

CORNELL
UNIVERSITY

**FIFTH BIENNIAL REPORT
ON
FRESHMAN GRADUATION RATES
FALL 1980 - FALL 1989 ENTERING CLASSES**

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Executive Summary

- Of first-time freshmen that entered Cornell in Fall 1989, 89.4 percent earned a baccalaureate degree from one of the seven undergraduate colleges within six years of their matriculation. This is an increase of nearly seven percentage points over the freshman class that entered in Fall 1980. (See pages 3-4.)
- The proportion of students who initially enter Cornell as first-time freshmen and do not complete a degree at Cornell has decreased from 17 percent for those who entered in Fall 1980 to 10 percent for the Fall 1989 entering class. (See page 8.)
- The proportion of students who graduate early -- that is prior to the spring semester of what would be their fourth year at Cornell -- is gradually increasing (see Figure 3). The proportion graduating early among those who entered in Fall 1989 was 4.5 percent, the highest rate since Fall 1981 when 5.6 percent graduated early. (See page 4.)
- Six year graduation rates vary by the college in which students matriculate, though graduation rates have been increasing for those entering each of Cornell's seven undergraduate colleges. (See pages 4-5.)
- Not all students who enter Cornell as first-time freshmen graduate in the same college in which they matriculate. The patterns of internal transfer have remained relatively stable over the period of time under investigation. The Colleges of Architecture, Art, and Planning; Engineering; and Human Ecology experience the greatest amount of out-migration, while the Colleges of Arts and Sciences and Agriculture and Life Sciences gain the most internal transfers. (See pages 5-6.)
- For those students who entered Cornell as first-time freshmen in Fall 1980 there was a gap of approximately 20 percentage points between Black, Hispanic, and Native American students whose six year graduation rate was approximately 68 percent and the approximately 87 percent graduation rate among Asian and White students. By the entering class of Fall 1989, this gap had been reduced to about 10 percentage points, and all five groups had seen gains in their individual six-year graduation rates. (See pages 6-8.)

Methodology

Population

The population of interest for this study is first-time freshman matriculants (with no prior transfer work) who were initially enrolled at Cornell in the Fall term of 1980, 1981, 1982, 1983, 1984, 1985, 1986, 1987, 1988, or 1989. Entering classes are identified by when they first entered the university. Transfer students -- those who come to Cornell from another college or university -- are excluded from this study.

Principal Concept and Study Design

The retention concept underlying this report is based on a six-year period from the point a student first matriculated at one of Cornell's seven undergraduate colleges to the time of graduation. The methods employed in this research design are similar to those employed in retention research completed in many national studies.

The research behind this report was conducted so that students who graduate within four, five, or six years can be distinguished. Students who did not graduate from any of Cornell's seven undergraduate colleges within six years of entering are classified in the attrition group.

A year is delineated in terms of the academic calendar and comprises the Fall and Spring semesters and the Summer term. Students appearing in the four-year rate are those receiving degrees earlier than whichever Fall semester would signify the start of their fifth year. The single exception is in the College of Architecture, Art, and Planning where students enrolled in five-year programs have their time-to-degree window extended by a year. For example, students in five-year degree programs who graduate before the beginning of their sixth year are included among the four-year degree recipients. This was done in the interest of comparability since these students have made the same progress toward their degrees as those candidates for degrees normally requiring only four years of study.

In addition, information on students who graduate "early" -- before the Spring semester of what would normally be their senior year is presented. As well, graduation rate information drawn from *US News & World Report's* annual *America's Best Colleges* is included to help put Cornell's graduation rates into a larger context.

Analysis

Overall Graduation Rates

Of first-time freshmen that entered Cornell in Fall 1989, 89.4 percent earned a baccalaureate degree from one of the seven undergraduate colleges within six years of their matriculation.

This is an increase of nearly seven percentage points over the freshman class that entered in Fall 1980 (see Figure 1). In addition to the Fall 1989 entering class, the three other most recent entering freshman classes that have had six years to complete a bachelors degree have all seen approximately 90 percent of their numbers complete a Cornell degree within six years --

90.1 percent for those who entered in Fall 1986, 89.7 percent for those entering in Fall 1987, and 91.9 percent for Fall 1987.

As Figure 2 indicates, the majority of this increase in graduation rates from the entering class of Fall 1980 to Fall 1989 can be accounted for by the increase in the number of students who are earning degrees in four years. For the Fall 1980 entering class 72.8 percent earned a Cornell degree in four years, while the Fall 1989 entering class saw

80.3 percent of their number earning their degree in four years. The proportion of first-time freshmen earning a degree in five years remained essentially constant between the Fall 1980 (8.5 percent) and Fall 1989 (8.2 percent) entering classes. Those needing a sixth year to complete their degree requirements decreased slightly from 1.6 percent among the Fall 1980

Figure 1. Six-Year Graduation Rates for First-Time Freshmen Entering Classes Fall 1980 - Fall 1989

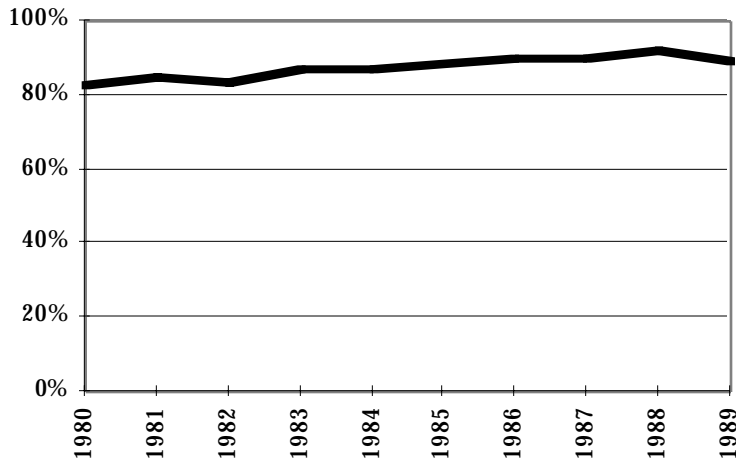
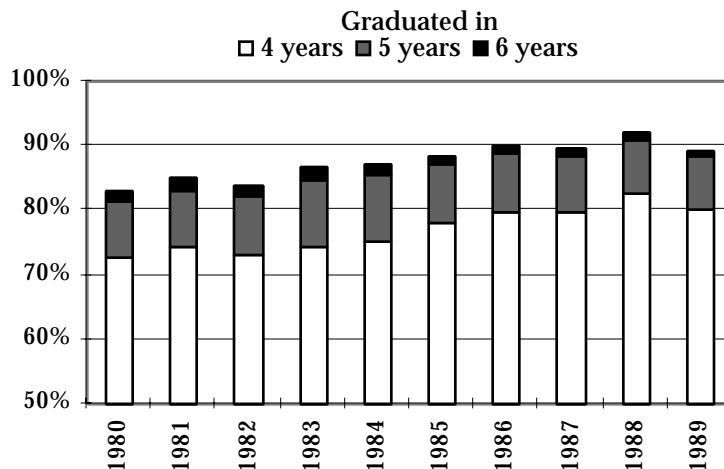


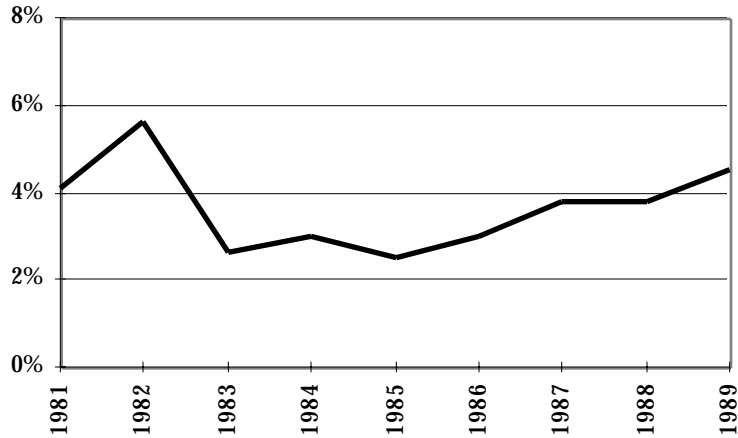
Figure 2. Four-, Five-, and Six-Year Graduation Rates for First-Time Freshmen Entering Classes Fall 1980 - Fall 1989



entering class to 0.9 percent in Fall 1989.

The proportion of students who graduate early -- that is prior to the spring semester of what would be their fourth year at Cornell -- is gradually increasing (see Figure 3). The proportion graduating early among those who entered in Fall 1989 (4.5 percent) is beginning to approach the rates seen among those who entered Cornell in Fall 1981 (5.6 percent).

Figure 3. Proportion of First-Time Freshmen Who Graduate in Less than Four Years Entering Classes Fall 1980 - Fall 1989

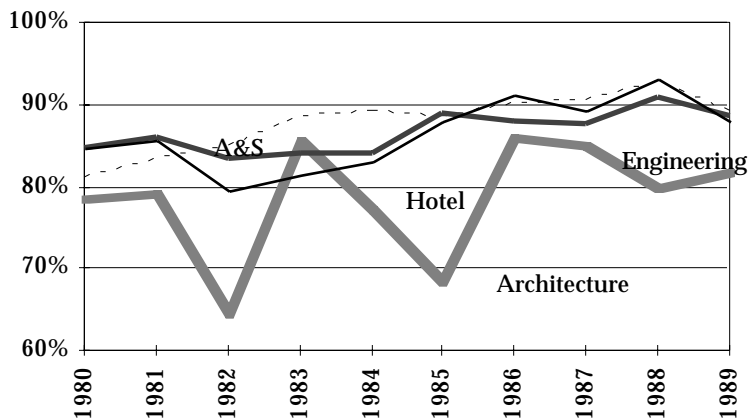


Graduation Rates by College

Six year graduation rates vary by the college in which students matriculate, though the rates have been increasing for those entering each of Cornell's seven undergraduate colleges. For instance, as depicted in Figure 4, the trend in graduation rates among the four endowed colleges is clearly positive. For students entering the College of Arts and Sciences in Fall 1980 81.3 percent earned a degree from Cornell within six years. For the Fall 1989 entering class that proportion had increased to 89.4 percent. Similarly, the College of Engineering saw an increase from 84.6 percent to 88.6 percent and the proportion of first-time entering freshmen to the School of Hotel Administration who graduated from Cornell increased from 84.8 percent to 87.9 percent.

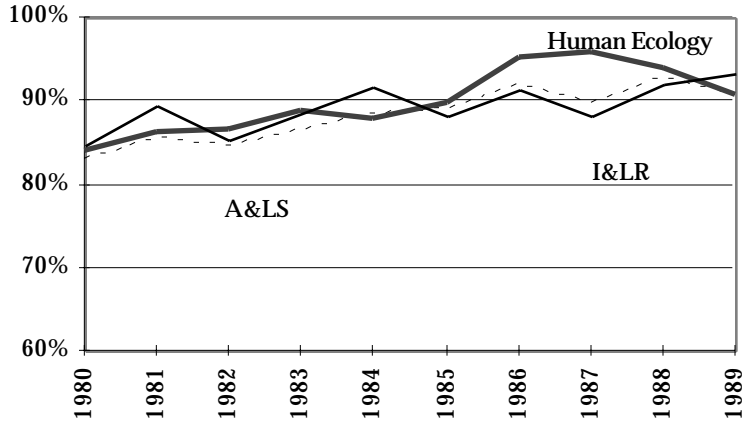
While six year graduation rates in the College of Architecture, Art, and Planning are lower than in the other endowed colleges and were more volatile among those classes

Figure 4. Six-Year Graduation Rates for First-Time Freshmen Matriculating in the Endowed Colleges Entering Classes Fall 1980 - Fall 1989



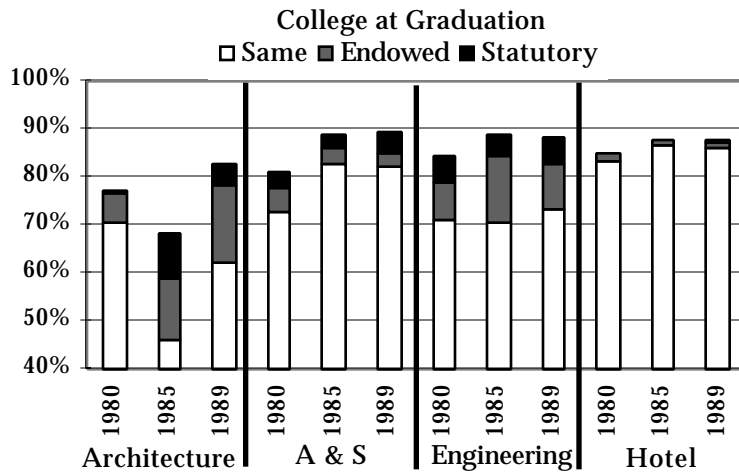
entering in the early part of the decade, the graduation rate trend is still positive with an increase from 78.5 percent in 1980 to 81.9 percent in 1989. Six-year graduation rates peaked among students entering the College of Architecture, Art, and Planning in Fall 1983 (85.7 percent) and Fall 1986 (86.0 percent), while Fall 1982 (64.4 percent) and Fall 1985 (68.6 percent) were valleys.

Figure 5. Six-Year Graduation Rates for First-Time Freshmen Matriculating in the Statutory Colleges Entering Classes Fall 1980 - Fall 1989



Similarly, six-year graduation rates for students who initially enrolled in one of Cornell's statutory colleges also saw noticeable increases between freshman classes entering in Fall 1980 and Fall 1989 (see Figure 5). Among students entering the College of Agriculture and Life Sciences six-year graduation rates increased from 83.2 percent in Fall 1980 to 90.6 percent in Fall 1989. Students who matriculated in the College of Human Ecology in Fall 1980 graduated at a rate of 84.0 percent while the proportion of those who entered in Fall 1989 was 90.7 percent (with peak graduation rates of 95.3 percent among the Fall 1986 entering class and 96.0 percent for Fall 1987). Students who enrolled in the School of Industrial and Labor Relations in Fall 1989 boasted the highest graduation rate that year of 93.4 percent, an increase from 84.7 percent for the 1980 entering class.

Figure 6. Internal Transfer Patterns and Six-Year Graduation Rates for Endowed College First-Time Freshman Matriculants Entering Classes Fall 1980, Fall 1985, and Fall 1989



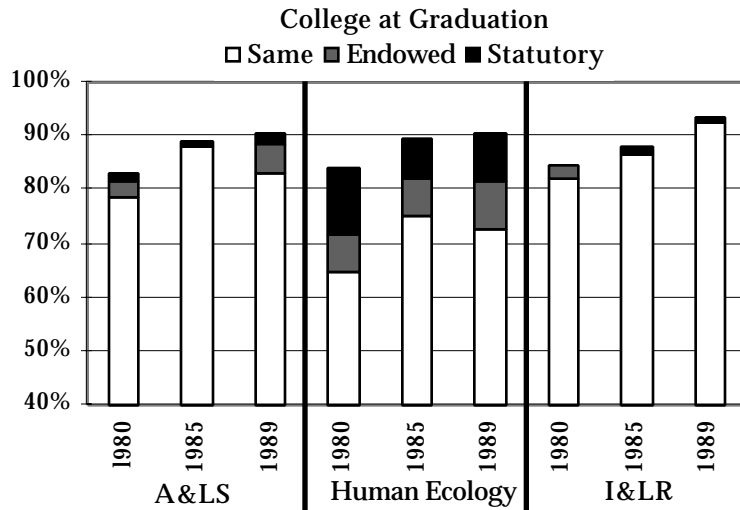
Not all students who enter Cornell as first-time freshmen graduate in the same college in which they matriculate. The patterns of internal transfer have remained relatively stable over the period of time under investigation, but are nevertheless interesting. For

instance, among the endowed colleges (see Figure 6), there is a considerable amount of transferring to other colleges among students who initially enter both the College of Architecture, Art, and Planning and the College of Engineering while there is virtually none among students who matriculate in the School of Hotel Administration.

Nearly one-fifth of the students who entered the College of Architecture, Art, and Planning in Fall 1989 (23 of 116 total matriculants) earned their degree from another college, and 61 percent of these students completed their degrees in the College of Arts and Sciences. For students who matriculated in the College of Engineering in Fall 1989, 15.9 percent (107 of 675 students) earned their degree from another college with 54 percent getting a degree from Arts and Sciences and 30 percent from Agriculture and Life Sciences. The proportion of students initially enrolled in Arts and Sciences in Fall 1989 who completed their degree elsewhere was 7.2 percent and 1.6 percent for the School of Hotel Administration.

Among the statutory colleges there are also strikingly different patterns of internal transfer that have remained fairly consistent over this ten-year period (see Figure 7). A considerable number of students transfer out of the College of Human Ecology (18 percent in 1989), a more modest amount transfer out of the College of Agriculture and Life Sciences (7.3 percent in 1989), and virtually no one transfers out of the School of Industrial and

Figure 7. Internal Transfer Patterns and Six-Year Graduation Rates for Statutory College First-Time Freshman Matriculants Entering Classes Fall 1980, Fall 1985, and Fall 1989



Labor Relations (0.8 percent in 1989). Students who transferred out of the College of Human Ecology from the Fall 1989 entering class who still earned a Cornell degree were most likely to transfer to the College of Agriculture and Life Sciences (44 percent) or the College of Arts and Sciences (42 percent).

Graduation Rates by Racial/Ethnic Group

When looking at graduation rates among racial/ethnic groups at Cornell over this ten year time frame we also see that the trends are positive (see Figure 8). For those students who entered Cornell as first-time freshmen in Fall 1980 there was a gap of approximately 20 percentage points between Black, Hispanic, and Native American students whose six year graduation rate was approximately 68 percent and the

approximately 87 percent graduation rate among Asian and White students. By the entering class of Fall 1989, this gap had been reduced to about 10 percentage points, and all five groups had seen gains in their individual six year graduation rates.

The volatility in six-year graduation rates among Native American students can be attributed primarily to the very small numbers in each

entering class. This has ranged from a low of 3 in the Fall 1983 entering class to a high of 16 in Fall 1984. Nevertheless, beginning with the Fall 1986 entering class the number of Native American students entering Cornell as first-time freshmen each Fall have become somewhat more stable (eleven in Fall 1986 and 1987, nine in Fall 1988, and 12 in Fall 1989). The trend in the six-year graduation rate has also become more consistently positive (45.5 percent in Fall 1986, 63.6 percent in Fall 1987, 66.7 percent in Fall 1988, and 77.8 percent in Fall 1989).

Among the four other racial/ethnic groups, six-year graduation rates for Blacks increased from 64.6 percent for those entering in Fall 1980 to 74.2 percent in Fall 1989; Hispanics increased from 69.8 percent to 81.0 percent; Asians from 86.8 percent to 90.5 percent; and Whites from 87.1 percent to 91.1 percent.

While Black and Hispanic students are more likely to take five or six years to complete their degrees than Asian or White students (see Figure 9),

Figure 8. Six-Year Graduation Rate Trends by Racial/Ethnic Category for First-Time Freshmen Entering Classes Fall 1980 - Fall 1989

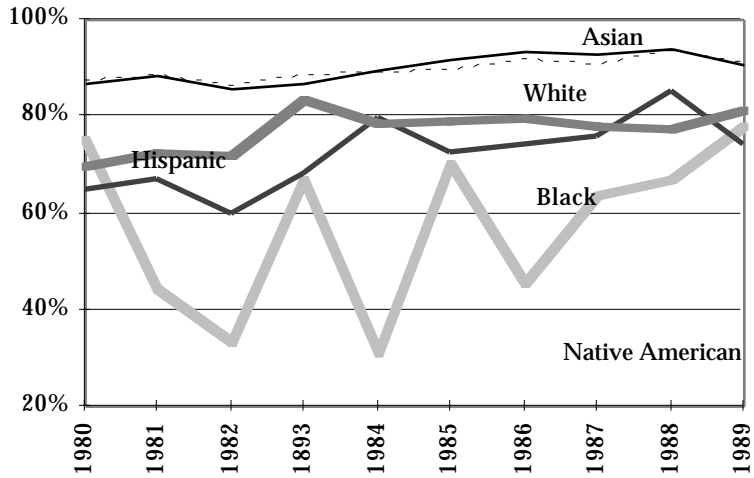
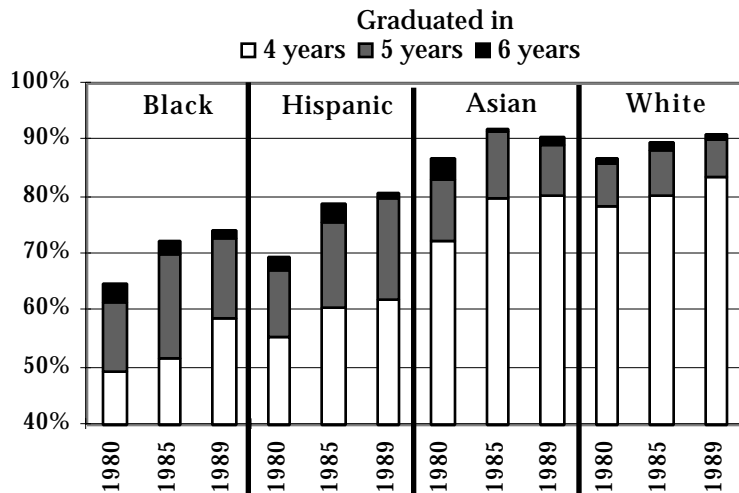


Figure 9. Four-, Five-, and Six-Year Graduation Rates for Black, Hispanic, Asian, and White First-Time Freshmen Entering Classes Fall 1980, Fall 1985, and Fall 1989



the increase in the total proportion of students graduating within six years seems generally more attributable to the increase in students completing their degree requirements in four years.

Attrition Group

The proportion of students who initially entered Cornell as first-time freshmen who do not complete a degree at Cornell within six years of matriculation has decreased from 17 percent for those who entered in Fall 1980 to 10 percent for the Fall 1989 entering class (see Figure 1).

Within this diminishing number of students who make up each entering class's attrition group, the proportion who are in good academic standing at the completion of their last semester of enrollment is increasing (see Figure 10). Among those 2,785 students who entered Cornell as first-time freshmen in Fall 1980 a total of 477 did not earn a degree within six years of matriculation; 56.7 percent of those students (275) were in good academic standing. For Fall 1989, the number of students in the attrition group dropped to 299 out of an entering class of 2,809. Correspondingly the number of those in good academic standing had decreased to 202, yet their proportion of the attrition group increased to 67.6 percent.

As Figure 11 indicates, when comparing the proportion of the Fall 1989 entering class who left Cornell prior to completing a degree by the college in which the students matriculated, there is variability which is primarily a product of the size of the entering class in each college. Nevertheless, more than three-fourths of the attrition group in both Architecture, Art,

Figure 10. Academic Standing of First-Time Freshmen in the Attrition Group Entering Classes Fall 1980 - Fall 1989

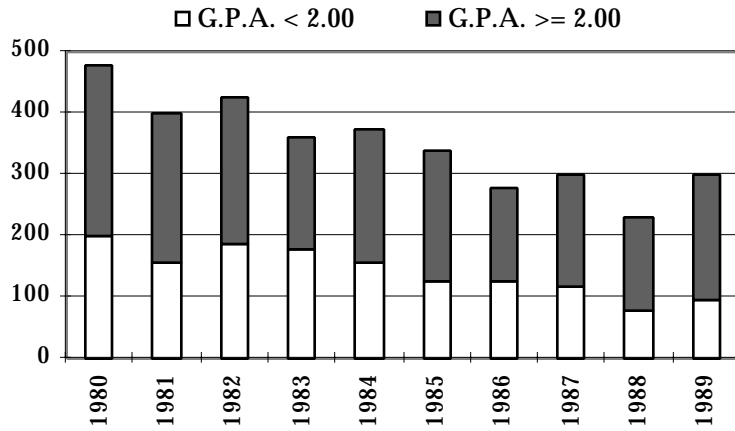
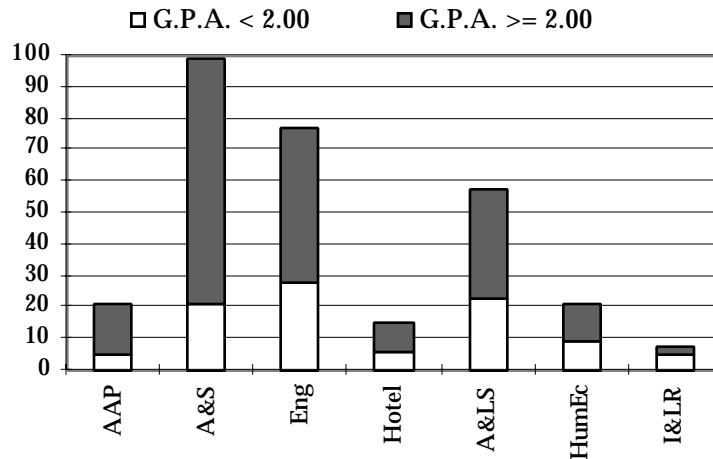


Figure 11. Academic Standing of Fall 1989 First-Time Freshmen In the Attrition Group By College of Matriculation



and Planning (76.2 percent, 16 of 21) and Arts and Sciences (78.8 percent, 78 of 99) were in good academic standing as of the last semester they were enrolled. At the other extreme, only 37.5 percent (3 of 8) of the Industrial and Labor Relations' Fall 1989 attrition group were in good academic standing.

Inter-Institutional Comparisons

Consistently reliable graduation rate information covering the time period under consideration in this study for the full set of institutions that constitute Cornell's common application and admission overlap group is not easily accessible. One proxy for such data is found in the annual *America's Best Colleges* guide published

**Table 1. Change in Graduation Rates
for Cornell University and its
Application and Admission Common Overlap Group
Source: USN&WR's Annual *America's Best Colleges* Guide¹**

	1991	1992	1993	1994	1995	1996	
Binghamton	67%	70%	72%	75%	77%	79%	12%
Michigan	77%	79%	80%	83%	84%	85%	8%
Cornell	83%	85%	86%	88%	90%	90%	7%
Northwestern	82%	84%	87%	88%	89%	89%	7%
Harvard	90%	93%	95%	97%	97%	97%	7%
Stanford	88%	89%	89%	92%	93%	93%	5%
MIT	86%	87%	89%	90%	91%	91%	5%
Virginia	88%	88%	89%	91%	92%	92%	4%
Penn	86%	87%	88%	89%	90%	90%	4%
Duke	91%	92%	93%	93%	94%	95%	4%
Brown	90%	90%	91%	94%	94%	94%	4%
Yale	93%	92%	93%	95%	95%	96%	3%
Princeton	93%	93%	94%	95%	95%	95%	2%
Johns Hopkins	86%	87%	87%	88%	87%	87%	1%
Dartmouth	95%	95%	95%	95%	95%	95%	0%
Columbia	90%	90%	90%	90%	95%	88%	-2%

each fall by *U. S. News & World Report*. For the past six years they have collected and displayed a graduation rate figure for each institution included in their rankings.

Table 1 displays reported graduation rates for Cornell and the fifteen institutions that make up its common application and admission overlap group. Note in particular that except for SUNY Binghamton and the University of Michigan --

¹The 1991 rate is the average five-year graduation rate for freshmen entering Fall 1982 - Fall 1984. The 1992 rate is the average five-year graduation rate for freshmen entering Fall 1983-Fall 1985. The 1993 rate is the average five-year graduation rate for freshmen entering Fall 1983-1986. The 1994 rate is the average six-year graduation rate for freshmen entering Fall 1983-1986. The 1995 rate is the average six-year graduation rate for freshmen entering Fall 1984-1987. The 1996 rate is the average six-year graduation rate for freshmen entering Fall 1985-1988. The last column of the table displays the arithmetic difference between the 1996 rate and the 1991 rate.

which had substantially lower initial graduation rates -- Cornell, Northwestern, and Harvard have experienced the largest net growth in graduation rates.