

# California Postsecondary Education Commission

# University Eligibility Study for the Class of 200 l

The Postsecondary Education Commission, the California State University, and the University of California conducted a study to estimate the proportion of public high school graduates who meet the admission requirements for the two university systems.

The study found that 34.1% of the high school graduating class of 2001 were eligible for admission to the California State University and 14.2% were eligible for the University of California.

#### Contents

Results	4
Study Procedure	8
Methodology	10
References	15

The Commission advises the Governor and Legislature on higher education policy and fiscal issues. Its primary focus is to ensure that the state's educational resources are used effectively to provide Californians with postsecondary education opportunities. More information about the Commission is available at <a href="https://www.cpec.ca.gov">www.cpec.ca.gov</a>.

Commission Report 05-09

# **Executive Summary**

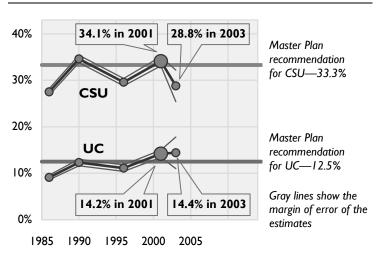
Since 1983, the California Postsecondary Education Commission has conducted six studies of university eligibility of public high school graduates. The purpose of these studies is to estimate the percentage of California public high school graduates who meet the admission requirements of the California State University (CSU) and the University of California (UC).

In May 2004, the Commission released a study reporting eligibility rates for the high school graduating class of 2003. The Commission began work on the 2001 eligibility study before the 2003 study, but completion was postponed until the 2003 study was finished. This report presents eligibility rates for the high school graduating class of 2001.

Eligibility studies are conducted by collecting a random sample of transcripts from high schools throughout the state. Each transcript is reviewed

### Eligibility rates

Estimates from Commission studies, 1986-2003



by university staff to see if the pattern of courses, grades, and test scores would make a student eligible for admission. Schools were contacted in March 2002 and transcripts for the 2001 graduating class were collected over the following months. Over 13,000 transcripts from nearly 1,100 schools were evaluated.

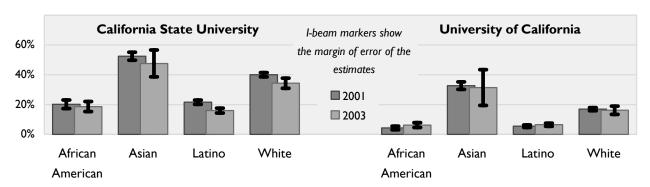
The eligibility rates estimated from this sample show that eligibility rates for UC did not change significantly between 2001 and 2003. The 2001 results, with their relatively low margin of error, confirm the gains in eligibility from 1996 indicated by the Commission's 2003 study.

The 2001 estimates for CSU showed that the eligibility rates increased between 1996 and 2001, but fell between 2001 and 2003. This change is too large to be explained as a statistical error and must reflect real drop in CSU's eligibility rate. A possible reason for the drop in eligibility is more stringent requirements. Between 2001 and 2003, CSU added a year of laboratory science and a year of history or social science to its coursework requirements. A more detailed analysis of the data would show how the new requirements might have affected CSU eligibility.

Other results confirm the gains in eligibility for African Americans and Latinos from 1996 shown by the 2003 study. For UC, the 2001 estimates are all close to the 2003 estimates (see graph and table below). Nevertheless, eligibility rates for African American and Latino graduates are well below the rates for Asians and Whites.

For CSU, the 2001 eligibility rates were all higher than the 2003 rates. The drop in CSU eligibility between 2001 and 2003 has affected all ethnic groups, but with the margins of error of the estimates, there is not enough information to tell whether the change has disproportionately affected any ethnic group. Full details of the results and comparisons with past eligibility studies are in *Results*, page 4.

#### Eligibility rates for racial and ethnic groups



#### Estimated values, 2001 and 2003

	CS	SU	U	С
	2001	2003	2001	2003
All graduates	34.1	28.8%	14.2%	14.4%
African American	20.2	18.6	4.3	6.2
Asian	52.4	47.5	32.7	31.4
Latino	21.6	16.0	5.5	6.5
White	40.0	34.3	16.9	16.2

In all figures presented in this report, the Asian category includes Asians, Pacific Islanders, and Filipinos

# UC and CSU's Eligibility Requirements for 2001

Eligibility requirements for freshmen admission are based on courses completed at high school and scores on the SAT or ACT tests. Both university systems have changed their requirements in recent years. The requirements in force for students entering in Fall 2001 are as follows.

**Coursework and test scores.** To be eligible, a student must have completed a required pattern of high school courses and achieved a sufficiently high grade point average (GPA).

The score needed on the SAT or ACT depends on the student's GPA. Students with a GPA of 3.0 are eligible for CSU without taking these tests. Students with a lower GPA need a qualifying score on the SAT I or ACT (see table, right).

UC requires a qualifying test score for all students. This score is calculated from the SAT I or ACT and SAT II tests in mathematics, writing and a third subject. The score needed depends on the student's GPA. Students with lower GPAs need higher scores.

Other paths to eligibility. UC has two other paths to eligibility. Under *Eligibility in the Local Context* (ELC), high school juniors in the top 4% of their class are eligible, regardless of their test scores and senior year grades. These students must have completed 11 of the required courses by the end of their junior year.

UC identifies these students by asking high schools to provide transcripts for the top 10–12% of their juniors. UC reviews the transcripts to identify the top 4% according to UC's criteria on how students should be ranked.

Under *Eligibility by Examination Alone*, a student without the required coursework is eligible with sufficiently high test scores. The student must have an SAT I score of 1,400 or an ACT score of 31, and have a combined score of 1,760 in the three SAT II subject tests, with no score lower than 530.

**Special admission.** The universities also admit some students under special admission or admission by exception. These include athletes, students with exceptional talent in the fine arts, and students who are educationally or economically disadvantaged. These students are not included in the eligibility estimates in this report.

Subject requirements, 2001

Subject	Years required			
Subject	CSU	UC*		
a. History and social science	I	2		
b. English	4	4		
c. Mathematics	3	3		
d. Laboratory science	1	2		
e. Foreign language	2	2		
f. Visual and performing arts	1	_		
g. Electives	3	2		

<sup>\*</sup> UC requires that 7 of these courses be taken in the junior and senior years.

#### Test score requirements, 2001

	Te	est score	needed
Student's GPA (a)	For C	CSU	For UC
Gi7 (u)	SAT I	ACT	Total SAT (c)
2.0	1.300	30	_
2.2	1,140	26	_
2.4	980	22	_
2.6	820	18	d
2.8	660	14	4,640
3.0	Ь	Ь	3,840
3.2	_	_	3,408
3.4	_	_	3,152
3.5+	_	_	3,120

The table is condensed from the universities' actual requirements, which are based on GPA brackets calculated to two decimal places. For example, a student with a GPA of 2.85 would need an SAT I of 620 to be eligible for CSU or a total score of 4,384 to be eligible for UC.

- a— GPA in courses meeting the subject requirements taken in grades 10-12
- b—CSU does not require a test for students with a GPA of 3.00 or more
- c— Total score is [SAT I math+verbal] + [2x(SAT II writing + SAT II math + third SAT II)]
  ACT scores can be converted to an SAT I equivalent
- d—Students with a GPA below 2.80 are not eligible for admission to UC

Information on recent changes in eligibility requirements is in the Commission reports listed in **References**, or is available at the universities' web sites

#### Results

The Commission's estimates of eligibility rates were based on a review of transcripts by university staff. The results of this review were used to estimate statewide eligibility rates using statistical procedures that reflected the way that the transcripts were sampled from schools. The Commission, CSU, and UC conducted analyses of the sample results independently. All three analyses gave the same results, confirming that the data had been interpreted correctly.

University of California. For UC, the 2001 results confirmed the findings of the 2003 study. The 2003 results showed that UC eligibility had increased substantially since 1996. However, the 2003 estimates had wider margins of error than the eligibility estimates from the Commission's earlier studies (see sidebar on page 9). The 2001 study, with its smaller margin of error confirms the recent gains in UC eligibility. The results show that UC eligibility rose from 11.1% in 1996 to 14.2% in 2001. The 2003 estimate is slightly higher than the 2001 figure, but given the margins of error of the estimates, this change is not statistically significant.

**California State University.** The 2001 results for CSU show an overall eligibility rate of 34.1%, well over the figures indicated by the 1996 and 2003 studies. The drop between 2001 and 2003 must be the result of a real decrease in CSU eligibility. The eligibility rates from the 2003 study are defined in exactly the same way as in previous studies -- the rate is the percentage of graduates of comprehensive,

Eligibility rates and margins of error

	1990	1996	2001	2003	Margin (	of error
	1770	1770	2001	2003	2001	2003
California State Uni	iversity					
All graduates	34.6%	29.6%	34.1%	28.8%	33.2–35.0%	25–32%
Male	32.4	26.3	28.4	24.0	27.2–29.6	20–28
Female	37.6	32.9	39.4	33.3	38.2–40.7	30–37
African American	18.6	13.2	20.2	18.6	17.3–23.0	15–22
American Indian	_	_	20.1	19.7	11.3-28.8	10–30
Asian	61.5	54.4	52.4	47.5	49.7–55.0	39–57
Latino	17.3	13.4	21.6	16.0	20.3–22.9	14–18
White	38.2	36.3	40.0	34.3	38.7–41.4	31–38
University of Califor	rnia					
All graduates	12.3%	11.1%	14.2%	14.4%	13.5–14.9%	11–18%
Male	11.6	9.7	12.5	12.6	11.5–13.4	9–16
Female	13.3	12.6	15.8	16.2	14.9–16.8	13–19
African American	5.1	2.8	4.3	6.2	3.0-5.5	5–8
American Indian	_	_	8.9	6.6	3.1-14.7	3–10
Asian	32.2	30.0	32.7	31.4	30.1-35.3	19-43
Latino	3.9	3.8	5.5	6.5	4.7–6.2	5–8
White	12.7	12.7	16.9	16.2	15.8-17.9	13–19

Figures for Asians include Pacific Islanders and Filipinos.

Margins of error are between the upper and lower 95% confidence limits.

continuation, and alternative high schools who are eligible for CSU. The margin of error of the 2003 study is larger than in earlier studies, but the difference between the 2001 and 2003 estimates is too large to be explained as an error from sampling.

**Racial and ethnic groups.** The results confirm the recent gains in UC eligibility for African American and Latino graduates. Although the 2001 estimates are lower then the 2003 estimates, the margins of error are smaller. The advance from 1996 reflects a real increase in the eligibility of these graduates, rather than the uncertainty inherent in estimating a statewide value from a sample of transcripts.

For CSU, the 2001 results showed that eligibility rates for African American and Latinos were up substantially from 1996. Eligibility was 20.2% for African Americans, and 21.6% for Latinos. Both rates were just over 13% in 1996. The 2003 estimates showed a slight drop in the rate for Latinos from 2001, but eligibility is still higher than in 1996. The 2003 estimate for African Americans is slightly lower than the 2001 figure, but the difference is not statistically significant.

In most ethnic groups, the CSU eligibility rate is 2–3 times the UC eligibility rate. This means that for every 100 graduates eligible for UC, there are another 100–200 graduates who are eligible for CSU but not eligible for UC. However, for Asians, the spread between the UC and CSU eligibility rates has become much smaller than for other ethnic groups. In 1990, Asian gradates showed the normal pattern with UC eligibility at 32.2% and CSU eligibility at 61.5%. Since then, the Asian rate for CSU has steadily fallen, while the UC eligibility rate has remained at 30–32%. This trend may indicate that Asians are becoming divided between well-qualified graduates who are eligible for UC and others who are not eligible for either system.

# What is eligibility?

The eligibility rates presented in this report are based on the number of students who meet the minimum entrance requirements for admission to each system. These figures differ from the number of students who are admitted to or actually enter UC and CSU.

Not all eligible applicants are admitted to the campus or program of their choice. Many programs have more eligible applicants than there are places. Admission to UC is based on a comprehensive review of an applicant's academic preparation and other accomplishments. Students admitted to the most popular programs at the most sought-after campuses typically have grades and test scores well above the minimum eligibility requirements and have completed additional coursework.

Eligible applicants who are not admitted to the campus of their choice are placed in UC's referral pool and are provided an opportunity to enroll at another campus. CSU also uses supplemental criteria to admit applicants for oversubscribed, or impacted, programs and campuses. These criteria include grades and test scores, special talents and socioeconomic disadvantages. Eligible applicants who are not admitted to a program of their choice are redirected to other campuses. CSU designates service areas for its campuses and guarantees that eligible applicants from high schools in a campus's service area will be admitted to some program at that campus.

Not all students who are admitted actually enter UC and CSU. Some may accept offers from independent universities or out-of-state universities, or may not go to university at all.

For these reasons, entry rates are lower than eligibility rates. In recent years, 7–8% of public high school graduates actually entered UC and about 10% actually entered CSU.

**Gender inequities.** As in previous studies, the estimates showed that eligibility rates for male graduates are lower than those for female graduates. The gap is particularly wide for CSU, where the rate for male graduates is 28.4%, compared to 39.4% for female graduates.

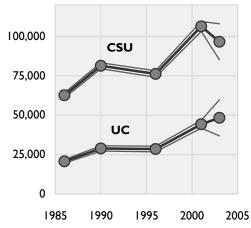
Eligibility rates by ethnicity by gender are not yet available from the 2001 study. A Commission analysis of the 2003 results showed that eligibility rates for males are lower than for females in all ethnic groups, but the differences are greater for African Americans and Latinos. For example, the UC eligibility rate for male Latino graduates is half the rate for females. More information on this issue is in a Commission fact sheet *University Eligibility as a Percentage of All High School Students*.

**Eligibility pool.** Applying the eligibility rates to the number of students graduating from California public high schools gives an estimate of the total number of students eligible, or the eligibility pool, for each system. The 2001 eligibility pool for UC was an estimated 44,300, an increase of 55% from 1996. The CSU eligibility pool was 106,500, up by 40% from 1996. These increases are the result of both the

growth in the number of students graduating from public high schools and the increases in eligibility rates. Between 2001 to 2003, growth in the number of high school graduates was outweighed by the drop in CSU eligibility, with the result that the CSU eligibility pool fell to 96,700 in 2003.

# Growth in the eligibility pool Estimates from current and past studies

Number of eligible graduates



Gray lines show the margin of error of the estimates

# Margins of error

When making any comparisons using the results of this study, the margins of error of the estimates are just as important as the estimated values.

The eligibility rates are estimates based on a sample of transcripts. The true value is unknown and cannot be determined unless every transcript from the graduating class is reviewed. However, the variation in eligibility within the sample can be used to estimate a margin of error, or confidence range, for the estimated eligibility rates.

The graphs and tables in this section and at the front of this report show the margin of error of the estimates. There is 95% confidence that the true value of the eligibility rate lies within these margins. For example, the margin of error for the 2003 eligibility rate for CSU shows that although the figure of 28.8% is only an estimate based on the sample, there is 95% confidence that the true eligibility rate lies between 25 and 32%.

The factors underlying the margins of error can be used to estimate the chance that a difference between two estimated values reflects a difference in the true values rather than the uncertainty inherent in a study where data are sampled.

## California public high school graduates

	1986	1990	1996	2001	2003	
All graduates	227,800	235,200	257,400	312,000	335,700	
Male	111,500	115,800	123,500	149,500	160,800	
Female	116,300	119,300	133,900	162,500	174,800	
African American	18,200	17,300	19,200	21,900	24,100	
American Indian	1,700	1,900	2,300	2,700	3,100	
Asian	24,000	32,800	37,300	46,600	48,400	
Latino	43,300	54,900	78,000	102,200	114,300	
White	140,800	128,300	120,600	137,700	142,800	
Multiple or unknown	_	_	_	900	2,900	

Graduates of public comprehensive high schools, public continuation schools, and public alternative schools. Excludes graduates of public special schools, county community schools, juvenile court schools, and similar institutions.

Columns may not total because of independent rounding.

#### **Eligibility pool**

	1986	1990	1996	2001	2003	
California State Uni	versity					
All graduates	62,700	81,400	76,200	106,500	96,700	
Male	27,700	37,500	32,500	42,500	38,600	
Female	35,800	44,900	44,100	64,100	58,300	
African American	2,000	3,200	2,500	4,400	4,500	
American Indian	_	_	_	500	600	
Asian	12,000	20,200	20,300	24,400	23,000	
Latino	5,800	9,500	10,500	22,100	18,300	
White	44,500	49,000	43,800	55,100	49,000	
University of Califor	nia					
All graduates	20,700	28,900	28,600	44,300	48,400	
Male	9,900	13,400	12,000	18,600	20,200	
Female	11,000	15,900	16,900	25,700	28,300	
African American	400	900	500	900	1,500	
American Indian	_	_	_	200	200	
Asian	6,000	10,600	11,200	15,200	15,200	
Latino	1,300	2,100	3,000	5,600	7,400	
White	14,200	16,300	15,300	23,200	23,100	

# **Study Procedure**

Transcripts for the 2001 study were collected by writing to every public high school in the state, asking them to provide a sample of transcripts from their graduating class. This approach is similar to what was done in the Commission's 1996 and earlier studies.

In March 2002, the Commission mailed a letter requesting transcripts to all comprehensive, continuation, and alternative high schools. Schools were asked to compile a list of their 2001 graduates, pick graduates from this list using a list of random numbers provided with the request, and send transcripts for the selected graduates to the Commission. The number of transcripts requested from each school varied from 1 to 75, depending on the size of the school. A total of about 16,000 transcripts were requested from 1,552 schools. More details of the sampling plan are in *Methodology* on page 10.

Over the following months, the Commission mailed four rounds of follow-up requests to nonresponding schools. In September 2002, the Commission contacted district superintendents, seeking their assistance in encouraging schools to take part in the study. After a fifth follow-up mailing, Commission staff contacted larger schools by telephone. A final follow-up request was mailed to smaller schools. By November 2002, a response had been received from 1,200 schools. This response was 86% of the transcripts requested, giving a sample that was representative of all California public high school graduates.

As responses were received from schools, they were checked by Commission staff to verify that the transcripts had been selected according to the instructions. In cases where the transcripts were not selected correctly, or not all of the requested information was provided, staff contacted the school to arrange for the correct materials to be sent.

# **Privacy concerns**

Student transcripts contain personal information that is confidential under state and federal law. Generally, schools cannot release transcript information without parental consent.

However, there are exceptions to these laws for educational research by state agencies. Schools may release information to state educational agencies for the evaluation of education programs provided that the studies do not allow individual students to be identified (CEC §40976 (a)(3), (b)(5), 20 USC §1232g (b)(1)(F)). The university eligibility study meets the requirements of this law.

The Commission made every effort to protect the confidentiality of the transcripts. The paper transcripts provided by schools were kept in a secure location and handled only by authorized staff. Data keyed from the transcripts was kept

on servers where access was limited to authorized staff. All data and image files were placed in encrypted archives before they were sent to UC and CSU.

At UC and CSU, the files containing student information were kept on a secure server and used only by the staff responsible for matching the student information to the College Board and ACT test records. The transcript images, which did not contain any identifying information, were seen only by the evaluators.

UC and CSU encrypted the results files before transmitting them back to the Commission. At the conclusion of the study, UC, CSU, and the Commission will erase any data files containing personal information and the Commission will destroy the transcripts and other materials received from schools.

In December 2003, work on the study was suspended. Legislative staff, the two university systems, and the Commission agreed that a higher priority would be to conduct an eligibility study for the class of 2003. This study could be conducted relatively quickly, because UC had recently developed a system to collect and process transcript data electronically. This system allowed schools to transmit data from their computers instead of compiling a sample of paper transcripts. The information received is handled by computer, greatly simplifying the evaluation of transcripts.

# A new approach for 2003: electronic data collection

The 2003 eligibility study, published in May 2004, was conducted differently from the 2001 and earlier studies. In the 2003 study, transcripts were collected electronically using a system developed by UC's admissions office. The system allows school staff to extract and transmit data from the computer applications that they use to maintain their student records.

This approach is less of a burden to school staff, because they do not have review sampling instructions, compile a list of their graduating class, select students from this list according to the instructions, copy transcripts, and compile other information, such as ethnicity, when it is not shown on the transcripts.

Collecting transcripts electronically avoids the high cost of handling and checking materials received from schools and the need to contact schools for additional materials when transcripts are not selected correctly or not all of the necessary information is provided. Some steps in the evaluation process, such as a comparison of courses taken with courses meeting the subject requirements, can be automated. When review by an evaluator is needed, transcript information can be presented in a consistent manner, avoiding the difficulty of reviewing transcripts that come in wide variety of formats and with different conventions for naming courses.

Because much of the effort of data collection is establishing contact with a school and making arrangements for data transmission, sampling was conducted differently in the 2003 study. Instead of contacting every high

school in the state and taking a few transcripts from each school, a representative sample of schools was selected and transcripts for these schools' entire graduating class were collected.

Collecting transcripts in this way has some disadvantages. Schools must be selected to ensure that they carefully representative of all California high schools. Unless a larger number of transcripts are reviewed, the margin of error of the study will be greater. There is less variation in the eligibility of students within a school than between schools, so 15,000 transcripts collected from a limited number of schools does not give such good estimates as 15,000 transcripts sampled from every high school in the state. Since the number of transcripts that could be evaluated was limited by the availability of staff, it was unavoidable that the study would have a wider margin of error than earlier Commission studies.

Nevertheless, the advantages of collecting transcripts electronically outweigh the disadvantages. This approach makes more efficient use of staff time for all concerned. As UC develops its system to automate more of the evaluation process, the sample size can be increased at low cost. Electronic data collection presents the opportunity of conducting eligibility studies more frequently. Continuing to collect transcripts by mail would mean that eligibility studies would be expensive and infrequent.

More information on the 2003 study and the reasons for the change in approach are in the 2003 Eligibility Study report listed in **References** 

The 2003 study was completed in May 2004. The Commission resumed work on the 2001 study in fall 2004. The Commission scanned the transcripts into computer-readable images and keyed information identifying the graduates into a database. A second set of images was prepared for use by evaluators at CSU and UC. These images were labeled with a code number, and names, photographs, and any other information identifying the student was removed from the images. The final 2001 study sample consisted of 13,374 usable transcripts from 1,080 schools.

The Commission sent the transcript images to UC and CSU in December 2004. UC developed a viewing system to allow evaluators to review the course and grade information on each transcript image. UC also matched the data keyed by the Commission to College Board and ACT records to get students' latest SAT and ACT scores. The transcript images were then evaluated by UC and CSU admission staff to determine the eligibility status of each graduate in the sample. Each system completed a final file with the results of this review in July 2005. The Commission, UC, and CSU then conducted independent statistical analyses of this results file to estimate statewide eligibility rates from the sample.

# **Methodology**

**Sampling plan.** The Commission developed the sampling procedure in consultation with UC, CSU and a team of statistical consultants. Because of the limited availability of university admission staff, only about 15,000 transcripts could be evaluated. The sampling plan was designed to yield the most useful results given this sample size.

In past studies, the most difficult figure to estimate was the UC eligibility rate for African Americans. These students tend to be concentrated in schools that have poor academic performance. The consultants' recommendation was to divide schools into three sampling categories based on school performance and ethnic composition. Each category would be sampled differently in order to ensure that the transcripts selected would include a representative number of African Americans from high schools with more typical academic performance.

The sampling categories were based on the school's UC eligibility rate from the 1996 study, or their entry rate to UC when a 1996 eligibility rate was not available. For most schools, the sampling rate was 4.6% of graduates (see table below). Schools with eligibility rates above the state median and with more than 3% African American graduates were sampled at a higher rate. Schools above the median and with more than 7% African American graduates were asked to provide transcripts for all of their African American graduates.

#### Sampling categories and sampling rates

	Sampling category	Number of schools	Sampling rate
Tot	al schools contacted	1,552	
Α	Schools with eligibility or entry rate above median and with 3–7% African American graduates.	85	9.2% of graduates
В	Schools with 1996 eligibility or entry rate above median and with more than 7% African American graduates.	200	100% of African American graduates 4.6% of other graduates
С	All other schools	1,267	4.6% of graduates

Under this sampling plan, African American graduates from schools above the median 1996 eligibility rate were oversampled to ensure that the sample has at least some African Americans from these schools. When the statewide eligibility results were estimated from the sample, these graduates were downweighted so that the oversampling did not distort the estimates.

The sampling plan was implemented using enrollment data available in March 2002. The Commission generated sampling instructions for every comprehensive, continuation, and alternative school in California that had graduates in 2000. Each school was asked to compile a list of its 2001 graduates in any order as long as it was not by GPA or class rank and then pick graduates from the list using random numbers included in the instructions. There was one random number for each transcript requested. These numbers ranged up to the number of graduates at the school. For example, a school in sampling category C with 400 graduates would be given 19 random numbers ranging from 1 to 400.

The schools in sampling category B were asked to provide transcripts for all of their 2001 African American graduates and then compile a list of their other graduates and pick graduates from this list using the random numbers.

The number of transcripts requested from each school ranged up to 75, but was typically between 10 and 40 for comprehensive high schools. Continuation schools and alternative schools were generally smaller and most of these schools were asked to provide one or two transcripts. A total of 16,900 transcripts were requested from 1,552 schools.

**Response.** A response of some kind was received from 1,201 schools. Most of these responses included a useable sample of transcripts, but in some cases, transcript selection problems could not be resolved with the school. The transcripts from these schools had to be dropped from the sample. Some schools were dropped from the sample because they reported that they had no graduates in 2001 or were found to be opportunity or community schools. A breakdown of the response from schools is in the table on page 12.

The final sample consisted of 13,374 transcripts from 1,080 schools. A further 19 of the responding schools indicated that that they did not have college preparatory courses, so none of their graduates could be eligible for UC or CSU. In the analysis of the results, these schools where treated as if they had provided transcripts for all of their graduates and none of these graduates had been found to be eligible for either system.

The responding schools represented 69% of comprehensive, continuation, and alternative schools that had graduates in 2001. This response rate is based on a total count of schools that includes 77 schools with 2001 graduates that were not contacted for the study, because they had no 2000 graduates. Overall, the responding schools represented 82% of California's 2001 graduating class.

#### **Responses from schools**

	Number of school
Total schools contacted	1,552
Schools dropped from sample	
School closed, or had no graduates in 2001, or was an opportunity or community school	36
Sample response	
School did not respond	334
Invalid response. School stated that it had no graduates, but had graduates according to CDE data	14
Unusable materials because of incorrect selection or other issues	69
School has no college preparatory courses	19
School provided a usable sample of transcripts	1,080

#### Response rate

	All schools	Comprehensive schools	Continuation schools	Alternative schools
Schools contacted	1,552	904	476	172
Deduct schools dropped from sample (a)	36	8	3	14
Add schools that should have been contacted (b)	77	45	17	15
Number of schools in population	1,593	942	475	176
Schools providing transcripts	1,080	739	245	96
Schools that indicated that they do not offer college preparatory courses	19	2	2	15
Overall response rate	69%	79%	55%	56%
Valid transcripts received	13,374	12,757	238	379

a—The 36 schools dropped include 11 opportunity and community schools.

**Analysis of results.** The sample was analyzed by treating it as a two-stage sample with stratification at each stage. Under the sampling plan, schools were not explicitly sampled. All comprehensive, continuation, and alternative schools were contacted and asked to provide a sample of transcripts. However, not all schools responded and some schools with graduates in 2001 were not contacted.

The response from schools was treated as the first stage of sampling. In this stage, schools are stratified by school type and the responding schools are treated as a random sample from each school type. Analyzing the response in this way means that the margin of error of the results will reflect the fact that not all California high schools with 2001 graduates provided a sample of transcripts. Stratifying by school type means that the lower response rate for continuation schools does not distort the results.

In the second stage, graduates are sampled from each responding school. The two different sampling schemes were handled by stratifying graduates within schools. Graduates at schools in sampling category B were divided into two strata -- one consisting of the African American graduates, and one consisting of the school's other graduates. In the other schools, all graduates were placed in a single stratum. In the final stage of sampling, graduates are sampled from each stratum.

The sample results were weighted to reflect the variation in sampling rates from school to school. Generally, the weight was calculated as the number of graduates at a school divided by the number of graduates sampled from that school. The sample results were analyzed using the SUDAAN system developed by RTI International. The table on page 14 shows the output of the statistical procedures, and the calculation of the eligibility pool.

b—Comprehensive, continuation, and alternative schools with 2001 graduates but not contacted because they had no 2000 graduates according to data available in March 2001.

# Weighting and sampling stages

**First-stage stratification.** Each of the three school types is treated as a separate stratum

**First-stage population count.** The population of schools is the total number of schools in each type with graduates in 2001.

First-stage weights. The strata were analyzed separately, so there was no need to apply weights to reflect the proportion of schools of each type that responded. The estimated eligibility rates for each school type were applied to a count of graduates to give an eligibility pool for each school type. The three eligibility pools were combined to give an overall eligibility pool for all public high schools. The overall eligibility rates were calculated from this pool.

Analyzing the strata separately gives a more realistic estimate of the margins of error of the estimates. Because the sample includes some schools from which only one graduate is sampled, the margin of error cannot be estimated correctly unless some assumption is made on the average eligibility rate of these schools. Analyzing the school types separately allows the statistical procedures to use the average eligibility rate for the particular school type for the schools providing only a single transcript. This is more reasonable than using the average for all schools as would be the case if the sample were analyzed as a whole.

**Second stage stratification.** Most schools contain only a single stratum. The schools in

sampling category B are broken into two strata. One stratum consists of the African American graduates and the other stratum consists of the school's other graduates.

**Second stage population count.** The population count for each stratum is the number of graduates at each school, or the number of African American graduates where these graduates formed the stratum. The analysis used the CDE's current data. About 47 schools sent a correct sample of transcripts but did not have 2001 graduates according to CDE. In these cases, the school's count of graduates was used as the stratum population.

**Second-stage weights.** At schools providing only randomly-selected transcripts, the weight was the number of graduates at the school divided by the number of graduates sampled from that school.

At schools providing transcripts for all African Americans, the transcripts for the randomly-selected students were weighted as the number of non African American graduates divided by the number of randomly-selected transcripts. The weights for the African American graduates were generally one, but were calculated explicitly when not all the transcripts for African Americans were actually provided.

#### **Output from statistical procedures**

	2001	Nimel	Califo	California State University			University of California			
(	2001 Number Graduates Sampled		Eligibility	Eligibility Rate Eligibility Pool		Eligibility	Rate	Eligibility	Eligibility Pool	
`	Ji addates	Sampled	Estimate	SE*	Estimate	e SE	Estimate	SE	Estimate	SE
Comprehensive	schools									
All graduates	287,989	12,927	35.9%	0.5%	103,320	1,380	15.3%	0.4%	44,040	1,120
Male	138,342	6,319	30.0	0.6	41,520	900	13.4	0.5	18,500	720
Female	149,647		41.4	0.7	61,980	1,000	17.1	0.5	25,580	780
African American	19,801	1,711	21.6	1.5	4,280	300	4.8	0.7	940	140
American Indian	2,333	80	22.3	4.7	520	120	10.0	3.5	240	80
Asian, Pacific, Filipir	no 44,965	1,663	54.0	1.4	24,300	620	33.7	1.4	15,160	620
Latino	93,007	7 3,624	22.8	0.7	21,160	660	6.0	0.4	5,580	380
White	127,180	5,425	41.9	0.7	53,240	900	18.2	0.6	23,100	720
Alternative scho	ols									
All graduates	9,332	328	21.6%	3.2%	2,020	300	2.6%	1.2%	240	100
Male	3,657	7 123	18.7	4.5	680	160	3.7	1.9	140	60
Female	5,675		23.4	<b>4.</b> I	1,320	240	1.9	1.4	120	80
African American	743	3 17	7.2	6.9	60	60	Z	_	_	_
American Indian	131	2	Z	_	_	_	Z	_	_	_
Asian, Pacific, Filipii	no 651	1 12	19.4	11.9	120	80	11.0	9.9	80	60
Latino	2,929	105	17.9	4.4	520	120	Z	_	_	_
White	4,736	5 177	26.3	5.1	1,240	240	2.7	1.5	120	60
Continuation sch	nools									
All graduates	14,712	941	7.9%	1.5%	1,160	220	Z	_	_	-
Male	7,545	452	4.3	1.4	320	100	Z	_	_	_
Female	7,167	489	11.2	2.5	800	180	Z	-	-	-
African American	1,387	7 66	6.1	5.8	80	80	Z	_	_	-
American Indian	229	9 15	9.2	9.1	20	20	Z	_	_	_
Asian, Pacific, Filipir	no <b>99</b> 8	3 55	Z	-	_	_	Z	_	_	-
Latino	6,287	7 345	6.6	2.2	420	140	Z	-	_	-
White	5,757	7 418	10.6	2.8	620	160	Z	-	_	-
Total, all schools	;									
All graduates	312,033	14,196	34.1%	0.5%	106,500	1,400	14.2%	0.4%	44,300	1,100
Male	149,544	6,894	28.4	0.6	42,500	900	12.5	0.5	18,600	700
Female	162,489	7,302	39.4	0.6	64,100	1,000	15.8	0.5	25,700	800
African American	21,931	1,794	20.2	1.5	4,400	300	4.3	0.6	900	100
American Indian	2,693	97	20.1	4.5	500	100	8.9	3.0	200	100
Asian, Pacific, Filipir	no 46,614	1,730	52.4	1.4	24,400	600	32.7	1.3	15,200	600
Latino	102,223	3 4,074	21.6	0.7	22,100	700	5.5	0.4	5,600	400
White	137,673	6,020	40.0	0.7	55,100	1,000	16.9	0.5	23,200	700

<sup>\*</sup>Standard error of estimate.

The sample was analyzed using PROC DESCRIPT in the SUDAAN system from RTI International, Cary, North Carolina. Documentation is available at **www.rti.org/sudaan**.

z—Estimate is zero because no graduates in this category are eligible.

r—Estimate is greater than zero, but rounds to zero.

# **References**

- California Department of Education. A Master Plan for Higher Education in California, 1960–1975.
- California Postsecondary Education Commission. *Eligibility of California's 1996 High School Graduates for Admission to the State's Public Universities.* December 1997
- California Postsecondary Education Commission. *University Eligibility Study for the Class of 2003*. May 2004.
- California Postsecondary Education Commission. Moving the Goalposts The Potential Effects of Changes in the University of California's Admission Requirements. September 2004.
- California Postsecondary Education Commission. *University Eligibility as a Percentage of all High School Students—Fact Sheet*. March 2005.

See www.cpec.ca.gov/eligibility for links to these reports and other materials referred to in this report.

#### **Recent Commission Publications**

An Update of the Commission's Community College Enrollment Demand Projections by Region. March 2005.

Are they Going? University Enrollment and Eligibility for African Americans and Latinos—Fact Sheet. March 2005.

California Baccalaureate Production and Labor Market Demand—Fact Sheet. June 2005.

Commission Review of New Academic and Vocational Programs Proposed by the Public Higher Education Systems, 2004-2005. June 2005.

Deferred Maintenance Needs of California Public Higher Education—Fact Sheet. June 2005.

Factors Limiting Eligibility for the University of California. December 2004.

Faculty Salaries at California's Public Universities, 2005–06. March 2005.

Implementing the Commission's Student Record System: First Steps. June 2005.

Policy Recommendations to Strengthen California Higher Education. March 2005.

Recommendation for a Higher Education Accountability Framework. March 2005.

Recommendations for Adjusting the Maximum Cal Grant Award at California's Nonpublic Colleges and Universities. March 2005.

Recommendations on Higher Education Policies in the Governor's Proposed 2005–06 State Budget. March 2005.

Resident Graduate Charges at California's Public Universities—Fact Sheet. February 2005.

Resident Undergraduate Charges at California's Public Colleges and Universities—Fact Sheet. January 2005.

Student Transfer in California Postsecondary Education. June 2005.

The Granting of Doctoral Degrees in California: Policy Questions and Issues Pertaining to Senate Bill 724. June 2005.

University Eligibility as a Percentage of all High School Students—Fact Sheet. March 2005.

University Preparedness of Public High School Graduates. March 2005.