

## SECTION 2

# ACADEMIC UNITS

### OVERVIEW OF ACADEMIC UNITS

This section summarizes programmatic and financial activity for each academic unit. It also describes the relationship between the unit's capital plan and its programmatic plans. Overall, the academic units are projecting a surplus of \$93.1 million in 2008/09,

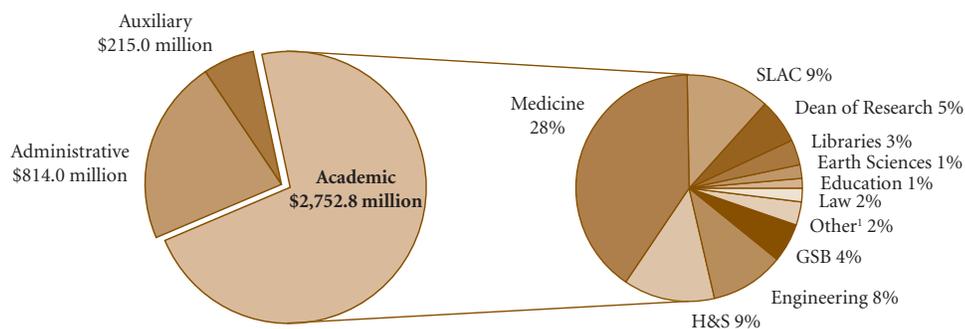
driven largely by strong endowment income in the School of Engineering, the School of Humanities and Sciences, and the School of Medicine. Together, these three schools expect their endowment income fund balances to increase by roughly \$60 million due to highly restrictive endowments and unfilled chairs.

### CONSOLIDATED BUDGET FOR OPERATIONS, 2008/09: ACADEMIC UNITS

[IN MILLIONS OF DOLLARS]

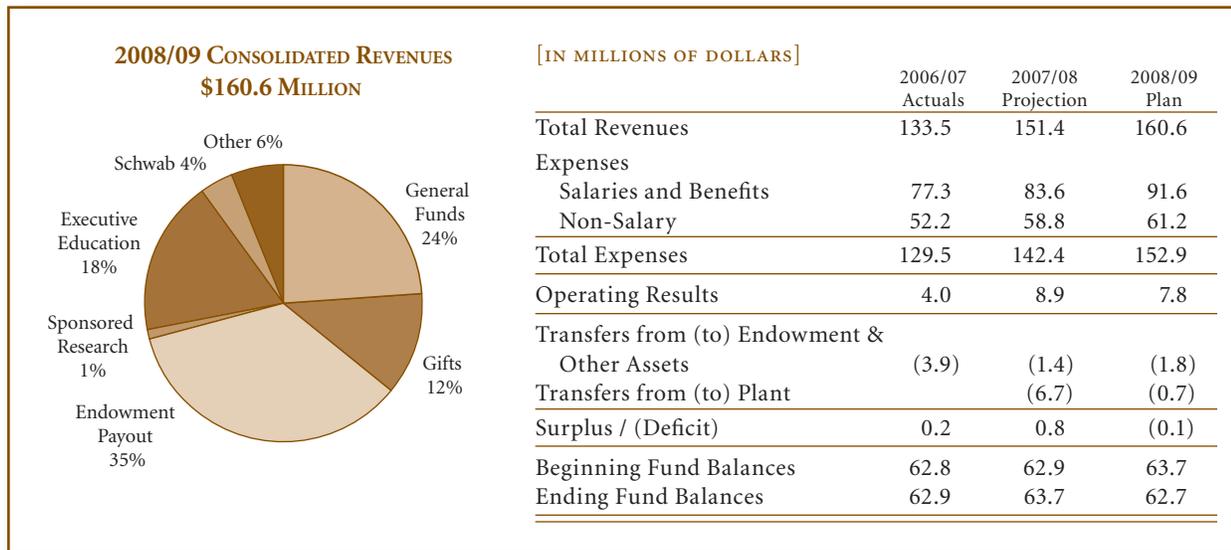
	Total Revenues and Transfers	Total Expenses	Result of Current Operations	Transfers (to)/from Assets	Change in Expendable Fund Balance
Graduate School of Business	160.6	152.9	7.7	(8.8)	(1.1)
School of Earth Sciences	51.5	51.5		(3.6)	(3.6)
School of Education	38.2	36.1	2.1	(0.9)	1.2
School of Engineering	317.1	291.2	25.9	(7.8)	18.1
School of Humanities and Sciences	403.7	356.2	47.5	(6.8)	40.7
School of Law	63.5	58.0	5.5	(5.5)	
School of Medicine	1,183.1	1,111.4	71.7	(40.6)	31.1
Vice Provost and Dean of Research	175.6	174.1	1.5	1.2	2.7
Vice Provost for Undergraduate Education	40.5	41.4	(0.9)	(1.0)	(1.9)
Vice Provost for Graduate Education	7.2	5.2	2.0		2.0
Hoover Institution	53.9	44.2	9.7	(4.3)	5.4
Stanford University Libraries	97.7	99.9	(2.2)	0.5	(1.7)
SLAC	330.9	330.7	0.2		0.2
<b>Total Academic Units</b>	<b>2,923.5</b>	<b>2,752.8</b>	<b>170.7</b>	<b>(77.6)</b>	<b>93.1</b>

### 2008/09 CONSOLIDATED EXPENSES BY ACADEMIC UNIT



<sup>1</sup> Other is Hoover, VP for Undergraduate Education, and VP for Graduate Education.

## GRADUATE SCHOOL OF BUSINESS



### INITIATIVES AND PRIORITIES

The Graduate School of Business (GSB) continues to make progress on its new MBA curriculum, its collaborations across the university, and its new campus. These will continue to be its main areas of focus for the next few years.

#### New Curriculum

The GSB launched its new MBA curriculum this fall for incoming first-year students. The curriculum is designed to be more challenging and more personalized, with more leadership development and more global context.

The fall quarter was filled with Management Perspectives courses designed to expose incoming students to various issues faced by business leaders. The students also worked on developing competencies in several important areas. Constructing a well-reasoned argument and communicating it effectively was the focus of the 15-person Critical Analytical Thinking (CAT) seminar. Each student had support from both a tenure-line GSB faculty member and a writing coach to help improve business writing skills.

The Strategic Leadership course introduced students to strategy and general management issues in a case discussion format. Groups of six to eight students participated in labs designed to develop leadership skills. The course culminated in the Executive

Challenge, which brought the entire first-year class together with the second-year MBA leadership fellows and more than 150 alumni from around the world for an all-day “final exam.” The students and alumni played roles in a series of realistic situations requiring the exercise of interpersonal, influence, and leadership skills developed during the quarter. The alumni, all experienced high-level executives, critiqued and mentored the students.

The winter and spring quarters featured the Management Foundations courses, such as finance, operations, and marketing, that used to be at the heart of the MBA core curriculum. Each course offered several base-level sections, at least one accelerated section, and an advanced application section for students with extensive background and work experience in the area. CAT instructors guided students into the sections based on the students’ backgrounds, skills, and interests. The multiple versions of each course challenged each student at the most appropriate level.

The school also launched the global experience requirement, so all MBA students must take a global study trip or complete a global internship. One way students could complete this requirement was by participating in one of the 22 trips offered during the winter and spring breaks.

For 2008/09, several modifications to the first-year curriculum will be introduced based on feedback

from faculty, staff, and students. Completion of these modifications will require a significant amount of faculty time.

The GSB was able to deliver the curriculum this year by encouraging several senior faculty to postpone sabbaticals and teach more than their normal course load, and by recalling several emeriti. This is not a sustainable approach. Estimates are that 105–110 tenure-line faculty will be needed to deliver the new curriculum, to staff all of the electives expected of a top business school, and to satisfy demand for other graduate teaching across the university. Accordingly, aggressive recruitment efforts are taking place, with the goal of adding ten faculty this year.

### Collaborations

The GSB continues to offer several joint degree programs, including one in environment and resources and one in public policy. The popular Summer Institute in Entrepreneurship (SIE) continues to be offered to graduate students outside of the GSB. Several popular courses bring together GSB and non-GSB graduate students, including Bio-design Innovation (Engineering and Medicine), Design for Extreme Affordability (Engineering and the Design Institute), and Evaluating Entrepreneurial Opportunities (all other schools).

New activities this year included a back-to-school course for alumni entitled “Reduce Your Ecological Footprint”, which featured a broad set of Stanford faculty, including several from the Woods Institute. Also new is an executive education course entitled “Business Strategies for Environmental Sustainability”. The Global Supply Chain Forum, a joint program of the GSB and the School of Engineering, is delivering a conference on responsible supply chains this spring and will continue to focus some of its research on environmental issues. The GSB will continue to develop new programs each year in support of the initiatives in the Stanford Challenge.

### New Campus

The Knight Management Center is scheduled for groundbreaking this summer. The campus is being designed to promote collaboration within the GSB community and between the GSB and the rest of Stanford. It will integrate indoor and outdoor spaces to take advantage of the Bay Area’s favorable climate. The design of its academic space reflects the needs of

the new curriculum – providing much more seminar and team space – and accommodates the need for flexibility as programmatic needs evolve.

### CONSOLIDATED BUDGET OVERVIEW

GSB expenses are projected to grow 7.3% versus the 2007/08 budget plan to \$151.4 million. This growth is somewhat more moderate than it has been in the last few years because expenses related to the new curriculum were included in the 2007/08 budget figures. The largest driver of the expense increase is teaching and research, particularly the plan to add ten net new faculty (an 11% increase). Continuing pressure on faculty salaries is expected as the hiring market for faculty remains extremely competitive.

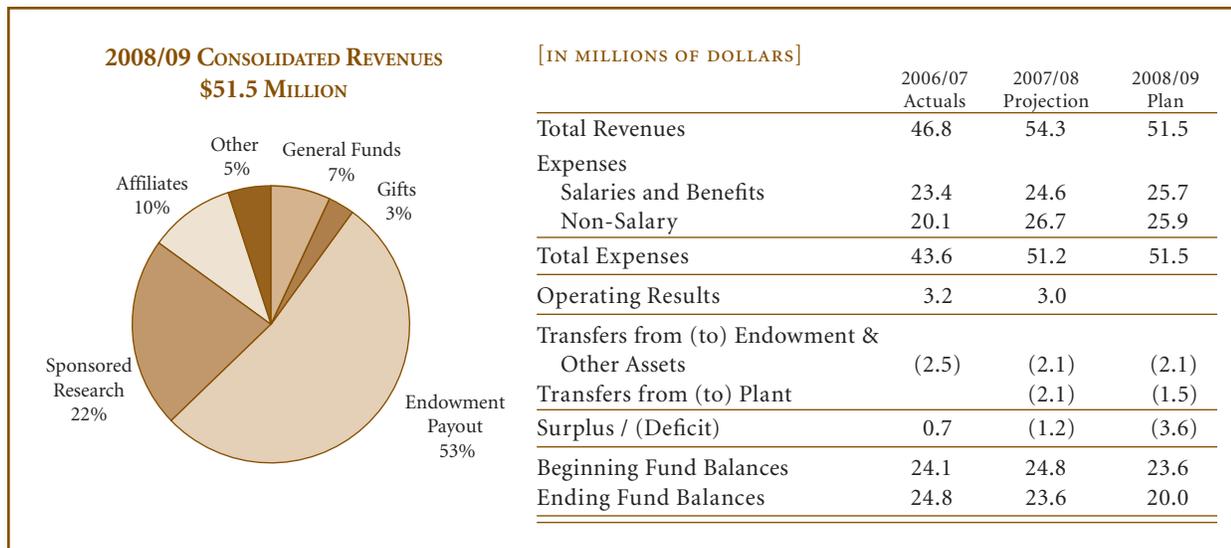
GSB revenues are projected to grow 6.1% over the budget plan for 2007/08. The school expects tuition revenue to increase 5%. First-year MBA students’ tuition will increase by 6.5%, second-year students’ tuition will be flat, and Sloan students’ tuition will increase by 9.1%. The school will have fewer students than in 2007/08 since the number of MBA students was decreased for autumn 2007 to accommodate the first year of the new curriculum. The school forecasts Executive Education revenues to increase 7% year over year, in line with prior years growth. Endowment income and interest are expected to grow 6.4%, while the school expects a decrease of 6.8% in expendable gifts as it focuses on gifts for the new campus and endowment.

### CAPITAL PLAN

The Knight Management Center is integral to the school’s plans for leadership in business education. The new campus, including an underground parking structure, will be completed in 2010/11 at an estimated cost of \$370 million.

The Knight Management Center is being designed to earn a Platinum Certification under the U.S. Green Building Council’s LEED rating system. This is the highest rating a building can receive and represents a substantial commitment to sustainable design. The design will minimize energy and water demands while maximizing the potential of natural ventilation and daylighting strategies. The campus will also satisfy the university’s space planning guidelines, with some spaces being even more efficient than the guideline recommendations.

## SCHOOL OF EARTH SCIENCES



### INITIATIVES AND PRIORITIES

In 2008/09 the School of Earth Sciences will continue its transformation into a 21st-century school focused on the study of planet Earth: its mantle and crust; atmosphere, climate, oceans, and land and water systems as they are changing naturally and in interaction with human activities; and its energy resources. This transformation began with the 2005 strategic plan and has yielded a remarkable shift across the organization.

#### Strategic Directions

The school's top priority for 2008/09 is faculty recruitment and retention. It has welcomed eight new faculty since 2006 and expects an additional four this year. While some of this change is due to retirements, some is the result of joint appointments with the Woods Institute and new endowed chairs. Strategically, this means that the school's focus has shifted from solid earth and petroleum engineering, and has broadened to include areas of research and teaching completely new to the university and essential to the Initiative on the Environment and Sustainability. Such a dramatic change requires substantial investments in start-up packages, lab renovations, and expanded support services for faculty and research activities.

Earth Sciences has also experienced retention pressures. The school must be more aggressive in recruiting and retaining the best faculty and must invest more

in salary and research funds than ever before. This investment is critical to maintaining the school's top rankings and the ability to attract and keep the very best faculty and students.

#### Programmatic Plan

##### *Environmental Earth System Science*

In 2007/08 Earth Sciences received Board of Trustees approval to launch a new department: Environmental Earth System Science (EESS). Begun with a group of faculty from departments in the school (and joint appointments from elsewhere on campus), and some 25 existing graduate students, the department will be in full operation in 2008/09. EESS is expected to grow to twelve faculty (after current searches come to closure) and approximately 60 graduate students. Much activity during the year will be devoted to developing the department's identity, building community, and integrating EESS into the school's ongoing activities. The school is considering folding its popular undergraduate interdisciplinary program, Earth Systems, into EESS. During 2008/09 this question will be explored fully, and a decision will be made during the year.

##### *Diversity*

Efforts to increase the diversity of the student population through targeted outreach activities and partnerships with other schools on campus will ramp up in 2008/09. Additionally, the school will establish a comprehensive diversity fellowship program for

graduate students, to offer additional financial aid to under-represented students and others who would add diversity to the school. Earth Sciences also plans to develop programs that build diversity through activities such as university-to-university partnerships, faculty sabbatical programs with minority-serving institutions, and summer programs for diverse student populations.

### Interdisciplinary Activities

Much of what Earth Sciences does is, by its nature, interdisciplinary. In 2008/09 the school intends to make at least two joint faculty appointments with the Woods Institute for the Environment: one focused on climate science, the other on land use and land cover change. Earth Sciences will also continue to support the Interdisciplinary Program on the Environment and Resources (IPER), with the hope that the program will become self-supporting through successful fundraising efforts. Finally, the Dean of Earth Sciences will continue to serve as one of Stanford's chief spokespersons for the university's Initiative on the Environment and Sustainability, an interdisciplinary effort encompassing activities across all seven Stanford schools.

### CONSOLIDATED BUDGET OVERVIEW

The projection for 2007/08 shows a year-end balance of \$23.6 million, with an overall decrease of \$1.2 million across all fund types due to investments in lab renovations. Gift fund balances are projected to grow by \$600,000 due to transfers from school endowment into faculty start-up accounts, and designated funds will grow by a net \$660,000 due to uncommitted funding from the president to the Dean. Endowment balances are projected to decrease by \$2 million, primarily as a result of physical plant investments.

Looking ahead to 2008/09, Earth Sciences expects to continue making substantial investments in physical plant for lab renovations and other space improvements, as well as additional outlays for start-up packages and equipment purchases. The net result is a projected decline of \$3.6 million across all fund types, primarily endowed funds, with a year-end projected balance of \$20 million. Of this total, \$5 million will reside in central school reserves, and the remaining fund balances reside in either highly restricted or faculty-controlled funds.

For 2008/09, the school projects modest growth in expenses of \$300,000 over 2007/08, with consolidated expenses approaching \$52 million. While operating expenses will increase by over \$1 million due to faculty and staff hires, sponsored research funding and expenses will decrease substantially as a large federal grant (San Andreas Fault Observatory at Depth) comes to a close. Looking beyond 2008/09, investments in new faculty should decline and school reserves should begin to build up over the next several years.

### CAPITAL PLAN

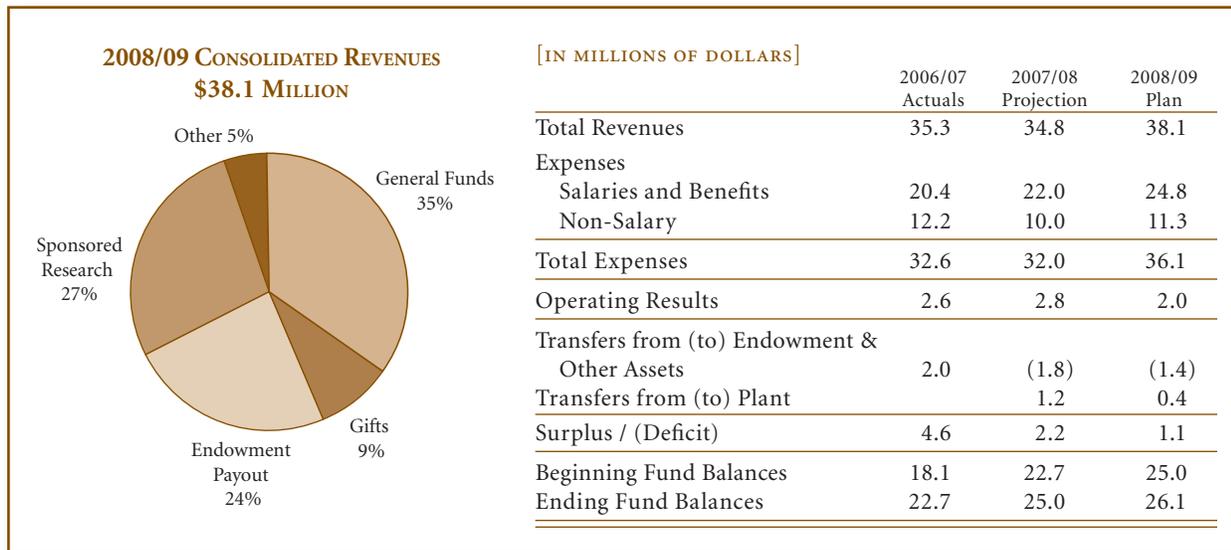
As mentioned above, Earth Sciences is at a crossroad and requires an investment in facilities. The school's capital plan for 2008/09 has four components: improved space utilization, gathering and conference spaces, Branner library improvements, and laboratory renovations.

The school's need to accommodate program growth within its current footprint is an important factor driving the need for improved space utilization. With the help of Huntsman Architects, the school developed a master plan in the spring of 2008, intended to bring its office spaces closer to university guidelines. A particular focus of the plan is to provide student and faculty offices to address the school's expected growth. Additionally, the plan outlines approaches for improved gathering and meeting places to encourage interaction among faculty, students, and staff.

Another part of the planning focuses on the Branner Earth Sciences Library, located in the Mitchell Earth Sciences building. The library was built in the 1970s and does not meet current research needs. During 2008/09, working closely with Stanford University Libraries and Branner staff, the school will develop a strategy to bring Branner into the 21st century, so that both its space and services support the school's teaching and research needs well into the future.

Finally, much of the school's capital investment in 2008/09 will be for laboratory renovations in support of new faculty. Many of these faculty are experimentalists with substantial wet lab needs that are unique, requiring alterations to existing facilities. In addition, faculty with significant computational research needs will put new demands on the school's computing infrastructure, forcing capital investment in this area as well.

## SCHOOL OF EDUCATION



### INITIATIVES AND PRIORITIES

The School of Education has multiple but integrated missions: to generate new knowledge; to train educational researchers and practitioners; to improve educational practice; and to influence policy. Being directly involved in practical and policy issues helps the school contribute to improvements in pre-K–12 education and the community contexts in which children grow and learn. The school addresses issues of practice, policy, and research at multiple levels: classrooms; schools and the organizations supporting them, such as districts and charter school management organizations; the communities surrounding schools; and state and federal policy.

The school is involved in a number of initiatives to improve schools and community contexts for youth. The newest, Improving K–12 Education, is a Stanford Challenge initiative. Its main goal is to develop and study innovative strategies to improve K–12 education. This interdisciplinary initiative focuses on three sets of issues: (1) development of highly effective teachers who remain committed to careers in education, and of curricula that support effective teaching; (2) school leadership and governance; and (3) policies that affect educational practice and student learning. In all of these domains, the goal is to strengthen connections between research and practice.

Other major School of Education programs include the charter elementary and high schools in East Palo

Alto, the School Redesign Network, the Stanford Educational Leadership Institute (SELI), the Institute for Research on Education Policy and Practice (IREPP), and the John W. Gardner Center for Youth and Their Communities. Although the primary purpose of these programs is to promote more effective practice, they all involve faculty research and graduate training, and are thus at the core of the mission of the school and the university.

The Stanford Teacher Education Program (STEP) will expand in 2008/09 by opening admissions to the Elementary Teacher Credential Program to non-Stanford students. The state now requires all students planning to teach in California to pass a state-approved teacher performance assessment in order to receive their preliminary credentials. The School of Education led the consortium of twelve institutions that designed the newly approved Performance Assessment for California Teachers.

The new loan forgiveness program for STEP students went into effect for the class of 2007/08. It will significantly reduce debt for these students and hopefully will provide an incentive for them to stay in the profession. In addition, the Woodrow Wilson National Fellowship Foundation has selected STEP as one of four U.S. graduate education programs to participate in a \$6 million national initiative to encourage student teachers to pursue careers in high-need schools. Over three years, this initiative will provide 21 fellowships

to STEP students, each including a \$30,000 stipend. The first set of fellowships will be awarded to students entering STEP in fall 2009.

An ongoing priority is recruiting faculty. Retirements and continuing searches will make 2008/09 another heavy recruitment year, and the school expects at least five new faculty members to join it in fall 2009. The school strives to hire excellent scholars who have genuine interests and experience in education practice. Three new joint faculty positions will further the school's interdisciplinary focus: one in environmental education (with the Woods Institute), one in international post-secondary education (with the Freeman Spogli Institute), and one in collaboration with the Center for Comparative Studies in Race and Ethnicity (CCSRE).

### **CONSOLIDATED BUDGET OVERVIEW**

The school projects a consolidated budget surplus of \$2.2 million in 2007/08. Net transfers to assets will be \$600,000. This is the result of a return of \$1.2 million from plant, a \$1.7 million transfer out to the Avery Student Loan Fund, and a \$125,000 transfer out to endowment principal. Endowment balances are expected to increase due to new endowed chair funds, as well as student aid funds and unused restricted fellowship funds. Gift balances are expected to decrease, the result of spending down large gifts received in prior years for specific projects. Revenues and transfers are projected to decrease compared to 2006/07, the result of a decrease in non-federal research funding. Expenses are also expected to be lower than projected, resulting from decreased non-federal research funding and unfilled faculty positions.

In 2008/09 revenue is expected to grow by 9% and estimated expenses will increase by 13%. The surplus in 2008/09 is expected to be \$1.1 million. The increased expenses relate to new faculty joining the school, expenses related to the K–12 Initiative, and projected growth in non-federal funding. The discrepancy between growth in revenues and expense results from large gifts received in the past two years

which will support specific program expenses over the next several years. New gift revenue is expected to support the K–12 Education initiative and other gift revenue and expenses are expected to relate primarily to research centers in the school: the John W. Gardner Center for Youth and Their Communities, the Center for Adolescence, the Stanford Education Leadership Institute, and the Institute for Research on Education Policy and Practice. A new \$8 million endowment in support of the John W. Gardner Center for Youth and Their Communities will contribute to endowment income growth, with payments spread over five years.

Of the \$1.4 million in transfers out for 2008/09, the School of Education expects to use \$1.2 million to support student loan assets and \$210,000 to support endowment. \$435,000 will be returned from plant.

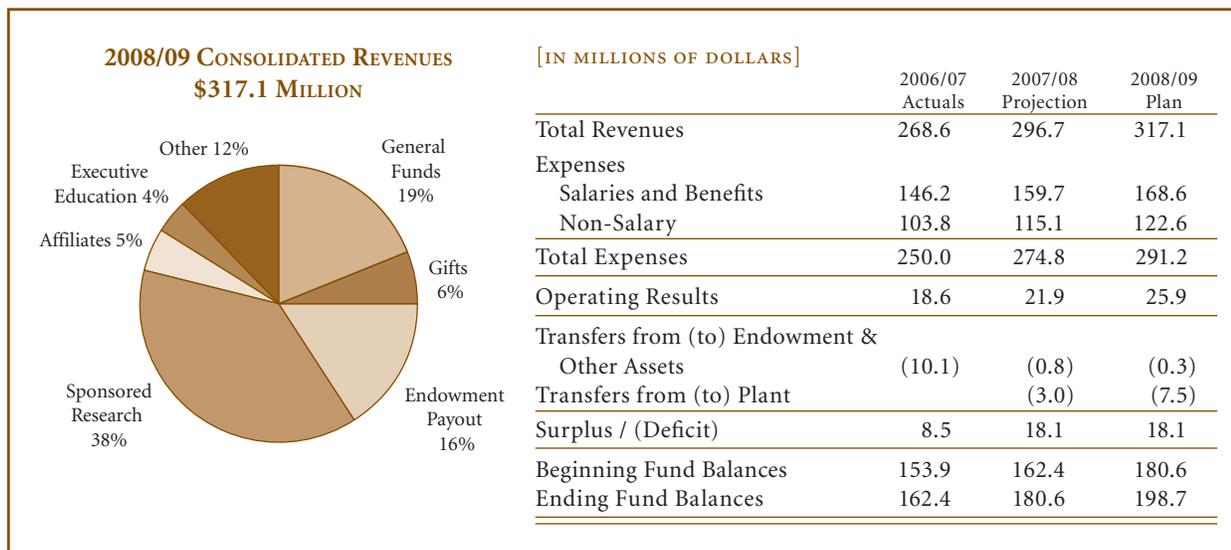
Fundraising efforts will focus on the K–12 initiative, new endowed chairs, student aid, support for the teacher education programs, and unrestricted funding for faculty research. The School of Education has been successful in fundraising for its academic programs: in the past year it received funds for three new endowed faculty chairs, several endowed student aid funds, and an endowment to support science education.

### **CAPITAL PLAN**

To provide leadership in academic programs and to succeed in recruiting the best students, staff, and faculty, the School of Education will continue to upgrade and improve its existing spaces. The new Barnum Center has become an important new resource. In summer 2009, the School of Education building will be seismically retrofitted to address unreinforced masonry issues with the entrances and arcades. The Cubberley Library, on the second floor, will also be reconfigured.

The school is working with Capital Planning and Space Management to use office space in accordance with the university's space guidelines. A master planning study has begun. It will develop plans for improved space utilization and for necessary space modifications.

## SCHOOL OF ENGINEERING



### INITIATIVES AND PRIORITIES

With emphases on interdisciplinary research, innovative teaching, and maintaining core competencies, the School of Engineering's strategic plan supports the broader goals of the Stanford Challenge. The primary strategic initiatives are described below.

#### Information Technology (IT)

IT has been a strength for the School of Engineering for decades. IT will continue to play a critical role in the future. A plan to add one faculty member per year to the Computer Science Department over the next ten years will offer opportunities for continued leadership in this rapidly advancing field and enhance prospects for interdisciplinary research.

#### Nanoscience and Nanotechnology

The study of matter at the nano scale has the potential for huge impact in engineering. The school's plan to support this critical discipline includes partnering with other units to complete the new Nano Center building; making strategic faculty hires in Materials Science, Chemical Engineering, and Bioengineering; and establishing a new nano institute. Shared equipment facilities, patterned after the Stanford Nanofabrication Facility and the Stanford Nanocharacterization Lab, are critical infrastructure for this type of experimental research and are planned for the Nano Center and the new Bioengineering building.

#### Energy and Environment

Several engineering departments have substantial activity in the area of energy and the environment, including Mechanical Engineering, Materials Science and Engineering, and particularly Civil and Environmental Engineering (CEE), which has reinvented itself to focus on sustainable engineering. The new Y2E2 building, opened in March 2008, is already having a dramatic effect in promoting interdisciplinary research. Faculty associated with CEE and other schools and independent labs are housed in the building according to their area of study (climate and energy, oceans and estuaries, land use and conservation, fresh water) to promote interaction.

In 2008/09, the school hopes to begin construction of the Green Dorm, intended to generate more electricity than it uses and emit no net carbon dioxide. In addition to housing 47 students, it will provide a "living lab" for faculty and students to explore innovations in "green" technology.

#### Bioengineering

Now in its sixth year, the Bioengineering Department continues to attract top-notch faculty and students and substantial research awards. In addition, several other engineering departments have reallocated faculty billets into areas associated with the life sciences. The school has built state-of-the-art labs for these recent hires. The new Bioengineering and Chemical

Engineering building will provide a hub for these activities, shared facilities for experimental research, and space for the growth of an undergraduate bioengineering curriculum, which may be introduced as early as 2009/10. These developments are complemented by the research activity fostered by the Clark Center and Bio-X.

### **CONSOLIDATED BUDGET OVERVIEW**

The School of Engineering projects a consolidated operating surplus of \$21.9 million in 2007/08, leading to an \$18.1 million surplus after \$3.8 million in transfers to assets.

In 2008/09, revenue is forecast to increase to \$317.1 million, 6.8% over the projected 2007/08 results. This includes an increase of 14.9% in forecast endowment income. Sponsored research continues to be a major contributor to the school's budget, and will represent approximately 40% of revenues in 2008/09. It is forecast to grow at 6.8% over 2007/08, with the addition of substantial new projects such as the Army High-Performance Computing Research Center and two individual researcher awards from the King Abdullah University of Science and Technology Global Research Partnership. Designated funds will benefit from projected increases in affiliate membership and new executive education programs offered by the Hasso Plattner Institute of Design. A surplus of \$18.1 million is expected in 2007/08.

Expenditures are forecast to rise 6% overall, with compensation growing by 5.6% over 2007/08 and noncompensation spending by 6.5%. Major drivers are the 16% increase in school-supported graduate aid resulting from the increased payout to endowment funds; a larger number of teaching assistantships, due to increased general fund allocations; and an anticipated 60% yield rate for sponsored project proposals, leading to substantial net new research activity.

Two years ago, the school began transferring assets to support the capital plan described below. In both 2007/08 and 2008/09, a substantial portion of the transfers to plant will be made from the Venture Capital II fund, which is not tracked in the consolidated budget

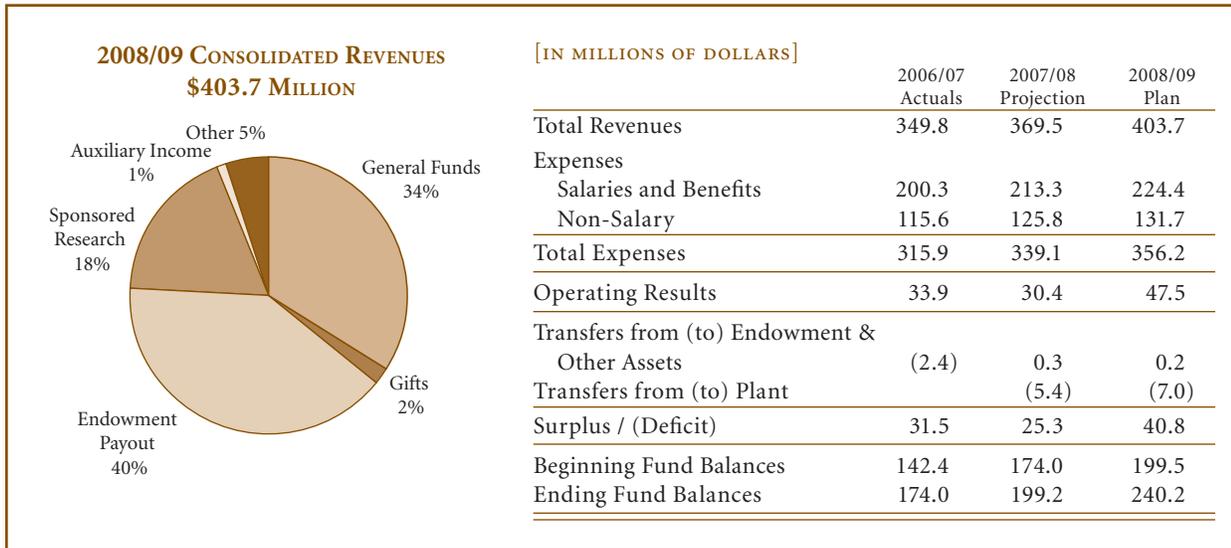
because it is a quasi-endowment. In 2007/08, transfers of \$45 million to plant accounts from reserves, gifts to plant and other sources are projected (some of this is via the quasi funds). In 2008/09, the School anticipates transfers of \$30 million to capital projects. In aggregate, the School is transferring nearly \$40 million during fiscal years 2007/08 and 2008/09 from reserves, including funds functioning as endowment.

### **CAPITAL PLAN**

The School of Engineering has the ambitious strategic objective of housing all of its departments in "21<sup>st</sup>-century" facilities by 2012. This is a critical element for the success of the academic strategic initiatives described above. Four of the new buildings in the Science, Engineering, and Medicine campus (SEMC) are major elements in meeting this objective. Additional capital projects include the Green Dorm, the Automotive Innovation Facility, continued modernization of laboratory space across the school, and new and renovated spaces along Panama Mall to house significant academic programs, among them the Hasso Plattner Institute.

Sustainability is central to the SoE's approach to both new buildings and renovations. The early success of the Y2E2 building has prompted both the school and the university to strengthen their commitment to ambitious goals for efficient energy and water use. The university has approved budget increases to fund further sustainability features for additional buildings in the SEMC. A primary goal for the School of Engineering Center, reducing peak energy demand by 50% compared with a similar building of more traditional design, will be achieved by providing 85% of the building's light requirements through daylighting and by maximizing natural ventilation. This approach reduces the need for large mechanical rooftop HVAC equipment and will lead to long-term utility savings. Additional utility savings will result from the installation of appropriate infrastructure for future solar panels for on-site power generation. The school is also employing sustainable materials in both the interior and the exterior finishes of the building.

## SCHOOL OF HUMANITIES & SCIENCES



### INITIATIVES AND PRIORITIES

The school’s primary challenge continues to be maintaining the extraordinary strength of its faculty, teaching and research programs while making enhancements in selected areas. During the past three years, significant progress has been made towards bringing the school’s base budget into alignment with expenditures, through large investments of base funding from the provost and a multi-year focus on improving administrative systems and processes associated with the management of major expense streams. The Dean’s Office is actively investing in systems and will continue to focus on carefully managing these expenditures.

H&S continues to face major challenges from cost increases in faculty recruitment and retentions. Costs in these areas continue to rise, reflecting competition from top and second-tier institutions and the high cost of living in the Bay Area. The school is directing endowment funding streams towards these areas in an effort to provide a long-term hedge against rising costs. Retention activity increased dramatically during 2006/07, but has slowed somewhat during 2007/08. Anecdotal evidence indicates that this decrease reflects the larger salary increase pool funded by the provost.

The school’s development team is in transition as the Dean’s Office searches for a director of development. This vacancy has slowed fundraising activity somewhat

over the past year, but is projected to be on track by the end of 2007/08, with \$39 million of new donor pledges. Academic plans developed during the past year indicate that a larger percentage of gifts will be for incremental expenditures than in prior years, but growth will be carefully matched to new income streams.

During 2008/09, investments will be made in the following areas:

- Robust graduate programs are essential to achieving the school’s mission and maintaining faculty productivity but are undersized in some departments. H&S has established a multi-year goal to increase the total number of graduate fellowships by 125 (8%) in order to bring departments up to critical mass. Incremental fellowships will be funded in key departments for the 2008/09 admissions year, and a third year of support will be added to the existing diversity admissions program. Over the longer term, the school’s goal is to identify additional funding sources to provide five-year fellowships for diversity students.
- The school is also focusing investments in key programmatic areas. As part of a major Pacific Rim university, H&S must have strength in Asian studies and is in the process of rebuilding the East Asian Studies program and building programs in South Asian and Islamic Studies. These programs are priorities in the school’s current fundraising plan. In the natural sciences, H&S will work closely with SLAC to take advantage of the new Linac Coherent Light

Source. The school envisions H&S/SLAC shared faculty appointments across a number of science departments.

### CONSOLIDATED BUDGET OVERVIEW

H&S projects a \$40.8 million consolidated budget surplus for 2008/09 after transferring \$7 million to plant. \$4 million of plant expenditures will be used to build out space for new faculty hires with an additional \$3 million used to fund building renovations for large capital projects.

Consolidated fund balances in H&S are projected to be \$240.2 million in 2008/09. Designated fund balances are projected to grow \$13.7 million as faculty funding (primarily recruitment and retention packages) is transferred in advance of actual spending. Expendable balances are projected to decrease by \$4.4 million, continuing the trend experienced during the previous couple of years. Endowment balances are projected to increase by \$31.4 million. A detailed analysis of each H&S endowment was made last year to determine if increased endowment payout (resulting from the higher payout rate) could be used to replace general funds, which would then be returned to the provost. 27% of endowment income growth was determined to be too restricted, or supported activities where there was no general fund support, resulting in large windfalls in particular areas. The Dean's Office and departments continue to analyze these funds to determine how windfalls might be used, but for the short-term, accumulated balances are projected to increase. Endowments that are aligned with current and new activities will provide an on-going funding source for base operations and will also support new academic initiatives while fundraising plans are implemented.

\$1 million of incremental base funding will be used for faculty recruitment and retention costs, which continue to grow at a rate greater than cost rise. \$750,000 of new base funding will be used for faculty salaries in key departments where salaries significantly lag market and to stabilize salaries in the Economics

Department. The Dean's Office will pool \$250,000 of incremental base funding with growth in School endowments to provide incremental graduate aid and diversity fellowships.

Rates of growth in federal and non-federal grants and contracts have slowed in each of the past four years and are projected to slow to less than 1% growth in 2008/09. This slowed growth, coupled with more frequent gaps in grant renewals has increased the need for bridging funds to support students and faculty research.

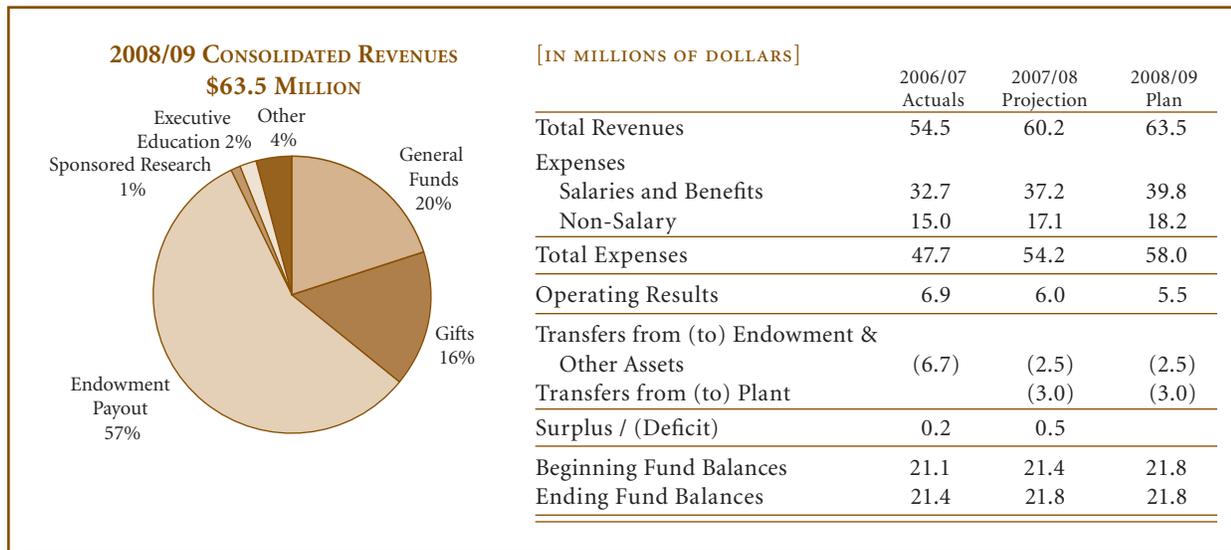
### CAPITAL PLAN

Major facilities planning is under way for Biology and Chemistry, including a new Biology building and combined Biology and Chemistry undergraduate teaching labs. The Art and Art History Department (including the new Film and Media Studies Program) will be moving to a new facility on the site of the old Anatomy building adjacent to the Cantor Arts Center. H&S is also a partner with the President's Office in planning the new Bing Concert Hall. As described above, these new facilities support significant academic initiatives of the Stanford Challenge. The school continues to undertake a range of laboratory and other renovations each year in support of new faculty recruitment, program growth and development, and ongoing needs.

Over the last year, H&S completed an extensive reallocation and reconfiguration of academic space in many areas of the Main Quad. This project helped the school accomplish pressing programmatic goals and better meet university space guidelines. Additional moves on the Main Quad will continue to pursue the goal of efficiently using the space that the school currently occupies, while also planning for future needs.

Working with Facilities Operations, the school is also investigating options for better ventilation and temperature control in the Math Corner building, without adding air conditioning. This is an important sustainability project that could serve as a model for other areas of the campus and the Main Quad.

## SCHOOL OF LAW



### INITIATIVES AND PRIORITIES

The trend of slower growth in Stanford Law School expenditures that began in 2007/08 will continue this year. Program expansion continues, but at a reduced pace. Though projected base operating expenditures are still rising, this year's increase is smaller than last year's, which in turn was smaller than that of the previous year. More than two-thirds of projected 2008/09 growth is related to two priorities: (1) accounting for debt payments on a planned new clinic and faculty office building, and (2) meeting the continued market competition in faculty compensation.

Space remains the single biggest constraint on the Law School's ability to maintain academic excellence. There is presently no room to house new faculty, staff, or academic/clinical programs. In recent years, through efficient and creative space planning, the Law School has been able to accommodate considerable growth in academic staff without any incremental space allotment. For example, library and student activity space was renovated for academic staff use. At this point, almost all such solutions have been exhausted; hence, completing a new building as quickly as possible has become the school's top priority. Funding it has required diverting substantial financial resources to service a projected \$30 million in associated long-term debt.

The continued competition for top-echelon legal scholars has made efforts to retain and recruit these faculty increasingly challenging. Making matters worse, a number of peer law schools have announced aggressive faculty expansion programs (Harvard, Columbia, and NYU are increasing faculty billets by 20% or more), so this intense faculty compensation pressure is unlikely to abate in the near future. In response to these market conditions, the Law School intends to provide appropriate resources where necessary.

In recent years, building a first-rate legal clinical operation practically from scratch has been among the Law School's top priorities. Stanford's clinical faculty is the best in the country, and participation among law students has risen from 30% a few years ago to more than 75% this year. The goal is to achieve 100% participation and to require that students take a clinic to graduate, though first the school needs to ensure that the program is stable and settled. Several of the ten clinics are new and experimental (two were launched last year alone), and their long-term stability is not yet certain. Even so, what the clinical leadership has accomplished in a few short years is impressive, and the expectations for this year are matched with resources.

Among the most significant recent trends in legal scholarship has been the emergence of Empirical Legal Studies, including the analysis of complex databases using sophisticated statistical and econometric models. Largely by serendipity, Stanford Law School has become one of the nation's leading centers for this kind of research, with at least seven faculty members whose work is substantially or wholly empirical. Law schools do not have graduate students equipped to perform such research. In the past year, the Law School has therefore sought and hired postdoctoral students new to the legal academy to assist these faculty. The Law School also recently hired a grant writer to assist the faculty in finding and securing grants to cover the costs of their empirical research. To the school's knowledge, no other law school has such a resource.

### CONSOLIDATED BUDGET OVERVIEW

The Law School is projecting a break-even budget in 2008/09. Consolidated revenue is projected to be \$63.5 million, up 5.5% over 2007/08 year-end projections. Consolidated expense is anticipated to be \$58 million, up 7% from 2007/08 year-end projections. The resulting consolidated operating surplus of \$5.5 million will be transferred out of current funds into the following asset categories: student loan (\$1.5 million), funds functioning as endowment (FFE) (\$1 million), and plant (\$3 million). The school's fund balances will remain unchanged at just less than \$22 million.

In an effort begun last year, the Law School is continuing to focus heavily on the short- and long-term financial resources required to fund the new clinic and faculty office building. Additionally, the Dean is working with faculty leaders of academic program centers to use available restricted funds first, thereby freeing unrestricted funds for the new building.

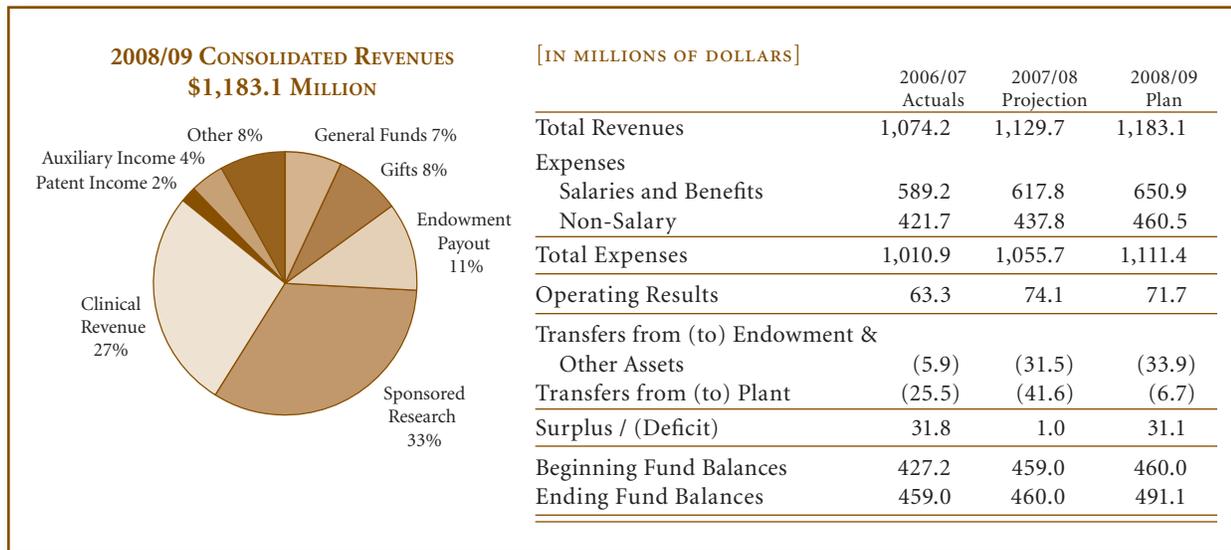
### CAPITAL PLAN

The Law School's Munger Residence Hall is well under way. This facility, planned to open in 2009, will house 600 students and include a dining hall that seats 250, a full kitchen to support the dining hall, a café, a store, meeting rooms for both student use and executive education programs, and an underground parking garage. The Law School plans to break ground for its new clinic and faculty office building in 2009. This building will be approximately 63,000 gross square feet and will cost just over \$71 million. In addition, the school continues to renovate Crown Quadrangle to upgrade its facilities and make maximally efficient use of its space.

Sustainability features in the Munger project include water conservation measures, a high level of natural lighting, and drought-tolerant landscaping. The single most significant sustainability strategy has been efficient land use planning involving higher-density development. The project also will bring commuting law students to the campus to live (reducing traffic and carbon output) and provide local amenities (a café, convenience store, and meeting space) to support a live-learn environment on campus.

The design team is evaluating sustainability options for the new clinic and faculty office building during the schematic design phase. The building design incorporates natural light and exterior views along with exterior courtyards to maximize daylighting. Lighting studies, thermal comfort, water conservation, and sun-shading options are being explored. The design team's objective is to meet or exceed the university goal of bettering American Society of Heating, Refrigerating, and Air-Conditioning Engineers requirements, which aim for a 30% reduction in energy demand.

## SCHOOL OF MEDICINE



### INITIATIVES AND PRIORITIES

The School of Medicine seeks to translate discovery and foster innovation, thereby improving health through research and its application to patient care. Educating and training future leaders is essential to these missions. Changes in education and training programs are contributing to the disciplinary alignments and workforce needed to assure the future success of the school and the biomedical research enterprise. These changes have included a new curriculum, the first phase of which was introduced in Fall 2003, to educate future leaders in innovation, discovery, and scholarship. Other changes take advantage of the broad opportunities available at Stanford for interdisciplinary education and offer enhanced joint degree programs, including expanded MD/PhD programs in science and other disciplines.

Further education initiatives include the Master of Science in Medicine, which will admit its third class in 2008/09. This program enables PhD students to acquire more intensive knowledge of clinical medicine and promotes the next generation of researchers who will translate discoveries into patient therapies and cures. This program is supported by the school and the Howard Hughes Medical Institute. In addition, the new Advanced Residency Training at Stanford (ARTS) program, whose goal is to foster development of physicians with comprehensive research training, will enroll its second class in 2008/09. ARTS students pursue their PhDs in science while completing their

clinical residency or fellowship training. The school plans to further increase joint degree opportunities and programs in the years ahead.

Promoting translational and interdisciplinary research and pursuing translational medicine continue to be central to the school's overarching mission. The school, through Dr. Harry Greenberg, has resubmitted an application to the National Institutes of Health for the Clinical and Translational Science Award. If approved and funded, this award will have a transforming impact. This will be enhanced by Stanford's next review by the National Cancer Institute in 2009 as a designated Cancer Center.

### CONSOLIDATED BUDGET OVERVIEW

In 2008/09, the School of Medicine is projecting an overall surplus of \$31.1 million based on a projected surplus from operations of \$71.7 million and transfers of \$40.6 million to plant and endowment. Expenses are projected to increase 5.3% and revenues 4.7% over projected 2007/08 results. Of the total revenues, sponsored research comprises 32.2% and healthcare services and tuition 31.9% and 3.3%, respectively. Expendable gifts, endowment income, and other designated income, such as patent income and investment income, constitute the majority of the remainder. The school plans to transfer \$22.4 million to the Capital Facilities Fund, \$400,000 for the Foundation in Medicine (FIM) #1 building, and \$1.5 million to fund strategic capital projects.

### Revenue Growth

Revenues will increase from a projected \$1,129.7 million in 2007/08 to \$1,183.1 million in 2008/09. Endowment income is projected to increase 7.5% due to higher projected endowment market value and new gifts. Gift revenue is expected to increase 15.0% as a result of development efforts focused on interdisciplinary and program initiatives. Growth of 1.5% in federal and nonfederal sponsored research revenue reflects stronger growth in the latter than in the former, due primarily to new awards from the California Institute of Regenerative Medicine.

Clinical professional service agreement and service payment revenues are projected to grow 5.0%, primarily as a result of expansion in clinical programs, including the opening of the Stanford Medicine Outpatient Center in Redwood City, expansion of operating room capacity at Lucile Packard Children's Hospital, and expansion of imaging capacity at the Palo Alto Imaging Center and in Redwood City. Based on current-year trends, the net contributions to academic resources from clinical operations are projected to grow 10.8%, from \$43.2 million in 2007/08 to \$47.8 million in 2008/09.

### Expense Growth

The school's 2008/09 budget plan includes the net recruitment of 21 Medical Center-line and nine university tenure-line faculty and related expenses, including program and staff support. The faculty will be recruited for the interdisciplinary institutes, the comprehensive cancer center, and the growing clinical practices.

Expenses are projected to increase by \$49.7 million in 2008/09. An \$18.8 million increase in academic and staff salaries includes the average merit increase and the increases related to the recruitment of incremental faculty. Academic and staff employees will receive an \$8.2 million increase in benefits. A \$22.7 million increase in noncompensation expenditures will be driven primarily by a net payment to the hospitals for the school's use of their leased space, incremental litigation expenses, and increases in operations and maintenance expenses.

### Transfers to Plant, Endowment, and Other Assets

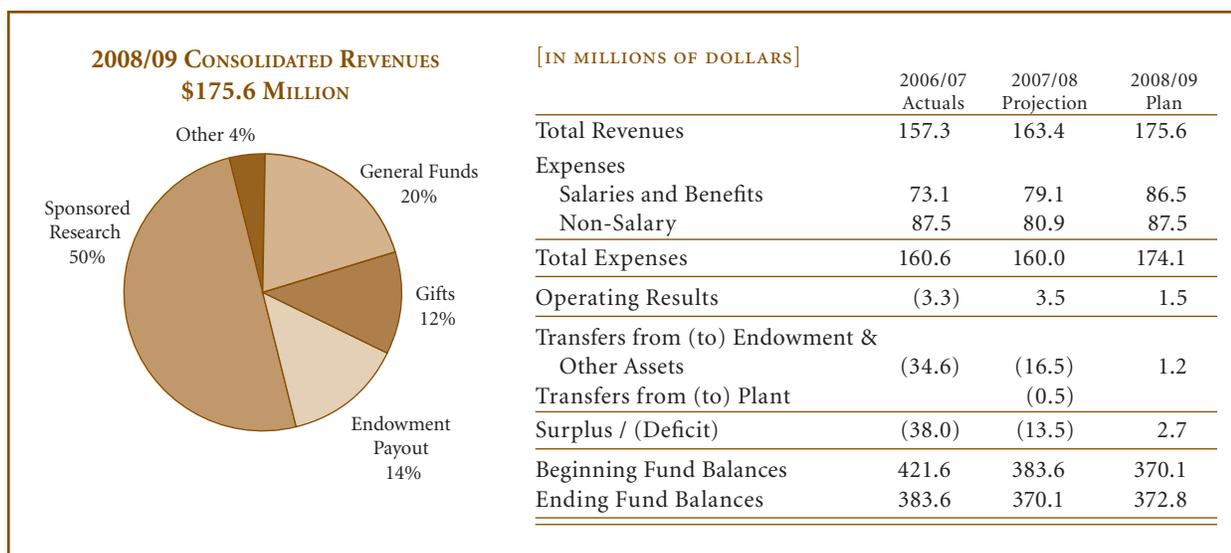
The projected transfers to plant of \$6.7 million comprise \$400,000 for FIM #1, \$300,000 for tenant improvements to leased off-campus space, \$1.5 million for strategic capital projects, and \$4.5 million for department capital projects. The projected transfer to other assets is a transfer of \$22.4 million to the Capital Facilities Fund. Transfers to endowment include investments in quasi endowment of \$3.6 million from the Dean's Office and \$9.0 million from departments.

### CAPITAL PLAN

The Learning and Knowledge Center (LKC) building is in construction, together with the LKC connective elements utilities project, a below-grade loading dock, and an extended tunnel. Occupancy is projected for winter 2010. Sustainability features of the LKC include the use of chilled beams for cooling and displacement ventilation in the classrooms, reducing the need for mechanical ventilation. The project also incorporates dual-supply water piping to employ recycled water safely. The majority of construction waste from the demolition of Fairchild Auditorium was recycled.

The school's new loading dock will be completed in December 2008, enabling deliveries to be centralized to one below-grade location. Distribution of supplies will be handled through an expanded network of tunnels connecting the majority of school buildings with the new loading dock. In addition, construction of the new Stanford Institutes of Medicine (SIM) #1 building will begin in summer 2008. The new building, which will provide new laboratory and vivarium space for 24 investigators plus additional lab benches for 60 collaborating researchers, will be devoted to research primarily in stem cells, including cancer stem cells. Other current capital projects include completion of the build-out of leased space at 1050 Arastradero Road, tenant improvements to office and dry research leased space at 1070 Arastradero, and programming and design of new construction at 800 Welch and FIM #1.

## VICE PROVOST AND DEAN OF RESEARCH



### INITIATIVES AND PRIORITIES

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

Along with the usual programs and responsibilities, DoR and its colleagues from the Schools of Engineering, Humanities & Sciences, and Earth Sciences are immersed in activities related to Science and Engineering Quad II. The Woods Institute for the Environment, the Precourt Institute for Energy Efficiency, and the Global Climate and Energy Project moved into the Yang and Yamazaki Environment and Energy (Y2E2) building in January 2008. The main Hansen Experimental Physics Laboratory (HEPL) building was demolished. The site is being excavated for the SoE Center and the Center for Nanoscale Science and Technology (Nano Center). Detailed programming for the Ginzton faculty laboratories and for new shared nanosciences facilities in the Nano Center is under way.

With the addition of the Center for Advanced Studies in the Behavioral Sciences (CASBS) in January 2008, DoR supports the operations of sixteen independent laboratories, institutes, and centers. These play a central role in enhancing multidisciplinary research at Stanford. In 2007/08 and 2008/09, the interdisciplinary

research programs being developed through the Photon Ultrafast Laser Science and Engineering Center, the Stanford Institute for Materials and Energy Science, and the Kavli Institute for Particle Astrophysics and Cosmology, in partnership with related Stanford Linear Accelerator Center programs, will be expanded. These are also important years for newer independent labs, including the Woods and Precourt Institutes.

DoR is helping to implement the goals of the Stanford Challenge through the international, environment, and human health initiatives. Bio-X, the Woods Institute, and the Freeman Spogli Institute for International Studies are the foci of many activities related to the Stanford Campaign and are involved in recruiting faculty whose interests bridge disciplines. The role of the independent laboratories in the sciences is increasingly important as faculty seek to sustain their extramural research funding in the face of declining federal investment in science and science education.

DoR is leading an initiative to develop a model to update current, and create new, shared laboratory research facilities, which are an essential resource for faculty from Engineering, H&S, Earth Sciences, and Medicine. These core laboratories give individual investigators and their trainees access to broad scientific expertise and expensive instrumentation unavailable in their own laboratories or through most departmental shared facilities. Stanford's new science buildings will dedicate substantially more space to shared facilities

that must be programmed and equipped optimally for use by faculty and students from several schools. Federal grants for shared instrumentation are not sufficient for most equipment, however, and funding levels are less than 10%.

DoR administrative units also support faculty research and scholarship. The Research Compliance Office has added a Stem Cell Research Oversight (SCRO) panel to review protocols for human embryonic stem cell (hESC) and adult stem cell research consistent with state and federal requirements. Stanford has received awards of approximately \$41 million from the California Institute for Regenerative Medicine for hESC research, more than any other institution in California.

The Environmental Health and Safety (EH&S) office is responsible for risk reduction and compliance related to laboratory biosafety, health physics, hazardous materials, and occupational health. These responsibilities have expanded because of increased faculty research activities and new regulations related to security concerns. EH&S is significantly involved in the university-wide emergency preparedness program, which includes business continuity planning.

### CONSOLIDATED BUDGET OVERVIEW

DoR projects operating surpluses of \$3.5 million in 2007/08 and \$1.5 million in 2008/09, due primarily to new restricted expendable gifts and endowment income for the independent programs. These funds are projected to be spent over the next several years. After transfers to and from endowment, other assets, and plant, DoR projects a consolidated budget deficit of \$13.5 million in 2007/08 and a surplus of \$2.7 million in 2008/09.

Total revenue is projected to increase 7%, or \$12 million, in 2008/09 as compared to 2007/08, mainly due to increased research volume and endowment income payout.

DoR research volume is projected to increase 12%, or \$9 million, in 2008/09, largely due to new, nonfederal awards projected for the Global Climate Energy Project and the Geballe Laboratory for Advanced Materials, including a King Abdullah University of Science and Technology Center award of \$25 million over five years. No growth is projected for federal grants and contracts in 2008/09.

CASBS adds a projected \$3.8 million in revenue, mostly endowment income, and \$3.6 million in consolidated expenses to the budget for 2007/08. Compensation is \$1.5 million, 41% of the CASBS budget. For 2008/09, total revenue and expenses are both projected to be \$4.6 million, of which compensation will be 50%.

Total DoR compensation expenses are projected to increase 9%, or \$7 million, in 2008/09. This is due to growth in the administrative units, such as RCO and EH&S. In addition, several of the newer independent laboratories, institutes, and centers are ramping up. As of 2007/08, the DoR budget includes compensation expenses for the SCRO panel and SEQ II staff. Noncompensation expenses are projected to increase 8%, or \$6.6 million, in 2008/09.

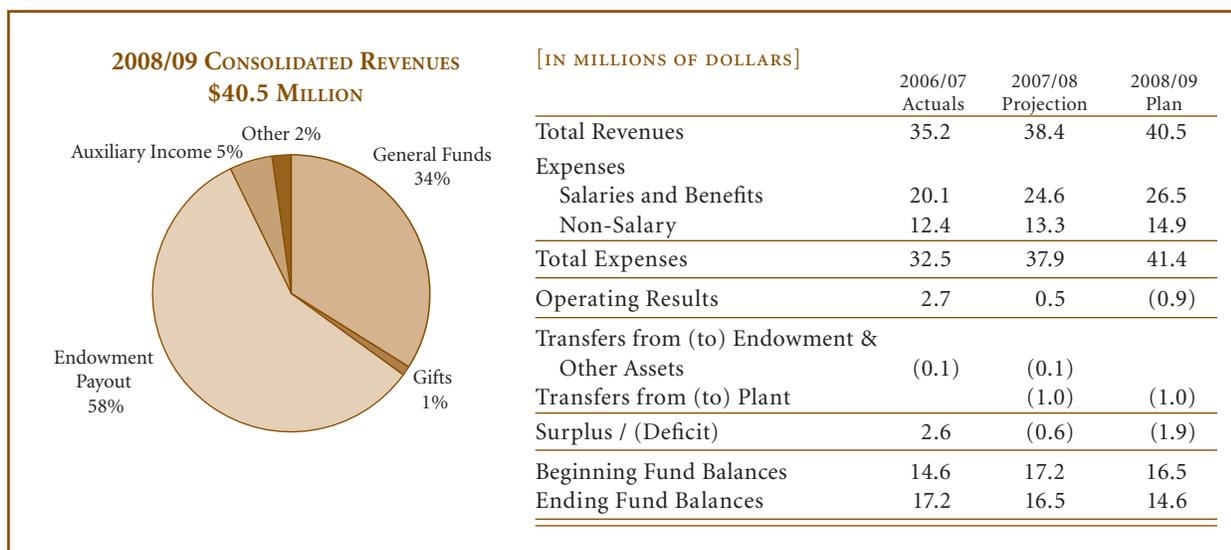
### CAPITAL PLAN

Capital facilities play a key role in DoR's support of Stanford's research goals. In addition to being integrally involved in the development of SEQ II, DoR is working on a new building for the Stanford Institute for Economic Policy Research (due to begin construction in summer 2008), a Stanford in China Center (due to open in 2009), a renovation of Encina Commons for the International Initiative, and a range of laboratory and academic space renovations for new and expanding independent laboratories and research programs.

Sustainability efforts within DoR include working with the units to find ways to use space more efficiently over time. Since a number of independent labs, institutes, centers, and administrative units have recently moved or will soon move into new locations and/or buildings (e.g., SEQ II), DoR will work to optimize space utilization over the next few years.

In addition, sustainability goals have been key design criteria for SEQ II. For example, the Nano Center is designed to reduce peak energy demand by 37%. Like the SoE Center, the Nano Center will rely upon natural ventilation to reduce the size of mechanical ventilation units. Utility systems will be right-sized to reduce energy consumption in the laboratories, and potable water consumption will be reduced by 90% by using lake water for irrigation and blowdown water from the university's Central Energy Facility for toilet fixtures.

## VICE PROVOST FOR UNDERGRADUATE EDUCATION



### INITIATIVES AND PRIORITIES

The Office of the Vice Provost for Undergraduate Education (VPUE) continues to build upon the re-organization and strategic planning in which it has engaged in recent years. Three main initiatives inform the 2008/09 budget plan and will continue to influence future planning: completion of the academic advising infrastructure, program evaluation and assessment, and access and equity in undergraduate education.

#### Completion of the Academic Advising Infrastructure

Effective June 2007, VPUE assumed academic standing functions from the Registrar's Office, including academic review of students at risk for probation/suspension and processing of the hundreds of petitions students submit each quarter (e.g., requests to enroll in more than 20 units or to withdraw from a course after the deadline). With the launch of the Undergraduate Academic Life website this past August ([undergrad.stanford.edu](http://undergrad.stanford.edu)), VPUE created a comprehensive resource to assist students in making thoughtful choices about their academic courses of study – an online advising tool, as it were. For 2008/09, VPUE plans to increase its support of academic advising by adding three new Academic Directors (ADs) and a data analyst.

ADs are academic advisors dedicated to the students of, and located (when space is available) in, a particular dorm complex. Data from surveys and focus groups

suggest that the addition of ADs to the constellation of available academic advice has enhanced the quality of intellectual exchange that undergraduates experience in planning their academics, provided students with consistently accurate and coordinated information, and improved outreach to those undergraduates who struggle most with their academics, particularly those at odds with university policies governing academic standing and progress.

The data analyst will be responsible for maintaining databases that track academic standing cases and petitions, as well as supporting evaluation and assessment of the effectiveness of academic advising and other programs within VPUE.

#### Program Evaluation and Assessment

VPUE is committed to ongoing evaluation of the programs under its purview. This is an appropriate time to strengthen expertise in this area, given that assessment and evaluation of undergraduate education are central to the university's accreditation process, which is currently under way. VPUE plans to coordinate with the Provost's Office to hire a program assessment and evaluation professional to assess the extent to which current educational objectives are being met.

#### Access and Equity in Undergraduate Education

In 2008/09, VPUE will make investments to increase the availability and consistency of existing academic and academic support resources other than advising.

For example, the Center for Teaching and Learning will increase the number of resident tutors in dorms where demand has not been met and will provide funding for tutoring in languages with increasing enrollments, such as Arabic.

Also, with funding support from the provost, VPUE will increase the number of postdoctoral fellows in the Introduction to the Humanities (IHUM) program and enhance the compensation of IHUM fellows and lecturers in the Structured Liberal Education program. These enhancements are intended to improve VPUE's competitive position for humanities postdocs and to increase the disciplinary breadth of those hired. These educators are among the most personal and consistent "faces of Stanford" for freshmen.

Thanks to generous support from the president, VPUE will pilot several new programs for three years starting in 2008/09. Rigorous assessment will inform decisions on continuing them thereafter. These new programs are the Stanford Summer Academy, the Arts Intensive, and a new Bing Overseas Studies campus in South Africa.

The Stanford Summer Academy will help selected freshmen with their transition to Stanford. Targeting those whom Admissions identifies as being from under-resourced high schools, it will provide them with a more solid preparation for Stanford and acclimatize them to what they can expect and what will be expected of them in college.

The Arts Intensive session (starting in September 2010) will be modeled on the very successful Sophomore College and should mesh well with the arts initiative of the Stanford Challenge. Students will work under the close supervision of a leading scholar/practitioner in a two- to three-week course in arts practice.

Funds from the president will allow the new South Africa campus to begin operations while ongoing funds are being raised. This program will be developed with the support and input of the African Studies Program and is expected to attract involvement from a variety of other programs and departments, including Center for Comparative Studies in Race and Ethnicity (CCSRE), International Relations, and Anthropology.

Lastly, the impending Sweet Hall renovation represents a challenging transition for VPUE employees: VPUE's

Sweet Hall population will increase by two-thirds, its space by only one-third.

### **CONSOLIDATED BUDGET OVERVIEW**

VPUE projects a consolidated deficit of \$1.9 million in 2008/09. It is spending \$2 million from reserves to support the renovation of Sweet Hall; \$1 million of that will be allocated in 2008/09. Also, the increasing weakness of the U.S. dollar will increase the cost of operations at Bing Overseas Studies campuses by \$1.1 million (on an expense base of \$10 million). VPUE would have a balanced budget for 2008/09, if not for the weakness of the dollar and the renovations to Sweet Hall mentioned above. Factors that help the bottom line include a \$2.2 million increase in endowment payout as CUE campaign pledges are fulfilled, and \$125,000 of new general funds and \$470,000 of new funds from the president.

Expenditures will grow by \$3.5 million, or 9%. In addition to the cost of currency fluctuations and growth supported by the president and provost (\$1.6 million total), VPUE will fund the investments in advising (\$350,000), assessment and evaluation (\$130,000), and equity and access (\$370,000) mentioned above. The remaining expenditure growth is due to inflation.

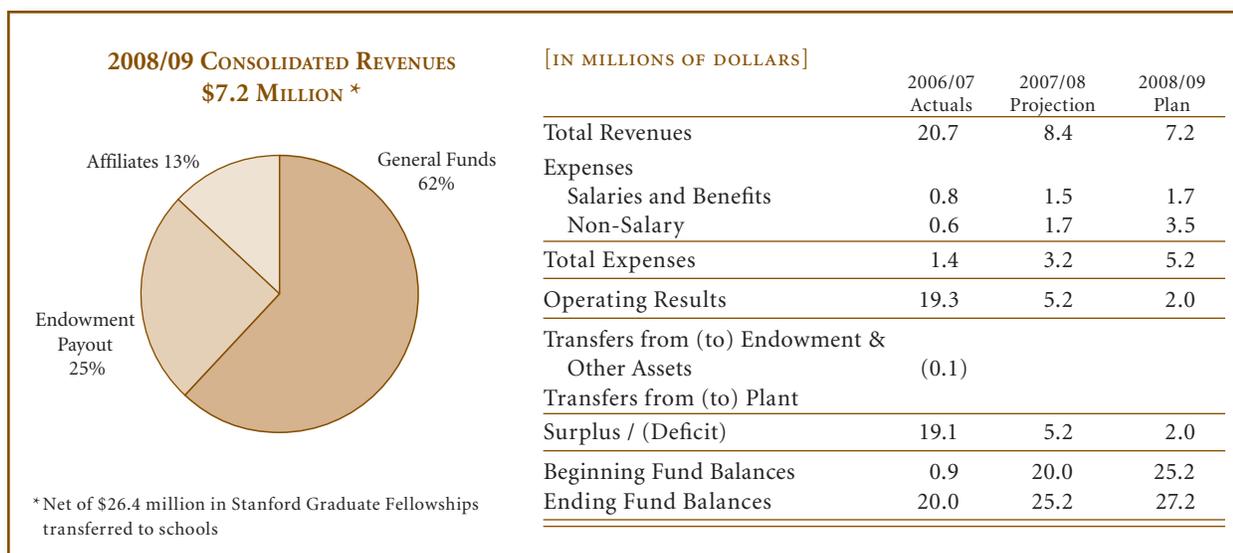
While reserves are healthy and the budget is near equilibrium, VPUE will continue to carefully monitor currency fluctuations and will rigorously assess the academic and financial feasibility of continuing new programs beyond their pilot phase.

### **CAPITAL PLAN**

The university's tightening space situation motivates the Sweet Hall renovation, which will be complete by December 2008. Not only will the renovation provide a more inviting and engaging physical presence for students, occupants, and visitors, but more than 70 VPUE employees currently housed in the Main Quad will move to the building.

This will be an important demonstration project for Stanford, as models drawn from it will be used across the campus to test ideas about building systems efficiency, application of space guidelines, sustainability, and functional use of space. For example, only 12% of spaces in Sweet Hall will be private offices, 88% will be shared offices or cubicles, a much higher percentage than currently seen on campus.

## VICE PROVOST FOR GRADUATE EDUCATION



### INITIATIVES AND PRIORITIES

The Office of the Vice Provost for Graduate Education (VPGE) works across all seven schools at Stanford to enhance the quality of graduate education. Having completed its first year, the VPGE is in a developmental period of expanding initiatives and pilot programs. The emergence of a new budget unit is a time of intense planning. There are many ways to attain VPGE’s goals and, as it moves forward, those programs will be refined.

VPGE provides leadership, expertise, and resources for the following six priorities.

#### Graduate Diversity

VPGE develops programs and events to support university-wide recruiting, enhance the educational experience of current students, and promote academic careers. It supports a variety of recruitment activities to make Stanford graduate programs more attractive to a broadly defined, diverse population. Graduate Recruitment and Diversity Day (GRADD), Stanford Diversity Outreach for Doctoral Education (STANDOUT), and funds to help applicants travel to departments allow students to visit the campus and meet faculty in their areas of interest.

To better prepare graduate students from diverse backgrounds for academic careers, VPGE has developed a

\$4.5 million pilot program to provide two-year fellowships, faculty mentors, and seminars on the academic profession to 36 doctoral candidates over the next four years. This new Diversifying Academia, Recruiting Excellence (DARE) program will also require \$1 million to support four fellows serving in one-year acting assistant professor appointments after they complete the program and their PhDs.

#### Cross-school Learning Opportunities

VPGE is creating activities that promote graduate students’ exploration beyond their disciplines. These programs and activities encourage students to move across school lines, engaging in cross-disciplinary dialogues and networks.

The Stanford Graduate Summer Institute (SGSI), now in its third year, provides courses for graduate students at no cost to them. These weeklong sessions further collaboration within groups of twenty students, who learn about such things as global warming, managing teams, and design.

Also in its third year, the Summer Institute in Entrepreneurship (SIE) provides an intensive monthlong course for 66 graduate students, with tuition supplemented by VPGE. The SIE is offered by the GSB for graduate students in non-business fields. It combines team projects and workshops with guest speakers and visits to Silicon Valley companies.

### **Innovation in Graduate Education**

To maintain the excellence of graduate education at Stanford, core graduate degree-granting programs must be supported to pursue new educational possibilities. VPGE provides resources to faculty and students for innovation and improvement in educational practices. Two pilot programs allocate these funds on a competitive basis.

The Strengthening the Core (SCORE) Innovation Fund offers financial resources to academic departments to respond to challenges facing disciplines and departments. Faculty propose one- or two-year projects to scrutinize long-existing departmental practices and explore new approaches to accomplishing educational goals. In the first year, up to six SCORE grants will be awarded.

Student Projects for Intellectual Community Enhancement (SPICE) allows graduate students to propose one- or two-year projects. Funds support them in creating and implementing innovative activities to expand and sustain the intellectual community of their department or program.

### **Graduate Fellowship Programs**

The Stanford Graduate Fellowship (SGF) Program in Science and Engineering annually awards more than 115 three-year fellowships providing tuition support and stipends to outstanding students pursuing doctoral degrees in the sciences and engineering. To illustrate our future by looking at last year, in 2007/08, these fellowships supported 434 students for a total of \$21.7 million. This focus will continue.

VPGE also administers the Stanford Interdisciplinary Graduate Fellowships (SIGF) Program, a new, competitive, university-wide program awarding three-year fellowships to outstanding doctoral students conducting research that crosses traditional disciplinary boundaries. The fundraising goal to establish this program is \$100 million in endowed funds. The first fellowships will be awarded in spring 2008 and will commence 2008/09.

The three-year Comparative Studies in Race and Ethnicity Graduate Fellowships (CSRE-GFs) are for newly admitted doctoral students interested in the

study of the meanings, processes, and consequences of race, ethnicity, and culture. CSRE-GF finalists are selected from nominations submitted by faculty affiliated with CCSRE.

### **Problem Solving in Graduate Student Funding**

VPGE supports university efforts to address challenges in graduate student funding. Its immediate goal is twofold: to identify funding sources to replace general funds, and to facilitate problem solving to alleviate the tuition gaps felt most acutely by schools, departments, and faculty under federally funded programs. VPGE is also exploring how to best use additional funds from the SGF endowment payout for graduate student support in the sciences and engineering.

### **Interpreting Policy and Data**

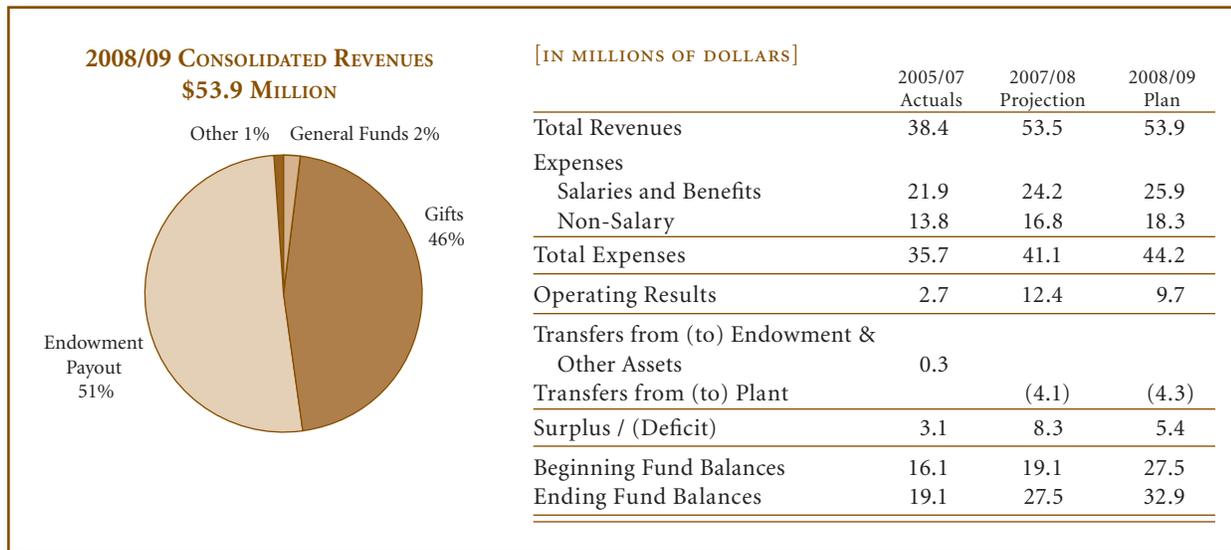
VPGE is responsible for setting university-wide administrative and financial policies for graduate education, such as recommending minimum salaries for research assistants and teaching assistants. It also serves as a resource for interpreting academic policies on topics such as dissertation committee membership and oral examinations.

There is an abundance of longitudinal and comparative data on graduate students and programs, such as admissions data, student demographic and degree progress data, and data collected for the National Research Council Assessment of Research-Doctoral Programs. VPGE serves as a resource to facilitate the use of these data by the university, schools, and departments.

## **CONSOLIDATED BUDGET OVERVIEW**

VPGE is projecting a surplus of \$2.0 million in 2008/09. This surplus is derived largely from endowment income for the SGF program, which is greater than current program needs, due to the change in endowment payout rate. The university does not intend to increase the number of SGF recipients at the present time and is working with donors to use the available funds for other graduate support. Total net revenue, after transfers to graduate fellowship support to the schools, is expected to be \$7.2 million, and total expense is budgeted at \$5.2 million.

## HOOVER INSTITUTION



### INITIATIVES AND PRIORITIES

The Hoover Institution is a public policy research center, library, and archive devoted to advanced study of politics, economics, and political economy, as well as international affairs. With its world-renowned group of scholars, extensive archival collection, and ongoing programs of policy-oriented research, the Hoover Institution puts its accumulated knowledge to work as a prominent contributor to the world marketplace of ideas defining a free society. Hoover fellows focus on how society approaches collective concerns while balancing the demands of freedom and order. The Library and Archives strive to create an accessible historical record of this balance.

In 1919, the Library and Archives began collecting firsthand accounts of historical events and political transformations. Today they continue the mission envisioned by Herbert Hoover of gathering, preserving, and serving as a repository for rare and unique archival materials and collections. As part of the Hoover Institution's participation in the Stanford Challenge, new fundraising efforts will allow the Library and Archives to capitalize on important collecting opportunities. For example, the institution is augmenting the already superb collection of Soviet-era materials by microfilming strategic portions of the Lithuanian KGB archives. Further, it has recently obtained a valuable collection of Iraqi Ba'ath party archives consisting of 11 million original and copied

documents. The institution expects these archives to be the centerpiece of accelerated collecting and research activity on Saddam's Iraq, as the Chiang Kai-Shek diaries were for the modern China collection.

The Library and Archives are more than a repository of history; they strive to provide unique research material for the generation of knowledge and ideas to improve the human condition. For example, the Hoover Soviet Archives Workshop has resulted in more than 40 articles, ten books (three of which have won international awards), and two documentary collections. The institution's Radio Free Europe / Radio Liberty archives have sparked extraordinary interest, leading scholars to research effective means of cross-cultural cross-boundary communication.

As an enterprise steeped in academic tradition, the Hoover Institution is continually evaluating how to effectively provide input to society by gathering pertinent information, analyzing prevailing policy circumstances, and advising on matters of public policy. By using its existing intellectual assets and recruiting extraordinary new talent, the institution has developed an ability to convene scholars willing to contribute their efforts to task forces with specific research and dissemination objectives. These task forces represent a new way to organize the research conducted at the institution with a view toward synthesizing current thinking, offering new perspectives, and conveying results to a broad constituency.

The institution launched the Koret Task Force on K–12 Education in 1999 as a five-year pilot effort. This task force sought to identify and convey information about the state of American education, as well as generate ideas that would enhance educational opportunities for children. Due to its success, it was reauthorized for five additional years.

Nine more task forces are in various stages of development and operation. Four were rolled out in 2007/08: National Security and Law; Virtues of a Free Society; Property Rights, Freedom, and Prosperity; and Energy Policy. In 2008/09, three more will be launched: Ideology and Terror; Tax and Budget Policy; and Health Care Reform. The final two, Procedural Reform of Government and Economic Development, are planned for rollout by 2009/10.

A very important ancillary activity of the task forces is to introduce exceptional scholars from outside Stanford to the rewarding academic life of the campus. This creates a potentially rich pool for recruitment. Three outstanding scholars who were charter members of the K–12 Education task force have now taken up full- or part-year residence at Stanford. The institution will set aside funds for opportunistic recruitment of task force members.

Communications and outreach efforts are being enhanced to leverage the output of the task forces. Plans are in place to develop a new journal, tentatively titled *Defining Ideas*, to disseminate task force research. This journal will expand the line of periodicals published by Hoover, which currently includes the *Hoover Digest*, *Education Next*, *China Leadership Monitor*, and *Policy Review*. Short books arising out of the task forces will complement the book series *Hoover Studies in Politics, Economics and Society*, copublished with Rowman and Littlefield.

The institution's presence in traditional media covers the gamut: op-eds in influential newspapers, articles and essays in leading academic journals, monographs, and full book treatments. The institution is also developing a suite of Web products. The *Daily Report* provides regular updates on the thoughts and writings

of Hoover fellows. *Facts on Policy* highlights facts relevant to current issues of public interest, providing context for opinion, commentary, and policy dialogue. *Focus on Issues* seeks to link current events and contemporary issues with the research and writings of Hoover fellows. *Uncommon Knowledge*, devoted to interviews with leading public intellectuals and figures, has been recast from a television program appearing on PBS to a webcast hosted by National Review Online.

### CONSOLIDATED BUDGET OVERVIEW

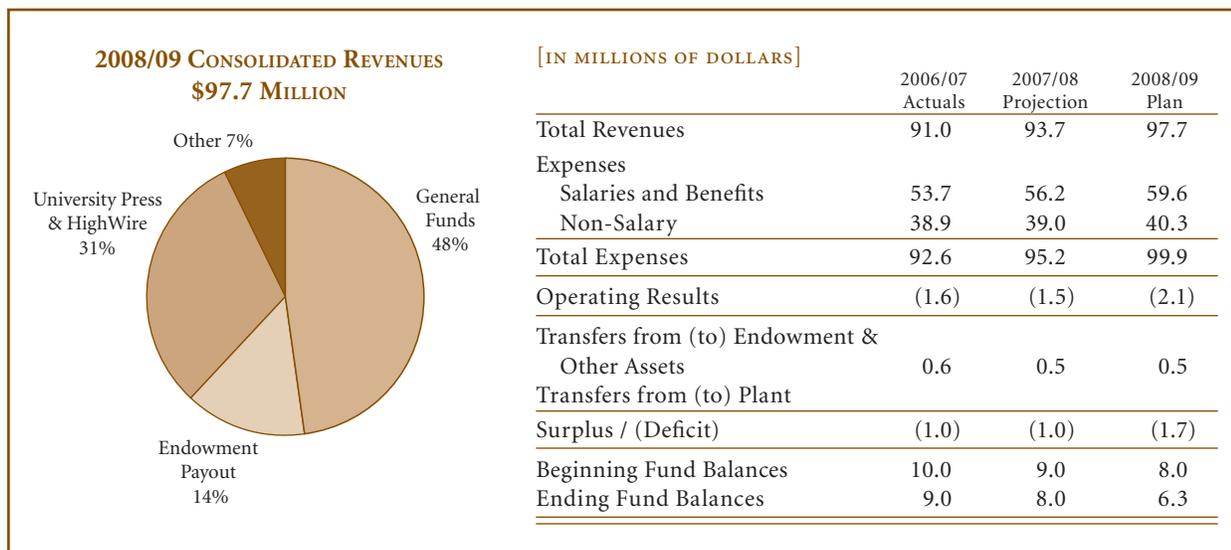
The Hoover Institution is projected to end 2007/08 in a strong position, with solid growth in revenue, continued discipline on the expense side, and an increase in current fund balances of approximately \$8.4 million. Revenues will be approximately \$3 million greater than budget, thanks to successful fundraising. Expenses are expected to fall \$1.3 million short of budget, due largely to the timing of task force expenses. The schedule for task force rollouts has been extended to allow careful planning and preparation for each one.

The institution's budget outlook is also healthy. Revenues are composed primarily of endowment payout and expendable gifts. Payout is projected to grow due to outstanding investment performance and pledged gifts. Expendable gifts in 2008/09 may show a slight decline from 2007/08 due to the timing of pledge payments, not a change in long-term gift growth. The institution's expense budget for 2008/09 calls for growth of 8% over the 2007/08 year-end projection. Much of this growth will be associated with the rollout of task forces. The net result is a projected increase in current funds of greater than \$5 million by the end of 2008/09. Many of these funds represent revenue earmarked for multi-year projects, so the balances will be drawn down over the next few years.

### CAPITAL PLAN

The Hoover Institution will complete modest renovation and remodeling of the first floor of the Lou Henry Hoover building in 2009. The Cummings replacement building, projected to begin construction in 2012, will provide office space and technology-enhanced conference and meeting spaces.

## STANFORD UNIVERSITY LIBRARIES &amp; ACADEMIC INFORMATION RESOURCES



### INITIATIVES AND PRIORITIES

SULAIR's 2008/09 budget reflects the limited availability of incremental general funds for allocation to base budget needs. The library materials budget enjoyed a much-needed increase in the last budget cycle, but for the coming year it will decrease in purchasing power, due primarily to price increases in the publishing industry and exchange rate impacts on European purchases. SULAIR will address this decrease by moderating the scope of collection development programs to match the budget.

Maintaining the rate of development of the digital library is also a concern, particularly in light of decisions to reduce stack space on campus. SULAIR will therefore seek internal allocations that will provide the funding to maintain an appropriate level of development. The budget also includes modest increases to improve services from the remote Stanford Auxiliary Library storage facilities, which will also become more heavily used as stack space on campus is reduced.

#### Strategic Directions

SULAIR needs to continue to develop and operate an advanced digital library, both to address campus space constraints and to support user needs. However, the transition to the pure digital library will take years. SULAIR is acquiring more digital resources than ever, often under better terms than in the past, but many of the books, journals, and other materials

that Stanford scholars require are not yet available in digital form. Also, while some disciplines are fully comfortable with digital libraries, others are less so, and a significant percentage of users continue to prefer, even demand, print materials. Thus, while SULAIR is accelerating acquisition of electronic materials and developing the required supporting services, it must continue to collect traditionally published materials. This "both/and" approach is the only way to ensure that users have full access to the resources they need for teaching, learning, and research.

A subcommittee of the Academic Senate Committee on the Libraries is currently assessing faculty requirements for the digital library, particularly in light of space constraints for print materials. The libraries will be attentive to the findings, recommendations, and especially conclusions of this report, which are likely to be the source of some debate. In the meantime, SULAIR is educating the Stanford community about the possibilities of the digital environment. There is a dynamic balance here, and the university is engaging in the discussion with its usual gusto.

#### Programmatic Plans

Last year brought new leadership for the science and engineering libraries, and this year brings additional new staff to the Engineering Library, following some unexpected departures. SULAIR is beginning to analyze the possibilities for a "bookless" library for Math, Physics, Chemistry, and Biology, which would

consolidate collections, services, and staff, and is discussing redevelopment of the Earth Sciences library. As it redevelops its facilities, it is also refining and redefining librarians' roles, developing new tools for serving faculty and students, and even developing user tools in coordination with interested faculty.

SULAIR continues to build out the Stanford Digital Repository, which will support the institution's needs for a digital archive, facilitate the development of the digital library, and allow development of a number of much-needed services. Academic Computing continues to develop the CourseWork course management system, which is based on the open-source Sakai software, and SULAIR is also seeking to implement a Sakai-based prototype research collaboration environment. Dozens of faculty have expressed interest in this possible new service.

### Interdisciplinary Activities

A university-based research library is interdisciplinary at its core, and SULAIR is particularly so, in part because it has over time incorporated Academic Computing, HighWire Press, and Stanford University Press. SULAIR supports wide subject, language, and regional coverage in collecting and reference programs, as well as a productive mix of functional specialties that collaborate on opportunities and challenges, driven by faculty interests and needs.

### Impact of the Stanford Challenge

New research programs arising from the Stanford Challenge will inevitably mean new requirements for information services from SULAIR, which has an important, if sometimes overlooked, role in the planning for these new programs. It is critical that fundraising plans incorporate a holistic view of these resource needs. Fundraising for several curatorial endowments under the Stanford Challenge is under way.

## CONSOLIDATED BUDGET OVERVIEW

SULAIR projects an operating results deficit of \$2.1 million across all funds in 2008/09 and will cover

that deficit with existing fund balances. SULAIR's operating budget will be balanced at \$60.3 million; its auxiliaries, HighWire Press and Stanford University Press, project a combined operating results deficit of \$1.6 million, and expenses in restricted funds are expected to exceed revenue by \$500,000.

SULAIR's operating budget of \$60.3 million includes \$45.9 million in general funds and \$14.4 million in restricted funds. Endowment income is projected to be \$13.7 million, an increase of 6.2% over 2007/08. Designated revenue is expected to be \$2.3 million, and gifts are expected to remain stable at \$300,000. SULAIR's auxiliaries anticipate combined revenue of \$31.1 million, a 4% increase over 2007/08.

SULAIR's operating budget includes \$35.9 million for compensation expenses, \$16.4 million for library materials, and \$7.2 million in other operating expenses. The auxiliaries anticipate combined expenses of \$32.7 million (detailed in Auxiliary section of this book). Restricted funds expenses include \$4.9 million for library materials and \$1.2 million in other expenses.

SULAIR expects to draw down its fund balances in 2008/09 from \$8.0 million to \$6.3 million. Restricted funds balances are expected to decrease by \$500,000; HighWire's reserves will decrease by \$1.2 million, from \$4.8 million to \$3.6 million; and Stanford University Press will balance its operations with an annual withdrawal of \$500,000 from the Press Sustaining Fund.

## CAPITAL PLAN

Design for the new Engineering Library, a component of the SEQ II School of Engineering Center, has been completed and approved. The capital plan for the libraries includes potential demolition of Meyer Library, with timing and replacement plans to be determined. The Stanford Auxiliary Library (SAL3) in Livermore will be expanded, with construction of additional storage space scheduled to begin in 2011. In addition, approximately 350 staff of SULAIR from various divisions may move to Redwood City when the North Campus redevelopment is complete.

## STANFORD LINEAR ACCELERATOR CENTER (SLAC)

### INITIATIVES AND PRIORITIES

As a National User Facility of the Department of Energy (DOE), SLAC continues to provide world-class state-of-the-art electron accelerators and related experimental facilities to about 3,000 scientists from all over the world under two main research programs: Photon Science, and Particle Physics and Astrophysics.

The Linac Coherent Light Source (LCLS), to be completed in 2010, will add a unique user facility by providing the world's first x-ray free electron laser, delivering x-ray beams of unprecedented brightness in femtosecond pulses with full transverse coherence. These extraordinary beams will explore previously inaccessible realms of structural dynamics in the chemical, biological, and materials sciences, and will find new applications in nanoscale phenomenology and atomic and plasma physics. A suite of four instruments specifically designed for LCLS ultrafast science research will be built. The initial LCLS scientific experiments are expected to begin in 2009.

The ultra-high intensity x-ray synchrotron radiation at SPEAR3 of the Stanford Synchrotron Radiation Laboratory (SSRL) serves many areas of science, including materials sciences, structural biology, and chemistry. Completion of new beam lines will provide access to more users at the state-of-the-art facility. In 2009, a new beam line for nanoscale research and another for macromolecular crystallography will begin operation. Routine high-current operation at 500 mA in 2009 will provide new capabilities for users.

The Photon Science program will see growth in the interdisciplinary research areas driven by the capabilities of SPEAR3 and LCLS. In addition to the Photon Ultrafast Laser Science and Engineering (PULSE) Center and the Stanford Institute for Materials and Energy Science (SIMES), structural biology is a growing interdisciplinary area at SLAC.

Due to the 2007/08 budget shortfall, in early April SLAC concluded the operation of the on-site experimental particle physics facility, the PEP-II/BaBar B Factory, which examines a cosmological mystery: the crucial matter-antimatter asymmetry that led to the existence of the visible universe. The intense data analysis program being carried out by a collaboration

of 600 physicists from eleven countries will continue for several years.

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 LHC will be the flagship high-energy frontier facility for the next decade, with opportunities for major discoveries that could fundamentally change our understanding of nature. SLAC will play a significant role in commissioning the ATLAS detector and harvesting the physics results once LHC turns on. SLAC will also serve as a Tier 2 ATLAS Physics Analysis Center in the western United States.

The future accelerator-based particle physics initiative is the International Linear Collider (ILC) at very high energy. In 2008/09, SLAC's involvement with the coordinated international ILC R&D program will resume, after being put on hold because of the large budget cut in 2007/08. A detailed design study will proceed, as part of the Global Design Effort, on the critical elements necessary to build a linear collider at minimum cost.

Kavli Institute for Particle Astrophysics and Cosmology (KIPAC) is involved with the Large Area Telescope for the GLAST mission and the R&D for a proposed Dark Energy experiment, the ground-based Large Synoptic Survey Telescope (LSST). GLAST is a space-based gamma-ray telescope, built at SLAC by an international collaboration led by the Stanford team (SLAC, Physics Department, and HEPL), to be launched in 2008. The GLAST research program will explore how cosmic accelerators work, including active galactic nuclei and gamma ray bursters, and will search for dark matter in our galaxy. SLAC is the Instrument Science Operations Center for the GLAST mission.

SLAC sees significant opportunities to leverage the considerable federal investment through third-party gifts or donations. Such resources will enable the funding of endowed faculty chairs to attract prominent scientists, and fellowships to attract the most talented graduate students and postdocs. New buildings, optimally configured to support the expanding Photon Science agenda and in part replacing old and inadequate space, would significantly help to accommodate the expanding science programs in ultrafast science (PULSE Center) and in advanced materials research and energy

science (SIMES). The Stanford Challenge provides a valuable framework for enabling fundraising for these initiatives, most of which are directly coupled to main campus activities through joint faculty appointments and faculty research programs.

### **CONSOLIDATED BUDGET OVERVIEW**

The DOE Office of Science provides 98% of the funding for SLAC, primarily from the Offices of Basic Energy Sciences (DOE-BES) and High Energy Physics (DOE-HEP). Unexpectedly low funding for the Office of Science under the 2007/08 Omnibus Appropriations Bill led to major budget reductions for almost all SLAC programs in 2007/08 and contributed to the laying off of almost 200 staff. Some of the layoffs were under a voluntary program to help adjust the skills of the SLAC workforce as needed to prepare for the transition to LCLS operations.

The U.S. government's 2008/09 budget provides a reasonable proposal for the SLAC programs. However, there remains a great deal of uncertainty prior to passage of the Energy and Water Development Appropriations Bill. Based on the budgetary assumptions in the President's Budget, SLAC costs on federal grants and contracts in 2008/09 is expected to be \$326 million, about \$40 million lower than the projected costs in 2007/08. This is primarily due to the expenditure profile of the LCLS construction project as it progresses towards completion in 2010. The overall cost expenses for SLAC (including funds outside of federal grants) is expected to be \$330 million.

Since the inception of SLAC, DOE-HEP has been responsible for funding the operation of the SLAC linear

accelerator (Linac), which has been used primarily for high-energy physics experiments. In preparation for the operation of the LCLS in 2009, the DOE has been transitioning Linac funding support from DOE-HEP to DOE-BES. In 2008/09, DOE-BES is expected to provide \$215 million (67% of the DOE funding) and DOE-HEP \$96 million (29%). These programs represent 96% of the SLAC federal grants and contracts.

### **CAPITAL PLAN**

#### **Linac Coherent Light Source**

The DOE-funded LCLS project is well under way and will be completed in 2010. The total estimate for its construction is \$352 million, with funding of \$51 million in 2007/08 and \$37 million in 2008/09. The project includes experimental halls, beam line tunnels and facilities, service buildings, utilities, and technical components.

#### **Safety and Operational Reliability Improvements**

SLAC will be continuing with the \$15.6 million infrastructure upgrade project, funded by DOE, to replace a portion of the aging underground mechanical utilities and to improve the seismic safety of several important facilities. The construction work is phased to coordinate with the accelerator operations schedule and will be completed in 2009.

#### **PULSE Building Renovation of Central Lab**

SLAC has initiated an \$11 million renovation, funded by DOE, of the two-story wing of the Central Laboratory Building to house offices and laser laboratories for the PULSE Center. The renovation will be completed in 2009.

