

# UNDERGRADUATE ENROLLMENT TRENDS Fall 2001

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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 for 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.
- Discourage colleges from enrolling more than their targeted number of students.

Given the recent 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>. Although the models were not as predictive for the colleges of Arts & Sciences and Engineering, Arts & Sciences was able to meet its enrollment target with the waitlist. Engineering also aggressively utilized the waitlist, but their yield on admitted students proved to be lower than the university expected, and the waitlist was not sufficient to meet the first-year freshmen enrollment goal.

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.

<sup>&</sup>lt;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>&</sup>lt;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**

One challenge is implementing a cohesive enrollment management strategy, including more robust admit and yield models. However, for this inaugural year, the 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 were charged to refine their independent admissions processes to achieve a university first-time freshmen enrollment target of 3,000 students. They were successful with 2,988 first-time freshmen enrolling for Fall 2001 as of the third week of classes

Cornell continues to be challenged by multi-cultural recruitment. Overall, the percentage of students of color remains relatively constant. However we have yet to make significant progress with the enrollment of underrepresented minorities 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.

Continuing to enhance the selectivity of our undergraduate student population is also essential. This is linked to individual college recruitment plans, research on our prospect pool for targeted recruitment efforts in order to strategically increase the size and quality of our applicant pool, linking admissions efforts more pointedly with the commitment programs, and improving the yield on offers of admission.

#### **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 tensions among our teaching and infrastructure resources.

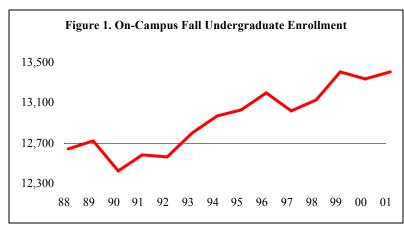
The current enrollment objective of the university focused intensely on a first-time freshman enrollment target of 3,000 students. More than ever, it is imperative to be disciplined about first-year enrollment targets with the opening of the new North Campus residential initiative.

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 is the major contributing factor and the one over which the institution has the greatest control. As a result of the new undergraduate enrollment management guidelines, the university admitted approximately 300 fewer freshmen applicants than in Fall 2000 and 700 fewer than in Fall 1999. This led to the anticipated and planned decrease in first-time freshmen enrollments as designated within the guidelines.

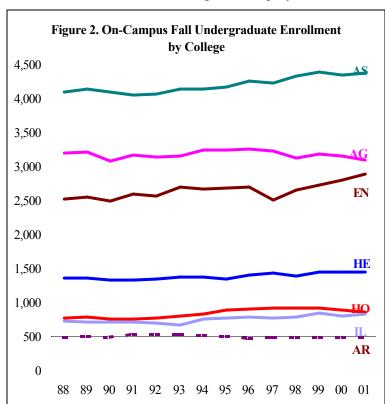
From Fall 2000 to Fall 2001, the accept rate dropped from 30.6 percent to 27.2 percent. However, the yield rate continued to increase from 51.1 percent to 51.9 percent over the same time period. As of the third week of enrollment in Fall 2001, Cornell enrolled 2,988 first-time freshmen, just 12 students short of the 3,000 first-time freshmen target.

## **Current Situation and Changes over Time**

Figure 1 indicates that oncampus undergraduate enrollment increased by 6.1 percent, or 769 students, between Fall 1988 and Fall 2001 (12,603 in Fall 1988 to 13,372 in Fall 2001). Slightly more than a third of this increase (276 students) occurred between Fall 1998 and Fall 1999.



The Endowed General Purpose Colleges accounted for 79 percent of the 6.1 percent increase from Fall 1988 to Fall 2001. Figure 2 displays Arts & Sciences (AS) with 280 more students in



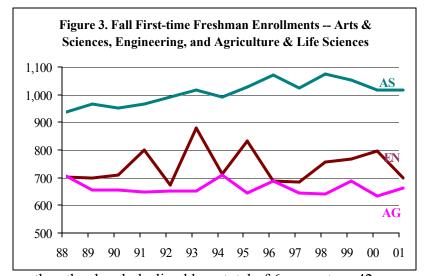
Fall 2001 than in Fall 1988: Engineering (EN) with 364 additional students; and Architecture, Art, & Planning (AR) with only 6 more students currently enrolled than in Fall 1988. The Contract Colleges accounted for 11 percent of the 6.1 percent total on-campus undergraduate enrollment increase from Fall 1988 to Fall 2001. Industrial and Labor Relations (IL) increased their enrollments by 100 students, Human Ecology (HE) increased by 86 students, and Agriculture & Life Sciences (AG) experienced a decrease of 96 students in their enrollments between Fall 1988 and Fall 2001. The remaining enrollment changes occurred in the Hotel School (HO), with a planned increase of

100 students, and the Internal Transfer Division (not pictured) where enrollments declined from 95 in Fall 1988 to 41 in Fall 2001.

Figures 3 and 4 display the results of the newly implemented first-year freshman enrollment plan as compared to prior first-time freshmen enrollments starting in Fall 1988. The enrollment plan was tested in Fall 2000 by the undergraduate colleges. As planned, the first-time freshman enrollment decreased from 3,162 in Fall 1999 to 3,054 in Fall 2000, and is currently at 2,988 in Fall 2001. 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 (over-enrolled due to higher than anticipated yield) and Engineering (under-enrolled as a result of lower than anticipated yield), the reminder of the undergraduate colleges were successful in managing within the bounds of their Fall 2001 first-time freshmen targets.

Figure 3 displays third-week freshman enrollments from Fall 1988 to Fall 2001 in the three largest colleges – Arts & Sciences, Engineering, and Agriculture & Life Sciences. The size of the incoming freshman class in Arts & Sciences increased fairly steadily from 918 in Fall 1988

to 997 in Fall 2001, a 9 percent increase. In Fall 2001, however, Arts & Sciences managed within 1 percent of their 990 target by enrolling 997 students. Engineering has experienced much volatility in their freshmen enrollment over the past several years including a high of 860 new freshmen in Fall 1993. For Fall 2001, Engineering fell short of enrolling their targeted 710 freshmen by 30 students. Freshman enrollments in



Agriculture & Life Sciences have, on the other hand, declined by a total of 6 percent, or 42 freshmen, between Fall 1988 (687) and Fall 2001 (645). However, for Fall 2001 Agriculture & Life Sciences exceeded their first-time freshmen objective of 635 by enrolling 645 students.

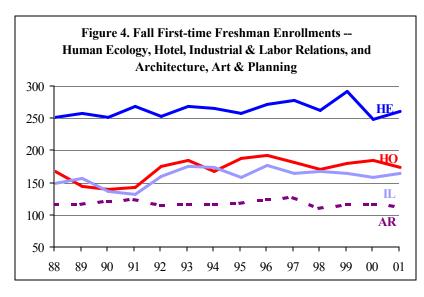
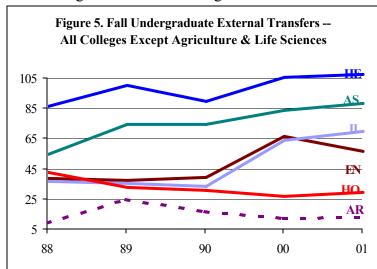


Figure 4 displays third-week fall first-time freshman enrollments from Fall 1988 to Fall 2001 in the other four undergraduate colleges. Both Human Ecology and Hotel Administration experienced a marginal 4 percent increase in freshman enrollments from Fall 1988 to Fall 2001. For Fall 2001, Human Ecology managed to their exact target of 245 freshmen, while Hotel

Administration enrolled 159 freshmen -- just missing their target of 160 freshmen. Freshman enrollments have been stable in Architecture, Art & Planning (116 in Fall 1988 and 113 in Fall 2001). The Fall 2001 freshmen goal for Architecture, Art & Planning was 115 and they enrolled 113 students. From Fall 1988 to Fall 2001, enrollments in Industrial & Labor Relations have increased 11 percent. However, Industrial & Labor Relations fluctuated from 134 students in Fall 1988 to a low of 116 students in Fall 1991 and another high of 162 students in Fall 1996. Despite these fluctuations, between Fall 1988 to Fall 2001, Industrial & Labor Relations exceeded their Fall 2001 freshmen target of 145 freshmen by only 4 students.

External transfers offer another option for strategically managing undergraduate upper-class enrollment. The majority of external transfers to Cornell arrive as sophomores or juniors. These students help to compensate for the modest amount of natural attrition of first-time freshmen, the small number of students completing their bachelor degree requirements in less than four years, and the increasing number of juniors and seniors participating in off-campus programs (study abroad, Cornell in Washington, the Engineering and Hotel co-op programs, Human Ecology's urban semester in New York City, etc.).

Between Fall 1988 and Fall 2001, between 35 and 44 percent of all incoming external transfers have annually enrolled in Agriculture & Life Sciences. In Fall 1988, this amounted to 186 out of 431 external transfers (43 percent) and in Fall 2001, 181 out of 523 (35 percent). The various affiliation agreements between Agriculture & Life Sciences and a number of SUNY campuses

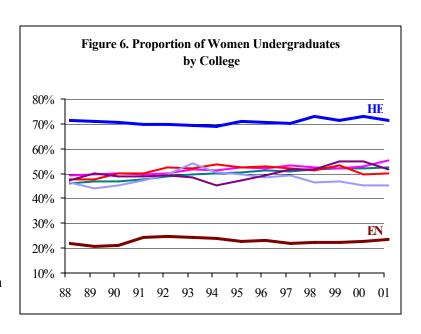


are one reason why such large proportions of transfers into the university enroll in this particular college. For the other colleges (see Figure 5) the number of external transfers fluctuates from year to year. Regardless, the number of transfers into Arts & Sciences has been trending upward as part of the total on-campus enrollment planning process, and they have seen an increase from 50 in Fall 1988 to 84 in Fall 2001. Industrial & Labor Relations experienced a doubling of their

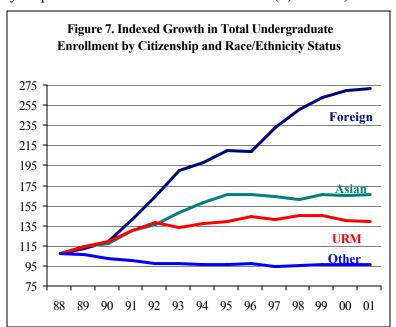
external transfers from 32 in Fall 1998 to 65 in Fall 2001. Engineering and Human Ecology had increases of 53 percent and 26 percent, respectively, in external transfers between Fall 1988 and Fall 2001. Hotel Administration experienced a decrease from 38 in Fall 1988 to 25 in Fall 2001.

Even though the main focus for Fall 2001 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 44.2 percent in Fall 1988 to 47.8 percent in Fall 2001. As Figure 6 makes clear, however, 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 1988 to Fall 2001. Conversely, women have accounted for only 20 to 24 percent of the students in Engineering.



The proportion of minorities among the undergraduate population<sup>3</sup> has grown from 20 percent in Fall 1988 to 29 percent in Fall 2001. Figure 7 indicates that the proportion of under-represented minorities (URM: Native Americans, Hispanic Americans, and African Americans) has grown by 32 percent from Fall 1988 to Fall 2001 (1,085 to 1,427 students respectively). The largest



growth during this period has been among Hispanic Americans growing by 233 students (507 in Fall 1988 to 740 in Fall 2001), followed by 87 African American students (535 in Fall 1988 to 622 in Fall 2001) and 22 Native American students (43 in Fall 1988 to 65 in Fall 2001). The number of Asian American students grew from 1,415 in Fall 1988 to 2,239 in Fall 2001, an increase of 58 percent. For all other U.S. citizens (Caucasians and those who elected not to designate race/ethnicity information), enrollments declined 12 percent from 10,053

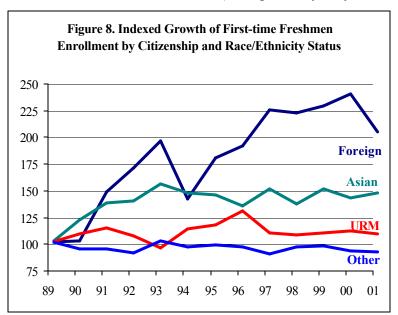
in Fall 1988 to 8,962 in Fall 2001. Over this same time period, the enrollment of foreign students increased from 390 to 1,030 students.

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

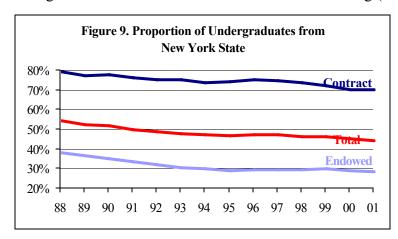
Overall, for first-time freshmen, the percentage of students within each race/ethnicity category remains relatively constant. Figure 8 shows that the proportion of underrepresented minorities (URM: Native Americans, Hispanic Americans, and African Americans) has grown by only

7 percent from Fall 1989 to Fall 2001 (322 to 346 students respectively). Between Fall 1988 and Fall 2001 Hispanic Americans accounted for the largest growth (from 157 to 177 students), followed by Native Americans (8 to 13 students). Even though African Americans declined 1 student from Fall 1989 to Fall 2001, they experienced a decline of 6 percent between Fall 1999 and Fall 2000. Overall, we are not making progress with first-time freshmen enrollment of underrepresented students. In the other categories, from Fall 1989 to Fall 2001, Asian



Americans increased 46 percent (167 students) and foreign students increased from 98 students in Fall 1989 to 199 students in Fall 2001. Caucasians and those not reporting race/ethnicity have declined 12 percent (2,111 to 1,911 students from Fall 1989 to Fall 2001, 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



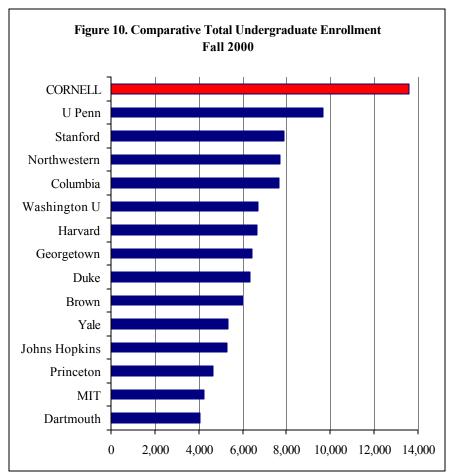
largest share of students in both the Endowed and Contract colleges. From Fall 1988 to Fall 2001, in the Endowed colleges, proportions from the Middle Atlantic, Midwestern, South and Southwestern states have been stable with only a 1 percent or less increase; those coming from New England have declined 3 percent; and enrollments from the West and out of the country have increased between 3 and 6 percent.

respectively. During the same thirteen-year period, enrollment in the Contract colleges has been stable from the Midwest, South and Southwestern states and students from out of the country. Proportions from the Middle Atlantic and the West increased 9 percent and 3 percent respectively. The only region slightly declining outside of New York State was the New England states (by only 1 percent).

# **Competitor Comparisons**

This section focuses on comparisons between Cornell and many of the "admissions overlap group" institutions for which we have a ready source of comparative data through our

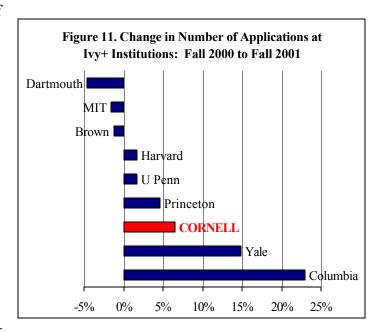
participation in the Consortium on Financing **Higher Education** (COFHE).<sup>4</sup> As Figure 10 makes clear, Cornell enrolls a larger number of undergraduates than any of our comparators. With the exception of the University of Pennsylvania, Cornell generally has at least twice as many undergraduates 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



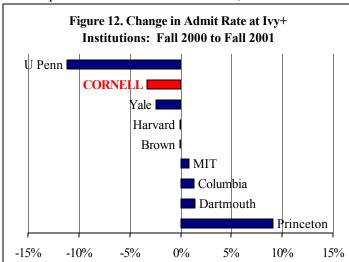
approximately 2,400, while Dartmouth, Princeton, and Columbia are admitting closer to 1,000 new freshmen each year.

<sup>&</sup>lt;sup>4</sup>Fall 2000 comparative data is the most recent information available from COFHE. The 2001 data from COFHE will not be available until much later in the semester. We were, however, able to gain early release of information from our Ivy League colleagues about their Fall 2001 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 2000 and Fall 2001. Cornell's increase from 20,199 to 21,519 (7 percent) significantly trailed the 23 percent increase experienced at Columbia (13,464 to 16,559 applications) and the 15 percent increase at Yale (12,887 to 14,809 applications). However, it should be noted that Cornell experienced a 2 percent increase between Fall 1999 and Fall 2000, and Columbia saw a similar increase of 3 percent, while Yale experienced a decrease of 3 percent in the number of applications.



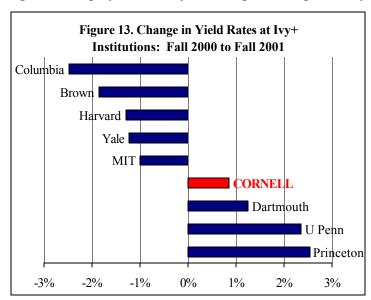
As indicated in Figure 12, Cornell's admit rate – the proportion of students offered admission divided by the total number of applicants – declined from 31 percent in Fall 2000 to 27 percent for Fall 2001. Of our Ivy comparators plus MIT, Princeton experienced a 9 percent increase, two had a 1 percent increase in admit rate, two showed no change and 3 -- including Cornell -- saw a



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 27 percent admit rate for Fall 2001 is the highest in the Ivy League plus MIT, which otherwise ranges from a low of 11 percent at Harvard to a high of 23 percent at

Dartmouth. Among Cornell's seven undergraduate colleges, Arts & Sciences had the lowest admit rate (23 percent) with Agriculture & Life Sciences having the highest (34 percent). Collectively, the Contract Colleges had an admit rate of 32 percent, and the Endowed colleges' admit rate was 26 percent for the incoming Class of 2005.

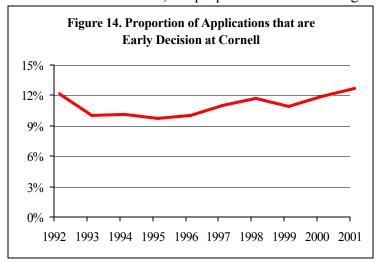
Figure 13 displays the one-year change in comparative yield rates – the proportion of students



who accept an offer of admission divided by the total number of applicants who were admitted – for all Ivv League institutions plus MIT. Between Fall 2000 and Fall 2001, Cornell's yield rate increased from 51 percent to 52 percent. A significant component of the increased yields depicted can be attributed to the increased number of students admitted via early decision or early action programs. Among the other Ivy League institutions plus MIT, yield rates for Fall 2001 ranged from a low of 51 percent at Brown and Dartmouth to a high of 78 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 2001 entering Class of 2005, 2,589 of 21,519 applicants applied via EDP. Nevertheless, the proportion of the entering

class admitted through EDP has been steadily increasing. For Fall 2001, 36 percent of all first-time freshmen entering (1,076 of 2,988 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: MIT admitted 57 percent, Columbia admitted 49 percent, Brown and the University of Pennsylvania admitted 43 percent,



and Yale admitted 40 percent. Cornell admitted 36 percent through the early decision program in filling the Fall 2001 first-time freshman class.

#### 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 new North Campus residential initiative and increased emphasis on the total undergraduate experience, there is an even 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 was an initial success.

External transfer applications for fall semester admissions have decreased during the ten-year period from 1990 to 2000. During the same ten-year period, the number of acceptances steadily increased, while yield has remained roughly 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 assign specific transfer admission and enrollment targets by college is under development. In spring 2002, a Transfer Admissions Advisory Committee will be convened to review policy issues related to transfer enrollment.

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 to make it possible to admit and matriculate a highly 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 savvy about marketing the institution, both to prospective students and the public at large.

Most recently, our main concern was the over enrollment of first-time freshmen. For Fall 2001, the seven undergraduate colleges were given a cumulative first-time freshman enrollment target of 3,000. As indicated earlier, total first-time freshman enrollment at Cornell for Fall 2001 is 2,988, only 12 students under target; this is the first time in four years we have been within 1 percent of the fall target. The undergraduate enrollment plan guidelines will 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 squarely face the consequences of continuing to over-enroll total undergraduates. Though this will naturally diminish as a problem as we continue to meet our 3,000 first-time freshmen target in succeeding years, additional effort will be necessary to further refine strategies to bring our enrollments into an equilibrium that is programmatically sound and fiduciarily responsible.