

**Admissions and Registrations Trends in the College of Engineering  
2005 to 2009 – Women and Underrepresented Minorities  
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**Introduction**

Under state law, the University of California is prohibited from considering race or gender when admitting students. In order to increase the diversity of the engineering undergraduate body, it will be necessary to increase the number of highly qualified women and underrepresented minorities who apply for admission to the College of Engineering, either as freshmen or junior transfer students, and to increase the number of admitted students who choose to attend Berkeley once admitted (yield-based activities).

Both steps are needed, but recruiting admitted students is an easier task to undertake with our existing resources and infrastructure. To gain an understanding of the efficacy of our existing recruiting processes, it is instructive to examine trends in the numbers and percentages of women and underrepresented minorities choosing to study engineering at Berkeley, along with yield data. These make it apparent that the College of Engineering is not making any demonstrable progress in increasing its gender diversity, and is losing ground dramatically with its underrepresented minorities. There is clearly an urgent need to rethink our recruiting strategies for both women and underrepresented minorities, particularly with the latter group, and act aggressively over the next few years to reverse recent declines.

**Women**

**Freshmen:** Figure 1 shows the numbers of women and men who submitted a statement of intent to register (SIR) as freshmen in the Fall semester for the last five years, and the percentage of women (multiplied by 10 for scaling purposes). It is difficult to make the case that any progress has been made in increasing the gender diversity of the freshman class during this time; increases in both numbers and percentages of women one year have been followed by disappointing drops. One cannot dismiss this as being due to changes in the numbers of women admitted to engineering; Figure 2 shows the yield data (defined as the ratio of SIRs to admits); these clearly follow the same pattern. Although campus-wide data show the yield of women lagging that of men slightly, it is clear that there is a much more dramatic gap in engineering.

In Spring 2006, Spring 2008 and Spring 2009, a “Celebrating Women in Engineering” recruiting event was held. The increases in the percentage of freshman women in 2006 and 2008 were attributed to this effort, but the 2009 results are disappointing. There is clearly a need for a detailed analysis of the performance of these recruiting events, to compare the yield for attendees with that for non-attendees. I believe that we should review the timing and form of recruiting events. On the basis of feedback this Spring, I think that “Celebrating Women” should not be run again. Many attendees were angry when they were not admitted to Berkeley. My own recommendation is for the College AND DEPARTMENTS to showcase the activities of women students on Cal Day, addressing both admitted women and prospective women who are juniors or sophomores in high school. We should also take contact information for all young women who attend Cal Day events, and follow up with them.

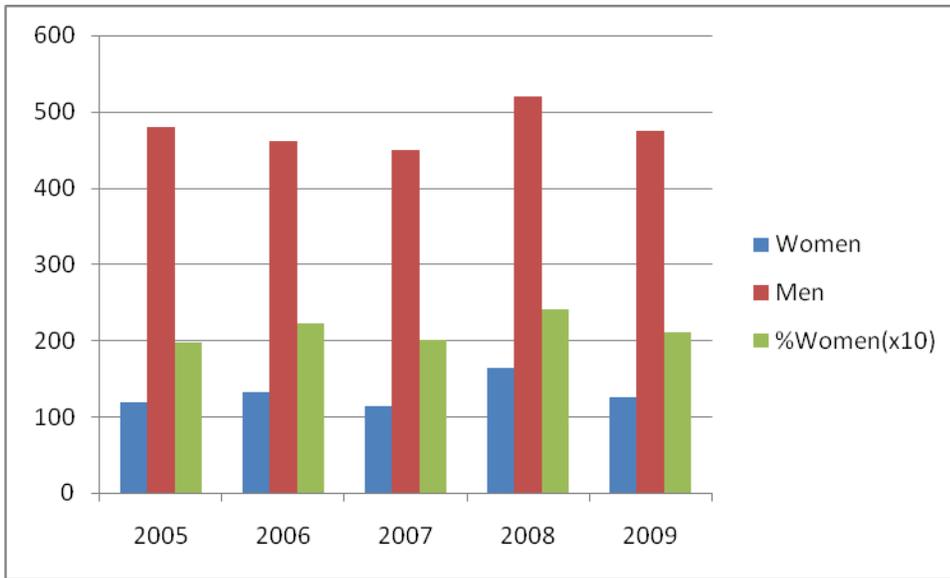


Figure 1: Freshman Fall SIR Numbers – Gender\*

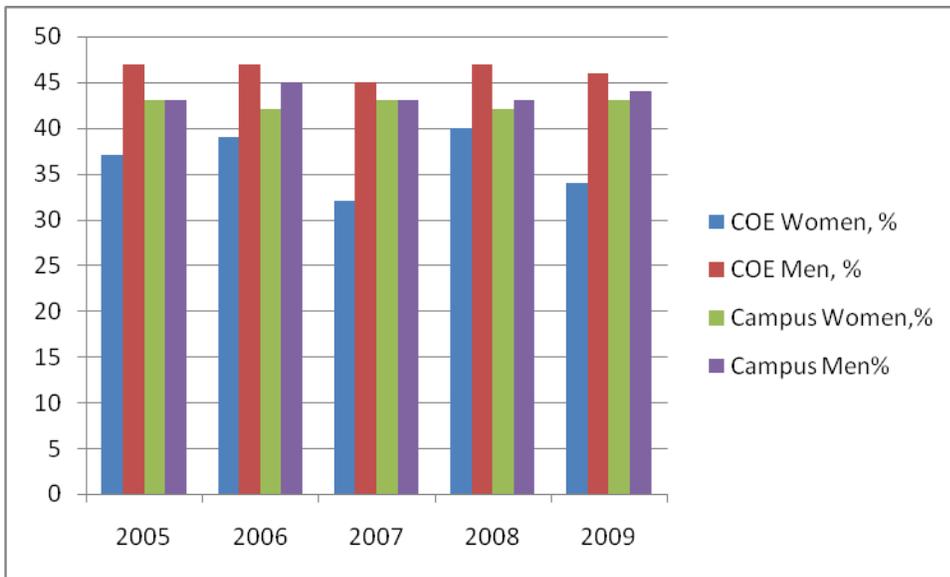


Figure 2: Freshman Fall Yield – Gender\*

\* All data taken from campus early June reports, either accessed by R. Giomi or distributed at Co-ordination Board Meetings

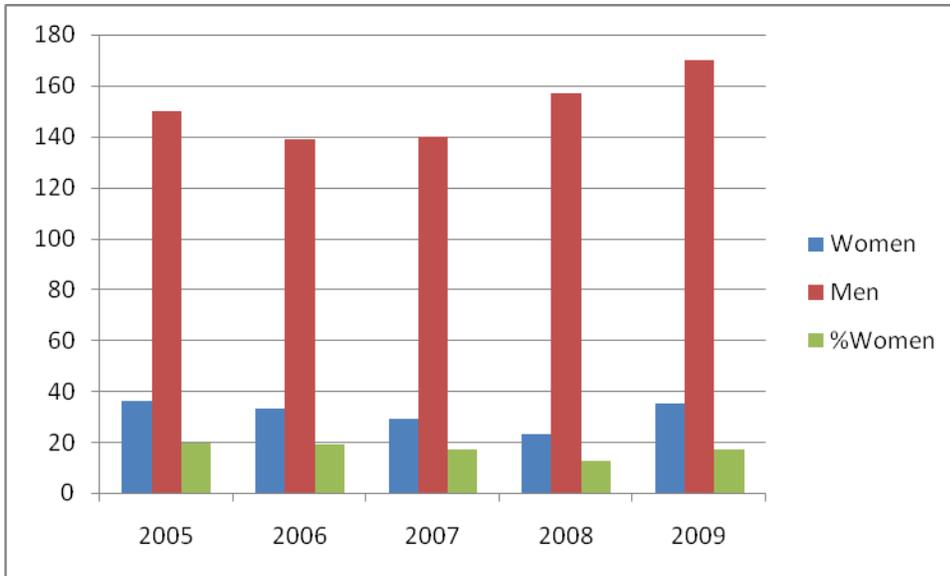


Figure 3: Junior Transfer Fall SIR Numbers – Gender

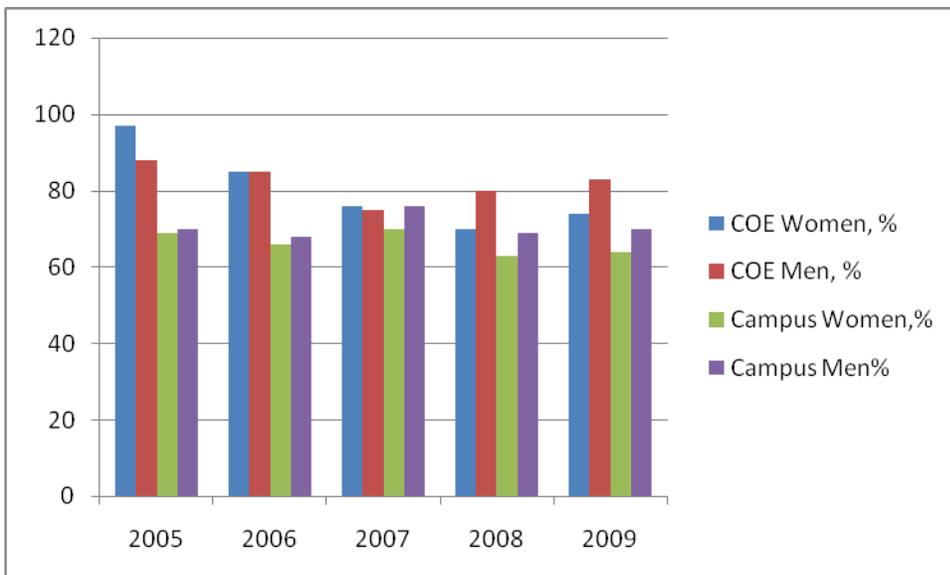


Figure 4: Junior Transfer Fall Yield – Gender

**Transfer students:** Figure 3 shows a steady decline in both the number of transfer women entering engineering, and their percentage of the overall transfer entrants, from 2005 to 2008. There was a welcome increase in both the number and percentage of women in 2009, but the percentage remains well below 20%. During this time period the yield (Figure 4) of women decreased from 97% to 70% (in 2008), and increased to 74% in 2009. This yield is higher than the campus-wide yield for women, but went from being higher than the yield for men to being considerably lower than the yield for men. Yields for men have been much less volatile over the five year period. There is clearly a need to do some aggressive recruiting of women transfer admits; this should be relatively easy to accomplish, as many come from local community colleges.

### **Underrepresented Minorities (Latino, Chicano, African American and Native American)**

**Freshmen:** Figure 5 shows the number of underrepresented (Latino, Chicano, African American and Native American) freshmen who chose to join the College of Engineering in the Fall 2005 to Fall 2009 semesters, and their percentage of the entering Fall classes. There has been a steady and dramatic decrease in number, from 62 to 37; more than a 40% decrease in five years. As a percentage, underrepresented minorities dropped from 10.4% of the Fall 2005 freshman class to just 6.2% of the Fall 2009 class. As is the case for women, this decrease cannot be blamed on admissions; Figure 6 shows that the yield of underrepresented students has dropped dramatically in this time. For both 2008 and 2009, this yield was below 30%. The overall freshman yield in the College of Engineering has not changed significantly in this time period. While campus-wide the yield of underrepresented students has lagged the overall yield by 2 to 5 percentage points, the engineering gap has widened from 2 % in 2006 to 17% in 2008 and 13% in 2009. In 2009, Engineering had THE LOWEST YIELD OF UNDERREPRESENTED FRESHMEN OF ANY UNIT ON CAMPUS. It is clear that urgent steps are needed to reverse these trends. There are no clear reasons why the College of Engineering should be performing so poorly compared to the rest of campus.

**Transfer students:** Community College transfer students have traditionally been considered a rich pool of diversity for the engineering undergraduate body. From Fall 2005 to 2007 the numbers and percentages of underrepresented minority transfer students entering engineering increased from 9 (4.8%) to 20 (11.8%). The numbers dropped to 19 (10.4%) and 17 (8.3%) in 2008 and 2009, respectively. Over the five year period the yield of underrepresented students fell from 90% in 2005 (higher than the overall yield of 87%) to just 59% (significantly lower than the overall yield of 81%). The campus fluctuation of yield during this time of 13 percentage points is less than half of engineering's 31 percentage point fluctuation. Hence it is difficult to attribute the decline to economic or political factors over the five year time period.

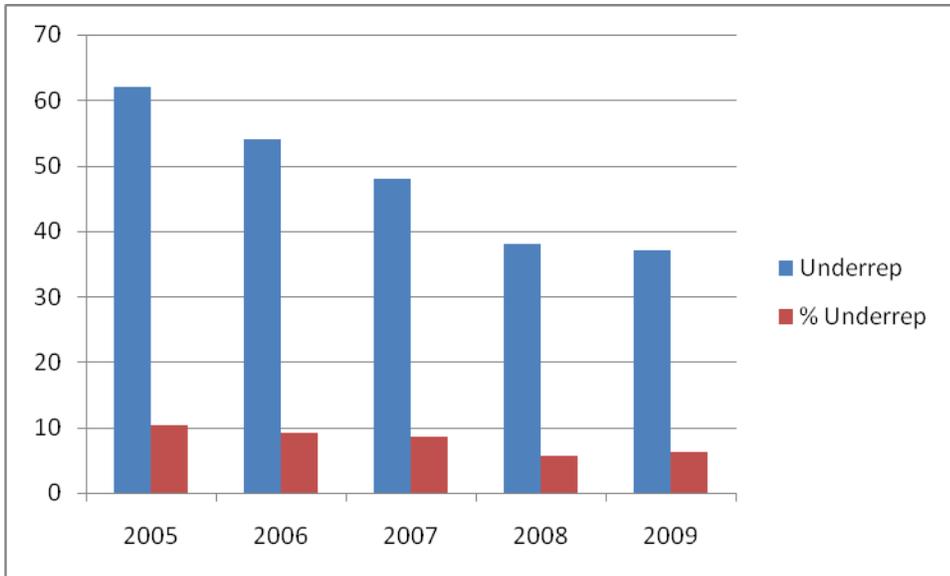


Figure 5: Freshman Fall SIR Numbers – Underrepresented Minorities

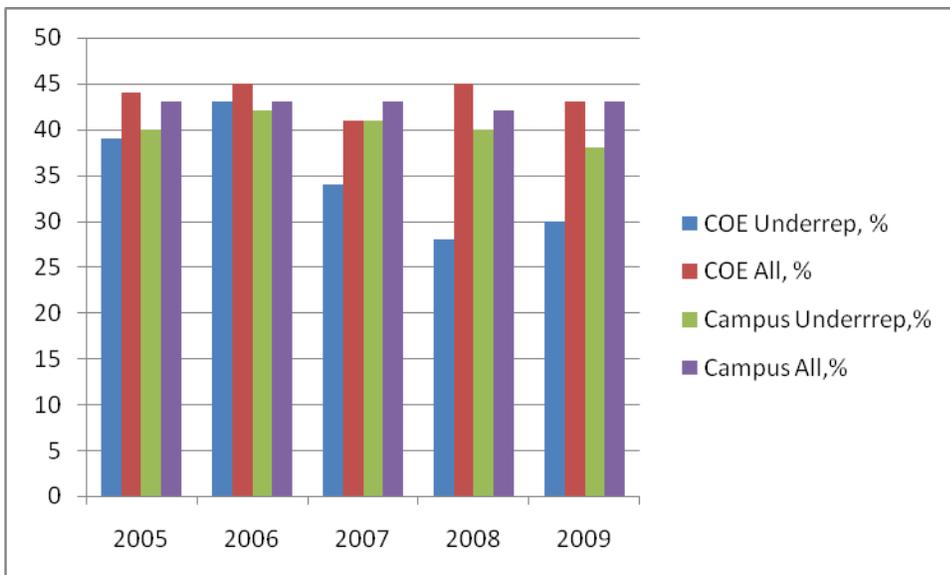


Figure 6: Freshman Fall Yield – Underrepresented Minorities

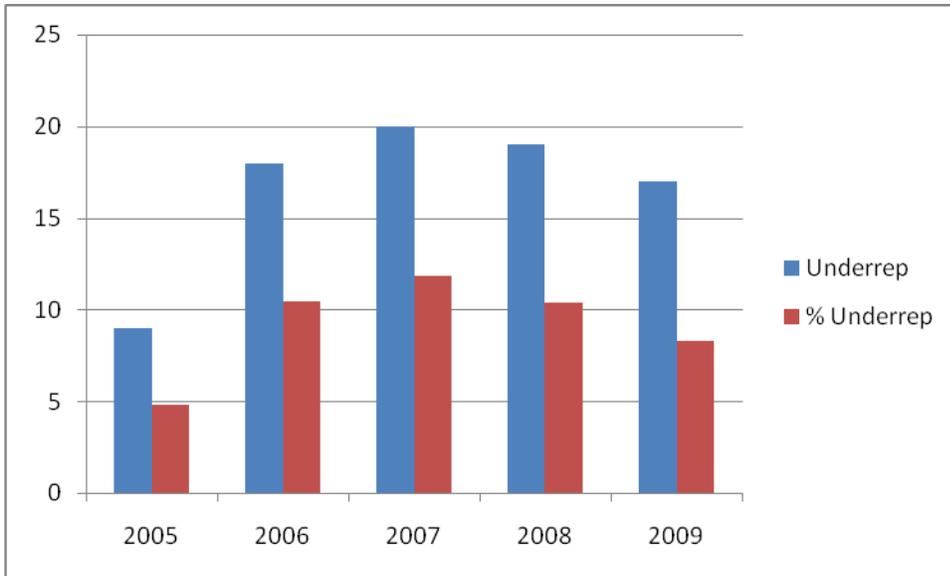


Figure 7: Junior Transfer Fall SIR Numbers – Underrepresented Minorities

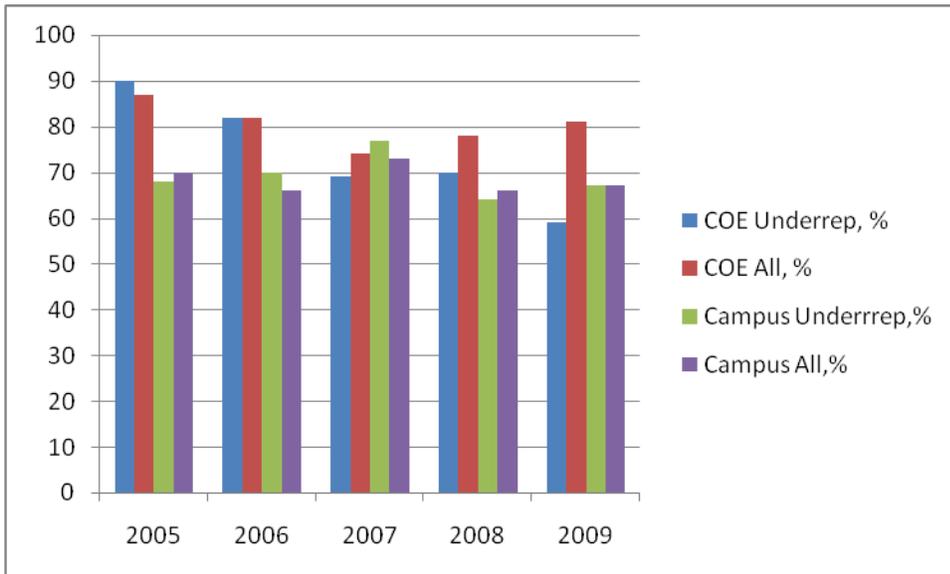


Figure 8: Junior Transfer Yield – Underrepresented Minorities