

Working for California: The Impact of the California State University

Overview



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This overview prepared by ICF Consulting.
The full impact report is available at www.calstate.edu.

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Introduction

The social and economic impact of the California State University on the state of California is enormous. With 443,280 students served (annualized headcount, college year 2002-2003), the CSU is the largest university in the United States and has an extremely significant impact on the economy of the state and the regions where its campuses are located. Yet this impact is often under-appreciated.

California's dynamic, knowledge-based economy is envied the world over. This study demonstrates that the CSU is a critical foundation of the state's economy and, were it not for the CSU, California simply would not enjoy the level of prosperity that it does. The CSU is central to California's economy and directly or indirectly impacts *everyone* in the state.

In addition, the university system makes a tremendously important non-economic contribution to California and its future. In a nation of immigrants, California's population is uniquely diverse. A university education is vital to pursuing a lifelong professional career and achieving greater economic security. The CSU keeps this avenue of economic opportunity open to everyone in California by providing a quality, affordable university education.

The expanding research work of CSU faculty and their students is solving critical problems for the state, creating innovations and solutions for California industry, and helping to ensure that university curricula are current and relevant. CSU research and innovation complement and extend the university's core educational mission and represents an emerging dimension of its economic impact.

CSU students also have a tremendous impact on California in their roles as students and as degree or certificate-earning graduates. As students, their educational-related spending provides an economic stimulus to the campus and surrounding communities. In addition, they perform in musical, theatrical and sporting events, and they perform volunteer services to a degree seldom matched at other universities—in areas ranging from early childhood education to health care to arts to social services.

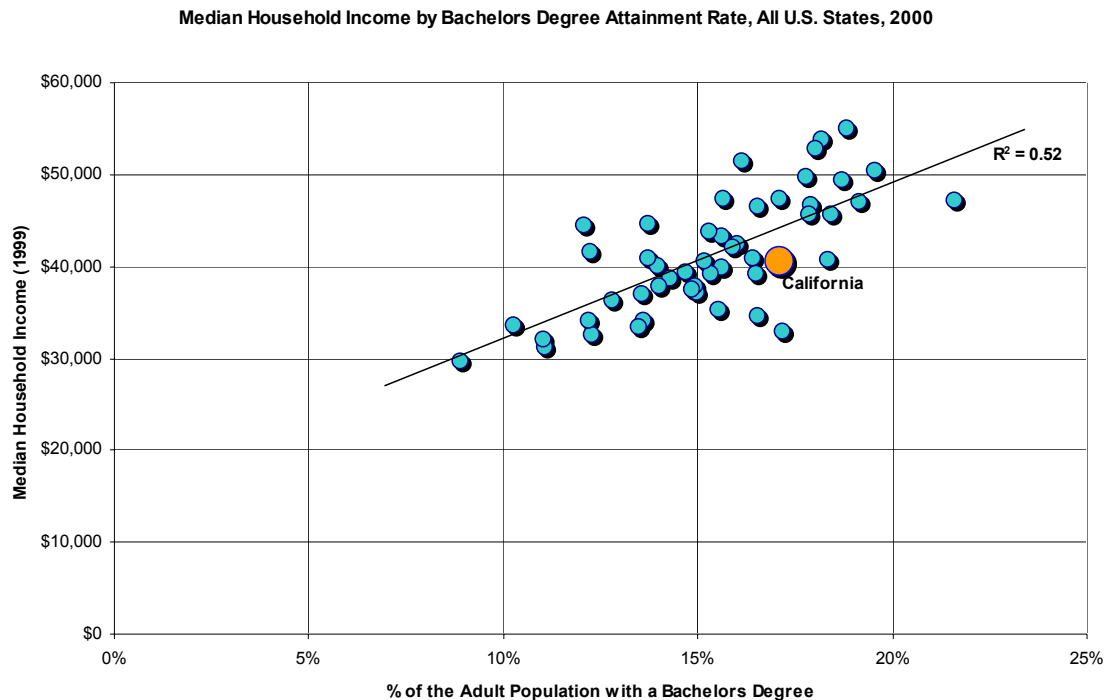
Together, the students, faculty and staff of the California State University have an almost immeasurable impact on California—its economy, society, technology, and quality of life. The purpose of this report is to highlight those impacts.

Higher Education and Economic Prosperity

A university education changes the trajectory of people's lives. It helps them to fulfill their aspirations to become artists, engineers, teachers, health care professionals and more. Its recipients are better prepared to succeed in, adapt to, and appreciate the rapidly changing world around them. In addition, a university education is widely recognized as an investment that pays a lifetime of dividends, in the form of better jobs and higher incomes.

What is less well understood, however, is that the investment in higher education is also a *good investment for states*. When states make the investment in their public university systems, the state as a whole receives a lifetime earnings boost. State per capita income is systematically higher in states where a high percentage of the population has an undergraduate university degree.

The chart below shows a strong correlation between median household income of states in the U.S. and the state's adult population with bachelor's degrees. Even a relatively modest increase of 5% in the bachelor's degree percentage yields about an \$8,000 increase in the household median income across the entire state.



This chart demonstrates that the investment made by states in their public universities benefits everyone in those states. This is because the U.S. economy has shifted from one dependent upon manufacturing to one driven by knowledge-based services and high-technology manufacturing. In such an economy, states that have a well-educated workforce are more attractive locations for these fast-growing, high-paying industries. Workers in these regions benefit from higher wages and more economic opportunities, while everyone benefits from the greater level of public services these states can afford.

How the CSU Impacts California's Economy

Conventional economic impact assessments traditionally focus on estimating the direct and indirect expenditures of the organization being studied—the so-called “multiplier effect” created by the multiple rounds of spending triggered by new income into a region.

As in those conventional economic impact assessments, the direct spending by the CSU—spending that is funded by both state and non-state sources—and the multiplier effect of this direct spending is a major part of the University's overall economic impact. However, the value of the CSU is much more than the total impact of its direct, indirect and induced spending because of what the CSU actually *does*. Specifically, the primary products of the CSU's 23 campuses, the thousands of job-ready graduates produced each year, contribute mightily to California and its economy.

Home to Silicon Valley and Hollywood, thousands of technology start-ups and millions of creative workers, California has perhaps the most widely-admired knowledge-based economy in the world today. *University-educated workers are the fuel of this economy.* Many of the industries that drive the California economy and are responsible for its prosperity do not cluster in the state because of its natural resources or its access to markets. California serves the world's technology and cultural needs because it has accumulated an unparalleled pool of know-how and skill. And the bulk of these skilled workers in these industries are university graduates. Even the industries that are concentrated in California because of its other assets—such as agriculture and tourism—are changing rapidly and are increasingly dependent on new technology and a highly educated workforce.

California's 1960 Master Plan for Higher Education, with its far-sighted commitment to universal higher education, is largely responsible for California's well-educated workforce today. The CSU's primary mission in this master plan has been to provide access to baccalaureate, post-baccalaureate and master's level higher education. The success of the University in fulfilling this responsibility has been decisive in providing California's advanced industries with the skills they need.

While producing university graduates has been the most decisive way that the CSU supports California's knowledge-based economy, it is not the only way. The CSU's applied research helps California's industries remain innovative, and the university provides an array of services and facilities to assist entrepreneurial start-ups.

The CSU's cultural and recreational programs help make California's communities more livable, and contribute to overall quality of life. This encourages creative and talented people to move into and remain in the state, which is a major advantage in an increasingly mobile society.

California's economic future is largely tied to the competitiveness of its knowledge-based industries. Consequently, all Californians share a common interest in the foundations that make these industries strong. There is no element of that foundation that is more important than the state's public university systems. *Because the California State University provides more well-educated, job-ready graduates to California's knowledge-based industries than any other institution of higher education in the state, it has a strategic role at the absolute center of California's economy.*

In college year 2001-2002 (the most recent year for which comparative data were available), the CSU conferred 61,463 bachelor's degrees, over 51% of all the bachelor's degrees awarded by all of the universities, public and private, in the entire state. In that same year, the CSU conferred 14,537 master's degrees, almost 40% of all the master's degrees awarded in that year across the entire state.

In addition, in partnership with other institutions (most notably the University of California), the CSU offers joint doctorate programs. In 2001-2002, the CSU conferred 44 doctoral degrees. These well-educated graduates - at all levels - help to attract, retain, and develop the companies that are leading California's economy into the future.

In 2001-2002, the CSU awarded:

- **51% of All Bachelor's Degrees Awarded in CA**
- **40% of All Master's Degrees Awarded in CA**

The Magnitude of the CSU's Economic Impact

Whenever new spending occurs in an economy, that new spending starts a ripple effect—creating a total economic impact that is larger than the initial influx of dollars. This is because the recipients of the new income spend some percentage of it within the region, and the recipients of that share, in turn, spend some within the region, and so on. The total spending impact of the original new spending in the economy is the sum of the original spending plus the progressively smaller, subsequent rounds of spending (the indirect and induced impacts) within the economy. This total economic impact creates a certain number of jobs, called the total employment impact, and also generates tax revenue for state and local governments, referred to in this report as the total fiscal impact.

In this assessment of the California State University's economic impact, total spending, employment, and fiscal impacts of all CSU-related expenditures, including the expenditures of the university itself, those of its auxiliary organizations, and those of students who moved to California to attend the CSU, have been calculated on a state, regional and individual campus level. IMPLAN was the software package used in this study to calculate the total economic impact on the state—a methodology consistent with similar analyses across the nation.

In fiscal year 2002-2003, the state's general fund support and average annual capital spending for the CSU was \$3.09 billion. However, the full amount of direct CSU-related expenditure for wages and salaries, capital equipment and supplies, student spending on textbooks, meals, and housing, and an array of other items related to its educational mission totaled \$7.46 billion across the state. This total includes:

- ▶ \$5.68 billion in university expenditures on wages and salaries, services, supplies, and related ongoing needs
- ▶ \$531 million in construction and capital expenditures (for libraries, classrooms, laboratories and other campus infrastructure)
- ▶ \$1.12 billion in expenditures from campus auxiliary organizations such as bookstores, campus restaurants and research institutes
- ▶ \$128 million in additional off-campus spending by out-of-state students who are in California to attend the CSU.

The IMPLAN analysis of the direct spending by the university plus the indirect and induced economic impact to the state annually generates:

- ▶ Total spending impacts of CSU-related expenditures equal to \$13.6 billion
- ▶ More than 207,000 California jobs supported, and
- ▶ More than \$760 million in taxes for the state and local governments across California.

Based on total direct spending, \$1.83 is generated for each dollar spent. This aspect of the impact of CSU-related expenditures confirms that the university is a large and significant institution in California, with a spending profile and an economic impact to match.

Direct expenditures and the indirect and induced impacts of this spending, however, do not capture the economic impact of what the University actually does—provide an affordable, quality university education to thousands of Californians who otherwise would not attend a university in the state.

One of the ways that the full economic impact of the CSU enterprise can be estimated is by focusing on the higher earning power of university graduates. The U.S. Census Bureau has estimated that bachelor's degree holders earn, on average, nearly one million dollars more than high school graduates over the course of their working life.

In 2002-2003, it was estimated that 1.7 million CSU bachelor's and master's alumni living and working in California earned an estimated \$89 billion in income. Of this \$89 billion in total wages, based on U.S. Census Bureau data, it is estimated that *\$25.3 billion is attributable to their higher level of educational attainment, i.e., their CSU degrees.*

Therefore, the direct, annual spending impact of the CSU and the enhanced earnings of its graduates exceed \$32 billion. However, just like the direct expenditures by the CSU system, the enhanced earning power of CSU graduates has indirect and induced effects on spending, jobs, and taxation.

Combined, the total annual economic impact of CSU-related expenditures, the enhanced earnings of its graduates in the workforce and the ripple effect they both create:

- ▶ **Generates a \$53 billion total annual spending impact in the state**
- ▶ **Supports more than 527,000 jobs in the state, and**
- ▶ **Creates more than \$3.11 billion in tax revenue for the state government and local governments.**

California's Return on Investment in the CSU

The magnitude of CSU's economic impact on California can be compared to the state's annual investment in the CSU system to estimate a "bottom-line" value of the taxpayer's input. In 2002-2003, the state investment in the CSU totaled \$3.09 billion. For every dollar the state invested in the University, the impact of CSU-related

For each dollar annually invested by the state, \$4.41 is generated.

When enhanced earnings by graduates are taken into account, the annual return rises to more than \$17 for each \$1 invested.

expenditures alone created \$4.41 in total spending impact. When the impact of CSU alumni enhanced earnings is included, the ratio rises to more than \$17 in total spending impact for every dollar the state invests in the CSU. In fact, the state and local governments received an estimated \$3.11 billion in state and local taxes from the total economic impact of the university and the added earning power of its graduates currently in the workforce. In other words, state and local governments actually got back more in taxes than the annual state investment in the CSU.

An impact like this—a non-profit university and its graduates in the workforce generating an annual tax impact for California that is greater than the state’s annual investment—is a testament to the critical role of the CSU’s core mission—providing a quality, affordable university education for California’s economy and its future.

Jobs and Economic Vitality

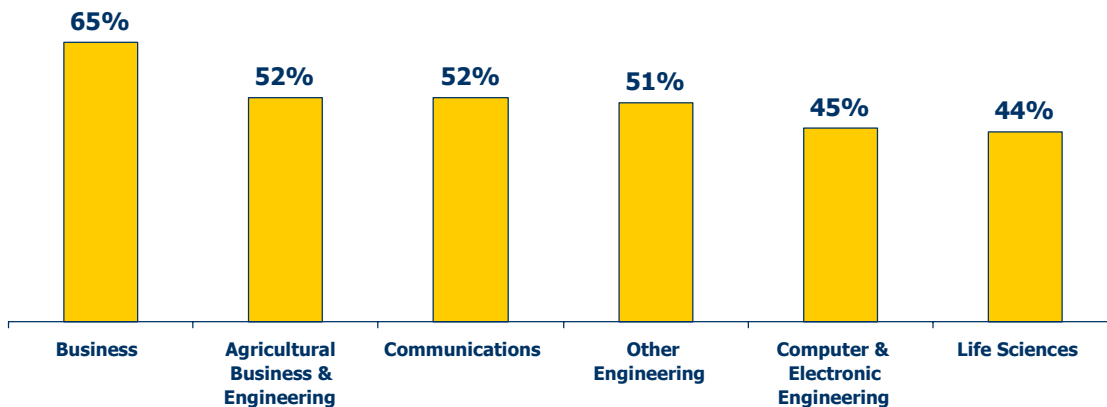
As previously noted, California’s economy depends on the global competitiveness of a distinct set of industries. This analysis identified nine such industries based on their high concentration of employment in California relative to the entire United States:

- ▶ Electronics & Information Technology
- ▶ Media & Cultural Industries
- ▶ Agriculture, Food & Wine
- ▶ Life Sciences
- ▶ Tourism
- ▶ Engineering Services
- ▶ Apparel
- ▶ Aerospace
- ▶ Transportation Services

All of these industries have distinct human resource needs for specific professional occupations. For example, computer scientists, engineers, accountants, business managers, biologists and artists are all needed to support the work of these industries. Some of these industries, such as electronics and information technology, media & cultural industries, life sciences, engineering services, and aerospace, are likely to remain competitive in California *only* if they can get the labor they need.

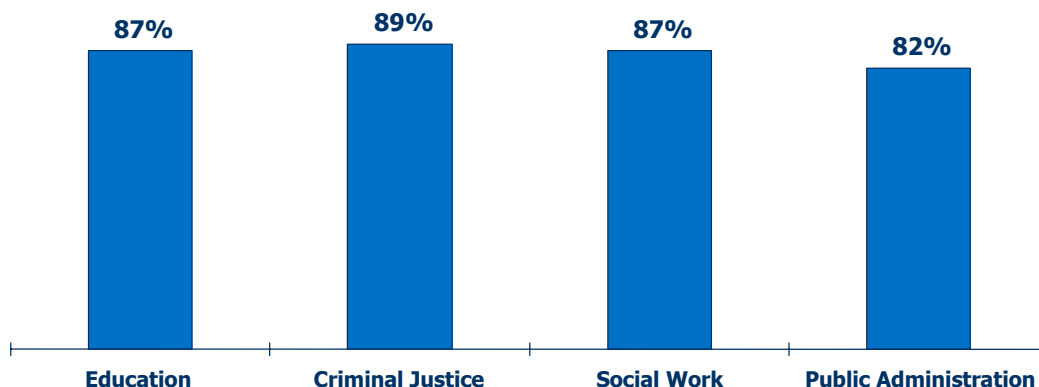
The following chart provides a sampling of the central role played by the CSU in fulfilling the vital workforce needs in key industries in the state. *The CSU meets the need of these industries for well-educated workers by graduating more people in fields related to these industries than the University of California and all of the private universities in the state combined.*

**CSU Bachelor's Degrees as Percent of All Public and Private University
Bachelor's Degrees Awarded in California, Critical Fields 2001-2002**



But the CSU's strategic importance to California's workforce is not limited to supplying California's leading for-profit industries with the professional workers they need. The CSU is an even more important producer of workers for critical occupations in the public and non-profit sector, from education and social work to public administration and criminal justice.

**CSU Bachelor's Degrees as Percent of All Public and Private University
Bachelor's Degrees Awarded in California, Service Fields 2001-2002**



In addition to its state-supported baccalaureate, post-baccalaureate and master's degree programs, the CSU provides a wide range of extended educational programs and workshops for professionals, educators, researchers, youth and adults in the surrounding communities through its Extended University (EU). In fiscal year 2002-2003, 291,500 registrants participated in more than 20,000 Extended University courses. Often working directly with employers, the CSU-EU designs special seminars, training programs, certificate programs and in some cases degree programs for a wide variety of professionals—to keep skills up-to-date with changing needs.

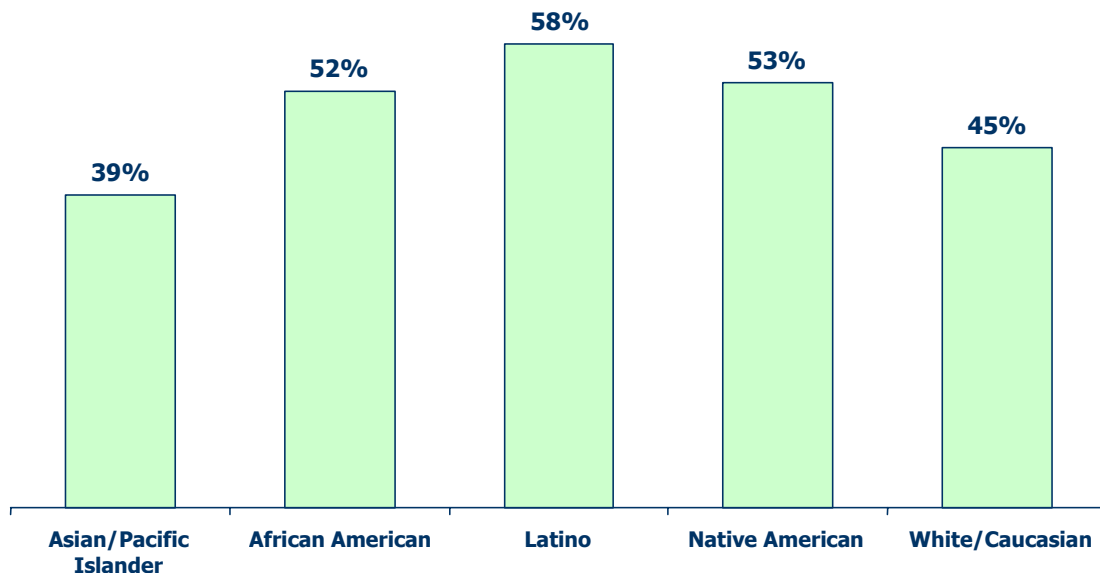
A Gateway to Prosperity for a Diverse Population

The CSU has an impact on California that is even more profound and far-reaching than what is revealed in the statistics provided in the previous sections.

California's population is changing and it is critical to the state's future that its tradition of quality, affordable higher education remains in place for the changing demographic going forward. The university's enrollment of Latino students has more than tripled since 1986, African-American enrollment has more than doubled, and Asian-American enrollment has increased by more than 40%.

As of 2001-2002, 58% of *all* bachelor's degrees granted to Latinos in California were CSU degrees. The numbers for other ethnic groups in the state were similar.

CSU Share of All Public and Private University Bachelor Degree Recipients in California, by Ethnicity, 2001-2002



An amazing array of CSU graduates populate every important field in California and speak proudly of how their educational experience at CSU expanded their horizons and put their lives on a different path. Similarly, executives in California's public and private sector organizations speak glowingly of the quality and job-readiness of CSU alumni. On a personal level, university graduates are likely to have a broader understanding of the world, are more likely to vote and participate in civil society and tend to be healthier and live longer. They are also more likely to instill in their children the value of education. Beyond economics and workforce needs, therefore, the CSU's ability to transform the lives of Californians is a critical dimension of its impact on the state.

A Partner in California Innovation

California's knowledge-based economy runs on innovative solutions as well as on university graduates. CSU campuses are complementing their traditional focus on education by increasingly attracting research investment. The impact of this research ranges from new start-up companies stemming from faculty-performed, applied research, to companies grown, assisted, or incubated through research partnerships with the university.

As the volume and quality of research grows, CSU campuses are also developing their own ways of bringing the new ideas, innovations, and solutions of CSU faculty to the economy by working closely with industries and other groups in their communities. In the process, the CSU is creating a distinctly new economic impact—one not based simply on the number of educated graduates or the amount of CSU expenditures, but on the quality and effectiveness of ideas developed by the CSU faculty and students in their research endeavors. The applied research performed by faculty and students also helps to ensure that educational programs of the university are current and relevant and that students are as prepared as they can be when they leave the university and enter the job market.

Four areas of research-related activity stand out:

1. **Applied Research:** CSU faculty members and their students are carrying out scientific research to address real and current challenges facing California's industries. The amount of external funding is rising rapidly, adding a new dimension to education that helps fuel California's knowledge-based economy.
2. **Technology Institutes and Centers:** New, dedicated research organizations are being established within and across CSU campuses, focusing on themes of strategic importance to California. These institutes and centers are important ways that CSU campuses connect to the industries that hire CSU graduates and benefit from CSU research.
3. **Entrepreneurship and Commercialization:** CSU faculty and facilities are managing programs and services to help the risk-taking entrepreneurs who continually renew California's knowledge-based economy. This activity applies CSU education and related business services to both students—as future entrepreneurs—and small businesses.
4. **Technology Parks:** The CSU's impact on the California economy is being expanded through the development of research and technology parks that bring industry closer to campuses. These new partnerships are serving as a bridge between campuses and the private sector, creating new sources of competitive advantage for California's knowledge-based industries.

CSU and California's Quality of Life

The CSU has a deep commitment to enriching the real life experiences of its students and the quality of life of the surrounding communities and regions. As an integral partner in local communities across the state, CSU campuses offer their students and their surrounding communities the benefit of an outstanding spectrum of amenities, services and campus facilities—options that would not be available if the university was not located in close proximity to the citizens of the area.

Community service is one of the many ways that the CSU has a profound impact on California society. The CSU has a distinguished track record in serving the communities, and is a national leader in service learning initiatives. CSU students contribute 33 million hours a year to activities that are responsive to community needs. As they do, they develop deep, life-long values for service and leadership. In addition to students who volunteer through classes, scholarship programs and projects, many others serve the community through student-run organizations and numerous civic awareness events.

Beyond reaching out to thousands in the community through community service and civic engagement activities, the CSU offers a multitude of arts, multicultural, sporting and recreational activities on campus. From field trips for elementary school students to community festivals, more than 2 million visitors and tourists flock to CSU campuses every year to attend various university and non-university sponsored events and programs. For some communities in the state, the local CSU campus is the main source of social and cultural enrichment opportunities. Community groups also make extensive use of campus facilities and venues for various events, meetings, and recreational needs.

As a truly public educational institution, the CSU is also committed to meeting the life-long learning, and cultural needs and interests of all Californians. The university provides unparalleled access to high-quality information and educational resources and services such as libraries, special collections, information technology and digital services. Additionally, the CSU delivers a number of highly rated media programs— radio and local cable television—of listening and viewing interest to the public.

The CSU's partnership with California's communities goes beyond its traditional commitment to providing an affordable, high-quality university education. The CSU is an intrinsic part of the rich mixture of cultural, recreational, and learning resources that makes California such a uniquely livable state.

The CSU is Working for California

The state of California and its citizens, individually and collectively, benefit in countless ways from the state's commitment to and investment in the California State University. On the strictly economic level, the results are compelling. The annual fiscal impact of CSU-related expenditures and CSU alumni exceeds the state's annual investment in the university.

But this study also demonstrates that the benefits of the CSU go beyond the economic and easily quantifiable. The CSU is maintaining California's historic commitment to economic opportunity by providing a quality, affordable university education to a diverse new generation of Californians.

The CSU is, at the same time, meeting the preparation needs of California's rapidly changing, leading-edge industries. Its expanding research is complementing and stimulating its educational mission, while providing new solutions for and new forms of partnership with industry. The CSU is also complementing the recreational and cultural amenities in California's communities, with its unique offerings spanning the arts, lectures, sports, and media.

In all of these ways, the California State University is fulfilling its strategic role at the center of California's knowledge-based economy and in so doing, helping to ensure a new generation of prosperity for all of California.