



A Commission Resolution to Proceed with a University Eligibility Study for the Class of 2007

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Since 1983, the Commission has conducted six studies of the university eligibility of 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 and the University of California.

The Commission's two most recent eligibility studies were for the high school graduating classes of 2001 and 2003. The 2003 study was released in May 2004. Work on the 2001 study had started earlier, but because UC and CSU had a pressing need for current eligibility figures, completion was postponed until the 2003 study was completed. The 2001 study was released in August 2005. The results of these and earlier studies are shown in the graph below.

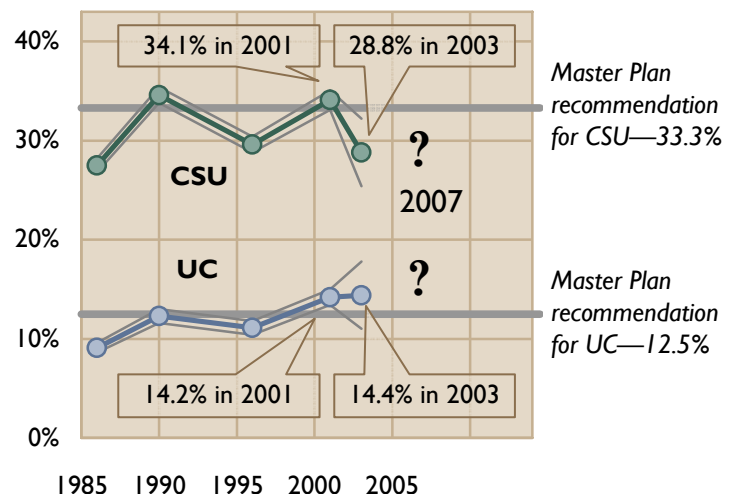
The 2003 study showed that UC's eligibility rate was higher than the figure recommended in the state's Master Plan for Higher Education. An analysis of data from student applications done internally by UC was consistent with the Commission's estimates showing that UC eligibility had increased since the mid-1990s. In order to bring its eligibility rate closer to the Master Plan recommendation, UC made a series of changes in the way that it determines eligibility (see Appendix A, page 5). The last of these changes will be effective for students entering in fall 2007.

Need for a 2007 Study

The current eligibility rates for both systems are now uncertain. UC has changed the way it determines eligibility since the 2003 study and, although CSU has not changed its requirements recently, it is possible that the CSU eligibility rate has changed. CSU increased its history and social science and laboratory science requirements shortly before the 2003 study and schools have had more time to adjust their course offerings in response to these changes.

The effect of UC's recent changes on the eligibility of Latino and African American high school graduates is also a major concern. The Commission's *Moving the Goalposts* report, released in 2004, showed that almost any changes to UC's requirements are likely to have a disproportionate effect on African Americans and Latinos. Eligibility rates for these graduates are very low, and they continue to be underrepresented at the University. A 2007 study will show how UC's recent changes have affected eligibility rates for these ethnic groups.

Eligibility Rates from the Commission's Studies
Percentage of California public high school graduates meeting the minimum entrance requirements of UC and CSU



Gray lines show the margin of error of the estimates

Resources Needed

Eligibility studies are conducted by collecting a random sample of transcripts from high schools throughout the state. Each transcript is reviewed by university staff to see if the pattern of courses, grades, and test scores would make the student eligible for admission. Statewide eligibility rates are estimated from this sample.

The table below shows the costs of conducting an eligibility study based on experience with the 2003 study. Planning and statistical analysis in the 2003 study took about 1.2 person-years (py) of staff time at the Commission, plus a similar amount of time at each university system. In addition, there were significant contract expenses for the development of a computerized evaluation system.

The cost of planning and statistical analysis for a 2007 study is likely to be similar to the 2003 cost, but the overall cost of the study will depend on the desired margin of error of the results. A major expense

Cost of conducting an eligibility study

Step	Costs
1. Develop and apply and sampling plan. Determine acceptable margin of error for the eligibility estimates. Develop a plan to collect a representative sample of transcripts from high schools throughout the state. Apply procedures specified in the sampling plan to select the actual schools that will be sampled.	Approximately 0.5 py of CPEC staff time, plus significant involvement by UC and CSU staff. Contact with statistical consultant may be needed.
2. Collect transcript data from schools. Contact the selected schools and make arrangements for transmission of data.	UC will be lead. 0.5 py.
3. Collect test scores. Make arrangements with the College Board and ACT to provide test scores. Develop procedures to match the test scores to the students at the selected schools.	UC will be lead. 0.3 py.
4. Develop evaluation system. Develop computer-based system to compare grades and test scores in the data collected from schools with UC's and CSU's requirements and make a preliminary determination of eligibility for each student. Process the transcript data with this system.	UC will be lead. Can be adapted from system used for UC's transcript evaluation service. Contract expense of \$300,000, plus 0.1–0.2 py in production support.
5. Preliminary processing. Match courses and process the transcript data with this system.	Contract expense of \$50,000 for 50 schools, increasing proportionately if more schools are included in the study.
6. Review by admission staff. CSU and UC staff review cases where the computer-based system cannot make conclusive determination of a student's eligibility.	Training and initial setup will total \$20,000. Evaluation will be \$15,000 per segment for 50 schools, increasing proportionately with the number of schools.
7. Estimate statewide eligibility rates. Apply statistical procedures to estimate statewide figures from sample results. Write reports and fact sheets presenting estimates.	Calculations are done independently by CPEC, UC, and CSU. Analysis is 0.3 py for each organization. Report writing is an additional 0.2 py for CPEC.

in eligibility studies is the review of transcripts by UC and CSU admission staff. The desired margin of error determines the number of schools that have to be included in the study and the number of transcripts that must be evaluated.

The margin of error in the 2003 study was 3½ percentage points, compared with 1 percentage point in the 2001 and earlier studies. The 2003 study was conducted differently from earlier studies, with data collected electronically rather than by mail (see Appendix B, page 6), but this wider margin of error was not an unavoidable result of the difference in methodology. The margin was wider because the number of schools in the 2003 study was limited by the availability of university staff to review transcripts. Regardless of whether data is collected electronically or by mail, the margin of error can be made as small as desired by including more schools in the sample.

In the 2003 study, 48 schools were contacted and 16,000 transcripts were evaluated at a cost of about 0.7 py in evaluator time. A fourfold increase in the sample size will generally halve the margin of error, so collecting data from 200, rather than 48, schools would likely reduce the margin of error to 1½–2 percentage points. Transcript evaluation is labor-intensive with no economies of scale, so the cost of this step increases in proportion to the number of schools in the study. Improvements in the computer-based evaluation system will reduce the proportion of student records that must be reviewed by evaluation staff, but a study with 200 schools is likely to cost \$190,000 in staff costs and contract expenses at the evaluation stage.

All of the cost estimates assume that the study is done in the same way as the 2003 study, but with a larger sample size. As yet, there has been no agreement with UC and CSU faculty and other interested parties on the study methodology. If another methodology is used, such as collecting transcripts by mail from a wider variety of schools, the study would have a very different cost structure.

Recommended Action

Staff recommends that the Commission proceed with an eligibility study for the class of 2007. Commission staff, UC, and CSU plan to consult with faculty representatives and legislative staff to determine the desired margin of error. Staff can then conduct a statistical analysis of proposed sampling plans and determine the sample size that is needed for this margin of error. However, given the importance of the estimates and their use in setting university eligibility requirements, staff recommends that funding be provided for a sample large enough to give a margin of error substantially lower than that of the Commission's 2003 study.

A resolution indicating the Commission's intent to proceed with a 2007 eligibility study follows on page 4.

Commission Resolution to Proceed with a 2007 Study

Staff recommends that the Commission adopt the following resolution. This will emphasize to the Governor and the Legislature that up-to-date estimates of university eligibility rates are needed and that the Commission, UC, and CSU should proceed with a study.

The California Postsecondary Education Commission intends to proceed with a University Eligibility Study for the class of 2007. This study will give up-to-date estimates of the percentage of California public high school graduates eligible for the University of California and the California State University. These estimates are needed to assess inequities in access to the state's public university systems and to compare eligibility rates with the figures recommended in California's 1960 Master Plan for Higher Education.

The Commission recommends that the Legislature provide the University of California and the California State University with funding at a level that will allow eligibility rates to be estimated with a margin of error comparable to those in the Commission's 2001 and earlier studies.

Appendix A. Recent Changes to UC's Eligibility Requirements

The University of California responded to the Commission's 2003 Eligibility Study by making its eligibility requirements more stringent. In July 2004, the Board of Regents approved two changes in eligibility requirements. These changes were effective for students entering in Fall 2005.

First, students identified as *Eligible in the Local Context* (ELC) are now required to complete the course pattern and take the tests required of other applicants. Under ELC, high school juniors who have completed 11 of the 15 required *a–g* courses and are in the top 4% of their class are eligible. Until 2004, these students did not have to complete the *a–g* requirements in their senior year.

Second, for students seeking *Eligibility in the Statewide Context*, UC changed the method used to calculate GPA. Until 2004, UC used a *best-of-pattern* GPA, based on the applicant's best grades in the courses meeting the *a–g* requirements. When an applicant took more *a–g* courses than needed to meet the coursework requirement, poorer grades could be omitted from the calculation. UC now uses an *all-courses* GPA, where grades in all *a–g* courses taken in the 10th and 11th grades are used in the calculation.

In September 2004, the Regents approved an additional change, raising the minimum GPA from 2.8 to 3.0. This change will be effective for students entering in fall 2007. UC's analysis indicated that these three changes will cut UC's eligibility rate from 14.4% to 12.8%. The individual changes in requirements are expected to affect eligibility as follows:

Change in requirements	Effective date	Reduction in eligibility
More restrictive conditions for ELC students	Fall 2005	0.9%
Change from a <i>best-of-pattern</i> GPA to an <i>all-courses</i> GPA	Fall 2005	0.5%
Increase in GPA from 2.8 to 3.0	Fall 2007	0.2%
Total effect		1.6%

Appendix B. Electronic Data Collection in the 2003 Eligibility Study

The 2003 eligibility study 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. In earlier eligibility studies, transcripts were collected by mail and evaluated manually. The Commission wrote to every high school in the state, asking each school for a sample of transcripts from their graduating class. Schools compiled this sample and mailed it to the Commission. The transcripts were scanned, information identifying individual students was redacted, and then reviewed by an evaluator from each university system to determine each student's eligibility.

Electronic data collection is less of a burden to school staff, because they do not have to 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.

This approach also 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 are in a wide variety of formats and have 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 all transcripts for these schools' entire graduating class were collected and evaluated.

Collecting transcripts in this way has some disadvantages. Schools must be selected carefully to ensure that they are 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 will give a wider margin of error than 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. As UC develops its system to automate more of the evaluation process, the sample size can be increased at low cost. Electronic data collection also presents the opportunity of conducting eligibility studies more frequently. Continuing to collect transcripts by mail would mean that future eligibility studies would be expensive and infrequent.

