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Retention and Graduation of Full-time Undergraduates

This publication is a summary of information presented in the Institutional Planning and Analysis (IP&A) **“Retention and Graduation of Full-time Undergraduates Report,”** most recently updated in May 2001. The analysis is derived from a comprehensive cohort study developed by IP&A and includes Summer/Fall first-time freshmen and upper division transfer student cohorts from 1990 to 2000.

As part of Cal Poly's re-accreditation review by the Western Association of Schools and Colleges (WASC), the accreditation team noted in their March 2000 report that "Cal Poly has good graduation rates, if examined in a cohort of CSU campuses. It is another matter if Cal Poly is examined in a cohort of institutions with entering class bearing the same qualifications. Compared with these latter institutions, Cal Poly does not produce as much success among its students, as measured by baccalaureate degrees earned within six years."

Some points of interest regarding the retention and graduation of Cal Poly students:

■ **Cal Poly has a high first to second year retention rate for both first-time freshmen and upper division transfer students with the rate for the past two years at 89 to 90 percent for both groups.** Cal Poly has a higher retention rate than other CSU institutions, with Chico, Humboldt, and Sonoma achieving a range of 74 to 83 percent for first to second year retention rates. Comparable UC institutions (Berkeley, UCLA, and San Diego) are higher with approximately 96 percent of their first-time freshmen returning in the second year. Cal Poly is very close to UC Davis and UC Santa Barbara rates of about 90 percent. While first to second year retention at Cal Poly is high, it should be noted that at the end of six years, over 30 percent of the students in each of the past five first-time freshmen cohorts were not enrolled and had not earned a Cal Poly degree.

■ **Cal Poly's six-year graduation rates are consistently the highest in the CSU system at over 64 percent.** Six-year graduation rates at other CSU institutions vary greatly, ranging from under 30 to 50 percent. Selective California public institutions with whom Cal Poly competes for new students tend to have higher rates,

ranging from just under 70 percent to over 80 percent.

■ **Cal Poly students must declare a major when they apply.** This, coupled with the fact that all of Cal Poly's programs are impacted (i.e., programs have more applicants than spaces available), might lead to the conclusion that Cal Poly students do not (or cannot) often change their major. In reality, **approximately 26 to 27 percent of first-time freshmen and 11 to 12 percent of upper division transfer students change their major at least once by the end of the sixth year** (or before graduation if the elapsed time to degree is less than six years).

■ **Consistent with national patterns, Cal Poly women graduate at a higher rate than men.** For the almost 300 institutions included in the Consortium for

Student Retention Data Exchange (CSRDE), the six-year graduation rate for women was 58 percent compared to 52 percent for men. At Cal Poly those rates were 69 and 58 percent respectively when looking at an average of the 1992-94 cohorts.

■ **Retention and graduation rates for underrepresented minority students at Cal Poly are consistently lower than Cal Poly's overall rates, but improving.** After the first year, retention rates were 76 percent for African Americans, 79 percent for Hispanics, and 80 percent for Native Americans compared to 88 percent for Asians and 89 percent for whites (using a 1997-99 average). Six-year graduation rates were 41 percent for African Americans, 46 percent for Hispanics, and 39 percent for Native Americans compared to 70 percent for Asians and 68 percent for whites (1992-94 average).

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University-wide Retention and Graduation Rates

This section provides an overview of the status of first-time freshmen and upper division transfer cohorts at the six and four year mark, respectively.

Freshmen Cohort after Sixth Year: The freshmen cohort graduation rates displayed in this table are for six years, cumulative. The six-year observation interval is the rate most often used by federal and other reporting bodies (e.g., the National Center for Educational Statistics).

This six-year observation interval represents 150% of "assumed normal time" to completion for incoming freshmen in a four-year or five-year baccalaureate program.

Upper division transfer cohort graduation rates displayed in this table are for four years, cumulative. It is typically four years before transfer students achieve a graduation rate comparable to six-year rates for first-time freshmen at Cal Poly.

Upper Division Transfer Cohort after Fourth Year: The upper

Of those who entered Cal Poly as:

Summer/Fall Cohort	First-time Freshmen			Upper Division Transfers		
	1992	1993	1994	1994	1995	1996
<i>Cohort Headcount</i>	1,394	1,676	2,098	1,336	1,367	1,316
	At Sixth Fall Census			At Fourth Fall Census		
Still Enrolled	7.1%	4.0%	3.3%	8.2%	9.5%	6.6%
Graduated 4 Year Program	58.1%	63.0%	63.3%	63.0%	60.5%	64.0%
Graduated 5 Year Program	1.7%	1.5%	1.3%	1.6%	2.6%	2.4%
Not Currently Retained	33.2%	31.5%	32.1%	27.2%	27.4%	26.9%
Total Six Year Grad Rate	59.8%	64.5%	64.6%	64.6%	63.1%	66.4%

Notes: Totals may not equal 100% due to rounding. "Not currently retained" reflects status at seventh Fall census (FTF) or fifth Fall census (UDT). Six-year graduation rate (FTF) reflects graduation through sixth year including Summer. Four-year graduation rate (UDT) reflects graduation through fourth year including Summer.

Retention and Attrition Rates by College

The table that follows displays the percentage of students retained from the first to second fall for first time freshmen and upper division transfer cohorts by college.

Of the students who leave Cal Poly, the departure typically takes place between the first and second Falls for both first-time freshmen and transfer students. The next highest attrition rate

for first-time freshmen is between years two and three with about 9 to 11 percent additional first-time freshmen leaving the University.

For upper division transfer students, the second highest university-wide attrition rate occurs between years three and four (5 to 9 percent).

Summer/Fall Cohort	First-time Freshmen			Upper Division Transfers		
	1997	1998	1999	1997	1998	1999
<i>Retained from first to second Fall</i>	<i>97 to 98</i>	<i>98 to 99</i>	<i>99 to 00</i>	<i>97 to 98</i>	<i>98 to 99</i>	<i>99 to 00</i>
College of Agriculture Cohort	86.2%	88.9%	90.3%	86.3%	89.4%	88.7%
College of Arch. & Environmental Design Cohort	87.4%	88.7%	85.9%	85.2%	91.9%	97.5%
College of Business Cohort	90.9%	91.9%	91.8%	92.4%	91.3%	92.8%
College of Engineering Cohort	83.6%	89.0%	87.1%	93.5%	92.5%	92.3%
College of Liberal Arts Cohort	93.9%	87.6%	89.3%	87.8%	91.0%	89.7%
College of Science & Math Cohort	87.5%	87.7%	86.5%	83.7%	85.7%	82.4%
University Total	87.1%	89.0%	88.6%	88.1%	90.5%	90.4%
Percent Graduated by Second Fall (Transfers)				0.2%	0.3%	0.1%

Graduation Rates by College

The following table displays graduation rate data by college for students who entered and graduated from the same college.

The first-time freshmen data shows the percentage of students in each entering cohort that have graduated after the sixth year. The upper division transfer data displays graduation after four years. These tables reflect the total percent of students in each cohort who started in a college and subsequently graduated from that same college (*note*: students may have changed major within their original college). Comparing this data

with the University Total rate shows that there can be a considerable difference between the overall graduation rates for students and the rates at which students complete in the college where they matriculated. For example, for first-time freshmen, the overall rate for the 1993 cohort was 64.5 percent, but the rate for FTF within their original college was

51.3 percent (a 13.2% difference). For the 1994 FTF cohort there was a 14.2 percent difference between the rates. Upper division transfer student cohorts show a less dramatic difference, with the 1995 cohort displaying a 3.5 percent difference between UDT students' overall graduation rate and within college rate, and a 4.1 percent difference for the 1996 cohort.

Summer/Fall Cohort Graduation Rate (Same College)	First-time Freshmen			Upper Division Transfer		
	1992	1993	1994	1994	1995	1996
	Six Year			Four Year		
College of Agriculture Cohort	48.1	48.1	44.6	50.1	53.3	53.9
College of Arch. & Environmental Design Cohort	42.2	40.3	42.3	45.9	40.3	38.8
College of Business Cohort	64.5	62.8	70.1	77.1	75.6	80.5
College of Engineering Cohort	41.6	48.2	44.0	57.2	63.8	63.1
College of Liberal Arts Cohort	54.2	60.9	64.1	69.6	64.1	72.1
College of Science & Math Cohort	56.8	50.4	39.8	57.0	57.5	57.1
University Total (Same College)	47.3	51.3	50.4	60.1	59.6	62.3

Change of Major

Analysis of the university-wide cohort data indicates that a significant proportion of Cal Poly's undergraduates change major.

By the Fall of 2000, 27 percent of the students in the 1994 first-time freshmen cohort had changed major and/or college at least once. This was slightly higher than the percentage changing major in the 1991, 1992, and 1993 cohorts, but similar to the 1990 cohort.

Analysis of the data available on upper division transfer student cohorts, shows that upper division transfer students

change major and/or college at a much lower rate than do the students in the first-time freshmen cohorts. Approximately 11 to 14 percent of upper division transfer students included in the 1990 to 1996 cohorts changed major and/or college at least once.

Data in the table below reflects cohort status for first-time freshmen after

the sixth year and for upper division transfer students after the fourth year. Students may have changed major one or more times (or changed to another then changed back to their original major) during their tenure at Cal Poly. Only their status after the sixth or fourth year is shown as a "change of major" in the table.

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Of those who entered Cal Poly as: Change of Major Summer/Fall Cohort	First-time Freshmen			Upper Division Transfers		
	1992	1993	1994	1994	1995	1996
<i>Cohort Headcount</i>	1,394	1,676	2,098	1,336	1,367	1,316
	At Sixth Fall Census			At Fourth Fall Census		
% Enrolled/Graduated Same Degree Program	40.6	42.4	40.7	58.3	61.3	61.3
% Enrolled/Graduated Different Degree Program	26.3	26.1	27.2	14.5	11.3	11.5
% Not Currently Retained	33.2	31.5	32.1	27.2	27.4	27.3

Note: Totals may not equal 100% due to rounding.

Change of Major *(continued from page 3)*

The main destination colleges for students in the 1994 first-time freshmen cohort who changed their major were:

■ **College of Agriculture** students' main destination college was the College of Liberal Arts or the College of Science and Mathematics.

■ **College of Architecture and Environmental Design** students most often moved to the College of Liberal Arts or the College of Business.

■ **College of Business** students' main destination college was the College of Liberal Arts.

■ **College of Liberal Arts** students changed in an even distribution to the College of Agriculture, the College of Business or the College of Science and Mathematics.

■ **College of Engineering** students most often moved to the College of Business or the College of Liberal Arts.

■ **College of Science and Mathematics** student's main destination was the College of Liberal Arts.

Retention and Graduation by Ethnic Origin and Gender

Using the established First-time Freshmen (FTF) and Upper Division Transfer (UDT) cohorts, this section focuses on retention and graduation rates at the University and college level by ethnic origin and gender.

The data presented in this section compares specific groups using three year averages. The small number of students in some groups may make it difficult to compare year-to-year data as the percentages can be dramatically affected by small changes in the number retained or graduated.

First-time Freshmen First-to-Second Year Retention Rates by Ethnic Origin and Gender: Cal Poly's first-to second- year retention rate for females was 90 percent compared with 87 percent for males (1997-99 three-year average). Three-year average retention rates for specific ethnic groups range from 76 percent to 89 percent. This is an increase for most groups over the 1996-98 three-year average rates.

First-time Freshmen Six Year Graduation Rates by Ethnic Origin and Gender: The average six-year graduation rate for the 1992-94 first-time freshmen cohorts by gender and ethnic origin shows a 1992-94 average graduation rate of 69 percent for women and 58 percent for men. This was slightly higher than the 1991-93 average of 65 percent for women and 57 percent for men. Graduation rates by ethnic origin show considerable variation among groups, ranging from 39 to 70 percent of students graduating before their seventh Fall at Cal Poly. These rates represent an improvement over the 1991-93 average rates in most ethnic groups.

Upper Division Transfer Four Year Graduation Rates by Ethnic Origin and Gender: The four-year average upper division transfer student graduation rate from the 1994-96 cohorts shows a 68 percent graduation rate for women and a 62 percent graduation rate for men. These percentages are both higher than the 1991-93 three-year average for females and males, 66 and 58 percent respectively. As with first-time freshmen, the average graduation rate for most ethnic groups improved for the 1994-96 cohorts when compared to the average for the 1991-93 cohorts.

	African American	Asian	Hispanic	Native American	White	Female	Male
First-time Freshmen First-to-Second Year Retention Rates							
University Total % Retained (1997-99 Average)	76%	88%	79%	80%	89%	90%	87%
First-time Freshmen Six Year Graduation Rates							
University Total % Graduated (1992-94 Average)	41%	70%	46%	39%	68%	69%	58%
Upper Division Transfers Four Year Graduation Rates							
University Total % Graduated (1994-96 Average)	52%	62%	53%	56%	69%	68%	62%

Source: IP&A Retention and Graduation data, 1/16/01.

Definitions: A cohort is selected based on a student's entering class level and enrollment status. Cohorts include students entering in Summer or Fall quarters of each cohort year, and enrolled in 12 or more units during their first Fall quarter. Retention rate is calculated for each subsequent Fall quarter. Graduation rate is calculated on degrees awarded through each Summer quarter.

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