# Transfer Education at the University of California: A Review of Available Data Regarding the Effectiveness of the Master Plan Transfer Function

This report provides an overview of student transfer, the process by which California students enter one of the State's 108 community colleges for their lower division education, then transfer to the University of California to complete their baccalaureate degree. The extent to which students are well served by the transfer function as defined by the Master Plan for Higher Education will become increasingly important in light of California's continuing budget crisis and its impact on the ability of the University to accommodate an expanding number of college-age students.

Data presented in this report provide a quantitative view of the effectiveness and efficiency of the transfer function as a path to the baccalaureate degree:

- Section 1 provides a brief historical overview, followed by a description of the controlling policies that guide UC transfer efforts.
- Section 2 presents data regarding the admission and enrollment of students from California community colleges, with particular emphasis on recent enrollment increases resulting from the implementation of the UC/Community College Memorandum of Understanding signed in 1997 and the Partnership Agreement with the Governor initiated in 2000.
- Section 3 profiles the students that successfully transfer to UC and describes how they differ from other students that attend a California community college.
- Section 4 focuses on the academic performance of community college students following their transfer to a UC campus.
- Section 5 presents data depicting the productivity of various community colleges in preparing students for transfer to UC.

#### **Section 1: History and Goals of the Transfer Function**

The University has both a historical relationship with the California community colleges and a formal, statutory bond. In 1907, the California Legislature, with strong support from the University of California, passed legislation creating the first "junior" colleges for the purpose of offering instruction equivalent to the first two years of university study. For the next 50 years, the University worked closely with this burgeoning educational segment in formulating lower division curricula intended to prepare students who planned to transfer to the University for a baccalaureate degree.

In 1960 this relationship between the University and the California community colleges was formalized with the adoption of the California Master Plan for Higher Education. This policy structure for California higher education establishes transfer from California community colleges to the University of California (UC) and the California State University (CSU) as a central element in the state's educational system. Originating during an era of rapid growth in the number of students, much like today, California's higher education policy was intended to provide access, economy, and quality in the state's higher educational programs.

A critical feature of the Master Plan is its commitment to access; a promise intended to be achieved in large part through transfer. Implementing this notion, UC and CSU are to maintain an upper to lower division ratio of at least 60/40 to assure that there are spaces available for all eligible transfer students. Eligible California community college transfer students are, by statewide policy, to be given priority in the admission process over freshmen and other categories of students transferring from institutions other than California community colleges.

The Master Plan specifies that transfer should accommodate two groups of students: 1) those who attain University eligibility upon high school graduation, but because of financial considerations or limited geographic mobility choose to remain in their home community and attend a local college, and 2) "second chance" students—those who did not attain University eligibility in high school.

To accommodate enrollment and access needs and to build on the success of the Master Plan, UC pledged in a Memorandum of Understanding with the California Community College system to increase by one-third the number of transfer students to UC. <sup>1</sup> Building on this effort, UC entered into a "partnership" with the Governor in 2000 to increase by 50 percent the number of students that transferred to UC from a California community college to a total of 15,300 by academic year 2005-06. Meeting this goal required an average growth rate of 6 percent per year, more than double the historical growth rate for this process. Yet, as detailed in Section 2, these expectations are very close to being realized.

<sup>&</sup>lt;sup>1</sup> Enhancing Student Transfer: A Memorandum of Understanding Between the California Community Colleges and the University of California. (1997) Oakland: Student Academic Services, Office of the President.

#### Section 2: Community College Transfer Admission and Enrollment

During the 1990s the number of transfer students entering UC was stable. Between 1990 and 1997 (the year the MOU was signed) transfer enrollment increased only 1.1 percent. Since the implementation of the MOU and Partnership, however, transfer enrollment has grown dramatically. As seen in Figure 1, the numbers of applications, offers of admission, and enrollment of new transfer students from California community colleges have increased significantly since 1998-99.<sup>2</sup>

Figure 1

California Community College Students Transferring to the University of California

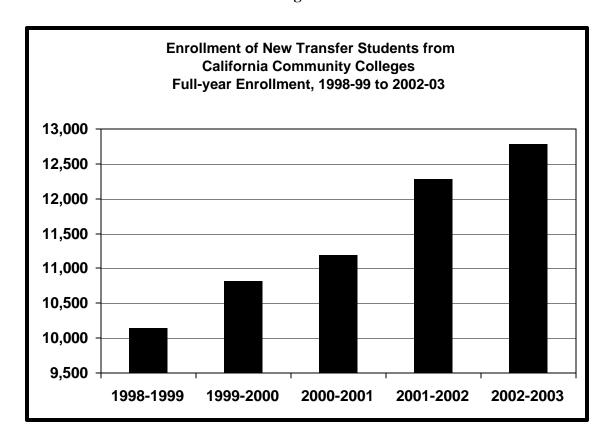
		Applied	Application Increase (%)	Admitted	Admit Increase (%)	Enrolled	Enrollment Increase (%)
_	Fall 2003	19,370	7.89%	15,357	9.83%		
ats	Fall 2002	17,953	5.87%	13,983	3.26%	10,325	3.76%
Term Data	Fall 2001	16,958	5.25%	13,541	7.28%	9,951	7.71%
	Fall 2000	16,112	2.86%	12,622	6.09%	9,239	6.15%
Ea⊪	Fall 1999	15,664	6.41%	11,897	8.14%	8,704	4.02%
	Fall 1998	14,720		11,001		8,368	
亞	Full-year 2002-03	21,925	7.89%	16,944	5.27%	12,780	3.86%
Data	Full-year 2001-02	20,321	4.93%	16,096	5.83%	12,305	9.72%
Full-year	Full-year 2000-01	19,367	0.36%	15,210	3.52%	11,215	3.64%
	Full-year 1999-00	19,298	8.94%	14,693	10.75%	10,821	6.61%
ц	Full-year 1998-99	17,715		13,267		10,150	

In 2002-03, the University enrolled 12,780 new transfer students from California community colleges, the highest enrollment in the history of the University. Since 1998-99 (the base year for enrollment targets specified in UC's partnership with the Governor), enrollment of transfer students from California community colleges has grown at an average annual rate of 6 percent, nearly doubling the historical UC growth rate for transfer. Figure 2 depicts this recent, rapid increase in transfer enrollment since the signing of the MOU in 1997.

<sup>&</sup>lt;sup>2</sup> Some statistics on undergraduate enrollment refer to Fall term only, but full-year enrollment figures are a better measure of transfer enrollment, because only 75 to 85 percent of new transfer students generally enter UC in Fall, while 15 to 25 percent enter in Winter or Spring terms. In comparison, approximately 97 percent of freshmen enter in the Fall term.

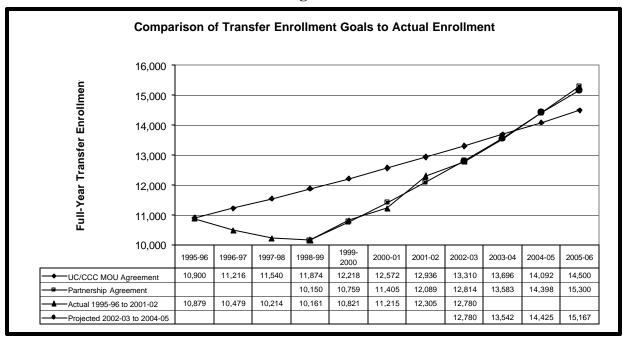
<sup>&</sup>lt;sup>3</sup> The California Master Plan for Higher Education and UC admissions policy give priority to students transferring from California community colleges, specifying that the University would enroll all UC-eligible transfer students from California community colleges. UC has been able to accommodate all eligible transfer students from California community colleges, although not always at the campus of their choice or in the term of their choice.

Figure 2



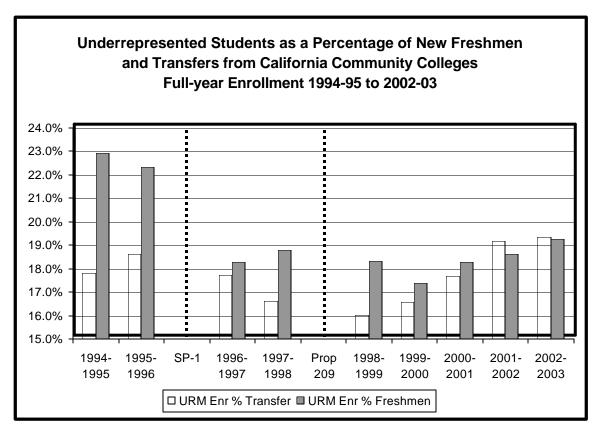
If transfer enrollment continues to grow at this rate, UC will surpass the 2005-06 UC/CCC MOU enrollment target of 14,500 new community college transfer students and match the 2005-06 Partnership Agreement enrollment target of 15,300 new community college transfer students, as illustrated in Figure 3 below.

Figure 3



In addition to overall transfer growth, the enrollment of underrepresented transfer students (i.e., American Indian, African American, and Chicano/Latino students) also has grown significantly, increasing 51.7 percent overall since 1998-99. The proportion of underrepresented minority students as a percentage of the entering transfer class also has increased since 1998-99, for the first time surpassing the proportion of underrepresented minority students in the freshman class for the past two academic years. Figure 4 shows the proportion of underrepresented minority students in the entering freshmen and transfer class since 1994-95.

Figure 4



#### **Section 3: Transfer Student Profile**

Students enrolling at UC from California community colleges are a large and significant part of UC's general student body. Transfers enroll at UC from all 108 California community college campuses and are well represented on all of UC's eight undergraduate campuses. The vast majority of community college students enter UC as juniors. This section highlights some of the most important characteristics of community college students at UC.

• Although the majority of UC undergraduates enter from California public high schools, community college transfer students constitute the second largest source of students.

In Fall 2001, approximately 26,000 junior and senior level students who had begun their studies at a California community college were enrolled at UC. While most upper division students are from California high schools (51 percent), students from California community colleges account for the second largest group, constituting 31 percent of all upper division students enrolled at UC in Fall 2001. Figure 5 shows the distribution of students based on their school of origin.

Fall 2001 Upper Division Student Enrollment by School of Origin 60.0% 50.0% 40.0% 30.0% 20.0% 10.0% 0.0% California California California California California California University of lon-California Foreign Other Public High Private High Community Private 2 vear Public 4 Year Private 4 Yea California Institution Institution College School School College College College ■ Series1 50.5% 8.3% 31.0% 0.1% 0.7% 0.4% 1.7% 0.1% 4.9% 0.8%

Figure 5

Transfers from California community colleges constitute 25 to 37 percent of the total upper-division population at each UC campus, with 6 campuses having community

college transfer populations that exceed 30 percent of the upper-division total. Figure 6 presents the number of upper-division students at each campus who began their higher education at a community college.

**Proportion of Upper-division Students at UC Campuses Entering as Transfers** from a California Community College 40.0% ■ BERKELEY 35.0% □ DAVIS 30.0% ■ IRVINE 25.0% **■ LOS ANGELES** 20.0% RIVERSIDE 15.0% ■ SAN DIEGO 10.0% ■ SANTA BARBARA 5.0% ■ SANTA CRUZ 0.0%

Figure 6

#### • Community college students come from a variety of ethnic and racial backgrounds.

In Fall 2001, transfer students from California community colleges represented a diversity of racial and ethnic backgrounds, as shown in Figure 7. Among traditionally underrepresented students, Chicano and Latino students constituted the largest group of upper-division transfers (14.9 percent), followed by African American students (2.7 percent), and American Indian students (0.7 percent). Figure 8 shows how this ethnic and racial diversity compares with students at the freshmen level.

Figure 7

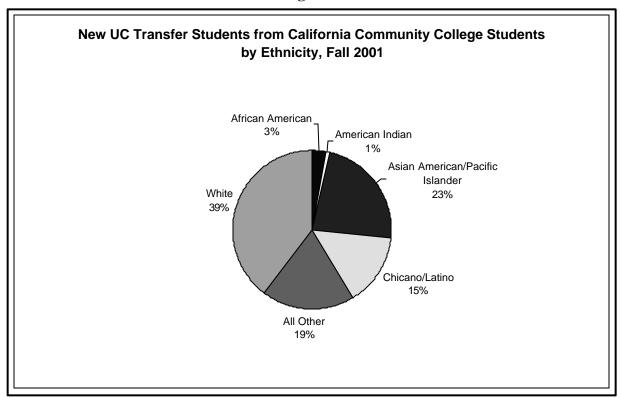
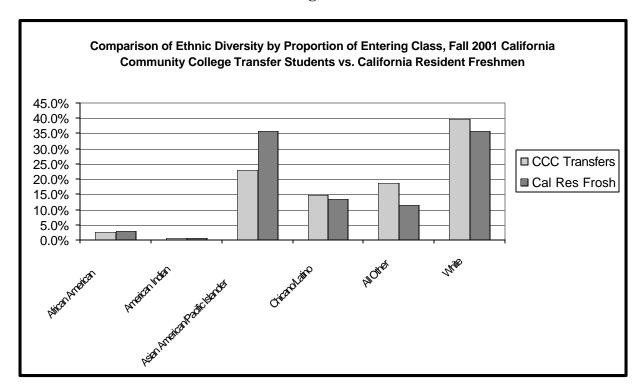


Figure 8



#### UC attracts transfers from a variety of age groups.

Students enrolling at UC from a California community college generally do so within a few years after leaving high school. Nevertheless, older students (23 years and older) also are an important part of UC's transfer population, constituting about 30 percent of the total transfer enrollment in 2000-2001. Figure 9 shows the age distribution of transfer students from California community colleges to UC.

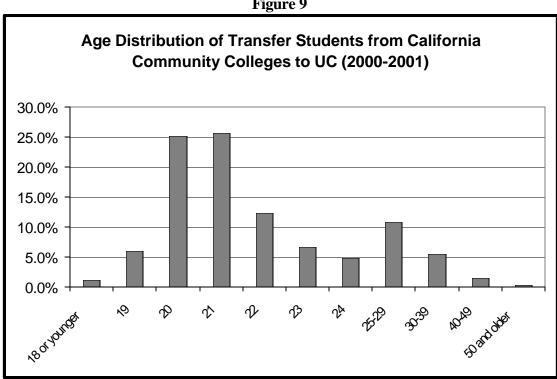


Figure 9

#### Students who transfer to UC differ in significant ways from other students at California community colleges.

A recent study investigated the ways in which students who transfer to UC differ from community college students who do not transfer (but who express a desire to transfer). The study included two groups of students who had attended a California community college. Characteristics of students who had successfully transferred to UC during the 1998-99 academic year were compared to students who attended a community college during the same period (and who did not transfer to UC, although they might have transferred to another four-year institution). Rather than compare students who had transferred to UC against all students in the community college system (which include a great number of individuals who have no interest in transfer), the comparison group was confined to those students who completed 60 units of UC-transferable courses, including UC-transferable math and English composition courses, and earned a minimum GPA of 2.40. These criteria provide a good approximation of UC transfer eligibility given current data collection procedures. The aim of the investigation was to determine some

"markers" or characteristics that could identify, in a general way, a pool of students in California community colleges that might be good prospects for successful transfer to a UC campus.<sup>4</sup> Major findings from this investigation include the following:

- Most UC transfer students attended the community college full time and completed more units per term than students in the comparison group (13 units per term versus 9 units).
- The average age of students transferring to UC was 22.8 years. In contrast, the average age of students in the comparison group was 24.6 years.
- Students transferring to UC earned higher overall GPAs during their attendance at California community colleges compared to students who did not transfer to UC. The mean GPA for UC transfer students was 3.27, compared to 3.15 for students in the comparison group.
- Students who transfer to UC are proportionately less composed of underrepresented minorities than are students in the comparison group. African American students that transferred to UC were 2 percent of the group, compared to 4 percent for the non-transfer group. Chicano/Latino students were 12 percent of the students that transferred to UC and 18 percent of the non-transfer group. Caucasian students were 39 percent of the UC-transfer group and 44 percent of the community college comparison group. Asian and Asian American students were 24 percent of the UC-transfer group and 28 percent of the community college comparison group.

College Student Database. Oakland: Office of the President, University of California, Student Academic Services.)

<sup>&</sup>lt;sup>4</sup> (For more information, see Egorin, M. & Handel, S. [2001] Estimating the Number of Community College Students Preparing for UC Transfer: Results from an Analysis of the California Community

#### **Section 4: Transfer Student Academic Achievement**

The academic performance of community college transfer students, measured in terms of persistence and graduation rates at UC, has improved steadily over the last decade. Since 1985, one-year persistence rates have risen 6.6 percentage points, from 85.8 percent to 92.4 percent. This means that almost all transfer students who enroll at UC complete their first year at UC and enroll for a second. While there is concern nationally about "transfer shock" (i.e., community college students dropping out in large numbers after their first term in a four-year institution), transfers at UC generally complete their first year with sound academic records.

California community college students also graduate from UC at high rates. Although two-year graduation rates have remained relatively steady for the past 16 years (hovering around 30 percent), three-year graduation rates have risen 5.4 percentage points (from 63.6 percent to 69.0 percent), and four-year graduation rates have risen 7.8 percentage points (from 71.8 percent to 79.6 percent). Thus, four years after transferring to UC from a California community college, nearly four-fifths of community college transfers have earned a baccalaureate degree (see Figure 10).

Figure 10

Persistence, Graduation, & Time-to-Degree
Upper Division California Community College Transfers to UC

Entering Transfers		Persistence Rates		Graduation Rates*			Average <u>Time to Degree</u> Calendar Quarters		
Fall	Number	1-year	2-year	2-year	3-year	4-year	Years	Enrolled	
1985	3,217	85.8%	47.9%	28.6%	63.6%	71.8%	2.6	7.9	
1986	3,203	85.9%	48.3%	28.5%	64.0%	73.5%	2.6	8.0	
1987	3,399	85.6%	49.5%	27.9%	64.7%	71.6%	2.6	8.0	
1988	3,832	87.0%	49.9%	28.3%	59.7%	73.0%	2.6	7.9	
1989	4,011	87.9%	48.5%	22.7%	60.4%	73.0%	2.6	7.9	
1990	5,346	89.0%	47.9%	25.0%	63.1%	75.6%	2.5	7.8	
1991	5,447	89.2%	44.0%	28.0%	64.4%	75.8%	2.5	7.6	
1992	6,331	91.0%	43.2%	30.1%	67.5%	78.1%	2.4	7.5	
1993	7,002	90.2%	44.3%	29.6%	67.1%	78.3%	2.4	7.5	
1994	7,207	90.3%	45.0%	28.9%	66.4%	77.1%	2.5	7.6	
1995	7,512	91.0%	45.1%	29.1%	66.1%	78.2%	2.4	7.6	
1996	7,438	90.3%	44.2%	29.5%	66.8%	78.2%			
1997	7,146	90.7%	42.6%	31.9%	69.0%	79.6%			
1998	7,221	91.8%	40.4%						
1999	7,541	91.3%	39.6%						
2000	8,146	92.0%	39.6%						
2001	8,663	92.4%							

While the performance of community college transfers is good overall, there is great interest in how well community college students perform in specific academic disciplines when compared with students who begin as freshmen at UC. Beginning in 2001, analyses were completed to address these issues. Researchers compared the academic records of students who entered UC as freshmen and became juniors (called "native juniors") to California community college transfers who entered UC with junior

standing.<sup>5</sup> They also noted the general academic discipline that students studied. By following these students through their major and upper-division coursework, researchers were able to compare how native juniors and transfer juniors in different disciplines achieve similar academic goals (i.e., earning a baccalaureate degree). Here are the main findings:

• Transfers and native juniors differ somewhat in their selection of academic majors, but the magnitude of difference is small.

Although community college transfer students to UC demonstrate a similar pattern of major selection as native juniors, there are some differences between the groups, specifically, proportionately more representation of transfer students in the Humanities and Arts and less representation in the Life Sciences. However, about the same proportion of native juniors and transfer students select majors in Engineering and Computer Science, Physical Sciences and Mathematics, and Social Sciences/ Psychology.

• Both native juniors and junior transfers have high 4-year graduation rates, although a slightly higher proportion of native juniors tend to graduate within four years after reaching junior status. These differences vary somewhat across academic majors.

The vast majority of native juniors and transfer students graduate from UC. However, four-year graduation rates are about 10 percentage points higher for native juniors compared to junior transfers (see Figure 11).

Graduation rates also vary by discipline. The largest differences occur in the Life Sciences and Physical Sciences & Mathematics. Across the five cohort years, transfer juniors in the Life Sciences and Physical Sciences & Mathematics had graduation rates that averaged 16 percentage points below native juniors. Transfer juniors in the Humanities & Arts and Social Sciences & Psychology had graduation rates approximately 8 to 10 percentage points below native juniors. Graduation rates for transfer juniors are most similar in Engineering and Computer Science, averaging only 5 percentage points lower than similar rates for native juniors. Across the country, a number of studies have found that the graduation rates of students who entered four-year institutions as freshmen are higher than those for students who transferred in from community colleges. Although a variety of explanations have been offered to explain this, many of these differences can be traced to the significant and often disruptive life transition, as well as academic transition, that transfer students must make in entering a university.

<sup>&</sup>lt;sup>5</sup> The analysis included student cohorts from Fall 1994 through Fall 1998.

<sup>&</sup>lt;sup>6</sup> See, for example, a literature review written by K. Dougherty in 2002: "The Evolving Role of the Community College: Policy Issues and Research Questions." In *Higher Education: Handbook of Theory and Research*, Vol. XVII (J. C. Smart, Ed.). New York: Agathon Press.

# • Transfer and native students earn similar GPAs and complete their degrees in about the same amount of time.

Transfer juniors also earned similar grades as native juniors. There are virtually no differences in the upper-division GPAs of native juniors and junior transfers overall or by disciplinary category (see Figure 11).

In addition, transfer juniors and native juniors take just about the same amount of time to complete their degrees. On average it takes native juniors about 2.2 years to complete their degrees after reaching junior status; transfer juniors take 2.3 years. These time-to-degree patterns are consistent across the academic disciplines examined in this study.

# • Despite differences with native students, the academic performance of community college transfer students is strong.

As shown above, four-year graduation rates for native juniors are about 10 percentage points higher than for junior transfers. Yet, on other measures, such as GPA and time-to-degree, the academic performance of transfer students is comparable to that of UC native juniors. In evaluating this data, one must remember that these community college students have transferred into one of the most selective higher education institutions in the United States. The fact that their academic performance is very comparable to that of native juniors reflects the strong lower division preparation that students at both UC and California community colleges receive.

Figure 11

Comparison of Native Jun Fall 1994 through Fall 19 Five-year Avera	98 Enterii	ng Transf	er Studer	nt Cohorts	
				Mean	

		Proportion of Cohort	Upper Division GPA	Percent Graduated in 4 years	Mean Elapsed Years to Graduation	Mean Enrolled Terms to Graduation
Engineering and	Native Junior	9%	3.0	87	2.5	7.9
Computer Science	CCC Transfer Junior	7%	3.1	82	2.5	8.1
Humanities	Native Junior	10%	3.3	89	2.1	6.7
and Arts	CCC Transfer Junior	14%	3.3	81	2.2	7.1
Life Sciences	Native Junior	19%	3.1	90	2.3	7.4
Life Sciences	CCC Transfer Junior	14%	3.0	74	2.4	7.9
Physical Sciences	Native Junior	3%	3.0	86	2.4	7.6
and Math	CCC Transfer Junior	5%	3.0	70	2.5	8.0
Social Sciences and	Native Junior	25%	3.2	92	2.0	6.5
Psychology	CCC Transfer Junior	27%	3.1	82	2.1	7.0
T-1-1	Native Junior	100%*	3.1	89	2.2	7.1
Total	CCC Transfer Junior	100%*	3.1	79	2.3	7.3

\*Note: Total of proportion of cohort does not add to 100% because not all discipline categories are listed

# Section 5: Transfer Student Preparation at California Community Colleges

The University enrolls transfer students from all 108 California community colleges nearly every year, although the number of students varies greatly by college. Although transfer is one of the central missions of the community colleges, these institutions also serve other needs, such as vocational training and developmental (remedial) education. While all community colleges provide courses that allow students to become eligible for transfer to UC and CSU, the degree to which each community college promotes transfer (over other institutional missions and priorities) may vary.

Approximately one-third of the community colleges in California sent over two-thirds of UC's entering transfer class in 2002-03. The top 10 feeder community colleges transferred 38 percent of UC transfers in 2002-03. This pattern has been repeated throughout the past two decades. Moreover, these colleges are preparing many of the transfers to CSU as well. Of the ten top feeder community colleges for UC, seven are among the top 10 feeders for CSU as well (see Figure 12).

Figure 12<sup>8</sup>

## Top 10 Most Productive Community Colleges Transferring Students to UC and CSU (2002-03)

UC Top Ten	# of Students
Feeder Community Colleges	Transferred
Santa Monica College	895
De Anza College	589
Diablo Valley College	564
Santa Barbara City College	518
Pasadena City College	465
Orange Coast College	450
San Diego Mesa College	373
Mount San Antonio College	328
Riverside College	328
City College of San Francisco	297

CSU Top Ten	# of Students
Feeder Community Colleges	Transferred
De Anza College	1,348
Orange Coast College	1,255
Fullerton College	1,225
City College Of San Francisco	1,224
Mount San Antonio College	1,177
Pasadena City College	1,160
Diablo Valley College	1,050
Fresno City College	1,026
El Camino College	1,015
Santa Monica College	1,011

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<sup>&</sup>lt;sup>7</sup> Appendix 1 presents the number of students who transferred to UC and to CSU for all 108 community colleges.

<sup>&</sup>lt;sup>8</sup> Community colleges listed in italics are the top feeder colleges for both UC and CSU.

### Appendix 1

#### New California Community College Transfers By Campus Full Year Enrollment 2002-2003

Community Colleges	csu	UC	Community Colleges		CSU	UC
Allan Hancock College	311	61	Los Angeles Harbor College		338	48
American River College	973	201	Los Angeles Mission College		201	15
Antelope Valley College	471	58	Los Angeles Pierce College		641	248
Bakersfield College	785	47	Los Angeles Southwest College		163	9
Barstow College	47	4	Los Angeles Trade-Technical College		254	10
Butte College	664	29	Los Angeles Valley College		737	174
Cabrillo College	387	265	Los Medanos College		170	28
Canada College	132	26	Mendocino College		86	14
Cerritos College	784	156	Merced College		399	23
Cerro Coso College	64	15	Merritt College		103	39
Chabot College	660	120	Mira Costa College		400	133
Chaffey College	675	84	Mission College		278	25
Citrus College	505	53	Modesto Junior College		857	59
City College Of San Francisco	1,224	297	Monterey Peninsula College		206	80
Coastline College	90	9	Moorpark College		771	254
College Of Alameda	175	64	Mount San Antonio College		1,177	328
College Of Marin	167	94	Mount San Jacinto College		269	65
College Of San Mateo	429	184	Napa Valley College		192	46
College Of The Canyons	482	122	Ohlone College		462	101
College Of The Desert	276	61	Orange Coast College		1,255	450
College Of The Redwoods	367	23	Oxnard College		260	52
College Of The Sequoias	505	43	Palo Verde College		11	0
College Of The Siskiyous	56	7	Palomar College		873	190
Columbia College	77	26	Pasadena City College		1,160	465
Compton College	165	6	Porterville College		114	14
Contra Costa College	168	46	Reedley College		441	17
Copper Mountain	27	0	Rio Hondo College		472	79
Cosumnes River College	444	69	Riverside College		950	328
Crafton Hills College	227	50	Sacramento City College		710	232
Cuesta College	764	74	Saddleback College		764	269
Cuyamaca College	185	26	San Bernardino Valley College		409	36
Cypress College	630	96	San Diego City College		280	74
De Anza College	1,348	589	San Diego Mesa College		779	373
Diablo Valley College	1,050	564	San Diego Miramar College		164	46
East Los Angeles College	717	138	San Joaquin Delta College		762	88
El Camino College	1,015	256	San Jose City College		268	18
Evergreen Valley College	334	27	Santa Ana College		762	116
Feather River College	32	1	Santa Barbara City College		425	518
Foothill College	391	254	Santa Monica College		1,011	895
Fresno City College	1,026	91	Santa Rosa Junior College		830	193
Fullerton College	1,225	165	Santiago Canyon College		111	32
Gavilan College	176	15	Shasta College		375	33
Glendale College	638	208	Sierra College		866	152
Golden West College	573	81	Skyline College		429	85
Grossmont College	871	134	Solano College		340	90
Hartnell College	370	58	Southwestern College		611	126
Imperial Valley College	251	12	Taft College		49	2
Irvine Valley College	392	230	Ventura College		668	165
Lake Tahoe College	54	25	Victor Valley College		267	28
Laney College	357	127	Vista College		76	54
Las Positas College	291	80	West Hills College		114	6
Lassen College	66	4	West Los Angeles College		168	44
Long Beach City College	798	115	West Valley College		582	107
Los Angeles City College	502	79	Yuba College		291	35
				Total	50,744	12,780