

California At The Crossroads



*Investing
in Higher
Education for
California's
Future*



Fiscal Resources Task Force
California Education Roundtable

The California Education Roundtable

Richard C. Atkinson
President
The University of California

Delaine Eastin
Superintendent of Public Instruction
California Department of Education

Warren H. Fox
Executive Director
California Postsecondary
Education Commission

Janet L. Holmgren
President, Mills College
Chair
Association of Independent California
Colleges and Universities

Thomas Nussbaum
Chancellor
California Community Colleges

Charles Reed
Chancellor
The California State University

Letter from the Chairman

Members of the California Education Roundtable:

I am pleased to submit for your consideration the report from the Fiscal Resources Task Force entitled, "California at the Crossroads: Investing in Higher Education for California's Future." This report highlights the critical contributions that higher education has made to California's prosperity and, most importantly the essential role it must play in our new information age economy.

This report also recognizes the fundamental trends which are reshaping our state demographics, and identifies traditional weaknesses in higher education participation rates. These factors become vitally important as we seek to provide our students with the needed skills of our emerging economy, and work to avoid the growing disparities that may develop should these trends continue.

All of us support a strong and vibrant California that affords everyone the opportunity to reap the rewards of hard work, innovation, and creativity. If we make the critical investment in higher education today, we can continue to protect the promise made to Californians years ago; the promise that a superb system of higher education can serve as a key to future prosperity for individuals and our society.

With agreement from the Roundtable, this report may serve as the focal point for bringing political, community, and business leaders together with the common goal of fulfilling that promise, by investing in higher education for California's future.

Sincerely,



TED SAENGER
Chairman of the Fiscal Resources Task Force
California Education Roundtable



Table of Contents

Executive Summary	3
I The Promise of Higher Education: The Master Plan for Higher Education	5
II Return on Investment	7
III California's New Economy	8
IV The Changing Face of California	11
V Challenges Facing Higher Education	13
VI Strategies for the Future of Higher Education	16
Summary	20



Executive Summary

Thirty-eight years ago, California adopted the Master Plan for Higher Education in order to assure the accessibility and quality of higher education within the State. That Plan established widespread expectations for an affordable, high-quality education, which would allow social mobility, citizen contributions to our social and economic development, and a highly educated workforce. During the intervening years, California's population has doubled and become far more ethnically diverse. Service jobs are replacing industrial jobs and often require a college degree. The State has endured a serious recession with significant economic shocks that are only recently being overcome. The state's financial support for public higher education institutions and student financial aid has been inconsistent, resulting in rapidly escalating student fees to ensure necessary funding. Technological advances have created new opportunities for education but not without enormous costs. In addition, between 1993 and 2005, the number of students seeking entry to public colleges and universities within the State is expected to increase by over 24 percent.

We have all seen the impact that education can have on increasing prosperity and opportunities for the state's citizens. In order to ensure that all members of our society continue to have the opportunity to obtain needed education, political and business leaders, the state's colleges and universities, and the citizens of California must commit to a renewed investment and further innovations in higher education.



Strategies for the Future of Higher Education

Higher Education's Commitment to a Growing California Economy

- Develop the workforce necessary to accommodate continued economic growth;
- Meet measurable goals in areas such as enrollment, student achievement, and quality of teaching, and clearly communicate those results to the citizens; and
- Improve and measure productivity in student retention, graduation rates, time-to-degree, cost control, and faculty training.

A Commitment for State Financial Support

Building on the successes of the existing "Compact with Higher Education," a new agreement should be forged consistent with the long-term benefits of investing in higher education. An initial down payment on this investment should be made on the following principles:

- Obtain a commitment for General Fund increases of four percent annually for CSU and UC over the next four years, beginning in 1999-2000;
- Consistent with demographic projections of 2% to 3% annual enrollment growth and the commitment of the segments of higher education, provide full funding for increased enrollment at UC and CSU based upon the agreed-upon marginal cost, in addition to the four percent increase in General Fund support;
- Provide support for the community colleges for both cost increases and enrollment growth (projected at 3% annually) funded through their share of the Proposition 98 revenues; and
- Provide general obligation bond capital funding at \$750 million per year divided equally between community colleges, CSU, and UC.

Establish Predictable Fees and Financial Aid Policies

- Adopt a fee policy that provides for fees to grow at a rate equivalent to the percentage increase in the state's per capita personal income. The Legislature and the Governor may choose in any year to fund the equivalent of the fee increase with General Fund resources consistent with their action for fiscal year 1999-2000;
- Maintain the existing policy which directs a portion of the increased fee revenue to financial aid;
- Establish a commitment to financial aid policies that ensures both choice and access for capable students in public and private institutions; and
- Commit to growth in financial aid at a rate proportionate to the increases in the costs of education which must be shouldered by students and their families.

Increase the Accountability of the Colleges and Universities

- Commit to improved access and quality of instruction through cost-effective innovations and improved productivity;
- Assure that the institutions educate their share of new students by remaining focused on their respective missions and retaining an appropriate balance between their functional responsibilities;
- Train additional qualified K-12 teachers and increase the number of graduates in business, sciences, math, and engineering to meet the needs of our technology-based economy;
- Increase availability of classes to improve time-to-degree for students;

- Expand current efforts to develop additional joint academic degree programs;
- Develop a collaboration between the institutions that assures the transferability of units and sharing of infrastructure and faculty; and

- Contain the rising costs of higher education by improved management, sharing of resources, and more effective planning.

Implement Innovative Approaches to Restructuring Higher Education

- Use technology to achieve long-term efficiencies;
- Develop new entrepreneurial approaches to managing the institutions and resources;
- Provide competitive faculty salaries with an emphasis on rewarding outstanding faculty;
- Expand student preparation and outreach programs while providing clearer communication of course work necessary for graduation; and
- Use public-private partnerships to further institutional goals.

Strengthen Collaborations with K-12 Education

- Continue implementation of K-12 school reform by setting and enforcing high goals for academic achievement and through college admission requirements that support high school graduation standards;
- Strengthen the priority given to new teacher preparation in order to support class-size reduction initiatives;
- Commit to higher education's participation in community-school partnerships to serve the needs of low income, at-risk students; and
- Identify and communicate best practice models for school improvement, teacher education programs, and community/higher education/K-12 partnerships.

Build Relationships with the Private Sector

- Work more closely with business leaders to define the educational requirements of the labor force of the 21st century;
- Increase efforts to obtain private support and mission-related sponsored research; and
- Develop focused training programs in businesses that complement the education provided by higher education institutions.



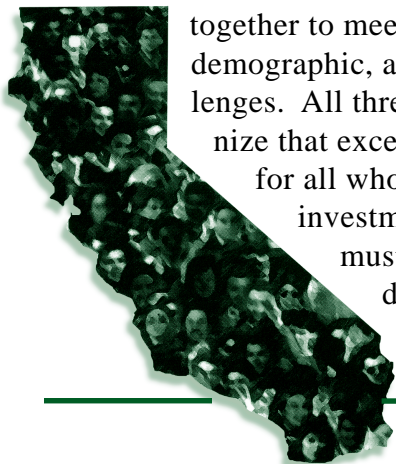
California at the Crossroads

Investing in Higher Education for California's Future

From the earliest days of California history, this State has represented a special and unique opportunity for those who ventured here. Built on a diverse population, California has always promised its people rewards for hard work and innovation. Education has often defined the promise of these rewards, and in the past half century, higher education has been especially crucial for the promise. For persons with talent and desire, California has provided affordable access to higher education at institutions of exceptional quality.

Today, California stands at the crossroads of its future. We have entered a different era. A new California is emerging: one that is both more diverse and more populous than any other state in the nation. Moreover, California's economy, still strong in most traditional areas, has become a knowledge-based economy with astonishing growth in such fields as high technology, entertainment and the arts, international trade, finance, medical and scientific research, and textiles. These activities demand a highly educated labor force.

To develop the human resources for the new California, all parties will need to forge a new partnership. Political and business leaders, the state's colleges and universities, and the citizens of California will need to work together to meet our economic, demographic, and budgetary challenges. All three entities must recognize that excellent higher education for all who seek it is a critical investment that California must make in the coming decades.



California's institutions of higher education, which still rank among the best in the nation, require a renewed public commitment. The state's recent experiences of unstable financing and a reduction in the number of students in higher education have pointed to the need for a longer-term planning and funding policy and a renewed focus and investment in California's institutions of higher education. Concurrently, changes must be made in education at all levels, from K-12 through institutions of higher education, if California is to meet the challenges that face it and fulfill its promise to our citizens.



The Promise of Higher Education: The Master Plan for Higher Education

Historically, Californians have had a belief in higher education. Founded in 1851, the first higher education institutions in California were both private: the University of Santa Clara and the University of the Pacific. In 1857, the first public school, San Jose Normal School was established. Since that time, California has provided substantial support for both public and private institutions of higher education.

The University of California was established in 1868 and given special status in the State Constitution in 1879. By 1907, what was to evolve into an extensive system of two-year community colleges was authorized by legislation allowing school districts to offer "grades thirteen and fourteen." Additional legislation in 1935 renamed a handful of "normal schools" (teacher education colleges) as State Colleges while providing authority for these institutions to grant baccalaureate degrees in the liberal arts fields.

California's "modern" higher education system was influenced by the now classic 1960 document, *Master Plan for Higher Education*. The result of a unique set of demographic, educational, and political forces, the Master Plan was intended to examine the needs and ambitions of higher education, including recommendations on structure, function, and governance. The Master Plan established widespread expectations for higher education in California: social mobility, affordability, high quality instruction, an educated workforce, contribution to our social and economic development, and cooperation among institutions to serve students transferring among the institutions of higher education.

Key Elements of the Master Plan

The Master Plan, as adopted in 1960, has led to several key policies that have become entitlements in the minds of most Californians:

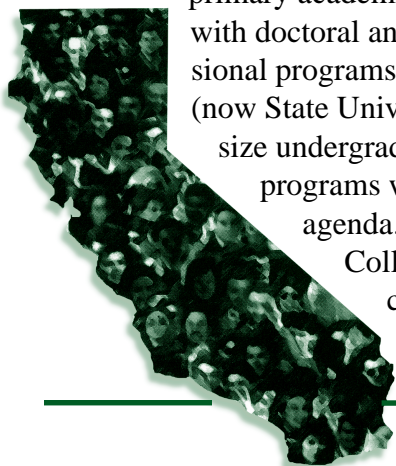
- First, access for all California residents to a college and university system anchored by an "open access" two-year college system that provides all residents the opportunity to enroll in or transfer to a four-year baccalaureate institution.
- Second, no tuition will be imposed on California residents although students are expected to contribute to the cost of their education by paying low to moderate fees.
- Third, distinctions are established among the three public segments of higher education. The University of California is to be the primary academic research institution with doctoral and advanced professional programs. The State Colleges (now State Universities) are to emphasize undergraduate and master's level programs with a limited research agenda. The Community Colleges are to offer courses for transfer to four-year

institutions, as well as vocational and technical education. The Community Colleges are to provide open access, while the universities will have more restrictive admission criteria.

- Fourth, public institutions will receive line-item budgetary support while the state's private institutions will receive support only indirectly, through a program of student financial aid that will be used to promote choice in attendance at quality public or private institutions.

The Master Plan has been reviewed several times since its adoption, and these repeated reviews have reaffirmed that its basic structure and promise of access, quality, and affordability remain valid. One of the most recent reaffirmations of the Master Plan's commitment to affordable quality higher education was the four-year "Compact with Higher Education" negotiated with Governor Wilson in 1995. This compact, which extends through the 1998-99 fiscal year, establishes the framework for budgetary stability by providing commitments for:

- General Fund increases averaging four percent per year along with ten percent annual fee increases, or equivalent additional General Fund support, and funding for debt service;
- Enrollment growth averaging one percent annually;
- Increased portability and transferability of classes between the University of California (UC), California State University (CSU), and the Community Colleges;
- Productivity increases and efficiencies to produce new savings totaling \$20 million annually from UC and CSU;
- Priority on reduced student time-to-degree and on restoring faculty salaries to competitive levels; and



- \$150 million per year in capital outlay funding for each system.

The enduring strength of the Master Plan, and the continuing policy challenge, has been the simple and compelling tenets of affordable access to high quality and diverse institutions, and the opportunity to choose among them. The promise of the Master Plan set the tone for California economically and socially in 1960. That promise is as vital to our future today as it was when first expressed nearly 40 years ago.



Return on Investment

The payoff for California's investment in higher education was clearly demonstrated in the state's economic comeback in the last four years. As depicted in the chart below, California lost over 700,000 jobs from 1990 to 1993, driven by an international recession and more critically, a significant reduction in defense spending. In fact,

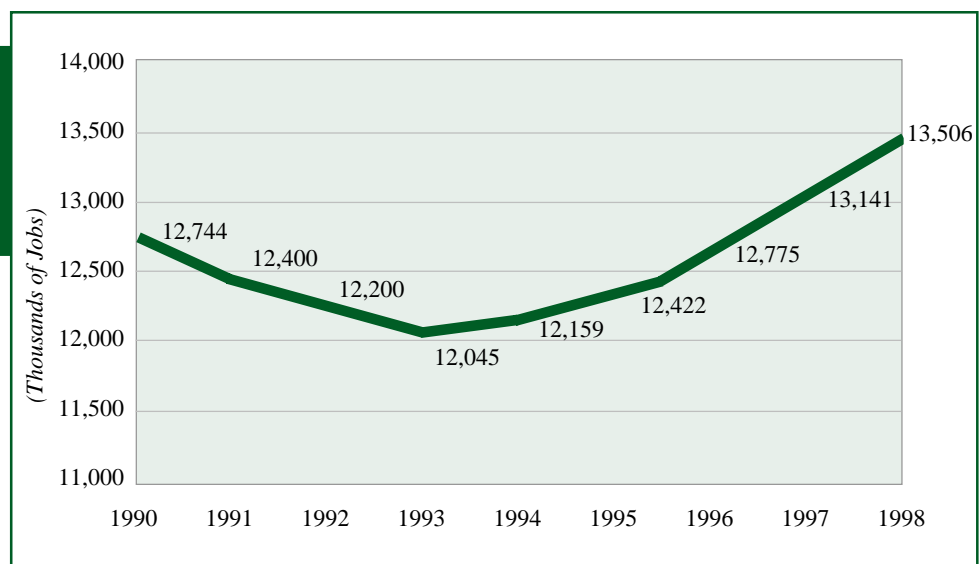
defense spending reductions accounted for an estimated 66% of the job losses occurring in the State in the early 1990s.

The more important feature of this chart is California's comeback since 1993, with an explosion of over one million new jobs through 1997. Even more significantly, it must be noted that these are new jobs in new sectors of the economy, not merely the return of the same old jobs. To illustrate, defense spending as a percent of California GDP has declined from 9% to 3.5% in the past ten years. Thus, California has had to replace jobs lost forever with new jobs in new areas of the economy.

California has accomplished its economic resurgence with the creation of new jobs driven by sectors such as high-technology, motion pictures, business services, and education. In particular, as part of the growth in business services, the software industry alone has added over 100,000 jobs. As depicted in the chart on page 8, this growth has been in diverse areas which will serve California well into the future.

California Employment Trends

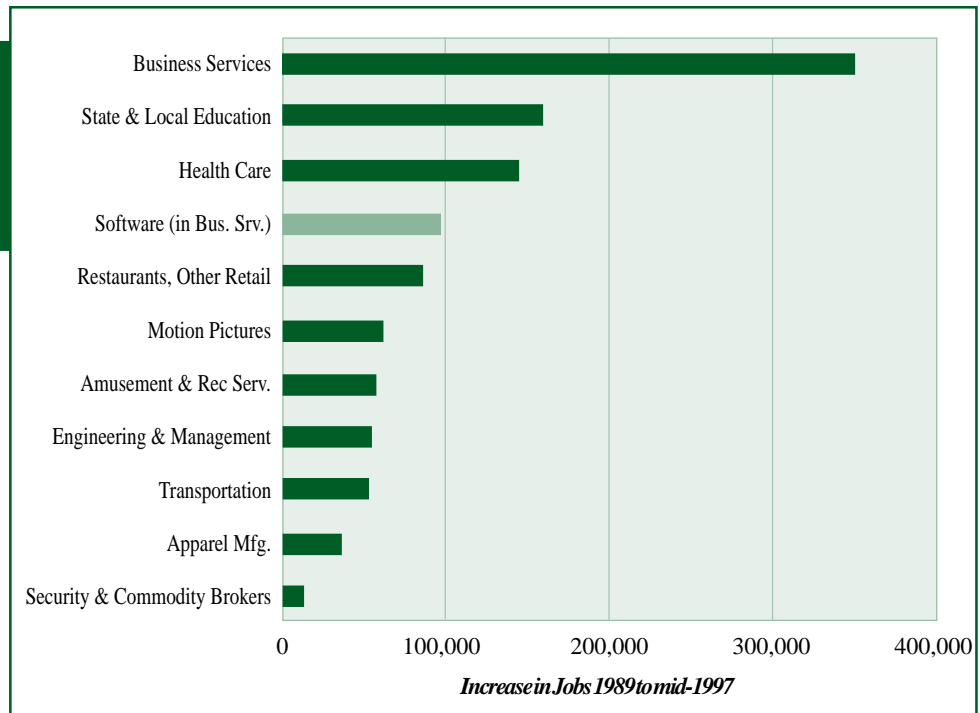
Non-Farm Employment
1990 - 1998



Source: California Department of Finance

California Growth Industries

1989-1997



Source: California Department of Finance

All of these employment fields are developed and nurtured through the commitment that higher education has historically received in California. Although not all of these new jobs require advanced degrees in higher education, we must recognize the impact that each high paying position has in creating new jobs for others. These additional positions requiring technical or service skills generated by the economic engine of California expand the true sense of opportunity throughout the entire population.

This true sense of opportunity, and its value to our society, is difficult to measure. However, a measure of success this opportunity has provided is evident in the increase of 135,000 women enrolled in undergraduate programs from 1984 to 1996. This has led to \$54 billion in increased annual sales for women-owned firms, an increase of 175%, in the five years from 1987 to 1992.



It remains critical that all Californians have the opportunity to realize their potential as

California blossoms as a multicultural society with the gifts and challenges that this diversity brings. Higher education fosters the informed and responsible citizenship necessary to form a cooperative multicultural society.



California's New Economy

After surviving the longest downturn since the Great Depression, the Golden State's remarkable recovery has set the foundation for a new economy. We have transitioned from a defense and aerospace-based economy to one of the leading-edge information and knowledge-based economies of the world. Historically, California's economic recoveries have depended on the strength of defense spending and the revival of the construction industry. California's emerging economy is now rooted in the growth of the knowledge and information-based economy and our rapidly expanding role as the largest exporting state in the nation.

California is now ahead of the nation in job as well as income growth. We also expect the State to rank first in high-tech employment for the rest of the 1990s and beyond. Nearly 700,000 workers in California now hold high-tech jobs, and that is expected to grow to nearly 780,000 by the year 2000. The businesses that are driving the seventh largest economy in the world include computer hardware and software, telecommunications, multimedia, movie and television production, biosciences, environmental technology, and business services. These are the primary industries of the “New Economy” - an economy based on information, knowledge, and ideas.

As seen in the following chart, the anticipated areas of growth in the workforce clearly indicate that business services, retail trade, engineering, and management consulting jobs will account for much of the expected employment growth well into the next century. These are positions that represent the cornerstone of the information and knowledge-based new economy.

California has been leading the nation in the transformation to this new economy with:

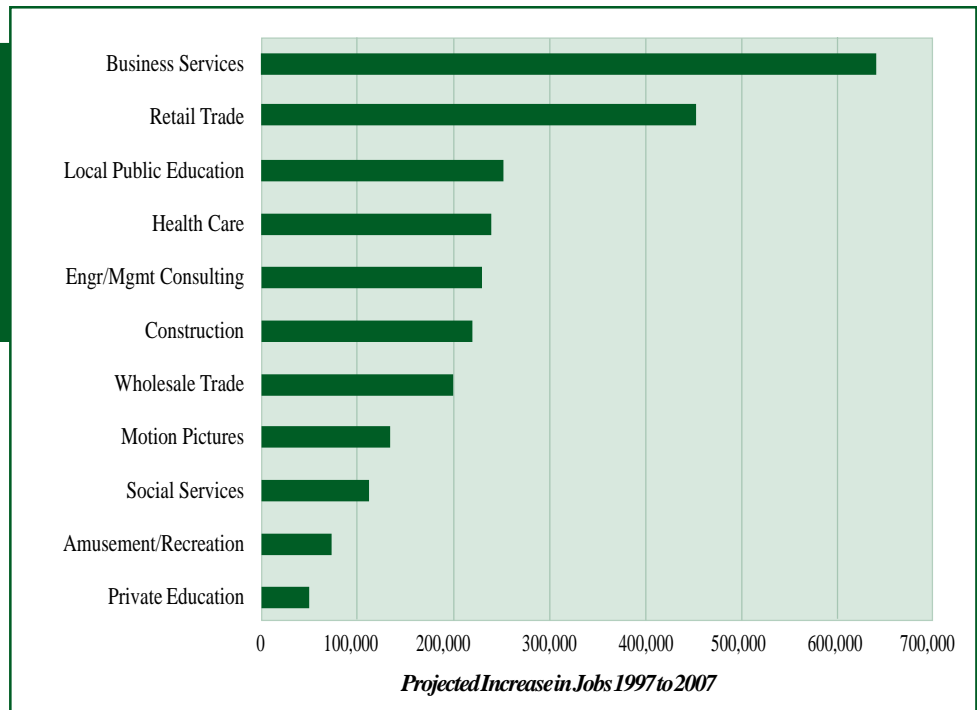
- More major research centers than any other state;
- More university programs ranked in the top 10 in the nation than any other state; and
- Nearly half of the 100 fastest growing firms in the nation.

California’s economy has been well served by having a highly educated citizenry; more than 54% of Californians over the age of 24 have some college education, and over 23% have at least a four-year degree. Both of these figures exceed the national averages which are 45% with some college education and 20% with four-year degrees or more.

At the same time, however, we are beginning to see cracks in the building blocks of California’s new economy. The key concern for our high technology industries is the availability of a workforce to meet employment demands. A January 1998 study, prepared by Information Technology Association of America (ITAA), reported a nationwide core of information technol-

California Industries with the Largest Projected Job Growth

Number of Jobs
1997-2007



Source: California Department of Finance

ogy employees totaling 3,354,000 in companies with employees of 100 or more. The same report stated that 346,000, or more than 10%, of these positions are currently unfilled. As a leader in technology employment, clearly California has a substantial share of this unmet demand.

Another report issued by ITAA in February 1997, stated that “American universities are not graduating students in adequate numbers...to fill the growing demands of American companies.” In fact, the report states that between 1986 and 1994, the number of degrees in computer science awarded by American universities fell from 42,195 to 24,200. Over 82% of the companies surveyed indicated that most or all of their information technology positions required a bachelor’s degree.

During a similar period from fiscal year 1987-88 to 1996-97, data from the California Postsecondary Education Commission (CPEC) shows that the number of degrees in computer sciences awarded by California colleges and universities fell from 4,792 to 4,332, and math degrees awarded fell from 2,318 to 2,043.

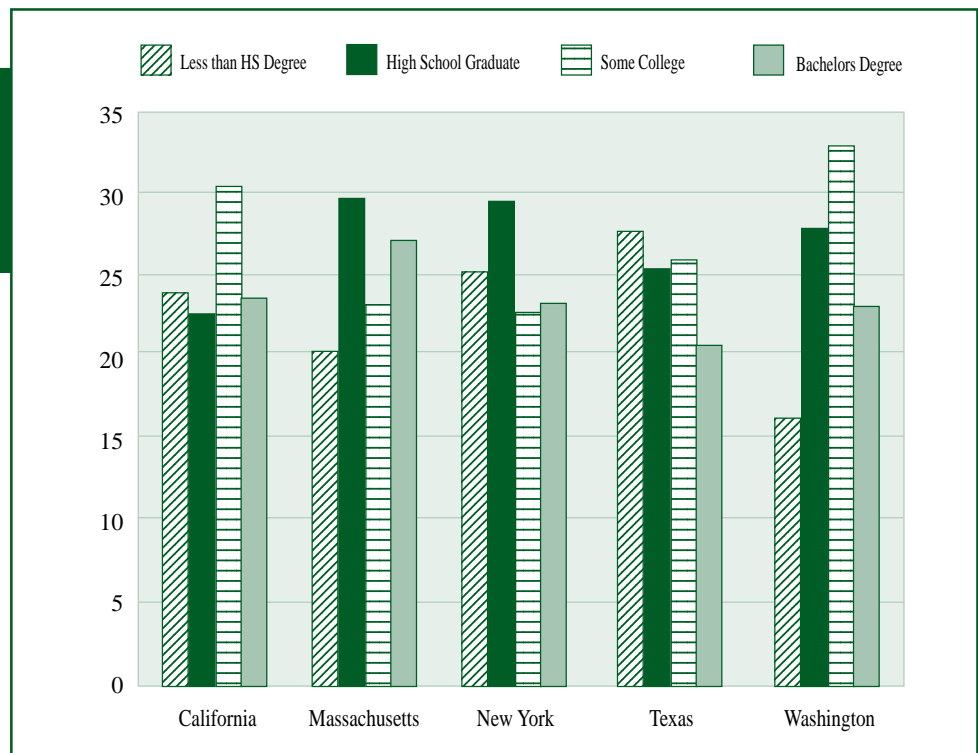
As for the future, the Bureau of Labor Statistics recently reported that more than one million new jobs in computer software should be created between 1996 and 2006. This represents 6% of all new jobs that are projected to be created during this period.

While California is leading the nation in overall job and economic growth and in the high-tech sectors characteristic of the new economy, its focus in preparing the workforce for our emerging economy warrants greater attention. The following chart shows education attainment for California and our key competitive states. Based on data from the most recently available census, 1990, California was ranked second among those states in the percentage of residents having college degrees.

Higher education is critical to matching the explosive growth of our high technology industries with a prepared workforce. Only through higher education will California be able to maintain its edge in technology and its economic momentum against our competition in the United States and abroad.

Education Attainment of Five Key States

1990
(Percentage)



Source: U.S. Department of Commerce
Bureau of Census, June 1993

There is no question that a key factor driving California's economic engine, in addition to its business and regulatory climate and quality of life factors, is the availability of a highly skilled, educated, and adaptable workforce. This is fundamental to California's economic resurgence as well as maintaining its competitive edge and prosperity. Continued prosperity in our State requires that we sustain and enhance the schools, colleges, and universities that are the fundamental infrastructure of the information and knowledge-based economy of the future.

IV

The Changing Face of California

In striving to achieve the Master Plan's promise for all Californians, we must recognize that the new California will be built upon a multi-ethnic foundation with each ethnic group having strong cultural and societal traditions. We also must recognize that there exist dramatic differences in the participation rates of the major ethnic groups in higher education. Whites and Asians/Pacific Islanders have tended to be strong consumers of higher education while Hispanics and African-

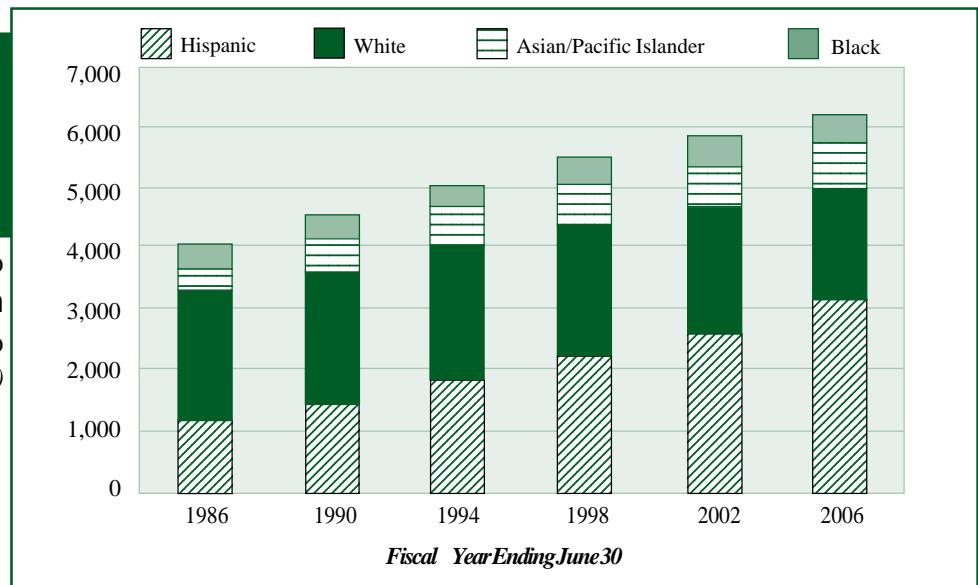
Americans historically have been far less likely to participate in higher education.

Based on California Postsecondary Education Commission (CPEC) projections, between the years 1993 and 2005, there will be a 24.3% increase in enrollment demand for California public colleges and universities. This 455,000 student "Tidal Wave II" of growth is all the more dramatic when compared to the U.S. Department of Education prediction of a 9% increase in higher education enrollment nationally during the same period. While CPEC estimates there is currently capacity for about 160,000 additional students in California's public and private colleges and universities, capacity is 295,000 short of estimated enrollment demand by the year 2005.

In addition to the unprecedented demand for entrance into California's colleges and universities, there also will be significant changes in the ethnicity of the students graduating from high schools. The future impact of these differences can be seen in the following graph which compares K-12 enrollment ethnicity between 1985-86 and 2005-06. The K-12 enrollment percentage of White and Asian/Pacific Islander students is expected to decline from 61.5% to 41.4%. The Hispanic and African-American enrollment percentage is expected to increase from 38.5% to 58.6%.

K-12 Public School Enrollment by Ethnicity

1985-86 through 2005-06
(In Thousands)



Source: California Department of Finance Demographic Research Unit, October 1996

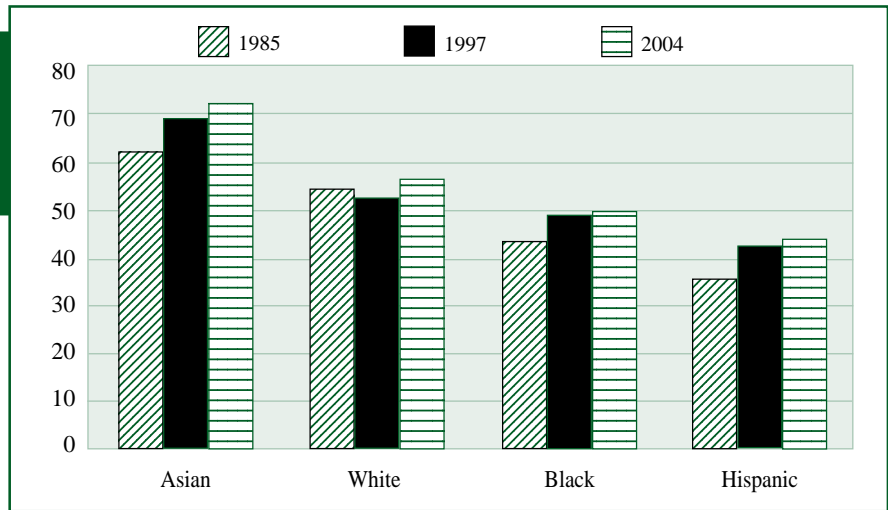
Higher Education Participation Rate By Ethnic Group

1985 - 2004
(Percentage)

Even as the percentage of Hispanic and African-American students grows in K-12 classrooms, their rate of participation in higher education is projected to remain significantly below that of Whites and Asians.

As shown in the adjacent chart, college-going rates among Hispanics is projected to be 44% in 2004. Similarly, estimated participation rates for African-Americans will be 50% for the same year. By contrast, participation rates in 2004 are forecast to be 73% for Asian/Pacific Islanders and 56% for Whites.

The personal and societal costs of low higher education participation rates are pointed out in a recent report from the RAND Institute. As discussed in its September 1997 report entitled, *Breaking the Social Contract*, RAND found that low levels of education attainment are powerful predictors of welfare dependency, unemployment, and incarceration, all of which are very costly in both human and fiscal resources.

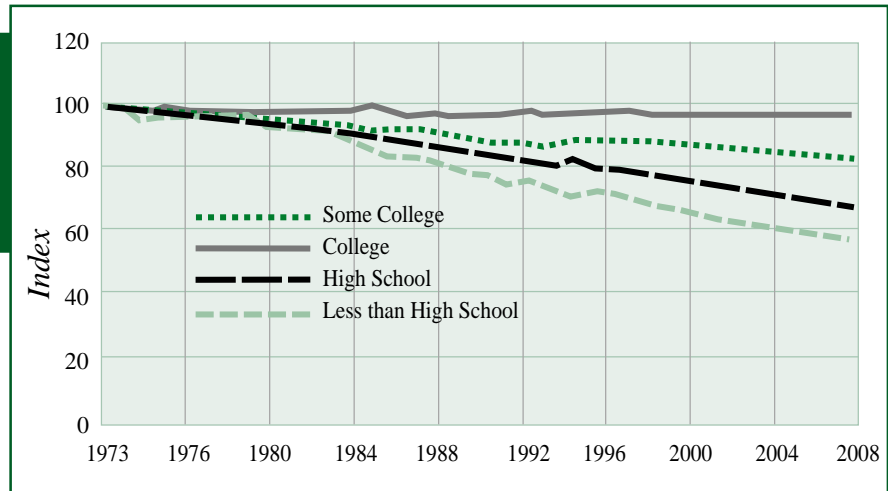


Source: CPEC 1995 Higher Education Projection Series

The facts also are clear relative to the real financial impact that participation in higher education has on earnings. As shown in the following chart, while real mean hourly wages have declined for all educational categories of male workers since 1970, the most dramatic effect has been on those with the least formal education. Only those with college degrees have substantially maintained their earning power.

The projected growth in K-12 enrollment by major ethnic groups, coupled with the differences in potential earnings and the continuing differences in ethnic participation rates in higher education, point to growing disparities in the distribution of

Distribution of Real Mean Hourly Wages For Male Workers by Education Level



Source: *Breaking the Social Contract*
RAND 1997

income and wealth in the State. This will be exacerbated by an economy that places increasing value on knowledge and information. For all these reasons, higher education institutions in California have both the commitment and the opportunity to provide improved access and participation to California's citizens. As the aspirations and capabilities of California's students increase, we must expect and encourage their involvement in higher education.



Challenges Facing Higher Education

Higher education has the potential to address the intellectual and technical requirements of California's information age economy and ensure better opportunities for all Californians. However, higher education now faces a number of challenges that affect California's ability to keep the promises contained in the Master Plan. The state's population has doubled since 1960 and is now more ethnically diverse as California has become the home to more foreign-born

immigrants than any other state. The nature of the State's economy has undergone dramatic and far-reaching changes. The four-year university degree has in many ways replaced the high school diploma as the entry card into productive employment. The service-related jobs that are replacing the industrial jobs of the earlier economy require a level of knowledge and skill that often require a university degree. Indeed, the rapidly changing technological environment of today necessitates a lifelong learning approach to higher education. In order to meet these challenges, the following five key factors must be addressed:

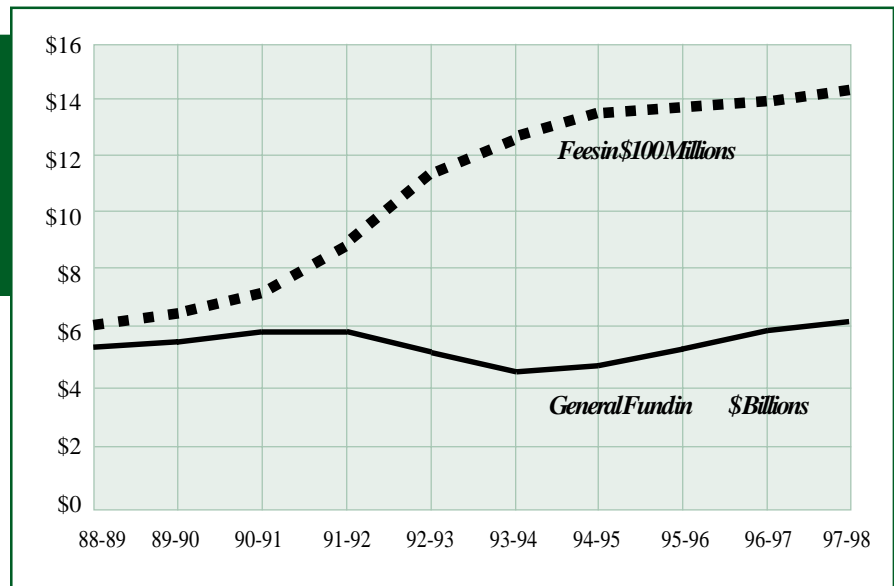
California's Budget Environment

Over the past ten years, California's budget environment has become more complex, with increased competition for limited resources. The State has been through its most severe recession in over half a century, with significant economic shocks that are only now being overcome. For higher education, economic developments of the past decade have resulted in "boom or bust" funding from the State, requiring rapidly escalating student fees to assist in covering the costs of education.

Student Fee Revenues and General Fund Support California Public Higher Education



1988-89 through 1997-98



Source: Governor's Budgets and Legislative Analyst's California Spending Plan, 1997-98

During the recession of the first half of this decade, the competition for scarce public dollars coupled with required expenditures for other mandated programs resulted in a significant demand for public support beyond state government's existing fiscal capacity. As the preceding chart demonstrates, the reductions in state General Fund support for higher education during this period were accompanied by significant increases in student fees. Only in the past three years, under the Compact with Higher Education negotiated by Governor Wilson and honored by the State Legislature, has higher education secured state funding adequate to provide for its most essential requirements of access to quality education without further fee increases.

In order to provide for continuing quality, access, choice, and affordability to higher education, a more stable financing structure is required. Built on the commitments of the Compact, more stable funding has allowed the institutions to plan more effectively, require accountability from their campuses, effect education reforms, and, in general, manage their affairs in a more business-like manner.

The specific results of the Compact have included providing access to 10,000 more students than projected, reduced time-to-degree, improved graduation rates to all time record levels, increased teaching loads for faculty, and annual cost savings through the use of technology and streamlined business practices. This compact of mutual commitment and accountability has worked well for our institutions, our students, and the State.

To build on these successes, the institutions of higher education must continue to demonstrate to state decisionmakers and the public, the economic and intrinsic rewards to the State as a whole of a high quality, affordable, and accessible system of higher education in the competition for state resources.

Higher education institutions also will need, as never before, to

ensure innovation in order to accommodate growth with a more limited range of resources than in the past. To achieve program changes with limited resource growth will require internal reallocations of existing resources together with a more focused capacity to leverage private resources with public revenue.

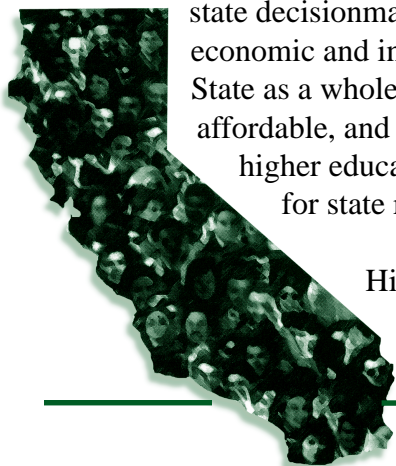
Affordability

In spite of the bargain that higher education in California represents through its relatively low fee structure, fee increases were an apparent factor in declining enrollment during the early 1990s. During the first three years of the Compact with Higher Education, there were no increases in undergraduate general student fees across all segments of the public undergraduate higher education system. As a result, enrollment has begun to rebound to pre-recession levels. In the final year of the Compact, student fees for undergraduate students who are California residents will be reduced by 5%.

As documented by CPEC, public higher education in California is still a "bargain" when compared to comparable public colleges in other states. All three California systems (UC, CSU and Community College) charge undergraduate residents less than comparable colleges in other states. The following table shows the 1998-99 year charges as compared to the 1997-98 average fees of the comparison public colleges.

Average Public Institution College Fees		
	1998-99 California	1997-98 Comparables Average
Community College	\$360	\$1,498
California State University	\$1,868	\$3,493
University of California	\$4,022	\$4,931

Source: CPEC Fact Sheet/97-2/January 1997



In looking to the future, parents and students must plan and be prepared to pay their fair share of the costs of a quality education. This will require students and their families with the financial ability to take the steps necessary to save to meet these costs. For those without necessary resources, financial aid must be available so that capable students are not denied access.

Infrastructure Requirements

In its *1997 Capital Outlay and Infrastructure Report*, the Department of Finance projected an expenditure need of about \$1 billion per year for at least the following ten years to maintain existing infrastructure, accommodate student growth, and undertake necessary renovations for 137 public higher education schools. In February 1998, the UC, CSU, and Community Colleges updated their capital needs for facility maintenance, deferred maintenance, and enrollment growth to \$1.344 billion annually.

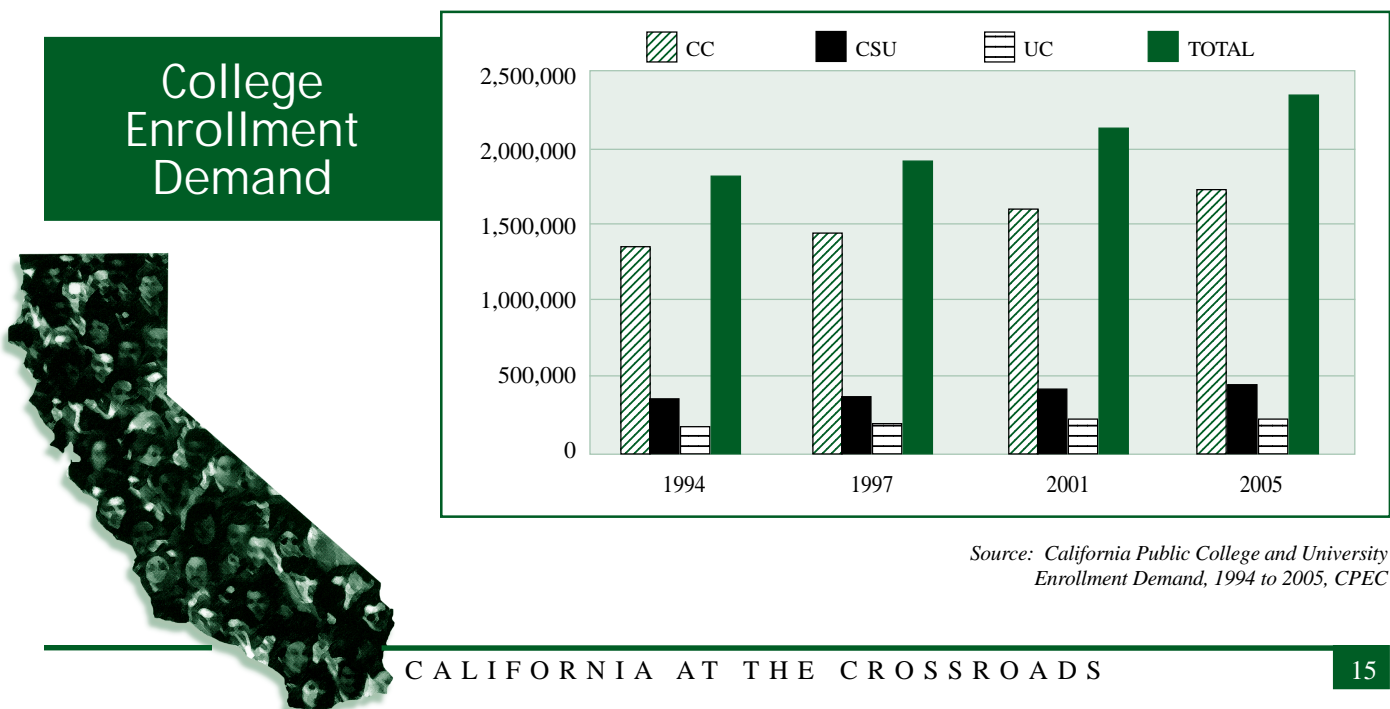
These projected capital requirements are significantly greater than amounts currently being authorized for infrastructure. Meeting the current and projected needs will require a significant financial investment in public higher education combined with a thoughtful use of the capacity of private institutions through financial aid.

The Cost of Technology

Technological advances have created new opportunities for education. A report by the California Education Technology Task Force, entitled *Connect, Compute and Compete*, states that, “Technology has the power to teach, to motivate, to captivate, and to transform an ordinary classroom into a training ground for the next generation of artists, entrepreneurs, and government leaders.” While no doubt true, the costs of equipping classrooms with the appropriate technology, maintaining the equipment, and keeping it updated are enormous. Given these substantial costs, the use of technology requires a sober balancing of the costs and benefits.

Enrollment Demands

The tidal wave of high school graduates over the next decade could negatively impact the already strained higher education system. Between 1993 and 2005, demand for enrollment in California’s public institutions of higher education is projected to grow by 455,000 to a total of 2.21 million, a 24% increase. This represents a growth rate that is two and one-half times the projected rate of growth for the nation as a whole. The following chart depicts the projected growth of each segment of higher education.



This growth will severely strain the existing facilities and staff and serves to highlight the need for long-term planning together with consistent and secure funding sources. California must assess the capacity of both its public and private institutions to focus policies and resources to address our enrollment demands. If California does not invest the necessary resources now to fund this predicted growth, the access to the high-quality education Californians have come to expect may not be assured for the future.

VI

Strategies for the Future of Higher Education

In order to achieve the goals of access to a high quality education and continued improvement in the operations of our higher education institutions, California must commit now to specific state government financial support, keeping education affordable, assuring adequate financial aid, providing for accountability of higher education, developing innovative approaches to education, and expanding business and corporate sector relations.

Higher Education's Commitment to a Growing California Economy

Higher education must demonstrate a renewed commitment to performance and accountability as part of its support for the growing California economy. That commitment includes providing the necessary training and skills for the workforce needed for the growing economy. New ways must be found to show evidence of achievement of education goals in areas including enrollment, workforce preparation, quality of teaching, and student learning. Higher education also must continue to demonstrate measurable progress in meeting goals for productivity,

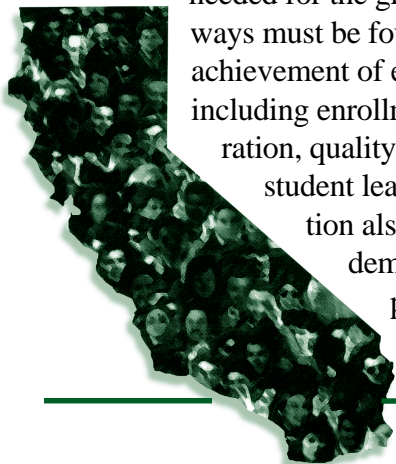
student retention and graduation rates, reduction of time-to-degree, and reinvestment in faculty. To confirm its commitment to the growing California economy, higher education must:

- Focus efforts on developing the necessary workforce to accommodate future economic growth;
- Meet measurable goals in areas such as enrollment, student achievement, and quality of teaching, and clearly communicate those results to the citizens; and
- Improve and measure productivity in student retention, graduation rates, time-to-degree, cost control, and faculty training.

State Financial Commitment

The State of California must assume ultimate responsibility for the financial support of higher education in the State if the promises of the Master Plan are to be achieved. This responsibility involves providing a stable and guaranteed financial base that is adjusted for changes in student enrollment. This financial commitment serves as the foundation upon which academic leadership, business, and students and their families can rationally plan their part in the shared responsibility of funding higher education. While policy leaders may choose to fund higher education through a blend of General Fund, fee revenues, and private support, the total support must be sufficient to meet the fiscal requirements of higher education. An initial down payment is critical to signal the state's commitment to funding quality higher education. Our suggested balance of funding would require the State to commit to:

- Increase General Fund support for UC and CSU education by four percent annually for the four years beginning with fiscal year 1999-2000;
- Consistent with demographic projections of 2% to 3% annual enrollment growth and the commitment of the segments of higher



education, provide full funding for increased enrollment at UC and CSU based upon the agreed upon marginal cost, in addition to the four percent increase in General Fund support;

- Provide support for the community colleges for both cost increases and enrollment growth (projected at 3% annually) funded through their share of the Proposition 98 revenues; and
- Provide general obligation bond capital funding of \$750 million per year divided equally among Community Colleges, CSU, and UC.

Student Fee Policy

Student fee policy should be based on a framework of shared responsibility between students, families, and government support. While the promise of the Master Plan that no tuition will be imposed on California residents has long been broken, the fact remains that higher education in California still is a “bargain.” Fees, charges, and tuition payments imposed on students at California public institutions of higher education remain far below those charged by comparable institutions in virtually every other state. Rather than the mere existence of tuition and fees, the major problem has been the rapid escalation of costs imposed on students and families, resulting in cost uncertainties tied to potential future increases. To combat this uncertainty, state policymakers and institutions of higher education must complement the State’s General Fund commitment with:

- Adoption of a fee policy that provides for fees to grow at a rate equivalent to the percentage increase in the state’s per capita personal income. The Legislature and the Governor may choose in any year to fund the equivalent of the fee increase with General Fund resources consistent with their action for fiscal year 1999-2000;

- Maintain the existing policy which directs a portion of increased fee revenue to financial aid; and
- For those students and families with available resources, increased financial planning for higher education is necessary.

Financial Aid Commitment

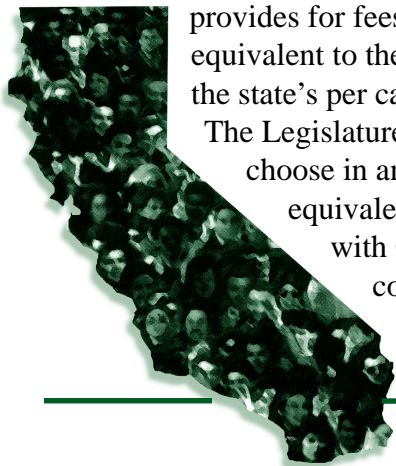
California also must maintain a commitment to student financial aid that allows students and their families the opportunity to choose the public or private institution which best fits with their educational goals and objectives. Indeed, the impending tidal wave of students over the next decade will require that the independent universities and colleges absorb an increased proportion of students to meet the demand. In order to facilitate this, the State must:

- Provide for financial aid policies that assure both choice and access for students in public and private institutions; and
- Commit to growth in financial aid at a rate proportionate to the increase in the costs of education which must be shouldered by students and their families.

Accountability of Higher Education

If the State and the public are to commit to funding higher education, the institutions must improve their accountability. Specifically, accountability must ensure improved access and quality of instruction through cost effective innovations and improved productivity. This improvement can be achieved by the focusing and streamlining of the education process, cooperative use of resources, and containment of the rising costs of higher education.

Refocus the Missions of the Institutions: The distinctions between the systems of higher education identified in the Master Plan need to



be revisited in light of changing circumstances. Specifically, the institutions and state government leaders should:

- Assure that the institutions educate their share of new students by remaining focused on their respective missions and retaining an appropriate balance between their functional responsibilities;
- Continue to reach out to and work with K-12 school administrators and teachers to ensure a high quality academic background for students entering college;
- Maintain the priority at CSU on training additional K-12 teachers as a key factor in restructuring the K-12 system and recognizing the need for lifetime learning to achieve teaching excellence. UC must also expand its current programs devoted to partnerships with schools, teachers, and students;
- Continue the UC commitment to providing undergraduate, graduate, and professional education in an environment where research and graduate education support the undergraduate instruction;
- Place a priority at UC and CSU at the undergraduate and masters levels on producing sufficient numbers of graduates in business, math, sciences, and engineering in order to help meet California's need for a trained workforce in our increasingly technology-based economy. In addition, UC must place a priority at the doctoral level on the sciences and engineering;
- Retain the Community Colleges' focus on preparing students for transfer to four year colleges with an additional priority on providing workforce preparation through vocational and technical education;

- Focus the curriculum and provide classes to ensure that full-time students can graduate in four years or less and work toward improving time-to-degree for other students;
- Create a more seamless higher education structure by improving transfers and better articulating transfer requirements among the higher education institutions; and
- Continue current efforts within UC and CSU to develop more joint academic degree programs.

Cooperate in the Use of Resources:

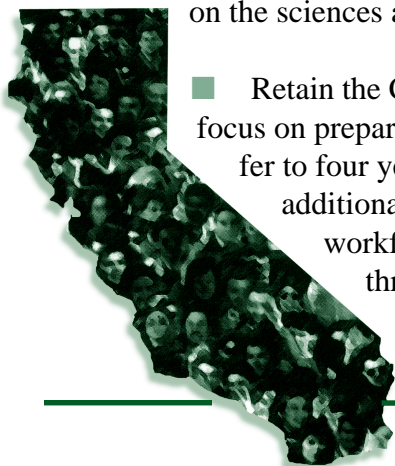
The limitations of space, buildings, equipment, qualified faculty, and capital and operating funding require that the institutions cooperate and share the limited resources. Specifically, the institutions' leaders should:

- Allocate resources in a manner aimed at reducing duplication of programs and non-productive competition between institutions; and
- Lift existing hard lines of demarcation among institutions to ensure adequate opportunities for collaboration and sharing of faculty, staff, instructional resources, and facilities.

Contain the Rising Costs of Higher Education:

The costs of higher education must be contained by:

- Carefully managing resources and sharing them with other institutions;
- Assessing the costs of each activity as part of the decision process;
- Reallocating existing internal resources to highest priorities;
- Eliminating excessive government regulations and fees; and
- Making tough choices regarding curriculum, research and teaching funding, and areas of academic specialization between various institutions.



Innovative Approaches to Education and Management

All participants need to recognize that more extensive use of technology in the educational setting will result in long-term efficiencies. The funds necessary to retain California's leadership in using technology in the classroom represent a significant investment for the institutions. However, the opportunities inherent in distance learning, access to the Internet, and providing the latest technology for both students and faculty warrant substantial financial commitment. The return that technology will yield if it is properly planned and integrated into the systems of instruction is well worth the investment.

Academic leadership must improve the efficiency with which higher education services are provided. Some key strategies which must be employed include:

- Develop new entrepreneurial approaches to managing the institutions and resources of higher education;
- Create partnerships with the private sector for capital investments which reach beyond current auxiliary services;
- Provide competitive faculty salaries to ensure that our institutions retain top talent and reward the most outstanding faculty;
- Reward efficiencies by applying savings to critical needs such as libraries, deferred maintenance, and instructional technology; and
- Expand student preparation and outreach programs while providing clear communication of course work necessary for graduation.

Strengthen Collaborations with K-12 Education

The higher education community must share responsibility with the State and the public for the performance of California's K-12 schools. To maintain excellence in higher

education requires excellence in the K-12 schools. Attention to the quality and performance of the state's K-12 schools is a special priority for the CSU, with its mission in teacher education. Yet the future responsibility of the K-12 schools is a total institutional responsibility which must be broadly shared by all of higher education. To meet this challenge in the future will require:

- Continued implementation of standards-based school reform by setting and enforcing high goals for academic achievement of all students and through college admission requirements that support high school graduation standards;
- Both CSU and UC to strengthen the priority given to new teacher preparation to support class-size reduction initiatives;
- Commitment to higher education's participation in community-school partnerships to serve the needs of low income, at-risk students; and
- Research to identify and communicate best practice models for school improvement, teacher education programs, and community/higher education/K-12 partnerships.

Private Sector Relationships

The higher education community must continue to build relationships with the private sector. Business must be called upon to expand its role in the shared responsibility to assure the appropriate focus and quality of education in California. The focus should be to:

- Work more closely with business leadership to help define the educational requirements of the labor force of the 21st century;
- Search for sponsored research consistent with the mission of the institution;
- Develop focused training programs within companies that complement the education provided by the public and private institutions; and
- Increase efforts to support higher education through private donations.



Summary

It is a time of great change for California, with a complex and culturally diverse society emerging. California is defining the characteristics of the economy of the 21st Century as a knowledge-based economy with astonishing growth in fields requiring a highly educated labor force. Only by providing higher education institutions with a stable financial base, developing a predictable fee and financial aid structure, increasing the account-

ability and cooperation between the systems, allowing the institutions to be innovative and operate more effectively, and forging expanded public/private partnerships, will California assure its citizens that the Master Plan promises of access, choice, quality, and affordability will continue to be achieved. The fulfillment of these promises to our citizens will result in unparalleled prosperity and growth for California's future.

