

## Cornell University

# Undergraduate Enrollment Trends 

Fall 2004

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## Context

As part of a continuing emphasis to enhance the selectivity of our undergraduate student population and curtail growth in order to stabilize overall enrollment, Cornell implemented an aggressive strategic first-year freshman enrollment plan in Fall 2001.

The purpose of the 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 adjust admissions strategies to yield their targeted number of incoming fall first-time freshmen.
- Advise and assist colleges from enrolling more than their targeted number of students.

Given the history of regularly over-enrolling the freshman class and the need for disciplined enrollment targets with the new North Campus residential initiative, the above plan was initially presented in Fall 2000 to each of the undergraduate colleges. Full implementation began in Fall 2001. After implementation, 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 freshmen enrollment plan was the construction of a conservative admit and yield model ${ }^{1}$ and the aggressive use of the waitlist ${ }^{2}$. Students admitted from the waitlist are just as strong as students admitted through regular and early decision based on standard, quantifiable measures. Contrary to conventional wisdom, there is no dramatic drop-off in academic quality when colleges admit from the waitlist. For an institution like Cornell, this is especially significant because we have such a large and strong applicant pool.

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## Challenges That Lay Ahead

The major challenge is continuing to implement a cohesive enrollment management strategy, utilizing increasingly more robust admit and yield models. For Fall 2004, implementation of the guidelines was a tremendous success as evidenced by the size and quality of the first-year freshmen class. The seven undergraduate colleges continued the charge to refine their independent admissions processes to achieve a university first-time freshmen enrollment target of 3,050 students. They were successful with 3,054 first-time freshmen enrolling for Fall 2004 as of the sixth week of classes.

Cornell continues to be challenged by enrollment of students of color. The percentage of African-American, Hispanic and Native American students has remained relatively constant, but the absolute number of students of color has fluctuated over the past decade. We have yet to make significant progress with the enrollment of underrepresented minority students overall and African-American students in particular.

It is imperative that we enhance the diversity of the undergraduate student population while maintaining access to a Cornell education. The gender, race/ethnicity, and socio-economic diversity of the student body must 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 the last several years, Cornell has had an operational maximum total on-campus undergraduate enrollment target of 13,000 students. At present, we continue to exceed that target. Having more than 13,000 undergraduates enrolled at any one time taxes the physical and human resources of the institution. In addition, significant year-to-year fluctuations create difficulties for both our teaching and infrastructure resources.

The current enrollment planning process focuses intensely on a first-time freshman enrollment target of 3,050 students. It is imperative to be disciplined about first-year enrollment targets given the North Campus residential initiative.

Undergraduate enrollment consists of different types of students: first-time freshmen, first-time transfers to Cornell, rejoining students, and continuing students. While only a portion of undergraduate over-enrollment can be attributed to first-time freshmen arriving in the fall, it has been the major contributing factor and the one over which the institution has the greatest control. Becoming more disciplined with regard to the enrollment of first-time freshmen, will assist in guiding our enrollment approach toward first-time transfers.

The admit rate from Fall 2003 to Fall 2004 decreased from 31 percent to 29 percent; the yield stayed constant at 51 percent over the one-year period. As of the sixth week of classes in Fall 2004, Cornell enrolled 3,054 first-time freshmen, just 4 students over the 3,050 first-time freshmen target.

## Current Situation and Changes over Time

Figure 1 indicates that oncampus undergraduate enrollment increased by 7 percent, or 920 students, between Fall 1990 and Fall 2004 (12,389 in Fall 1990 to 13,309 in Fall 2004). Slightly more than a third of this increase (393 students) occurred between Fall 1998 and Fall 1999.

Figure 1. On-Campus Fall Undergraduate Enrollment


The Endowed General Purpose Colleges accounted for 59 percent of the increase from Fall 1990 to Fall 2004. Figure 2 displays Arts \& Sciences (AS) with 254 more students in Fall 2004 than in Fall 1990; Engineering (EN) with 306 additional students; and Architecture, Art, \& Planning (AR) with 8 more students currently enrolled than in Fall 1990. The Contract Colleges accounted for 24 percent of the 7 percent total oncampus undergraduate enrollment increase from Fall 1990 to Fall 2004. Industrial \& Labor Relations (IL) increased their enrollments by 158 students, Human Ecology (HE) decreased by 17 students, and Agriculture \& Life Sciences (AG) increased by 80 students between Fall 1990 and Fall 2004. The remaining enrollment changes occurred in the Hotel School (HO), with an increase of 161 students, and the Internal Transfer Division (not pictured though included in the Endowed General Purpose percentage) whose enrollments have declined steadily from 71 students in Fall 1990 to 43 students in Fall 2004.

Figures 3 and 4 display the results of the implemented first-year freshman enrollment plan as compared to prior first-time freshmen enrollments starting in Fall 1990. The enrollment plan was tested in Fall 2000. As planned, the 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. With the exception of Agriculture \& Life Sciences and Industrial \& Labor Relations where they were over-enrolled slightly, the remainder of the undergraduate colleges were successful in managing within their respective bounds for Fall 2004 first-time freshmen targets.

Figure 3 displays fall first-time freshman enrollments from Fall 1990 to Fall 2004 in the three largest colleges - Arts \& Sciences, Engineering, and Agriculture \& Life Sciences. The size of the incoming freshman class in Arts \& Sciences increased 2 percent from 934 students in Fall 1990 to 998 in Fall 2004. Engineering experienced volatility in their freshmen enrollment during the early years under investigation including a high of 860 new freshmen in Fall 1993. For Fall 2004, Engineering enrolled 709 freshmen. Freshman enrollments in Agriculture \& Life Sciences
 increased by 2 percent, or 15 freshmen, between Fall 1990 (639 students) and Fall 2004 (654 students).

Figure 4 displays fall first-time freshman enrollments from Fall 1990 to Fall 2004 in the other four undergraduate colleges. Human Ecology experienced a 13 percent increase in freshman enrollments from 237 students in Fall 1990 to 267 in Fall 2004. Hotel Administration, on the
 other hand, increased their first-time freshmen by a total of 32 percent, or 40 students, between Fall 1990 (124 students) and Fall 2004 (164 students). Architecture, Art \& Planning experienced a 12 percent decrease in freshman enrollments from Fall 1990 ( 121 students) to 106 students for Fall 2004 primarily as a result of purposely reducing the number of freshman architecture students with the commencement of the M.Arch I program. From Fall 1990 to Fall 2004, enrollments in Industrial \& Labor Relations increased 28 percent. However, Industrial \& Labor Relations fluctuated from 122 students in Fall 1990 to a low of 116 students in Fall 1991 and another high of 162 students in Fall 1996.

External transfers offer another option for maintaining a stable enrollment. The majority of external transfers to Cornell arrive as sophomores or juniors. It is important to note that Cornell has always had a tradition of enrolling transfer students, particularly in the Contract Colleges; however, Arts \& Sciences also enrolls a significant number of new external transfers each fall. Cornell's tradition in this regard sets us apart from our Ivy peers, some of whom enroll a much more modest number of external transfer students or none at all. These students add a rich dimension to the classroom experience and their contributions to the undergraduate life at Cornell are deep and varied.

From Fall 1990 to Fall 2004, between 35 and 44 percent of all incoming external transfers have annually enrolled in Agriculture \& Life Sciences. In Fall 1990, this amounted to 172 out of 434 external transfers ( 40 percent) and in Fall 2004, 210 out of 534 external transfers ( 39 percent).


For the other colleges (see Figure 5) the number of external transfers fluctuates from year to year. Regardless, the number of transfers into Arts \& Sciences has ranged between 63 in Fall 2003 and 94 in Fall 2002 with 89 for Fall 2004. Industrial \& Labor Relations has more than tripled their external transfers from 29 in Fall 1990 to 74 in
Fall 2004. Engineering had a 75 percent increase and Hotel Administration a 19 percent increase in external transfers between Fall 1990 and Fall 2004. Human Ecology experienced a decrease from 85 external transfers in Fall 1990 to 56 in Fall 2004.

Cornell has been making progress on other related areas of undergraduate enrollment. Figures 6 through 9 display the diversity of the undergraduate student population with regard to gender, race/ethnicity, and geographic distribution.

The proportion of women among the total undergraduate population increased from 44 percent in Fall 1990 to 49 percent in Fall 2004. As Figure 6 demonstrates, two of the colleges have distinctly different patterns. The proportion of women among undergraduates in Human Ecology has fluctuated between 68 and 72 percent from Fall 1990 to Fall 2004. Conversely, women have increased from 20 to 26 percent of undergraduates in Engineering. The most significant increase in proportion of wome $n$ in any single college occurred in Architecture, Art \& Planning with a 9 percent increase from Fall
 1990 to Fall 2004.

The proportion of minorities among the undergraduate population ${ }^{3}$ has grown from 22 percent in Fall 1990 to 30 percent in Fall 2004. Among all minority groups, the largest increase during this period has been among Asian American students growing from 1,559 in Fall 1990 to 2,214 in Fall 2004, (42 percent). The proportion of underrepresented minorities (URM: Native Americans, Hispanic Americans, African Americans, and multi-racial indicating at least one

Figure 7. Indexed Growth in Total Undergraduate Enrollment by Citizenship and Race/Ethnicity Status
 underrepresented category) has grown by 28 percent from Fall 1990 to Fall 2004 (1,218 to 1,554 students respectively). The largest increase among URM students during this period has been among Hispanic Americans growing by 119 students (584 in Fall 1990 to 703 in Fall 2004), followed by 40 additional African American students (594 in Fall 1990 to 634 in Fall 2004) and 21 more Native American students (40 in Fall 1990 to 61 in Fall 2004). For all other U.S. citizens (Caucasians and those who elected not to designate race/ethnicity information), enrollments declined 8 percent from 9,586 in Fall 1990 to 8,886 in Fall 2004. Over this same time period, the enrollment of international students increased from 438 to 971 students, though there have been decreases since the events of September 11, 2001.

[^1]Starting in Fall 2002, the Office of Undergraduate Admissions began to utilize a new race/ethnic category to enhance the ability to track underrepresented minorities (URM) more consistently with federal guidelines. These are students who indicated on their admissions application they were multi-racial with at least one URM category. Prior to Fall 2002 students who indicated a multi-racial category were defaulted to "other or not reported." For total undergraduate enrollment, this new category has increased from 24 students to 156 students in Fall 2004.

For first-time freshmen, Figure 8 shows that the proportion of underrepresented minorities (URM) has grown 17 percent from Fall 1990 to Fall 2004 ( 346 to 405 students respectively). With the exception of the new multi-racial URM category and African Americans, between Fall 1990 and Fall 2004 the traditional categories of URM remained relatively stable. African Americans declined 8 percent (13 students) while Native Americans increased from 12 to 17 students, followed by Hispanic Americans (170 to 173 students). In the other categories, from Fall 1990 to Fall 2004, Asian Americans increased 19 percent ( 83 students) and international students increased

Figure 8. Indexed Growth of First-time Freshmen Enrollment by Citizenship and Race/Ethnicity Status
 from 99 students in Fall 1990 to 215 students in Fall 2004. Caucasians and those not reporting race/ethnicity declined 4 percent ( 1,985 to 1,911 students from Fall 1990 to Fall 2004, 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 9), they still account for the largest share of students in both the Endowed and Contract colleges. From Fall 1990 to Fall 2004, in the Endowed colleges, proportions from the Middle Atlantic States, South and Southwestern states have been stable with only a 1 percent or less increase; those coming from New England and Midwestern regions declined 1 percent or less; and enrollments from the West and out of the country have increased between 3 and 4 percent, respectively. During the same time period, enrollment in the Contract Colleges has been stable for the South, Southwestern and out of the country regions. Enrollments from the New England states increased 2 percent while proportions from the Middle Atlantic and the West increased 3 and 4 percent respectively.

## Competitor Comparisons

This section focuses on comparisons between Cornell and many of the "admissions overlap group" institutions for which we have a source of comparative data). ${ }^{4}$ As Figure 10 makes clear, Cornell enrolls a larger number of undergraduates than any of our comparators. With a few exceptions, Cornell has twice as many undergraduates as all but three of its primary comparators. Typically, freshmen account for approximately a quarter of the undergraduate population. Hence, while Cornell admits roughly 3,050 firsttime freshmen, our closest Ivy comparator, University of Pennsylvania, has an entering class of approximately 2,400,

Figure 10. Comparative Total Undergraduate Enrollment Fall 2003


MIT are admitting closer to 1,000 new freshmen each year.

[^2]As Figure 11 displays, all but two of the Ivy League institutions plus MIT saw an increase in the number of applications for admission between Fall 2002 and Fall 2003. Cornell experienced a 5 percent decrease from 21,435 to 20,360 over this period.

Figure 11. Change in Number of Applications at Iny+ Institutions: Fall 2002 to Fall 2003


Cornell's admit rate - the proportion of students offered admission divided by the total number of applicants - increased 1 percent from 27 percent in Fall 2002 to 28 percent for Fall 2003. Of our Ivy comparators plus MIT, in Fall 2003 Cornell and MIT experienced an increase (3 percent and less than 1 percent respectively). Dartmouth experienced a decrease of 3 percent while Yale had a 2 percent decrease. Brown, Columbia, Princeton, University of Pennsylvania and Harvard experienced a 1 percent or less decrease. The changes depicted are directly and inversely related to the changes in the number of applications displayed in Figure 11 above (an increase in applications typically leads to a decrease in admit rates). As well, the general declines in admit rates are also related to increases in the number of students being admitted via early decision programs.


Cornell's 31 percent admit rate for Fall 2003 is the highest in the Ivy League plus MIT, which otherwise ranges from a low of 10 percent at Harvard to a high of 20 percent at University of Pennsylvania (see Figure 12). Among Cornell's seven undergraduate colleges, Architecture, Art \& Planning had the lowest admit rate (22 percent) with Engineering having the highest ( 38 percent). Collectively, the Contract Colleges had an admit rate of 31 percent, and the Endowed colleges’ admit rate was 29 percent for the incoming class.


Figure 13 displays the Fall 2003 comparative yield rates - the proportion of students who accept an offer of admission divided by the total number of applicants who were admitted - for all Ivy League institutions plus MIT. Between Fall 2002 and Fall 2003, Cornell's yield rate increased less than 1 percent. Among the other Ivy League institutions plus MIT, yield rates for Fall 2003 ranged from a low of 50 percent at Dartmouth and to a high of 84 percent at Harvard.

For the past decade, Cornell's Early Decision Program (EDP) applications have accounted for between 9 and 12 percent of all applications (see Figure 14). For the Fall 2004 entering class, 2,546 of 20,822 applicants applied via EDP. Nevertheless, the proportion of the entering class admitted through EDP has been steadily increasing. For Fall 2004, 31 percent of all first-time freshmen entering ( 1,097 of 3,054 students) were enrolled through EDP.


Comparatively speaking, however, Cornell significantly trails many of its Ivy League comparators in utilizing an early decision/early action program to fill its first-time freshman class (see Figure 15). Harvard enrolled 54 percent while MIT enrolled 28 percent of their first-time freshmen through early decision/early action.

## On the Horizon

Maintaining a stable total undergraduate enrollment is imperative as Cornell continues to enhance the undergraduate experience. With the opening of the North Campus residential initiative and increased emphasis on the total undergraduate experience, there is a greater need to be more disciplined about all aspects of enrollment targets. Managing toward the 3,050 target has been possible because of the implementation of the undergraduate enrollment management guidelines.

External transfer applications for fall semester admissions have decreased 14 percent during the period from 1990 to 2004. During the same period, the number of acceptances increased 10 percent, while yield increased 1 percent. As a result, external transfer enrollment has grown over the past several years. With the North Campus Residential Initiative in place, the need for specific external transfer admission and enrollment targets is critical in order to maintain optimal overall enrollments. A long-range enrollment plan for external transfers that will develop specific admission and enrollment targets by college is under development.

As part of its continuing emphasis to provide the best undergraduate experience, Cornell is renewing and revitalizing its traditional commitment to undergraduates. At its heart is one of the most ambitious program innovations ever undertaken by the university: building a House system for post-first-year students on West Campus.

## Conclusions

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

The 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 highability 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.

Most recently, our main emphasis was on the over enrollment of first-time freshmen. For Fall 2003 and Fall 2004, the seven undergraduate colleges were given a cumulative first-time freshman enrollment target of 3,050 . During the first two years of the university enrollment management plan, total first-time freshman enrollment at Cornell has been within one percent of the fall freshman enrollment target. The undergraduate enrollment plan guidelines continue to be refined based on the needs of the university as a whole as well as for each individual college.


[^0]:    ${ }^{1}$ The admit model is used to estimate the number of students each college should admit 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.
    ${ }^{2}$ Because the admit and yield model is a predictive tool that approximates enrollment prior to admitted students acceptance or rejection of Cornell's offer of admissions, it is customary to utilize an admissions waitlist to guard against over-enrollment. 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. It is this pool of potential students that allows us to address conceivable shortfalls in targeted enrollments

[^1]:    ${ }^{3}$ Limited to U.S. citizens and Permanent Residents only; race/ethnicity data is not gathered and reported on international students.

[^2]:    ${ }^{4}$ Fall 2003 comparative data is the most recent information available. The 2004 data will not be available until late in the spring 2005 semester.

