

The University of California: A Strategic Asset for the State, the Nation, and the World  
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Good afternoon. I appreciate the opportunity to join you today. Conferences such as these are an important means of connecting leaders across the University and cultivating your management skills. I hope that it has been helpful to each of you. Much of the conference has focused on the internal workings of the University. I would like to open the aperture a bit and speak about the University's role in the future of California and why you are crucial to it.

California is at the beginning of a profound social transformation driven by dramatic demographic changes and global economic changes. Higher education, and the University of California in particular, will be key to the successful outcome of this transformation.

By 2025, California's population will differ from the rest of the country in four dramatic ways. First, in the next twenty years, California will experience the largest population increase of any state -- an increase of 57 percent to more than fifty million people. This increase is equivalent to adding the current population of New York state to California.

Second, more than one-third of all international immigrants to the United States are expected to become California residents. More immigrants will settle in California than in the next four highest states combined. It is interesting to note that from 1940 to 1970 less than 10 percent of California's population growth was due to international immigration. Since 1970, however, nearly 50 percent of the growth has been due to immigration, largely from Latin America and Asia.

Third, California will have one of the youngest populations in the country, with one-third of its residents under the age of twenty and fewer than 15% over the age of sixty-five. Parenthetically, California currently has one of the youngest populations in the U.S. and the U.S., in turn, has one of the youngest populations among the industrialized nations. Currently, the median age of the U.S. population is 35 years. In Western Europe the median age is 36. By 2040, the median age of the U.S. population is expected to be 36 years of age. By striking contrast, in 2040 the median age of the Western European population is expected to be 52 years of age. Imagine the ramifications of a population with a median age of 52.

And last, California will have the most diverse population in terms of ethnic and racial composition. While California's population is already diverse, it will become even more so. Between 1980 and 2040, California's white (non Hispanic) population is expected to decline from 67 percent of the population to 26 percent. The Latino population is expected to increase from 19 percent to 50 percent. The Asian American population is

expected to increase from 5 percent to 13 percent. The African American population is expected to decrease from 8 percent to 7 percent. And the Native American population is expected to remain under 1 percent.

The University is already experiencing these demographic changes. Undergraduate enrollment at the University of California will increase by 43 percent from 1998 to 2010 as we accommodate a dramatic increase in California's college-age population. Not surprisingly, in view of patterns of international immigration to California, one-half of our entering freshmen have at least one parent who was born outside the United States. And, as the complexion of the state has changed, so has that of our students. Between 1975 and 2005, white (non-Hispanic) students have declined from 81 percent to 43 percent of our students. Asian American students have increased from 10 percent to 38 percent. Latino students have increased from 5 percent to 16 percent. African American students have decreased from 4 percent to 3 percent. And Native American students have remained under 1 percent.

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With these demographic changes in mind, education remains the principal means of upward social mobility and social cohesion in the United States. Personal income, health, civic participation and opportunities for one's children are in many ways a function of a person's level of education. The Census Bureau says that lifetime earnings for a college

graduate are \$1 million more than for a high school graduate, and the gap has been widening with each passing decade. If we can educate California's rapidly growing population and continue to create new jobs, California could have the best dependency ratio in the nation. The dependency ratio is a measure of economic health. It is the ratio of people in the workforce to those who are still in school and those who have already retired. A healthy economy will have more people in the workforce relative to those out of the workforce. However, in order for California to achieve this positive dependency ratio, the University will need to continue to grow to meet the demands of California's growing population.

In the next five years, we will need to begin planning the University's eleventh campus. Why do we need to do so by 2010? The California Department of Finance forecasts little growth in California's college-age population from 2010 to 2020. But it projects another increase in the college-age population from 2020 to 2030. UC's current undergraduate enrollment capacity will be reached on all of the campuses by 2010, with one exception -- UC Merced. Since it has taken 10 years from the time The Regents made the decision to build UC Merced until the date the campus admitted its first class of students, UC will need to begin planning the 11<sup>th</sup> UC campus in 2010 in order to meet California's projected enrollment demand in 2020.

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At the same time, global economic shifts are challenging the United States' long standing economic preeminence. China, India and the European community are all investing heavily in higher education and research and development. These investments -- together with their vast and highly-educated workforces, lower labor costs, growing consumer markets, and generous government subsidies -- are driving U.S. companies to set up manufacturing operations abroad. Increasingly their research and development efforts are also expanding throughout the world. Two books, Thomas Friedman's *The World is Flat* and Clyde Prestowitz's *Three Billion New Capitalists* describe the situation in detail, so I won't belabor the point. You may agree or disagree with the premise of these books, but you should become familiar with their principal arguments.

Most economists agree that innovation resulting from research and development is the best opportunity for the United States to remain competitive in a changing global economy. However, the great industrial research laboratories like those at AT&T's Bell Laboratories, IBM, General Electric, Xerox and Exxon have largely disappeared in the past thirty years. So, American companies and the U.S. government now look almost exclusively to universities to perform the research and development that will generate the innovations that are needed to maintain our economic competitiveness and our standard of living. Therefore, the University of California, which performs more research than any other University, is seen as a key strategic asset for California and for the nation. UC has a crucial role because private research universities, while excellent, are too small to meet California's or the nation's needs for a well educated workforce, for the constant

stream of innovations to fuel our economy and provide jobs for our citizens, or to develop the latest medical advances to care for sick patients. As but one example, in the past decade California's three private research universities increased their undergraduate enrollment by a combined total of only 1,500 students. During the same period, UC increased its undergraduate enrollment by 42,000 students.

Clearly, higher education is at the nexus of both these forces: demographic change and economic competitiveness. As I noted earlier, higher education is the principal means of upward social mobility in our society, and the new knowledge produced by university research is a significant factor in our economic well being. But in order to sustain the University's positive impact on our society, we will need to attract even higher levels of financial support from the state and federal governments and from the private sector. This is where we face real challenges.

The State of California provides roughly 20 percent of UC revenue annually. But it is a crucial 20 percent because it pays the cost of student instruction and faculty salaries, which are the foundation on which the University's other revenues are built. Yet, the share of the state budget devoted to higher education has dropped by one-half in the past 30 years. This is, in part, the result of shifting state public policy priorities. From 1984 to 2004, state spending per capita on prisons increased by 165 percent, spending on health and human services increased by 31 percent and spending on K-12 education increased by 37 percent. During the same period, state spending on higher education

decreased by 9 percent. Recent state budget deficits have compounded the problem, resulting in budget cuts to the University of 15 percent in the past four years even while our enrollments have grown by 19 percent.

Fortunately, the outlook is brightening. State revenues are \$4 billion ahead of the Department of Finance's projections this year and the Governor is honoring his funding compact with the University. This is crucial because, while the compact stopped the financial bleeding at the University, we need to further increase state funding to provide competitive salaries, to improve the student/faculty ratio, and to enhance our graduate and research programs -- all of which suffered during the recent economic downturn.

One of the big problems we face in Sacramento is that polarization in the Legislature makes it very difficult to pass a state budget. The redistricting of electoral districts after the 2000 census created safe districts for every incumbent legislator. As a result, elections are typically decided in primary elections rather than in general elections. Candidates for office now need only appeal to voters from their own parties. So Democratic candidates run on platforms leaning to the left and Republican candidates run on platforms leaning to the right. They no longer have to appeal to voters from both parties in the general election. Once they get to Sacramento, they effectively represent the electorate that elected them. This makes it very difficult for them to reach the consensus needed to pass a budget, which requires approval by two-thirds of the

Legislature, or to find common ground on key policy issues that will shape the future of the state -- like education and research.

In Washington, we face similar challenges. Federal funding for the University has increased by 150 percent in the past fifteen years. The federal government funds UC research, it pays a portion of the education and clinical care delivered by our hospitals, it funds our national laboratories, and it provides financial aid to our students. The federal government had a \$200 billion budget surplus five years ago. But today it has a \$400 billion deficit. Since this is not sustainable, the President wants to reduce the deficit in half by 2009. To do so, he has proposed budget cuts of approximately 1 percent in the research, education and healthcare programs that fund universities. This may not sound like a significant reduction, but the President's budget does not include funds for the wars in Afghanistan and Iraq or for the recovery efforts following hurricanes Katrina and Rita. So, it is possible that the programs that fund the University could experience even deeper cuts. The Congress may not agree with the President's proposed cuts, but there are signs that the Congress could be even more aggressive than the President in reducing federal expenditures. If these cuts are approved by the Congress, they could present real challenges to our ability to meet the enrollment demands we face this decade. Funding for research and graduate education, for the indirect costs that accompany research funds, and for capital improvements and equipment purchases may not keep pace with our projected rate of enrollment growth.

Washington is a Republican town. The Republicans won the White House and the majority of seats in both houses of Congress. And many Republican elected officials view higher education as too liberal. This perception is particularly true for the University of California, and it has potential implications for the University, including the competitions for the UC-managed DOE labs. Education and research need the support of both political parties.

So what are we doing about these challenges? We have launched an aggressive effort to improve the University's prospects. First, we have conducted extensive public polling to understand Californians' attitudes toward UC. We have learned that Californians deeply respect the University, but that they feel no personal connection to it. They want their children to attend the University, but otherwise they do not see how the University benefits their lives. This is a serious problem, since -- by definition -- only 12.5 percent of the state's high school students are eligible for the University. In order for the University to continue to make a difference in the lives of Californians, we need to create a much broader base of support than 12.5 percent of the population.

We have worked very hard to communicate an integrated message from the campuses, the national laboratories, and the Office of the President about UC's broader impact on the state. This message has focused on UC's impact on the economy and jobs, on advances in healthcare, on our national security, on the environment, on the food we eat, on our cultural life, on our entertainment, and on the overall quality of life in California.

All these aspects of our lives are intimately connected to the research, teaching, and public service that the University performs.

In the early 1900's, UC researchers discovered how to remove alkali salts from Central Valley soils, making California the world's most productive farming region. In the 1960's, UC studies led to automobile safety standards such as seatbelts, shatter-proof windshields, and head rests to protect vehicle occupants. The identification of HIV as the cause of AIDS, and tests to protect the nation's blood supply emerged from the University, as did Recombinant DNA technology -- the result of research conducted by UC and Stanford professors, which gave birth to the biotechnology industry. So it is no accident that one-third of all biotechnology companies in the United States are located within 35 miles of a UC campus. And, UC faculty pioneered the laser, fiber optics, and the wireless technologies that make modern telecommunications and entertainment possible -- from compact discs to cellular telephones. There are hundreds of additional examples, but these few make the point. We want people throughout the state to know that all Californians benefit from the University even if they or their children did not attend the University.

In addition, we have launched an advocacy effort to help deliver this message in Sacramento, in Washington, and throughout the state. An electronic advocacy campaign enables alumni, friends and University employees to receive electronic updates on current issues facing the University and, in turn, to email legislators with their views on these

issues. In its first year of operation, more than 9,000 alumni participated in this effort and 126,000 emails were sent in opposition to a bill in Sacramento that would have cost the University an estimated \$5 million per year. These alumni emails helped to defeat the bill. We have also engaged California business leaders in explaining why UC is critical to their companies and the state's future. They have been incredibly effective in Washington and Sacramento, where they are better able to bridge the partisan divide. As well, Bob Dynes has been traveling the state meeting with hundreds of Californians and their elected officials to highlight the role UC plays in their regions of the state.

In Washington, we worked with Congressman Wolf and a group of Republican Congressmen who are seeking to triple the federal research budget. Most recently, we organized an effort that led sixty-eight senators to co-author a letter seeking an increase in the budget for the Office of Science at the Department of Energy -- which funds most of the nation's research in the physical sciences -- and we have been actively working on the competitions to manage the Berkeley, Los Alamos, and Livermore national laboratories.

Lastly, we have significantly increased contributions from the private sector. In the past ten years, private giving to the University has increased from \$550 million to \$1.1 billion, and we are on track to do even better this year.

In conclusion, let me leave you with two thoughts. First, as university leaders, I would like you to think about your work in a public context. Californians have high expectations of the University. When we do not meet those expectations, they will hold us accountable. As you make decisions and take actions, ask yourself how your decisions would fare if they were reported in a newspaper or were the subject of a legislative hearing. Too often we think in these terms only when it is too late. This is an important part of what leadership means in a public institution. Second, think of yourselves as advocates for the University. Our public opinion polling found that faculty, staff and students are the most credible sources of information about the University. And most Californians want to learn about the University face-to-face in one-on-one communication. When you talk to your neighbors and friends about the University, you create the “word of mouth” impressions that can be crucial to our success.

We must succeed in helping California navigate these demographic, global, financial and public support challenges. California and the nation are relying on us to do so. So please throw yourselves into this effort with all the passion you can give.

I have enjoyed the opportunity to speak with you today and I look forward to a candid dialogue with you in the time remaining.