



# **UNDERGRADUATE ENROLLMENT TRENDS**

**Fall 2002**

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*Catherine J Alvord  
cja2@cornell.edu  
Institutional Research and Planning  
440 Day Hall  
Ithaca, NY 14853-2801*

## **UNDERGRADUATE ENROLLMENT TRENDS Fall 2002**

### **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.

A key element of the first-year freshmen enrollment plan was the construction of a conservative admit and yield model<sup>1</sup> and the aggressive use of the waitlist<sup>2</sup>. For Fall 2001, the yield model under predicted enrollment in two of the seven undergraduate colleges and as a result, there was heavy use of the wait list. For Fall 2002, adjustments were made to the admit and yield model that resulted in a more modest use of the wait list.

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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<sup>1</sup>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.

<sup>2</sup>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 "wait list." It is this pool of potential students that allows us to address conceivable shortfalls in targeted enrollments

## **Challenges That Lay Ahead**

The major challenge is implementing a cohesive enrollment management strategy, including more robust admit and yield models. However, for Fall 2002, the second year of 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 3,000 students. They were successful with 3,003 first-time freshmen enrolling for Fall 2002 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 also 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.

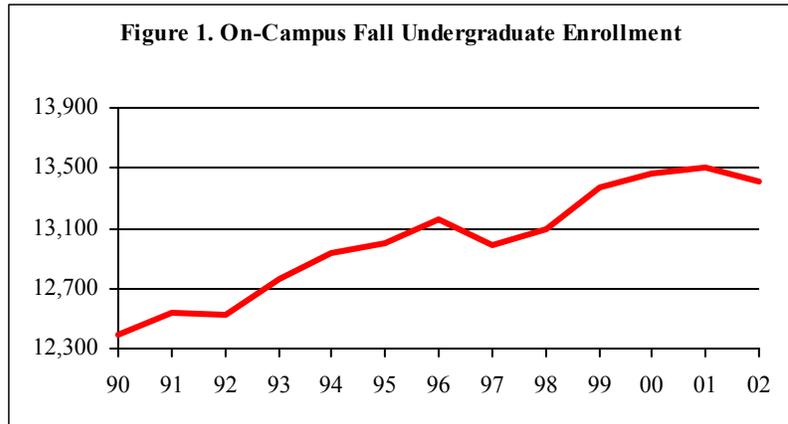
The current enrollment planning process of the university focused intensely on a first-time freshman enrollment target of 3,000 students. More than ever, it is imperative to be disciplined about first-year enrollment targets with the opening of the North Campus residential initiative.

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. As we become more disciplined with regard to the enrollment of first-time freshmen, we will use this experience to guide our enrollment approach towards first-time transfers.

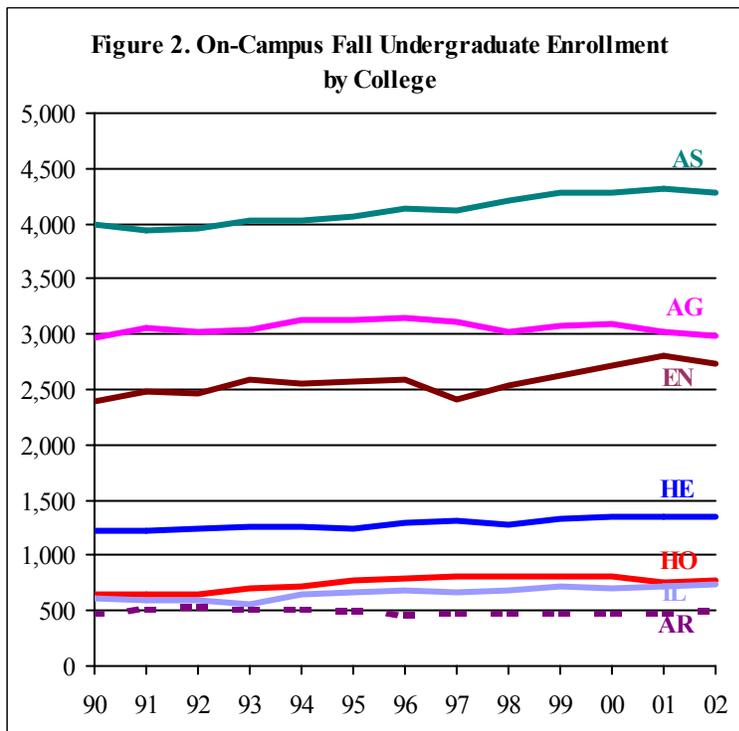
The admit rate for Fall 2002 increased from 27 percent to 28 percent; the yield decreased from 52 percent to 50 percent over the same time period. As of the sixth week of enrollment in Fall 2002, Cornell enrolled 3,003 first-time freshmen, just 3 students over the 3,000 first-time freshmen target.

**Current Situation and Changes over Time**

Figure 1 indicates that on-campus undergraduate enrollment increased by 8 percent, or 1,016 students, between Fall 1990 and Fall 2002 (12,389 in Fall 1990 to 13,405 in Fall 2002). Slightly more than a third of this increase (393 students) occurred between Fall 1998 and Fall 1999.



The Endowed General Purpose Colleges accounted for 62 percent of the 8 percent increase from Fall 1990 to Fall 2002. Figure 2 displays Arts & Sciences (AS) with 293 more students in



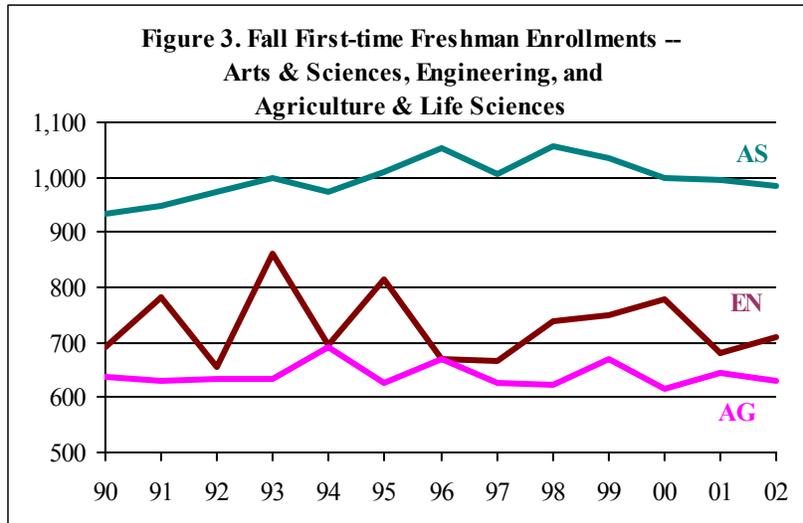
Fall 2002 than in Fall 1990; Engineering (EN) with 341 additional students; and Architecture, Art, & Planning (AR) with 25 more students currently enrolled than in Fall 1990. The Contract Colleges accounted for 27 percent of the 8 percent total on-campus undergraduate enrollment increase from Fall 1990 to Fall 2002. Industrial & Labor Relations (IL) increased their enrollments by 134 students, Human Ecology (HE) increased by 117 students, and Agriculture & Life Sciences (AG) increased by 22 students between Fall 1990 and Fall 2002. The remaining enrollment changes occurred in the Hotel School (HO), with a planned increase of 100 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 40 students in Fall 2002.

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 Architecture, Art & Planning and Hotel Administration where they were over-enrolled due to higher than anticipated yield, and Human Ecology, the remainder of the undergraduate colleges were successful in managing within their respective bounds for Fall 2002 first-time freshmen targets.

Figure 3 displays fall first-time freshman enrollments from Fall 1990 to Fall 2002 in the three largest colleges – Arts & Sciences, Engineering, and Agriculture & Life Sciences. The size of the incoming freshman class in Arts & Sciences has increased 5 percent from 934 students in Fall 1990 to 983 in Fall 2002. In Fall 2002, Arts & Sciences achieved within 1 percent of their 990 target by enrolling 983 students. Engineering has experienced much volatility in their freshmen enrollment over the past decade including a high of 860 new freshmen in Fall 1993. For Fall 2002, Engineering enrolled their target of 710 freshmen.



Freshman enrollments in Agriculture & Life Sciences declined by 1 percent, or 9 freshmen, between Fall 1990 (639 students) and Fall 2002 (630 students). However, for Fall 2002 Agriculture & Life Sciences also managed within 1 percent of their first-time freshmen objective of 635 by enrolling 630 students.

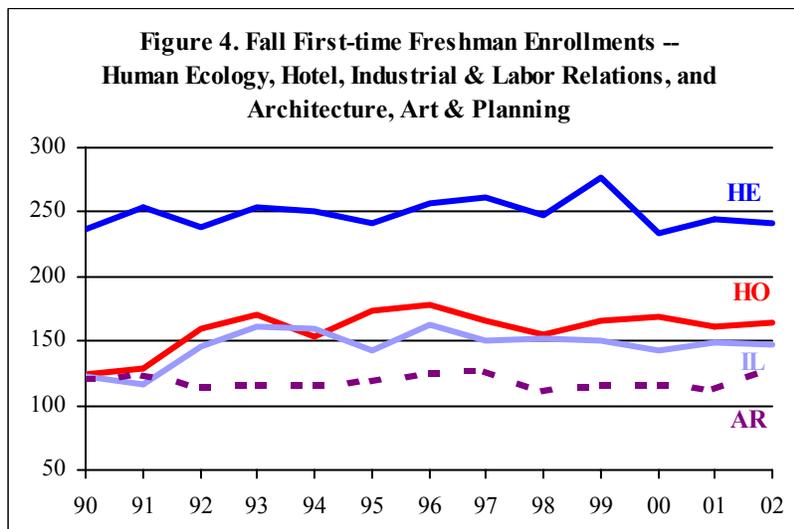


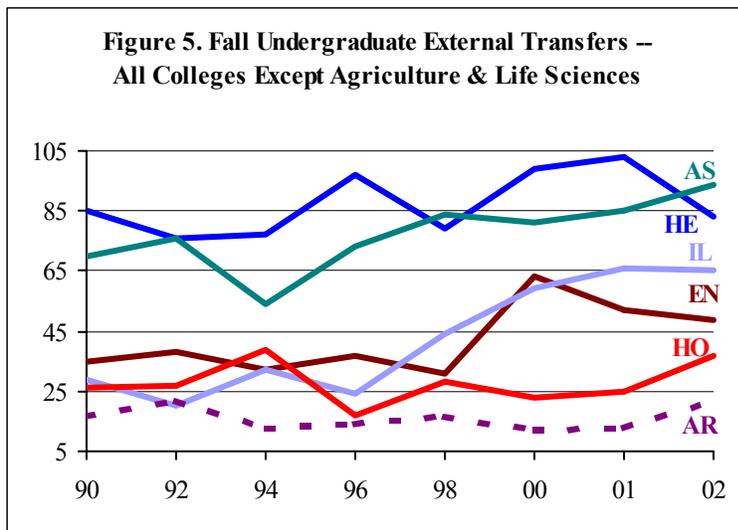
Figure 4 displays fall first-time freshman enrollments from Fall 1990 to Fall 2002 in the other four undergraduate colleges. Human Ecology experienced a 2 percent increase in freshman enrollments from 237 students in Fall 1990 to 241 in Fall 2002. However, for Fall 2002 Human Ecology was within 3 of their targeted 245 freshmen at 242. Hotel Administration, on the other hand, increased their first-time

freshmen by a total of 32 percent, or 25 students, between Fall 1990 (124 students) and Fall 2002 (164 students). In Fall 2002, however, Hotel Administration exceeded their first-time freshmen objective of 160 by 4 students. Architecture, Art & Planning experienced a 6 percent increase in

freshman enrollments from Fall 1990 (121 students) to Fall 2002 (128 students). The Fall 2002 first-time freshmen goal for Architecture, Art & Planning was 115 and they exceeded their target by 13 freshmen. From Fall 1990 to Fall 2002, enrollments in Industrial & Labor Relations increased 20 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. Despite these fluctuations Industrial & Labor Relations managed within 1 percent their Fall 2002 first-time freshmen objective of 145 by enrolling 147 students.

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, but Arts & Sciences also enrolls a significant number of new transfers each fall. Cornell's tradition in this regard sets us apart from our Ivy peers, some of whom enroll a modest number of transfer students or none at all. Transfer 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 2002, 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

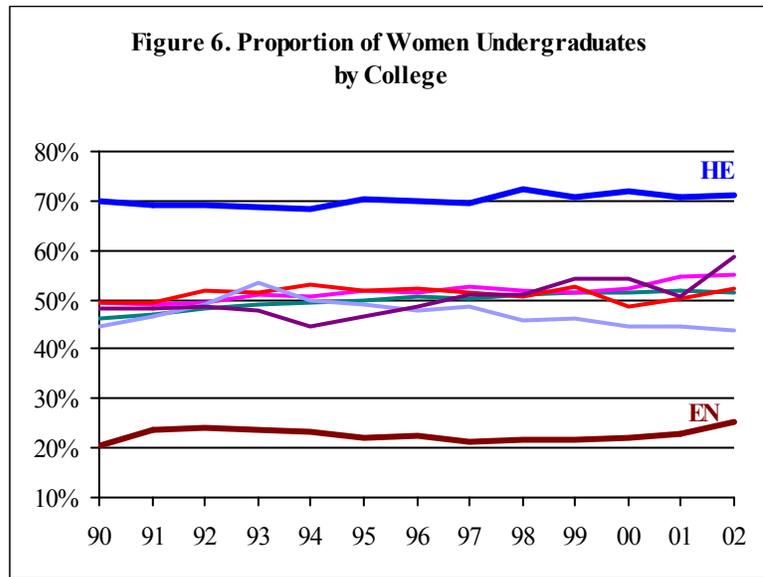


external transfers (40 percent) and in Fall 2002, 205 out of 555 external transfers (37 percent). For the other colleges (see Figure 5) the number of external transfers fluctuates from year to year. Regardless, the number of transfers into Arts & Sciences has been trending upward, and they have seen an increase from 70 external transfers in Fall 1990 to 94 in Fall 2002. Industrial & Labor Relations has more than doubled their external transfers from 29 external transfers in Fall 1990 to 65

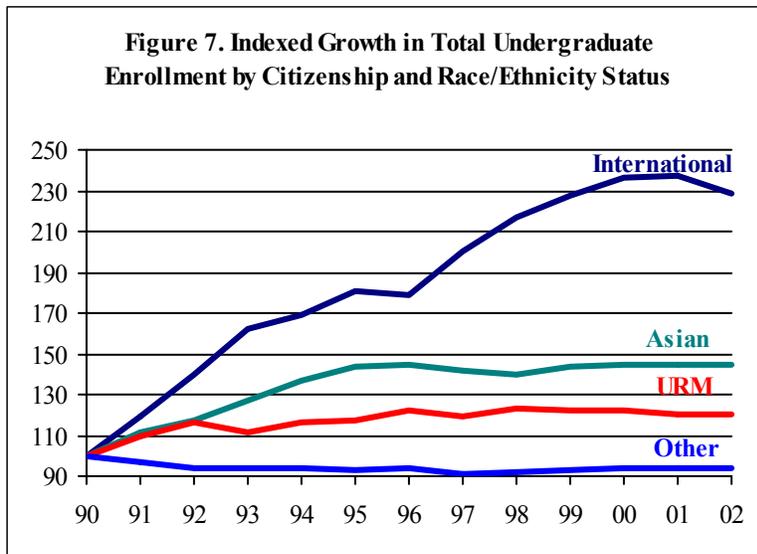
in Fall 2002. Engineering and Hotel Administration had increases in the 40 percent range, in external transfers between Fall 1990 and Fall 2002. Human Ecology experienced a marginal decrease from 85 external transfers in Fall 1990 to 83 in Fall 2002.

Even though the main focus for Fall 2002 has been on first-time freshmen enrollment, Cornell has been making progress on 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 2002. As Figure 6 demonstrates, two of the colleges have distinctly different patterns that have remained relatively unchanged over this period. The proportion of women among undergraduates in Human Ecology has remained between 68 and 72 percent from Fall 1990 to Fall 2002. Conversely, women have accounted for 20 to 25 percent of the students in Engineering in recent years; this percent has been trending upward.



The proportion of minorities among the undergraduate population<sup>3</sup> has grown from 22 percent in Fall 1990 to 29 percent in Fall 2002. Among all minority groups, the largest increase during this period has been among Asian American students growing from 1,559 in Fall 1990 to 2,258 in Fall 2002, (45 percent). The proportion of underrepresented minorities (URM: Native



Americans, Hispanic Americans, African Americans, and multi-racial indicating at least one underrepresented category) has grown by 20 percent from Fall 1990 to Fall 2002 (1,218 to 1,462 students respectively). The largest increase among URM students during this period has been among Hispanic Americans growing by 134 students (584 in Fall 1990 to 718 in Fall 2002), followed by 49 African American students (594 in Fall 1990 to 643 in Fall 2002) and 27 Native American students (40 in Fall

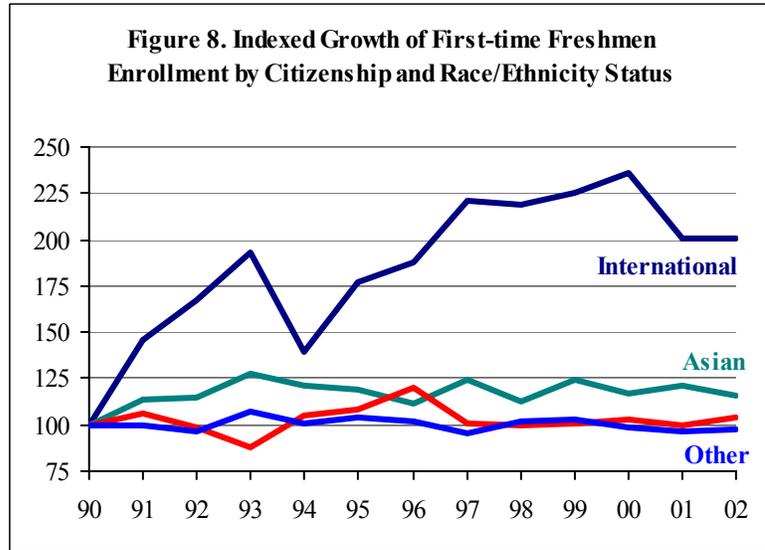
1990 to 67 in Fall 2002). For all other U.S. citizens (Caucasians and those who elected not to designate race/ethnicity information), enrollments declined 6 percent from 9,586 in Fall 1990 to 9,004 in Fall 2002. Over this same time period, the enrollment of international students increased from 438 to 1,001 students.

<sup>3</sup>Limited to U.S. citizens only; race/ethnicity data is not gathered and reported on international students.

Starting in Fall 2002, the Office of Undergraduate Admissions developed a new category to enhance the ability to track underrepresented minorities (URM) more similar 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.”

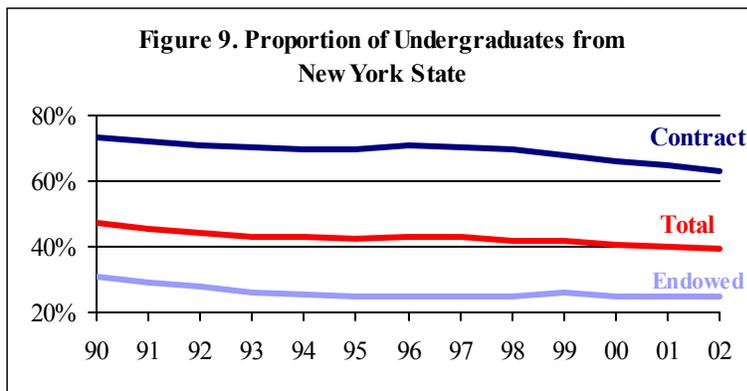
For first-time freshmen, the percentage of students within each race/ethnicity category remains relatively constant. Figure 8 shows that the proportion of underrepresented minorities (URM: Native Americans, Hispanic Americans, African Americans, and multi-racial indicating at least one underrepresented category)

has grown 4 percent from Fall 1990 to Fall 2002 (346 to 361 students respectively). With the exception of the new multi-racial URM category, between Fall 1990 and Fall 2002 the traditional categories of URM declined. African Americans accounted for the largest decline of 7 percent (12 students); Hispanic Americans decreased from 170 to 166 students, followed by Native Americans (12 to 9 students). Overall, progress is not improving with first-time freshmen



enrollment of underrepresented students. In the other categories, from Fall 1990 to Fall 2002, Asian Americans increased 16 percent (70 students) and international students increased from 99 students in Fall 1990 to 199 students in Fall 2002. Caucasians and those not reporting race/ethnicity have declined 3 percent (1,985 to 1,933 students from Fall 1990 to Fall 2002, respectively).

As part of planned recruitment efforts, the undergraduate student population has become more geographically diverse in both the



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 2002, in the Endowed colleges, proportions from the South and Southwestern

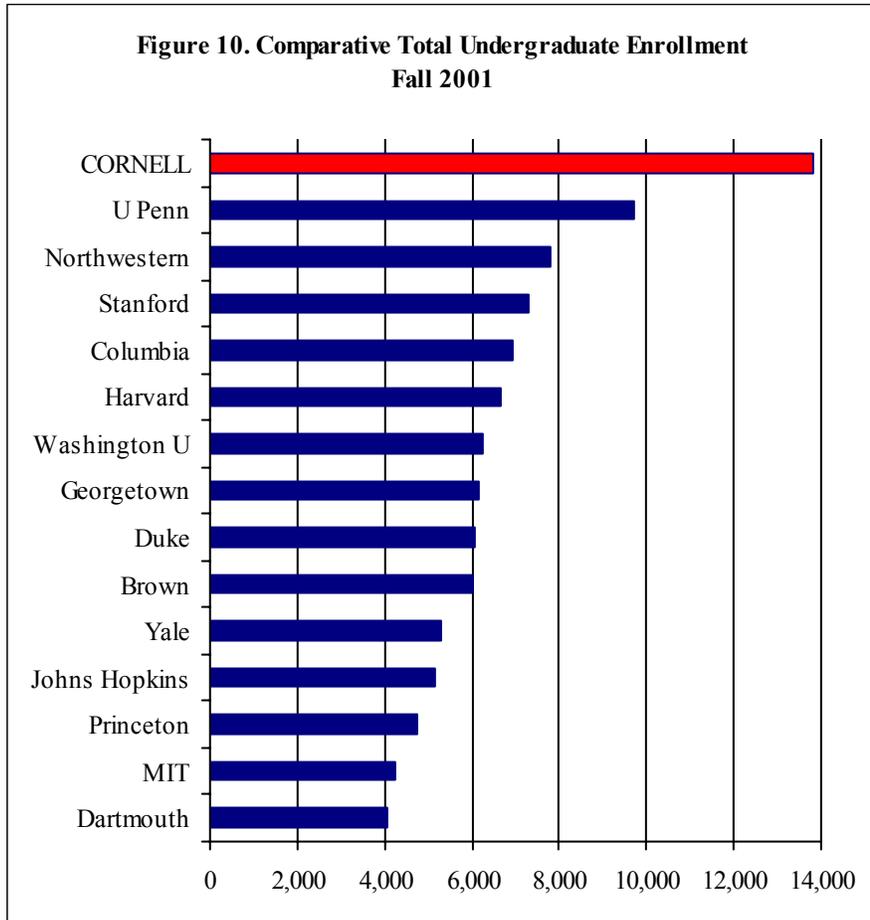
states have been stable with only a 1 percent or less increase; those coming from New England declined 2 percent; the Middle States and Midwestern regions decreased by less than 1 percent; and enrollments from the West and out of the country have increased between 3 and 4 percent,

respectively. During the same time period, enrollment in the Contract Colleges has been stable at the 1 percent or less increase from the New England, South and Southwestern states and students from out of the country. Proportions from the Middle Atlantic and the West increased 2 and 3 percent respectively.

### **Competitor Comparisons**

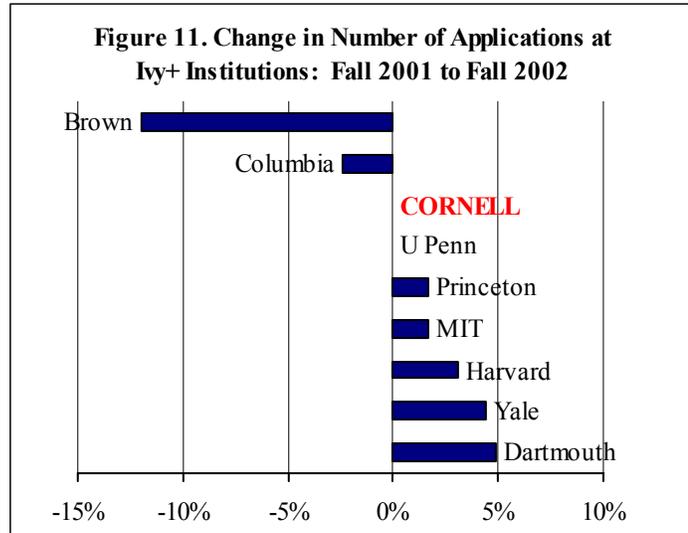
This section focuses on comparisons between Cornell and many of the “admissions overlap group” institutions for which we have a source of comparative data).<sup>4</sup> As Figure 10 makes clear, Cornell enrolls a larger

number of undergraduates than any of our comparators. With the exception of the University of Pennsylvania, Cornell has twice as many undergraduates as any other Ivy League school. Typically, freshmen account for approximately a quarter of the undergraduate population. Hence, while Cornell admits roughly 3,000 first-time freshmen each fall, our closest Ivy comparator, University of Pennsylvania, has an entering class of approximately 2,400, while Dartmouth, and MIT are admitting closer to 1,000 new freshmen each year.

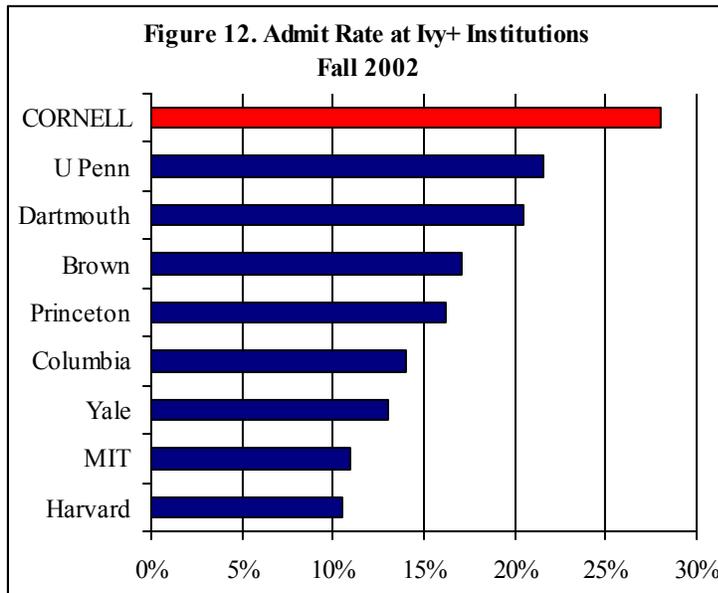


<sup>4</sup>Fall 2001 comparative data is the most recent information available. The 2002 data will not be available until much later in the semester. We were able to gain early release of information from Ivy League colleagues about their Fall 2002 entering freshman class.

As Figure 11 displays, all but three of the Ivy League institutions plus MIT saw an increase in the number of applications for admission between Fall 2001 and Fall 2002. Cornell's less than 1 percent decrease from 21,519 to 21,502 applications is relatively insignificant. However, it should be noted that Cornell experienced a 1 percent increase between Fall 2000 and Fall 2001, and Columbia saw an increase of 3 percent, while Yale and Dartmouth experienced a decrease of 1 and 3 percent respectively in their number of applications.



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 2001 to 28 percent for Fall 2002. Of our Ivy comparators plus MIT, in Fall 2002 the University of Pennsylvania experienced a 10 percent increase, Brown also had a 1 percent increase in admit rate, Columbia, Harvard and Yale showed no change or had less than a 1 percent decrease in admit rate and Dartmouth, Princeton and MIT saw a larger decrease in admit rate. 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 28 percent admit rate for Fall 2002 is the highest in the Ivy League plus MIT, which otherwise ranges from a low of 10 percent at Harvard to a high of 22 percent at University of Pennsylvania (see Figure 12). Among Cornell's seven undergraduate colleges, Architecture, Art & Planning had the lowest admit rate (27 percent) with Engineering having the highest (33 percent). Collectively, the Contract Colleges had an admit rate of 30 percent, and the Endowed colleges' admit rate was 28 percent for the incoming Class of 2006.

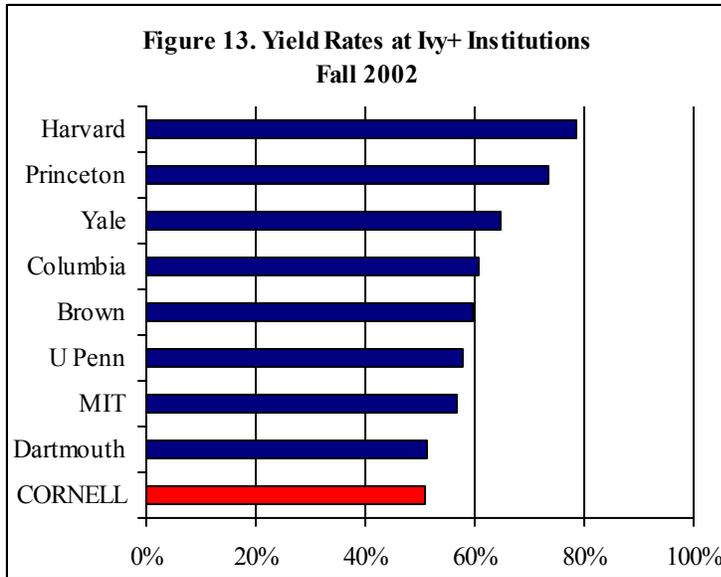
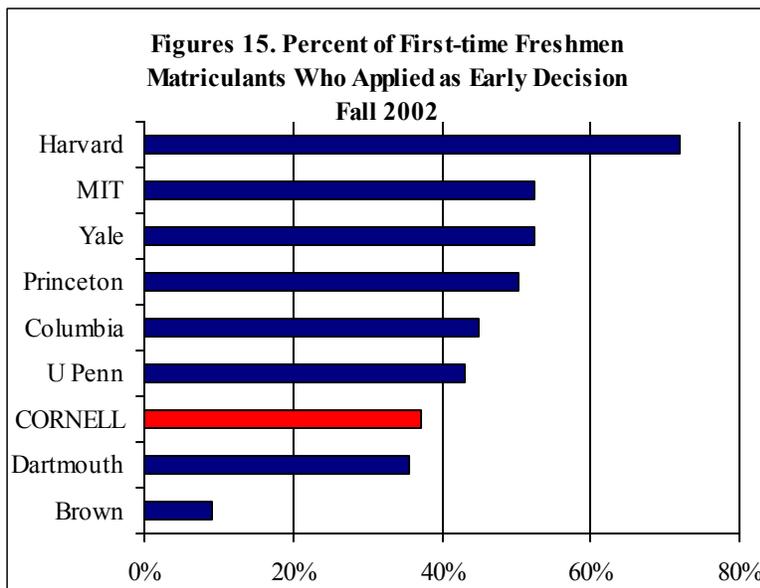
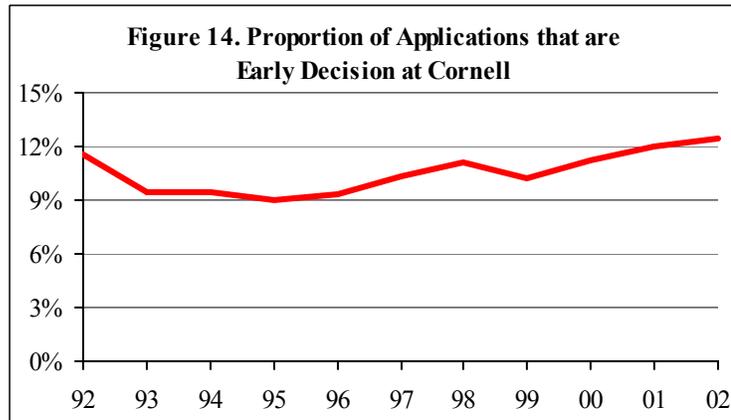


Figure 13 displays the Fall 2002 comparative yield rates – the proportion of students who accept an offer of admission divided by the total number of applicants who were admitted – for all Ivy League institutions plus MIT. Between Fall 2001 and Fall 2002, Cornell’s yield rate decreased from 52 percent to 51 percent. Among the other Ivy League institutions plus MIT, yield rates for Fall 2002 ranged from a low of 51 percent at Dartmouth and to a high of 79 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 2002 entering Class of 2006, 2,679 of 21,502 applicants applied via EDP. Nevertheless, the proportion of the entering class admitted through EDP has been steadily increasing. For Fall 2002, 37 percent of all first-time freshmen entering (1,120 of 3,003 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 72 percent, MIT and Yale enrolled 52 percent, Princeton enrolled 50 percent; and the Columbia and the University of Pennsylvania enrolled 45 and 43 percent respectively of their first-time freshmen through early decision/early action.

## **On the Horizon**

Maintaining a stable total undergraduate enrollment is becoming more 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. Despite the difficult process in managing toward the 3,000 target, the implementation of the undergraduate enrollment management guidelines in the past two years has been successful.

External transfer applications for fall semester admissions have decreased 7 percent during the period from 1990 to 2002. During the same period, the number of acceptances increased 22 percent, while yield has remained relevantly constant. As a result, transfer enrollment has grown over the past several years. With the North Campus Residential Initiative in place, the need for specific transfer admission and enrollment targets is critical. Currently a long-range enrollment plan for transfers that will develop specific transfer 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 sufficiently 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 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.

Most recently, our main emphasis was on the over enrollment of first-time freshmen. For Fall 2001 and Fall 2002, the seven undergraduate colleges were given a cumulative first-time freshman enrollment target of 3,000. 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.

Another immediate concern is the need to continue to face the consequences of continuing to over-enroll total undergraduates. Though this will naturally diminish as a consequence of meeting our 3,000 first-time freshmen target in succeeding years, additional efforts will be necessary to further refine strategies to stabilize enrollments.