint across campus, its faculty is interdisciplinary by nature, with its 53 members reflecting nearly 20 fields of study.

A recent programmatic initiative has been to expand the school's doctoral program from a baseline of 30 students to closer to 40 per year. While the faculty has grown significantly over the past decade, its doctoral cohort has not. To remain competitive the school needs to provide four years

of guaranteed funding for all doctoral students, but this, coupled with the sharp decline in endowment, has strained its graduate aid budget. Thanks in part to incremental funding from the provost, the school has been able to increase the cohort to 35, effective 2011/12.

In addition, over the past several years the school has made great strides in increasing the engagement of undergraduate students. It sponsors an honors program, the Education and Society theme residence, a master's cotermin program, and a minor in education that gives official credit to undergraduates interested in learning how to apply the knowledge they gain in their majors to the diverse field of education.

A key challenge for the school will be achieving its programmatic goals given constrained resources. The school anticipates that unrestricted funds will grow minimally over the next several years. Thus, leveraging restricted funds—expendable gifts, endowments, and contracts and grants—will be essential if it is to continue to thrive. As school centers receive no general funds support, their growth must come from successful fundraising.

The school must also continue to be strategic about deploying its existing resources, most notably staff, but also equipment and space. Over the past two years the school has explored a number of opportunities to increase administrative efficiencies. These include restructuring several jobs to shift staff to address the most pressing needs, sharing staff members between two or more units, enhancing systems to empower individuals to access useful information without administrative assistance, and streamlining processes to eliminate redundancies.

The scarcity of available office space in the school's three buildings presents an ongoing challenge, but the school has made significant efforts to consolidate and free up space for necessary growth. It has revised the student office space policy, converted common areas and meeting rooms into offices, and invested funds to improve space configurations.

In spite of recent financial, administrative, and space challenges, the School of Education is well-positioned to continue its efforts to generate new knowledge, train educational researchers and practitioners, improve educational practice, and inform policy.

Consolidated Budget Overview

The School of Education projects a \$1.3 million consolidated deficit in 2011/12 after an estimated \$1.0 million transfer

to plant for a major lecture hall renovation project. Aside from this capital expenditure and a slight drawdown in accumulated gift and faculty designated funds, the school anticipates an essentially balanced budget. Similarly, the projection for 2010/11 indicates an \$800,000 deficit after a \$900,000 transfer for a lab build-out project. School revenues are expected to increase significantly this year due to strong growth in grants and contracts, in particular from non-federal sources, which contribute over two-thirds of the school's research support.

The School of Education is maintaining a healthy level of sponsored research activities. The volume of proposal submissions remains consistently high as a result of the new centers, new faculty, and the trend toward more collaborative research across disciplines. While the school has not benefited greatly from American Recovery and Reinvestment Act (ARRA) funds, increased efforts to access federal funds have yielded moderate growth in proposals submitted to agencies such as the U.S. Department of Education's Institute of Education Sciences and the National Science Foundation. The school projects that non-federal activities will remain strong due to improvement in the general economy and the endowment outlook of private foundations. Federal activity is expected to decrease slightly.

School reserves will be somewhat diminished due to the facilities projects noted above. However, the level of reserves provides an adequate contingency. Going forward, the school will seek to carve out base funding to address ongoing facilities needs.

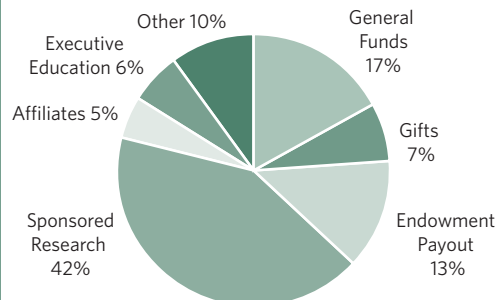
Capital Plan

To support leadership in academic programs and to attract outstanding students, staff, and faculty, the School of Education is upgrading and improving its existing spaces. In 2011/12, the school plans to invest funds to transform an aging 150-seat lecture hall into a state-of-the-art auditorium. The school is also committed to improving student space configurations and revitalizing gathering spaces as the demands of new centers and multidisciplinary activities necessitate more efficient use of space. University and school reserves will fund these projects.

The school anticipates the second phase of the Cubberley Building seismic update, which will add concrete shearwalls in the remainder of the building. The specific scope and timing of this project are still to be determined.

SCHOOL OF ENGINEERING

2011/12 Consolidated Revenues \$327.0 Million



[IN MILLIONS OF DOLLARS]

	2009/10 ACTUALS	2010/11 PROJECTION	2011/12 PLAN TOTAL
Total Revenues	313.3	314.4	327.0
Expenses			
Salaries and Benefits	161.5	176.3	183.8
Non-Salary	130.5	127.7	133.0
Total Expenses	292.0	303.9	316.8
Operating Results	21.3	10.5	10.2
Transfers From (to) Endowment & Other Assets	(4.9)	(11.2)	(1.8)
Transfers From (to) Plant	(8.0)	(0.2)	0.0
Surplus / (Deficit)	8.5	(0.9)	8.4
Beginning Fund Balances	199.5	202.5	201.6
Ending Fund Balances	202.5	201.6	210.0

Programmatic Directions

In June 2010, the School of Engineering (SoE) moved into its new home, the Jen-Hsun Huang Engineering Center on the Science and Engineering Quad (SEQ). The Huang Engineering Center is an inviting hub that welcomes the Stanford community to engage in interdisciplinary scholarly collaboration and further positions the school to achieve great things.

SoE is now focused on fundraising for and designing SEQ's fourth and final building, the future home for the Bioengineering (BioE) and Chemical Engineering departments (Building 4). This critical building will feature specialized labs and offices for faculty, students, and administrators. It will connect underground to its neighboring structures and complete the SEQ in 2014. Preparing Building 4 is a major programmatic undertaking for SoE and is also a fiscal concern (see Capital Plan section), mainly because of slow fundraising. Aside from Building 4, the financial issues SoE faces are largely associated with day-to-day operations.

SoE ranks alongside MIT as one of the nation's top engineering schools. It continues to succeed in recruiting graduate students, even in head-to-head competition with peer institutions. The school is also generally able to recruit any

faculty member to whom it makes an offer and has very few retention problems. Following successful fundraising in support of faculty, the school opened nine billets in mid-2011 and is once again recruiting.

A competitive strength of SoE is that it sits within one of the world's great liberal arts universities and thus is able to build partnerships with world-class experts in essentially all academic disciplines. SoE has leveraged Stanford's broader strengths by, for example, building the unique BioE department, jointly managed by the engineering and medical schools. BioE remains the only such department managed this way in the country, and the only department jointly managed by two schools at Stanford. This interdisciplinary structure will help to make BioE the top-ranked program in the country in a few more years.

SoE is making major changes to its undergraduate and graduate programs to prepare students for 21st-century careers. The Stanford Technology Ventures Program (STVP), for example, hones skills in entrepreneurship, innovation, and creativity. The National Academy of Engineering recently recognized STVP as the best program of its kind, awarding it the Gordon Prize.

SoE continues to champion the establishment of major shared research laboratories in areas such as nanoscience and nanotechnology. Through shared labs, faculty benefit from experimental equipment that would be cost prohibitive to obtain on an individual basis.

SoE is well known for its impact on Silicon Valley, creating new ideas for existing and start-up companies and educating the people who create and drive them. Historically this impact has been primarily in information technology (semiconductors, computers, software), with over 1,000 companies tracing their roots to SoE. While this IT impact shows no signs of abating, the school's portfolio of new companies and new technologies has expanded in recent years.

Research continues to be of great strategic and fiscal importance to SoE. To better support its prolific principal investigators (PIs), the school implemented an entirely new Engineering Research Administration (ERA) service model in 2010/11. With additional university support, ERA increased its staffing levels, which had stagnated since 1998 and not kept pace with the increase in research activity and complexity. The new ERA locates research administrators (RAs) proximate to PIs, fostering collaboration, communication, and rapport. RAs had previously worked from an isolated, central location. ERA will continue to report to the Dean's Office, ensuring consistent research administration across the school. At the request of PIs, ERA will also continue to manage research both pre- and post-award, providing one RA contact to handle every phase.

Consolidated Budget Overview

In 2011/12, the school anticipates an \$8.4 million surplus leading to ending fund balances of \$210 million (approximately 4% over the beginning balances). It anticipates that both revenue and expense will grow by \$13 million (4% over 2010/11), producing a \$327 million consolidated revenue budget and a \$316 million consolidated expense budget for 2011/12.

The projected surplus is due to anticipated stronger showings in designated income, restricted expendable gifts, and endowment income. Faculty and divisions or laboratories within departments control 48% of designated fund balances. Faculty or divisions and laboratories control 73% of expendable fund balances. Substantial percentages of restricted expendable and designated funds are earmarked for research. Endowment income funds are mainly focused on faculty and student support.

For 2011/12, sponsored research expenditures are projected to represent 44% of the school's consolidated budget, though the rapid growth seen recently (compound annual growth rate of 6% for 10 years) is projected to level off.

For 2010/11, SoE projects a deficit of \$900,000 after \$11.2 million in transfers to assets. This deficit is a change from the budgeted surplus (in August 2010) of \$3.7 million, and is due largely to departments reinvesting endowment income to principal, and using designated and gift funds to establish new endowments.

For 2010/11, the school projects \$7 million less expense than in the August 2010 budget, due in part to a slowing of sponsored research spending. Sponsored research activities are projected level off soon, having spiked the previous two years. In 2010/11, SoE's research expenditures in federal and non-federal award are projected to total \$141 million. Approximately \$54 million in sponsored research conducted by SoE faculty is associated with the Dean of Research, representing the interdisciplinary approach.

Capital Plan

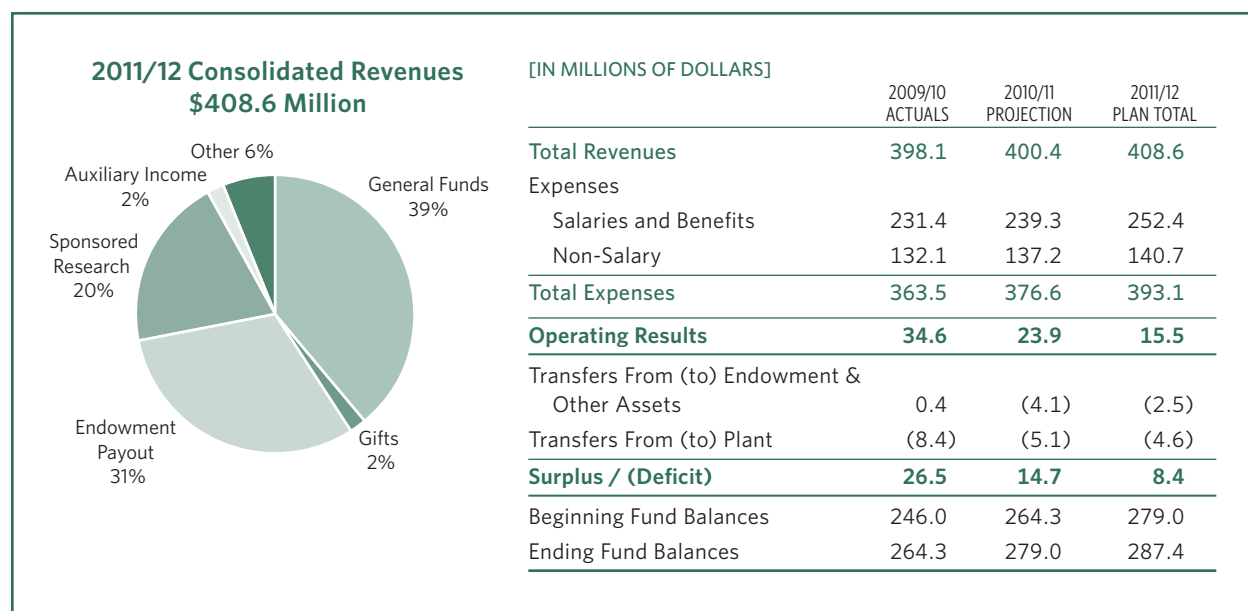
SoE has made continued progress toward its strategic goal of housing all departments in "21st-century" facilities. Major planning is now under way for SEQ's largest and final building, Building 4. The demolition of Terman and Ginzton Labs and the construction of Building 4 in Ginzton's place are both slated for summer 2011. Building 4 will cost \$211 million, with SoE responsible for up to \$49 million.

Last year, the school put a hold on Panama Mall capital projects because of economic uncertainty. It used this period to evaluate its plans and prioritize projects. Based on this evaluation, SoE will focus on renovating Building 02-520, Building 02-524, and Durand, starting in summer 2011. These renovations will provide needed space for Mechanical Engineering, Materials Science & Engineering, and Aeronautics & Astronautics.

The school has identified specific locations to meet its Registrar's Office obligations to provide replacement classroom spaces and is in the process of either renovating or building such spaces.

Funding constraints continue to delay the Green Dorm project.

SCHOOL OF HUMANITIES & SCIENCES



Programmatic Directions

Although the financial pressures of the past two years have created significant stresses and challenges, the School of Humanities & Sciences (H&S) has emerged in a strong position, able to advance strategic goals and take advantage of opportunities as they arise. Successful implementation of reduction plans over the past two years has resulted in greater efficiencies, and resource streams are now better aligned with school priorities. The H&S budget is fundamentally in equilibrium, with school reserves large enough to support onetime costs associated with several key priorities.

The strategic priorities for H&S continue from prior years. Achieving faculty hiring equivalent to departures has become the school's primary concern as it works to reverse net decreases in faculty FTE resulting from retrenchment during the past two years. H&S also remains committed to increasing diversity in the graduate student population and has joined with the provost to increase funding to encourage departments and programs to admit a more diverse doctoral student body. More broadly, increasing the overall number of graduate students remains a priority. While some departments are able to support the desired number of graduate students, achieving a viable cohort is still a problem in others. Larger cohorts will better enable these

departments to meet teaching needs and adequately support faculty research programs. H&S will continue to seek fundraising opportunities and ways to more efficiently use existing resources to achieve this goal. A detailed analysis of faculty salaries conducted in 2010/11 revealed equity issues across the school, particularly at the full professor rank. The provost has provided an additional salary pool to correct this problem during the 2011/12 salary-setting cycle, and the school will continue to monitor the issue.

The economic downturn has provided a temporary respite from faculty retention cases. As the economy recovers and competing universities resume hiring, H&S anticipates a significant upswing in retention cases. During 2011/12 the school will work with the provost to create strategies to address this problem. Tuition shortfalls on training grants and nationally competitive fellowships are an emerging problem in H&S and across the university. Tuition caps imposed by grantors are widening the funding gap historically filled by departments and faculty. The overall shortfall has grown to the point that a more sustainable solution will need to be found. H&S will continue working with the Office of the Vice Provost for Graduate Education (VPGE) and the provost to better understand this growing problem and identify solutions.

Consolidated Budget Overview

The 2011/12 Consolidated Budget for Operations shows total revenues of \$408.6 million and expenses of \$393.1 million, for a net operating result of \$15.5 million. After \$7.1 million of transfers to plant and capitalization of endowment payout, the school's net surplus is \$8.4 million. This surplus is \$6 million less than the 2010/11 surplus, primarily due to overall expense growth rates that exceed revenue growth rates and incremental expenses for the ramp-up of strategic priorities.

Planning assumptions for most ongoing revenues and expenses are in alignment with university guidelines. Endowment payouts are projected to be 1% above the 3.6% university growth parameter due to new endowment funds and other funds that do not contain total return policy language and that were underwater in 2010/11. Sponsored research volume decreased 2% during 2010/11 but is projected to recover in 2011/12.

For 2011/12, H&S received \$3.5 million of incremental provostial funding for key strategic areas. This figure includes funding to increase faculty recruitment to achieve replacement-rate hiring, two faculty salary funding pools targeted at correcting gender equity issues and reducing the number of retention cases, additional support to increase diversity among graduate students, and increasing support of undergraduate teaching in Economics and the Language Center.

An increased number of faculty searches begun in 2010/11 will yield new hires during 2011/12, and onetime expenses for faculty start-up packages are projected to increase by \$4 million. For the most part, departments and programs are maintaining the conservative expenditure rates established with expense cuts two years ago. Funding and expense timing differences across 2010/11 and 2011/12 related to the Cognitive and Neurobiological Imaging Center in the Psychology Department result in a \$2 million decrease to the school's net surplus.

While 2010/11 fund balance growth is projected to be fairly evenly split between the Dean's Office and departments and programs, two-thirds of this growth in 2011/12 will accrue to departments and programs. Dean's Office endowment flows were disproportionately affected by the 25% endowment payout reduction across the past two years because this control point holds all endowed chairs and many graduate aid funds. As annual payouts were reduced, a larg-

er proportion of payout was used for operating budget support, ending the large surpluses experienced in 2008/09 and 2009/10. Across the past three years, fund balance growth has also been slowed somewhat by an intensive effort to capitalize highly restricted accumulated balances. Capitalizations are projected to decrease by \$2 million from 2010/11 levels as opportunities for them diminish.

Unspent fund balances at the end of 2011/12 are projected to total \$287 million, with approximately 40% controlled by the Dean's Office, 40% controlled by departments/programs and 20% controlled by faculty. Wealth is very unevenly spread across departments and programs and the Dean's Office continues to consider actual and target balances when making funding decisions. Faculty-controlled balances are largely comprised of research support that will be spent during the next five years.

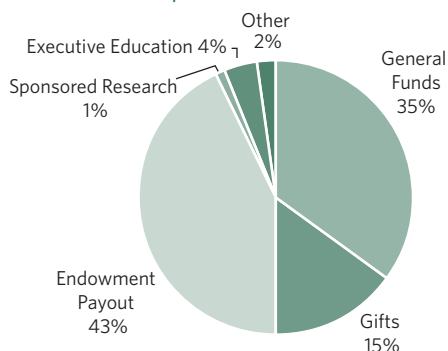
Capital Plan

H&S recently began programming and design on the McMurtry Art and Art History Building. The project will move the department, including the Film and Media Studies programs, to a new facility adjacent to the Cantor Arts Center. Along with the Bing Concert Hall, on schedule to be completed in summer 2012, the McMurtry Building will help support new H&S and campus-wide Arts Initiative interdisciplinary programs.

The school hopes to move forward within the next few years on a new Biology/Chemistry undergraduate teaching lab facility. The building will support innovation in the undergraduate curriculum in ways that the current outdated teaching laboratories cannot. The school also hopes to revive plans for a new Biology research building to replace the outdated laboratories in Herrin Labs and facilitate state-of-the-art research. The school continues to undertake a range of laboratory and other renovations in support of new faculty recruitment, program growth and development, and ongoing needs.

SCHOOL OF LAW

2011/12 Consolidated Revenues \$68.7 Million



[IN MILLIONS OF DOLLARS]

	2009/10 ACTUALS	2010/11 PROJECTION	2011/12 PLAN TOTAL
Total Revenues	62.2	63.8	68.7
Expenses			
Salaries and Benefits	36.8	40.5	43.9
Non-Salary	17.5	19.7	21.2
Total Expenses	54.3	60.2	65.1
Operating Results	8.0	3.5	3.6
Transfers From (to) Endowment & Other Assets	(4.8)	(2.5)	(1.5)
Transfers From (to) Plant	(0.1)	(1.1)	(2.0)
Surplus / (Deficit)	3.1	0.0	0.1
Beginning Fund Balances	19.1	20.1	20.1
Ending Fund Balances	20.1	20.1	20.2

Programmatic Directions

Over the past few years, Stanford Law School (SLS) has aggressively responded to the unprecedented challenges posed by the global economic downturn. When the downturn began in 2008/09, endowment payout represented 61% of the school's consolidated budget. In 2011/12, it will cover less than 45%. The decline in both school endowment and university general funds required the law school to reduce its consolidated budget by \$4.7 million, or 8%.

The school accomplished this without reducing academic support or student services, instead resorting to solutions such as decreasing its administrative staff 12.5% (cross-training remaining staff to ensure service continuity), creating online forms to bundle tasks and purchase orders, moving the telephone system to VoIP, and reducing the number and size of external relations events. As a result, though challenges remain, SLS has turned the corner on most pressing financial matters and is now fiscally stable and primed to capitalize on new opportunities. The goodwill of students, faculty, staff, and alumni has been paramount in this recovery.

Financial aid remains an extremely high priority. In the past several years, without any change in school policies for

awarding aid, the percentage of students with need great enough for them to receive scholarships rose from 50% to 60%, while the average award increased 20%. The net result is a planned deficit in the school's dedicated financial aid budget of almost \$3 million. The financial aid expense increases were not attributable solely, or even mostly, to the economy. They resulted from factors such as an older student applicant pool, a greater number of students pursuing employment in public service and public interest (rather than the private sector), and the decision by law firms to shorten their summer programs from ten to eight weeks, thereby reducing the self-help component used to calculate financial aid packages. For now, the law school is covering the deficit with reserves. To solve the shortfall permanently, it plans to raise \$20 million specifically for this purpose and to adjust financial aid policies as needed.

SLS would like to make experiential learning through the Mills Legal Clinic an essential part of every law student's course work. To have sufficient slots requires ten fully operational clinics. SLS had just reached that goal in 2008/09 when the economy collapsed, forcing it to put two clinics into abeyance. Along with financial aid, raising money for the Mills Legal Clinic has become a priority of SLS

fundraising. Its efforts have allowed the school to relaunch both inactive clinics, one in international human rights, the other in intellectual property and innovation. Searches are under way for new directors so that these two clinics can be operational in 2011/12. Lastly, the school has further fundraising goals to ensure long-term financial stability for the clinic program.

Last year, SLS embarked on a program to hire five new faculty members, taking advantage of opportunities to make strong lateral hires from peer schools. The figure of five represents a compromise between having a faculty sufficiently large and diverse to offer rich curriculum and having one small enough to preserve an interactive and collaborative educational environment. The school has had early success with one hire. There are numerous twists in the recruiting process, but SLS remains optimistic and continues to recruit aggressively.

Consolidated Budget Overview

SLS is projecting a minimal consolidated budget surplus of \$92,000 in 2011/12. Consolidated revenues are \$68.7 million, up from \$63.8 million in 2010/11 as a result of increases in general funds, expendable gifts, and, for the first time in two years, endowment income payout. In 2011/12, consolidated expenses will increase to \$65.1 million from \$60.2 million in 2010/11, in large part due to the reactivation of two clinics, creation of the Steyer-Taylor Center, growth in existing centers, and continued augmentation of the faculty. From an operating perspective, this results in a 2011/12 consolidated surplus of \$3.6 million, the same as in the previous year. Transfers to assets are \$3.5 million in 2011/12. The Law School will transfer \$1.5 million to cover the annual cost of its loan repayment assistance program, and \$2 million to capital to start the third floor remodel of Crown Quadrangle. The school's consolidated fund balances will remain virtually unchanged at \$22 million.

A three-year phase-in of larger JD and graduate student classes that will increase income by roughly \$450,000 will conclude in 2011/12. This is also the second year of a planned two-year SLS tuition increase of \$2,000 (\$1,000 per year) above the standard university graduate tuition increase. This increase will provide additional 2011/12 income of almost \$550,000. In addition, SLS projects an 11% increase in gift proceeds in 2011/12. This is due principally

to two new gifts: a pledged \$1 million payment (spread over two years) from the Crown family, designated for renovating the Crown Quadrangle building, and approximately \$800,000 from Tom Steyer and Kat Taylor for the new Steyer-Taylor Center for Energy Policy and Finance.

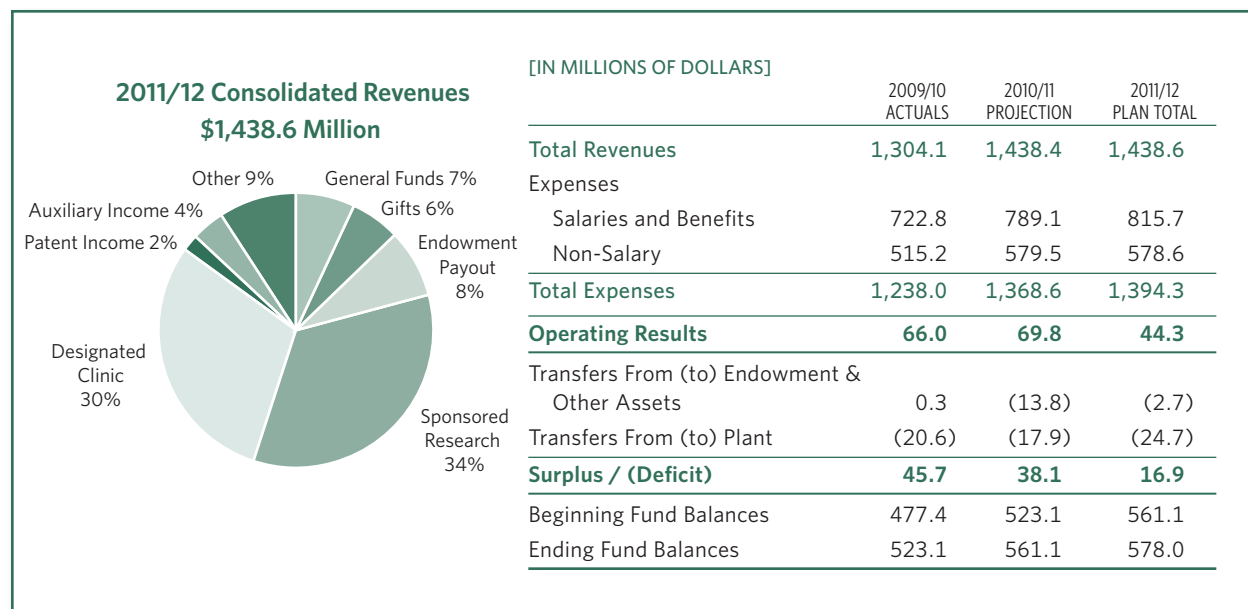
For myriad reasons, expense growth in 2011/12 will be approximately 8% higher than in the previous year. There will be across-the-board increases in compensation (\$3.3 million) and non-compensation expenses (\$1.6 million). Finally, SLS will begin moving into the William H. Neukom Building in summer 2011, which will trigger incremental debt service and other non-compensation expenses in 2011/12.

Capital Plan

Construction of the William H. Neukom Building is nearly complete. Faculty and staff will begin moving in soon after the building is dedicated on May 20, 2011. This facility will provide much-needed space for expansion of the Mills Legal Clinic and for work in the ever-expanding field of empirical legal studies. Total project cost is expected to be on budget at \$68.5 million (which includes a \$4.6 million contribution to the GSB for the Kresge replacement), significantly less than the \$80 million originally projected.

To complement the Neukom Building, the law school is developing a phased strategy to renovate and modernize the Crown Quadrangle. Phase one involves renovating the basement and third floor. Initial surveys indicate the current second-floor library staff offices and third-floor library collection can be moved to the basement at a cost of \$2 million, while full renovation of the third floor is estimated at \$11 million. Phase two involves renovating the first- and second-floor offices to make them more efficient and bring them into line with university space policy guidelines. The estimated cost for this phase is another \$2 million. Hence, preliminary total project costs are anticipated to be approximately \$15 million. The school plans to begin the renovation in summer 2012. Early estimates indicate it will create as much as 15,000 square feet of space for interdisciplinary programs.

SCHOOL OF MEDICINE



Programmatic Directions

After a decade of planning, the Li Ka Shing Center for Learning and Knowledge (LKSC) officially opened in September 2010. Within a month, the Lorry I. Lokey Stem Cell Research Building opened. These two buildings constitute the new face of the School of Medicine and bring harmony and architectural integrity to the school. The LKSC symbolizes the transformation of medical education, in concert with the school's new curriculum, which began its first phase in 2003 and continues to evolve, and is supported by this facility. The Lokey Building, funded through generous donors (especially the naming donor, Lorry Lokey) and a \$43.6 million grant from the California Institute of Regenerative Medicine (CIRM), is the largest dedicated stem cell research facility in the nation. The 33 research laboratories in the building focus on stem cell research discoveries and their translation into preclinical applications, innovative therapies, and treatments.

Basic science research funding through American Recovery and Reinvestment Act (ARRA) and CIRM provided opportunities to create knowledge and potential future cures of human disease. Unfortunately, the federal research budget seems unlikely to keep pace with inflation during the years ahead. Accordingly, the school's highest priorities are to support current faculty by raising gifts for professorships

and research support for junior faculty, diversifying research funding sources, addressing critical research needs, and optimizing research space utilization. At the same time, it is important to make progress on the next phase of the school's Master Plan, including Foundations in Medicine 1, the Jill and John Freidenrich Center for Translational Medicine, the CJ Huang Building, and the BioE/Chemical Engineering facility. In tandem, it is imperative to develop new approaches for the efficient and effective management of research cores (including critically needed animal facilities) and assure continual recruitment of research faculty of the highest quality.

A related challenge is funding for graduate education and postdoctoral training. Think tanks on medical student, graduate student, and postdoctoral training were held in fall 2010. The school anticipates continued work on medical and graduate education over the next year, focusing on new technologies along with efforts to enhance humanism and professionalism. The Affordable Care Act of 2010 will dramatically change the healthcare landscape over the next decade. Reductions in clinical revenues to physicians and hospitals are virtually certain, although their nature and timeline are not. They highlight the importance of engineering efficiency and focusing on patient-centered care that features quality, safety, and cost-effectiveness.

The school has achieved integrated clinical planning with Lucile Packard Children's Hospital (LPCH) and is currently engaging with Stanford Hospital & Clinics in comprehensive planning. Integrated plans on service lines, such as cardiovascular services, cancer care, and neuroscience, are under way. Additional considerations to support this integrated clinical planning are under evaluation.

Consolidated Budget Overview

The school projects an overall surplus of \$16.9 million in 2011/12, compared to \$38.1 million in 2010/11. Surplus from operations will be \$44.3 million in 2011/12, a \$25.5 million (36.5%) decrease from \$69.8 million in 2010/11. Transfer to plant and endowment will be \$27.4 million, which is lower by \$4.3 million (13.6%) than the 2010/11 projection of \$31.7 million.

Revenue

Revenue and transfers for 2011/12 are projected to stay flat at \$1,438.6 million, compared to \$1,438.4 million in 2010/11. Key drivers include the following:

- The majority of awards from ARRA end in 2010/11, driving federal and non-federal sponsored research revenues down 4.6% from 2010/11 to 2011/12. This decline, however, is from a total research revenue base that increased 11.7% between 2009/10 and 2010/11, the first and second years of ARRA funding. In addition, growth in incremental faculty and new awards from CIRM will dampen the decrease between 2010/11 and 2011/12.
- Clinical professional service agreement and service payment revenues are projected to grow 2.8% from 2010/11 to 2011/12. This growth reflects clinical program expansion and a onetime revenue stream in 2010/11 resulting from the change in LPCH's funds flow payment.
- Expendable funds pool payout is projected to be \$23.2 million in 2011/12, compared to \$21.4 million in 2010/11, based on the new calculation on zero-interest fund balances. Gift revenue is projected to grow 5.8%.
- Endowment income is projected to grow 4.4% from 2010/11 to 2011/12, reflecting a 3.56% payout increase on existing assets and a modest influx of new gifts.

Expense

The school's 2011/12 plan includes the projected net recruitment of 24 faculty—twelve from the medical center line and twelve from the university tenure line—and associated

expenses, including program and staff support. The faculty will be recruited primarily for the interdisciplinary institutes, BioE, genetics/genomics, and the cancer center, and to support growth in the clinical practices.

Expenses are projected to increase 1.9%, or \$25.7 million, from 2010/11 to 2011/12. The major components of this increase are:

- A \$16.3 million increase in annual compensation for faculty and staff, primarily from the salary program, incremental faculty recruitment, and clinical program growth.
- A \$10.3 million increase in benefits for academic and staff employees, reflecting the benefit rate and salary increases.
- A \$16.7 million decrease in non-compensation federal research expenses, primarily in indirect costs, materials and supplies, and subcontracts.
- Increases in operations and maintenance expenses for a full year of operation of the Lokey Building, additional leased properties, higher utility rates, increased permanent debt service payments, and rent and operating expenses.

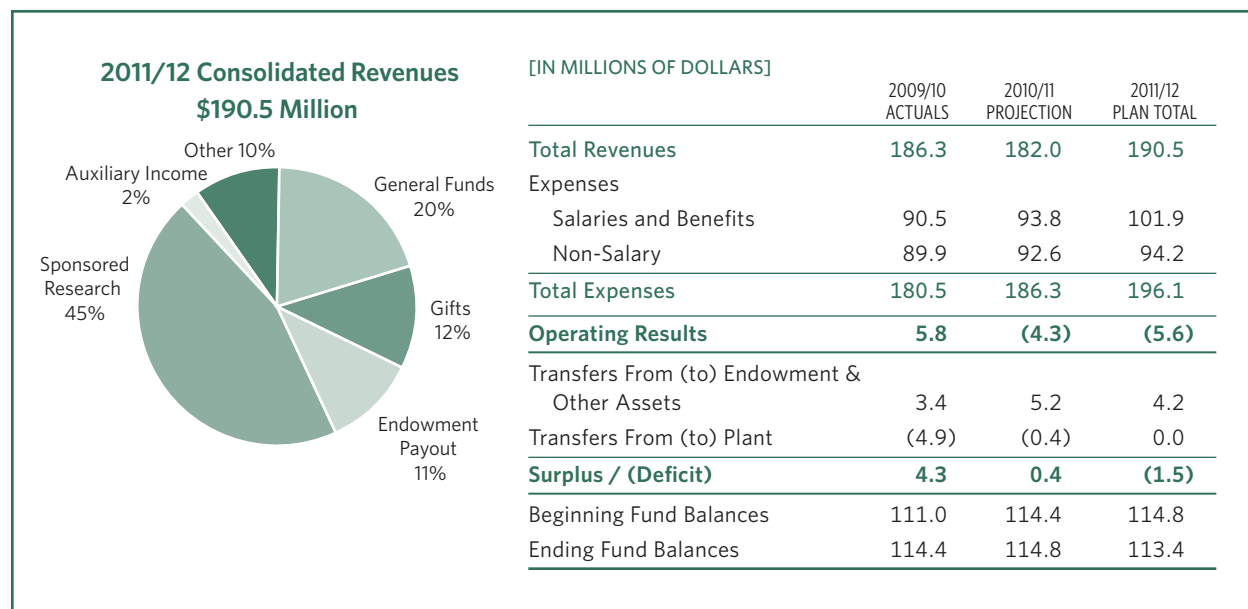
Transfers to Plant, Endowment, and Other Assets

The projected transfers to plant of \$24.7 million include \$12.0 million for tenant improvements for off-campus leased properties at Porter Drive; \$10.0 million for the Foundations in Medicine 1 building; \$2.8 million for the CJ Huang Building; \$2.3 million for utility, seismic, and research animal facilities rehabilitation projects; and \$2.0 million to fund strategic capital projects.

Capital Plan

The Jill and John Freidenrich Center for Translational Medicine began construction in 2010/11. Close to the hospitals and patient subjects, the building will provide work space for clinical researchers, biostatisticians, and research nurses who support clinical and translational research as part of SPECTRUM (the Stanford Center for Clinical and Translational Education and Research) and the Stanford Cancer Center. The building is estimated to cost \$21.0 million and to open in summer 2012.

VICE PROVOST AND DEAN OF RESEARCH



The Office of the Vice Provost and Dean of Research (DoR) is responsible for the development and oversight of research policy; oversight of seventeen independent laboratories, institutes, centers, and three shared facilities; and management of the Offices of Environmental Health & Safety, Research Compliance, Technology Licensing, Science Outreach, and Sexual Harassment Policy.

Programmatic Directions

Stanford has a long history of independent laboratories, institutes and centers that function across school boundaries and are intended, by policy, to facilitate multidisciplinary scholarship and research. These entities have become increasingly significant to the research and education missions of the university. While discipline-based research will remain the foundation of excellence, some problems are best addressed with complementary intellectual and technical approaches. Working across disciplines can yield new conceptual frameworks; integration across discipline-based approaches often fosters innovation in fundamental research and scholarship and has broader relevance, consistent with the 'Finding Solutions' theme of the Stanford Challenge.

Among these initiatives, new interdisciplinary programs are focused on energy-related research. The Precourt Institute

for Energy (Precourt) serves as the hub for a network of faculty from various science, technology, behavioral and policy disciplines who are studying the world's pressing energy problems. Faculty from at least five independent laboratories, as well as twenty-two departments (across many schools), pursue energy-related issues in their research and teaching. Precourt is using a combination of new faculty appointments and pilot project awards to engage Stanford faculty who have expertise relevant to energy applications but have not necessarily been active in energy research. Pilot project funds allow investigators to do proof-of-concept experiments that, if successful, can enable them to compete for extramural grants and contracts. The \$25 million commitment to the Center for Advanced Molecular Photovoltaics is an example of research that was supported early by the Global Climate and Energy Project which led to major funding from an external source. Precourt is also working with the Woods Institute and the Geballe Laboratory for Advanced Materials to develop an industrial affiliates program to enhance the engagement of companies with Stanford research in energy sciences so that new ideas can move rapidly to commercialization and public benefit.

The Bio-X NeuroVentures program was launched in 2008 with presidential support and a founding gift; its first accomplishment was to build the Optogenetics Innovation

Laboratory in the Clark Center, which opened in June 2010. Bio-X Neuroventures is a university-wide research initiative that targets projects with exceptional potential to develop the field of neuroscience in fundamentally new ways. Bio-X and the Woods Institute are also collaborating to bring together Stanford biologists and engineers concerned about the environment with those concerned about evolution and medicine; this effort led to a joint symposium on 'Unnatural Evolution' and could evolve into a new Bio-X venture on dynamic evolution.

Stanford is enhancing opportunities for faculty by hiring a Center Grants Coordinator. The coordinator will assist in preparing center grants and other complex proposals for submission to federal agencies and foundations. In addition, the coordinator will help Stanford faculty respond to new opportunities for interdisciplinary research offered by federal agencies.

The Office of International Affairs (OIA) is a new office that will report to the Vice Provost and Dean of Research. OIA was created to fill a growing need for a centralized resource to help encourage and support faculty whose work involves international programs and activities. The office will offer coordination and communications services, administration of a new seed-grant program for global initiatives by faculty, assistance with legal and liability issues, and help with developing new overseas facilities. OIA will also establish processes and mechanisms to ensure that Stanford faculty and students have access to a dynamic, comprehensive information base relevant to their global research and education.

Consolidated Budget Overview

DoR projects consolidated revenues of \$190.5 million, net transfers from endowments and other assets of \$4.2 million, expenses of \$196.1 million in fiscal year 2011/12 and a planned deficit of \$1.5 million. The consolidated budget reflects an increase of 5% in revenue and expenses as compared to fiscal year 2010/11. The increase is primarily the result of continued growth in various programs of the independent labs, including Bio-X, the Woods and Precourt Institutes, and the Stanford Materials and Energy Sciences and Economic Policy Research Institutes.

Also contributing to the growth in DoR is the addition of shared facilities which house costly instruments that are an essential resource for research as well as education. The DoR established the Stanford Nanosciences Center, a new

shared facility in the Center for Nanoscale Sciences and Engineering. In 2010/11, DoR assumed responsibility for the Stanford University Mass Spectrometry facility, formerly operated by H&S, as well as the new Cognitive Neurobiological Imaging Center. The addition of the shared facilities to DoR has resulted in an increase in internal income and expenses for salaries, instrumentation and other non-salary expenses.

Multi-year, multidisciplinary research awards distributed to Stanford faculty by independent labs such as Bio-X, the Freeman Spogli Institute for International Studies, Human Sciences and Technologies Advanced Research Institute, Precourt Institute for Energy and the Woods Institute for the Environment are expected to continue in 2011/12.

The independent laboratories often receive gifts for multiple years in advance. These gifts are spent over several years. The impact of the expenditure of funds received by the independent labs in a prior fiscal year is the planned deficit of \$1.5 million in 2011/12.

Capital Plan

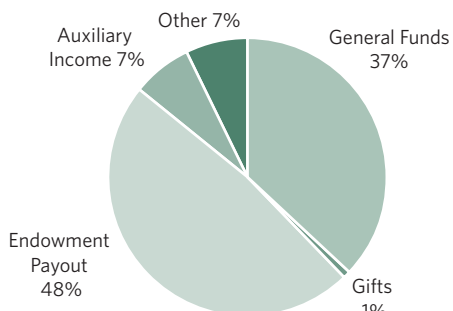
The recently completed Center for Nanoscale Science and Engineering, houses the Ginzton laboratory and shared facilities that provide access to cutting edge equipment and space for the Stanford faculty and students engaged with science at the nanoscale. The Stanford Center at Peking University (PKU) is under construction and is expected to open in 2011/12. The Center, located in the historic heart of the PKU campus will offer a beautiful and highly functional 'home base' for short and longer term research and education in China, including the Bing Overseas Studies Program as well as many new initiatives.

Research computing infrastructure is currently operating at capacity at both the university and at the SLAC National Accelerator Laboratory. To meet the critical and accelerating demand, DoR is participating in planning for a state of the art, scalable, energy efficient, and high density scientific research computing facility, to be located at SLAC. The plan will be presented to the Board of Trustees in June 2011. If approved, the project should be completed by the end of 2012/13.

The Encina Hall complex renovation, which is a goal of the International Initiative, has been postponed until additional resources are identified.

VICE PROVOST FOR UNDERGRADUATE EDUCATION

2011/12 Consolidated Revenues \$52.3 Million



[IN MILLIONS OF DOLLARS]

	2009/10 ACTUALS	2010/11 PROJECTION	2011/12 PLAN TOTAL
Total Revenues	48.5	49.8	52.3
Expenses			
Salaries and Benefits	26.1	27.4	29.9
Non-Salary	17.7	19.5	20.9
Total Expenses	43.7	46.9	50.8
Operating Results	4.8	2.9	1.6
Transfers From (to) Endowment & Other Assets	(2.7)	(3.0)	(1.6)
Transfers From (to) Plant			
Surplus / (Deficit)	2.1	(0.1)	(0.0)
Beginning Fund Balances	19.9	22.0	21.9
Ending Fund Balances	22.0	21.9	21.9

Revenues and expenses in this chart and the table include \$9.6 million of activity that is accounted for as operating transfers in Appendix A.

Programmatic Directions

This is a significant moment of both transition and reaffirmation for the Office of the Vice Provost for Undergraduate Education (VPUE). With a new vice provost, Professor Harry Elam, in place, a primary objective is to further establish VPUE as a vibrant intellectual center for undergraduate education. To achieve this goal, VPUE must strengthen core programs as well as implement new initiatives that reinforce and expand Stanford's vision of excellence. The Study of Undergraduate Education at Stanford (SUES) is critical to this process and is currently working on a broad slate of general education initiatives through seven subcommittees comprising faculty, staff, and students. The final recommendations the SUES committee delivers to the Faculty Senate in fall 2011 will broadly reshape undergraduate education at Stanford and, consequently, VPUE.

Recognizing that implementation of the SUES recommendations will likely require new resources in the future, VPUE seeks to be fiscally conservative without sacrificing innovation in the present. The fresh memories of the 2008/09 budget crisis and the resulting reductions and layoffs inform this plan. In addition, the past year's budget surplus and current healthy reserves enable VPUE to finance certain

new pilots and other continuing signature programs internally. Accordingly, VPUE intends to use reserves to fund a new program aimed at encouraging curriculum innovation, pedagogical experimentation, and collaboration provisionally called "Faculty College." New incremental funding of \$500,000 will allow VPUE to reinstitute the Bing Overseas Studies seminars, one of the most popular programs with students and faculty. During the economic downturn of 2008, VPUE put this program on hiatus until better financial times, and it believes now is the time to bring the overseas seminars back.

The extremely popular overseas seminars serve students who desire an academic experience abroad but feel unable to leave campus for an entire quarter due to course load pressures or athletic demands. Hence these seminars play a significant role in ensuring access and equity at Stanford by providing the opportunity for more students to study abroad. Moreover, the seminars broaden and diversify the intellectual and geographic possibilities of the overseas studies program. One of their objectives is to expand the reach of the Bing Overseas Studies Program (BOSP). With campuses in Florence, Paris, Berlin, Madrid, and Oxford, BOSP has remained rather Eurocentric. The seminar pro-

gram provides opportunities for academic experiences in non-Western locations. In addition, the very nature of the seminars, the collective travel, and the living arrangements bring faculty and students together in intensive interactions inside and often outside the classroom. As a result, the seminars enable a different learning experience than the quarter-long overseas programs do. Students and faculty can study and learn in a concentrated format without the dedicated infrastructure a center requires.

In 2008/09 VPUE reorganized several units to reduce staff size and achieve immediate budgetary savings. It created a more efficient organization able to operate with reduced administrative and overhead costs while still delivering outstanding programs to students. These operational efficiencies allow it to invest strategically in programs that will affect students immediately and are unlikely to be radically changed by SUES. Signature Stanford programs that will expand include Sophomore College, which will increase by four courses, and Introductory Seminars, which will grow by fifteen courses focused on oversubscribed subject areas. Two successful new programs, the Arts Intensive and the overseas campus in South Africa, are in their final year of onetime start-up funding provided by the President's Fund, but VPUE will continue delivering these programs with internally reallocated funds after 2011/12.

Undergraduate research is another outstanding Stanford program that was scaled back in recent years, but reallocation of onetime funding allowed VPUE to increase research grants 20% in 2010/11. In 2011/12, VPUE plans to continue supporting undergraduate research at this increased level, which should fund an additional 140 full-time students and will help meet student, faculty, and departmental demand. In 2010/11, some 31% of student grant requests, 21% of departmental requests, and 68% of faculty requests went unfunded, so grants remain highly competitive even with additional funding. Research is a cornerstone of the Stanford undergraduate experience, and one that Stanford promotes widely to prospective students. Research experiences stimulate undergraduates to engage with faculty and to immerse themselves in their chosen disciplines, so research will remain a high VPUE funding priority.

VPUE is directing financial resources into programs that reaffirm its central mission of connecting Stanford students with tenure-line faculty. By doing so, VPUE not only reinforces its founding principles, but also looks to the

future by ensuring that Stanford remains at the forefront of undergraduate education. Similarly, the SUES report will provide fresh opportunity for Stanford to innovate and lead in undergraduate education.

Consolidated Budget Overview

VPUE projects a balanced consolidated budget in 2011/12 with the targeted programmatic expansion described in the preceding section. The operating results will yield a \$1.6 million surplus that VPUE plans to reinvest to endowment principal in order to fund future programming. However, VPUE does not expect an operating surplus of this magnitude to continue beyond 2011/12 because several sources of one-time, start-up funding will end this year. In subsequent years, VPUE will maintain those programs with existing resources and projects a balanced operating budget. Increases in 2011/12 revenue are driven largely by increasing endowment payout as well as increasing student revenue from BOSP seminars and expanded Sophomore College enrollment. Increases in 2011/12 expenses all center around expansion of the programs described previously and enhancements to other existing programs.

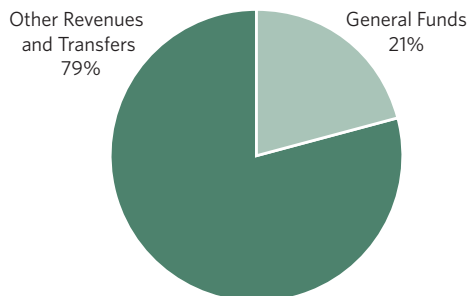
Currency exchange rates are a primary concern for VPUE, and rates remain volatile and unfavorable by historical standards. Most of the overseas centers' activities are carried out in local foreign currency and are adversely affected by this volatility. However, the improving U.S. economy has led VPUE to revise a reasonable worst-case scenario from one that continues to deteriorate year over year to one where rates remain unfavorable but flat. Hedges put in place in April 2010 saved approximately 9% compared to budget, and VPUE will look to hedge for 2011/12 in the coming months. Building a dedicated currency reserve for BOSP to address exchange rate fluctuations more effectively remains a high priority.

Capital Plan

Berlin is the only city where the university owns a BOSP center rather than leasing space. The building was donated to BOSP and is a historic structure that is due for extensive renovations including roof, electrical, and plumbing work. Renovations are scheduled for summer 2012 using \$1.2 million from facilities reserve funds, and the work should not disrupt the study-abroad program.

VICE PROVOST FOR GRADUATE EDUCATION

2011/12 Consolidated Revenues \$31.9 Million



[IN MILLIONS OF DOLLARS]

	2009/10 ACTUALS	2010/11 PROJECTION	2011/12 PLAN TOTAL
Total Revenues	33.7	31.3	31.9
Expenses			
Salaries and Benefits	1.8	1.8	2.3
Graduate Student Support	24.3	30.4	30.7
Other Expenses	0.4	1.0	1.0
Total Expenses	26.5	33.1	33.9
Operating Results	7.2	(1.8)	(2.0)
Transfers From (to) Endowment & Other Assets	(1.1)	(0.6)	(0.2)
Transfers From (to) Plant			
Surplus / (Deficit)	6.1	(2.5)	(2.3)
Beginning Fund Balances	39.1	45.1	42.7
Ending Fund Balances	45.1	42.7	40.4

Revenues and expenses in this chart and the table include \$28.2 million of activity that is accounted for as operating transfers in Appendix A.

Programmatic Directions

VPGE has completed its fourth year of operation to ensure Stanford's preeminence in graduate education. VPGE continues to play a crucial leadership role, working collaboratively across the university's seven schools to enhance the quality of graduate education for more than 8,800 students in 70 degree programs and departments. Resources are used for the most pressing challenges that affect the quality of graduate students' educational experiences. Under guidance from the provost as well as deans and departmental leaders, the top priority is to address three programmatic areas cited by the Commission on Graduate Education as the most critical university priorities: advancing diversity, facilitating cross-school learning (i.e., interdisciplinarity and leadership development), and fostering innovation to strengthen the quality of graduate programs. A persistent need for direct graduate student funding has also become a major focus.

Programmatically, VPGE has been able to maintain—and, in some areas, even gain—momentum, reaching more graduate students by developing low-cost pilot programs. The sheer numbers are noteworthy:

- VPGE-sponsored initiatives reach approximately 2,500 graduate students annually.
- In 2010/11, over 1,100 students will receive over \$32 million in direct funding from VPGE's seven fellowship programs (up from 430 receiving \$14 million in 2006/07).

Still in its early years, VPGE continues to focus on intensive planning. There are far more great ideas than resources and staff time to pursue them—a challenge that is common to high-energy start-ups. As VPGE extends its reach, it adopts a spirit of exploration and experimentation in its pilot programs, which reflect a longer-term agenda for change while pursuing short-term goals. As Stanford recovers from the budget reductions, VPGE will continue to advance the university's critical graduate education priorities by resuming the selective rollout of programs that were part of its initial five-year plan.

Below is an overview of developments in the three priority areas. Some VPGE programs address more than one of these areas. For example, the DARE (Diversifying Academia, Recruiting Excellence) Doctoral Fellowship Program advances diversity, cross-school learning (leadership), and professional development.

Diversity

Supplementing school activities, VPGE develops university-wide programs for recruiting, enhancing the educational experience of current students, and cultivating interest in academic careers to diversify the academic pipeline.

The largest expenditure of general funds in this priority area goes to the direct funding of graduate students: tuition and stipend for DARE fellows and graduate fellows in the Center for Comparative Studies in Race and Ethnicity, and bridge funds to support students in science and engineering. The remaining funds go to programming that enhances the quality of experiences for current students and promotes their academic success.

Cross-School Learning: Interdisciplinary and Leadership Development

VPGE develops interdisciplinary opportunities that encourage graduate students' intellectual exploration beyond their disciplines to better prepare them for their work lives after graduation. These programs enable students to engage in cross-disciplinary dialogues and build intellectual communities across schools as well as professional networks beyond their academic specializations.

The Stanford Graduate Summer Institute (SGSI), in its fifth year, provides the opportunity for graduate students to attend weeklong courses at no cost to them. Topics have been wide-ranging, including global warming, team management, design, and music and human behavior. Also in its fifth year, the Summer Institute for Entrepreneurship is a four-week course offered by the GSB to more than 60 graduate students in nonbusiness fields.

Strengthening Core Quality in Graduate Programs

VPGE provides faculty and students in graduate degree programs with resources for innovation and improvement in educational practices. The SCORE (Strengthening the Core) Innovation Fund helps departments respond to changes within their disciplines and among their graduate students. SPICE (Student Projects for Intellectual Community Enhancement) is an innovation fund that gives students an opportunity to undertake projects to expand and sustain the intellectual community of their department or field of study.

In addition, VPGE identifies critical unmet needs in graduate programs and develops an array of pilot programs (workshops, seminars, tutoring) in areas such as teaching, presenting, writing, and other communications skills. For ex-

ample, a high priority moving forward is to design pilot initiatives to strengthen student-faculty advising relationships.

Prioritizing Graduate Student Funding

Most graduate student support is in the form of doctoral fellowships (full tuition and stipend) paid from one of seven VPGE-administered fellowship programs, with the largest being the Stanford Graduate Fellowships Program in Science and Engineering.

Through 2011/12, VPGE allocates central support (including endowed funds restricted to student aid) to help close tuition gaps in National Institutes of Health Training Grants and NSF Fellowships. The goal is twofold: to alleviate pressure felt by schools, departments, and faculty on these two federally funded programs and to identify income from endowed funds that can replace general funds.

Consolidated Budget Overview

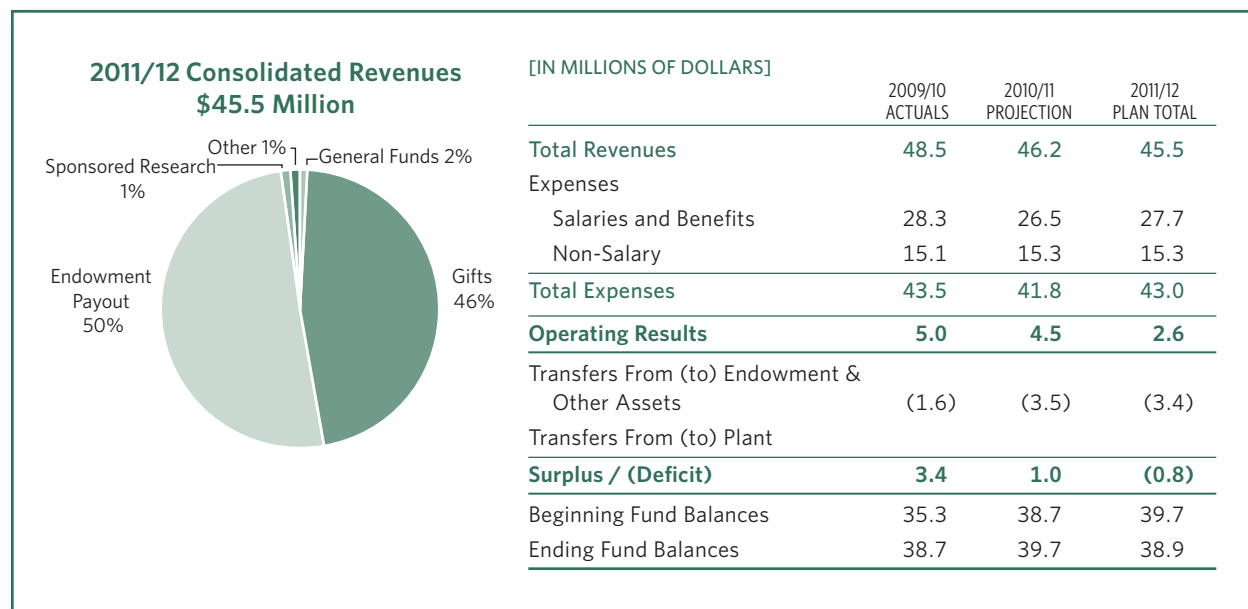
VPGE expects revenue of \$31.9 million and expenses of \$33.9 million. VPGE has a healthy fund balance that it will use to fund the \$2 million shortfall. Overall it expects its fund balances to go from \$42.7 million at the end of 2010/11 to \$40.4 million at the end of 2011/12.

The 2011/12 consolidated expense budget comprises 6% programmatic non-compensation expenses, 7% compensation and benefits, and 87% direct graduate student support. Direct student funding accounts for the greatest portion of VPGE revenue and expenses. Since the fellowships are mostly three-year awards, their funding can be adjusted only when granting new awards.

Of the \$40.4 million fund balance, \$29 million is endowment income that is restricted to graduate student funding. Over the next five years the number of fellows will be increased with the intent to draw down the fund balance to below \$10 million. Ultimately, the goal is to fund a steady-state number of fellowships through the yearly payout, and maintain a reserve of between \$5 to \$8 million to cover unanticipated fluctuations.

VPGE will continue to assist with university priorities; expand diversity programming by working with diversity officers across the seven schools; increase interdisciplinary programming through SGSI offerings; add workshops for leadership, advising, writing, and teaching; and pilot other programming as critical unmet needs are identified.

HOOVER INSTITUTION



Programmatic Directions

The Hoover Institution is a public policy research center and library and archives devoted to advanced study of politics, economics and political economy, and international affairs. Hoover fellows participate in ongoing programs of policy-oriented research that have established the institution as a prominent contributor to the public policy dialogue. The library and archives strive to collect a broad spectrum of materials to support scholarly research on political, economic, and social change.

Due to expense reductions during the last three budget years, the institution is well positioned for 2011/12. The reductions allowed the institution to achieve a balanced budget annually on the ongoing operations of its research, library and archives, and administration, despite revenue declines of 25% from 2007/08 levels. Budget reductions were made strategically rather than across the board. All aspects of operations were examined to identify ways to increase efficiency. As a result, the institution will be able to take advantage of gradually increasing revenues by growing in areas that best align with its priorities and focus.

The library and archives continue to pursue the mission envisioned by Herbert Hoover in 1919 to acquire, preserve, and

make available for research unique materials documenting war, revolution, and peace in the 20th (and now 21st) century. In keeping with this mission, the focus remains on documents at risk due to political upheaval and revolutionary change; much like war correspondents, the library and archives go where the action is. Thus, while the institution continues its commitment to traditionally strong collecting areas like the former Soviet Union and China, collecting also focuses on newer areas of conflict (a new project aims to preserve documents of Khmer Rouge crimes against humanity) and movements that cross geographic boundaries, such as terrorism, Islamic fundamentalism, and emerging democracy. The mission has not changed, but loyalty to that mission requires flexibility in response to a changing world.

What has changed, however, is the manner in which the library and archives collect, preserve, and provide access to holdings in an increasingly digital world. Rare books in the library are being digitized as part of the Google Books project. In the archives, more born-digital collections are being acquired and more paper collections are being digitized. These collections can then be made available online to a worldwide audience, respecting copyright limitations. Additionally, online access opens new avenues for international collaboration. For instance, the Polish state archives

recently made available online the World War II records of the Polish government-in-exile in London (preserved, organized, and microfilmed at Hoover). Beyond providing broader access, digitization allows countries to retain their cultural patrimony while sharing it with the world. Therefore, the institution will continue to develop its digital capabilities in the coming year.

Funding for the library and archives is a high priority. Unrestricted revenue of the institution is used extensively to supplement designated gifts, payout, and university general funds. To best utilize these resources in coming years, pilot projects are being launched now around new collecting areas and digital opportunities. These projects are expected to lead to broader initiatives within the next year.

Elsewhere, budget reductions disproportionately hit the research function at the institution, affecting the ranks of the fellows. Refreshing the senior scholarly talent at the institution through recruitment will be a priority over the next couple of years. The target is to add one to two new senior fellows each year. Additionally, the institution will supplement full-time appointments with term and visiting appointments to facilitate collaboration on projects and topics aligned with the priorities of the existing resident fellows. Hoover will attempt to secure new restricted funding where possible for these appointments; however, forecast growth in expendable giving and endowment payout is also available to cover these increased costs.

Due to successful targeted fundraising over the last five years, Hoover has built a substantial fund balance for certain research projects, notably its task forces and working groups. With their fundraising goals largely met, these projects will continue their activities at full capacity in the coming year.

To disseminate the thoughts and ideas of the scholars to a broader audience, Hoover will continue to develop new communication vehicles. Like the library and archives, these vehicles are increasingly digitally based. The *Defining Ideas* journal, launched to highlight the work of the task forces and working groups, has been repurposed as an online publication. In addition, the institution has recently reached an agreement with Scribd, a social network-based publishing tool, intended to provide the institution with a means to promote scholarly work in an increasingly digital book publishing environment.

Consolidated Budget Overview

The 2011/12 consolidated budget calls for total revenues of \$45.5 million and expenses of \$43 million. The resulting projected surplus and a planned \$3.4 million transfer to the facilities reserve for an expanded facility yield a projected current funds decline of \$830,000 to \$38.9 million.

The projected revenue represents a modest decline from the \$46.3 million expected for 2010/11. However, this decline belies growth in endowment payout and ongoing expendable giving. 2010/11 represents the institution's terminal year of participation in the Stanford Challenge. Removing gifts to fulfill pledges from 2010/11 totals provides a more realistic base of giving, and modest growth is expected from this baseline in 2011/12. Additionally, endowment income is expected to grow 3.6% in 2011/12, and payout on new endowment gifts is expected to increase growth in this revenue category even further.

Final budget reductions in response to the recent economic crisis will be made during 2010/11. Netting these costs from 2010/11 projections leaves a baseline for expenditures that allows room for real growth if anticipated revenues are realized. As previously indicated, the institution is actively pursuing the recruitment of new senior fellows.

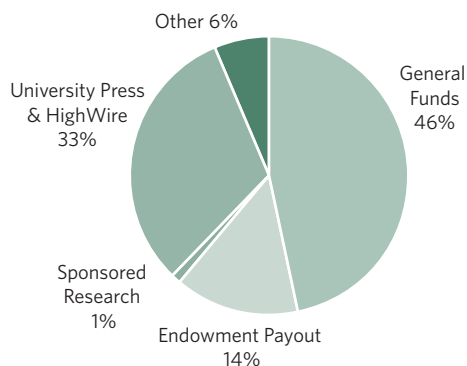
Additionally, the library and archives will continue expanding in the digital realm and aggressively collecting and preserving historical documents that are at risk. The institution's ongoing budget remains in balance even while allowing for growth in these areas. Anticipated declines in current funds after transfers represent the drawdown of restricted funds raised for specific projects with limited duration.

Capital Plan

Plans for a new Hoover facility on the site of the current Cummings Art Building were delayed as part of the university's response to the economic downturn. They have now been reactivated, their timing dependent upon the construction and occupancy of the new Art and Art History building. The current project plan estimates breaking ground on the new building in December 2014. The new building will provide needed office space and technology-enhanced conference and meeting facilities for a range of activities and has an estimated project cost of \$45 million.

STANFORD UNIVERSITY LIBRARIES AND ACADEMIC INFORMATION RESOURCES

2011/12 Consolidated Revenues \$101.0 Million



[IN MILLIONS OF DOLLARS]

	2009/10 ACTUALS	2010/11 PROJECTION	2011/12 PLAN TOTAL
Total Revenues	98.2	98.2	101.0
Expenses			
Salaries and Benefits	57.0	61.6	63.1
Non-Salary	37.9	40.8	41.2
Total Expenses	94.9	102.4	104.4
Operating Results	3.3	(4.2)	(3.4)
Transfers From (to) Endowment & Other Assets	0.9	0.8	0.8
Transfers From (to) Plant	(0.1)		
Surplus / (Deficit)	4.1	(3.4)	(2.6)
Beginning Fund Balances	17.5	21.6	18.2
Ending Fund Balances	21.6	18.2	15.6

Programmatic Directions

SULAIR will continue to work toward the strategic goals of providing, in physical or virtual formats, information resources supportive of and responsive to the plethora of programs of research, teaching, and learning undertaken by the Stanford professoriate and its students.

Particular initiatives revolve around the ongoing development of digital academic information offerings and related information services. In addition, investigations are under way regarding a new location for SULAIR people, programs, and collections now housed in Meyer Library. Planning and authorization for adding a second set of modules to Stanford Auxiliary Library 3 in Livermore are under way as well.

Programs

Continued development of the Stanford Digital Library and the Stanford Digital Repository is a primary focus for SULAIR. A major goal of the Stanford Digital Library development team will be to merge a federated search function into the search and virtual browsing functions already available in the SearchWorks interface to the library catalog. Federated search, which allows searching across multiple databases and other information resources with a single search, will save faculty and students significant time and effort in their search for information. The Stanford Digital

Repository is concurrently being expanded to serve faculty whose research grants demand auditable data management plans. This service builds upon planning conducted last year and prototypes tested with a limited number of faculty.

Another key digital library program is the implementation of specialized information portals for departmental programs and ongoing research projects. Finally, SULAIR is pleased to be able to permanently fund its Digital Forensics Lab. The lab, which preserves and provides access to digital files produced on historical computing platforms and legacy media, has developed into an essential piece of SULAIR's digital preservation effort. These materials represent an increasing portion of the digital archival material the library receives, and without near-term action, they are at great risk of loss.

SULAIR's map and geospatial information services are used by faculty and staff in 20 different departments, and demand for them is increasing. In support of that need, SULAIR is actively collecting both physical and digital maps, and it makes geographic information systems (GIS) software available on over 800 computers across campus. SULAIR will add a map curator and a GIS development specialist to its staff to better assist faculty and students in accessing and using SULAIR's maps, its GIS resources, and the growing collection of digital maps that bridge the space between those two collections.

Incoming Stanford students are enormously well qualified, but few of them have worked in an information environment as rich and diverse as Stanford's. The librarians and curators who staff SULAIR's Information Center offer bibliographic instruction and information literacy sessions in over 100 courses each quarter, particularly in the Program in Writing and Rhetoric and the Introduction to the Humanities. These services are core to SULAIR's mission. To ensure integrated, dynamic, and effective instruction, SULAIR is adding an instruction coordinator

Over 1,200 courses, two-thirds of all courses taught at Stanford, use the CourseWork course management environment. SULAIR was instrumental in developing the underlying open-source software supporting the system, Sakai, and is still active in that project. SULAIR will incorporate findings from several experimental, small-scale course management systems devised by faculty in Computer Science to enrich CourseWork's functional offerings and contribute to the multi-institutional Sakai 3.0 development effort.

Collections

The Library Materials Budget will increase only 1.5% this year, but SULAIR is endeavoring to apply various fund balances resulting from tightly constrained book fund endowments to more general purposes. There has been a strong uptick in acquisitions of special collections materials, particularly archives of prominent Stanford faculty, Silicon Valley innovators, and related figures. Holdings of maps in physical and virtual form are increasing thanks to gifts in kind and "digital philanthropy." SULAIR is rising to the challenge of absorbing the historical record in these innovative media formats.

Consolidated Budget Overview

SULAIR's consolidated budget is projected to grow 4% over 2010/11. Revenue and transfers are expected to total \$101 million: \$46.6 million in general funds, \$34.8 million in auxiliary revenue, and \$19.6 million in restricted funds. Compensation expenses are projected to be \$63.2 million, operating expenses \$18.9 million, and library materials acquisitions expenses \$22.3 million, resulting in a planned operating deficit of \$3.4 million. The planned deficit has the following components:

- SULAIR will allocate \$1.7 million of its endowed fund balances to library materials selectors to help offset the 25% decrease in endowment payout over 2009/10 and 2010/11.

- HighWire continues to invest in staff and outsourcing to stage the migration of its approximately 140 publisher clients and more than 1,400 websites to a new technology platform (HighWire 2.0, aka H2O). In 2011/12, HighWire will fund that investment with \$0.9 million of reserves.
- SU Press will fund operating expenses with draws of \$0.4 million from the Press Sustaining Fund and \$0.4 million from the Press Research Fund in 2011/12.

Fund balances at the end of 2011/12 are expected to be \$15.6 million, consisting of \$3.4 million in designated funds (including \$2.2 million in LOCKSS Auxiliary Reserves); \$1.6 million in expendable funds and \$8.2 million in endowed funds, both heavily restricted by donor purpose, and \$2.4 million in the auxiliaries: \$1.5 million for HighWire, \$0.4 million for LOCKSS, and \$0.5 million in SU Press endowments.

Capital Plan

Stanford's library collections continue to grow, even as on-campus library facilities face space constraints. To accommodate that growth, SULAIR is developing a second set of storage modules at its offsite storage facility, Stanford Auxiliary Library 3. This project, known as SAL3.2, was on hold for some time, and the space is sorely needed. Materials in this highly efficient, carefully climate controlled facility are stored by size and located by incredibly precise and carefully checked decision-support software. This new set of modules is planned to also enable the addition of a digital scanning facility, as well as a cold storage room for film.

Due to the planned demolition of Meyer Library, an investigation of alternative locations for the programs housed in Meyer continues to progress. The East Asia Library, Academic Computing Services, and access to approximately 600,000 volumes in below-grade stacks constitute the principal public services in Meyer, but it also houses essential back-of-the-house operations, primarily SULAIR's Technical Services. SULAIR and Land, Buildings and Real Estate have completed a study to relocate these services South Building of the GSB, and have determined that the fit is promising. LBRE is now conducting a more detailed cost study. SULAIR hopes the project will be approved by the provost and presented to the trustees in the course of 2011/12.

SLAC NATIONAL ACCELERATOR LABORATORY

Programmatic Directions

SLAC is a multiprogram national laboratory operated by Stanford for the Department of Energy's Office of Science. SLAC is a host of DOE scientific user facilities providing world-class, state-of-the-art electron accelerators and related experimental facilities used by 3,000 scientists each year from all over the world to conduct research in photon science, astrophysics, particle physics, and accelerator science. The major programs SLAC currently undertakes to achieve its vision are described below.

Scientific User Facilities

SLAC operates two major DOE Basic Energy Sciences user facilities: the Stanford Synchrotron Radiation Lightsource (SSRL) and Linac Coherent Light Source (LCLS).

SSRL provides X-ray beams and advanced instrumentation for research in many areas of science, engineering, and technology. Applications range from energy storage and environmental remediation to drug discovery and magnetism in thin films. In 2011, about 1,500 scientific users are scheduled to perform research using SSRL's X-ray beam lines. The synchrotron ran at 200 milliamperes of current in 2009/10; it will begin the 2011/12 run at a much higher current, and the plan is to ramp up to its top design current of 500 milliamperes. The increased current will make SSRL's X-ray beam lines even brighter, providing clearer experimental results and reducing the length of time needed for data collection, thus allowing examination of more samples in a given period of time.

ARRA funded a new SSRL instrument for advanced spectroscopy that is being commissioned in 2011. This instrument has unique capabilities for the study of catalysis, materials science, and biology.

LCLS is the world's first hard X-ray free electron laser. It began experimental operations in late 2009, and four of the six instruments specifically designed for LCLS science are now in operation. The remaining two are expected to be installed and commissioned by 2012. The LCLS science pro-

gram, which is complementary to that of SSRL, is opening new frontiers of discovery in areas including atomic physics, imaging of nonperiodic nanoscale materials, ultrafast structural and electro dynamics, and matter under extreme conditions. LCLS will probe the structure and dynamics of matter at nanometer-to-atomic dimensions and on femtosecond time scales, fast enough to resolve the motions of atoms and the forming and breaking of chemical bonds. Its first biological imaging results were recently published in *Nature*.

Based on the success of LCLS, the DOE approved the start of planning for LCLS-II in April 2010. This expansion of LCLS, which will significantly enhance its scientific capability and capacity, is expected to move forward to completion in 2017. LCLS and its planned future expansion, LCLS-II, will maintain SLAC/Stanford/DOE's position as a world leader in the emerging field of ultrafast X-ray science, an area expected to see significant growth and impact in 2011 and beyond.

Photon Science Program

The photon science program at SLAC will see growth in multidisciplinary research areas that take advantage of the capabilities of SSRL and LCLS. In addition to the Photon Ultrafast Laser Science and Engineering Center (PULSE) and SIMES, SLAC has begun a new initiative in coordination with Stanford's Department of Chemical Engineering: SUNCAT, the Center for Sustainable Energy through Catalysis. SUNCAT will focus on creating better catalysts for use in alternative energy industries. It is a part of the Joint Center for Artificial Photosynthesis, an Energy Innovation Hub established by the DOE to create a new class of materials that capture the energy of the sun and store it in a form usable as fuel.

High-Energy Physics Program

SLAC's multifaceted program in particle physics and astrophysics operates experiments in space and on the ground to explore frontier questions about the nature and origin of our universe.

In 2011, SLAC will begin the user-assisted commissioning of a new ARRA-funded facility called FACET, the Facility for Advanced aCcelerator Experimental Tests. FACET will use two-thirds of the iconic SLAC linear accelerator to study plasma wakefield acceleration, one of the most promising approaches to advancing accelerator technology. It has the potential to accelerate subatomic particles 1,000 times faster over a given distance than existing accelerators, thus shrinking the size and cost of accelerators for scientific research, medicine, and industry.

SLAC is also a leading contributor to research and development for the accelerator and detector for the International Linear Collider, a planned facility for colliding electrons and positrons at tera-electronvolt energies and elucidating properties of physics at the high-energy frontier.

SLAC has been a member of the ATLAS experiment and the accelerator R&D program associated with the Large Hadron Collider (LHC) at CERN, the European high-energy physics laboratory in Switzerland. The experiment accumulated initial physics data in spring 2010, and this first run is now planned to extend through the end of calendar 2012. The LHC will be the flagship high-energy frontier facility for the next decade, with prospects for discovering super-symmetry and its possible dark-matter candidate, the neutralino; new spatial dimensions suggested by quantum gravity theories; or even mini black holes, all potential constituents of a new understanding of the universe.

The Kavli Institute for Particle Astrophysics and Cosmology is involved with the Fermi Gamma-ray Space Telescope, R&D efforts for the next-generation dark-energy experiment, the ground-based Large Synoptic Survey Telescope (LSST), and the Super Cryogenic Dark Matter Search (CDMS) experiment. Fermi has embarked on a decadelong program of space-based gamma-ray observations that will transform our understanding of the high-energy universe. SLAC hosts the Instrument Science Operations Center for Fermi's main instrument, the Large Area Telescope, which was managed and assembled at the laboratory. The LSST is designed to probe the properties of dark energy, allowing us to better understand the "dark" universe and its dominant components. Super CDMS will be the next-generation underground experiment seeking to directly observe relic dark matter from the Big Bang.

Consolidated Budget Overview

The DOE's Office of Science provides 97% of the funding for SLAC, primarily from the offices of Basic Energy Sciences and High Energy Physics.

SLAC has not yet received its 2011 funding from the federal government. Congress has approved multiple continuing resolution bills to fund the federal government since Oct. 1, 2010. Under these continuing resolutions, SLAC is expected to operate at the 2010 level of \$350 million, which has the US President's budget for new funding of \$320 million and a spend down of prior year carryover of \$34 million. Our current expectation is that SLAC's capital construction plan will not be severely impacted by the 2011 U.S. government budget stalemate.

The 2012 federal budget proposal shows robust funding for the DOE, and for SLAC in particular. The \$329 million proposed for SLAC includes funding for LCLS-II and for another new building to support users. On the other hand, given the large U.S. budget deficits and worries about government spending, the chance that SLAC will receive this budget is small. SLAC management continues to make contingency plans for absorbing potential budget reductions.

Capital Plan

SLAC has initiated a project to renovate 14,750 square feet of existing space in the Central Laboratory Building to provide research office and laboratory space for materials synthesis and characterization. Construction bids have been received, and an award is anticipated in the next few weeks. The expected completion date of this project is early 2012.

As part of the Office of Science's goal of modernizing the infrastructure of its labs, SLAC received funding in 2009/10 to begin the design of a new 64,000-square-foot modern office building and the renovation of 68,000 square feet of existing space in three major buildings. Approximately 35 trailers and substandard buildings will be demolished. The project is estimated to cost \$96 million and will be completed in 2015.

The DOE's Office of Science has approved a \$64 million, 60,000 square foot science and user support building. Construction should begin in early 2012.

