

**Assembly Higher Education Committee  
Informational Hearing  
California's Master Plan for Higher Education  
The Plan, The Promise, and The Problems**

**Assembly Member Liu, Chair**

**Presentation to Assembly Higher Education Committee  
February 22, 2005**

**Dr. M.R.C. Greenwood  
Provost and Senior Vice President for Academic Affairs  
University of California**

Good afternoon, Chair Liu and members of the Committee. Thank you for giving me this opportunity to appear before you. I am M.R.C. Greenwood, Provost and Senior Vice President for Academic Affairs at the University of California

On behalf of the University of California, I would like to express my gratitude for your leadership in holding hearings on what we consider the foundation of the best overall system of higher education in the country, even the world.

The 1960 Master Plan for Higher Education was about ensuring opportunity to quality higher education for all Californians who could benefit from such an education.

I have handed out slides from presentations I did at the January Regents' meetings on both the Master Plan and issues related to graduate education.

You have just heard two presentations from the LAO and Dr. Shulock on the Master Plan, so I will skip a few of the slides as I go through my remarks.

The Master Plan was developed to address a situation much like what we are face today:

- increasing demand for higher education, both from Tidal Wave II and from issues of economic competitiveness
- and, at the same time, significant resource constraints.

These conditions are similar to circumstances in 1960, shown on **SLIDE 2**. Rather than shying away from this enormous challenge, the framers of the 1960 Master Plan faced it directly. Rather than limiting access to higher education, they devised a system that would find a place for every student who could benefit from higher education. As Clark Kerr told the Legislature in 1999, “it was the first time in history of any state in the United States, or any nation in the world, where such a commitment was made.” [**SLIDE 5**]

At the time, forward thinkers were beginning to associate access to higher education as important to national competitiveness, but even they could not have conceived that 50 to 60 percent of the economic growth in this period would be derived from national and now state investments in research and development, largely done in our research universities. California’s success in this area, facilitated by the Master Plan, is the envy of the world.

The access provisions of the Master Plan succeeded beyond all expectations, primarily at the undergraduate level. Turning to **SLIDES 6 and 7**, you can see:

- Actual 1975 enrollment of 1.4 million was double the original Master Plan estimate
- A much higher proportion of California's population—in every ethnic group and by gender—is in college now compared to 1960
- 60 new public campuses were built (4 UCs counting Merced, 10 CSUs, and 46 CCCs)
- all eligible undergraduate students have been accommodated to date

I want to thank members of the Legislature, who through recent policy and budget actions, maintained the access promise. This ensures that all students who are eligible to UC and CSU and who seek to attend will be offered a place somewhere in the system. As we saw clearly last year, this promise is what the public understands as the heart of the Master Plan.

Less well understood, but still a critical component of the Master Plan and one that will be even more critical in the next decade, is how the Master Plan enabled California to fulfill the promise of creating new knowledge through research and advanced graduate education. That knowledge drives our economic and social progress and is the basis for the new jobs and industries that have made California one of the 5th or 6th largest economies in the world.

Not only was access to higher education provided in California since 1960, but the quality of all three public higher education segments increased. **[SLIDE 8]** The Graham and Diamond study of American research universities credits the Master Plan with California's unmatched success in creating, not just one or two, but eight research universities ranked among the very best in the country **[SLIDE 9]**.

Universal access and high quality could only have happened in the face of such huge growth if efficiency increased. Since the Master Plan was developed, the growth in the number of baccalaureate degrees awarded has outpaced both growth in high school graduates and in 4-year undergraduate enrollments, as shown in **SLIDE 10**. Partial credit for this outcome most likely can be attributed to the success of the community college transfer function.

So how did we do it? How did we ensure universal access to higher education in a period of rapid growth while building quality and assuring student success?

We believe the key was differentiation of mission and functions **[SLIDES 11 to 14]**. Mission differentiation ensures the efficient allocation of state resources by minimizing duplication across the segments. This is especially true for high-cost doctoral and professional education programs. Here efficient allocation of state resources must be combined with the recruitment of extraordinary faculty and graduate students, who in turn garner the additional resources necessary to conduct these programs. Thus, advanced graduate education in California is a highly leveraged state investment, of which you should be justifiably proud. Such leveraging and efficiencies are crucial to provision of universal access and to promotion of educational excellence within each segment. This differentiation of function is key to the economic competitiveness issues I just mentioned; it allows California to be more efficient than other states in generating new knowledge through research, applying that new knowledge through technology transfer, and educating the workforce for this knowledge-based economy.

The other key features of the Master Plan that ensured its success are detailed in **SLIDES 15 and 16**—differential admissions pools, the emphasis on community college transfer, a strong governance structure for each segment, a statutory coordinating body, student choice among segments facilitated by Cal Grants, and a commitment to affordable higher education.

Before turning to areas that we believe require policymakers' attention, let me reiterate something I stated in my presentation to the Regents. The Master Plan is not an outdated document. It has been reviewed and updated many times, as you can see from the collage of reports in **SLIDE 17**. The most recent review was the 2002 report prepared by the Joint Master Plan Committee chaired by Senator Alpert. Chair Liu was a key member of that committee, co-chairing it for the last two years. That report and all the previous reports have reaffirmed the basic tenets of the Master Plan and modified those aspects which were outdated. It is a living and evolving plan and I think California would suffer mightily if we let it fall apart.

Let me turn to **advanced graduate and professional education**, an area that benefited enormously from the Master Plan, but now needs our attention. If you turn to **SLIDE 18**, you will see the commitment to undergraduate access reflected in UC enrollment data. Since 1960, at the undergraduate level, we accommodated the Baby Boom and we are well on the way to accommodating Tidal Wave II. This was the state's priority for higher education and we are proud of our record. We have added nearly 60,000 undergraduates since 1975, the equivalent of two Berkeley campuses. Our students graduate at extremely high rates and in some of the most challenging disciplines. When asked to address state needs by increasing enrollments in engineering and computer sciences, we did it ahead of time and well. In short, we have tried to be and largely succeeded in being a reliable state partner.

But you will notice very little growth in graduate enrollments and no growth at all in health sciences enrollments over the last 25 years. If you turn to **SLIDE 19**, you will see what has happened to the *proportion* of graduate students in each segment of higher education in California. UC has dropped from having 30 percent of its student body at the graduate level, down to just 23 percent today— 17 percent academic and professional students and 6 percent in the health sciences.

Turning to **SLIDE 20**, you can see that the proportion of graduate students at UC is well below the 8 comparison institutions that the state uses for UC faculty salary parity studies. Not only that, we are below the average of the 4 public institutions in that group (Michigan, Virginia, Illinois, and SUNY Buffalo).

In the health sciences area, our new report indicates that California will not be able to meet its need for medical professionals without expansion of our current programs.

This is a situation that needs attention. A study of UC undergraduates shows that 83 percent intend to pursue advanced degrees beyond the baccalaureate degree. Where will the students of Tidal Wave II, entering now at the undergraduate level, pursue graduate training if we do not invest adequately in capacity at the graduate level? California will lose these bright minds to other states and other nations.

Just last week, a national Task Force on the Future of American Innovation warned that the “United States is in danger of losing its leadership role in science and innovation” to other countries. The proportion of US citizens in science and engineering (S&E) graduate studies declined by about 10 percent during the period 1994-2001 while the number awarded in other countries is growing. In 2000, about 89,000 of the approximately 114,000 doctoral degrees earned worldwide in S&E were earned *outside* the United States.

There will be some leveling off of Tidal Wave II pressures at the undergraduate level early in the next decade. At the University, we believe that means we now have the opportunity to “re-balance” graduate, professional, and undergraduate enrollments before the next echo of the Baby Boom arrives.

At the same time, we need to look at emerging disciplines and the future needs of our state and national economies. To this end, we are creating a Task Force within the University to examine existing and emerging disciplines and to look at state workforce needs. Our goal is to identify the places where the University and the state can most effectively and productively direct their limited resources for graduate and professional education.

With your support, UC will not only continue to provide opportunity and access for eligible undergraduate students, but will prosper and provide opportunity so that this talent does not leave California, so that you and I have quality health care, so that there will be new and increasing numbers of high-wage jobs for Californians, and so our state remains competitive and forward looking.

Our last two slides [**SLIDES 21 and 22**] list some of the challenges to the Master Plan, but given the committee’s time constraints, I will stop here. I would be pleased to respond to any questions members of the committee might have.

# **Master Plan for Higher Education**

**Presentation to Assembly  
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for Academic Affairs  
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The image shows the cover of a report titled "A MASTER PLAN for HIGHER EDUCATION IN CALIFORNIA 1960-1975". The cover is light green with a darker green rectangular box in the center containing the title text in white. The text is arranged in a centered, stacked format.

**A MASTER PLAN  
for  
HIGHER EDUCATION  
IN CALIFORNIA  
1960-1975**

# What is the Master Plan?

- A statewide policy and planning framework first implemented in 1960 to accommodate enrollment growth and meet state needs by providing high-quality postsecondary institutions
- Master Plan is a living/evolving document, last reviewed from 1999-2004
- Each review has reaffirmed its core tenets/goals
- Goals include access, affordability, equity, and quality

# History: California in late 1950s

- **Constraints on state resources:**
  - end of postwar surpluses
  - tax increase rejected by Legislature
- **Huge enrollment growth projected:**
  - from 226,000 to 661,000 by 1975
- **Lack of coordination/planning:**
  - 22 competing legislative proposals to establish new state colleges



# Proposal for a Master Plan

UC President Kerr proposed that governing boards initiate planning effort to:

- Prevent unnecessary program/degree duplication to limit taxpayer expense
- Offer access to all qualified residents who could benefit from postsecondary education

Legislature supported the effort and imposed a moratorium on new campuses until plan completed

# Original Master Plan

- Within a year, report was completed and adopted by governing boards in December 1959
- The plan recommended putting provisions into the State Constitution
- Instead, many key provisions codified in statute in April 1960 (Donahoe Higher Education Act)

# Clark Kerr in 1999 on the access commitment of the Master Plan

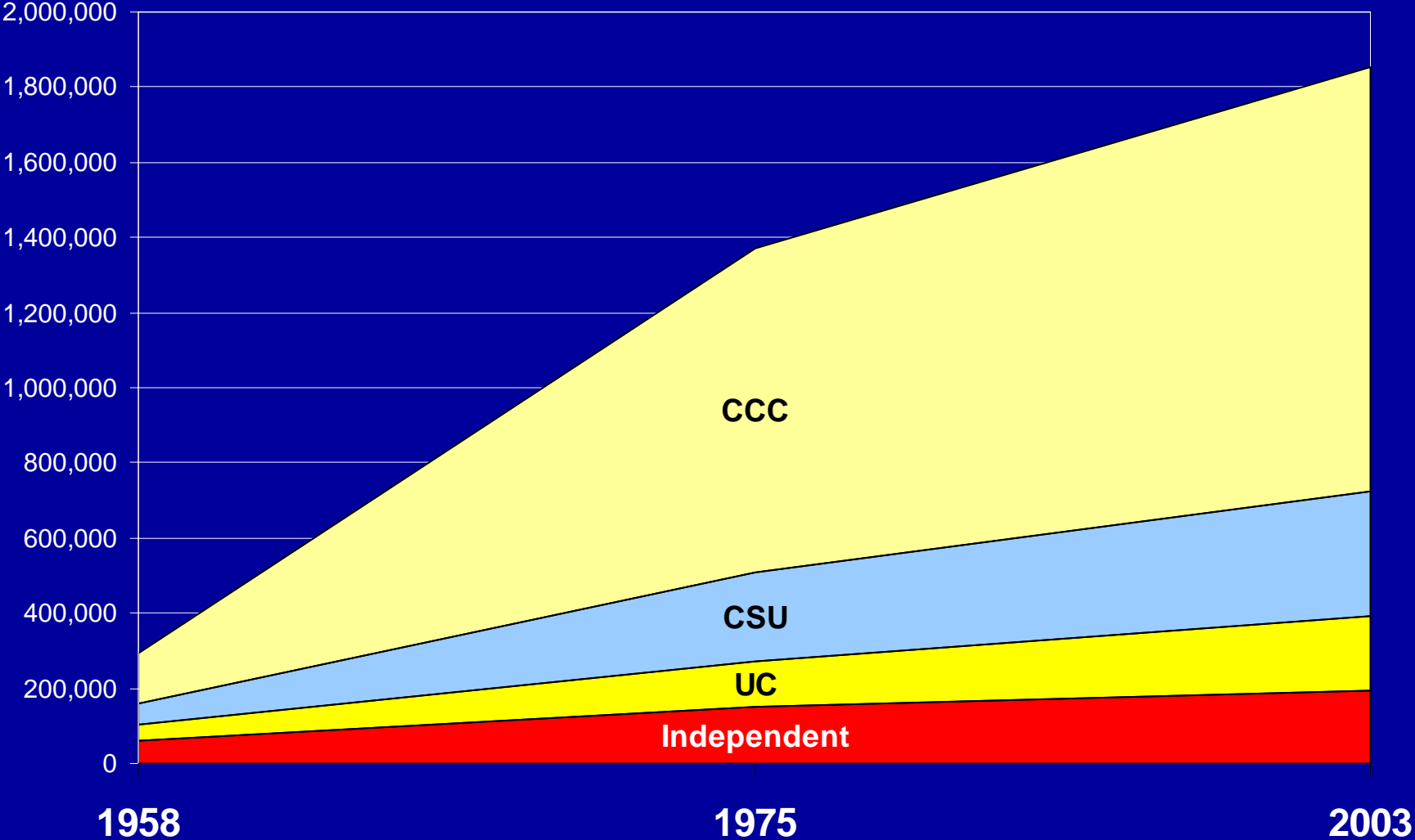
“[I]t was the first time in the history of any state in the United States, or any nation in the world, where such a commitment was made—that a state or a nation would promise there would be a place ready for every high school graduate or person otherwise qualified. It was an enormous commitment, and the basis for the Master Plan.”

From August 24, 1999 testimony to Joint Master Plan Committee

# Has it been a success? (1 of 2)

- Access promise succeeded beyond all expectations—it is the provision best understood and supported by the general public
- Actual 1975 enrollment of 1.4 million was double original Master Plan estimate
- A much higher proportion of California's population—in every ethnic group and by gender—is in college now compared to 1960
- 60 new public campuses were built

# Total Enrollment (FTE) by Segment, 1958 to 2003



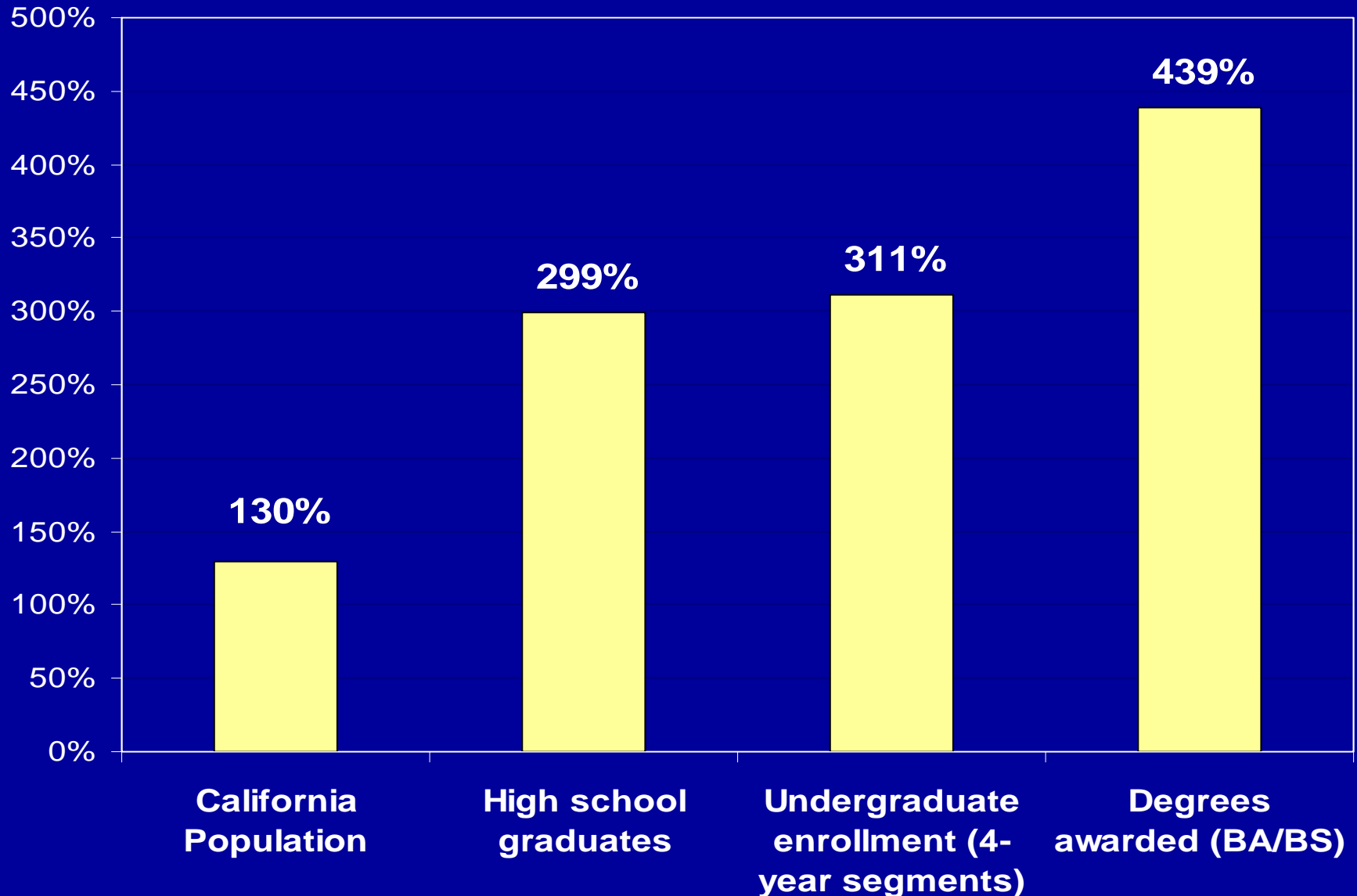
# Has it been a success? (2 of 2)

- Quality increased despite rapid growth [SLIDE 9]
- California's economic strength based on:
  - university-generated research and intellectual property
  - a highly-trained workforce
- Efficiency increased—high school graduates increased 300% while BA/BS degrees awarded increased 440% [SLIDE 10]

## **Graham & Diamond, *The Rise of American Research Universities*, 1997**

“No aspect of our revised class of Research 1 universities is more arresting than the inclusion of all eight general campuses of the University of California... The Master Plan...reserved the research and doctoral training function to the multicampus UC system... Much of the UC success may be attributed to the distinctive allure of California’s climate, economy, and cultural mystique in the postwar era. But considerable credit must also go to the state’s visionary higher education policy, as codified in the 1960 Master Plan.”

# Percent changes, California 1958 to 2002





# Key features of the Master Plan (1 of 3)

- **Differentiation of Mission & Functions**
  - to ensure quality and efficient allocation of resources
  - limits the no. of campuses offering high-cost doctoral and professional education programs
  - greater focus on undergraduate education at CSU and CCCs
  - cost structure enables universal access

# Differentiation of function

## UC

- State's primary academic agency for research
- Undergraduate, graduate, & professional education
- Sole authority for doctoral degrees (CSU able to offer joint doctorates)
- Sole authority for instruction in law, medicine, dentistry, and veterinary medicine

# Differentiation of function

## CSU

- Undergraduate education, graduate, and professional education through the Master's degree
- Teacher education
- Faculty research consistent with the primary mission of instruction
- Doctorates jointly with UC or an independent institution

# Differentiation of function

## Community Colleges

- Academic & vocational instruction through the first two years of undergraduate education (lower division)
- Remedial instruction
- English as Second Language (ESL) courses
- Adult noncredit instruction
- Community service courses
- Workforce training services

# Key features of the Master Plan (2 of 3)

- **Principle of access**
  - to all who can benefit
  - state's responsibility to fund access
- **Differential admissions pools**
  - to ensure high standards and to encourage students to take lower division at the community colleges
- **Community College transfer**
  - ensures universal access and route to 4-year segments
  - 60:40 ratio to preserve access for all eligible transfers

# Key features of the Master Plan (3 of 3)

- **Governance structure**
  - independent lay board for each public segment
- **Statutory coordinating body (now CPEC)**
  - for on-going planning
- **Student choice among segments**
  - facilitated by portable Cal Grant awards
  - to maximize use of independent (private) enrollment capacity
- **Affordability**
  - ensured through fee and financial aid structure and state funding commitment

# Master Plan is a living document

A MASTER PLAN  
for  
HIGHER EDUCATION  
IN CALIFORNIA  
1960-1975

THE CALIFORNIA MASTER PLAN  
FOR  
HIGHER EDUCATION  
IN THE SEVENTIES AND BEYOND



REPORT AND RECOMMENDATIONS  
OF THE  
SELECT COMMITTEE ON THE MASTER PLAN  
FOR HIGHER EDUCATION  
TO THE  
COORDINATING COUNCIL FOR HIGHER EDUCATION

REPORT OF THE  
JOINT COMMITTEE  
ON THE MASTER PLAN  
FOR HIGHER EDUCATION

CALIFORNIA LEGISLATURE  
SEPTEMBER 1973

THE MASTER PLAN RENEWED

UNITY, EQUITY, QUALITY, AND EFFICIENCY  
IN CALIFORNIA POSTSECONDARY EDUCATION

Commission for the Review of the  
Master Plan for Higher Education



California Faces...  
California's Future

Education for Citizenship  
In a Multicultural Democracy



Joint Committee for Review of  
The Master Plan in Higher Education

BREAKING THE  
SOCIAL CONTRACT

The Fiscal Crisis in California Higher Education

Roger Benjamin  
Stephen J. Carroll

Final Report

Toward  
A State  
of  
Learning

California Higher Education  
for the Twenty-First Century

California Citizens Commission on Higher Education

Joint Committee to Develop a Master Plan for Education

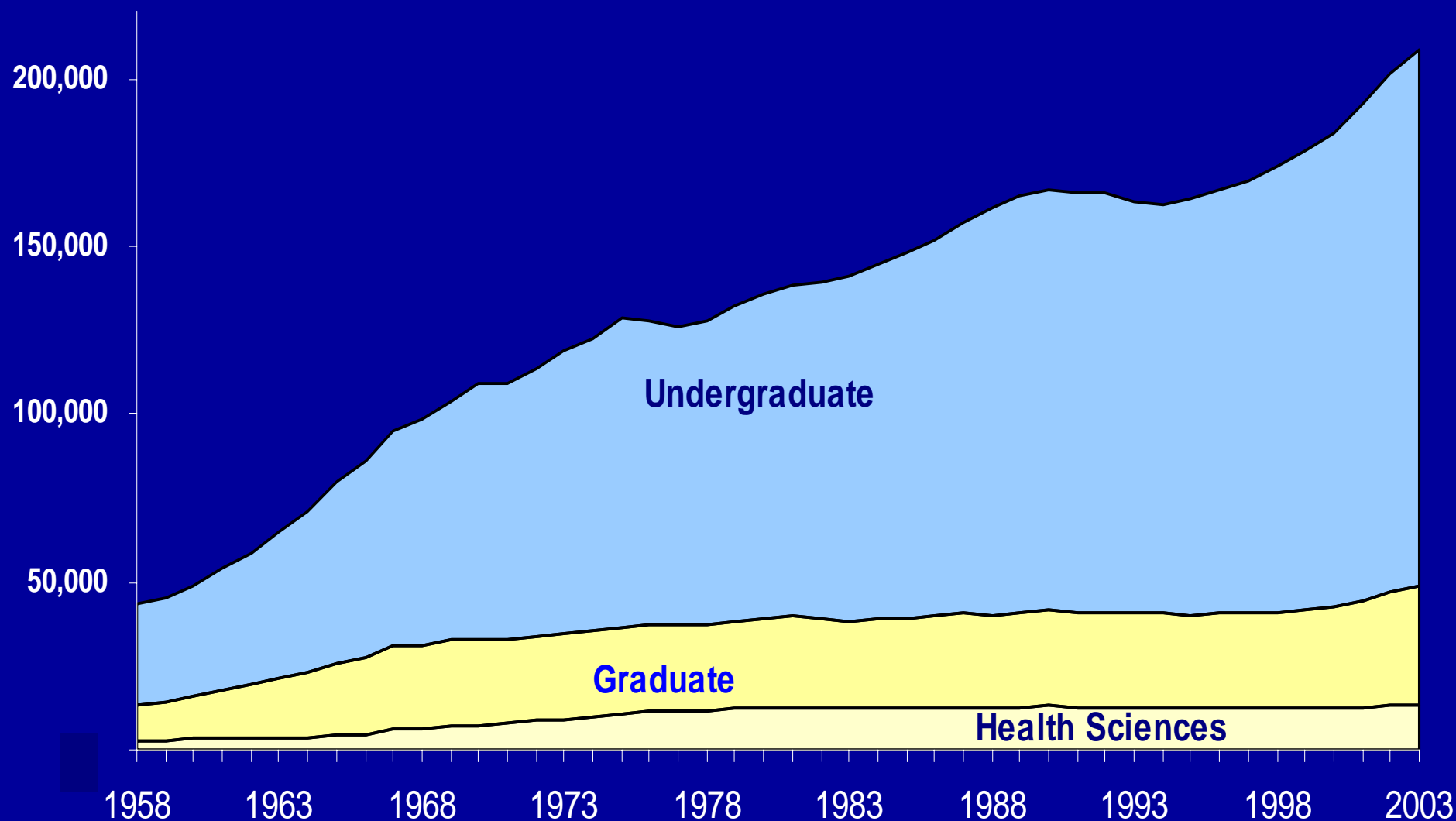
Senator Dede Alpert, Chair  
Assemblywoman Elaine Alquist, Co-Vice Chair  
Assemblywoman Virginia Strom-Marini, Co-Vice Chair

The California Master Plan  
for Education

Master Plan  
for Education

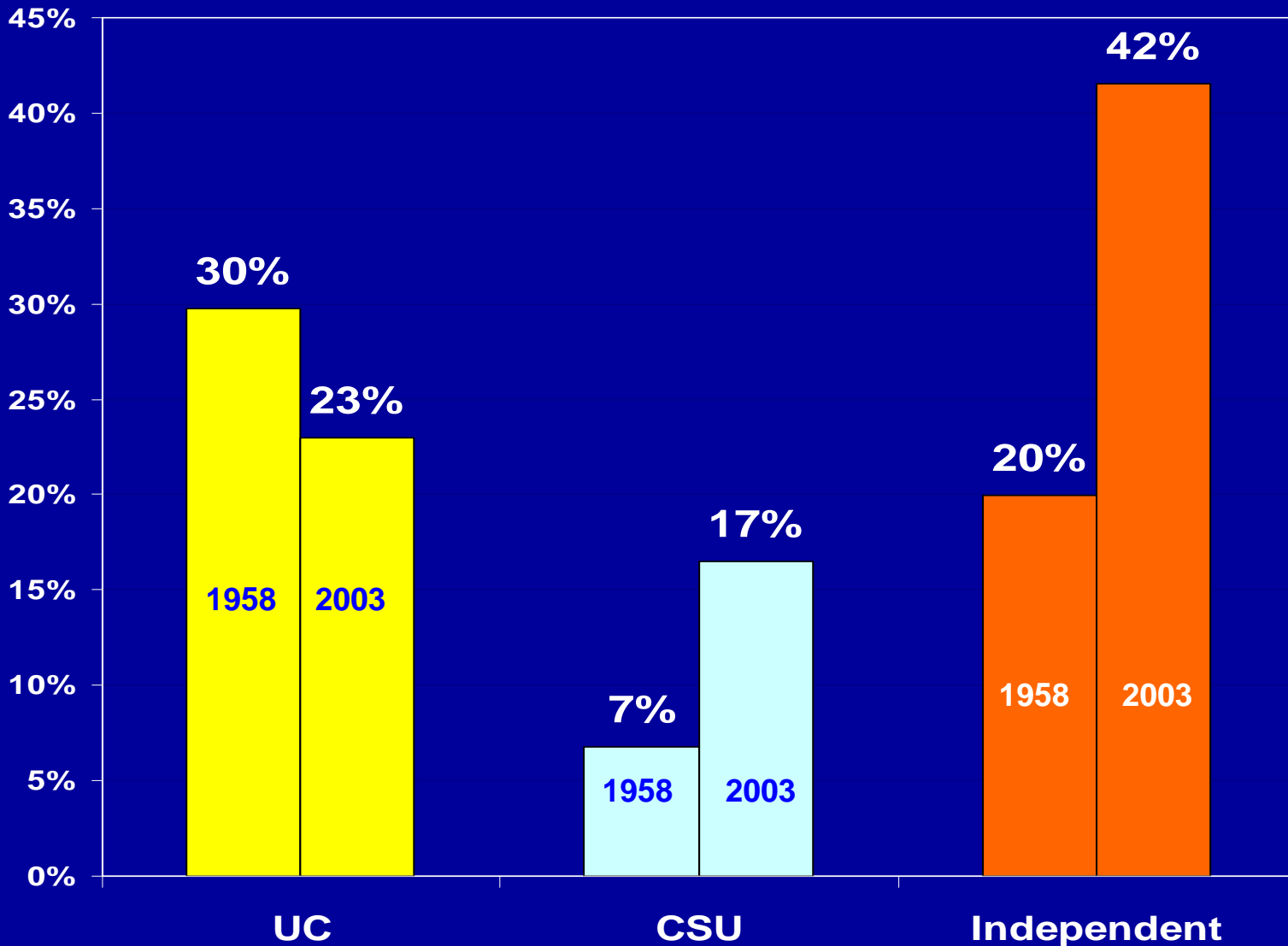


# UC Enrollment Growth 1958-2003

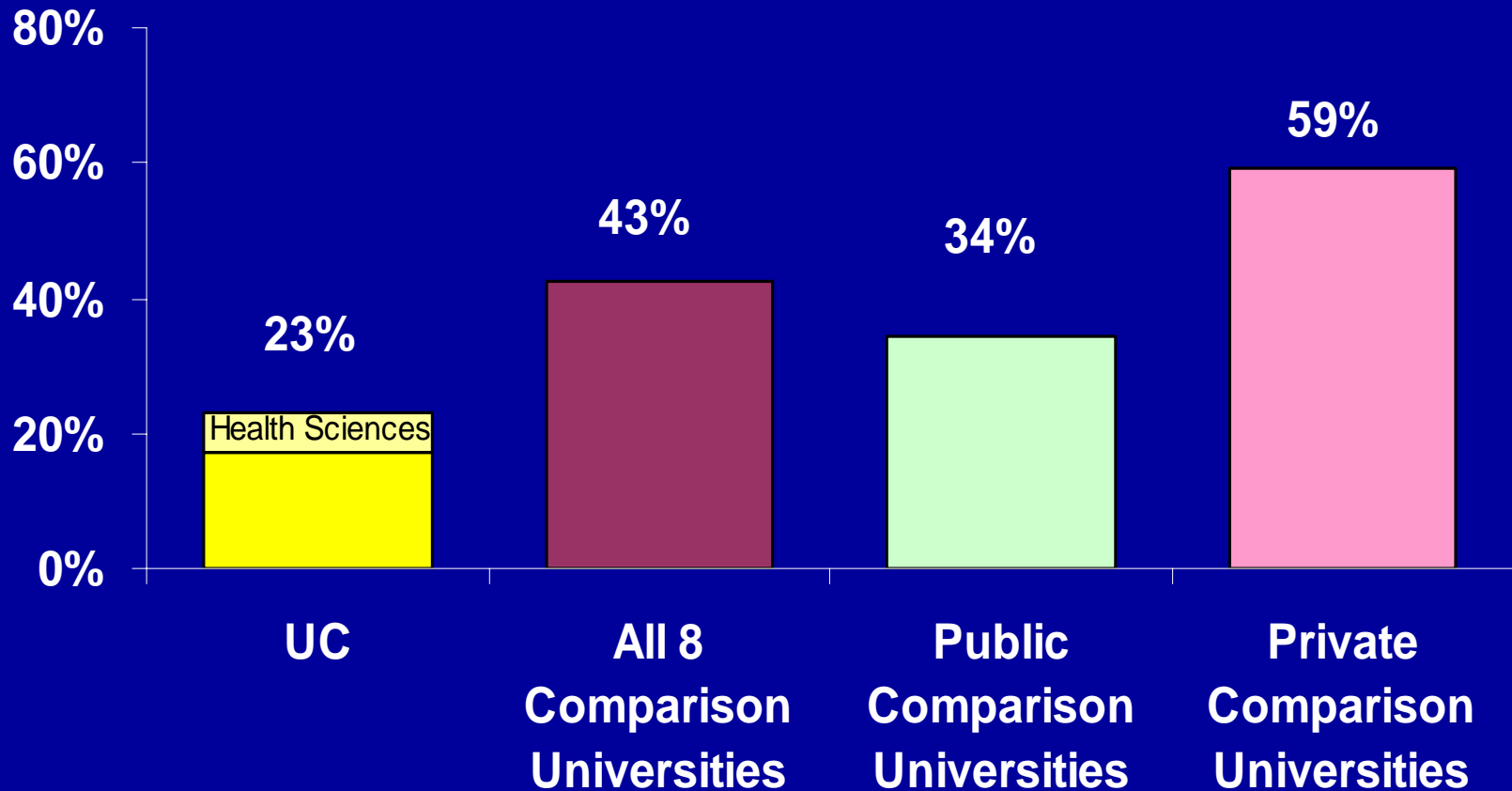




# Proportion of Graduate Students WITHIN Segment Change from 1958 to 2003



# UC is Below Others in Percent Graduate



All graduate students as a percent of total enrollment

# Master Plan challenges/threats (1 of 2)

- Social and economic changes
  - greater demand for higher education
  - increasingly global economy
  - more diverse society
- Demographic challenges
  - issue of access
  - differential participation rates
  - ethnic/racial diversity not keeping pace

# Master Plan challenges/threats (2 of 2)

- Declining State financial support
- Preserving affordability
- Proposals to change or abolish Master Plan coordinating agency (currently CPEC)
- Maintaining mission distinctions
- Transfer and joint doctoral programs require coordination across segments