

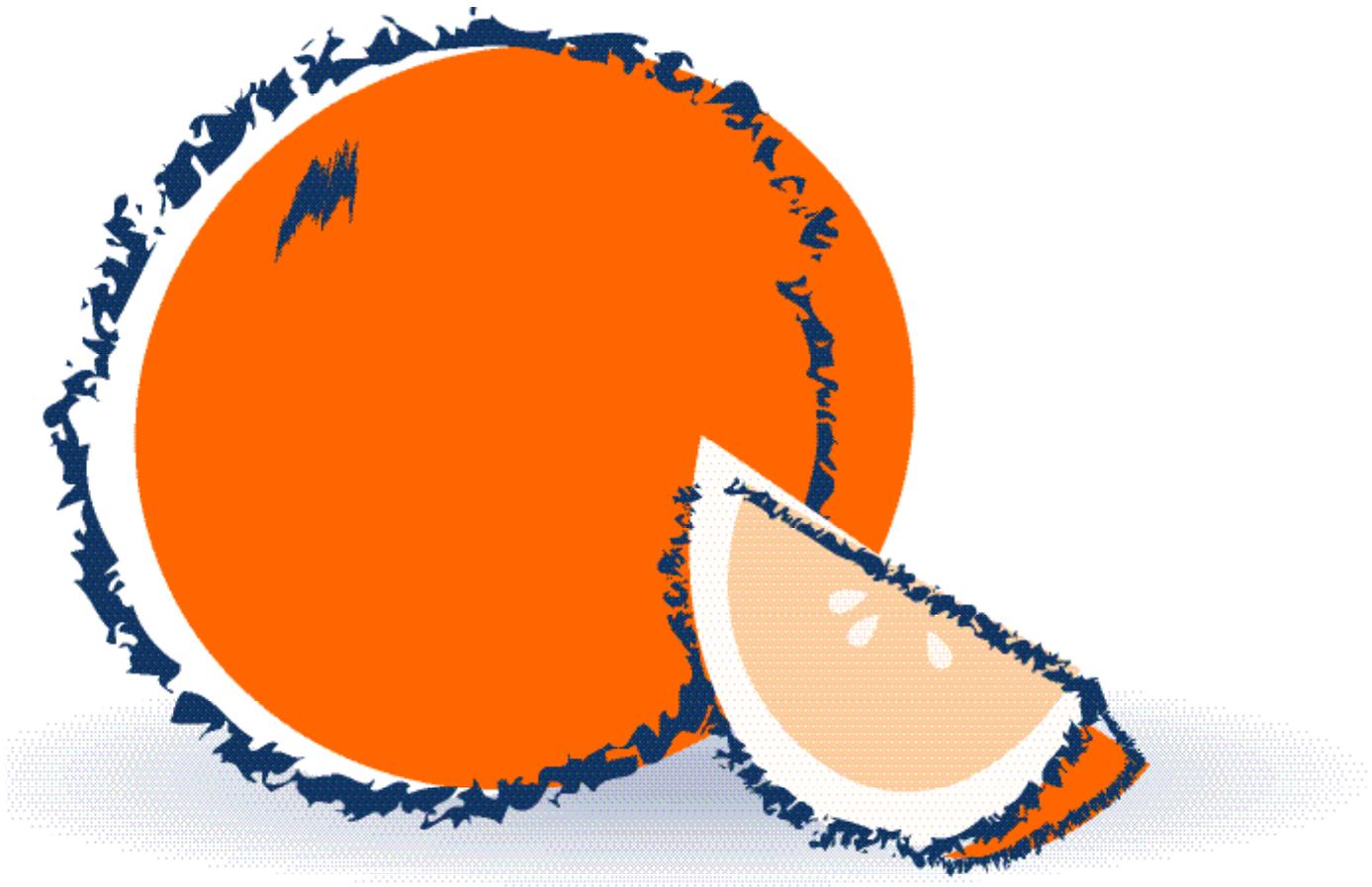
Economic Impact

of California State University, Fullerton

A study by **Radha Bhattacharya** and **Lee Cockerill**

College of Business and Economics
Cal State Fullerton

April 2002



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of California State University, Fullerton
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Lee Cockerill, M.A., Lecturer and Research Associate, Institute for Economic and Environmental Studies, earned his master's degree in economics at Cal State Fullerton, where he teaches micro- and macroeconomics courses. In 2001, he was awarded the Giles T. Brown Award for the university's most outstanding master's thesis of the year, the first graduate student in business to be so honored.

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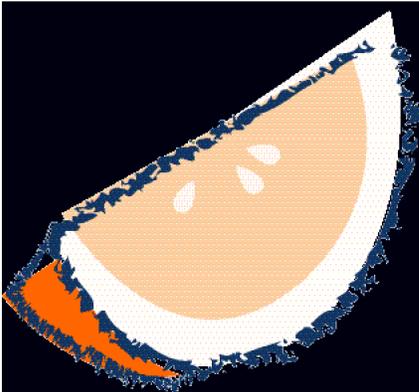
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Introduction

Guide to a few terms used in this report:

- **Direct impact**, or **direct effect**, refers to the initial injections into the local economy of expenditures on goods and services acquired locally.
- **Indirect impact** refers to the added jobs and production required to support the expenditures from the direct impact.
- **Induced impact** refers to the jobs and production required to fulfill the household demands for goods and services generated by the wages of workers. These workers are employed as a consequence of subsequent rounds of spending by households.
- **Total impact** is the sum of direct, indirect and induced impacts.



This report provides a look at the total economic impact of California State University, Fullerton during Fiscal Year 2001 (July 1, 2000 through June 30, 2001).

Special emphasis is given to Orange County, as the university's home. This report, however, examines Cal State Fullerton's economic contribution to the larger Southern California region of Orange, Los Angeles, Riverside and San Bernardino counties; a third of faculty and staff live outside the county, and more than half the goods and services purchased by CSUF are from neighboring counties.

To tell the story of CSUF's role in the economy, this report is divided into sections which present:

- demographic data on Orange County and the university;
- components of students' expenditures;
- information on the sources of CSUF funds and where they are spent;
- charts illustrating the university's economic impact; and finally,
- the financial benefits of a Cal State Fullerton degree—for both student and taxpayer.

Cal State Fullerton's expenditures and its students' expenditures are the major sources of the university's economic impact. Put another way, there are a number of economically quantifiable activities related to the university's business, which include

Central activities of the university: instruction, research, administration, construction, and purchase of goods and services;

Expenditures by students on: fees and supplies related to their education, housing and other living expenses, transportation, and other goods and services; and

Activities of the university's auxiliary units responsible for: vending and food services, campus bookstore, residence halls, the student union, outside grants to and contracts with faculty, fundraising and other University Advancement activities.

Direct, indirect and induced effects of these activities on output and employment are presented in text and charts. In arriving at estimates of economic impact, no dollars have been counted twice, and the study model has accounted for all "leakages" from the region.

Estimates of the total impact are conservative, because they do not take into account difficult-to-quantify items such as spending by visitors to Cal State Fullerton.

Note: In this report, **CSUF** is used as an abbreviated reference to California State University, Fullerton. **IEES** stands for Institute for Economic and Environmental Studies, a research arm of the College of Business and Economics at Cal State Fullerton. **FTEs** means "full-time-equivalent students" (total number of enrolled units divided by 15, an average course load), in contrast to student "headcount," the total of all students enrolled for any number of course hours. **Auxiliary units** of the university are the CSUF Foundation, the University Advancement Foundation (UAF), and CSUF Associated Students (AS).

Summary

California State University, Fullerton plays a prominent role in one of the most vibrant regional economies in the United States. Affordable, ethnically diverse, fast-growing, the university is increasingly known for its graduates' achievements and leadership in Orange County and neighboring counties.

CSUF is the largest institution of higher learning in Orange County. Not only do its current students—now numbering more than 30,000—have an enormous impact on the local economy, but the vast majority of its 133,000 alumni have settled in Southern California and contribute to remarkable employment and economic growth in the region.

The total economic impact (sum of direct, indirect and induced impacts) of the university's expenditures on such items as salaries, goods and services, and construction supports **7,129 jobs** and **\$428.2 million** in output. Furthermore, CSUF's economic activity generates **\$142.2 million in federal, state and local taxes**.

Student expenditures have a total impact of **\$400.3 million** and **4,550 jobs**.

The grand total of Cal State Fullerton's economic impact on this region, which combines the total economic impact of student spending and institutional expenditures, comes to **\$828.5 million** and **11,679 full- and part-time jobs**.

Taxpayer support of Cal State Fullerton is an economically sound investment, with the state recapturing \$2.98 for every dollar spent on a CSUF graduate's education.

Beyond economic benefits, Southern California citizens enjoy immeasurable enhancements to their quality of life from an institution that provides high-quality educational opportunities, centers and institutes focused on community needs, cultural and athletic attractions, consulting resources, and productive partnerships with municipalities, businesses and corporations. The university's staff and faculty are also a well-known source of volunteers who give generously of their time and talents to community nonprofits and organizations.

University Profile

Founded 1957

President Milton A. Gordon

Main Campus

228 acres. One of 23 campuses in the California State University system

Seven Colleges

Arts, Business and Economics, Communications, Engineering and Computer Science, Human Development and Community Service, Humanities and Social Sciences, Natural Sciences and Mathematics

Degree Programs Offered

101, of which 46 are at the graduate level

Other Offerings

Numerous credential and certificate programs

Faculty Approximately 1,900 full- and part-time

Students Students in fall 2001 (headcount/FTES): undergraduates 25,071/22,015.9; graduate students 5,286/2,911.5; total 30,357/24,927

Alumni More than 133,000

California Resident

Undergraduate Fees in 2001-2002 \$924.50 per semester for more than six units; \$648.50 for six units or fewer

Mascot Elephant (Tuffy Titan)

The University and Orange County

Partners in the Regional Economy

More about Cal State Fullerton Students Fall 2001⁴

The average age of undergraduates is 23.12 years; of graduate students, 32.3

Women outnumber men. In fall 2001, 60.87% of the student population was female, 39.12% male

They live nearby, in Orange County, 56.67%
Los Angeles County, 28.62%
San Bernardino County, 6.4%
Riverside County, 4.85%

64 percent live or work within a 30-minute commute to campus

They work as well as study 74% of undergraduates are employed, working an average of 24.7 hours per week
86% of graduate students are employed, working an average of 31.7 hours per week

They support others 17% of undergraduates and 39% of graduate students have one or more dependents

The California State University, Fullerton campus lies about 25 miles southeast of downtown Los Angeles, in north Orange County. CSUF is the county's largest university, one of its largest employers and purchasers, and a significant player in its economy.

The local and national economy are showing signs of emerging from a recession, and Orange County, the U.S.'s fifth-largest, is expected to continue to be a dominant economic force in California as well as the nation. With a gross county product of \$137.7 billion, if Orange County were an independent country, its economy would rank among the top 35 in the world—larger than the economies of Greece, the Philippines, and New Zealand.¹

Orange County's economic growth has been phenomenal in recent years, and the county benefits from a diverse industry base which includes manufacturing, high-tech clusters, trade, services and retail. Employment growth in the county is projected to be 29 percent through 2010; cities in the university's immediate vicinity² are expected to experience rapid employment growth over the next 20 years. CSUF will continue to play an important role by strengthening the local labor force with well-prepared university graduates.

The population of Orange County is 2,846,289, roughly 8.49 percent that of California. From 1990 to 2000, the county experienced a population growth of 18.1 percent. The university's student body, too, continues to grow, accommodating an ever-increasing demand for a Cal State Fullerton education. In fall 2001, a record 30,357³ students enrolled in CSUF courses, an increase of 19.38 percent over a decade earlier.

As the table below indicates, the county is ethnically diverse, and the university even more so.

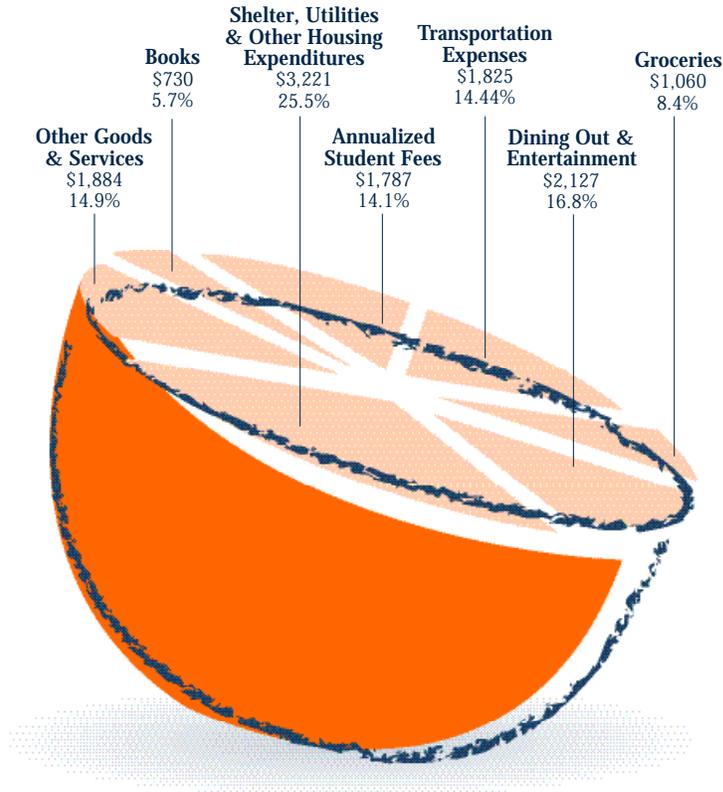
Demographics: Orange County and CSUF Students

	Orange County	CSUF Student Body
Population	2,846,829	30,357 (headcount fall 2001)
Ethnicity (%distribution)		
White	51%	36%
Hispanic or Latino	31%	23%
Asian	13%	
Asian / Pacific Islander		22%
Black	2%	3%
American Indian		1%
Other (American Indian, Alaska Native, Hawaiian, Pacific Islander, some other race, multiracial)	3%	
Unknown (left blank, no answer, other)		11%
International students		4%

Sources: County ethnicity, Census 2000. University ethnicity, CSUF Office of Institutional Research and Analytical Studies, Fall 2001

What Students Spend

Total annual average expenditure per student: \$12,634



Cal State Fullerton students will spend an estimated \$302.7 million during the 2001-2002 school year.

This works out to an average of \$12,634 spent by each student annually on books and school supplies; student fees; shelter, utilities and other housing expenses; groceries; entertainment; transportation; and other goods and services.

National Rankings

U.S. News & World Report lists Cal State Fullerton among its "Top Public Schools," ranking it among the top 10 of the nation's "Top Public Western Universities—Master's" institutions.

Black Issues in Higher Education (June 2001) ranks Cal State Fullerton seventh in the nation in terms of baccalaureate degrees awarded to minority students (June 2001).

Hispanic Outlook in Higher Education (May 2001) ranks Cal State Fullerton ninth in a listing of the top 100 colleges and universities conferring bachelor's degrees on Hispanics.

The College of Business and Economics is home to the nation's second largest undergraduate enrollment in business, according to the American Assembly of Collegiate Schools of Business.

According to *Performing Arts Major's Guide*, the Cal State Fullerton theatre program is among the top 16 most highly recommended in the nation, in the company of such schools as Juilliard, NYU, Northwestern and Boston University.

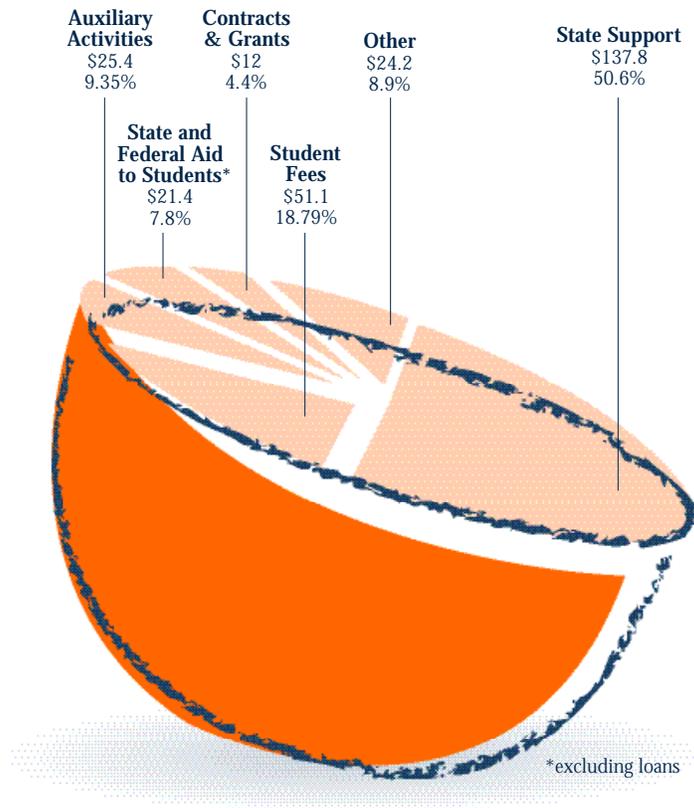
University Funds

Where They Come From, How They're Used

More Titan Facts

- Cal State Fullerton faculty members were awarded more than \$10.7 million in grants and contracts for research and scholarly activities in 2000-2001.
- The Family Business Council, of the College of Business and Economics, promotes the success and continuity of family-owned businesses, providing expertise and workshops on dealing with issues unique to these companies.
- Cal State Fullerton provides Orange County with nearly 70% of its K-12 teachers.
- From courses in e-commerce and pharmaceutical engineering to certificate programs that span environmental compliance and school business management, University Extended Education serves community needs through targeted offerings that result in more than 60,000 annual enrollments.

Sources of Funds (2000-2001)
Figures in Millions



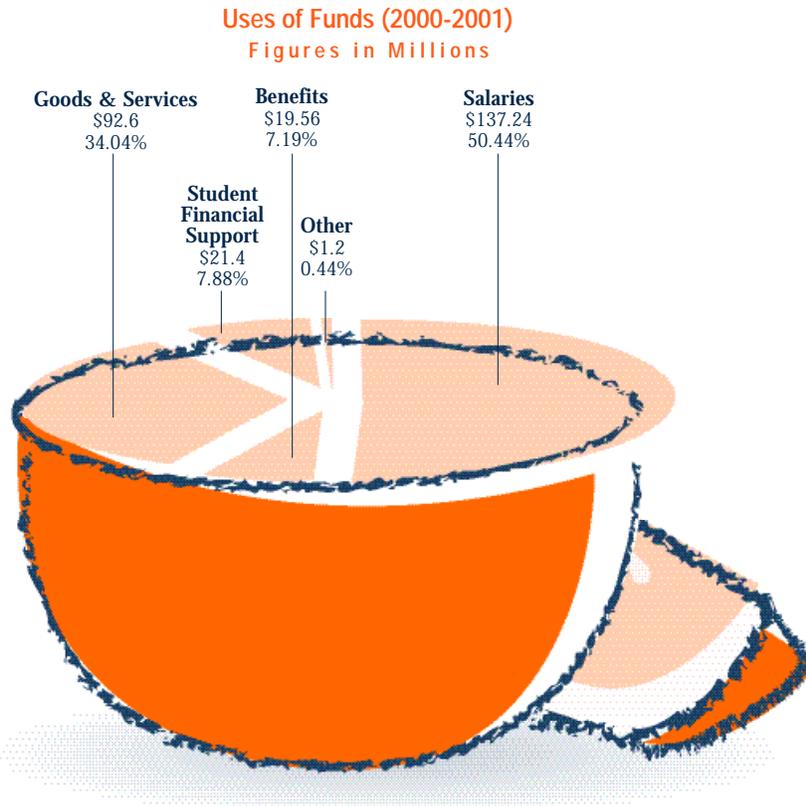
Sources of funds

The university and its auxiliary enterprises received approximately \$272 million in revenue in Fiscal 2001. The most significant sources of these funds, by far, were the State of California, which provided \$137.8 million—50.65 percent of the total—and fees collected from students, \$51.13 million—18.8 percent.

Other sources were contracts and grants; auxiliary activities such as bookstore sales, food and housing services; state and federal aid to students; and "other" sources, which include all gifts to the university and Foundation, revenues of Associated Students, parking fees, Extended Education, and other miscellaneous activities.

Uses of funds

Salaries and benefits of CSUF employees accounted for \$156.8 million—57.6⁵ percent—of the approximately \$272 million spent on operating expenses in Fiscal 2001. Purchase of goods and services took a little over a third of the total, \$92.62^{6,7} million. Student financial support was \$21.4 million, and expenditures on miscellaneous other items claimed the rest.



- Thousands of visitors each year are drawn to The Fullerton Arboretum, a 26-acre preserve on the northeast corner of the campus. Thousands more stay overnight at the Fullerton Marriott, a full-service hotel on the southeast corner. Both resulted from City of Fullerton-Cal State Fullerton partnerships.

- “Titan Pride” has been the rallying cry for Cal State Fullerton's 11 national team championships in seven different sports, a success story that's the envy of many older, heavily endowed institutions across the country.

- The choice of the elephant as the university's mascot, dubbed Tuffy Titan, dates to the early 1960s when the campus hosted “The First Intercollegiate Elephant Race in Human History.” The springtime event attracted 10,000 spectators, 15 pachyderm entrants, a telegram from Richard M. Nixon and worldwide news coverage. Associated Press rated the story among the top 10 for 1962. Day of the Titan was born.

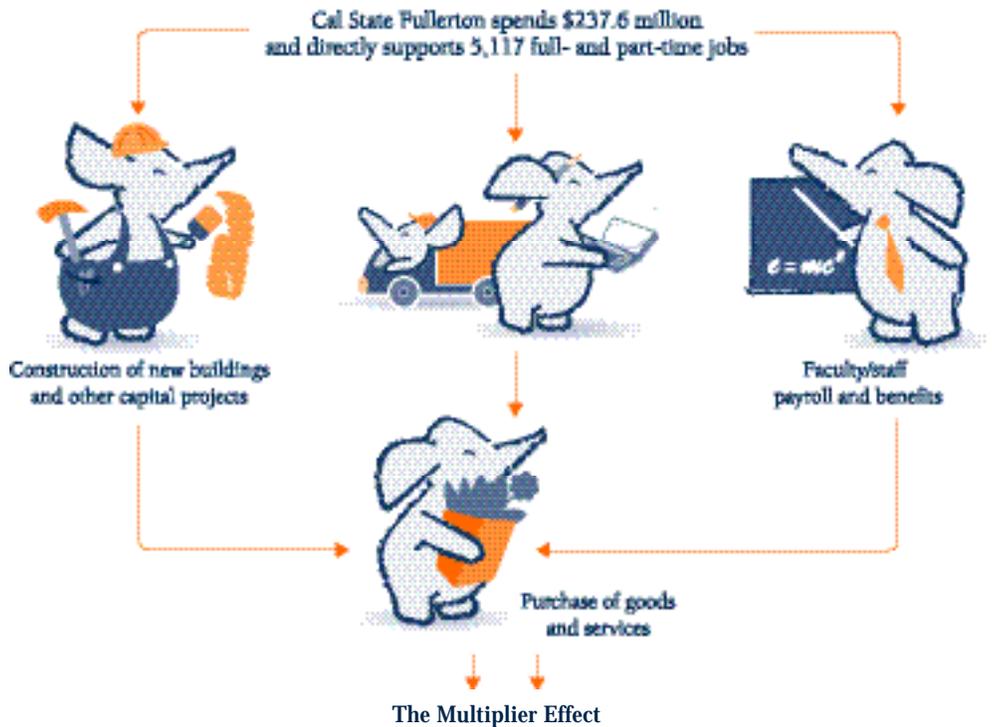
Building for the future. University expenditures for major construction projects are not included in the operating funds detailed above. They are significant, and they have a notable impact on the local economy. For example, expenditures for student dormitories and faculty/staff housing will account for approximately \$25 million in Fiscal 2002. Parking garages and a new performing arts center are among future capital projects that will have an economic impact on the surrounding area.

Annual Impact of Cal State Fullerton on the Regional Economy

These and other university-affiliated groups welcome community members who want to nurture an interest, support a worthy cause, or contribute to the region's quality of life.

- Art Alliance
- Association of the Friends and Docents of the Anthropology Museum
- College Advisory Councils
- Continuing Learning Experience
- Friends of the Fullerton Arboretum
- Music Associates
- Patrons of the Pollak Library
- President's Associates
- Reading Educators Guild
- Titan Advocates
- Titan Athletic Club
- Tucker Wildlife Society

Institutional impact. Cal State Fullerton directly supports 5,117 jobs with \$237.6 million spent on payroll, construction projects and purchases of necessary goods and services. This is the figure used to estimate accurately the total economic impact of the institution's expenditures. (Another 600 full- and part-time jobs, mainly in auxiliary enterprises such as the bookstore and food services, are considered to be attributable to student expenditures, hence they are not included here.)



CSUF's spending triggers subsequent rounds of spending, further multiplying the impact on output and jobs to \$428.2 million and 7,129 jobs

CSUF's sizeable expenditures for labor and resources set into motion a series of subsequent expenditures by the university's suppliers for their own payrolls, raw materials and other business-related necessities. This in turn prompts spending by the households receiving income from these "spin-off" activities.

This multiplier effect accounts for an additional 2,012 jobs, bringing the total related to the university's institutional expenditures to **7,129 jobs**. Additional rounds of spending create another \$190.6 million in output, pushing the total economic impact of university spending alone to **\$428.2 million**.

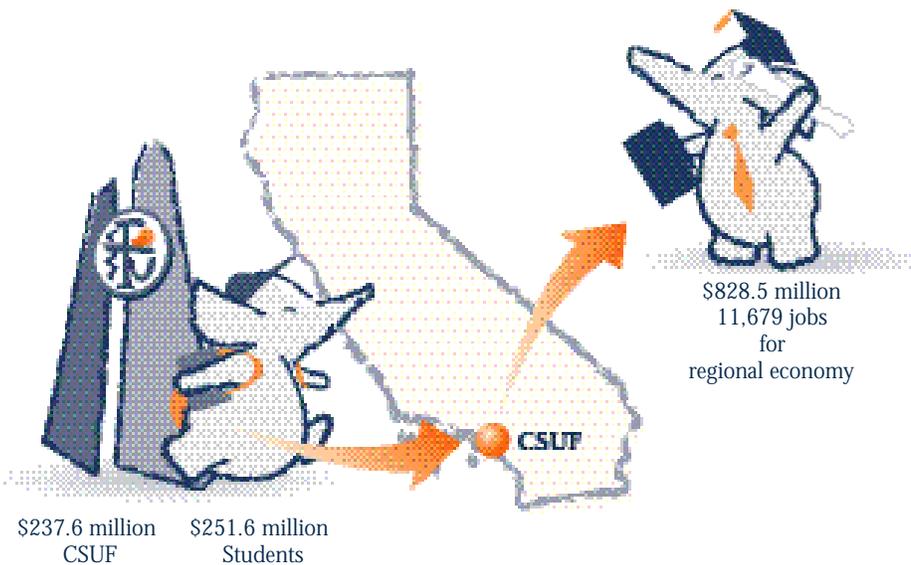
Student impact. The direct impact of student spending on the economy is \$251.6 million.⁸ Subsequent economic interactions translate into an additional \$148.7 million, bringing the total economic output created by CSUF students to **\$400.3 million**. The multiplier effect on the 3,009 jobs directly supported by students creates a new total of **4,550 jobs**.

Total economic impact. The total direct economic impact of Cal State Fullerton (the sum of institutional and student expenditures) is \$489.2 million. Additional rounds of purchases stimulated by these expenditures push this figure to **\$828.5 million** for a total economic impact. The total number of jobs supported by the university and its students is 8,126, but with the multiplier effect, **11,679 jobs** are the result.

These on-campus centers and institutes are involved in research and activities that directly benefit the community:

- Center for...
- Business Studies
 - California Public Archeology
 - Children Who Stutter
 - Community Collaboration
 - Demographic Research
 - Economic Education
 - Entertainment and Tourism
 - Ethnographic Cultural Analysis
 - Excellence in Science and Mathematics Education
 - Governmental Studies
 - Public Policy
 - Study of Emerging Markets
 - Study of Religion in American Life
 - Successful Aging
- Centers for Life Span Development
 - Harry R. Gianneschi Center for Nonprofit Research
 - Social Science Research Center
 - South Central Coastal Information Center
- Institute of Gerontology
 - Institute for Economic and Environmental Studies
 - Real Estate and Land Use Institute
 - Small Business Institute
 - Sport and Movement Institute

Total economic impact of university and student expenditures = \$828.5 million and 11,679 jobs



Total Impact of Students and CSUF on Southern California

	Economic Impact on Output (millions)			Economic Impact on Jobs		
	Students	CSUF	Total	Students	CSUF	Total
Direct	\$251.6	\$237.6*	\$489.2	3,009	5,117*	8,126
Indirect/Induced	\$148.7	\$190.6	\$339.3	1,451	2,012	3,553
Total	\$400.3	\$428.2	\$828.5	4,550	7,129	11,679
Multiplier	1.59	1.80	1.69	1.51	1.39	1.44

*Adjusted to avoid double-counting of student expenditures at CSUF.

Fullerton and Beyond....

Cal State Fullerton's main campus occupies 228 acres of what once was part of a vast orange grove in the city of Fullerton. There are 19 permanent buildings or building clusters, and the greatest walking distance from one building to another is just 10 minutes. The 10-story College Park building on Nutwood Avenue provides additional classrooms, as well as office space for university staff and faculty.

El Toro Campus is the latest "satellite" campus to take a Cal State Fullerton education closer to other communities in Orange County. To accommodate growing demand for its programs in south county, upper-division and selected graduate-level classes will begin August 26, 2002 in newly renovated facilities at the former Marine base. More info at www.fullerton.edu/eltoro.

The El Toro Campus programs will replace and enhance those currently offered at CSUF's Mission Viejo Campus at Saddleback College. Other satellite campuses are located in Garden Grove, Irvine and Santa Ana.

Cal State Fullerton's contribution to federal, state and county tax revenues.

Economic activity by the university and its students generates income, which in turn stimulates the flow of tax revenues at all levels of government. IEES's estimates of the tax dollars generated by CSUF/student spending has taken into account induced expenditure effects.

Federal, State and Local Taxes Generated by CSUF and Student Expenditures Figures in Millions

Corporate Tax	\$10.4
Indirect Business Tax	\$6.4
Personal Income Tax	\$75.5
Federal Government Tax	\$92.3
Corporate Tax	\$2.4
Indirect Business Tax	\$35.1
Personal Income Tax	\$12.4
State/Local Government	\$49.9
Total Tax Revenues	\$142.2

Technical Notes

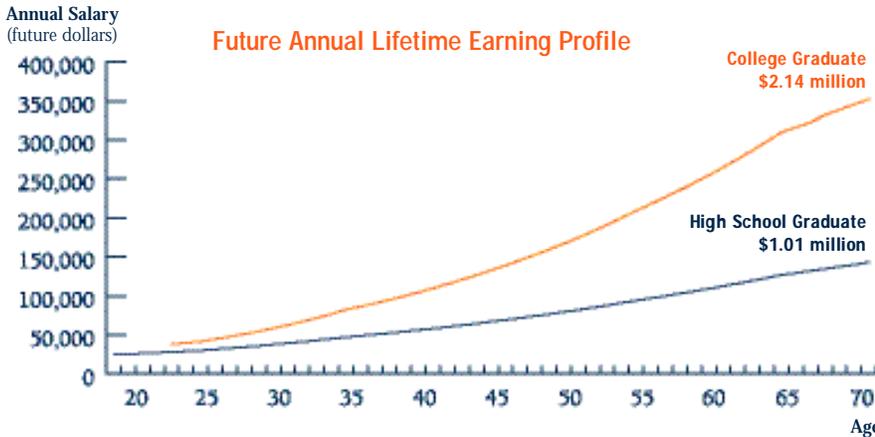
The results of this study were generated using a detailed input/output model that mirrors the Social Accounting Matrices employed by the Bureau of Economic Analysis. This input/output program, IMPLAN (Impact Analysis and Planning), can create a complete economic model of any region in the United States. The program tracks the economic linkages between all agents; this includes all interinstitutional transfers such as payments by governments to households. The model tracks purchases of foreign goods by domestic consumers and also accounts for purchases made by foreign demanders. Finally, the model monitors trade flows that occur between geographical regions within the U.S. That is, the model takes into consideration local supply and demand for every available commodity. If a region under analysis does not have sufficient supply to meet local demand for a particular commodity, the input/output model will fulfill local demand by importing the commodity from outside the region. In other words, the model captures the leakages of local spending on products that are not produced in the region.

What students spent at the campus bookstore and on campus vending and dining was counted in the category "student expenditures." To avoid double-counting, these expenses were not counted in university expenditures. A survey of student expenditures was administered in December, 2001, and purchases of goods and services were assumed to include any purchases at CSUF.

The Cal State Fullerton Degree

A Sound Investment for Student & Taxpayer

The earnings of a university graduate start out at a higher level than those of a high school graduate, and they rise more rapidly in the years following.



Over her lifetime, a Cal State Fullerton graduate can expect to earn approximately \$2.14 million (expressed in today's dollars)—a full \$1.14⁹ million more than a high school graduate of the same age. In addition to her higher salary potential, well-researched advantages of a college degree include more career opportunities and job satisfaction, better health, longer life expectancy, etc.

So *she* benefits from her college degree, but what about the California taxpayers who spent about \$27,616¹⁰ on her education over four years? The university graduate's higher earnings mean she will put \$82,410 more in taxes¹¹ into the state's coffers than someone who stopped with a high school diploma, a net benefit to the state of \$54,794.

Bottom line for taxpayers: for every tax dollar spent on a CSUF graduate, they get \$2.98 back, or a "profit" of \$1.98.

Average Lifetime Earnings For:		Additional Taxes Paid by CSUF Grad over Lifetime	\$82,410
CSUF Graduate	\$2.14 million	Cost to Taxpayers of CSUF Degree	\$27,616
High School Graduate	\$1.01 million		
Earnings benefit for CSUF Graduate	\$1.13 million	Net Fiscal Benefit to Taxpayers per CSUF Grad	\$54,794

$$\$82,410 / \$27,616 = 2.98$$

University Gables is a new community of affordable homes for Cal State Fullerton faculty and staff under construction in Buena Park for first occupancy in late August 2002. Orange County, the Orange County Flood Control District, Orange County Affordable Housing Homeownership Alliance and developer/builder Ambling West worked in partnership with Cal State Fullerton and the city of Buena Park to make the 86-home project a reality.

The Tucker Wildlife Sanctuary, located in the Santa Ana Mountains, serves community visitors as well as students and faculty members. It is operated by the CSUF Foundation.

Endnotes

¹ <http://www.locate.ca.gov/>

² Over the period 1997-2010, SCAG projects employment growth to be 25.4% in Brea, 7.8% in Fullerton, 22.96% in Orange, 48.32% in Placentia, and 45.67% in Yorba Linda, compared to the county's projected growth rate in employment of 24.22%.

³ This is a headcount which includes both graduate and undergraduate students.

⁴ Source: Office of Institutional Research and Analytical Studies, CSUF

⁵ This includes CSUF, CSUF Foundation, CSUF UAF, CSU AS, and CSUF Extended Education.

⁶ This includes CSUF, CSUF Foundation, CSUF UAF, CSUF AS, and CSUF Extended Education.

⁷ This excludes construction because the sources and uses of funds are intended to describe primarily the operating expenses of the university.

⁸ Student fees (\$51.1 million) were not counted in the calculations of overall economic impact because they make their way back to CSUF in the form of expenditures by CSUF on salaries, purchase of goods and services, etc.; including them would constitute double-counting.

⁹ The earnings profile for ages 22-70 for college graduates (18-22 for high school graduates) was constructed with Historical Income Tables –People, US Census Bureau 2000, using weighted averages of male and female salary data by age group over the period 1991-2000. Details are available from the authors.

¹⁰ To arrive at the one-year cost to the state (in 2002 dollars), the average amount that the state paid in support and financial aid over the last four years was divided by the average number of FTES over those years. (An average was used to minimize effects of peculiarities from any one single year.) The four-year cost to the state was obtained by multiplying the one-year cost by four.

¹¹ Calculated on the basis of the average effective California state tax rates in 2001 and 2000.

This report follows the basic methodology of the 1994 study of the economic impact of CSUF conducted by Kleinhenz and Puri.

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