

INSTITUTE FOR HIGHER EDUCATION LEADERSHIP & POLICY

Moving Forward: Increasing Latino Enrollment in California's Public Universities

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Introduction

Many people in California have called for measures to increase the share of Latino high school graduates that is eligible for enrollment in the University of California (UC) and California State University (CSU) as one strategy for increasing Latino educational attainment. Both advocates for equity in opportunities for higher education and those concerned about the future workforce and economy of the state see a need for more Latino students to enroll in the state's public universities. Reforms are underway in the state's K-12 education system to increase academic preparation for college, and UC and CSU are using outreach efforts to increase applications and enrollment. The state needs to ensure that it plans for the success of these efforts by having enough physical and resource capacity to accommodate any additional students.

This report will examine issues of UC/CSU eligibility among under-represented minority high school students, with a focus on the growing Latino population, including the potential impact on enrollments in UC/CSU of increasing eligibility rates. Following a description of the college attainment gap for Latinos and some general discussion of eligibility criteria and current eligibility rates, the report describes a simple model that can be used to estimate eligibility increases for Latinos and presents a sample scenario for changes in Latino eligibility rates and the impact on enrollments and overall eligibility among all high school graduates.

The Latino College Attainment Gap

Earning a college degree is more important than ever for individual economic success, and the share of young people successfully enrolling in and completing college has important implications for state and national economic competitiveness. In spite of dramatic increases in the number of Hispanic¹ students enrolling in American higher education institutions, Latinos continue to be under-represented among those enrolling in and completing a postsecondary education,² as shown in Table 1. Latinos represent a large and growing share of the working-age population in a number of states, raising concerns about the nation's ability to maintain economic competitiveness and a healthy social and civic life.

Several recent studies have warned of the particular challenge California is facing to maintain an educated workforce given its large and growing Latino population.³ Data displayed in Table 2 summarize that concern, showing that the state's Latino population is substantially under-represented with respect to both college enrollments and degrees awarded. While Latinos represent 43 percent of the college-age

¹ "Hispanic" and "Latino" are used interchangeably in this report.

² Cook, B. J. & Cordova, D. I. (2007). *Minorities in higher education: Twenty-second annual status report:* 2007 supplement. Washington, DC: American Council on Education.

³ Baldassare, M. & Hanak, E. (2005). *California 2025: It's your choice*. San Francisco: Public Policy Institute of California; Moore, C. & Shulock, N. (2006). *State of decline? Gaps in college access and achievement call for renewed commitment to educating Californians*. Sacramento, CA: Institute for Higher Education Leadership & Policy, California State University, Sacramento; Fountain, R. & Cosgrove, M. (2006). *Keeping California's edge: The growing demand for highly educated workers*. Sacramento, CA: Applied Research Center, California State University, Sacramento.

population, they represent only 13 percent and 23 percent of students enrolled in the UC and CSU, respectively. Latinos are under-represented in the community colleges as well, but to a lesser extent.

The under-representation of Latinos in higher education is partly a function of the large immigrant population – some college-age Latinos never attended California's K-12 schools, but arrived in the state as young adults with a low level of educational attainment. But attainment is also lower among Latino students attending California schools. The chance of a Latino 9th grader enrolling in college within four years (26%) is substantially lower than for a white student (38%). Lower rates of high school graduation are a larger factor than are differences in rates of college going among high school graduates (see Figure 1).

Table 1

Latino Representation in College Enrollments and Degrees in the United States

	Percent Hispanic/ Latino
College-Age Population (ages 18-24)	17.6%
Higher Education Enrollments	9.7%
4-year institutions	7.1%
2-year institutions	13.9%
Degrees Awarded	7.1%
Associate	10.7%
Bachelors	6.6%
Masters	4.9%
Professional	4.8%
Doctoral	3.2%

Source: American Council on Education, *Minorities in Higher Education: Twenty-Second Annual Status Report:* 2007 supplement. Calculated from data in Table 1 (2005 college-age population), Table 4 (2004 fall enrollments), and Tables 14 to 18 (2004-05 degrees awarded).

Table 2

Latino Representation in College Enrollments and Degrees in California

	Percent Hispanic/ Latino
College-Age Population (ages 18-24)	43.0%
University of California	
Enrollments	12.6%
Bachelor's Degrees Awarded	12.8%
California State University	
Enrollments	22.6%
Bachelor's Degrees Awarded	20.0%
California Community Colleges	
Enrollments	29.1%
Certificates/Degrees Awarded	26.3%
Transfers to UC/CSU	21.7%

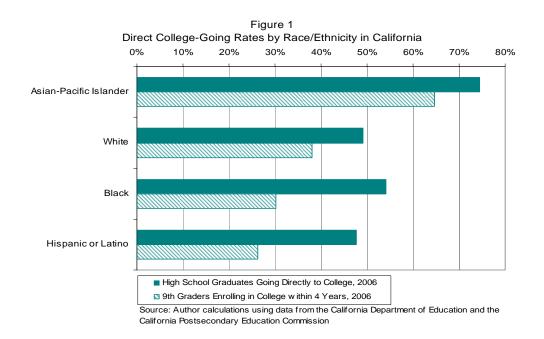
Source: California Postsecondary Education Commission on-line data; enrollments and degrees awarded from Characteristics by Ethnicity Reports, 2006; transfers based on custom report of full-year transfers to public institutions in 2006

There are a number of factors contributing to the lower rates of college enrollment among Latino students, including:⁴

- ♦ lower levels of academic preparation (see Figure 2)
- Iower family incomes
- Iower parental education levels
- higher rates of dropping out of high school, and of earning a General Educational Development (GED) certificate or other equivalency rather than a standard high school diploma
- Iower educational aspirations among students as they enter high school
- higher numbers of other risk factors including changing schools, being held back in school, having a low GPA, having a child while still in high school, and having siblings who dropped out.

Lower levels of academic preparation among California's Latino students are, in part, related to their greater likelihood of attending high schools with insufficient offerings of college preparatory (a-g) courses, fewer highly-qualified teachers, and student-to-counselor ratios that exceed the already-high average for all high schools in the state of one counselor for every 506 students.⁵

Among Latino college students, a number of factors contribute to lower rates of persistence and degree completion (see Figure 3), including a greater likelihood of attending part-time and of stopping out for one or more terms rather than attending continuously.⁶

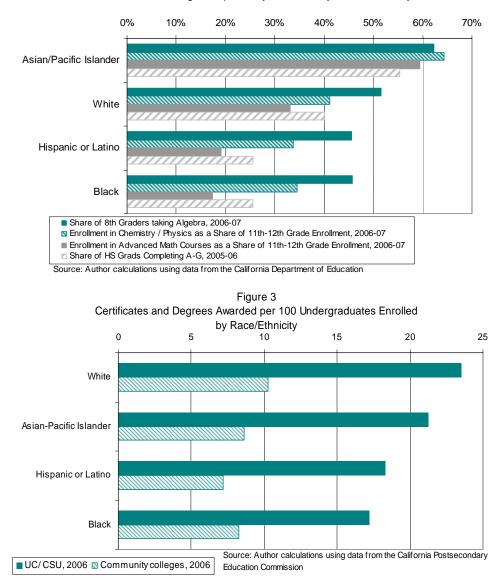


⁴ Swail, W. S., Cabrera, A. F., & Lee, C. (2004). *Latino youth and the pathway to college*. Washington, DC: Pew Hispanic Center.

⁵ Oakes, J., Rogers, J., Silver, D., Valladares, S., Terriquez, V., McDonough, P., Renee, M., & Lipton, M. 2006). *Removing the roadblocks: Fair college opportunities for all California students*. Los Angeles: UCLA Institute for Democracy, Education and Access

⁶ Swail, Cabrera & Lee, 2004; Moore, C. & Shulock, N. (2007). *Beyond the open door: Increasing student success in the California Community Colleges*. Sacramento, CA: Institute for Higher Education Leadership & Policy.

Figure 2 Enrollment in College Preparatory Courses by Race/Ethnicity



The lower level of participation and success in higher education among Latinos has serious consequences for the state's workforce and knowledge-based economy. Latinos represented 22 percent of the working-age population (ages 25 to 64) in 1990, growing to 29 percent by 2000, and expected to reach 40 percent by 2020 and 49 percent by 2040.⁷ Other states are doing a better job than California at educating their young people. California ranks second among the 50 states in the share of the population age 65 or older with an associate's degree or higher, but its rank declines with each successively younger age group (see Table 3). Among younger workers ages 25 to 34, California ranks 30th among the states.

⁷ Calculated from *Race/Ethnic Population with Age and Sex Detail 1990-1999* (May 2004) and 2000-2050 (July 2007), California Department of Finance, Demographic Research Unit

Table 3

Age Group	Rank among States in Share of Population with AA or Higher	Rank among States in Share of Population with BA or Higher	
65 and older	2 nd	5 th	
45 to 64	11 th	10 th	
35 to 44	21 st	16 th	
25 to 34	30 th	23 rd	

California is Becoming Less Educated than Other States

Source: NCHEMS Information Center for Higher Education Policymaking and Analysis (www.higheredinfo.org) based on data from the US Census Bureau, 2005 American Community Survey

Eligibility Rates of High School Graduates

While Latino high school graduates in California are about as likely as white students to go directly to college (as shown above in Figure 1), they are more likely to enroll in a community college. Fifty-nine percent of white students going directly to California's public higher education institutions after high school enroll in a community college, while over two-thirds (69%) of Latino students enroll in a community college.⁸ Recent research shows this gap between white and Hispanic freshmen in enrollment at fouryear institutions widening in several states with large Latino populations, including California.⁹ Enrollment in a community college rather than a university can have important implications, with a number of studies indicating a greater likelihood of degree completion for students who initially enroll in a four-year university.¹⁰

While the California Community Colleges (CCC) are open-access institutions, high school graduates must meet certain eligibility requirements to enroll in either UC or CSU. Based on recommendations in the 1960 Master Plan for Higher Education, the top 12.5 percent of the state's high school graduates are eligible for enrollment in the UC and the top one-third are eligible for CSU. All other students can enroll in the CCC, and may transfer to UC or CSU to complete a baccalaureate after completing lower-division requirements at a community college.

UC and CSU have set minimum entrance requirements to determine which high school graduates are eligible for enrollment. To be eligible, a student must have completed a required set of high school courses and achieved a minimum grade point average (GPA).¹¹ The high school course requirements (known as a-g) are the same in both CSU and UC. Students with a GPA of at least 3.0 are eligible for CSU, and students with a lower GPA can be admitted if they achieve a particular score on a college

⁸ California Postsecondary Education Commission on-line data – Enrollment of First-Time Freshmen age 19 and under in Public Institutions for 2006

⁹ Fry, R. (2005). Recent changes in the entry of Hispanic and white youth into college. Washington, DC: The Pew Hispanic Center. ¹⁰ Fry, R. (2002). *Latinos in higher education: Many enroll, too few graduate*. Washington, DC: The Pew

Hispanic Center: Berkner, L., Horn, L., Clune, M. & Carroll, C. D. (2000), Descriptive summary of 1995-96 beginning postsecondary students: Three years later. NCES 2000-154. Washington, DC: National Center for Education Statistics ¹¹ GPA is calculated on a-g courses taken during the sophomore and junior years in high school.

entrance examination (SAT I or ACT), although the GPA must be at least 2.0. UC uses an index that combines students' GPA and exam scores to determine eligibility.¹² Students with lower GPAs need higher test scores to be eligible for enrollment, with a minimum GPA of 3.0.¹³ UC has two other paths to eligibility. Students in the top four percent of their high school class are eligible (eligibility in the local context), and students who achieve a sufficiently high score on the entrance exams are eligible even without completing the required coursework (eligibility by examination alone).

Eligibility Study for Class of 2003

The California Postsecondary Education Commission (CPEC) periodically conducts eligibility studies of high school graduating classes to determine whether the systems' eligibility requirements are appropriate for selecting the correct proportion of graduates. CPEC collects and reviews a representative sample of student transcripts to determine the proportion of students that meet the UC and CSU eligibility requirements. The studies provide estimates of eligibility rates for regions and for racial/ethnic groups to assess disparities in eligibility.

The most recent eligibility study was conducted for the 2003 graduating class.¹⁴ Table 4 shows the estimated eligibility rates for all graduates and for each racial/ethnic group.¹⁵ Consistent with previous eligibility studies, substantially larger shares of white and Asian graduates were eligible for UC and CSU compared to black and Latino graduates. Lower rates of eligibility are in part related to lower rates of completing the required coursework as shown earlier in Figure 2. In addition, black and Latino students are less likely to take the required college entrance exams, and average scores are lower among those who take the tests.¹⁶

Race/Ethnicity	UC	CSU
White	16.2%	34.3%
Asian	31.4%	47.5%
Hispanic/Latino	6.5%	16.0%
Black	6.2%	18.6%
All Graduates	14.4%	28.8%

Table 4

Eligibility Rates by Race/Ethnicity for the Class of 2003

Source: California Postsecondary Education Commission

¹² In addition to the SAT I or ACT, UC requires students to take two SAT II subject examinations. The eligibility index combines scores on all exams. UC uses a "comprehensive review" of applications in making admissions decisions for a particular campus, but this is beyond the point of determining basic "eligibility" for the system.

The minimum GPA was recently increased from 2.8.

¹⁴ California Postsecondary Education Commission (2004). University eligibility study for the class of 2003. Sacramento, CA: CPEC.

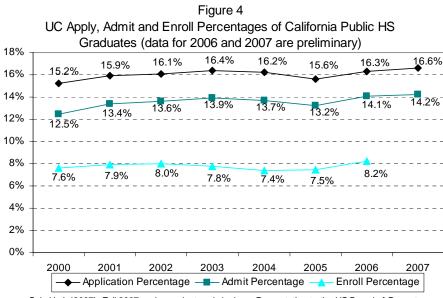
The eligibility rates do not represent the true value of the share of students that met eligibility requirements, but are estimates based on a sample of student transcripts. The CPEC study provides the 95 percent confidence range for each estimate - the range within which we can be 95 percent confident that the true value lies. The confidence ranges for UC eligibility are: white - 13-19%; Asian - 19-43%; Latino and Black - 5-8%; all graduates - 11-18%. The confidence rages for CSU eligibility are: white - 31-38%; Asian -39-57%; Latino – 14-18%; Black – 15-22%; all graduates – 25-32%.

UC Response

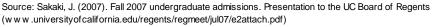
The results of the eligibility study indicated that over 14 percent of high school graduates in the class of 2003 met the eligibility requirements for UC. This rate was above the Master Plan target of 12.5 percent, although the 12.5 percent target fell within the statistical confidence range. As a result of the study's findings, UC implemented two procedural changes effective with the fall 2005 entering class:¹⁷

- A student's GPA now reflects performance in all a-g courses taken during the 10th and 11th grades. Previously, the calculation of GPA for eligibility purposes reflected the best combination of grades a student received for a given subject in cases where students took more than the minimum number of courses required, although campuses always used all a-g grades to calculate GPA when selecting students for admission.
- 2. Students in the top four percent of their class must now complete all course and testing requirements before UC will consider them eligible under the Eligibility in the Local Context (ELC) program. This change does not alter the actual requirements for ELC students, only the timing of when they officially become eligible.

In addition to these procedural changes, UC increased the minimum GPA requirement from 2.8 to 3.0 beginning with applicants for fall 2007.¹⁸



These changes are intended to keep the size of the university's eligibility pool within the 12.5 percent target, but no information will be available on the actual impact of the changes until CPEC completes the eligibility study currently underway for the graduating class of 2007.¹⁹ Rates of application and admission to UC have not changed substantially from 2003 as shown in Figure 4, although similar data by race/ethnicity are not available.20



¹⁶ Among high school seniors in 2004-05, the share of students that took the SAT I exam was 21 percent for Latinos, 29 percent for blacks, 33 percent for whites, and 57 percent for Asians. The average total (math + verbal) score was 899 for Latinos, 869 for blacks, 1085 for whites, and 1063 for Asians.

 ¹⁷ UC Office of the President (2004, July 15). Regents approve some eligibility adjustments for 2005, delay action on proposed GPA increase. UC press release, retrieved October 17, 2007 from www.ucop.edu/news/archives/2004/jul15.htm.
¹⁸ UC Office of the President (2004, September 23). Regents increase minimum GPA required for UC

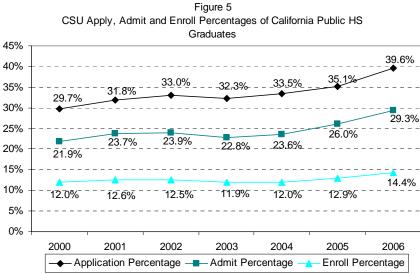
¹⁸ UC Office of the President (2004, September 23). *Regents increase minimum GPA required for UC eligibility from 2.8 to 3.0, effective for fall 2007 entering freshmen.* UC press release, retrieved October 17, 2007 from www.ucop.edu/news/archives/2004/sep23.htm.

 ¹⁹ A report of the study is due in late fall 2008 (see www.cpec.ca.gov/Agendas/Agenda0709/Item_09.pdf).
²⁰ Personal communication with Todd Greenspan, UC Office of the President, Educational Relations Office, September 24, 2007

CSU Response

The results of the 2003 eligibility study indicated that about 29 percent of high school graduates met the CSU eligibility requirements, below the Master Plan target of onethird. However, CSU decided against adjusting their eligibility criteria based on a loss of statistical precision related to methodological changes in the 2003 study and other considerations.²¹ The study used a different sampling technique than used in previous studies, and transcripts were evaluated electronically rather than manually. Funding constraints limited the number of schools sampled, resulting in larger confidence intervals around the estimates than in earlier studies. The estimate for comprehensive high schools, which enroll a large majority of students, was within the statistically acceptable range. Also, the 2003 study was conducted at a time when the a-g course requirements for CSU had recently been changed to require an additional year of lab science, perhaps accounting for any initial drop in eligibility rates.

According to CSU, the general pattern has been that changes to the CSU admission requirements are followed by a temporary dip in the proportion of high school graduates eligible to enroll; but the initial dip is followed by a regression back to the mandated standard of 33.3 percent. As shown in Figure 5, increasing percentages of public high school graduates are applying and being admitted to CSU and, while the data were not available by race/ethnicity, CSU reports that increases among Latino students exceed the systemwide increases.²² The CSU expects the 2007 eligibility study to show that the current eligibility rate is statistically equal to the mandated standard.



Source: Calculated using data from the CSU Chancellor's Office (Analytic Studies - New Students Applications and Admissions Reports) and the California Department of Education

²¹ Personal communication with Phillip Garcia, Director of Analytic Studies, CSU Chancellor's Office, September 5, 2007

²² Personal communication with Phillip Garcia, Director of Analytic Studies, CSU Chancellor's Office, September 5, 2007

Alternatives for Increasing Latino Enrollment in Public Universities

There are several alternatives for increasing the share of Latino high school graduates enrolling in UC and CSU, including:

- ♦ increasing the eligibility rate among Latino high school graduates
- o increasing the enrollment rate of students already meeting eligibility requirements
- o increasing the rate of transfer from the CCC

Each alternative would call for somewhat different policy and programmatic actions.

Increasing Eligibility

The 2003 eligibility rate for UC among Latino students, at 6.5 percent, was low compared to the rates for white and Asian students. But it represented an increase over the rate of three to four percent found in several earlier eligibility studies dating back to 1986.²³ The eligibility rate for CSU among Latino students fluctuated across the studies, but the rate of 16 percent in 2003 was an increase over the rate of 13 percent in 1996. Increasing the eligibility rate would require improvements in the level of academic performance in high school among Latino students, ²⁴ and increasing the share of students completing the a-g curriculum and taking required SAT/ACT exams. Another option for increasing rates of eligibility would be to reconsider the way eligibility is defined, by changing course-taking and/or test requirements.²⁵ Of course, an increasing rate of eligibility limits defined in the Master Plan. The response of UC to the overall eligibility rate of 14.4 percent was a moderate increase in admissions requirements in an effort to move back to the 12.5 percent standard. Such increases in standards are likely to impact the students already less likely to meet the current standards.

Encouraging Enrollment

There are currently students who meet the eligibility requirements for UC and CSU who either do not apply or choose not to enroll. Table 5 shows the enrollment rates among eligible high school graduates in 2003. Eligible Latino students were more likely to enroll in UC or CSU than eligible white students, at least in part related to their being the least likely group of students to enroll in private non-profit colleges and universities.²⁶ However, more than 40 percent of Latinos who met UC eligibility requirements, and about half of those who met CSU requirements did not enroll. Some students eligible for UC and/or CSU likely chose to enroll in a CCC campus instead. Increasing the enrollment rate of eligible Latino students would involve outreach efforts aimed at encouraging eligible high school seniors to apply to UC and CSU, and to enroll upon admission. Ensuring that students are aware of and apply for available financial aid would be particularly important.

²³ CPEC, 2004

²⁴ Academic performance as measured by higher GPA can be related to the availability of Advanced Placement (AP) courses in students' high schools, because an extra grade point is assigned for those courses (e.g., an "A" carries 5 points rather than 4).

²⁵ For example, the UC Academic Senate's Board of Admissions and Relations with Schools (BOARS) recently proposed dropping the UC requirement for students to take two SAT II subject tests in addition to the SAT I or ACT. See www.universityofcalifornia.edu/senate/underreview/sw.rev.eligibility.reform.0807.pdf ²⁶ Swail et al., 2004

Table 5

Enrollment Rates among Eligible High School Graduates

Race/Ethnicity	UC	CSU
White	43%	30%
Asian	71%	32%
Hispanic/Latino	58%	51%
Black	64%	56%
All Eligible Graduates	59%	39%

by Race/Ethnicity for the Class of 2003

Source: Author calculations using data from the California Postsecondary Education Commission; calculated as the number of first-time freshmen under age 19 enrolling in fall 2003 (obtained from online data), divided by the number of eligible students (calculated by multiplying the eligibility rate by the number of high school graduates in 2003)

Increasing Transfer

Latino enrollment in California's public universities could also be increased by increasing the rate at which Latino students in the CCC transfer to UC and CSU. Given that nearly three quarters of Latino students enrolled in California's public higher education system attend the community colleges, the campuses of the CCC represent a substantial pool of potential baccalaureate degree recipients. However, several recent studies, each using a different method to identify students with a goal of transferring to a university, have concluded that Latino students in the CCC are less likely to successfully transfer.²⁷ Increasing transfer rates would require increasing the number of students successfully completing remedial or basic skills courses, and increasing retention and successful completion of a transfer curriculum. Efforts are also needed to support Latino students in the CCC in applying for transfer admission to CSU and UC and applying for financial aid. State policy interventions could be used to encourage Latinos to transfer, with possibilities including:

- offering discounted fees at UC/CSU for students who complete a CCC transfer program to reduce the fee differential of moving from the CCC to a university
- providing incentives for UC and CSU to offer upper-division programs on CCC campuses to allow students to complete a baccalaureate at their community college without traveling to a university
- instituting a common General Education core curriculum transferable to any UC/CSU campus or otherwise requiring more standardization across UC and CSU campuses in course articulation and transfer requirements.

²⁷ Horn, L. & Lew, S. (2007). Unexpected pathways: Transfer patterns of California community college students. Berkeley, CA: MPR Associates, Inc.; Moore, C. & Shulock, N. (2007). Beyond the open door: Increasing student success in the California community colleges. Sacramento, CA: Institute for Higher Education Leadership & Policy, California State University, Sacramento; Sengupta, R. & Jepsen, C. (2006). California's community college students. San Francisco, CA: Public Policy Institute of California

Estimating the Impact of Increasing Eligibility among Latino Students

This section describes a simple model that can be used to estimate increases in eligibility for UC/CSU among Latinos, and presents a sample scenario for the impact of changes in Latino eligibility rates on UC/CSU enrollments and overall eligibility among high school graduates.

Description of the Model

The model relies on several pieces of information:

- ◊ projections of high school graduates by race/ethnicity
- current eligibility rates by race/ethnicity
- current rates of enrollment among eligible students of each racial/ethnic group (i.e., among those high school graduates eligible for UC/CSU, the percentage that actually enroll)
- the relationship of first-time freshman enrollment to total enrollment in UC and CSU
- the relationship of headcount enrollment to full-time equivalent student (FTES) enrollment in UC and CSU.

The model uses projections of high school graduates produced by the Western Interstate Commission on Higher Education (WICHE), which extend through 2017-18.²⁸ The current eligibility and enrollment rates are based on the 2003 CPEC study, which represent the most up-to-date information available on eligibility by race/ethnicity. The ratios of freshman-to-total enrollment and FTES-to-headcount enrollment are based on historical rates for the last five years.

The model allows one to estimate the impact on total enrollment in UC and CSU of changes in the eligibility and enrollment rates of specific racial/ethnic populations for the years 2008 through 2018. The user enters a particular year during that period into the model, and enters an assumed eligibility rate for each racial/ethnic population, and an assumed enrollment rate among eligible students. The model then uses the following algorithm to estimate enrollment in UC and CSU (separately) for that year:

- 1. looks up the projected number of high school graduates during that year for each racial/ethnic group
- 2. multiplies the number of high school graduates of each racial/ethnic group by the assumed eligibility rate (chosen by the user) to determine the number of students of each racial/ethnic group meeting eligibility requirements
- 3. multiplies the number of eligible students for each racial/ethnic group from step 2 by the assumed enrollment rate (chosen by the user) for each group to determine the estimated first-time freshman enrollment
- 4. sums across the freshman enrollment of each racial/ethnic group to determine total first-time freshman enrollment

²⁸ Western Interstate Commission on Higher Education (2004). *Knocking at the college door: Projections of high school graduates by state, income and race/ethnicity, 1988-2018.* Boulder, CO: WICHE. While the California Department of Finance regularly produces projections of high school graduates, they are not publishing projections by race/ethnicity at this time due to changes in the reporting system used by the Department of Education, and resulting inconsistencies in racial/ethnic projections (personal communication with Mary Heim, Demographic Research Unit, Department of Finance, October 17, 2007).

- 5. divides the figure from step 4 by the average ratio of first-time-freshman-to-total enrollment over the last five years (e.g., based on enrollment data from CPEC, first-time freshmen under age 19 represented 12.5% of total enrollment in UC on average over the last five years) to determine total headcount enrollment
- 6. multiplies the figure from step 5 by the average ratio of FTES-to-headcount enrollment over the last five years to determine the estimated total FTES enrollment in each system
- 7. divides the estimated total number of eligible students for each sector by the total number of projected high school graduates to determine the total eligibility rate for all high school graduates for comparison with the Master Plan targets.

Estimated Impact on Enrollment of Constant Eligibility Rates

Table 6 shows the FTES enrollment in UC and CSU that could be expected over the next decade if eligibility rates remain constant at 2003 levels.²⁹ Enrollment in both UC and CSU could be expected to decline as the number of high school graduates begins to decline after growing steadily since the early 1990s. Underlying demographic changes occurring in the high school graduate population affect the rates of growth in FTES given the different eligibility rates for racial/ethnic populations. Over the next decade, the white share of the high school graduate population will continue to decline while the Hispanic and Asian shares increase. In the early 1990s, white students represented half of all public high school graduates, while Latinos represented less than 30 percent.³⁰ By 2018 this situation will be reversed and Latinos will represent nearly half of high school graduates while white students make up less than 30 percent. The Asian population will continue to represent a growing share of graduates as well, with their share increasing from about 14 percent in the early 1990s to 18 percent by 2018.

	Number of		UC		UCCC	CS	U
Year	High School Graduates ¹	Growth in Graduates	FTES ²	Growth in FTES	FTES ²	Growth in FTES	
2008	388,049		225,922		361,668		
2009	386,895	-0.3%	224,521	-0.6%	359,019	-0.7%	
2010	383,247	-0.9%	223,440	-0.5%	355,323	-1.0%	
2011	386,437	0.8%	223,976	0.2%	356,564	0.3%	
2012	387,439	0.3%	224,232	0.1%	356,497	0.0%	
2013	386,294	-0.3%	224,119	-0.1%	354,793	-0.5%	
2014	362,440	-6.2%	213,657	-4.7%	335,959	-5.3%	
2015	351,957	-2.9%	209,513	-1.9%	327,497	-2.5%	
2016	352,310	0.1%	208,558	-0.5%	326,939	-0.2%	
2017	351,970	-0.1%	210,222	0.8%	327,530	0.2%	
2018	361,289	2.6%	221,961	5.6%	339,688	3.7%	

Projected Enrollment in UC and CSU with Constant 2003 Eligibility Rates within Racial/Ethnic Populations, 2008-2018

Table 6

¹Represents the number of graduates expected during the academic year ending in the spring (e.g., 2008 refers to graduates for academic year 2007-08) ²The model estimates foll beadeoust enrollment form which ETEO is during the spring (e.g., 2008 refers to graduates for

² The model estimates fall headcount enrollment, from which FTES is determined (e.g., 2008 refers to FTES for 2008-09 based on fall 2008 headcount enrollment)

²⁹ Table 6 also assumes constant enrollment rates by race/ethnicity. That is, eligible students within each racial/ethnic group are assumed to actually enroll in UC/CSU at the same rates as in 2003.

³⁰ Calculated from figures provided in WICHE, 2004

The growth in FTES shown in Table 6 departs substantially from plans for enrollment growth funding over the next few years outlined in the Governor's Compact with UC and CSU.³¹ The Compact anticipates funding enrollment growth at 2.5 percent per year through 2010-11, while the growth rates that could be expected with constant eligibility rates within racial/ethnic populations could actually be negative or only slightly positive through most of the next decade.

Estimated Impact on Enrollment of Increasing Eligibility Rates among Under-

represented Minority Students

It is difficult to determine what level of increase in eligibility rates would be reasonable to assume for Latino and other under-represented minority students. Between the 1996 and 2003 CPEC studies, the UC eligibility rate for Latinos increased from 3.8 to 6.5, a total increase in the rate of 71 percent or about 10 percent per year over the seven-year period. There was a smaller rate of increase in the eligibility rate for CSU. The rate for Latinos increased from 13.4 to 16.0, a total increase in the rate of 19 percent or less than 3 percent per year. The eligibility rates increased more for black students, but followed the same pattern of showing a larger increase in the eligibility rate for CSU.

Table 7 shows the FTES enrollment in UC and CSU that could be expected over the next

	UC			CSU		
Year	Latino Eligibility Rate ¹	FTES ²	Growth in FTES ³	Latino Eligibility Rate	FTES ²	Growth in FTES ³
2008	6.50%	225,922		16.00%	361,668	
2009	6.83%	227,322	0.6%	16.80%	366,510	1.3%
2010	7.17%	229,171	0.8%	17.64%	370,733	1.2%
2011	7.52%	233,034	1.7%	18.52%	381,062	2.8%
2012	7.90%	236,830	1.6%	19.45%	390,504	2.5%
2013	8.30%	240,307	1.5%	20.42%	398,326	2.0%
2014	8.71%	232,602	-3.2%	21.44%	386,952	-2.9%
2015	9.15%	231,617	-0.4%	22.51%	386,889	0.0%
2016	9.60%	234,468	1.2%	23.64%	396,713	2.5%
2017	10.08%	240,354	2.5%	24.82%	408,575	3.0%
2018	10.59%	257,358	7.1%	26.06%	434,670	6.4%

Projected Enrollment in UC and CSU with Eligibility Rates for

Table 7

¹ The same 5% annual increase in eligibility rates was applied for black and Native American high school graduates. Rates for white and Asian students were held constant at 2003 levels.

² The model estimates fall headcount enrollment, from which FTES is determined (e.g., 2008 refers to FTES for 2008-09 based on fall 2008 headcount enrollment).

³ No growth rate is shown for 2008 because the model as based on projected high school graduates does not produce figures that match the expected FTES funding for the current budget year (2007-08). The budget anticipates funding for 216,255 FTES in UC and 355,954 FTES in CSU. FTES at this level would suggest 4.5% growth in 2008 for UC FTES and 1.6% for CSU FTES with constant eligibility rates. However, budgeted FTES does not always match actual FTES, with both segments having recently failed to meet expectations. UC had actual FTES lower than budgeted FTES in 2005-06 and CSU fell short of budgeted FTES in 2006-07.

³¹ California Office of the Governor (2004, May 11). *Higher education compact: Agreement between Governor Schwarzenegger, the University of California, and the California State University, 2005-06 through 2010-11.* Sacramento, CA: Office of the Governor.

decade under a scenario where eligibility rates begin at 2003 levels (the most recent eligibility rates available) but increase by five percent per year among under-represented minority students. The scenario holds constant the eligibility rates for white and Asian students, and also holds enrollment rates constant at 2003 levels for all racial/ethnic groups. Under this scenario, the eligibility rate for Latino students would increase from the 2003 rate of 6.5 percent to 10.6 percent for UC and from 16 percent to 26 percent for CSU.³² There would be positive growth in FTES over much of the decade, although the growth through the Compact period would generally be less than the 2.5 percent that is expected to be funded.³³

Estimated Impacts Relative to the Master Plan

The changing demographic composition of high school graduates would have an impact on the overall eligibility rates among all high school graduates even if eligibility rates within racial/ethnic groups remained constant. Table 8 shows the overall eligibility rates for UC and CSU that could be expected to result if eligibility rates within racial/ethnic groups either remained constant at 2003 levels or increased by five percent annually over the next decade. With constant eligibility rates for each racial/ethnic group, the overall eligibility rate could be expected to decline as Latinos come to represent a larger share of all high school graduates. The increasing Asian population would moderate the decline somewhat given the exceptionally high eligibility rates among Asian students.³⁴

101 0C and C30, 2000-2018					
Year	Percent of All High School Graduates Meeting Eligibility Requirements UC CSU				
	Constant by	5% Annual	Constant by	5% Annual	
	Race/	Increase	Race/	Increase	
	Ethnicity		Ethnicity		
2008	13.4%	13.4%	27.0%	27.0%	
2009	13.2%	13.4%	26.7%	27.1%	
2010	13.2%	13.5%	26.6%	27.4%	
2011	13.1%	13.6%	26.2%	27.5%	
2012	13.0%	13.7%	26.1%	27.9%	
2013	13.0%	13.9%	26.0%	28.3%	
2014	13.1%	14.3%	26.2%	29.1%	
2015	13.2%	14.6%	26.3%	29.8%	
2016	13.2%	14.8%	26.2%	30.3%	
2017	13.2%	15.1%	26.3%	31.0%	
2018	13.5%	15.6%	26.6%	31.9%	

Projected Overall Eligibility Rates for UC and CSU. 2008-2018

Table 8

 $^{^{32}}$ Eligibility rates for black students would increase similarly, from 6.2% to 10.1% for UC and from 18.6% to 30.3% for CSU.

CSU. ³³ Enrollment growth funding has been budgeted to reflect 2.5% growth each year since the Compact took effect in 2005-06.

³⁴ This report combines all persons of Asian or Pacific Islander descent into one category as is done by CPEC in the eligibility studies. While there are likely substantial differences across Asian sub-populations in eligibility rates which are masked by only using one category, the data are not available for more detailed analysis.

The eligibility rate would continue to exceed slightly the 12.5 percent Master Plan standard for UC, while the CSU rate would continue to be less than the 33.3 percent standard. The results reflect our use of the 2003 eligibility rates which, while being the most recent information available, may not reflect the current eligibility rates. UC changed its eligibility criteria after the 2003 study, which may have reduced overall eligibility (with the impact most likely to be felt by the populations already less likely to meet the requirements). The most significant change in requirements, the increase of the minimum GPA to 3.0, only took effect with the current term (fall 2007), so the rate may not yet have been reduced to the 12.5 percent standard. CSU argued that methodological limitations of the 2003 study affected the results, and that the true eligibility rate was equal to the standard within statistical limits of estimation. Whatever the actual current eligibility rates for each segment, constant rates within racial/ethnic group could be expected to decrease overall eligibility for UC and CSU over the next decade without efforts to increase the share of students who meet current eligibility requirements or action by the universities to adjust their eligibility standards.

The scenario that assumes a five percent annual increase in the eligibility rates for underrepresented minority students would result in an overall eligibility rate for UC that increasingly exceeds the Master Plan target. For CSU, the overall eligibility rate would also increase, but would remain within the Master Plan target by the end of the decade. Again, these results assume that the current rates are at the 2003 levels.

Conclusions and Implications

This report examines the impact of increases in eligibility rates for UC and CSU on estimates of higher education enrollments in those sectors. The analysis indicates that constant eligibility and enrollment rates for under-represented minority students over the next decade would lead to enrollment declines, related both to projected declines in the number of high school graduates and the changing demographic composition of graduates. If eligibility rates for under-represented minority students were to increase by five percent per year over the decade, overall enrollments in UC and CSU would increase moderately. Achieving increases in eligibility of five percent per year over a decade, assuming eligibility requirements remained constant, would likely be an ambitious goal. It would require continuous improvements in the level of academic performance in high school among Latino students, and increases in the share of students completing the a-g curriculum and taking required college entrance exams.

If achieved, the increases in enrollment that would result would be well within the normal historical increases that have been funded by the state, leaving no reason to assume that such increases would be outside the capacity of the state budget. Governors and legislators in California have generally budgeted for levels of enrollment growth in UC and CSU that met or exceeded the rates of growth in high school graduates and the college-age population (age 18-24),³⁵ indicating a clear intent among California's policy makers to provide adequate capacity.

While increasing eligibility rates may not produce levels of enrollment growth that would present a budget problem, increases of five percent per year would pose questions related to the Master Plan. The eligibility pools for UC and CSU are defined by the limits outlined in the Master Plan, and the universities will adjust their eligibility standards and requirements to maintain those eligibility pools as long as they are expected to adhere to the Master Plan. Those higher

³⁵ Based on a review of: growth rates for high school graduates using California Department of Education Dataquest; growth rates in the college-age population using Department of Finance population figures; and growth rates in budgeted FTES in the annual LAO publication *Major Features of the California Budget*.

standards and requirements will likely reduce eligibility among populations already underrepresented in the universities.

Given that fact, some have argued that the state should reconsider the eligibility limits imposed by the Master Plan.³⁶ They maintain that, while those limits may have been appropriate in 1960 when the economy required a smaller and more homogeneous share of high school graduates to go to college, today's knowledge economy requires that a larger and more diverse group of people earn college degrees, a goal that can be realized more effectively with larger shares of students enrolling in UC and CSU. Several recent studies have warned of shortages of collegeeducated workers and dire consequences for California's social and economic health without increased degree production.37

Increasing the Master Plan limits, and therefore the share of high school graduates eligible for and enrolling in UC and CSU, would impose additional costs on the state. The state invests \$15,911 per FTES at UC and \$8,842 per FTES at CSU, compared to the much lower \$5,180 per FTES at the CCC.³⁸ However, research demonstrates that, after accounting for differences in academic preparation and income, students who begin their studies at a four-year university are more likely to complete a bachelor's degree than those who begin at a community college intending to transfer,³⁹ and that initially enrolling in more selective institutions rather than openaccess institutions may be particularly beneficial for degree attainment among Latino students.⁴⁰ The additional costs would likely be offset over the long run by the benefits of increased degree completion, including the higher tax collections and lower costs for social and health services that are clearly related to higher educational attainment levels.⁴¹ But the long-term benefits do not make the immediate budget choices any easier given the competing demands on state resources and the historical aversion to tax increases among California voters.

Budget considerations would not be the only impediment to changing the eligibility pools. Some in the UC would likely resist any change that might reduce the institution's status among the most selective public university systems in the country. CSU officials might have reasonable concerns about the increasing need for remediation that could result from an expanded pool of eligible students. And CCC officials may fear that the community colleges could receive even less policy attention and fewer resources if its better-prepared and more-advantaged students were increasingly enrolling in UC or CSU instead, leaving them to serve only the most needy and highest-cost students with too few resources.

Clearly, even if the needs of the economy and the research on student success might suggest that eligibility limits should be reconsidered, budget and political considerations make it an unlikely short-term solution to addressing under-representation of Latino students in UC and

³⁶ See, for example, former UC President Richard Atkinson's comments about rethinking admissions at UC and CSU at: http://rca.ucsd.edu/speeches/RethinkingAdmissions-UK1Final.rtf.

Johnson, H. P. & Reed, D. (2007, May). Can California import enough college graduates to meet workforce needs? California Counts, 8(4). San Francisco, CA: Public Policy Institute of California; Fountain, R. & Cosgrove, M. (2006). Keeping California's edge: The growing demand for highly educated workers. Sacramento, CA: Applied Research Center, California State University, Sacramento; Baldassare, M. & Hanak, E. (2005). California 2025: It's your choice. San Francisco, CA: Public Policy Institute of California. ³⁸ Legislative Analyst's Office (2007). *Analysis of the 2007-08 budget bill*. Sacramento, CA: LAO.

³⁹ Berkner, L., He, S., & Cataldi, E. F. (2002). *Descriptive summary of 1995-1996 beginning postsecondary students:* Six years later. Washington, DC: National Center for Education Statistics. ⁴⁰ Fry, R. (2004). Latino youth finishing college: The role of selective pathways. Washington, DC: The Pew Hispanic

Center.

Brady, H., Hout, M., & Stiles, J. (2005). Return on investment: Educational choices and demographic change in California's future. Berkeley, CA: Survey Research Center, University of California, Berkeley.

CSU. The other alternatives discussed in this report are worthy of attention in the near term – increasing the share of already-eligible Latino graduates that actually enroll out of high school, and increasing the share of Latino students in the CCC that successfully transfer to UC or CSU. If CPEC's 2007 eligibility study shows that CSU has "room" in its current eligibility pool, a focus on increasing the share of Latino students who meet the eligibility requirements for this sector should be a particular priority.