Undergraduate Enrollment Trends

Fall, 2008

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Context

In Fall 2001, Cornell developed a strategic first-year freshman enrollment plan. This original plan was part of a continuing emphasis on enhancing the selectivity of our undergraduate student population and curtailing growth in order to stabilize overall enrollment.

The purpose of the original plan was to:

- Manage toward longer-term, university-wide, undergraduate enrollment targets of 3,000 fall first-time freshmen.
- Protect individual colleges from under-enrollment as they adjusted admissions strategies to yield their targeted number of incoming fall first-time freshmen.
- Advise and assist colleges to avoid enrolling more than their targeted number of students.

Given previous history of over-enrolling the freshman class and the need for disciplined enrollment targets to accommodate the then new North Campus Residential Initiative, the above plan was initially presented to each of the undergraduate colleges in Fall 2000. After full implementation in Fall 2001, the plan was reviewed and revisions were initiated, starting with the Fall 2003 term. These included increasing the undergraduate enrollment target by 50 students to 3,050 fall first-time freshmen and eliminating all January first-time freshmen.

A key element of the first-year freshman enrollment plan was the construction of conservative admit and yield models¹ and the strategic use of the waitlist². For an institution like Cornell with a large and strong applicant pool, students admitted from the waitlist are generally as strong as students admitted through regular and early decision based on standard, quantifiable measures. Thus, there has been no dramatic drop-off in academic quality when colleges admit from the waitlist.

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¹The admit model is used to estimate the initial number of students each college should admit during the regular decision process to yield the targeted number of matriculating students. The yield model examines relevant characteristics of admitted students and statistically determines the likelihood of enrollment for a given admitted student.

²Because admit and yield models are predictive tools that approximate enrollment prior to admitted students’ acceptance or rejection of Cornell’s offer of admission, it is customary to utilize an admission waitlist. High quality students who are not selected for admission in the regular decision process are carefully vetted to be placed on an individual college’s waitlist. This pool of students who is offered a place on the waitlist that allows us to address conceivable shortfalls in freshman target enrollments.
Current Challenges

Since the freshman enrollment plan was implemented in 2001, Cornell achieved its freshman enrollment target in three of the seven years. In the other years, the university exceeded its freshman enrollment target by as much as 4 percent (Fall 2006) or fell short by up to 1 percent (Fall 2007). The 54 percent increase in admissions applications since 2001 further complicates the enrollment-planning process, but Cornell continues to look for ways to enhance the methods by which we manage overall freshman enrollment. Further refinements in admit and yield models, for example, may help us meet this challenge.

Cornell places a great emphasis on enhancing the diversity of the undergraduate student population. However, increasing the enrollment of underrepresented minority students has been a challenge. Since the implementation of freshman enrollment plan in 2001, the percentage of Hispanic Americans has grown only marginally and the number of Native American students has remained essentially constant. Further, in Fall 2008 only 135 African-American first-time students enrolled; a 13 percent decline as compared to Fall 2001. We will continue to monitor the enrollment of underrepresented minority students, and identify strategies that may improve undergraduate student racial and ethnic diversity at Cornell.

The gender, race/ethnicity, and socio-economic diversity of the student body continue to receive careful attention. The geographic diversity of the student body is equally important, as it enriches the educational environment.

Undergraduate Enrollment Objectives

For several years, Cornell has had an operational maximum total on-campus undergraduate enrollment target of 13,000 students. While the on-campus undergraduate enrollment has declined from 13,508 in Fall 2001 to 13,495 in Fall 2008, this still exceeds the desired target of 13,000. Having more than 13,000 undergraduates enrolled on-campus taxes the physical and human resources of the institution. In addition, significant year-to-year fluctuations create difficulties for both teaching resources and infrastructure.

Although there are other sources of undergraduate enrollment change (including attrition and transfer students), clearly the major driver of overall undergraduate enrollment is the body first-time freshmen who arrive in the fall semester each year. Thus, the current enrollment planning process focuses intensely on a first-time freshman enrollment target of 3,050 students. An additional reason to be disciplined about first-year enrollment is that all freshmen are housed within the limited scope of the North Campus Residential Initiative.

The admit rate from Fall 2007 to Fall 2008 remained stable at 21 percent; the yield stayed constant at 47 percent over the same one-year period. As of the sixth week of classes in Fall 2008, Cornell enrolled 3,139 first-time freshmen, 89 students over the 3,050 first-time freshmen target.
Current Situation and Changes over Time

Figure 1 indicates that on-campus undergraduate enrollment increased by 3 percent, or 397 students, between Fall 1998 and Fall 2008 (13,098 in Fall 1998 to 13,495 in Fall 2008). Until the recent increase of 89 students above the first-time freshman target for Fall 2008, Figure 1 also demonstrates the success experienced in decreasing the operational maximum total on-campus undergraduate enrollment toward the 13,000 students target articulated in Fall 2001.

The growth in the overall enrollment since 1998 was not distributed evenly across all colleges; three colleges decreased their enrollments and four increased, as illustrated in Figure 2. The colleges with decreasing enrollments between 1998 and 2008 were: Arts & Sciences (AS) with 189 fewer students; Architecture, Art, & Planning (AR) with 48 fewer students, and Human Ecology (HE) with 54 fewer students. The colleges with increasing enrollments were: Engineering (EN) with 261 more students enrolled in Fall 2008; Agriculture & Life Sciences (AG) with 240 more students; Industrial & Labor Relations (IL) with 142 more students, and Hotel Administration (HO), with an increase of 69 students. The remaining enrollment changes occurred in the Internal Transfer Division (not shown) which has declined steadily from 63 students in Fall 1998 to 39 students in Fall 2008.

Figures 3 and 4 display the first-year freshman enrollment from 1998 to 2008. Consistent with enrollment plan formulated in Fall 2000 and implemented in Fall 2001, first-time freshman enrollment decreased from 3,162 in Fall 1999 to 3,054 in Fall 2000. Following the initial Fall 2000 test, Cornell implemented more aggressive measures to assist each of the colleges in
staying within 1 percent of their designated targets. However, in Fall 2003, 2006, and 2008, the majority went over their respective bounds of the 1 percent target for first-time freshman, as shown in the figures below.

Figure 3 displays fall first-time freshman enrollments from Fall 1998 to Fall 2008 in the three largest colleges. The size of the incoming freshman class in Arts & Sciences decreased 1 percent from 1,055 students in Fall 1996 to 1,040 in Fall 2008. For Fall 2008, Engineering enrolled 763 freshmen, an increase of 3 percent from Fall 1998. Freshman enrollments in Agriculture & Life Sciences increased 10 students from 623 students in Fall 1998 to 633 students in Fall 2008.

Figure 4 displays fall first-time freshman enrollments from Fall 1998 to Fall 2008 in the small four undergraduate colleges. Human Ecology experienced the largest increase in freshman enrollments of 11 percent from 247 students in Fall 1998 to 275 students in Fall 2008. Hotel Administration increased 7 percent between Fall 1998 (155 students) and Fall 2008 (166 students). Industrial & Labor Relations experienced no change in freshman enrollments from Fall 1998 to Fall 2008 (152 students). Architecture, Art & Planning remained stable with a decrease of one freshman enrollment between Fall 1998 to Fall 2008. It should be noted, the fall freshman enrollment target increased by 50 students to offset the elimination of the January freshman program. This mostly affected an increase in first-time freshmen from Fall 2003 onward for Arts & Sciences, Human Ecology, and Industrial & Labor Relations.

*Starting Fall 2000, data are as of 6th week of classes. Prior to that time, data were as of 3rd week of classes.
From Fall 1998 through Fall 2008, Cornell’s Early Decision Program (EDP) applications have accounted for between 10 and 13 percent of all applications. For the Fall 2008 entering class, 3,094 of the 33,073 applicants, applied via EDP. The proportion of the entering class enrolled through EDP significantly increased from Fall 1998 to Fall 2002, and then declined in Fall 2005 to 34 percent of the entering class. In Fall 2008, of 3,039 first-time freshmen entering, 1,119 (36 percent) were admitted through EDP (see Figure 5).

External transfers offer another option for managing a stable enrollment, and Cornell has a long tradition of enrolling transfer students, particularly in the Contract Colleges and in Arts & Sciences. Although the enrollment management process for external transfer students is not as regulated as it is for freshman students, there is still careful monitoring of external transfer enrollments. Cornell’s tradition of admitting a significant number of transfers sets us apart from our Ivy peers, some of whom enroll few external transfer students or none at all. These students—the majority of whom arrive at Cornell as sophomores or juniors—add a rich dimension to the classroom experience. Their contributions to undergraduate life at Cornell are deep and varied.

From Fall 1998 to Fall 2008, between 35 and 44 percent of all incoming external transfers annually enroll in Agriculture & Life Sciences. In Fall 1998, this amounted to 195 out of 478 external transfers (41 percent) and in Fall 2008, 259 out of 617 external transfers (42 percent). For the other colleges (see Figure 6) the number of external transfers fluctuates from year to year. Industrial & Labor Relations almost tripled their external transfers from 44 in Fall 1998 to 115 in Fall 2008. Hotel Administration doubled their external transfers from 28 in Fall 1998 to 54 in Fall 2008 and Engineering increased 12 students between Fall 1997 and Fall 2008. Decreases in external transfer enrollment in the past decade occurred in Human Ecology (- 27 students), Arts & Sciences (- 4 students), and Architecture, Art & Planning (- 3 students).
Cornell continues to strive for progress on other related areas of undergraduate enrollment. Figures 7 through 10 display the diversity of the undergraduate student population with regard to gender, race/ethnicity, and geographic distribution.

The proportion of women among the on-campus undergraduate population increased from 47 percent in Fall 1998 to 49 percent in Fall 2002 where it still currently remains. As Figure 7 demonstrates, two of the colleges have distinctly different patterns from the other colleges. The proportion of women among undergraduates in Human Ecology has fluctuated between 71 and 75 percent from Fall 1998 to Fall 2008. Engineering experienced the most significant increase in the proportion of women in any single college with a 9-percentage point increase from Fall 1998 to Fall 2008.

Starting in Fall 2002, the Office of Undergraduate Admissions began to utilize a new race/ethnicity category to enhance the ability to track underrepresented minorities (URM)\(^3\) more consistently with federal guidelines. These students indicated on their admissions application that they were multi-racial with at least one URM category. Prior to Fall 2002 students who indicated a multi-racial category with at least one URM category were defaulted to “other or not reported.” This change in University recording and reporting practices created a large part of the apparent growth in the URM presence on campus, as illustrated in Figure 1. Thus for total undergraduate enrollment, this new category increased from 24 students in Fall 2002, to 365 students in Fall 2008.

\(^3\)URM: Native Americans, Hawaiian-Pacific Islanders, African Americans, Hispanic Americans, and multi-racial indicating at least one underrepresented category.
Overall, the proportion of ethnic and racial minorities among the undergraduate population has grown from 30 percent in Fall 1998 to 33 percent in Fall 2008. Similarly, the number of underrepresented minorities (URM) grew by 28 percent from Fall 1998 to Fall 2008 (1,497 to 1,912 students respectively). The largest increase among all URM students during this period was among the multi-racial category with an increase of 355 students between Fall 2002 and Fall 2008. African American students increased from 588 in Fall 1998 to 699 in Fall 2008 (19 percent). Over the 10-year period, Asian Americans increased 107 students, while decreases occurred in Hispanic Americans (-69 students) and Native Americans (-6 students). For other U.S. citizens (Caucasians and those who elected not to designate race/ethnicity information), enrollments declined 3 percent from 8,754 in Fall 1998 to 8,452 in Fall 2008. Over this same time-period, the enrollment of international students increased 18 percent from 1,015 to 1,199 students.

Figure 9 illustrates that the number of underrepresented minorities (URM) among first-time freshmen grew 28 percent from Fall 1998 to Fall 2008 (345 to 441 students respectively). Within that broad category and over the same time period, Native Americans increased by 3 students, Hispanic Americans decreased 8 percent (-15 students), and African American decreased 4 percent (-6 students). In the other categories, from Fall 1998 to Fall 2008, Asian Americans increased 14 percent (71 students) while international students increased from 217 students in Fall 1998 to 307 students in Fall 2008. Caucasians and those declining to report race/ethnicity declined by 10 percent (2,025 to 1,825 students from Fall 1998 to Fall 2008, respectively).

As part of planned recruitment efforts, the undergraduate student population has become more geographically diverse in both the Endowed and Contract colleges. Although the proportion of undergraduates from New York State has been declining (see Figure 10), they still account for the largest share of students in both the Endowed and Contract colleges. From Fall 1998 to Fall 2008, in the Endowed colleges, proportions from the Mid-Atlantic

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4Limited to U.S. citizens and Permanent Residents only; race/ethnicity data is not gathered and reported on international students.
increased 2 percent. The South, West, and foreign/US territory regions increased 1 percent while the Midwest decreased by 1 percent. The Southwest and New England regions remained stable. During the same time period, enrollment in the Contract Colleges increased in all the remaining regions: Mid-Atlantic (5 percent), New England, South, West, and foreign/US territory regions by 2 percent, and 1 percent in the Midwest and Southwest regions.

Competitor Comparisons

When available, comparative data allows us to make comparisons between Cornell and some members of the "admissions overlap group." As Figure 11 indicates, Cornell enrolls a larger number of undergraduates than any of our comparators. Typically, freshmen account for approximately a quarter of the undergraduate population. Hence, while Cornell admits roughly 3,050 first-time freshmen or 22 percent of total undergraduate enrollment; our closest Ivy comparator, the University of Pennsylvania, has an entering class of approximately 2,400 or 20 percent of their total undergraduate enrollment. Dartmouth and MIT are admitting closer to 1,050 new freshmen each year and that accounts for 26 percent of their undergraduate enrollment total.

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5 Fall 2007 comparative data is the most recent information available. The 2008 data will not be available until late in the spring 2009 semester.
As Figure 12 displays, six of the Ivy Plus Group (the eight Ivy League institutions plus MIT and Stanford) saw a substantial increase in the number of applications for admission between Fall 2006 and Fall 2007. Dartmouth and Yale stayed stable with a less then 1 percent increase. Cornell saw an 8 percent increase from 28,098 to 30,383 applications over this one-year period.

The admit rate is calculated as the proportion of students offered admission divided by the total number of applicants. As shown in Figure 13, Cornell’s 21 percent admit rate for Fall 2007 is the highest in the Ivy Plus Group, which otherwise ranges from 9 percent (at Harvard) to 18 percent (at the University of Pennsylvania). Among Cornell’s seven undergraduate colleges, Architecture, Art & Planning had the lowest admit rate (17 percent) with Human Ecology having the highest (35 percent). Collectively, the Contract Colleges had an admit rate of 26 percent, and the Endowed Colleges’ admit rate was 21 percent for the incoming Class of 2011.

Holding constant an enrollment target, an increase in applications (see Figure 12) will generally decrease the admit rate. Cornell’s admit rate decreased 4 percent from 25 percent in Fall 2006 to 21 percent for Fall 2007. The University of Pennsylvania also decreased 2 percent from Fall 2006 to Fall 2007. Of the remaining Ivy Plus Group comparators, MIT, Stanford, and Yale experienced a 1 percent decrease while Brown, Columbia, and Dartmouth experienced marginal or no increase.
Figure 14 displays the Fall 2007 comparative yield rates – the proportion of students who accept an offer of admission divided by the total number of applicants who were admitted – for the Ivy Plus Group. Between Fall 2006 and Fall 2007, the yield rate for Brown and Princeton decreased by 2 percent while Harvard’s yield rate decreased by a little less than 1 percent. The highest increase was 3 percent for MIT and Stanford and the remainder, including Cornell, experienced minimal or no change. Among these comparators, yield rates for Fall 2007 ranged from 46 percent at Cornell to 82 percent at Harvard.

On the Horizon

Maintaining a stable undergraduate enrollment is imperative as Cornell continues to enhance the undergraduate experience. The North Campus Residential Initiative’s role in the university’s total undergraduate experience necessitates a greater need to be more disciplined about all aspects of enrollment targets. Managing toward the 3,050 fall, first-time freshman target becomes the goal due to the implementation of the undergraduate enrollment management guidelines.

External transfer applications for fall semester admission increased 32 percent during the period from 1998 to 2008. During this same period, the number of external transfer acceptances increased 12 percent, and yield increased 8 percent, in part through more judicious use of guaranteed transfer programs in several of the colleges. As a result, external transfer enrollment has grown over the past several years. With the fall freshman enrollment plan in place, the need for specific external transfer enrollment targets is critical in order to maintain optimal overall enrollments. A long-range enrollment plan for external transfers that will enhance recruitment efforts and establish enrollment targets by college is being developed. A central part of this plan is the Pathway to Success program, a transfer admissions program funded, in part, from a grant that Cornell received from the Jack Kent Cooke Foundation. Cornell was the only Ivy League school and one of only eight institutions in the nation to receive this grant. The Pathway to Success program was initiated in June 2006 and it involves a partnership with Monroe Community College and Morrisville State College to increase the transfer of students from these schools to Cornell University.

As part of its continuing goal to provide the nation’s best undergraduate experience at a research university, Cornell is renewing and revitalizing its traditional long-standing commitment to
undergraduates. At its heart is one of the most ambitious program innovations ever undertaken by the university: building five House systems for post-first-year students on West Campus. Currently in operation are the Alice Cook House, Carl Becker House, Hans Bethe House, and William Keeton House. The remaining house is scheduled to be completed by 2010.

Conclusion

The on-going challenge facing Cornell is to craft and implement strategies that will allow the institution to become an ever-stronger player in the increasingly complex head-to-head competition for high-ability undergraduate students. In particular, it is imperative that we continue to highlight what is distinctive about Cornell to our target populations. In essence, we need to become ever more accomplished in marketing the institution, both to prospective students and the public at large.

Undergraduate enrollments at Cornell remain strong. The institution is in the enviable position of having a large and talented applicant pool making it possible to admit and matriculate a diverse and extremely well qualified student body.