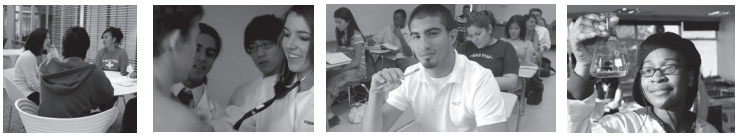
LONG RANGE ENROLLMENT PLANNING

UNIVERSITY OF CALIFORNIA



UNIVERSITY OF CALIFORNIA
SYSTEMWIDE ENROLLMENT PROJECTIONS:
UNDERGRADUATE AND GRADUATE ENROLLMENT
THROUGH 2020-21

PHASE I REPORT
MARCH 2008

Contents

Summary of Key Points

"**Systemwide Enrollment Projections**. UC shall provide systemwide enrollment projections through at least 2020 by March 25, 2008. In its report, the university should explain and justify the assumptions and data used to calculate the enrollment projections. The report shall relate the systemwide enrollment projections to the applicable LRDP for each campus. The report shall be presented to the UC Board of Regents before transmittal to the Legislature."

— California Budget Act, 2007, Supplemental Report Language. Item 6440-001-0001

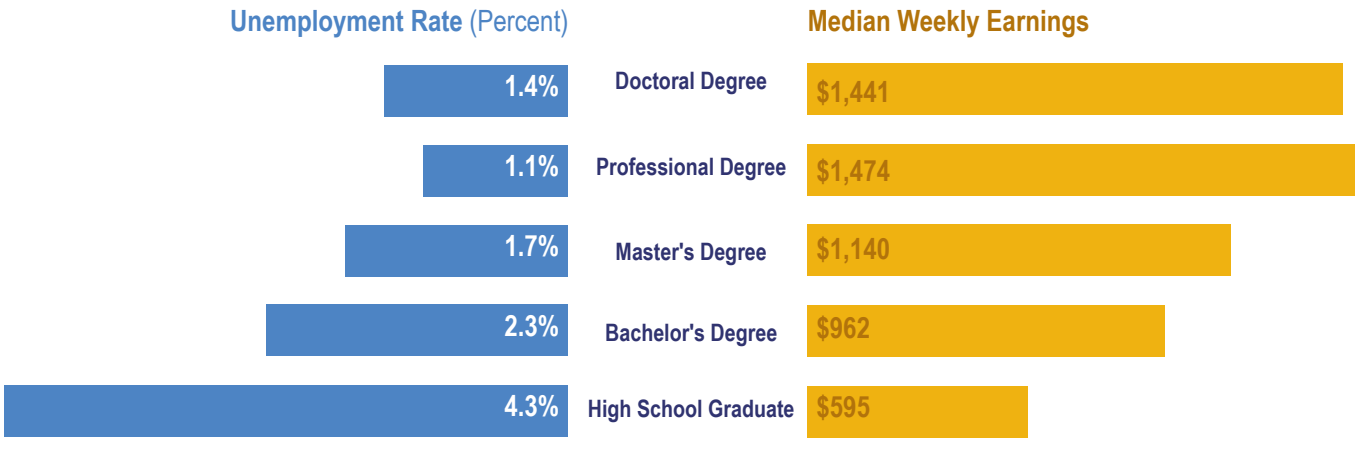
Higher education is vital to California's economic health and social well-being. According to the Bureau of Labor Statistics, individual income increases and unemployment rates decrease with each successive level of undergraduate and graduate training. *[Display 1]* For individual citizens, this means higher incomes and a better quality of life. For the state a more educated and affluent population means a more robust economy, lower unemployment, and higher tax revenues. Increased education levels can narrow the income gap among population groups and lead to higher levels of voting and other measures of civic participation.

As part of its ongoing academic planning efforts, the University of California is looking ahead to the size and shape of its educational programs into the third decade of the 21st century. This report introduces the University's long range enrollment planning through the academic year 2020-2021. While individual campus plans and programs are still evolving — and must remain flexible to respond to new and emerging opportunities and challenges that will face California — our overall direction is clear:

- **UC will continue to grow, though more slowly than in recent years.** Over the past 45 years, UC has increased its enrollments from fewer than 50,000 in 1960 to over 216,000 in 2007-08 — total growth of more than 330 percent, made possible by the creation of three new campuses founded in the 1960s and our tenth campus at Merced, founded in 2005. *[Display 2, page 2]* Much of this growth has been at the undergraduate level and has come in direct response to the enormous increase California has experienced among high school graduates. Although high school graduates will stabilize over the next decade, UC will continue to grow — more modestly than in the past and at a higher rate for graduate students than for undergraduates. We propose total enrollments in 2020-21 of 265,000, an increase of 48,000. Our proposed annual growth rate over the 10-year planning period from 2010-11 through 2020-21 is roughly 1.1 percent, considerably lower than the 2.5 percent annual growth budgeted through the current planning period under the Governor's compact that ends in 2010-11. *[Display 3, page 2]*

DISPLAY 1

Education and Training Pays

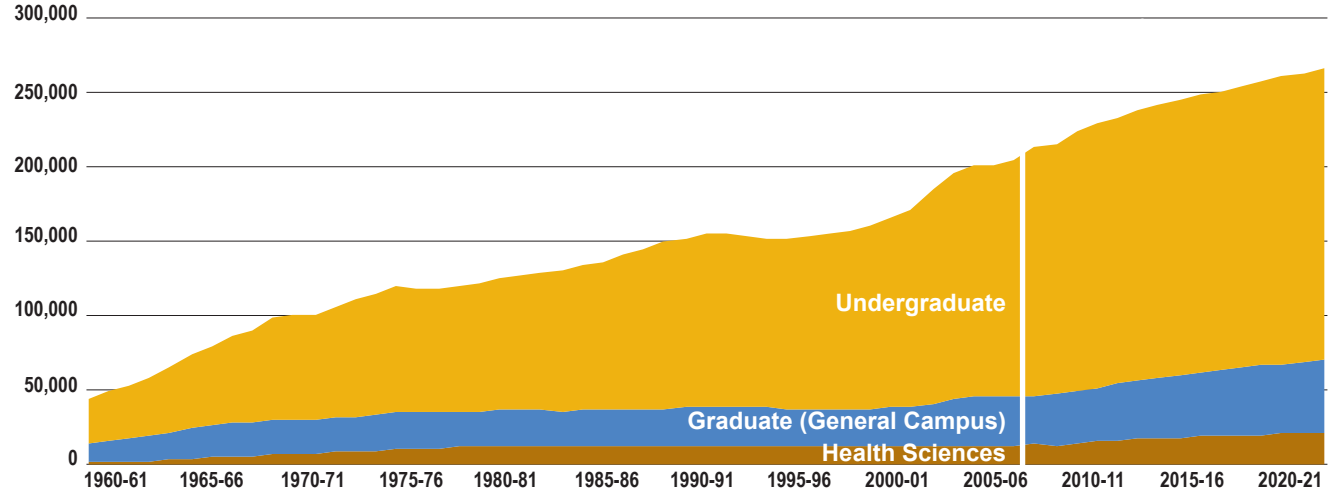


Source: U.S. Bureau Labor Statistics, 2006

DISPLAY 2

UC FTE Enrollments Actual and Projected

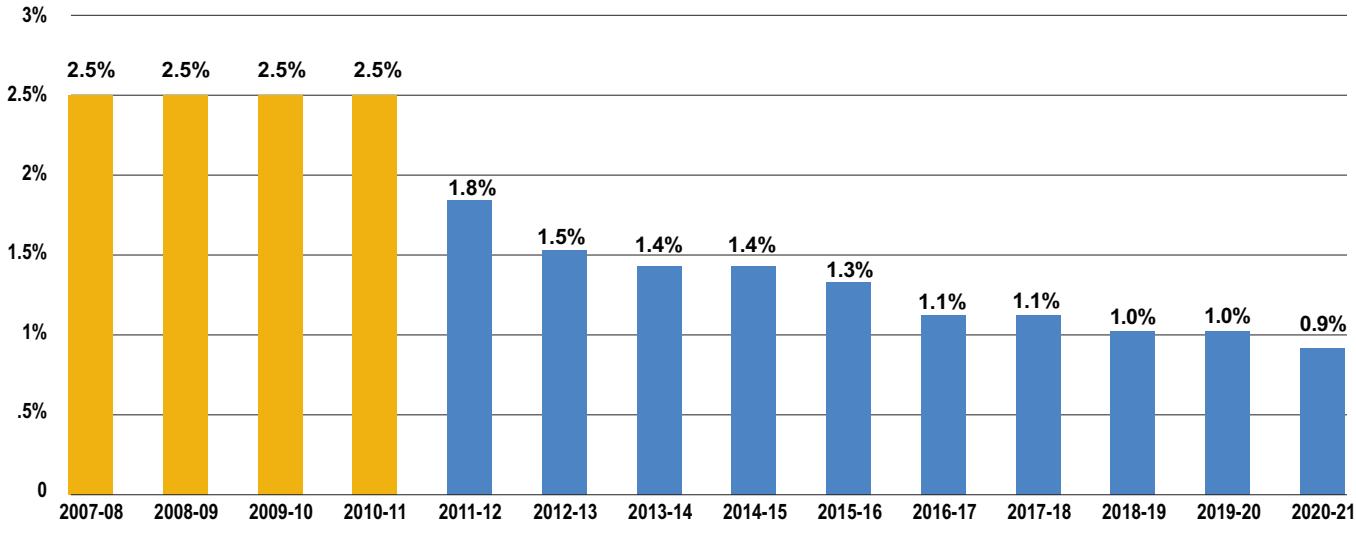
1960-61 to 2020-21



- **Undergraduate growth will expand opportunity to populations historically underserved by higher education.** UC will take advantage of slower growth among high school graduates to offer opportunity to a broader group of California students, including low-income students, those who are the first in their families to complete a four-year degree, students from underserved communities, and transfer students. Our proposed undergraduate growth of 26,000 students through 2021 will increase the proportion of California public high school graduates enrolling at UC to an all-time high of 9.2 percent. *[Display 6, page 5]*

DISPLAY 3

UC Projected Annual Growth Rates



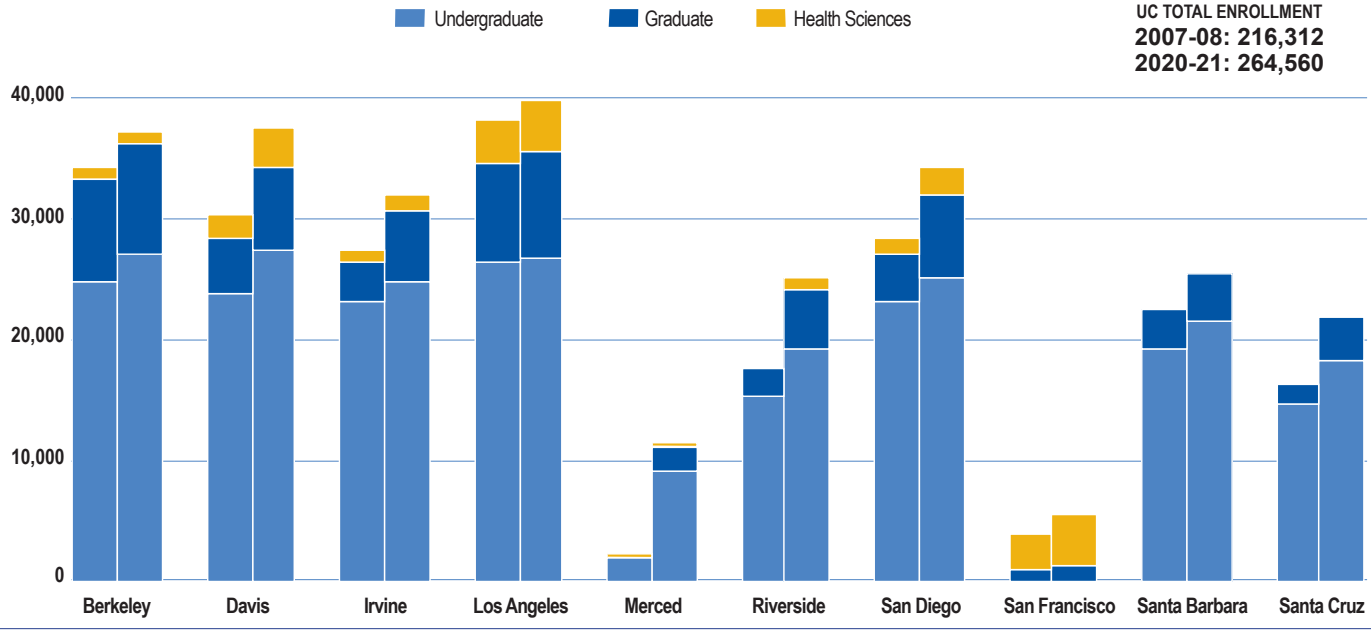
- **Accelerated growth in graduate enrollments will fuel California's economy and provide social and economic mobility.** By 2025, California will need to fill more than a million new positions requiring graduate degrees — a 68 percent increase from 2005. To help the state remain competitive in a knowledge-based global economy, UC proposes to increase graduate enrollments by roughly 22,000 students by 2020-21. More than a third of our proposed growth is expected to occur in life and physical sciences, engineering, and math and more than a quarter in professional programs to train doctors, public health professionals, nurses, veterinarians, and other critical health science professionals.
- **Enrollment growth will enhance diversity.** Growth is key to our ability to serve students from all of California's communities and we will expand in regions and in fields where underserved populations can most benefit. Undergraduate growth will be greatest in the Central Valley and Inland Empire — regions that lag the rest of the state in terms of college opportunity and that support diverse and growing populations. At the graduate level, our campuses are increasing enrollments and proposing new programs in areas that both attract and serve diverse populations, such as the PRIME programs that train doctors to serve underserved communities.
- **Campus enrollment projections take into account the needs and concerns of neighboring communities.** Many of our campuses are proposing new programs that respond specifically to regional needs (for example, in land use and environmental issues, immigration, and health policy). Campuses that are approaching enrollment levels on which an LRDP is based will use a variety of strategies, including summer and off-campus enrollments, to minimize impacts on their local communities.

Display 4 shows how enrollment growth is distributed by campus and by level (campus enrollment numbers are provided in Appendix A). The rest of this report describes in greater detail Phase I of our planning. In Phase II, we will refine our projections and provide additional analysis supporting our projected enrollment growth.

DISPLAY 4

UC FTE Enrollment by Campus

2007-08 Budgeted and 2020-21 Target



UC will continue to expand opportunity for California's young people

Over the past 50 years, the University of California has more than quadrupled its undergraduate enrollment to ensure that California's increasing demand for higher education was met, particularly when the "baby boomers" (and then their children, the "Tidal Wave II" generation) reached college age. Continued expansion of educational opportunities is consistent with the University's mission and character as well as with the needs of the state of California.

Enrollment at UC has been a steady engine of economic growth and social mobility, broadening access to the "California Dream" for successive generations of high school students. The University of California leads the nation's top-ranked research universities in the enrollment of low-income students[1] and 40 percent of last year's entering freshmen will be the first generation in their families to complete a four-year degree. These students go on to take their place in California's economy: UC's graduation rates (now over 80 percent for freshmen and 83 percent for transfers) are among the highest of any public institution in the country. UC's high graduation rates and the clear benefits that a more highly educated population brings the state make undergraduate growth an excellent investment for California.

[1] As measured by percentage of federal Pell grant recipients.

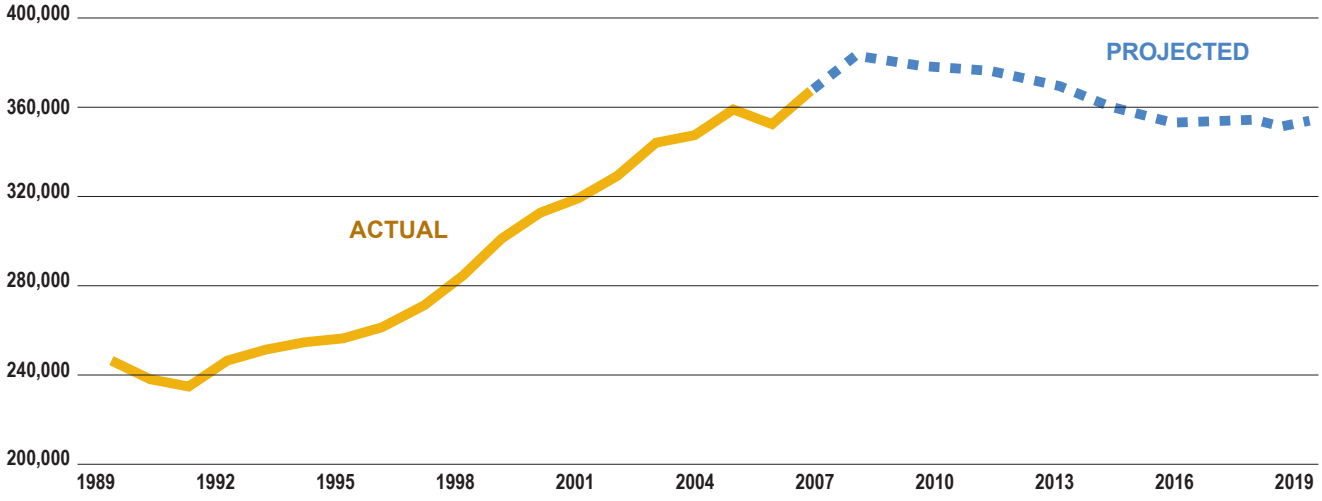
California's students have responded enthusiastically to UC enrollment opportunities and each year an ever-greater share of high school graduates aspires to UC. Increases in demand for spaces at UC consistently outpace growth among high school graduates. Today our most rapid increases in demand come from populations that have historically been underserved by higher education and that are growing as a proportion of California graduates. According to the California Department of Finance, between 2006 and 2008, Latino public high school graduates in California increased by 14.2 percent. But applications to UC from these students increased by 29.5 percent — more than twice as much as the growth in the underlying population. Similarly, African American high school graduates grew by just under 10 percent from 2006 to 2008, but applications from these students increased by nearly 24 percent.

As we look forward toward 2021, Department of Finance projections of high school graduates indicate that after a sustained period of record growth, the size of California's high school graduating class will stabilize and may even decline. *[Display 5]* Slower growth among high school graduates is good news in that it will relieve the pressure that has led to increasing competition for individual students applying to one or more of our campuses.

DISPLAY 5

California Public High School Graduates

1989–2020

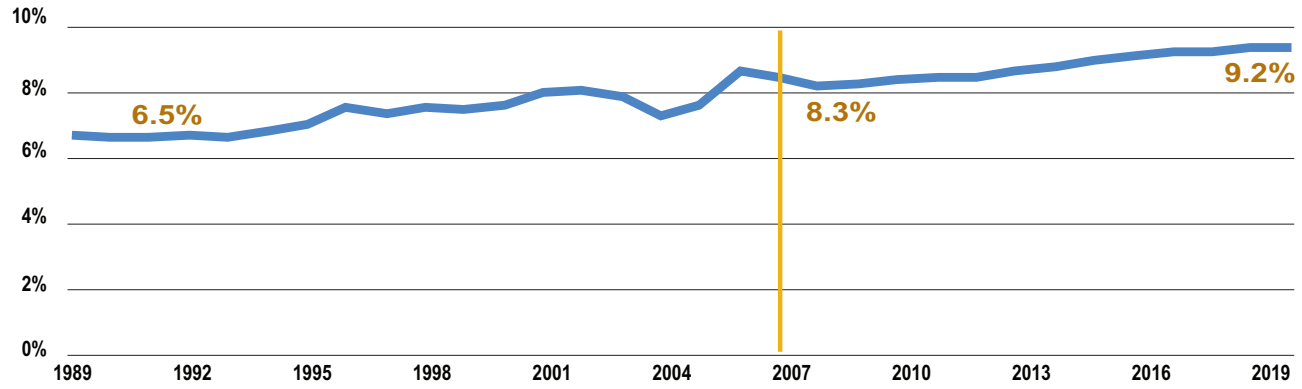


Source: Department of Finance Projections, 2007 Series (Unofficial projections 2017-2020)

DISPLAY 6

Ratios of New Freshmen to California Public High School Graduates

Freshmen from California Public High Schools



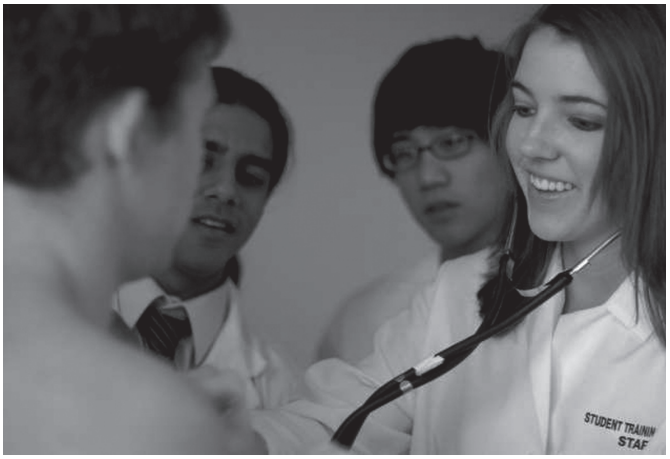
UC proposes to take advantage of these changing demographics to increase opportunity for both freshman and transfer students. In part the University will achieve this by attracting and enrolling a higher percentage of California's high school graduating class. Historically, the combination of accelerating demand for undergraduate admission and continued growth in the size of our entering classes has allowed us to increase the proportion of California public high school graduates who enroll at UC, from 6.5 percent in 1989 to more than 8 percent today.[2] Between now and 2020-21, we expect undergraduate enrollment to increase by an additional 26,000 students, to just over 195,000. Some of this growth will occur in the early years of the planning period and reflects the continued effects of Tidal Wave II. In addition we expect to increase the proportion of California's public high school graduates who enroll at UC to an all-time high of around 9.2 percent, broadening access to UC for all of California. *[Display 6]*

We also plan to take advantage of smaller numbers of high school graduates to increase the proportion of our undergraduates who enter as community college transfers. At present, the University enrolls 2.4 new freshmen for every transfer student. Our goal is move that ratio to 2:1 — one new transfer student for every two new freshmen. Our projected growth in transfer enrollments will take us halfway to this goal, reducing the ratio to 2.2 new freshmen for every new transfer. New transfer students are proposed to increase from roughly 15,300 per year in 2007-08 to nearly 17,900 in 2020-21. New transfers would increase at roughly twice the rate of new freshmen.

Although all campuses will experience some increases in undergraduate enrollment between 2007-08 and 2020-21, we expect the rate of undergraduate growth to be greatest at our campuses in Riverside and Merced — both of which are located in regions that have historically been underserved by higher education and where high school graduates are expected to continue to increase. Extending enrollment opportunities to these populations is key to ensuring that all of California's communities participate in our state's continued growth and economic success.

[2] Under the California Master Plan for Higher Education, all students in the top 12.5 percent of California public high school graduates are eligible for admission to UC, though not necessarily to their campus or major of first choice. The proportion of these students who actually enroll is lower than 12.5 percent because not all eligible students apply and many that do apply choose to attend other colleges and universities.

UC will produce more graduate-educated workers to fuel economic growth and social mobility



In recent decades, much of California's economic growth and competitiveness in the global market have been driven by high-tech industries — electronics, biotechnology, pharmaceuticals, telecommunications, nanotechnology, electronic gaming, and the special effects film industry, among others. These industries, fueled in part by the research discoveries of UC faculty, graduate students, and alumni, have produced millions of new jobs for workers, not just for those with graduate degrees but also for those with a wide range of educational backgrounds.

As the state's economy continues to shift toward jobs requiring advanced education, California will need to fill more than a million new positions requiring graduate degrees by 2025 — a 68 percent increase from 2005.

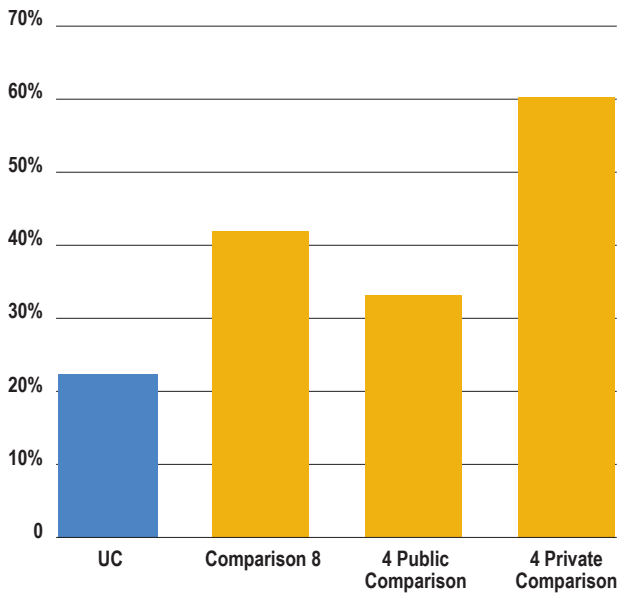
California's future economy will depend even more on high-tech industries. Stem cell research, environmental research and innovation, global health care development and delivery, and energy research will have significant impacts on the health and economy of California and the world. These science- and technology-based industries will require even more highly skilled and trained workers. As the state's economy continues to shift toward jobs requiring advanced education, California will need to fill more than a million new positions requiring graduate degrees by 2025 — a 68 percent increase from 2005. In addition, the retirement of the large baby-boom generation of highly educated workers and the significant decline in in-migration of educated workers from other states and nations create significant challenges to our economy.[3]

As the segment of California's public higher education system charged in the Master Plan with research-based graduate and professional education, UC must help address this gap. But despite the importance of graduate education to the state's economy, culture, and social welfare, the proportion of UC's graduate enrollments has declined sharply over the past 45 years. Display 7 shows how far we have fallen behind similar institutions in terms of the proportion of graduate enrollment relative to the total. This is a concern not only for the University — because graduate students are critical to our research and teaching enterprise — but because the demand for highly skilled and trained workers will only increase and without these workers the state will not remain competitive in today's knowledge-based global economy.

[3] Hans P. Johnson and Deborah Reed, "Can California Import Enough College Graduates to Meet Workforce Needs?," Public Policy Institute of California, *California Counts: Population Trends and Profiles*, May 2007.

DISPLAY 7

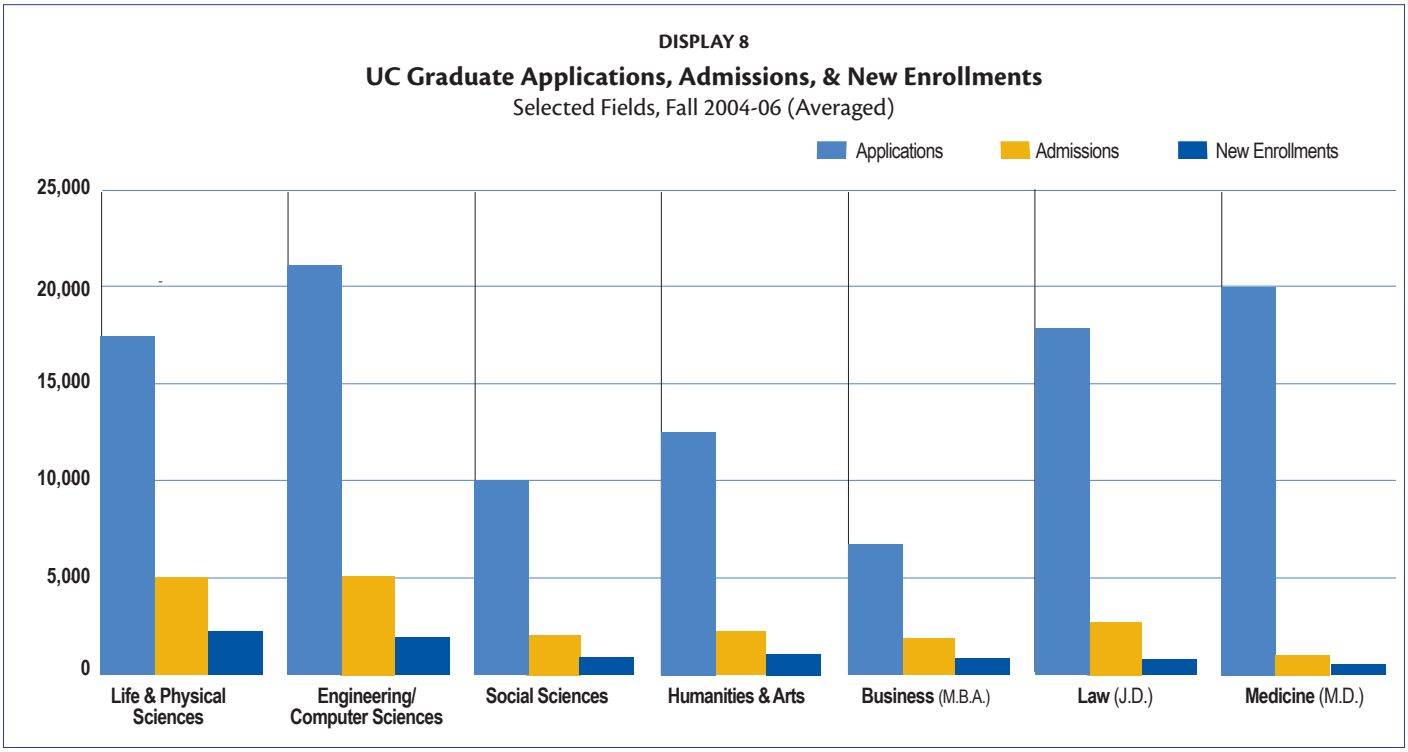
Graduate Enrollment Proportions at UC and Other Institutions



Source: 2006 IPEDS Fall Survey, all students

4 Public Comparison Universities: U. of Illinois-Urbana, U. of Michigan-Ann Arbor, SUNY-Buffalo, U. of Virginia.

4 Private Comparison Universities: Harvard, M.I.T., Stanford, Yale.

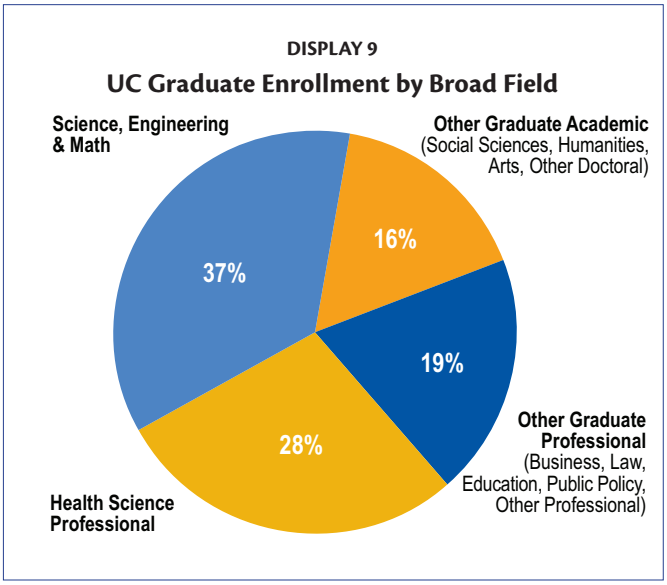


Among potential students, there is no shortage of demand for a UC graduate degree. Display 8 shows the large number of applications for study. Unfortunately, resource constraints have kept programs from admitting many highly qualified students.

Expansion of graduate enrollments is necessary to provide access to graduate education for the Tidal Wave II generation currently enrolled in college. This is particularly important because the state's underrepresented ethnic minorities, which have historically had much lower rates of graduate education, are projected to become the majority of California's population within the next 15 years. Unless more pursue graduate study, not only will their horizons be more limited, but the state will have even more difficulty in meeting its future workforce needs. We know that more than 75 percent of our own undergraduates aspire to graduate school. Unless UC increases graduate enrollments, many of these students will be unable to pursue graduate study, or will go out of state to do so, and may not return. (Conversely, we know that most UC graduate students — even those from elsewhere — plan to remain to live and work here: if we can attract them to UC for graduate study, most will stay in California.)

"I had a number of good offers to attend graduate school. But, like many of my fellow students, I specifically wanted a public university. It's not just the stellar research projects that bring graduate students to UC -- it's the opportunity to have an impact on the place where we live, to work with faculty who are focused on public service, and to teach students from the many backgrounds represented in California."

—Ahnika Kline, *Ph.D/M.D. student, UCSF*



To address these challenges, UC plans to increase graduate enrollments by about 22,000 — an increase that would take us from 22 percent of total enrollments at the graduate level to 26 percent (still well below the level of comparable public research universities). Examples of areas where UC graduate growth will address key work force needs include:

- **Science, technology, engineering and mathematics (STEM):** Workforce needs in STEM areas will be significant. Nationally, the U.S. Bureau of Labor Statistics projects that, between 2004 and 2014, jobs in science and engineering will grow nearly twice as fast as for the total of all occupations. There will also be large numbers of job openings to replace retiring workers in these fields.[4] More than a third of the graduate enrollment growth UC plans will be in science and technology. *[Display 9]*
- **Health professionals:** By 2015, California's population is expected to grow by more than 22 percent. The number of Californians aged 65 and older, who place much heavier demands on our health care system, will grow at more than twice the rate of the state's total population. A comprehensive assessment of California's health care work force needs concluded that California will face serious shortages of physicians, nurses, public health experts, and other health professionals.[5] More than a quarter of the graduate enrollment growth UC plans will be in the health professions.
- **College faculty:** The combination of continued expansion in college enrollments and large numbers of current faculty reaching retirement age means that between 2007 and 2020, California's four-year colleges and universities will need to hire more than 25,000 new tenure-track faculty. UC currently provides nearly a quarter of all UC and CSU tenure-track faculty; in the future, even more may need to come from UC, since many institutions elsewhere are not planning to grow. Increased enrollments in a broad range of UC doctoral programs will be critical to California's ability to fill these faculty positions.

Display 9 shows the rough distribution of UC's intended graduate enrollment growth across academic and professional degree programs.

[4] Calculation by National Science Board, *Science and Engineering Indicators-2008*, based on BLS projections.

[5] University of California Office of the President, *A Compelling Case for Growth: Final Report of the President's Advisory Council on Future Growth in the Health Professions*, January 2007.

Serving our local communities

Local communities and regions benefit from the research and services of UC faculty, graduate and undergraduate students, postdoctoral scholars, and alumni. Businesses locate near UC campuses to be near UC researchers and a well-educated population and professional workforce. Surveys have found, for example, that one in four U.S. biotech firms is within 35 miles of a UC campus, and 85 percent of California biotech firms employ UC alumni with graduate degrees. The aggregation of biotech companies in the Bay Area and surrounding UC San Diego and the UC Irvine-UCLA "joystick corridor" are prominent examples of the regional economic stimulus UC research and education provide.

Campus projections are firmly grounded in local needs for the research and intellectual expertise UC provides. In their graduate enrollment proposals, UC campuses have consciously targeted programs that will benefit their region's economy and people. UC Riverside, for example, is planning new master's programs in a number of areas where the Inland Southern California region is expected to have significant needs, such as civil engineering, global and environmental change, and education. UC Santa Cruz, located very close to Silicon Valley, is proposing new programs in digital media and digital arts.

The enrollment projections prepared by UC campuses also reflect the concerns of local communities about campus growth. Campuses such as Santa Cruz and Santa Barbara, sited in small, environmentally sensitive communities, will remain among our smaller campuses. Other campuses, such as Merced, Riverside, Irvine, and San Diego project more substantial growth. Larger campuses such as Berkeley and Los Angeles have stable populations that will not increase substantially.

Appendix B relates each campus's growth plans to its current and future Long Range Development Plans.

"UCSC's graduate programs … are closely connected with our unique location in the marine, coastal, forest, and agricultural ecosystems and … diverse communities of the Silicon Valley, Monterey Bay, and Pajaro Valley areas. With these communities we share a strong commitment to environmental awareness, social justice, entrepreneurial creativity, and technological innovation."

—UC Santa Cruz Planning Documents

How these projections were developed

The projections in this report are the product of systemwide and campus planning efforts that began in early 2007. They follow on the work of the President's Long-Range Guidance Team (http://www.universityofcalifornia.edu/future/lrgt1106.pdf) and academic planning efforts at each of the campuses. They are also consistent with the planning efforts underlying each campus's Long Range Development Plan (see Appendix B for more on campus LRDPs). Proposals recognize that UC serves a statewide population, and that all campuses share in accommodating enrollment growth given their capacity.

The University identified four key goals for its enrollment planning work:

- To identify enrollment levels that allow each individual campus to achieve its unique academic goals
- To increase both the number and proportion of graduate students at UC
- To continue to expand undergraduate opportunity and to increase the proportion of undergraduates who enter as community college transfers
- To increase diversity at all levels

Campuses developed individual projections for the period 2010-11 through 2020-21, building on enrollment levels already planned through 2010-11 (and included in the Governor's Compact). Undergraduate projections were based on current enrollment levels, reasonable growth rates, and campus capacity, and were informed by Department of Finance projections of local and statewide high school graduates. Graduate projections were based on anticipated need for additional research and education opportunities in emerging fields, expected labor market demand for students with graduate training in specific fields, and existing and projected student demand for UC graduate programs.

Graduate enrollment projections will be refined and supported with additional labor market analysis over the next several years, as the University develops specific proposals for additional enrollment and associated funding. For example, both the Riverside and Merced campuses anticipate opening medical schools by 2021. Because of the very large projected need for doctors and other health care professionals in California and the strong regional interest in improving medical education in the Inland Empire and Central Valley, we believe it is prudent to plan for these possibilities. But actual enrollments will depend on how quickly these and other programs can be developed.

Proposed University of California Full-Time Enrollments

2007-08 through 2020-21
Subject to Revision

	2007-08 Budgeted	2010-11 Proposed	2020-21 Proposed
Berkeley			
Undergraduate	24,435	26,360	26,600
Graduate	8,137	8,560	9,050
Health Sciences Graduate Professional	724	740	760
Total	**33,296**	**35,660**	**36,410**
Davis			
Undergraduate	23,340	24,610	26,920
Graduate	4,611	5,070	6,830
Health Sciences Graduate Professional	1,658	2,630	3,030
Total	**29,609**	**32,310**	**36,780**
Irvine			
Undergraduate	22,650	24,530	24,200
Graduate	3,594	4,280	5,840
Health Sciences Graduate Professional	991	1,120	1,240
Total	**27,235**	**29,930**	**31,280**
Los Angeles			
Undergraduate	25,856	26,400	26,400
Graduate	7,929	8,370	8,640
Health Sciences Graduate Professional	3,541	3,740	3,950
Total	**37,326**	**38,510**	**38,990**
Merced			
Undergraduate	1,860	3,770	8,820
Graduate	140	320	1,900
Health Sciences Graduate Professional	-	-	380
Total	**2,000**	**4,090**	**11,100**
Riverside			
Undergraduate	15,059	16,050	18,830
Graduate	2,100	2,830	5,000
Health Sciences Graduate Professional	48	60	860
Total	**17,207**	**18,940**	**24,690**
San Diego			
Undergraduate	22,575	23,790	24,700
Graduate	4,055	4,680	6,630
Health Sciences Graduate Professional	1,153	1,540	2,270
Total	**27,783**	**30,010**	**33,600**
San Francisco			
Graduate	770	1,050	1,340
Health Sciences Graduate Professional	3,014	3,660	4,150
Total	**3,784**	**4,710**	**5,490**
Santa Barbara			
Undergraduate	19,000	19,030	20,990
Graduate	3,000	3,050	3,890
Total	**22,000**	**22,080**	**24,880**
Santa Cruz			
Undergraduate	14,472	15,630	17,950
Graduate	1,600	1,800	3,390
Total	**16,072**	**17,430**	**21,340**
University Total			
Undergraduate	169,247	180,170	195,410
Graduate	35,936	40,010	52,510
Health Sciences Graduate Professional	11,129	13,490	16,640
Total	**216,312**	**233,670**	**264,560**

Undergraduate enrollments include both general campus and health sciences undergraduates.

Graduate enrollments include all general campus graduate enrollments and health sciences graduate academic enrollments.

Health Sciences Graduate Professional enrollments include professional degree and residency programs in allied health fields, dentistry, medicine, nursing, optometry, pharmacy, and veterinary medicine and all graduate programs in public health.

APPENDIX B

Relationship of Campus Enrollment Projections to Campus Long Range Development Plans

Long Range Development Plans (LRDPs) provide the physical planning framework to guide campus development. LRDPs focus on campus development needs over a number of years to accommodate anticipated academic programs, students, faculty, staff and visitors to the campus. A campus's projected enrollment may be accommodated both at the main campus for which the LRDP is adopted and at other sites, such as an off-campus academic center or in Study Abroad locations. LRDPs are designed to accommodate enrollments that are expected in the "regular" academic year (i.e., fall through spring terms); the campus enrollment projections presented here assume that some enrollment will occur in the summer. Campus enrollment projections were made in the context of existing LRDPs[6], with proposed modifications as noted below.

Berkeley — The current LRDP is based on an on-campus enrollment expectation in 2020 of 33,450 year-average headcount students. The campus's projection of potential students (including summer and off-campus enrollments) is 36,400. Should these enrollments aspirations seem likely to exceed the parameters of the LRDP, the campus would determine whether an LRDP update or amendment is necessary.

Davis — The current LRDP is based on an on-campus enrollment expectation of 30,000 year-average headcount students by 2015-16, with an additional 2,000 students at other sites. UC Davis's projected total enrollment (including summer and off-campus enrollments) is 36,780 FTE students in 2020-21. Before adopting new enrollment levels beyond those envisioned in the 2003 UC Davis LRDP, the campus would evaluate the impact on the current LRDP and initiate an amendment or update process as needed. A new LRDP would be subject to the approval of the Regents.

Irvine — The campus's projected enrollment of 31,300 FTE students is accommodated in the enrollment assumptions of its recently approved (2007) LRDP, which assesses the campus's potential capacity to be 37,000 three-term average headcount enrollments by 2025 (which is beyond the time-frame of the current enrollment planning period that ends in 2020-21).

Los Angeles — Projections are for 39,000 FTE students for all terms and all sites, representing very modest growth by 2020 (approximately 1,000 additional FTE). The campus is currently assessing whether and how the projected enrollment increase will change any assumptions in the LRDP.

Merced — The campus, which is in the early years of development, projects an enrollment of 25,000 students in 2028. It projects reaching 11,000 FTE students by 2020-21, which is consistent with the phasing assumed in the campus LRDP. (The campus is currently revising its LRDP to address development limitations associated with Section 404 of the Clean Water Act.)

Riverside — The campus projects growth to 24,500 FTE students at all sites and all terms by 2020-21. The campus's 2005 LRDP projected enrollment growth to 25,000 students by 2015.

San Diego — The campus is proposing 33,600 FTE students (all terms and all locations), which is consistent with its 2004 LRDP which projected 32,700 FTE enrollments (which includes summer enrollments but not off-campus enrollments).

San Francisco — UCSF is currently revising its now ten-year old LRDP to cover the years 2012-2025. The projected enrollment level of 5,500 FTE will form the basis of that new LRDP.

Santa Barbara — The campus is currently revising its LRDP, which will reflect the growth projected in the enrollment plan (to 24,900 FTE, all terms and all locations).

Santa Cruz — The campus's current (2006) LRDP was based on an on-campus enrollment projection of 19,500 students in 2020. Total enrollment is projected to be 21,300 FTE (which includes off-campus locations, such as Silicon Valley.)

[6] LRDPs are based on a year-average headcount for the regular academic year (fall-winter-spring quarters, or fall-spring semesters). The enrollment projections in this report are FTE students which are generally equivalent (when summer FTE are included in the calculation) to year-average headcount used in LRDPs.

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Wyatt R. Hume, Provost and Executive Vice President — Academic and Health Affairs

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