

STANFORD UNIVERSITY

Economic Impact Study 2008





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LETTER FROM PRESIDENT JOHN HENNESSY

This economic impact study tells a story that is largely unknown.

Much has been written about Stanford's education and research programs. Events at Stanford, medical breakthroughs, new discoveries, performances in the arts and even the efforts of Stanford's student athletic teams are regularly reported in the press.

The story here, however, is a different one. In the operation of its education and research programs – the vital purpose for which the University exists – Stanford is a large economic entity involving millions of transactions and the flow of funds in and out.

This study shows the enormous economic benefits for local communities from this economic activity. Of the \$4.5 billion in revenue Stanford received from around the world in 2006, Stanford spent more than \$2.1 billion in direct expenditures in Santa Clara and San Mateo counties. The two hospitals at Stanford made \$609 million of those expenditures.

An independent analytical firm prepared this study. A discussion of its methodology and sources is included in the study. Information about community resources and partnerships and some comments on issues of innovation have been added to provide a broader context.

We hope you will find this study informative, and we invite comments from readers.



John L. Hennessy
President, Stanford University

I. EXECUTIVE SUMMARY

Each year, Stanford brings in revenue from a variety of local, national and international sources and expends those funds largely in its local region. In 2006, Stanford received \$4.5 billion in revenue from around the world and spent more than \$2.1 billion in direct expenditures in Santa Clara and San Mateo counties.

This report presents factual information about the flow of resources in and out of Stanford, focusing primarily on the impact Stanford's economic activities have on the cities of Palo Alto and Menlo Park and on the counties of Santa Clara and San Mateo.¹

This report covers four separate entities: the University, which is organized into seven schools, with 1,807 faculty, 6,705 undergraduates and 7,697 graduate students; Stanford Hospital and Clinics (SHC); Lucile Packard Children's Hospital (LPCH); and the Stanford Linear Accelerator Center (SLAC). Throughout this

¹ This study is based on financial data from Stanford's 2006 fiscal year (September 2005 through August 2006). Salary data are from the 2006 calendar year. Audited financial data is typically not available until November following the close of the fiscal year.

study, references to "Stanford" and aggregated totals refer to the combined activities of these four entities unless noted. Two large commercial enterprises are located on Stanford lands: the Stanford Research Park and Stanford Shopping Center, and their revenue and expenditure activities are also discussed.

Summary of Stanford Impact DIRECT EXPENDITURES

Stanford received \$4.5 billion in revenue in 2006 to support teaching and research and provide medical services. Figure 1 illustrates the flow of money in and out of Stanford in 2006. The source of funds is shown by functional categories, including grants and contracts (mostly

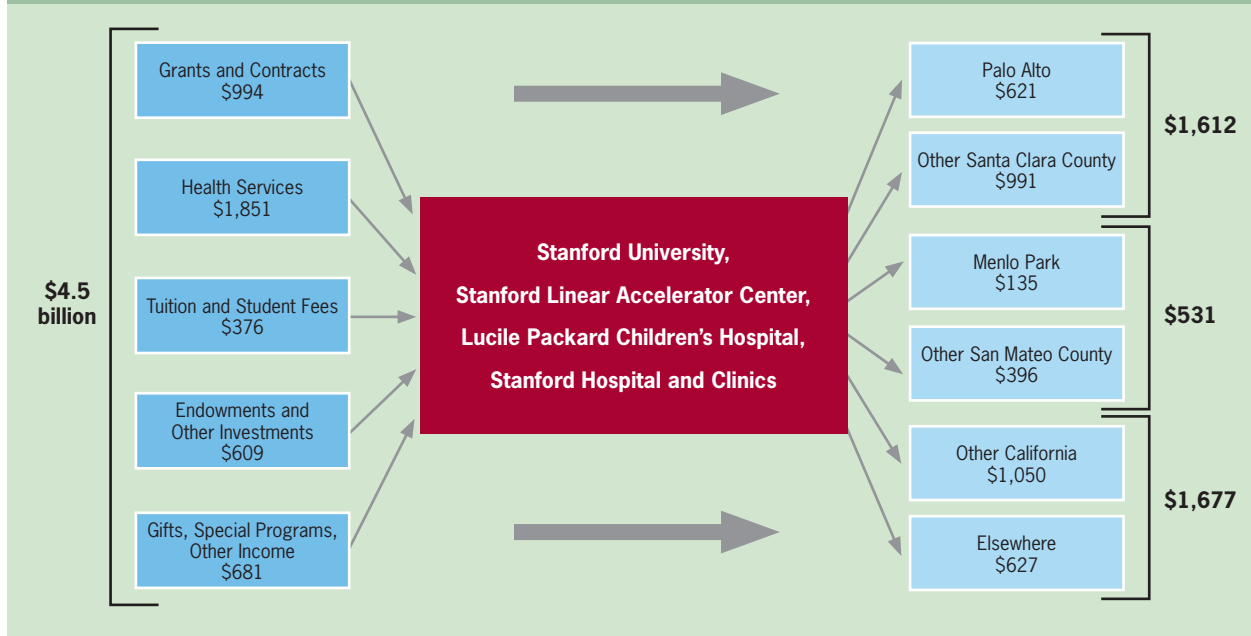
research), health services, tuition and fees, endowment earnings and other investments, and gifts and other income.² The outflow of Stanford's gross direct expenditures for salaries and wages, goods and services, and capital and construction is categorized by geographic location. These expenditures represent the majority of those made by Stanford but they do not include depreciation or staff benefits. Expenditures for benefits cannot easily be associated with specific geographic locations.

ECONOMIC IMPACT

The economic impact of Stanford's operations on the local

² Gifts and other income include current-year gifts in support of operations, payments received on prior-year pledges, prior-year gifts released from donor restrictions, special program fees and other income.

FIGURE 1
THE FLOW OF FUNDS INTO STANFORD AND DIRECT EXPENDITURES IN THE LOCAL COMMUNITY (IN MILLIONS)



One of Stanford's greatest contributions is its role as a stable employer. In 2006, Stanford was the largest single employer in Silicon Valley.

communities is not fully explained by Stanford's direct expenditures. One reason for this is that a portion of the salaries and wages paid to Stanford employees goes to pay federal and state taxes. In addition, Stanford's direct expenditures do not include the spending by Stanford students and visitors or other major entities on Stanford lands, such as businesses in the Stanford Research Park, the Stanford Shopping Center and the Sheraton and Stanford Park hotels.

Figure 2 provides a more complete picture of the impact of Stanford's operations on the local communities. It shows that

\$1.6 billion of the expenditures made by the University, SLAC and the hospitals stayed within these local communities through the spending of Stanford employees and Stanford's direct purchases. Spending by students and visitors added another \$222 million to the local economy. Property taxes paid by Stanford and its tenants added more than \$36 million to the revenues of Santa Clara and San Mateo counties as follows:

- Santa Clara County: \$2.1 million from Stanford; \$5.7 million from residents; and \$25.4 million from tenants for a total of \$33.2 million.

- San Mateo County: \$700,000 from Stanford; and \$2.7 million from tenants for a total of \$3.4 million.

Sales tax generated by Stanford Research Park and the Shopping Center contributed an estimated \$64 million to the two counties. Note that Figure 2 does not attempt to capture all of the impact of the Shopping Center or Research Park, only to highlight these significant contributions. In addition, the hotels located on Stanford lands generated nearly \$2 million in Transient Occupancy Tax paid to the City of Palo Alto

from the Sheraton Hotel and \$1 million paid to the City of Menlo Park from the Stanford Park Hotel.

EMPLOYMENT

One of Stanford's greatest contributions to the local economy is its role as a stable employer. With an average annual growth rate of 1 percent since 1984, Stanford has remained a stable source of jobs. Stanford had become the largest employer in the local area with more than 20,000 employees in 2006.

In Palo Alto, 2,400 residents

Spending by employees, visitors, students and other entities on Stanford lands contributes \$1.2 billion to the local economy.

**FIGURE 2
SUMMARY OF STANFORD'S ECONOMIC IMPACT ON LOCAL COMMUNITIES (IN MILLIONS)**

	Palo Alto	All Santa Clara Co.	Menlo Park	All San Mateo Co.	Two-County Total
Local Spending by Stanford Employees	\$184	\$589	\$79	\$270	\$859
Direct Purchases of Goods and Services	\$258	\$389	\$14	\$58	\$447
Construction and Capital	\$129	\$259	\$1	\$40	\$299
Subtotal Stanford Local Spending	\$571	\$1,237	\$94	\$368	\$1,605
Visitor and Student Spending	\$87	\$160	\$39	\$62	\$222
Property Tax from Stanford Lands	\$2	\$33	\$0.03	\$3	\$36
Sales Tax Generated	\$7	\$61	n/a	\$3	\$64
Utility Users Tax and Purchases by Stanford Research Park & Stanford Shopping Center	\$48	\$48	–	–	\$48
Transient Occupancy Tax Paid by Hotels	\$2	\$2	\$1	\$1	\$3
Total*	\$717	\$1,541	\$134	\$437	\$1,978

*City data is included in county totals.

The economic impact of the hospitals was \$444 million in San Mateo and Santa Clara counties.

In 2006, Stanford's Haas Center for Public Service engaged 3,836 students in projects with more than 265 agencies.

worked as regular, non-temporary Stanford employees, earning \$234 million, of which \$184 million was spent locally.

In Santa Clara County, 10,482 residents worked as Stanford employees, earning \$965 million, of which \$589 million was spent locally.

In Menlo Park, 1,281 residents worked as Stanford employees, earning \$119 million, of which \$79 million was spent locally.

In San Mateo County, 5,149 residents worked as Stanford employees, earning \$433 million, of which \$270 million was spent locally.

MEDICAL CENTER CONTRIBUTION
Stanford Hospital and Clinics and Lucile Packard Children's Hospital are an important component of Stanford's contribution to the area and are included in the Stanford totals. Section V addresses the significant contributions made by each hospital. Health services revenue grew from \$529 million in 1995 to \$1.85 billion in 2006.

STANFORD RESEARCH PARK AND STANFORD SHOPPING CENTER CONTRIBUTION
The Research Park and the Shopping Center, which are separate business enterprises on Stanford lands, also contribute to

the economic well-being of the area. The Research Park purchased more than \$40 million in utilities from the City of Palo Alto and generated over \$1.5 million in sales tax revenue for Palo Alto. The Shopping Center purchased over \$5 million in utilities and generated over \$5.2 million in sales tax revenue for Palo Alto in 2005-06.

COMMUNITY PARTNERSHIPS AND LEADERSHIP

Stanford's economic impact on the community extends far beyond the dollars and cents of revenue and expenditures. As outlined in Sections II, VII and VIII, Stanford's contribution to land-use stewardship, sustainability, community partnerships and the global economy are extensive, and Stanford is recognized as a world leader in these areas.

Methodology

The findings in this report are based, whenever possible, on published data from various Stanford offices and local governments, particularly the City of Palo Alto and Santa Clara County. Whenever assumptions were necessary, these assumptions are stated in the text or footnoted. See Section IX for more details on methodology.

II. STANFORD: A SELF-SUSTAINING COMMUNITY

The original Founding Grant, which guides Stanford's academic mission and its land-use policies, specifies that the original Palo Alto Farm be held in perpetuity to ensure its use for the academic purposes of the University.

Stanford's leadership must continually balance the need to develop its lands for academic, research and economic purposes with the obligation of stewardship and preservation for the future. While this study is primarily focused on Stanford's direct economic impact, it should be noted that Stanford's efforts to create a self-sustaining community have enabled it to pursue necessary academic growth while at the same time enhancing the economic vitality and environmental quality of the local area. Over many years, Stanford has initiated policies and programs specifically aimed at making a positive contribution to environmental protection and the health of neighboring communities.

Land-Use and Open Space

As shown in Figure 3 (and the inside back cover) and Figure 4, Stanford owns 8,180 acres of contiguous land in unincorporated Santa Clara (4,017) and San Mateo (2,701) counties, the cities of Palo Alto (1,161) and Menlo Park (111)

and the towns of Woodside (114) and Portola Valley (76). All of the academic facilities and student housing exist on 12 percent, or 991 acres, of Stanford lands. Sixty percent of Stanford lands remain undeveloped, including the 1,200-acre Jasper Ridge Biological Preserve.³

Stanford is the largest private owner of undeveloped land in Santa Clara County. Stanford has a professional management and planning office that coordinates planning, development and stewardship programs with the nearby cities and counties. Virtually all of the academic and athletic facilities and all faculty, staff and student on-campus housing are in unincorporated Santa Clara County and are subject to a General Use Permit granted by the county. Commercial areas on Stanford lands have been annexed to the cities of Palo Alto and Menlo Park, thereby providing them with tax revenues.

³ *Some of Stanford's agricultural lands contain small non-permanent structures.*

Stanford provides, at its own expense, a full range of essential services that are normally provided by municipal governments. Stanford provides, or contracts for, its own fire, police and other services at no cost to its neighbors. Stanford has built and maintains more than 46 miles of roads freely used by the public. Stanford has a 49-megawatt co-generation power plant, two separate water systems, three dams and lakes, 100 miles of water mains, a utility system, a post office, a medical center, a free shuttle system, museums, art galleries, a church, libraries, child care facilities, housing for students, faculty and staff, classrooms, laboratories, a stadium, athletic facilities and playing fields.

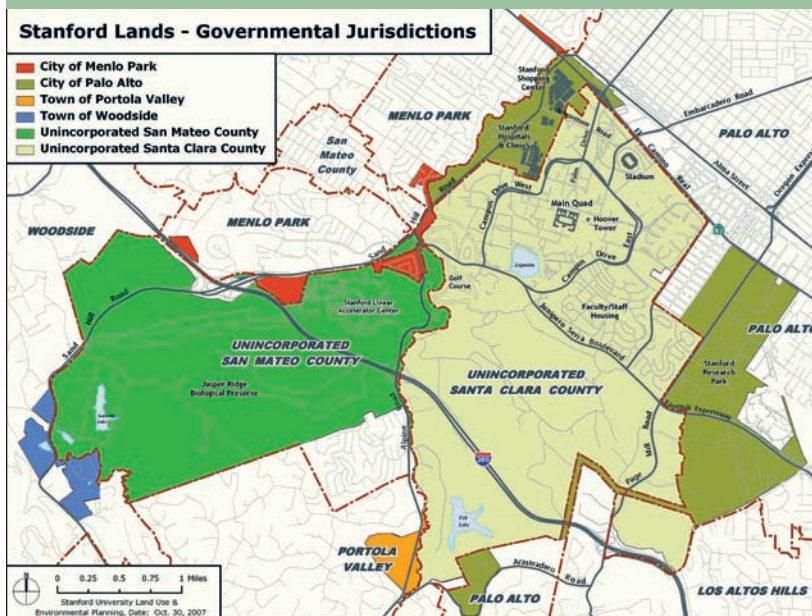
Conservation

Stanford devotes significant resources to the stewardship and environmental preservation of its lands. Stanford's lands are habitat for three federally protected species: the California red-legged frog, the steelhead trout and the California tiger salamander.

**FIGURE 3
AERIAL VIEW OF STANFORD BOUNDARIES (JUNE 2005)**



**FIGURE 4
GOVERNMENTAL JURISDICTIONS OF STANFORD LANDS**



Sixty percent of Stanford lands remain undeveloped.

Under a draft 50-year Habitat Conservation Plan submitted to the U.S. Fish and Wildlife Service and the National Oceanic and Atmospheric Administration (NOAA) Fisheries Service, about 350 acres of creek habitat are proposed to be protected by a conservation easement, and an additional 300 acres will become a reserve area for the tiger salamander. The University also has an active reforestation and habitat renewal program that has resulted in the planting of more than 2,000 native oak trees, the replacement of invasive and non-native species with tens of thousands of native California plants and the doubling of wildflower seedlings throughout the campus, arboretum and foothills.

Water Conservation

Through a continuing and comprehensive water conservation plan, the University successfully reduced its daily consumption of domestic water from 2.75 million gallons in 2000 to 2.2 million gallons in 2006.

Waste Management

Stanford's Source Reduction and Recycling Program recycles cans, bottles, plastics, paper, cardboard, construction and demolition debris, organic materials such as yard and food waste, and electronic scrap. Since the 1995 economic impact study, Stanford's waste diverted from landfill (as a percentage of total waste) increased from 30 percent to 61 percent. In 2006, the University recycled

190 tons of electronic waste, saved an estimated 74 billion BTUs of energy, reduced waterborne waste by 20 tons and eliminated the need for 547 tons of iron ore, coal and limestone.

Transportation

Stanford has one of the most comprehensive transportation demand management (TDM) programs in the country. Stanford’s Parking & Transportation Services promotes alternative transportation programs such as free passes for employees on regional transit systems (VTA and Caltrain), cash incentives for employees and students who travel by means other than driving alone and extensive bicycle facilities. Stanford also has a policy that prohibits freshmen from having cars on campus.

Stanford maintains a free shuttle-bus system (the Marguerite) with an annual budget of \$4.5 million, which carries more than 1.3 million riders annually. The

Marguerite serves the campus, downtown Palo Alto, the Stanford Medical Center, SLAC and the Shopping Center, with frequent stops to meet commuters at local bus and train stations.

Since 2000, Stanford has successfully achieved a goal of “no net new commute trips” for automobiles, as measured annually by independent traffic counts and analysis by Santa Clara County. Figure 5 highlights improvements in employee transportation modes.

Housing

Stanford has a long-standing commitment to residential education. In 2006, Stanford housed approximately 95 percent of its undergraduates and 60 percent of its graduate students on campus. An additional 600-unit graduate residence complex is currently under construction. Approximately 800 faculty and staff families live on campus lands. Stanford’s 2000 General Use

Permit from Santa Clara County anticipates the contribution of up to 3,018 housing units and student beds.

Schools

Stanford’s commitment to education extends beyond its own undergraduate and graduate programs. Lands acquired from Stanford are now used by five local public schools: four in the Palo Alto Unified School District (PAUSD) and one in the Menlo Park School District. In 2001, Stanford contributed \$10 million to PAUSD, which was used for the renovation and reopening of Terman Middle School in Palo Alto. Stanford’s commercial and other taxable lands are also a major source of property tax revenue for the local school district.

Stanford Dining

Stanford Dining is a University-operated, not-for-profit organization serving more than 18,000 meals a day at more than 20 locations. Stanford Dining buys as much food as possible from farmers within a 250-mile radius, thus reducing transportation emissions and supporting the local economy. As a result of Stanford Dining’s partnership with the Agriculture and Land Based Training Association (ALBA Organics), more than 25 local farming families are planting organic produce to meet the University’s needs. Almost 50 percent of Stanford Dining’s produce is sustainably produced and 22 percent is organic.

**FIGURE 5
CHANGING UNIVERSITY EMPLOYEE TRANSPORTATION MODES**

Primary Mode	2002	2003	2004	2005	2006
Bicycle	7.0%	9.3%	9.6%	9.9%	10.3%
Caltrain	4.0%	9.9%	11.7%	14.3%	15.8%
Drive Alone	72.0%	65.8%	63.6%	57.8%	54.4%
Marguerite/Bus	4.0%	2.8%	2.9%	4.2%	4.8%
Carpool and Vanpool	11.0%	9.8%	10.4%	10.2%	10.4%
Walk and Other	2.0%	2.3%	1.9%	3.5%	4.2%

III. SOURCES OF STANFORD REVENUE

A variety of local, national and international sources, including many agencies of the U.S. government, contribute to Stanford's total revenue each year.

In 2006, a total of \$4.5 billion flowed into Stanford to support annual operations. This total does not include gifts made to endowment or physical plant that are not available to be spent in the current year. Total gifts are discussed later in the study.

Of the \$4.5 billion in revenue drawn to Stanford, \$3.8 billion can be identified by location. Of that \$3.8 billion, 18 percent came from sources within Santa Clara County (\$796 million) and 11 percent from San Mateo County (\$498 million). Within those county totals, just less than 5 percent (\$208 million) came from sources within the City of Palo Alto and 3 percent (\$132 million) from Menlo Park.

Figure 6 shows the 2006 revenue coming to the University, SLAC, LPCH and SHC. Stanford's annual operating income has grown by an average of 8.4 percent per year since 1995. It must be noted, however, that LPCH was a separate entity in 1995, and its inclusion now accounts for nearly 10 percent of the total growth. Viewed

**FIGURE 6
STANFORD OPERATING INCOME BY DIVISION (IN MILLIONS)**

	2006	% of Total	Avg. Annual Growth Since 1995
University	\$2,577	57	7.8%
SHC	\$1,222	27	7.5%
LPCH	\$414	9	n/a
SLAC (direct costs)	\$298	7	4.9%
Total	\$4,511	100	8.4%

**FIGURE 7
STANFORD OPERATING INCOME BY SOURCE (IN MILLIONS)**

	2006	% of Total	Avg. Annual Growth Since 1995
Gifts	\$168	4	5%
Health Care	\$1,851	41	12%
Investment Income	\$609	14	9%
Special Programs and Other*	\$513	11	9%
Sponsored Research including SLAC	\$994	22	6%
Net Student Income**	\$376	8	4%
Total	\$4,511	100	8%

*The income category "Special Programs and Other" includes auxiliary enterprises such as the Stanford University Press, HighWire Press and Stanford Athletics.

**See page 13.

separately, the University's income grew at an average rate of 7.8 percent, SHC's income grew at 7.5 percent, and SLAC's income grew at just under 5 percent.

Figure 7 illustrates Stanford's major categories of income. With the addition of LPCH, health care receipts are now the largest source, with more than \$1.8 billion in revenue, or 41 percent of the total. This includes payments not only to the hospitals, but also to the University for physician services and support.

Sources of Stanford Income

HEALTH CARE

An in-depth discussion of LPCH and SHC income, expenditures and net revenue is included in Section V of this study.

SPONSORED RESEARCH

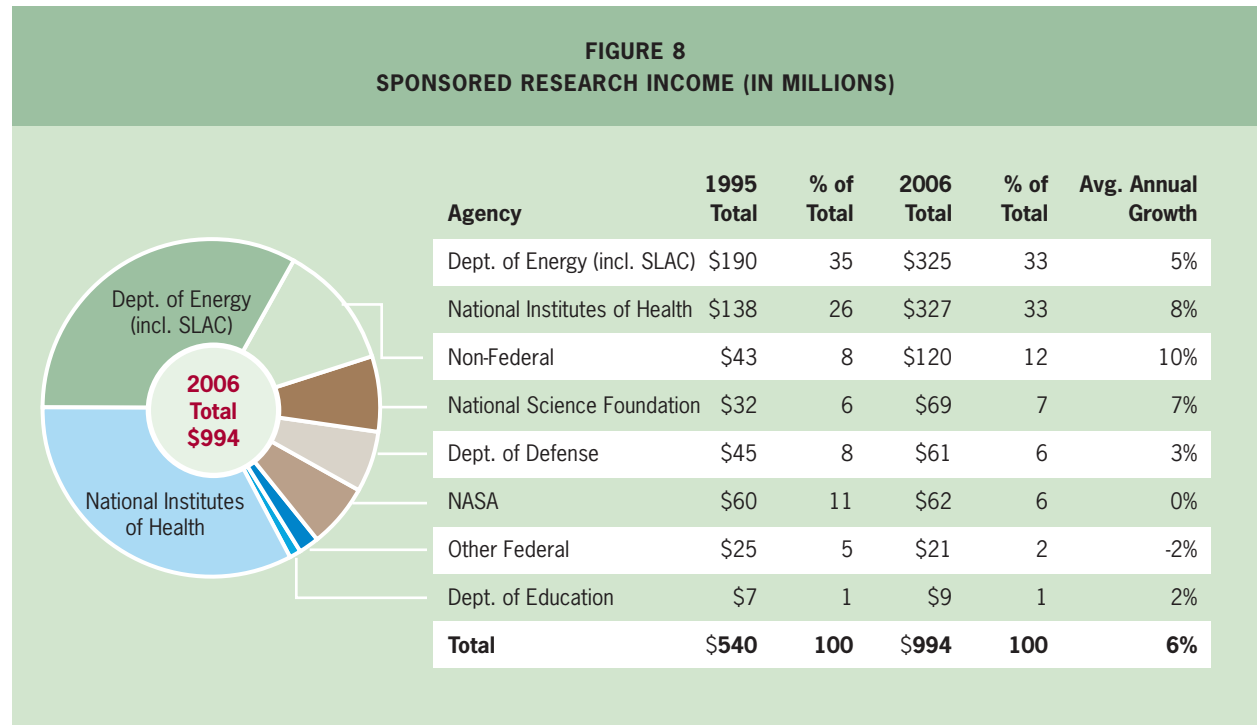
In 2006, sponsored research and instruction, including that at SLAC, was the second-largest source of revenue to Stanford, accounting for nearly \$1 billion, or 22 percent, of the total.

Figure 8 shows that 88 percent of Stanford's sponsored research

came from federal agencies such as the Department of Energy, the National Institutes of Health and the National Science Foundation. Although the competition for research funding is intense, sponsored grants and contracts income has grown at an average annual rate of 6 percent since 1995. All of these funds come from outside the local area.

The National Institutes of Health and the Department of Energy are the largest supporters of research at Stanford, each contributing

FIGURE 8
SPONSORED RESEARCH INCOME (IN MILLIONS)



33 percent of the total funds. While SHC and LPCH are integral partners in health sciences research at Stanford, all sponsored research funding flows through the University.

Non-federal grant sources account for 10 percent of Stanford's entire sponsored-research program. The total from non-federal sources has grown from \$43 million in 1995 to \$120 million in 2006, for an average annual rate of 10 percent.

ENDOWMENT AND OTHER INVESTMENT INCOME

For American private research universities, an important source of

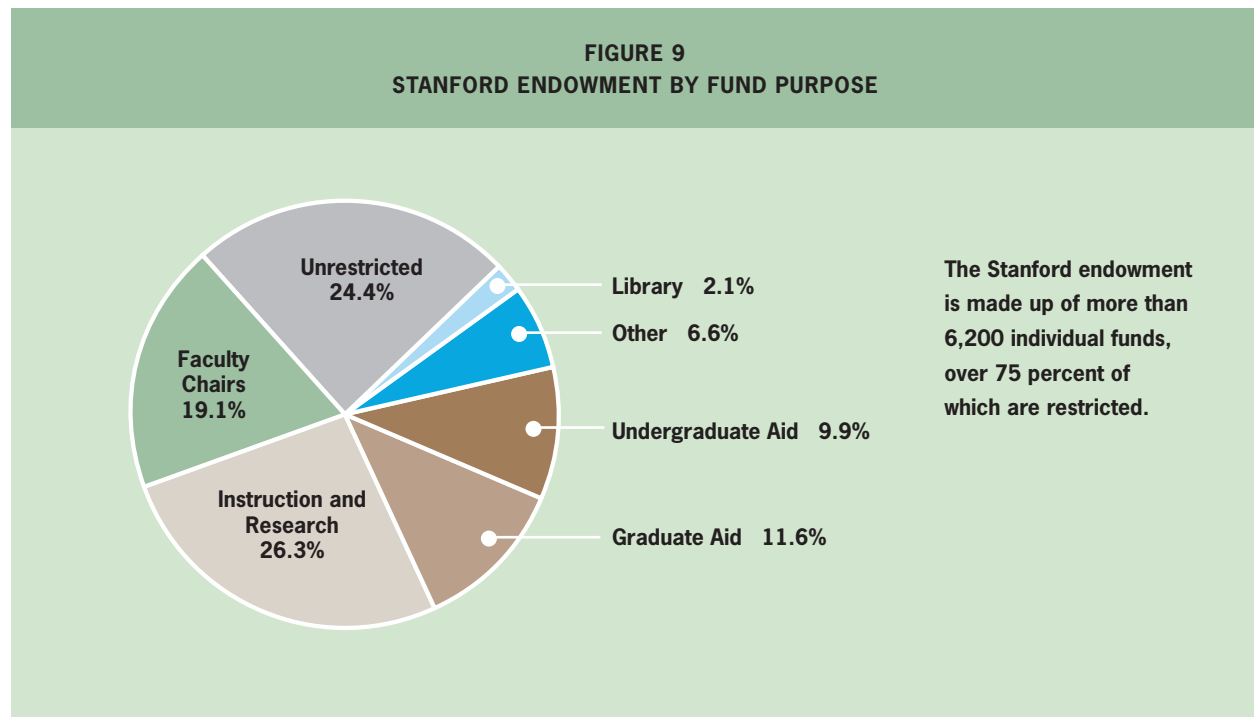
stable, ongoing financial support comes from endowed assets, which include land, cash and securities. Collectively these funds, most of which come from gifts or the earnings of gifts, are known as the endowment. Endowment principal is held as investments, and only the earnings are used to pay for the endowed purposes. Endowments are subject to legal restrictions and reporting requirements.

The endowment at Stanford is not a single fund, but is the sum of more than 6,200 individual funds, over 75 percent of which are restricted in purpose. Major categories of restrictions on the use

of endowment funds are shown in Figure 9.

The value of the Stanford endowment, as reported in August 2007, was \$17.2 billion.

Stanford's total investment income for 2006 was \$609 million, or 14 percent, of total income. Income from the endowment provided \$535 million of this total. Most of the remainder was derived from interest earned on cash balances. To preserve and increase support for teaching, research and financial aid, a portion of the endowment earnings are reinvested each year so that the principal and the return



it generates grow from year to year. In this way, funds set aside to endow a professorship, for example, generate not only enough for the professor's current salary, but also enough for perpetual support, including inflation. Such stewardship assures donors who make endowment gifts that their money will provide not only for the present, but for the future as well.

To preserve the University's purchasing power from year to year, the Stanford trustees limit the payout rate – the portion of accumulated endowment earnings that flows to Stanford's annual budget. In 2008, Stanford's Board of Trustees set the annual target payout rate at 5.5 percent.

Whether the portfolio realizes modest income, significant gains or losses, only that set payment of the endowment value is used for day-to-day expenses. The rest is reinvested so that the principal will grow and continue to provide a reliable source of funds for future needs.

Some of Stanford's funds are invested in equities and securities of San Francisco Bay Area businesses, making Stanford a substantial contributor to the well-being of the local economy through the success of other local businesses.

SPECIAL PROGRAMS AND OTHER INCOME

In 2006, Special Programs and Other Income totaled \$513 million, or approximately 11 percent of total operating income. This category of income includes the Stanford auxiliary enterprises, which are self-contained fiscal entities that charge both on-campus and off-campus customers for their services. Included are the Department of Athletics, the Stanford University Press and HighWire Press (a web-based publishing service). Together, these three enterprises accounted for \$55 million in income and grew at an average annual rate of 9 percent since 1995. Special program fees consist mainly of patent and royalty income (\$47 million) and fees for conferences (\$26 million). The LPCH and SHC share of other income was \$78 million, primarily reimbursements for services performed for ancillary organizations. This category of income also includes net assets released from restrictions, which consist of payments on prior-year pledges and prior-year gifts released from donor restrictions (\$94 million).

TUITION, ROOM AND BOARD, AND FEES

Student-generated revenue is calculated by adding tuition, room and board, and fees and then subtracting financial aid expenditures from that total. In 2006, revenue generated from students accounted for \$376 million, or approximately 8 percent, of Stanford's total income, and represents an average annual growth rate of 4 percent since 1995. Students in the seven graduate and professional schools accounted for approximately \$210 million (less \$46 million in financial aid) in tuition and fees, while undergraduate students contributed \$213 million (less \$97 million in financial aid).⁴ Payments for room and board to Residential and Dining Enterprises accounted for an additional \$96 million.

In 2006, 45 percent of Stanford undergraduates were California residents. Net undergraduate tuition paid by California residents therefore totaled approximately \$74 million. Santa Clara County, including Stanford and Palo Alto, accounted for 8 percent of Stanford

⁴ For undergraduate students, Stanford has both a need-blind admissions policy (that is, Stanford admits domestic students without regard to a student's ability to pay) and a policy of meeting the full computed financial need of each student. As a result, Stanford provides a substantial amount of undergraduate financial aid from restricted gifts, endowment earnings and general funds.

**FIGURE 10
GIFTS BY GEOGRAPHIC LOCATION (IN MILLIONS)**

	2006 University	2006 SHC	2006 LPCH	Total	% of Total
Santa Clara County Total	\$84	\$3	\$5	\$92	11
Stanford	\$22	\$0.1	\$0.2	\$22	3
Palo Alto	\$42	\$3.1	\$2	\$47	5
Other Santa Clara County	\$20	\$0.3	\$3	\$23	3
San Mateo County Total	\$309	\$3	\$13	\$325	37
Menlo Park	\$87	\$0.1	\$1	\$88	10
Other San Mateo County	\$222	\$3	\$12	\$237	27
Other California	\$138	\$1	\$5	\$144	17
Outside California	\$305	\$1	\$2	\$308	35
Total	\$836	\$8	\$25	\$869	100

undergraduates, while San Mateo County, including Menlo Park, accounted for 1 percent.

Since many graduate students live off-campus and are considered local residents, it is difficult to determine what share of graduate student tuition and fees comes from the local area. In 2006, 17 percent of the graduate students listed themselves as local residents in Santa Clara and San Mateo counties. Income to the University for tuition and fees for graduate students listing a local permanent address are included as revenue from within the appropriate local areas, even though these students

generally bring resources from elsewhere when they come to Stanford.

GIFTS, GRANTS AND BEQUESTS

In 2006, Stanford received a total of \$869 million in gifts, including bequests to the endowment, “physical plant” funds (typically gifts for building renovation or construction) and expendable gifts. Figure 10 illustrates the geographical distribution of donors to the University, SHC and LPCH: 48 percent of gifts to Stanford came from donors within Santa Clara and San Mateo counties; 35 percent of all gifts came from outside of California.

While Stanford received a total of \$869 million in gifts and bequests in 2006, those made to endowment or to the physical plant are not directly available for expenditure in the current year; consequently, they are recorded in accounts other than operating income. In addition, gifts in kind, such as artwork, are not included as income. Excluding these categories, Stanford recorded \$168 million in gifts as current-operating income (4 percent of total-operating income). In associating income with location, the \$168 million available in the current year is allocated in the same manner as total gifts.

IV. STANFORD EXPENDITURES

To provide education, health care and basic research and to maintain its lands and facilities, Stanford spends money on salaries and wages, goods and services, construction, taxes, utilities and local government fees. This section focuses on those expenditures and also includes a discussion of the positive impacts related to student and visitor spending.

The bulk of Stanford's \$3.8 billion in direct expenditures in 2006 took the form of salaries and benefits paid to employees living in the Bay Area and payments for goods and services to California-based companies. Figure 11 shows that 42 percent (\$1.6 billion) of

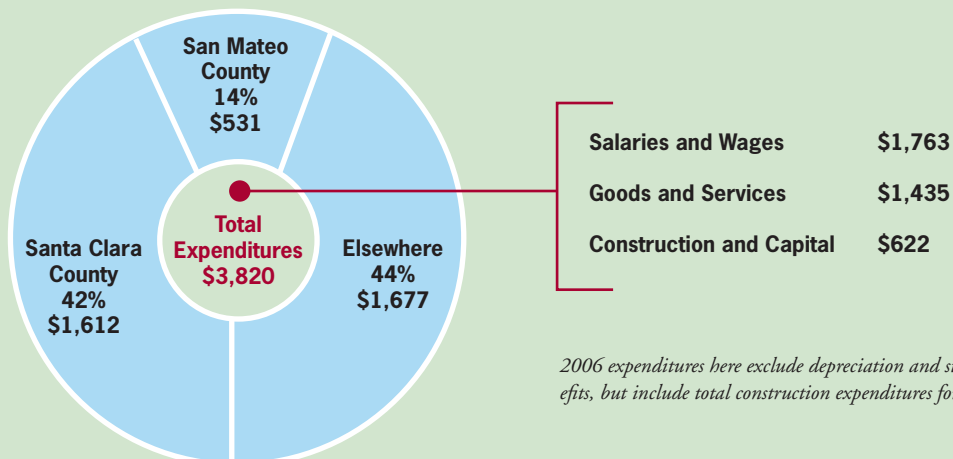
Stanford's total direct expenditures for 2006 went to individuals and entities in Santa Clara County. In 1995, that total was approximately \$660 million. Individuals and entities in San Mateo County received 14 percent (\$531 million) of the total \$3.8 billion spent in

2006, compared with \$315 million in 1995.

Jobs, Salaries and Wages

One of Stanford's greatest contributions to the local economy is its role as a stable employer. With the addition of Lucile Packard

FIGURE 11
STANFORD 2006 DIRECT EXPENDITURES (IN MILLIONS)



2006 expenditures here exclude depreciation and staff benefits, but include total construction expenditures for the year.

**FIGURE 12
LARGEST SILICON VALLEY EMPLOYERS**

	2006	1995	1984	Average Growth 1984–2006
Stanford*	20,452	16,587	16,500	1.0%
Cisco Systems, Inc.	16,500	1,023	n/a	
AT&T, Inc.	15,500	n/a	n/a	
Santa Clara County	15,012	13,512	9,600	2.1%
Kaiser Permanente	9,845	n/a	n/a	
Lockheed Martin	7,951	10,200	21,992	-4.5%
Oracle Corporation	7,500	n/a	n/a	
City of San Jose	7,169	5,218	4,310	2.3%
Hewlett-Packard Co.	7,000	15,000	18,033	-4.2%
IBM	6,500	7,000	13,500	-3.3%
Intel	5,700	5,000	6,000	-0.2%
Google	5,337	n/a	n/a	
Applied Materials	4,156	5,122	n/a	

**Includes University, hospitals and SLAC. (Note: LPCH's 2,037 employees were added to 1995 for comparability with 2006 data.)*

Data Sources:
All data, except Stanford, Kaiser Permanente and Google, are from *The Business Journal*. Data for Stanford, Kaiser Permanente and Google are self-reported.

Children's Hospital, Stanford has become the largest employer in the local area with more than 20,452 employees in 2006. That figure includes all regular, non-temporary employees working at least 20 hours per week. The University and SLAC provided jobs for 1,807 faculty members and 10,536 staff. SHC employed 5,914, and LPCH employed another 2,195.

Industries and jobs in Silicon Valley have changed significantly in the last 20 years. Figure 12 shows the changes since 1984. While some of the valley's largest employers – IBM, Hewlett-Packard and Lockheed Martin – have seen significant decreases in

employment, Cisco Systems, AT&T and Google have seen exceptional employee growth. Stanford, with an average annual growth rate of 1 percent since 1984, including the addition of LPCH, has remained a stable source of jobs for area residents, even during the turbulent dot-com boom and bust.

Residence Patterns

In 2006, 76 percent of Stanford employees lived in the surrounding counties of Santa Clara (10,482) and San Mateo (5,149), and 24 percent lived in the nearby communities of Palo Alto, East Palo Alto, Menlo Park and on the Stanford lands. Less than

25 percent of all of Stanford's employees live beyond Santa Clara and San Mateo counties, with most of those in Alameda and San Francisco counties. As Figure 13 illustrates, Stanford lies near the northern end of an expanding Silicon Valley.⁵ While the vast majority of Stanford faculty and staff live in the immediate vicinity of campus, a growing percentage can be found in some of the more distant Bay Area counties.

⁵ *Silicon Valley was originally defined as encompassing the northern part of Santa Clara Valley and adjacent communities in southern San Mateo County. It is now considered to include the Fremont/Newark area, the East Bay cities of Livermore and Pleasanton, and the Highway 17 corridor through the Santa Cruz Mountains. (Source: Wikipedia 2007)*

Salary Expenditures

Stanford's total payroll for 2006 was nearly \$1.8 billion (including student, temporary and seasonal employees). Figure 14 shows the total salaries and wages earned by employees living in the local areas. Another \$696 million was spent for employee benefits, including Social Security, medical and dental insurance and retirement contributions. Expenditures for benefits cannot easily be associated with specific geographic locations, therefore they are not considered in the following discussion of spending by Stanford's employees.

Local spending by Stanford employees can be estimated from their after-tax income. After subtracting estimated state and federal income taxes and employee contributions to Social Security and Medicare, Stanford employees

in the local area earned a net \$1.2 billion.

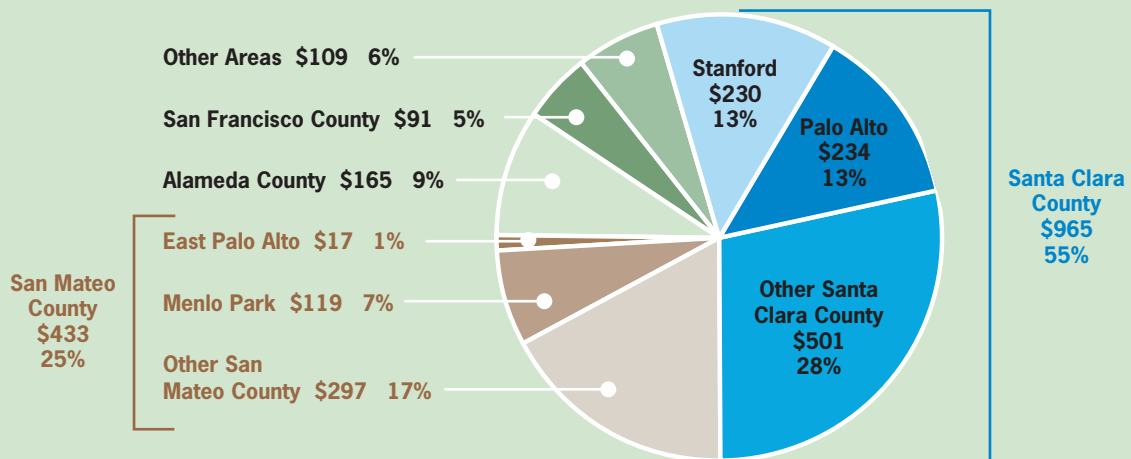
Figure 15 shows the estimated after-tax and local spending by Stanford employees in the nearby cities and counties. Local spending is estimated by using the components in the Consumer Price Index for food, housing, transportation, apparel and entertainment. Bureau of Labor Statistics data for the San Francisco Bay Area Consumer Expenditure Survey (2005-2006) show that a typical household spends 84 percent of after-tax income for these consumer items. While it cannot be assumed that all such spending was done in the city of residence, these estimates are most likely understated in any case. Much of the \$141 million of local spending attributed in 2006 to Stanford was actually spent in

the surrounding communities because the campus has minimal retail services. This is estimated to be \$42 million in Palo Alto and \$5 million in Menlo Park. Figure 15 also shows the average annual growth in local spending by employees from 1995 to 2006. In Santa Clara and San Mateo counties, this annual average was 6 percent per year.

Direct Expenditures for Goods and Services

Figure 16 illustrates the spending patterns for the University, SLAC and the hospitals for goods and services in 2006. Purchases of goods and services in support of the University's annual operations were more than \$1.4 billion with 31 percent (\$447 million) spent in Santa Clara and San Mateo counties. This spending included non-construction and non-capital

FIGURE 14
SALARY AND WAGES PAID TO EMPLOYEES IN LOCAL AREAS (IN MILLIONS)



**FIGURE 15
LOCAL SPENDING BY STANFORD EMPLOYEES (IN MILLIONS)**

	After Tax Income	2006 Local Spending	1995 Local Spending	Average Growth 1995–2006
Santa Clara County	\$712	\$596	\$322	6%
Stanford	\$168	\$141	\$81	5%
Palo Alto	\$170	\$142	\$87	5%
Other Santa Clara County	\$374	\$313	\$154	7%
San Mateo County	\$314	\$263	\$137	6%
Menlo Park	\$86	\$72	\$58	2%
East Palo Alto	\$14	\$12	n/a	n/a
Other San Mateo County	\$214	\$179	\$79	8%
Alameda County	\$125	\$105	\$36	10%
San Francisco County	\$66	\$56	\$18	11%
Total*	\$1,217	\$1,020	\$513	6%

**Includes only the local areas*

Of the total salaries and wages paid to Stanford employees, 80 percent (\$1.4 billion) went to those living in Santa Clara and San Mateo counties.

**FIGURE 16
STANFORD EXPENDITURES FOR GOODS AND SERVICES (IN MILLIONS)**

	University	Hospitals	Total	% of Total
Santa Clara County	\$289	\$100	\$389	27
Stanford	\$12	\$0	\$12	1
Palo Alto	\$173	\$85	\$258	18
Other Santa Clara County	\$104	\$15	\$119	8
San Mateo County	\$44	\$14	\$58	4
Menlo Park	\$11	\$3	\$14	1
East Palo Alto	\$2	\$1	\$3	0.2
Other San Mateo County	\$31	\$10	\$41	3
Alameda County	\$29	\$7	\$36	3
Contra Costa County	\$8	\$6	\$14	1
San Francisco County	\$94	\$137	\$231	16
Other California	\$118	\$128	\$246	17
Total California	\$582	\$392	\$974	68
Beyond California	\$257	\$204	\$461	32
Total	\$839	\$596	\$1,435	100

materials, supplies, equipment, services, utilities and taxes.⁶

Construction and Capital-Related Expenditures

Figure 17 shows Stanford spent \$622 million on construction and capital equipment in 2006 with 48 percent (\$299 million) going to businesses in Santa Clara and San Mateo counties.⁷

The asset value of the physical plant facilities for the University, hospitals and SLAC now exceeds \$5 billion (before accumulated depreciation). Additions in 2006 to the University’s plant facilities included the newly renovated Stanford Stadium, the Arrillaga Family Recreation Center, the Kavli Institute for Particle Astrophysics and Cosmology at SLAC and the purchase of a 35-acre technology park in Redwood City to be developed to accommodate employment growth that would otherwise occur on the main campus. In addition, Stanford Hospital and Clinics purchased facilities in Redwood City that will be utilized to provide outpatient care.

Construction and capital-related expenditures are not included in Stanford’s annual operating

⁶ Total goods and services expenditures are less than “Other Operating Expenses” recorded in the Annual Report. Interest payments and allowances for bad debts are excluded.

⁷ Construction and capital expenditures do not include salaries and wages of Stanford employees working on facilities projects. Their salaries and wages are included in the overall totals for salaries and wages discussed in the section on “Salary Expenditures.”

FIGURE 17
CONSTRUCTION AND CAPITAL-RELATED EXPENDITURES (IN MILLIONS)

	University	Hospitals	Total	% of Total
Santa Clara County	\$229	\$30	\$259	42
Palo Alto	\$109	\$20	\$129	21
Other Santa Clara County	\$120	\$10	\$130	21
San Mateo County	\$11	\$29	\$40	6
Menlo Park	\$1		\$1	0
Other San Mateo County	\$10	\$29	\$39	6
Alameda County	\$11	\$1	\$12	2
Contra Costa County	\$17	\$1	\$18	3
San Francisco County	\$15	\$12	\$27	4
Other California	\$52	\$73	\$125	20
Total California	\$335	\$146	\$481	77
Beyond California	\$88	\$52	\$141	23
Total	\$423	\$198	\$622	100

expenditures as they are long-term assets recognized through depreciation in the financial statements.

Utilities and Taxes

Stanford pays utility charges, taxes and fees directly and indirectly to the local counties and cities. The City of Palo Alto is a major provider of utilities and contract services for Stanford. Figure 18 contains data provided by the City of Palo Alto and includes not only the payments made by Stanford, but also by the Shopping Center and Research Park. Stanford alone paid more than \$19 million directly to the City of Palo Alto for utilities, taxes, permits and fire and police contracts.⁸

⁸ In 2006, Stanford paid an additional \$255,000 to Santa Clara County for police services.

Stanford paid more than \$2 million to Santa Clara County. This does not include property taxes paid by tenants on Stanford land, the Research Park, Stanford Shopping Center and faculty leaseholds.

Student Spending

Stanford students spend a significant amount of money on living expenses in the local community. While the vast majority of undergraduates live on the Stanford campus, some undergraduates and many graduate students reside in the surrounding communities. Except for their own earnings and financial aid paid by Stanford, spending money for students comes primarily from sources outside the region – for example, from parents, grants,

FIGURE 18
CITY OF PALO ALTO UTILITY CHARGES, TAXES AND FEES
GENERATED BY STANFORD UNIVERSITY (IN THOUSANDS)*

	Shopping Center	Research Park	Stanford	Total
Utilities Charges	\$5,177	\$40,982	\$12,259	\$58,418
Utility Users Tax	\$194	\$1,675	\$348	\$2,217
Fire Services Contract			\$5,878	\$5,878
Police Communication Contract			\$584	\$584
Property Tax	\$355	\$2,085		\$2,440
Sales Tax	\$5,155	\$1,503	\$81	\$6,739
Permit Fees	\$2	\$556	\$205	\$763
Total	\$10,883	\$46,801	\$19,355	\$77,039

*Source: City of Palo Alto fiscal-year 2005-06 data

fellowships and student loans. To estimate student expenditures in the surrounding communities, this study uses model cost-of-living budgets prepared by the Financial Aid Office at Stanford. Because these budgets assume frugal spending patterns, using them to determine student spending results in a conservative estimate of likely expenditures.

In 2006, there were 6,705 undergraduate students at Stanford and 7,697 graduate students. Using these enrollment figures in conjunction with the model cost-of-living budgets, it is estimated that Stanford students spent a total of \$252 million. Of that total, \$96 million was paid to Stanford for housing and dining services,

leaving \$156 million in other local student spending.

The next step in this analysis of student spending is to estimate what percentage of the \$156 million was spent in each community. The \$156 million spent on off-campus housing, food and other expenses is distributed by county (and selected cities) where students live.

The portion of this money spent on food and other expenses is probably concentrated in nearby cities (i.e., Palo Alto and Menlo Park) because so many students live on the Stanford campus. However, in keeping with the conservative approach of this study, these expenditures were assumed to

have the same distribution as the off-campus housing expenditures. Figure 19 shows student spending in Palo Alto and Menlo Park, as well as Santa Clara and San Mateo counties.

Visitor Spending

People come to Stanford to visit colleagues, friends and relatives at the University or Stanford Hospitals; to attend Lively Arts performances; or to participate in conferences and public programs held daily on campus. The Rodin Sculpture Garden, Cantor Arts Center, Hoover Tower, Stanford Bookstore and numerous athletic events also attract visitors. In 2006, Stanford home football games drew a total of 260,000 fans, while Stanford Lively Arts events and Commencement each attracted more than 33,000 attendees.

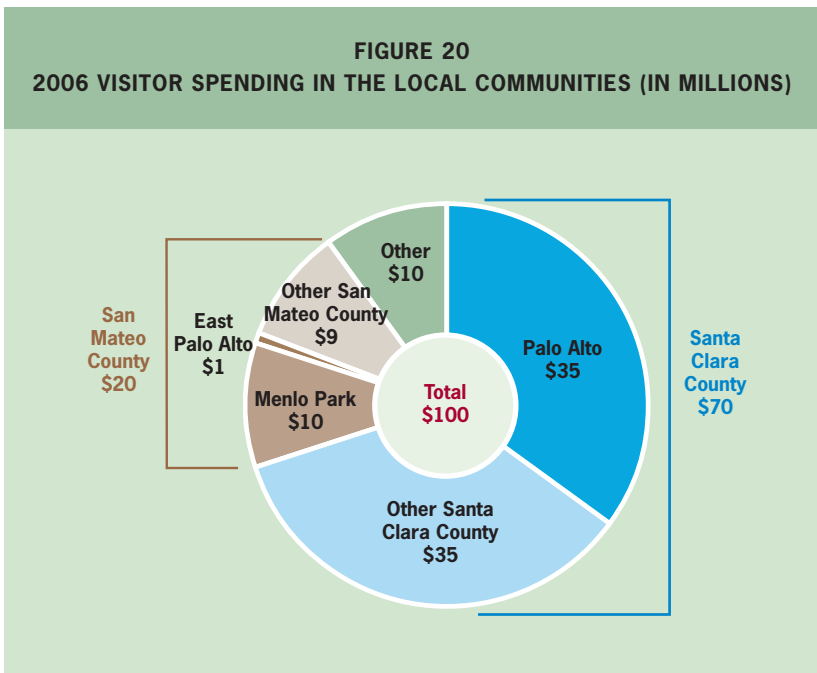
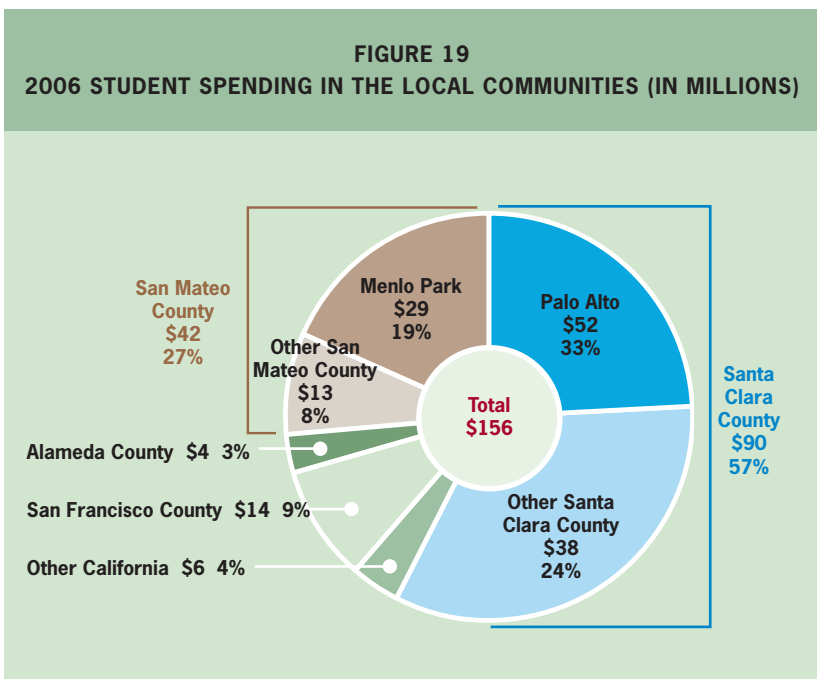
Based on information from the Stanford Planning Office, Visitor Information Services, Stanford Department of Athletics, LPCH and SHC, the average number of daily visitors to Stanford in 2006 was 4,200. The vast majority of these were visitors to the hospitals.

In measuring the economic impact of visitors to Stanford, the objective is to capture only spending by people who are not affiliated with Stanford and who live outside the immediate community. Attendance at Stanford functions obviously includes Stanford students and employees, as well as Palo Alto and surrounding city residents and out-of-town visitors.

While many different methods can be used to estimate the amount of spending by these out-of-town visitors, a conservative approach has been used. First, the many visitors to the companies in the Stanford Research Park are excluded to focus on the University, LPCH, SLAC and SHC. Second, visitors are assumed to spend \$35 per day during their visit here, which is the daily average of student expenditures (exclusive of housing). Third, the only visitors assumed to spend the night in local hotels or motels are non-resident conference attendees and 10 percent of patient visitors to SHC and 15 percent to LPCH. The City of Palo Alto estimates that the average hotel room rate for 2006 was \$137.

Using the assumptions of \$35 per day and \$137 per night for overnight visitors, it is possible to estimate the total expenditures by visitors to Stanford in 2006.⁹ A significant portion of these expenditures, approximately 45 percent, are assumed to have been spent in Palo Alto and Menlo Park. Figure 20 shows the estimated visitor spending in the local communities.

⁹ The California Tourism Board estimates the average expenditures per person per day in the San Jose/Santa Clara County area to be \$98 in 2004, based on an average length of stay of 2.4 days. The majority of visits to Stanford are day-trips, consequently the overall average is approximately \$65 per day.



V. LUCILE PACKARD CHILDREN'S HOSPITAL AND STANFORD HOSPITAL AND CLINICS

The economic impact of the hospitals was \$444 million in San Mateo and Santa Clara counties, based on expenditures for goods, services, construction and capital items and employee spending. Beyond this direct economic impact, both hospitals contribute to extensive community benefits in the form of educational programs, community health services and charity care.

As part of its educational mission, Stanford University operates a School of Medicine, and the School of Medicine is closely affiliated with the two hospitals on Stanford land. Each hospital is a separate 501(c)3

corporation, and each has its own Board of Trustees with fiduciary responsibility for that hospital. Stanford University is the sole owner of each of these hospitals.

While the revenue and expenditures of Stanford Hospital and Clinics (SHC) and Lucile Packard Children's Hospital (LPCH) have been included in the earlier sections of this report

FIGURE 21
NET HOSPITAL REVENUE BY LOCATION (IN MILLIONS)

	SHC Total Income	% of Total	LPCH Total Income	% of Total	Combined Total	% of Total
Santa Clara County Total	\$404	33	\$144	35	\$548	34
Palo Alto	\$99	8	\$43	10	\$142	9
Stanford	\$12	1	\$1	0	\$13	1
Other Santa Clara County	\$293	24	\$100	25	\$393	24
San Mateo County Total	\$221	18	\$89	22	\$310	19
Menlo Park	\$61	5	\$19	5	80	5
Other San Mateo County	\$160	13	\$70	17	\$230	14
Other California	\$524	43	\$134	32	\$658	40
Outside California	\$73	6	\$47	11	\$120	7
Total	\$1,222	100	\$414	100	\$1,636	100

examining the total impact of Stanford on the local communities, it is useful to understand the economic activity of the hospitals on their own.

Net Hospital Revenue

Figure 21 shows the source of revenues flowing to the two hospitals. In 2006, total net revenue for SHC and LPCH was \$1.6 billion.¹⁰ Fifty-three percent of the combined revenue came from Santa Clara and San Mateo counties. LPCH draws a slightly higher percentage of revenue from these areas than SHC, with 57 percent of its total coming from the two counties. The hospitals also provide care to patients who meet certain criteria under their charity care policies without charge or at amounts less than their established rates. Amounts determined to qualify as charity care are not reported as net patient revenue.

Gifts to LPCH and SHC

The hospitals received \$33 million in gifts and bequests in 2006. The geographic distribution of gifts to the hospitals is shown in Figure 22. While 53 percent of net hospital revenue comes primarily from Santa Clara and San Mateo counties, gifts from donors in these

¹⁰ Net hospital revenue includes net patient services, other revenue and net assets released from restrictions used for operations. It excludes transfers to the University for physician services and support. Those revenues are included in University income.

FIGURE 22
HOSPITAL GIFTS BY GEOGRAPHIC LOCATION (IN MILLIONS)

	2006 SHC	2006 LPCH	Combined Total	% of Total
Santa Clara County Total	\$3	\$5	\$8	25
Palo Alto	\$3	\$2	\$5	15
Stanford	\$0.1	\$0.2	\$0.3	1
Other Santa Clara County	\$0.3	\$3	\$3	9
San Mateo County Total	\$3	\$13	\$16	50
Menlo Park	\$0.1	\$1	\$1	3
Other San Mateo County	\$3	\$12	\$15	47
Other California	\$1	\$5	\$6	17
Outside California	\$1	\$2	\$3	8
Total	\$8	\$25	\$33	100

FIGURE 23
**SALARY AND WAGES PAID TO HOSPITAL
EMPLOYEES IN LOCAL AREAS (IN MILLIONS)**

	SHC	LPCH	Total
Santa Clara County Total	\$213	\$75	\$288
Stanford	\$4	\$0	\$4
Palo Alto	\$38	\$12	\$50
Other Santa Clara County	\$171	\$63	\$234
San Mateo County Total	\$101	\$47	\$148
Menlo Park	\$20	\$5	\$25
East Palo Alto	\$5	\$2	\$7
Other San Mateo County	\$76	\$40	\$116
Alameda County	\$71	\$35	\$106
San Francisco County	\$20	\$8	\$28
Other Areas	\$34	\$12	\$46
Total	\$439	\$177	\$616

Seventy-one percent (5,722) of SHC and LPCH employees resided in Santa Clara and San Mateo counties in 2006. Fourteen percent (1,163) lived in the nearby communities of Palo Alto, Stanford, East Palo Alto, and Menlo Park.

areas account for nearly 75 percent of all gifts.

Salaries, Wages and Local Spending

Salaries and benefits represent the largest expenditure for each hospital. As with the earlier analysis of Stanford as a whole, benefits are excluded in the discussion of salaries and wages and the resulting after-tax and local spending. Salaries and wages paid to hospital employees in 2006 were \$616 million. Figure 23 shows the geographic distribution of these payments of LPCH and SHC employees. More than \$436 million went to employees in Santa Clara and San Mateo

FIGURE 24
LOCAL SPENDING OF LPCH AND SHC EMPLOYEES (IN MILLIONS)

	After-Tax Income	2006 Local Spending	% of Total
Santa Clara County Total	\$215	\$179	51
Stanford	\$3	\$2	1
Palo Alto	\$37	\$31	9
Other Santa Clara County	\$175	\$146	41
San Mateo County Total	\$108	\$90	25
Menlo Park	\$18	\$15	4
East Palo Alto	\$6	\$5	1
Other San Mateo County	\$84	\$70	20
Alameda County	\$81	\$68	19
San Francisco County	\$20	\$17	5
Total*	\$424	\$354	100

**Includes only local areas*

FIGURE 25
**LPCH AND SHC EXPENDITURES FOR
GOODS AND SERVICES (IN MILLIONS)**

	Total	% of Total
Santa Clara County Total	\$100	17
Stanford	\$0	0
Palo Alto	\$85	14
Other Santa Clara County	\$15	3
San Mateo County Total	\$14	3
Menlo Park	\$3	1
East Palo Alto	\$1	0
Other San Mateo County	\$10	2
Alameda County	\$7	1
Contra Costa County	\$6	1
San Francisco County	\$137	23
Other California	\$128	21
Total California	\$392	66
Beyond California	\$204	34
Total Expenditures	\$596	100

counties (71 percent of the total). Residents of Palo Alto earned \$50 million (8 percent) and those in Menlo Park \$25 million (4 percent).

Local Spending by LPCH and SHC Employees

As with the earlier analysis of Stanford as a whole, local spending is estimated by first deriving employees' after-tax income. In 2006, total salaries and wages paid to LPCH and SHC employees just in the local areas was \$616 million. After subtracting estimated state and federal income taxes and employee contributions to Social Security and Medicare, hospital employees in the local area earned a net \$423 million.

Figure 24 shows the after-tax and local spending by LPCH and SHC

employees in the nearby cities and counties. Local spending is estimated by using the components in the Consumer Price Index for food, housing, transportation, apparel and entertainment. Bureau of Labor Statistics data for the San Francisco Bay Area (2005-2006) Consumer Expenditure Survey show that a typical household spends 84 percent of after-tax income for these consumer items. While it cannot be assumed that all such spending was done in the city of residence, these estimates are most likely understated in any case; much of the \$2.7 million of local spending attributed in 2006 to Stanford residents was actually spent in the surrounding communities because the campus has minimal retail services.

LPCH and SHC Direct Expenditures for Goods and Services

Figure 25 shows spending patterns for goods and services by LPCH and SHC. In San Mateo and Santa Clara counties, \$114 million was spent (20 percent) with \$85 million spent directly in Palo Alto (14 percent). The two hospitals share purchasing agreements to achieve cost effectiveness, therefore their expenditures are shown in aggregate. The specialized nature of health care supplies and services are important drivers in determining where LPCH and SHC can purchase them. Keeping 45 percent of total expenditures within the San Francisco Bay Area and 66

FIGURE 26
CONSTRUCTION AND CAPITAL-RELATED EXPENDITURES (IN MILLIONS)

	Total	% of Total
Santa Clara County Total	\$30	15
Palo Alto	\$20	10
Other Santa Clara County	\$10	5
San Mateo County Total	\$29	14
Menlo Park	\$0	0
Other San Mateo County	\$29	14
Alameda County	\$1	0.5
Contra Costa County	\$1	0.5
San Francisco County	\$12	6
Other California	\$73	37
Total California	\$146	73
Beyond California	\$52	27
Total Expenditures	\$198	100

percent within California supports local industries that provide health care supplies and services.

LPCH and SHC Construction and Capital-Related Expenditures

Figure 26 shows that in 2006 LPCH and SHC spent \$198 million on construction, capital equipment and other capital-related expenses. Twenty-nine percent of these expenditures were made in Santa Clara (\$30 million) and San Mateo counties (\$29 million). Ten percent (\$20 million) was spent in Palo Alto. Both hospitals are adding capacity to meet the growing

demand for health care services. In 2006, SHC acquired facilities in Redwood City for expanded outpatient services, and LPCH is expanding bed and operating room capacity, as well as adding satellite operations throughout the area.

Both hospitals are proposing to modernize and expand their facilities to address state-mandated seismic safety laws, a critical shortage of beds, increasing patient needs, undersized facilities and new space requirements for modern medicine. The hospitals submitted an application for these plans to the City of Palo Alto in August 2007, and the application is being reviewed and considered by the city.

Summary of LPCH and SHC Economic Impact

Figure 27 shows the impact on the local communities of the combined spending directly by LPCH and SHC and by their employees. The economic impact of the hospitals was \$444 million in San Mateo and Santa Clara counties, based on expenditures for goods and services, construction and capital items and employee spending.

The hospitals spent \$136 million in Palo Alto and the employees who live in Palo Alto contributed \$31 million of the total. In Menlo Park, total spending was \$18 million, with local spending by employees living there contributing \$15 million of the total.

Applying modest multipliers¹¹ to these numbers would add approximately \$390 million more in spending in the two counties with \$77 million of that in Palo Alto and \$10 million in Menlo Park.

¹¹ The economic multipliers used here (averaging 1.6 for goods and services, construction and employee spending) are taken from industry standards drawn from the Association of Bay Area Governments (ABAG).

FIGURE 27
LPCH AND SHC ECONOMIC IMPACT ON THE LOCAL AREA (IN MILLIONS)

	Goods and Services	Construction and Capital	Employee Spending	Total
Santa Clara County Total	\$100	\$30	\$180	\$310
Stanford	\$0	\$0	\$2	\$2
Palo Alto	\$85	\$20	\$31	\$136
Other Santa Clara County	\$15	\$10	\$147	\$172
San Mateo County Total	\$14	\$29	\$91	\$134
Menlo Park	\$3	\$0	\$15	\$18
East Palo Alto	\$1	\$0	\$5	\$6
Other San Mateo County	\$10	\$29	\$71	\$110
Total Local Areas	\$114	\$59	\$271	\$444

Visitors to LPCH and SHC

As was noted in the earlier section on Visitor Spending, a majority of those who come to Stanford for the day are patients and visitors coming to LPCH and SHC. Based on estimates from the hospitals, approximately 3,400 visits are made each day, and about 400 people spend the night. Drawing on the analysis presented in the Visitor Spending section of this report and applying the expected rates of \$35 per day and \$137 per hotel night, it can be estimated that visitors to the hospitals spend about \$60 million annually, \$43 million in Santa Clara County and \$12 million in San Mateo County.

Community Partnerships and Benefits

Beyond the economic impact of their various expenditures in the local community, Lucile Packard Children's Hospital and Stanford Hospital and Clinics have extensive community assistance and partnership programs that leverage their expertise and resources for the benefit of the entire community. A brief discussion of these programs and their financial value follows.

LUCILE PACKARD CHILDREN'S HOSPITAL

As part of its ongoing mission, LPCH seeks to develop and enhance community partnerships that improve the health of children, adolescents and expectant mothers in the community through mutual concern, collaboration and shared

FIGURE 28
2006 LPCH COMMUNITY BENEFITS

Uncompensated Costs of Medical Services to Government-Insured Patients	\$104,111,851
Charity Care at Cost	\$779,000
Health Professions Education	\$1,427,000
Community Health Services	\$776,766
Financial and In-Kind Contributions	\$427,236
Community Benefit Operations	\$336,420
Total Value of Community Benefits	\$107,858,273

FIGURE 29
2006 SHC COMMUNITY BENEFITS

Benefits for Vulnerable Populations	\$78,230,136
Benefits for the Larger Community	\$7,984,943
Health Research, Education and Training	\$16,522,882
Total Value of Community Benefits	\$102,737,961

resources. LPCH partners with existing and emerging community organizations and coalitions in San Mateo and Santa Clara counties that share the hospital's goals. These partnerships enable the hospital to better understand the needs of the community and maximize its impact on the overall health of its target population.

In 2006, the top priorities of the hospital's community service programs were expanding access to primary health services for children, teens and expectant mothers; advocacy toward solutions for the health-related issues facing children and expectant mothers; and enhancing preventive services, with an emphasis on preventing childhood obesity. Two examples of these priorities in action follow:

- LPCH has been very supportive of the Children's Health Initiatives in both San Mateo and Santa Clara counties. These initiatives ensure access to quality health care regardless of ability to pay by expanding health insurance coverage to children who do not qualify for the Medi-Cal or Healthy Families programs through the creation of locally-funded

Healthy Kids programs. In 2006, LPCH contributed \$196,404 for 100 children in each county to be completely covered by the Healthy Kids program.

- The Mobile Adolescent Health Services program provides primary treatment and preventive care to homeless and uninsured adolescents ages 12-24 at high schools and teen homeless shelters. In 2006, 306 individual teens received comprehensive care during 758 medical visits, 777 social worker visits and 192 dietitian visits at six locations.

Figure 28 quantifies LPCH's investment in community benefit programs. All figures quoted are the hospital's net investment after any reimbursement, fees or philanthropic support.

STANFORD HOSPITAL AND CLINICS
SHC maintains a strong commitment to the community. It dedicates significant resources to support community benefit programs to improve the health of the community. It participates in coalitions of other health care

providers to assess community needs and leverage resources. In FY2006, SHC reported \$102,737,961 in community benefit contributions. Figure 29 summarizes the financial value of SHC community benefit programs.

SHC's community benefit programming falls into three categories:

- **Benefits to Vulnerable**

Populations: SHC's single most important community benefit is to improve access to health care for vulnerable populations, including the poor, minorities, elderly, immigrants and youth. In FY2006, SHC contributed \$78,230,136 in this area. Among the many programs it supported were Farewell to Falls, a prevention program for adults 65 and older, and free laboratory testing and physician services for the Arbor Free Clinic. SHC provided care for substantial numbers of Medicare, Medi-Cal and charity-care patients.

- **Health Research and**

Education: Research and education are at the core of SHC's mission. In FY2006, SHC contributed \$16,522,882 to these activities. SHC trains medical students and residents from the Stanford School of Medicine, many of whom also contribute time to health organizations and events in the community. Examples of specific education programs for the community include the Stanford Health Library, which serves more than 30,000 area residents, and community-oriented traffic safety programs to reduce injuries and deaths for young drivers, bicyclists, pedestrians and older adults.

- **Benefits for the Larger**

Community: SHC contributed \$7,984,943 for activities that benefit the larger community. Included are Chaplaincy Program support groups for friends and family who have lost loved ones and the Partners in Caring program, which provides support services for those living at home and coping with a chronic illness.

VI. COMMERCIAL ENTERPRISES ON STANFORD LAND

Two large business enterprises with major impact on the local communities operate on Stanford lands: the Stanford Research Park and the Stanford Shopping Center.

The Stanford Research Park

Home to approximately 150 companies, primarily in electronics, software, biotechnology and other high-tech fields, the Stanford Research Park contributes to the economic well-being of Palo Alto and Santa Clara County in many of the same ways that Stanford does. These companies employ more than 20,000 people, many of them well-educated and well-compensated. (Source: Stanford Management Company Survey, November 2006.) Many of these employees live in the nearby cities, eat in local restaurants and shop in Palo Alto and Menlo Park.

A recent survey of the largest companies in the Research Park found that more than 100,000 visitors come annually to collaborate and do business with just the 10 largest of the 150 companies. These visitors frequently spend two or more days in the area, staying in local hotels, dining and shopping in nearby cities.

The Research Park is a major consumer of utilities from the City of Palo Alto, purchasing more than \$40 million in gas, water and electricity, and paying more than \$2 million to the city in utility user taxes and permit fees. In 2005-06, the total property taxes for all parcels in the Research Park was \$20 million, with the City of Palo Alto receiving just over \$2 million. Sales tax revenue collected from Research Park tenants was approximately \$12.5 million, with the City of Palo Alto receiving just over \$1.5 million.

The Stanford Shopping Center

Occupying 70 acres of land on the north end of the Stanford campus, the Stanford Shopping Center is one of the most successful retail centers in the country. It is leased on a long-term basis to the Simon Property Group, Inc.

The Stanford Shopping Center is visited by an estimated 12 million customers every year and provides

non-holiday jobs for an estimated 2,300 employees. With 145 stores, boutiques, restaurants and specialty-food vendors, and with an occupancy rate of 99 percent, the Shopping Center has annual sales of more than \$500 million.

Total sales tax revenue for 2005-06 was approximately \$43 million, with the City of Palo Alto receiving nearly \$5.2 million. In addition, the Stanford Shopping Center purchased more than \$5 million in utilities from the City of Palo Alto.

Encouraged by the City of Palo Alto, Simon Property Group, Inc., in 2007 submitted expansion plans that are under review by the City of Palo Alto. The plans anticipate adding approximately 240,000 gross square feet of retail space to the 1.4 million currently developed. The plans also include a hotel on the edge of the property that would focus on visitors to the University, hospitals and the Shopping Center.

VII. COMMUNITY RESOURCES AND PARTNERSHIPS

Stanford and its neighbors are involved in many valuable partnerships to tackle real-world problems and advance the public good.

Stanford is proud to share its knowledge, human capital and infrastructure with the broader community. The many partnerships Stanford has with local community organizations directly contribute to the research, training and teaching functions at Stanford. A small sample is provided here.

In 2006, Stanford's **Haas Center for Public Service** engaged 3,836 students in projects with more than 265 agencies. During that year, 1,407 students participated in 84 service-learning courses at Stanford, taught by 70 faculty in 28 academic departments.

Created through a partnership among Stanford Law School, the Legal Aid Society of San Mateo and local law firms, the **Stanford Community Law Clinic (SCLC)** offers free legal advice and services to low-income residents of East Palo Alto, Menlo Park and Redwood City.

Established in September 2000, the **John W. Gardner Center for Youth and Their Communities** is a Stanford-community partnership to support new practices, knowledge and capacity for youth development and learning. Its work is focused in three Bay Area communities: Redwood City, San Mateo County Mid-Coast and West Oakland.

Through the **Stanford Schools Corporation**, Stanford's School of Education oversees two public charter schools in the Ravenswood City School District of East Palo Alto. The charter schools use knowledge about best practices, based on academic research, to provide a high-quality pre K-12 educational experience for students.

Stanford Continuing Studies is a major resource of career education and personal enrichment for Stanford neighbors. Residents of the Bay Area can choose from a broad range of Continuing Studies courses, seminars and workshops.

The Stanford Business School Center for Social Innovation (CSI) provides learning opportunities to enhance the leadership and management skills of those striving to create social and environmental change. Through executive education, conferences, special programs, lectures and workshops, CSI touches thousands of individuals and organizations each year. It also offers pro bono consulting services to a broad range of nonprofits and government agencies.

Stanford Lively Arts offered 41 public performances in 2006 with more than 33,000 attendees, while Stanford's **Department of Athletics, Physical Education and Recreation (DAPER)** holds approximately 450 athletic and special events each year, and entertains more than 1 million spectators.

The **Cantor Arts Center** provides free admission to the public, allowing more than 150,000 visitors to view its collection of more than 25,000 objects each year.

VIII. STANFORD: RESEARCH LEADER AND SOURCE OF INNOVATION

Stanford's contributions to the community go well beyond local economics. Stanford contributes to the global economy through its emphasis on research, innovation and entrepreneurial leadership. A vast array of companies, technologies and medical advances and discoveries have been created by Stanford faculty and alumni.

Much has been written about Stanford's role in the creation and continual regeneration of Silicon Valley. That is a rich and complex process beyond the scope of this study. This economic impact study focuses on the important and significant results of Stanford's institutional economic transactions. A broader study of Stanford's influence on Silicon Valley would analyze the involvement of Stanford faculty, students and alumni in the economy of Silicon Valley. This is a fertile topic for future academic study.

Yet a quick look at some broad connections between Stanford and businesses based on innovation and technology demonstrates economic

impacts far beyond the inflow and outflow of dollars at Stanford itself.

The Stanford Institute for Economic Policy Research (SIEPR) brings Silicon Valley venture capitalists, entrepreneurs and business executives together with economics and business school faculty and students to improve economic policy. Over the past 25 years, SIEPR has contributed to more enlightened economic policy regarding the local economy of Silicon Valley and the economies of the state of California, the U.S., and the rest of the world with some emphasis on Mexico, India, and China.

As mentioned in Section III, Stanford is a magnet for sponsored

STANFORD OFFICE OF TECHNOLOGY LICENSING IN 2005-06

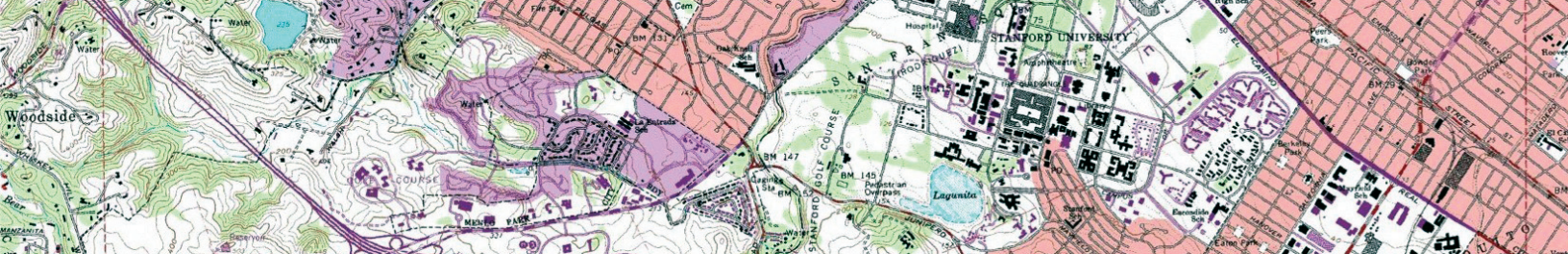
\$61.3 M
Royalty Revenue

470
Royalty-Producing Inventions

109
New License Agreements

10
New Start-ups

~2,600
Active Inventions



research dollars,¹² and much of this money flows from the federal government into research projects involving more than 4,000 graduate students and many undergraduates. Many of these students will go on to become business and technology leaders. A portion of the research done at Stanford each year has commercial use and will ultimately find its way to market, often through one of the many businesses and technologies that have had their start at Stanford. Stanford's Office of Technology Licensing (OTL) promotes the transfer of Stanford research and technology for society's use and benefit, while returning income to the inventor and to the University to support further research.

Many of the businesses and technologies created through Stanford research, or led by Stanford-trained business leaders, will in turn spin-off additional technologies and economic growth. Calculating the economic growth caused by this process and tracing its connection to Stanford exceeds the scope of this study. Figure 30 lists some of the companies that Stanford faculty and alumni have helped create.

FIGURE 30
COMPANIES STANFORD FACULTY AND ALUMNI HAVE HELPED CREATE
 (Partial list)

- | | |
|--------------------------|----------------------|
| Altera | Netflix |
| Atheros Communications | Nike |
| BEA Systems | NVIDIA |
| Charles Schwab & Company | Octel Communications |
| Cisco Systems | Odwalla |
| Cypress Semiconductor | Orbitz |
| DNAX Research Institute | Rambus |
| Dolby Laboratories | Rational Software |
| eBay | Silicon Graphics |
| E*Trade | Sun Microsystems |
| Electronic Arts | Sun Power Corp. |
| Gap | Taiwan Semiconductor |
| Google | Tandem Computers |
| Hewlett-Packard Company | Tensilica |
| IDEO | Trilogy |
| Intuit | Varian Associates |
| Logitech | VMware |
| Mathworks | Whole Earth Catalog |
| McCaw Cellular | Windham Hill Records |
| Communications | Yahoo! |
| MIPS Technologies | Zillow |
| Nanosolar, Inc. | |

¹² See pages 11-12.

IX. ORGANIZATION AND METHODOLOGY

This economic impact study explains the complex flow of funds to and from Stanford. The study is an update to a similar study done in 1995.

The findings in this report are based, whenever possible, on published data from various Stanford offices and local governments, particularly the City of Palo Alto and Santa Clara County. In the few instances when published data were not available, conservative estimates were employed. Studies like this economic impact study aggregate a large volume of information and data. Percentages and totals are often rounded.

Both this study and the 1995 study had to take into account that key data is available only at certain times. Much the underlying data in this study are taken from Stanford's 2006 fiscal year (September 1, 2005 – August 31, 2006). Salary data are from the 2006 calendar year, and SLAC expenditure data are from SLAC's 2006 fiscal year (October 1, 2005 – September 30, 2006). When comparisons are made with the 1995 study, the 1995 Economic Impact Study data are reported in 1995 dollars

and the 2006 data in 2006 dollars. This has been done to avoid confusing readers comparing the two reports.¹³

Two other large economic enterprises, with separate fiscal structures, operate on Stanford lands: the Stanford Research Park and the Stanford Shopping Center. This update touches briefly on some basic facts about these enterprises, but does not attempt to address their total economic impact on the region.

Economic Multipliers

Multipliers are frequently applied in studies of this nature to recognize the wider impact of University spending on the local communities. Money spent by Stanford on expenditures for goods and services, construction and capital is spent again by those who

receive it. Multipliers can be used to capture the number of times each dollar spent by the University and hospitals cycles through the local economies, thereby identifying the overall impact. Many models have been developed to capture this activity. One widely used and respected model was developed by the U.S. Department of Agriculture and is known as IMPLAN (Impact Analysis for Planning). The Association of Bay Area Governments has also collected multiplier data for the local areas. Multiplier models typically demonstrate a cumulative effect of direct and indirect spending of 1.8 to 2.2. This means that for every dollar spent directly, an additional \$0.80 to \$1.20 of spending is generated.

While multiplier analysis can be valuable in describing far-reaching effects, Stanford has preferred a conservative approach, limiting this study to the direct effects of the actual expenditures of the University and hospitals.

13 In many sections of this report, financial data from both 1995 and 2006 data are included. The report does not adjust these for inflation because different sectors have different inflation rates. Construction costs, goods and services, and salaries, as three examples, have all grown at different rates over the past 11 years.

STANFORD LANDS AND SURROUNDING AREAS



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