

Transfer Rate Study of California Community Colleges (2005-06 Report)

Transfers from the community colleges to four-year institutions remain an important measure of performance for the California Community Colleges. This report uses the same transfer methodology used by the Chancellor's Office in the Persistently Low Transfer College (PLTC) studies. Description of the methodology for the original PLTC analysis is available in Bahr, Hom & Perry (2005). In brief, the method involves tracking several cohorts of students for six years who showed initial behavioral intent to transfer. The differences reflected in the transfer rates among the colleges are accounted for by adjusting the actual rates for uncontrollable variables (or "exogenous variables") affecting transfer. This report differs from previous reports in that it does not identify "persistently low transfer colleges," is not mandated by legislation, and uses a different set of uncontrollable variables for the adjustment modeling. This report captures the three most recent cohorts with adjusted or "expected" transfer rates calculated for each college. For each of the three cohorts, the expected transfer rates are compared with the actual transfer rates of the colleges.

The transfer rates use an official methodology developed in 2001 by the Chancellor's Office in consultation with constituent groups and adopted by the Transfer Data Technical Workgroup (TDTW). The cohorts are first-time college freshmen with a minimum of 12 units earned who attempted a transfer level Math or English course during enrollment. The three cohorts consist of first-time students in 1998-1999, 1999-2000, and 2000-2001. The outcome is transfer to a four-year institution within six years of initial enrollment. A data match with the National Student Clearinghouse (NSC), University of California (UC) and California State University (CSU) identified the public and private four-year transfer institutions, as well as other institutions located outside California. Table 1 provides information on the cohorts and presents the statewide transfer rate.

Table 1: Cohort Summary

	1998-99 to 2003-04	1999-00 to 2004-05	2000-01 to 2005-06
First-time freshman (FTF) with intent to transfer	151,280	148,848	152,245
FTF with intent to transfer that transferred	61,187	60,946	61,901
Statewide actual transfer rates	40.9%	40.9%	40.7%
Number of colleges	107	108	108

The uncontrollable variables used for the adjustment modeling attempt to account for the environmental differences among the colleges. These variables or factors are outside the control of the colleges. The Accountability Reporting for the Community Colleges (ARCC) (2007) allowed the Chancellor's Office to expand the set of potential predictor variables, including the development of several indices based on college service areas. Staff identified a large set of potential adjustment variables and selected the most parsimonious set of factors based on their relationship with the actual transfer rate.

Statistical models derived from hierarchical regression identified a final set of variables that predicted transfer performance. The full model with the most current transfer rate has an adjusted $R^2 = .68$, $(F2, 105) = 108.17$, $p < .0001$. The final two variables used to adjust the transfer rate are (a) percentage of students 25 years or older at a community college (CCCCO

MIS) and (b) the Bachelor of Arts/Sciences Plus Index. The index represents the bachelor degree attainment of the population, 25 years or older, in a college’s service area. This index combines the enrollment patterns (Fall 2000) of students by ZIP code of residence with educational data for ZCTA (ZIP Census Tabulation Area) codes that Chancellor’s Office staff obtained from Census 2000. Table 2 summarizes the regression statistics.

Table 2: Hierarchical Regression Analysis Summary for the Transfer Rate (2000-01 to 2005-06)

Step	Variables	B	Std. Error	Standardized Coefficients	Correlation
1	(Constant)	54.78	7.54		
	Pct Age25+ (Fall 2003)	-22.28	10.75	-.20	-.20
2	(Constant)	24.20	4.91		
	Pct Age25+ (Fall 2003)	-25.76	6.30	-.23	-.20
	Bachelor Plus Index	68.51	4.80	.80	.79

The accompanying Excel tables (Table 3, 4 and 5) reflect transfer rates for the three most recent cohorts of first-time students. The first two columns of each of the tables represent the “Actual Transfer Rate” and the “Expected Transfer Rate.” The subsequent column is the “Residual”, or the difference between the expected transfer rate and the actual transfer rate. The residual value provides a sense of how much a college has exceeded or fallen short of their expected transfer performance. The last two columns reflect the factors or variables outside the control of the college that we used to adjust the transfer rates. The “Uncontrollable Variables” are the percent of students over the age of 25 at a college, each captured at the calendar midpoint of the six-year cohort. The Bachelor of Arts/Sciences Plus Index in the last column represents the percent of the population in the community college service area that attained at least a bachelor degree.

The results of this report will help community college transfer center directors, institutional researchers and college administrators evaluate transfer performance at specific institutions by allowing them to compare their transfer rates after an adjustment for the environmental differences between colleges. As in previous reports of adjusted transfer rates, we caution users about the interpretation of these adjusted rates and the residuals. Our analysis does not attempt to estimate a “causal” model of transfer so users of these rates must consider this limitation. That is, the adjusted rates and the residuals provide users a **starting point** for further in-depth analysis that could identify explicit factors (unique exogenous factors or systematic controllable factors) that could improve transfer performance.

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Bahr, P. R., Hom, W., & Perry, P. (2005). College transfer performance: A methodology for equitable measurement. *Journal of Applied Research in the Community College*, 13 (1), 73-87.

California Community Colleges Chancellor's Office (CCCCO) (2007). *Focus on Results: Accountability Reporting for California Community Colleges (ARCC)*.
http://www.cccco.edu/divisions/tris/rp/ab_1417/ARCC_Report_2007.pdf

Van Ommeren, A., Liddicoat, C. & Hom, W. (in press). Developing Service Area Indices for Your Community College: California's Method and Experience. *Community College Journal of Research and Practice*.