



## California Community College Transfer Rates Who Is Counted Makes a Difference

By Laura Horn and Stephen Lew

*This is the first in a series of MPR Research Briefs published on the outcomes and experiences of California community college students.*

*The research, funded by the William and Flora Hewlett Foundation, focuses primarily on transfer students, but we are also investigating the financial aid support that community college students receive.*

California Community Colleges (CCC) enroll roughly two-thirds of all California college students and nearly one-fourth of all community college students in the nation. Their low fees and open-admission policies provide critical access to many students who otherwise might not attend college. Yet recent research reports have concluded that students who enroll in California community colleges complete a degree or transfer at relatively low rates. For example, Sengupta and Jepsen (2006) from the Public Policy Institute of California (PPIC) reported that about one-quarter of “transfer-focused” students had transferred to a 4-year institution, and Shulock and Moore (2007) from the Institute for Higher Education Leadership and Policy (IHELP) reported that about one-quarter of “degree-seekers” had completed college, either through transfer (18 percent) or earning a formal credential (6 percent). In light of the scrutiny these studies have received and to better understand who should be counted in determining transfer rates, we examine transfer rates in the context of different course-taking patterns and illustrate how rates have changed over time. The purpose of this research is to provide empirical data and a broader context for ongoing policy analyses and discussions.

### **Data**

Using data files provided by the Chancellor’s Office from the California Community Colleges Management Information System (COMIS), we analyzed three cohorts of first-time students enrolled in 1993–94, 1998–99, and 2000–01.

“First-time students” are defined by the Chancellor’s Office as those who have never before enrolled in a community college

(i.e., no enrollment records were found prior to the cohort year in the COMIS). The cohort data we received from COMIS did not include “special admit” students, defined as first-time community college students concurrently enrolled in K–12 schools. In addition, we excluded students who reported they already held college degrees (AAs and BAs) and those whose dates of transfer preceded their CCC enrollment dates (i.e., reverse transfers) from our analysis.

## Changing Denominators: Who Is Counted in Transfer Rates

The first question one must ask in calculating transfer rates is who should be included in the denominator. Not all students intend to transfer. If you look at what students report as their initial goals when they first enroll, roughly one-third hope to transfer (with or without a degree) and another 10 percent intend to earn a formal credential (AA or vocational certificate).<sup>1</sup> Thus, together less than half of CCC students report intentions to complete a formal course of study. Other students enroll to obtain or enhance job skills, for personal enrichment, or for obtaining basic or pre-collegiate skills. For these students, completing one, two, or even a series of courses may be all they expect to accomplish during their enrollment.

The data also indicate that first-time students are fairly uncertain about their initial education goals: about 1 in 5 either report that they are undecided or do not report any goal. We know that many of these students go on to earn a degree or transfer to a 4-year institution.<sup>2</sup> Given such uncertainty and the variability in student-reported goals, we calculated transfer rates based entirely on transcript

data, using defined course-taking patterns as a guide to students’ intentions. Among these denominators, we included two measures of transfer-oriented course-taking patterns defined in the Accountability Report for California Community Colleges—ARCC (Drummond and Perry 2007).

The six denominators used to calculate transfer rates begin with the most inclusive population—students who completed any transfer units within 6 years—and in general become increasingly restrictive. The first three denominators are based solely on credit accumulation, while the remaining three are based on transfer-oriented course completion. The percentage of students and the total number of students included in each denominator are shown in Table A.

### Six Denominators

- **Completed any transfer unit.** This is the least restrictive denominator; at least 70 percent of all community college students meet this criterion.
- **College Pathway Status achieved** (completed 12 degree-applicable or transfer units). About 40 percent of all community college students meet this criterion. College Pathway Status is one of the “milestone events” set forth in a model developed by the State Student Data Project.<sup>3</sup>
- **Halfway milestone reached** (completed 30 degree or transfer units). Completing 30 units is the halfway mark for the number of units required for transfer to a UC or CSU.<sup>4</sup> Students may or may not have completed the required

<sup>1</sup>Based on the 2000–01 cohort.

<sup>2</sup>For example, about 16 percent of students who were undecided about their goal when they first enrolled in the 2000–01 cohort transferred to a 4-year college.

<sup>3</sup>The State Student Data Project is a collaboration of the Lumina-funded Achieving the Dream (AtD) initiative and Ford-funded Bridges to Opportunity initiative: [http://www.achievingthedream.org/images/index03/State\\_Data\\_Project\\_Jan2006.pdf](http://www.achievingthedream.org/images/index03/State_Data_Project_Jan2006.pdf).

<sup>4</sup>Based on the definition of “transfer prepared” in the ARCC report, which calls for the completion of 60 credits (Drummond and Perry 2007, Appendix B, p. 701).



Table A. Percentage of California community college students in each denominator and the total number in each group

Denominators	1993–94	1998–99	2000–01
	<b>Percent of all CCC students</b>		
Completed any transfer credits <sup>1</sup>	70.7	72.7	72.3
Reached college pathway status <sup>2</sup>	39.3	41.9	41.0
Reached halfway milestone <sup>3</sup>	25.0	28.1	27.8
Completed 12 credits and attempted math or English <sup>4</sup>	26.9	29.7	28.9
Math milestone <sup>5</sup>	13.7	15.6	15.2
Transfer ready <sup>6</sup>	4.2	5.9	6.0
	<b>Total number of CCC students</b>		
<b>Total</b>	<b>569,153</b>	<b>488,618</b>	<b>512,435</b>
Completed any transfer credits <sup>1</sup>	402,367	355,407	370,603
Reached college pathway status <sup>2</sup>	223,880	204,636	209,913
Reached halfway milestone <sup>3</sup>	142,204	137,179	142,402
Completed 12 credits and attempted math or English <sup>4</sup>	152,877	144,911	147,901
Math milestone <sup>5</sup>	78,082	76,282	77,738
Transfer ready <sup>6</sup>	24,084	28,658	30,591

<sup>1</sup>Completed any transfer units.

<sup>2</sup>Completed 12 degree or transfer units.

<sup>3</sup>Completed 30 degree or transfer units.

<sup>4</sup>Completed 12 degree or transfer units and attempted a transferable math or English course; defined by California Chancellor's Office Management Information System as students demonstrating transfer intentions.

<sup>5</sup>Completed transfer math course.

<sup>6</sup>Met minimum transfer requirements defined in the ARCC report: completed 60 units including both English and math requirements, with at least a 2.0 GPA.

SOURCE: COMIS 1993–94, 1998–99, and 2000–01 first-time student cohorts.

math or English transfer course. Some 28 percent of community college students reach the 30-unit milestone.

- **Transfer intentions demonstrated** (completed 12 degree-applicable or transfer units *and* attempted a transfer math or English course). This definition meets the criteria defined in the ARCC report for showing intent to transfer.<sup>5</sup> Just under 30 percent of community college students demonstrate transfer intentions.
- **Math milestone** (completed math transfer course). The findings from our analysis indicate that completing the required math course for transfer is a major hurdle for transfer-oriented students, and about 15 percent of community college students complete the course.
- **Transfer ready** (completed 60 transfer units with a grade of C or better and completed a transfer math and English course). This denominator includes only students who have met the minimum requirements for transfer to a UC or CSU.<sup>6</sup> Only about 6 percent of community college students meet these specifications.<sup>7</sup>

Figures A and B show the 6-year transfer rates for the six different denominators for three cohorts: students who enrolled for the first time in 1993–94, 1998–99, and 2000–01.

<sup>5</sup>Drummond and Perry (2007), Appendix B, p. 702.

<sup>6</sup>These students meet the definition of both “transfer directed” (completed required math and English transfer courses) and “transfer prepared” (completed 60 transfer credits with a grade of C or better) as defined in the ARCC report (Drummond and Perry 2007), Appendix B, p. 701.

<sup>7</sup>The proportion of students meeting the transfer-ready criteria is smaller than the proportion who actually transfer. This means that some students transfer without having met the transfer-ready criteria. These students may be transferring as first-year or lower-division students after completing courses needed for matriculation as freshmen. We will investigate the course-taking patterns of such transfer students in our next Research Brief.

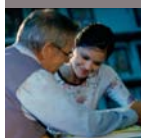
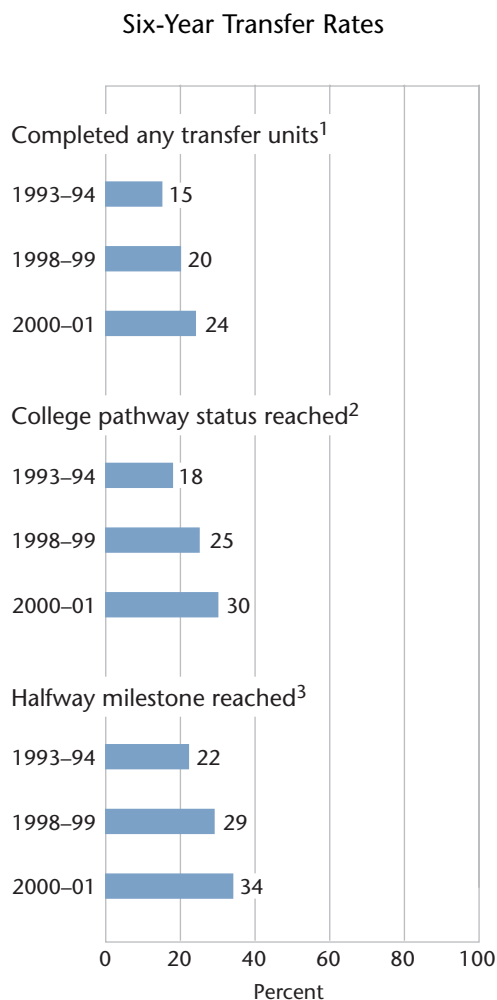


Figure A. Six-year transfer rates by college credit accumulation



<sup>1</sup>Completed any transfer units.

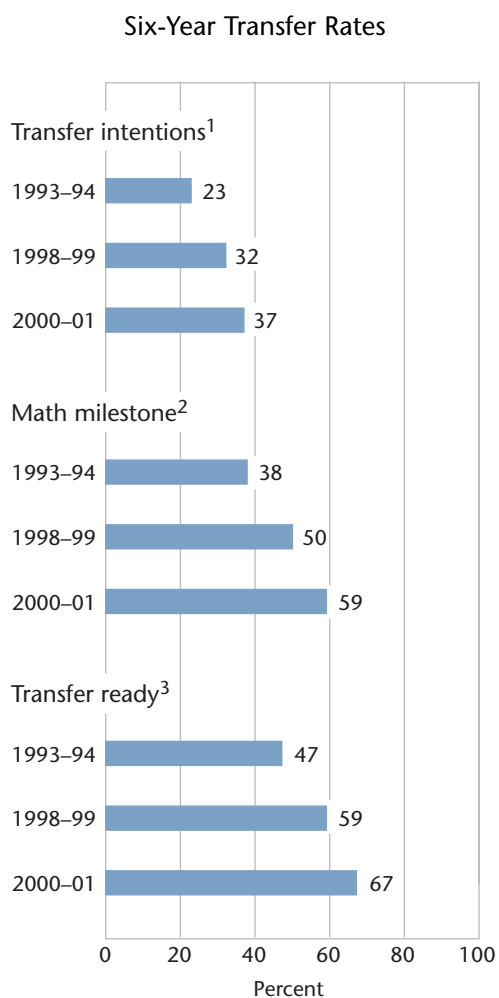
<sup>2</sup>Completed 12 degree or transfer units.

<sup>3</sup>Completed 30 degree or transfer units.

SOURCE: COMIS 1993–94, 1998–99, and 2000–01 first-time student cohorts.



Figure B. Six-year transfer rates by transfer-oriented coursetaking



<sup>1</sup>Completed 12 degree or transfer units and attempted a transfer math or English course; defined by California Chancellor's Office Management Information System as students demonstrating transfer intentions.

<sup>2</sup>Completed transfer math course.

<sup>3</sup>Met minimum transfer requirements defined in the ARCC report: completed 60 units including both English and math requirements, with at least a 2.0 GPA.

SOURCE: COMIS 1993-94, 1998-99, and 2000-01 first-time student cohorts.

### *Are Transfer Rates Increasing?*

What is immediately apparent from both figures is the systematic increase in transfer rates over time. The cause of this increase is subject to speculation, but chief among them is better transfer data reporting over time. To investigate this possibility, we disaggregated the transfer data from the three reporting sources: UC, CSU, and the National Student Clearinghouse (NSC).<sup>8</sup> The NSC is a central data system to which member institutions report enrollment and degree completion data, and this database is used to track students who transfer to private institutions in California or out of state. It was not until about 1999 that most colleges and universities participated in NSC; thus, the later years in the study would likely have greater numbers of transfers reported by NSC.<sup>9</sup> On the other hand, UC and CSU transfer data have been consistently reported by the UC and CSU systems over the period examined in this study, so if transfer rates increased at these institutions, one might conclude that the upward trend in rates is not entirely due to differences in data reporting. Table B illustrates increases in transfer rates in both the UC and CSU systems. For example, the first row of the table under "UC transfers" indicates that among students who completed any transfer units, the 6-year transfer rate to a UC increased from 2.8 percent in 1993-94 to 5.8 percent in 2000-01. Similarly, the comparable transfer rates to CSUs increased from 7.7 to 11.4 percent for those who had completed any transfer units.

<sup>8</sup>Our data originated from the COMIS transfer file; the COMIS receives the data from the three reporting sources.

<sup>9</sup>Personal communication with Patrick Perry, Vice Chancellor of Technology, Research and Information Systems, California Community Colleges Chancellor's Office.



Table B. Six-year transfer rates for 6 denominators, by transfer location

Denominators	1993–94	1998–99	2000–01
	<b>Percent</b>		
<b>UC transfers</b>			
Completed any transfer credits <sup>1</sup>	2.8	4.6	5.8
Reached college pathway status <sup>2</sup>	3.1	5.0	6.4
Reached halfway milestone <sup>3</sup>	3.8	5.6	6.8
Completed 12 credits and attempted math or English <sup>4</sup>	4.1	6.4	8.1
Math milestone <sup>5</sup>	7.7	11.7	14.6
Transfer ready <sup>6</sup>	10.5	13.7	16.1
<b>CSU transfers</b>			
Completed any transfer credits <sup>1</sup>	7.7	9.5	11.4
Reached college pathway status <sup>2</sup>	10.7	13.5	16.0
Reached halfway milestone <sup>3</sup>	14.3	17.4	20.2
Completed 12 credits and attempted math or English <sup>4</sup>	14.4	17.9	21.1
Math milestone <sup>5</sup>	23.9	29.7	34.9
Transfer ready <sup>6</sup>	32.2	38.7	44.5
<b>In-state private</b>			
Completed any transfer credits <sup>1</sup>	2.4	3.4	3.5
Reached college pathway status <sup>2</sup>	2.4	3.5	3.8
Reached halfway milestone <sup>3</sup>	2.5	3.5	3.7
Completed 12 credits and attempted math or English <sup>4</sup>	2.8	4.1	4.4
Math milestone <sup>5</sup>	3.6	4.9	5.2
Transfer ready <sup>6</sup>	3.4	4.2	4.1
<b>Out-of-state</b>			
Completed any transfer credits <sup>1</sup>	1.8	3.1	3.4
Reached college pathway status <sup>2</sup>	1.7	3.0	3.3
Reached halfway milestone <sup>3</sup>	1.6	2.8	3.2
Completed 12 credits and attempted math or English <sup>4</sup>	2.0	3.4	3.8
Math milestone <sup>5</sup>	2.4	3.9	4.2
Transfer ready <sup>6</sup>	1.3	2.2	2.6

<sup>1</sup>Completed any transfer units.

<sup>2</sup>Completed 12 degree or transfer units.

<sup>3</sup>Completed 30 degree or transfer units.

<sup>4</sup>Completed 12 degree or transfer units and attempted a transfer math or English course; defined by California Chancellor's Office Management Information System as students demonstrating transfer intentions.

<sup>5</sup>Completed transfer math course.

<sup>6</sup>Met minimum transfer requirements defined in the ARCC report: completed 60 units including both English and math requirements, with at least a 2.0 GPA.

SOURCE: COMIS 1993–94, 1998–99, and 2000–01 first-time student cohorts.

Another factor that might contribute to the upward trend in transfer rates is a change in the demographic profile of students. For example, a notable increase in the proportion of “traditional-age students” (those under age 20) was observed over the period, from about one-third to more than one-half of the student population. These are students who typically enroll in college immediately after high school graduation, and they generally complete college at higher rates than their older counterparts (Berkner, He, and Cataldi 2002). To look at this possibility, we present transfer rates for students under the age of 20 in Figures C and D. Even when restricted to traditional-age students, transfer rates still increased over time, though the transfer rates are higher than those for all students. Thus, the results of this study suggest that, while transfer rates may be relatively low in California community colleges, they have increased over time. Why they increased is an important question for future research.

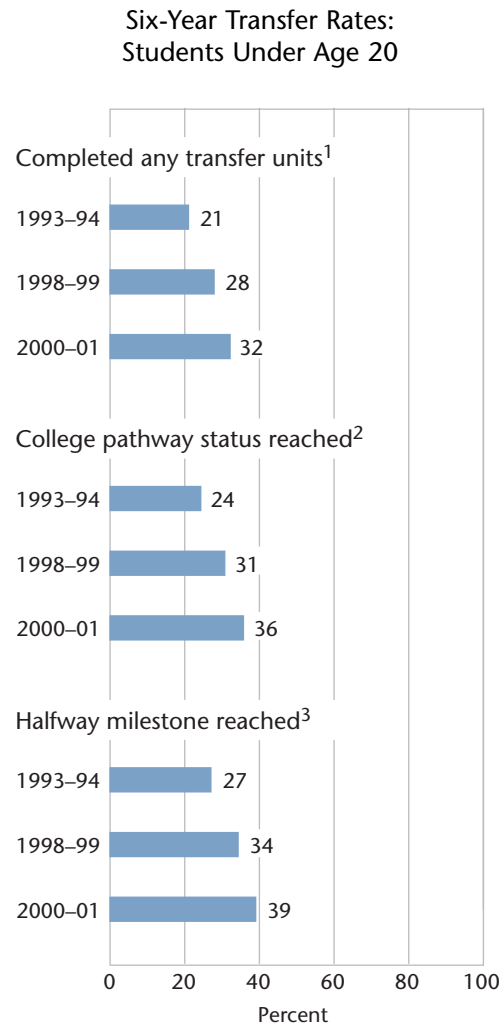
### ***What Do the Different Transfer Rates Tell Us?***

The first and most inclusive transfer rate we examined encompasses all students who completed a transfer unit. Figure A indicates that 24 percent, or roughly one-quarter, of 2000–01 students had transferred within 6 years. However, this denominator includes students who may have enrolled for personal enrichment, degree attainment, or transfer. In other words, many of these students may not have intended to transfer and, therefore, this rate is not necessarily an accurate assessment of transfer rates among students expected to transfer. However, the measure is useful for tracking system-wide transfer rate changes over time because it captures nearly all transfers, unlike the more restrictive measures described below.

The second and third denominators require the completion of a set number of college courses. Completing at least 12 degree or transfer units



Figure C. Six-year transfer rates by college credit accumulation for students under age 20



<sup>1</sup>Completed any transfer units.

<sup>2</sup>Completed 12 degree or transfer units.

<sup>3</sup>Completed 30 degree or transfer units.

SOURCE: COMIS 1993–94, 1998–99, and 2000–01 first-time student cohorts.

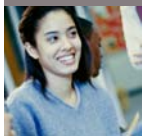
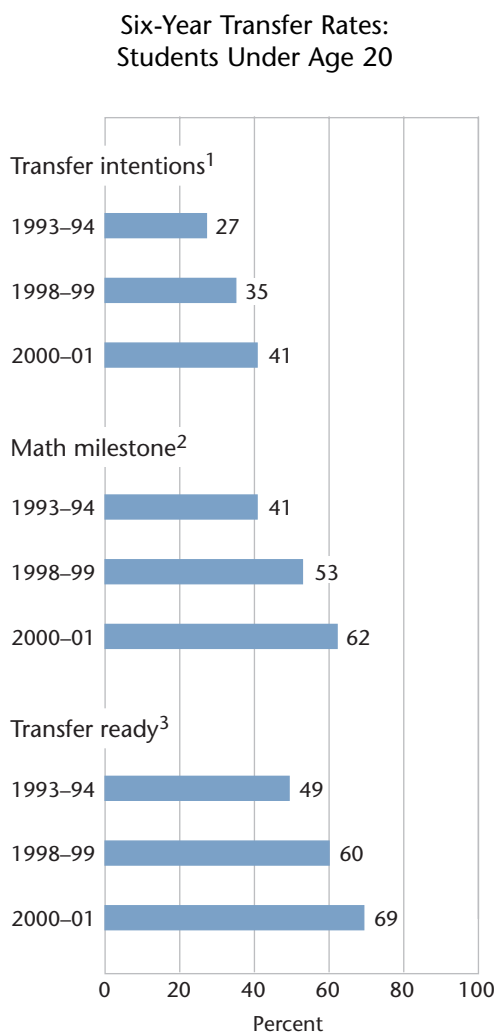


Figure D. Six-year transfer rates by transfer-oriented coursetaking for students under age 20



<sup>1</sup>Completed 12 degree or transferable units and attempted a transfer math or English course; defined by California Chancellor's Office Management Information System as students demonstrating transfer intentions.

<sup>2</sup>Completed transfer math course.

<sup>3</sup>Met minimum transfer requirements defined in the California Chancellor's Office accountability report: completed 60 units including both English and math requirements, with at least a 2.0 GPA.

SOURCE: COMIS 1993-94, 1998-99, and 2000-01 first-time student cohorts.

presumably removes students who intend to take only one or two courses for personal enrichment—i.e., those who are referred to as “incidental students” by Adelman (2005). However, because these students have not necessarily attempted the required math or English courses, their transfer intentions are not entirely clear. Among these students, 30 percent of the 2000-01 cohort had transferred within 6 years. Likewise, students who reach the halfway mark toward credit accumulation for transfer by completing 30 units may or may not have taken their required math or English course. It is notable that the transfer rates for these students are only slightly higher than the rates for those completing 12 units: about one-third of the 2000-01 cohort who completed 30 units transferred. Both measures are useful for tracking student progress toward completion, especially in terms of the time it takes for students to reach the benchmark and whether that time changes from year to year.

This brings us to the second set of transfer rates, which are based on transfer-oriented course-taking patterns. The first rate includes students who show clear transfer intentions by completing the equivalent of a full-time semester of coursework and attempting the required English or math courses. As shown in Figure B, among such students, 37 percent of the 2000-01 cohort had transferred within 6 years. In other words, among students whom one would expect to transfer, nearly 4 in 10 did so based on the most recent data available. Because these students demonstrate clear transfer intentions based on their course-taking behavior, one might use this rate as an accountability measure for transfer.

Looking at the remaining two transfer rates reveals just how strongly linked completing a transfer math course is to successful transfer. The transfer rate for those who complete the math class approaches the rate for those who meet all



transfer requirements (i.e., “transfer-ready” students), with 59 percent of the 2000–01 cohort transferring, and it is well above the rate for those who reach the halfway point in credit accumulation by completing at least 30 units. It is clear that completing a transfer math course is a strong predictor of transfer within 6 years.

The final transfer rate is the most exclusive and encompasses only those students who meet the minimum requirements for transfer to a UC or CSU; they have completed the equivalent of 2 full-time years of coursework with a passing grade, including the required math and English courses. Fewer than 10 percent of CCC students reach this status and one would expect most of these students to transfer. However, only about two-thirds of the latest cohort transferred within 6 years. That leaves one-third, or about 10,000 students, who should have transferred but did not do so. Why would these students not transfer after investing significant time and resources? Did they apply to a 4-year college? Are they still enrolled at a CCC and delaying transfer for personal or cost reasons? Have they entered the labor market instead? Did they earn an AA/AS degree or certificate only? Our data can only answer the question about degree status, and they show that roughly one-half of these students earned a credential. That leaves about 5,000 transfer-ready students who neither transferred nor earned a degree. Understanding why this occurred should be an important focus of future research.

### ***How Do the Transfer Rates Compare With Others?***

As noted earlier, two studies reported transfer rates of 26 percent among students enrolled in 1997–98 (Sengupta and Jepsen 2006) and 18 percent among students enrolled in 1999–2000 (Shulock and Moore 2007). These two rates are based on very different denominators. The first is based on students for whom the majority of courses taken in their

first year were transferable (called “transfer focused”). About 50 percent of CCC students who first enrolled in 1997–98 were in this category. The second rate is based on three factors related to degree completion, including age, educational goals, and coursetaking. Students were identified as “degree-seeking” if they met one or more of the following three criteria: being 17 to 19 years old, having a degree or transfer goal, or showing transfer intentions by their coursetaking (i.e., the same as denominator #4 in this report). Some 60 percent of CCC students who first enrolled in 1999–2000 were identified as meeting at least one of the criteria. The transfer rates for these two studies are closest to the rates we calculated for the most inclusive denominator—students who completed any transfer units—yet this denominator makes up at least 70 percent of all CCC students and captures nearly all the transfers. While our data did not include the years analyzed by the two previous studies, the transfer rates we calculated for the years nearest to those analyzed by the two earlier studies, are 20 percent (vs. 26 percent) and 24 percent (vs. 18 percent).<sup>10</sup> The fact that relatively similar transfer rates were obtained for such different denominators indicates the difficulty of targeting the population of students who are likely to transfer. In the case of the two earlier studies, many transfers were not captured in their target populations.<sup>11</sup>

Finally, it should be noted that the transfer rates we calculated for students showing clear intentions of transfer (denominator #4) were different

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<sup>10</sup>See Figure A; the rate for 1998–99 is closest to the year analyzed by Sengupta and Jepsen (who used 1997–98) and the rate for 2000–01 is closest to the year analyzed by Shulock and Moore (who used data from 1999–2000).

<sup>11</sup>For example, Shulock and Moore identified 60 percent of 520,407 CCC students as “degree-seeking,” of whom 18 percent had transferred. The number of transfers identified by this method is about 56,000. Yet more than 85,000 students transfer every year from CCC (Drummond and Perry 2007, p. 5).

from the comparable rates reported in the ARCC report (Drummond and Perry 2007, table 9). This report showed transfer rates of 40.9 and 40.7 percent for the 1998–99 and 2000–01 cohorts, respectively, whereas our rates for these years are 32 and 37 percent. The differences are due in large part to the inclusion of “special admit” students (those concurrently enrolled in grades K–12) in the ARCC report calculations, whereas these students were not included in our data files.<sup>12</sup>

Taken together, these studies demonstrate how transfer rates can vary dramatically depending on the target population—the denominator. Moreover, just which rate should be used depends on what is being measured and from what perspective.

## Next Steps

In our next research brief, we will investigate further why so many transfer-ready students do not transfer and examine the characteristics and coursetaking of all transfer students, regardless of their transfer-ready status. Preliminary analyses indicate that a majority of transfer students do not follow the traditional transfer track of completing 2 years of coursework and transferring as upper-division students to UC and CSU. Instead they are students who are taking only a few courses and presumably transferring as first-year or lower-division students. Who are these students and what other courses are they taking? Do they differ by low-income status or by race/ethnicity? What institutions are they transferring to? We will address these questions and others in our next MPR Research Brief.

<sup>12</sup>Personal communication with COMIS staff.

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