

## Transfer Students

### *An Analysis of Performance, Preparation, and Variations Among Colleges and Divisions*

#### **BACKGROUND**

The performance and academic quality of transfer students are often discussed as part of the annual enrollment planning process for both the campus and general campus academic units. The similarities and differences between students who enter UC Davis directly from high school and those who transfer to UC Davis from other institutions are discussed and sometimes debated as the campus attempts to balance various factors concerning access, student quality and overall enrollment capacity. While the campus and the system regularly monitor certain measures of transfer student performance (e.g., persistence, graduation) and have info available about common misconceptions about transfer students, there are still several outstanding questions. This brief study attempts to develop a clearer picture of the campus' experience over the last several years with transfer students at the college and division level. Together with the existing research in this area, this study should enable campus policymakers to see more clearly the similarities and differences between various groups of transfer students as well as between transfer students and those students who come to the campus direct from high school.

Specifically, this paper explores the following questions:

- How do the academic performance and preparation of transfer students compare with those of students admitted from high school?
- How do different groups of transfer students compare?
- Do transfers in certain majors succeed at a higher rate than others?
- Do source schools have any relationship to their academic performance?
- Do transfer students who have completed a Transfer Admission Agreement (TAA) perform differently from those who have not?

Note: In this paper the term “freshman direct from high school” is synonymous with “native student” and “direct from high school admit.”

#### **METHODOLOGY**

The findings in this report are based on student records for cohorts entering between fall 1993 and fall 2003, inclusive. Most of this paper focuses on comparisons of transfer students (i.e., those enrolled students who were admitted at advanced standing) with those admitted directly from high school and have reached junior standing. Within this context, differences among students in each of the six Colleges/Divisions are also examined.

Degree information was derived from a combination of UCOP degree files and Banner and it includes all undergraduate degrees awarded between summer 1993 and spring 2003. Findings about graduation rates, time to degree, course taking of degree recipients apply to students entering fall 1999 and before. Analyses of time-to-degree for degree recipients are expressed as terms (i.e., quarters and summer sessions) registered rather than elapsed time.

When the findings are about entering students, transfer students are counted in their initial major and students admitted directly from high school are counted in their major of the term in which they transitioned to junior standing. When the findings concern degree recipients, students are counted in their graduating major. One effect of this methodology of counting majors is that most students who were undeclared at entrance have declared their majors.

Students with double and triple majors are counted in their first major only. Because the number of students in Letters and Science Collegewide programs is so small, it is generally not discussed in the college/divisional breakouts. Letters and Science Computer Science majors are counted in the Division of Mathematics and Physical Science.

**GENERAL CHARACTERISTICS OF TRANSFER STUDENTS AND NEW FRESHMEN**

Over the last ten years, the number of new transfer students admitted each year has grown somewhat erratically. Overall, this group has grown by 17% during this period; however in four of the last ten years, the number of new transfers enrolled decreased from the previous year. In addition, for 2003-04 transfer students comprise a much smaller proportion of total admits than it did in 1993-94. Exhibit 1 compares enrolled new students by type for these two years.

**Exhibit 1**  
**Changes in New Students – Freshmen and Transfer Students**

	1993-94	Percent of New Students	2003-04	Percent of New Students	Percent Increase - 10 Years Ending 2003-04
<b>Freshmen (direct from high school)</b>	3,124	66%	4,789	72%	53%
<b>Transfer Students</b>	1,624	34%	1,901	28%	17%
<b>Total New Students</b>	4,748	100%	6,690	100%	41%

From a systemwide perspective, the composition of UC Davis annual new enrollees appears to track closely with the system-wide experience. Attachment 1 displays these campus and system trends for the eight year period ending in 2003-04.

Exhibit 2 displays additional comparative data for Transfer and Freshmen students in 2003-04.

**Exhibit 2**

**A Comparison of Selected 2003-04 Background Characteristics – Transfer Students, Freshmen, and Undergraduates**

	New Transfers	New Freshmen	All Undergraduates
<b>Total Enrollment</b>	1,901 (8%)	4,789 (21%)	22,432 (100%)
<b>Racial Ethnic Composition</b>			
White	44%	38%	41%
Underrepresented Minority	16%	15%	14%
Asian/Asian-American	31%	42%	39%
Unknown/Other	9%	5%	6%
<b>Gender</b>			
Female	59%	56%	56%
Male	41%	44%	44%

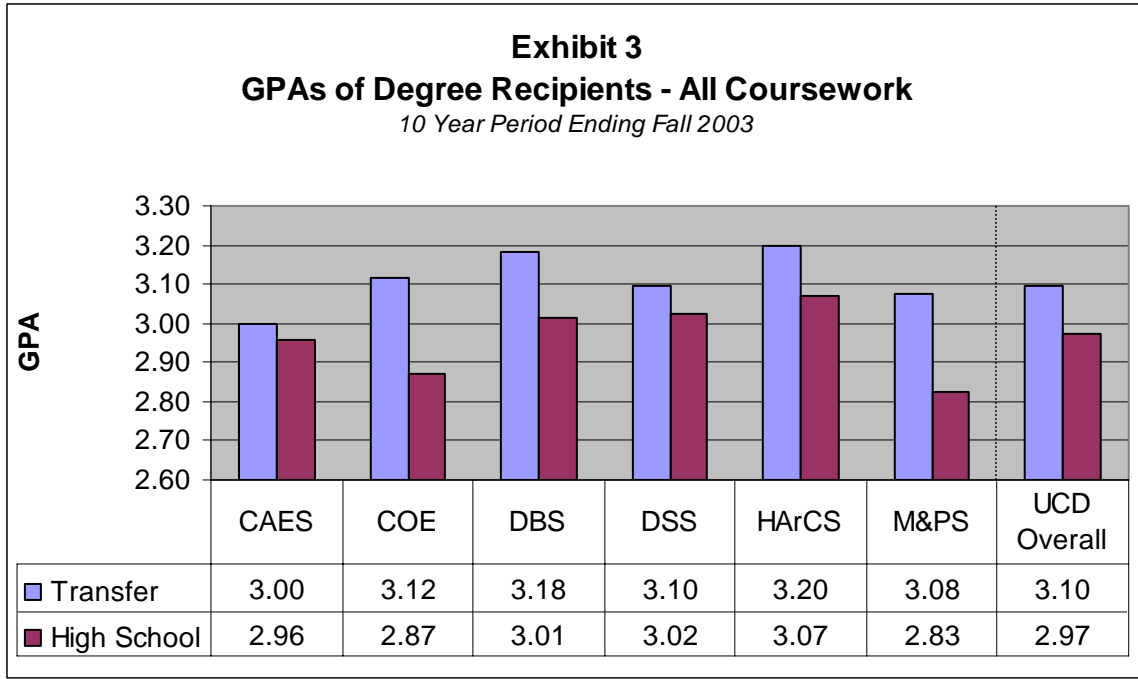
The average entering GPA for transfer students who enrolled at Davis during the ten-year span examined is 3.28. A College/Division comparison shows that transfer students entering with majors in the College of Engineering majors have the highest average GPA at 3.42 and the students entering the College of Agricultural and Environmental Sciences have the lowest at 3.22. The rest of the colleges/divisions fall in between:

- College of Engineering (COE) – 3.42
- Division of Biological Sciences (DBS) – 3.38
- Division of Math and Physical Sciences (M&PS) – 3.32
- Division of Humanities, Arts and Cultural Studies (HArCS) – 3.28
- Division of Social Sciences (DSS) – 3.24
- College of Agricultural and Environmental Science (CAES) – 3.22

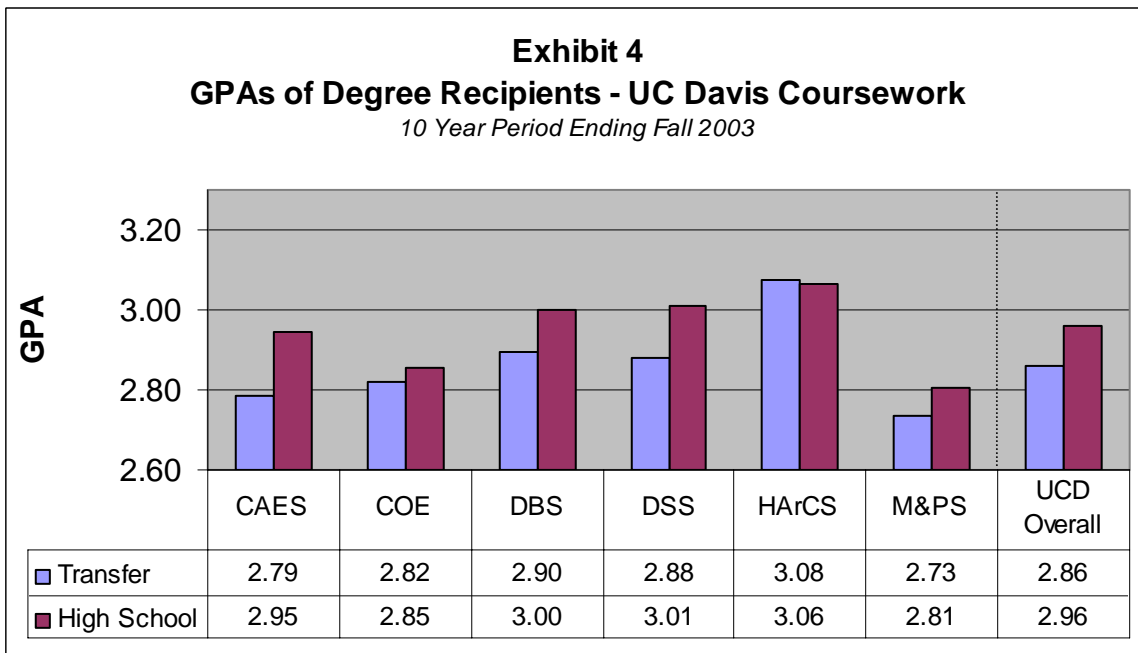
**ACADEMIC PERFORMANCE – TRANSFER V. DIRECT FROM HIGH SCHOOL COMPARISONS**

**GPA – All College Coursework.** On average, transfer students graduate with higher GPAs than native students (3.10 versus 2.97) and the advantage goes to transfer students regardless of division

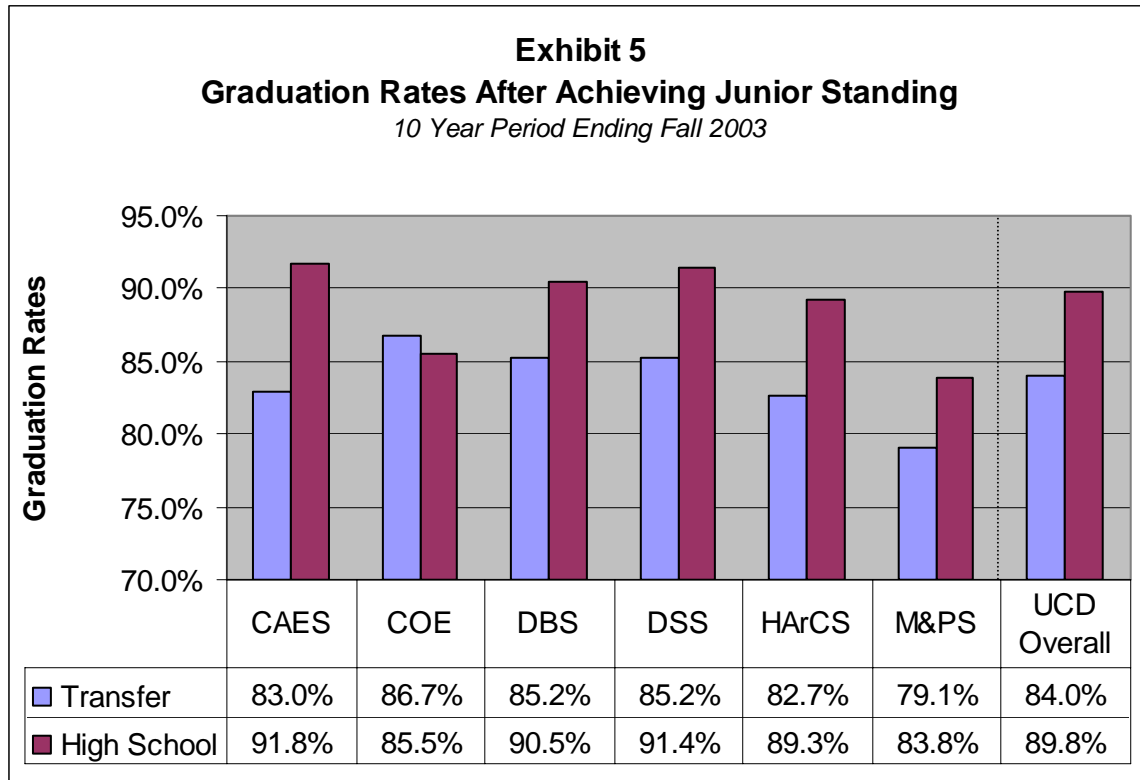
(Exhibit 3). The largest difference can be found among graduates from COE and M&PS (0.25) and the smallest in the College of Agricultural and Environmental Sciences (0.04). The cumulative GPA of graduates includes the grades transfer students earned prior to enrolling in UC Davis.



**GPA - UC Davis Courses Only.** When grades are limited to UC Davis coursework, the results are somewhat different (Exhibit 4) with the GPA of the graduates admitted from high school only slightly higher (2.96 versus 2.86) than that of the transfer students.

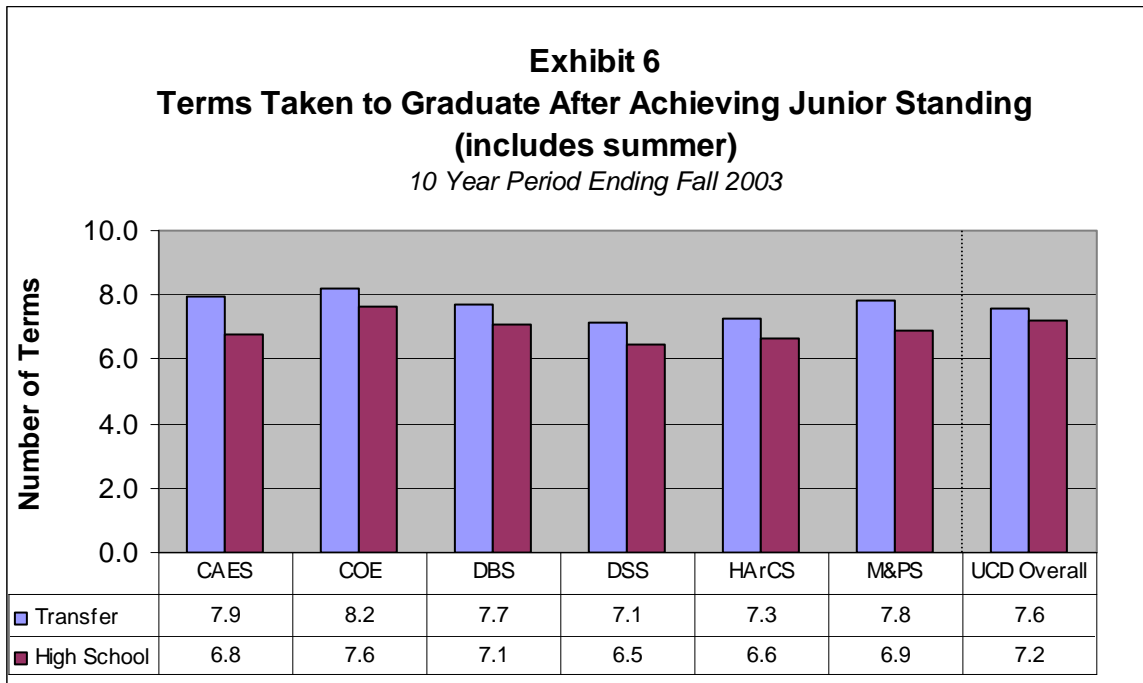


**Graduation Rates.** Generally, it has been reported that transfer students graduate at higher rates than students admitted directly from high school; but once the high school population is limited to those who achieve junior standing, high school admits graduate at a rate five and a half points higher than that of transfer students. Since most attrition for students admitted from high school occurs in the first two years, this comparison seems more meaningful. College/Division comparisons also reflect this same pattern except for COE where the transfer students have a slight edge in graduation rate over junior native students (Exhibit 5).

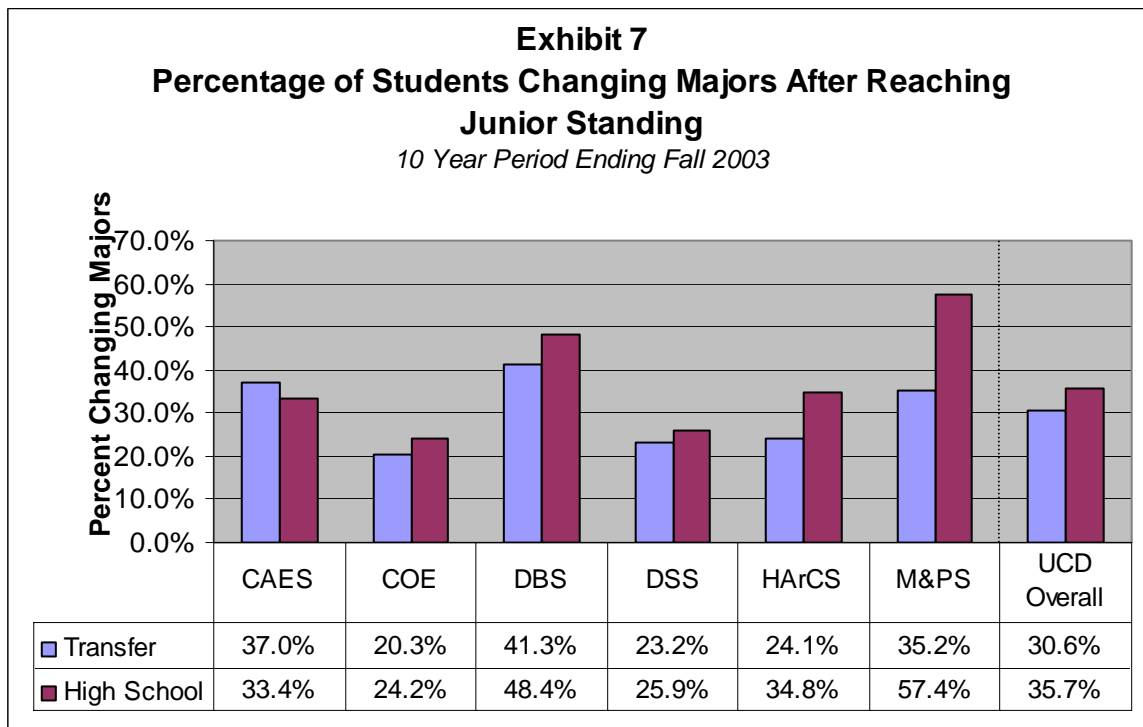


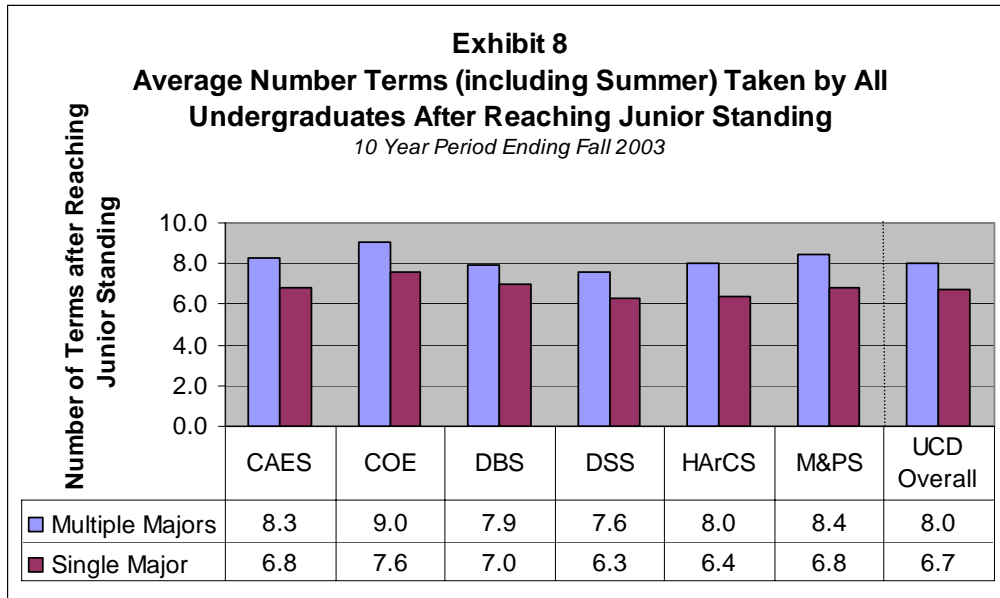
**Time to Degree.** Although the difference is not large, transfer students do take somewhat longer to graduate than native students when the count is begun at advancement to junior standing (Exhibit 6). Overall, the difference is less than a term (7.6 terms versus 7.2 terms). The spread is largest for the College of CAES (1.1 terms) and the second largest is for the MP&S (0.9 terms). The remaining college and divisions cluster about the average of 0.6 terms.

Note: As defined above, a term is defined as a quarter or summer session registered.

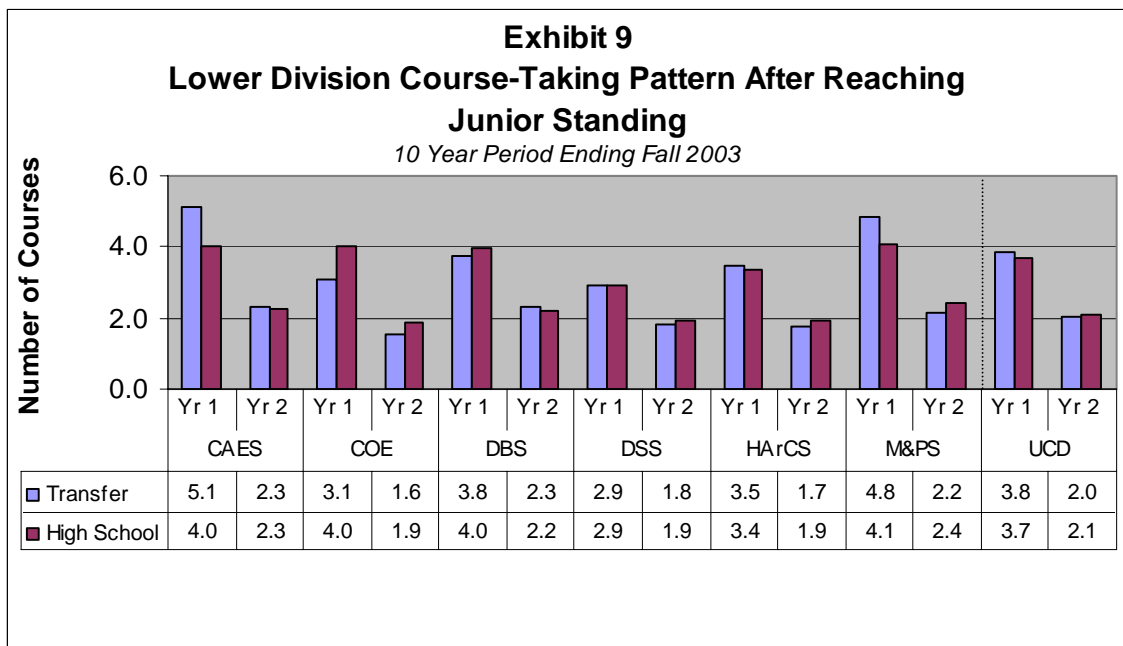


Time to degree is affected by whether a student changes their major after reaching junior status. About 31% of transfer students change majors versus 36% of native students (Exhibit 7) after reaching junior status. Generally, students who change majors take an extra term to graduate, though the difference is 1.5 more terms for students changing into CAES, HARCS and MP&S majors (Exhibit 8).





**Lower Division Courses Taken After Reaching Junior Status.** Another measure of preparedness and likelihood of graduating on time is the number of lower division courses taken after reaching junior status. Overall, admits from high school and transfer admits take about the same number of lower division courses after reaching junior standing (Exhibit 9) and take most of these courses in the first year after reaching junior standing (3.8 courses in the first year, 2.0 in the second and 0.8 in the third). This pattern holds for all divisions and for both admission types. Transfer students show no evidence of being less prepared than the students admitted from high school at this point in their careers. However, there is some variance by division. Transfer entrants in CAES and MP&S take more lower division courses after reaching junior status than do their colleagues admitted from high schools. For COE the relationship is reversed with native students taking more lower division courses after reaching junior status. In the other divisions, the differences are too small to note.



**Frequently Taken Lower Division Courses.** The most popular lower division courses taken are physical education courses for both transfer and native students. Excluding those courses, the single course most often taken is Nutrition 10— *Discoveries and Concepts*. Exhibit 10 lists the most frequently taken lower division courses by admit type. It is beyond the scope of this study to determine why these courses are so popular among students who have achieved junior standing. In general, they appear to be courses that fulfill breadth requirements rather than core requirements for particular majors. Further analysis would also be needed to determine whether limitations on access would explain why students direct from high school would be taking these courses as juniors and seniors.

**Exhibit 10**  
**Most Frequently Taken Lower Division Courses by Upper Division Degree Recipients**

Rank	Direct from High School	Transfer Students
1	Nutrition 10, Discoveries and Concepts	Nutrition 10, Discoveries and Concepts
2	Physics 7C, General Physics	Biological Sciences 1B, Introductory Biology
3	Biological Sciences 1C, Introductory Biology	Statistics 13, Elementary Statistics
4	Physics 7B, General Physics	Biological Sciences 1C, Introductory Biology
5	Agricultural Systems and Environment 21, Application of Microcomputers in Agriculture	Economics 1A, Principles of Microeconomics
6	Psychology 1, General Psychology	Physics 7A, General Physics
7	Economics 1B, Principles of Macroeconomics	Biological Sciences 1A, Introductory Biology
8	Economics 1A, Principles of Microeconomics	Agricultural Systems and Environment 21, Application of Microcomputers in Agriculture
9	Physics 7A, General Physics	Psychology 41, Research Methods in Psychology
10	Statistics 13, Elementary Statistics	Math 16B, Short Calculus

**COMPARING SOURCE SCHOOLS AND PREPARATION OF TRANSFER STUDENTS**

**Source Schools.** Ninety-nine percent of transfer admits come from California’s three public higher education segments (i.e., UC, CSU, and community colleges) and 93% of all transfers come from the California Community Colleges (CCC). UC Intercampus transfers have graduation rates slightly higher than those of native students who achieved junior standing (91% versus 89%) and significantly higher than all other populations of transfer students despite having a lower average GPA. Transfers from California community colleges graduate at a rate ten points lower than that of UC transfers (81% versus 91%) while the graduation rates of transfers from CSU and other colleges and universities fall about half way between UC and CCC transfers.

More than half of transfers from community colleges (55%) come from ten schools, and the same schools, albeit in different orders, appear in the top ten by entering GPA and the top ten by graduating rate (Exhibit 11). The top majors transferring from these community colleges are also listed. Interestingly, of the 10,197 students who transferred to UC Davis during the 10 year period examined from these schools, Psychology was the most popular entering major (7%), Biological Sciences was second (6%), and English and Biochemistry tied for third (4%).



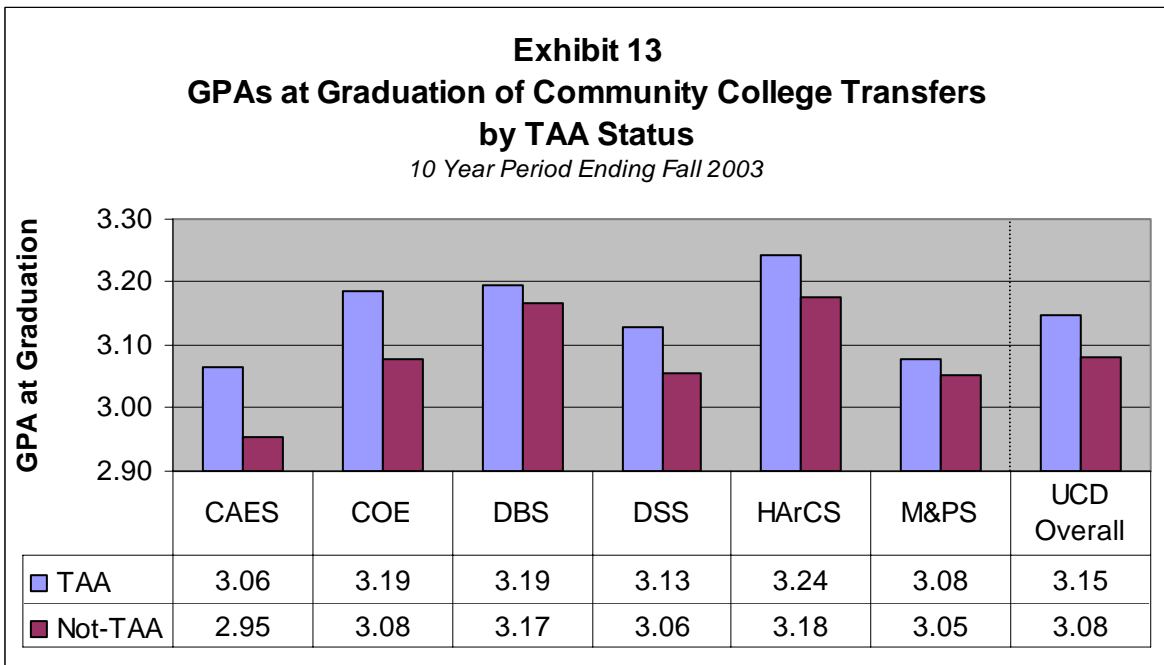
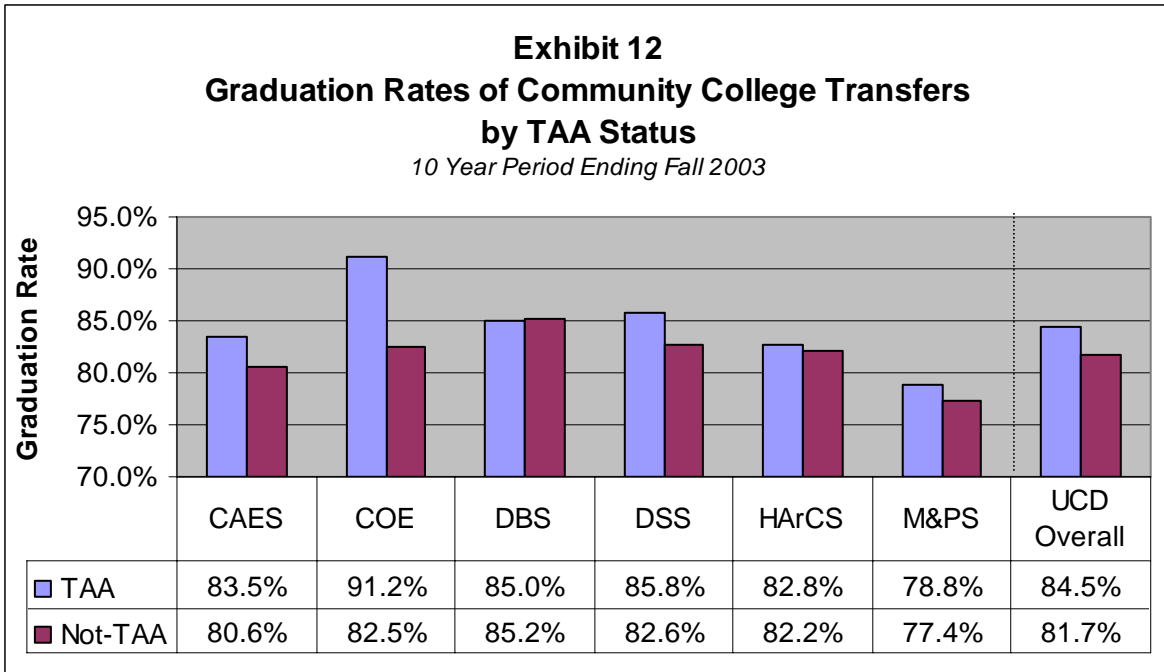
**Exhibit 11**  
**Top Ten Community College Feeder Schools**

	Number	Entering GPA	Percent Graduating	Top Majors at Entry (over 5% of all students from the college)
Sacramento City College	1632	3.26	80%	Psychology (6%), English (5%), Biochemistry (5%)
American River College	1613	3.30	84%	Psychology (8%), Biological Science (7%), English (5%)
Diablo Valley College	1607	3.30	85%	Psychology (10%), Economics (7%), Biological Science (5%)
De Anza College	1060	3.26	83%	Biochemistry (16%), Biological Science (8%), Computer Science (8%), Economics (7%)
Sierra College	924	3.33	85%	Biological Science (9%), English (8%), Psychology (7%)
Solano Community College	864	3.29	82%	Psychology (11%), Biological Science (7%), English (5%)
Santa Rosa Junior College	826	3.23	90%	Economics (8%), Psychology (8%)
City College of San Francisco	648	3.25	91%	Biochemistry (11%), Economics (9%), Computer Science (8%), Biological Science (8%), Psychology (5%)
San Joaquin Delta College	527	3.33	84%	Psychology (10%), Biochemistry (7%), Biological Science (7%), English (5%)
College Of San Mateo	496	3.18	84%	Biological Science (12%), Economics (8%), Human Development (6%)

**Transfer Opportunity Program.** The Transfer Opportunity Program (TOP) is a partnership between UC Davis and 17 Northern California community colleges whereby TOP coordinators from UCD Undergraduate Admissions regularly visit participating colleges to provide counseling to students and parents on admissions, major preparation, general education, financial aid, housing, internships, study abroad and many other important topics of interest to potential transfer students. Of the top ten source schools displayed in Exhibit 11, only Diablo Valley College and San Joaquin Delta College do not currently participate in the Transfer Opportunity Program (TOP). According to recent data developed by the Admissions Office, of the total number of transfer students admitted in Fall 2003, 18% more came from TOP schools than non-TOP schools.

**Transfer Admissions Agreements.** Approximately 40% of community college transfers have Transfer Admission Agreements (TAA). The TAA is a formal, written agreement between a community college student and UCD that guarantees transfer admission in a specified major provided that the terms of the agreement, which include GPA and specific coursework requirements, are met. TAAs are available from all participating community colleges and currently 81 out of 110 colleges are participants. All TOP programs are also in schools offering TAAs.

Students transferring with TAAs enter with slightly higher transfer GPAs (3.32 versus 3.26) and are slightly more likely to graduate than transfer students without such agreements (Exhibit 12). This is particularly true of the College of Engineering where the graduation rate of TAA admits is almost ten points higher than that of CCC transfers without such agreements. Furthermore, the UCD graduating GPAs of TAA admits are consistently higher than non-TAA CCC transfers (Exhibit 13). Because participation in the TAA program is voluntary, it is possible that their superior performance derives from the same qualities that caused them to participate in the program in the first place.



**CONCLUSIONS AND RECOMMENDATIONS**

In general, transfer student academic performance is strong and does not vary materially across colleges and divisions. While academic performance of this group tends to lag slightly that of native freshmen in terms of graduation rates and GPAs for courses taken at UC Davis, transfer students tend to be as well prepared as native students to take full upper division course loads in their junior year.

Transfer students who have participated in the TAA program performed better than those who did not; however, it is beyond the scope of this paper to make any determination about the presence of a cause and effect relationship.

In the future, it is likely that the relative size of the transfer student population will grow. Evidence of this possibility was apparent in the state budget negotiations and the budgetary limitations on overall growth of UC enrollment. In this environment, maintaining strong ties to those community colleges that historically provide the bulk of UC Davis' transfer population becomes increasingly important and may be more difficult in the future because of the financial circumstances of the community college system in general. Programs like TOP and TAA appear to play an important role in keeping the lines of communication open between the campus, its primary feeder schools, and well qualified students. The significance of this linkage should be considered as the outreach efforts of the campus and the UC system generally are prioritized in the future.

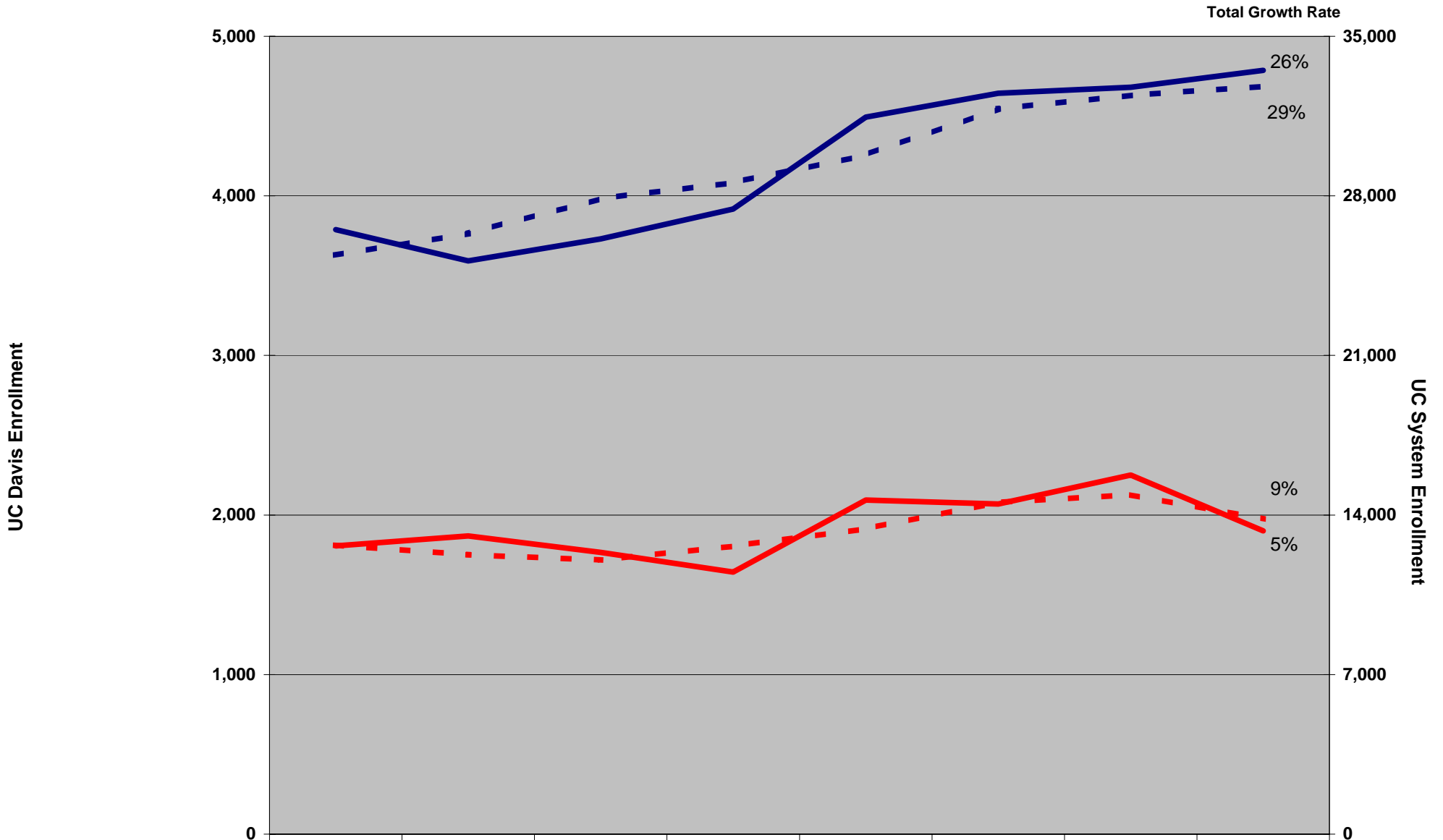
#### **OTHER REPORTS AND ANALYSES CONCERNING TRANSFER STUDENTS**

- Movement In and Out of Division/Colleges: ORMP-IPA January 2004  
[http://www.ormp.ucdavis.edu/inform/docs/specialreports/MajorInMajorOut\\_all-1.13.04Revisedformat.pdf](http://www.ormp.ucdavis.edu/inform/docs/specialreports/MajorInMajorOut_all-1.13.04Revisedformat.pdf)
- Undergraduate Time to Degree – Completion Rates by College and Division: ORMP-IPA March 2004  
<http://www.ormp.ucdavis.edu/inform/docs/specialreports/CollegeDivisionFinishRatesFinal031604.pdf>
- Academic Difficulty – A Brief Analysis of Systemwide and Campus Data Trends: ORMP-IPA June 2004  
[http://www.ormp.ucdavis.edu/inform/docs/specialreports/academic\\_difficulty.pdf](http://www.ormp.ucdavis.edu/inform/docs/specialreports/academic_difficulty.pdf)
- Postgraduate Outcomes and Undergraduate Experiences of Students who Transfer to UC Davis: SARI August 2004  
<http://www.sariweb.ucdavis.edu/downloads/330RecentGraduatesTransferStudentReport.pdf>
- Chancellors Community College Symposium: SARI April 2004  
<http://www.sariweb.ucdavis.edu/downloads/320CCCSymposium.pdf>
- Transfer Students – Myths and Reality: SARI October 2001  
<http://www.sariweb.ucdavis.edu/downloads/220TransferStudentsMythsReality.pdf>
- Characteristics of Students Transferring to UC Davis from California Community Colleges 1998-1999: SARI September 1999  
<http://www.sariweb.ucdavis.edu/downloads/218CharacteristicsOfStudentsTransferringToUCDavisFromCalifCommColl1998To1999.pdf>

File location: M:\Transfer Project\Transfer Study Analysis FINAL 092004.doc

# ANNUAL GENERAL CAMPUS NEW HEADCOUNT ENROLLMENTS

## A Comparison of Freshmen and Advance Standing Students UC Davis and UC Systemwide



	1996-97	1997-98	1998-99	1999-00	2000-01	2001-02	2002-03	2003-04
UCD Freshmen (All)	3,788	3,593	3,730	3,918	4,493	4,643	4,681	4,786
UCD Advanced Standing	1,806	1,869	1,766	1,642	2,094	2,069	2,251	1,901
System Freshmen (All)	25,401	26,343	27,880	28,579	29,785	31,816	32,414	32,802
System Advanced Standing	12,678	12,257	12,025	12,633	13,395	14,558	14,886	13,823