



The Size of Our University

Rice University's Vision for the 2nd Century
Spring 2006

Understanding the Size of Our University

On December 15, 2005, the Rice University Board of Trustees unanimously approved an increase in undergraduate enrollment by approximately 30% over the next decade.

The Call to Conversation suggested that the size of our university, while in some ways a strength, may in fact be too small and an important obstacle to further achievement. The distinction of a university depends primarily on the quality of its faculty and students. However, its national and international reputation is also built by its visibility and reach—a larger presence of its research endeavors, a broader alumni base which achieves “critical mass” in locations around the globe, expanded networks and opportunities for its students, and a dynamic diversity and active sense of engagement on the campus itself. This document describes Rice’s competitive position,* reflects on our historical development, and summarizes the comments and concerns raised by our various constituencies about preserving Rice values in the context of growth.

As the trustees have decided, we must grow the size of the university to realize more fully our ambition as an institution of national and international distinction, one that is able to attract students and researchers from around the globe. Rice’s undergraduate enrollment will be expanded to approximately 3,800 students within the next seven to 10 years. This growth must be carefully planned and occur in ways that preserve the distinctive features of our culture and campus, including the recruitment of undergraduate students of the highest caliber whose experience is characterized by direct interactions with faculty, and residential life in the colleges.

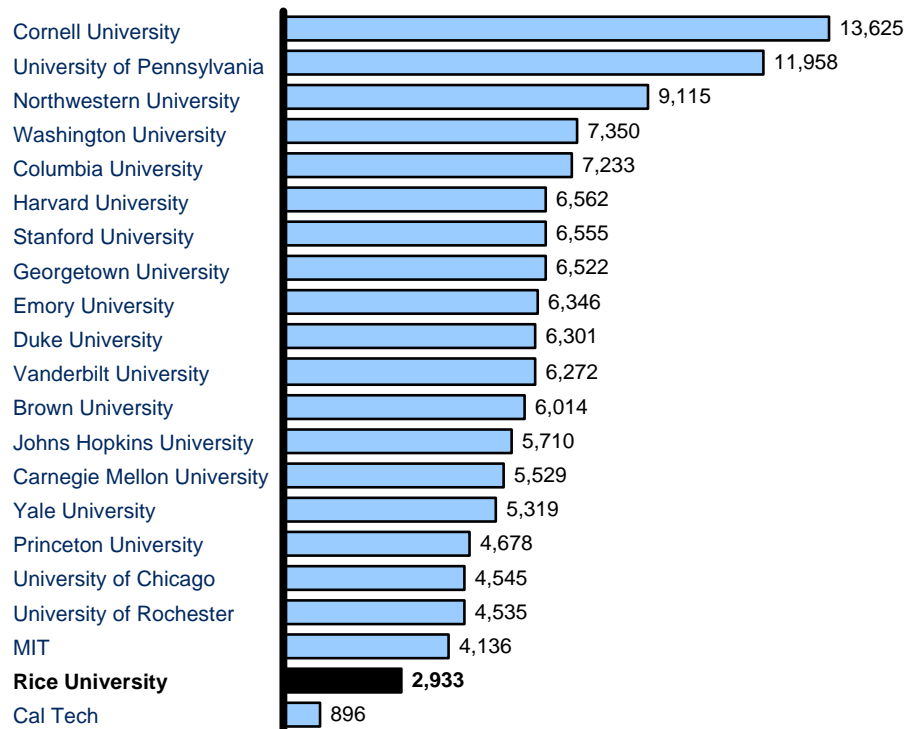
As we move forward, our decisions must be informed by a strong sense of preserving those distinctive features of our culture and community, but we must also be cognizant of the competitive landscape. Our plans for growth must preserve important values such as the direct access our students have to faculty and the residential experience of the college system. The quality of our student body must be maintained as we grow, and the coherence and attractiveness of our campus must guide our decisions as we move forward.

“I agree with the assessment that Rice needs to grow both undergraduate and graduate populations to remain competitive. That being said, an overarching concern in this endeavor should be to preserve the amazing sense of community that Rice currently enjoys, especially among undergraduate students.”
—Alum

*We identified as our peers the private institutions of the Association of American Universities (AAU), the nation’s most prestigious research universities, which include in addition to Rice: Brandeis, Brown, the California Institute of Technology, Carnegie Mellon, Case Western Reserve, Columbia, Cornell, Duke, Emory, Harvard, Johns Hopkins, MIT, New York University, Northwestern, Princeton, Stanford, Syracuse, Tulane, University of Chicago, University of Pennsylvania, University of Rochester, University of Southern California, Vanderbilt University, Washington University in St. Louis, and Yale.

In a comparison with other private institutions in the Association of American Universities, Rice is the second smallest school, larger only than the California Institute of Technology, which is a comparatively focused research institute with a very small undergraduate program (approximately 900 students). Even with an increase to approximately 3,800 undergraduates, Rice would maintain its position as the second smallest member of the AAU. Even as we plan for this relatively modest increase, our peers are continuing to grow. Princeton recently announced plans to increase its undergraduate enrollment from 4,600 to 5,200. Columbia has increased its enrollment by about 20 percent in the last decade, and the University of Chicago increased its enrollment from 3,500 to 4,500 (28%) in the last seven years.

Figure 1. Undergraduate Enrollment at Select AAU Universities (2004)



“I do believe that Rice needs a larger undergraduate population. I almost did not even apply to Rice because I thought it was too small.

“Although the size is nice in some respects because classes are generally small, there are more disadvantages than advantages to our size.”

—Undergraduate Student

Taking a Historical Perspective on Rice's Growth

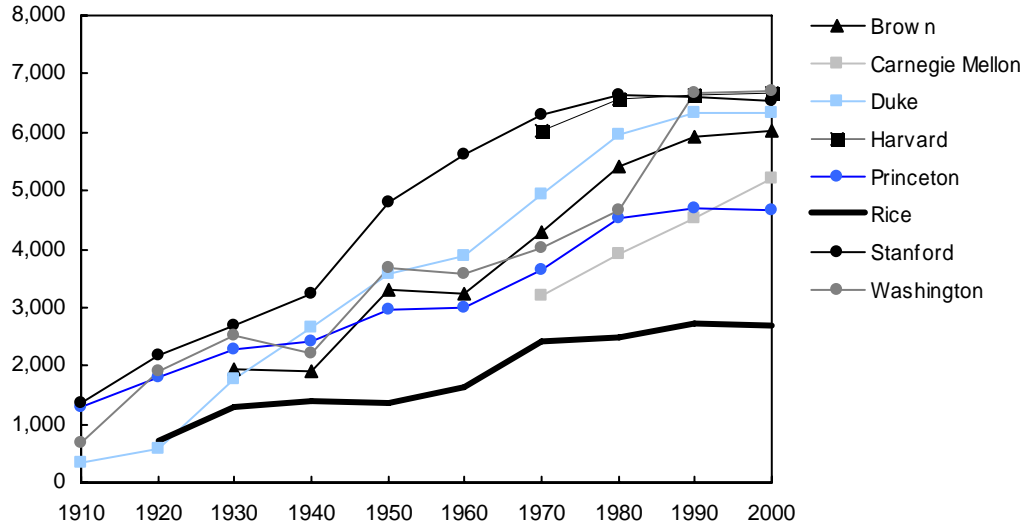
Over the last century, Rice's growth has diverged markedly from that of its peers, as illustrated in the chart below. It grew rapidly in its early years as the institution established itself in Houston and grew very little from 1930 until 1960. Our university underwent a growth spurt larger than the one contemplated here in the decade between 1960 and 1970, when it increased its undergraduate population by approximately 50 percent, from about 1,600 to 2,400 students. Since 1970, Rice's undergraduate enrollment has remained relatively flat.

Other universities have adopted very different growth strategies. As a result, the comparatively small difference in size that existed earlier in the last century has become much greater, and this could become even more pronounced in the years ahead. Such a dramatic size differential has the capacity to convey not simply that we are distinctive, but that we are not "in the same league" as the other major private research universities. Furthermore, Rice's relatively flat enrollment since 1970 has not kept pace with the growth of our city or our state, which poses challenges to our visibility, even in our immediate vicinity. Harris County, for example, tripled in population between 1930 and 1960, and it has tripled again since then.

"We have become so small compared with our peers that we have become increasingly irrelevant. With so few alumni we generate little visibility outside of Texas . . . state institutions continue to grow, and it is increasingly difficult to compete successfully against these larger programs for graduate students, grant money, and national recognition. . . . Houston is huge and growing. Rice must as well."

—Faculty

Figure 2. Undergraduate Enrollment Growth by Decade for Select Schools



"One reason to increase the student body is Houston and the whole country have expanded significantly over the past decades, and Rice has not changed with it. The changing ratio of students to population squeezes our ability to educate a reasonable segment of the population to the level that would help the community."

—Alum

Growth as a Strategy to Build a More National Student Body

We must think strategically about the geographic composition of our student body and how that composition reflects our ambition to be a university of national and international reach. Comparing the percentage of entering freshmen in 2004 by in-state residence shows that Rice differs greatly from our peer schools in the northeast (Figure 3), other universities based in the southern United States (Figure 4), and institutions in other highly populated states, including California and New York (Figure 5). Our in-state percentage in 2004 was significantly higher than all of the AAU competitor schools we examined. With modest efforts to increase national recruiting in the last year, a slight majority (54 percent) of the freshman class admitted in 2005 was from out-of-state.



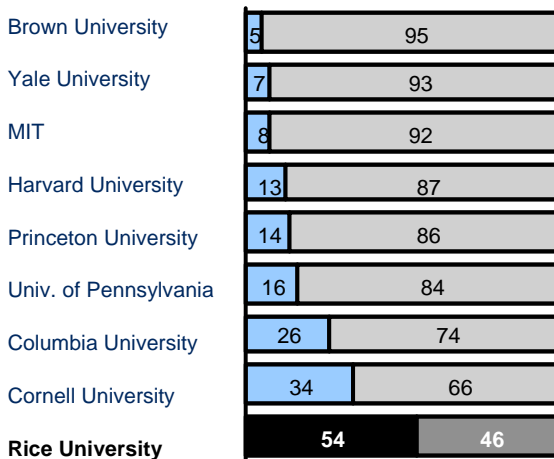
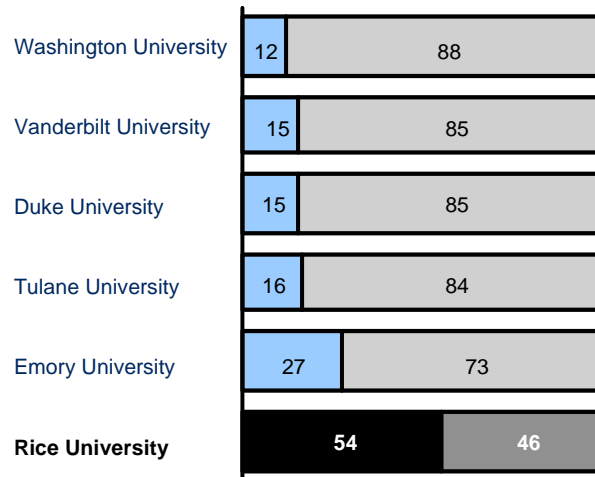
 In State
 Out of State

Figure 3. Rice Versus Northeast Peers (2004)



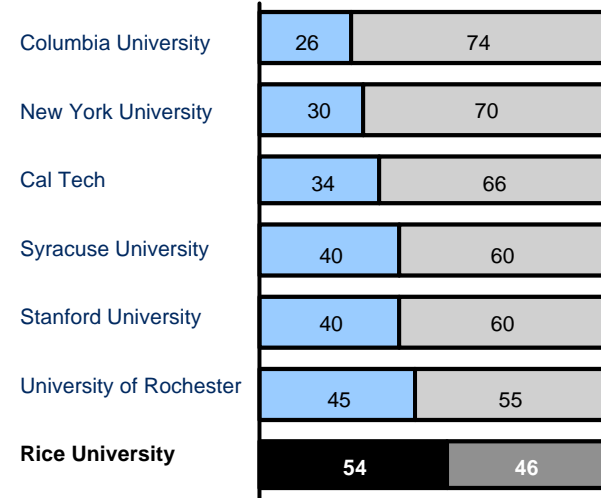
Average = 15%*

Figure 4. Rice Versus Southern Universities (2004)



Average = 17%*

Figure 5. AAU Schools in NY, TX, and CA (2004)



Average = 36%*

* Excluding Rice

Setting a New Direction for Rice: Recruiting for a National University While Still Serving Texas

With more effective national recruiting, we should expect to attain a student body that remains distinctively Texan, but with a clear majority (approximately 60 percent) of students coming from out of state. This is to be achieved not by setting goals or targets, but through more effective outreach to and recruiting of the country's top students. Growing the student body as we also become more national allows us to do so without reducing the number of students from Houston and Texas.

"Rice has no choice but to grow. I am familiar with Stanford (live close by), and Stanford's footprint on this community is significant. Stanford has focused on clear areas such as computer science and medicine and done a world-class job. Rice today is too small to have critical mass. I support doubling the undergraduate population within 10 years with a huge outreach program outside of Texas. Rice is extremely insulated and is not well served by the easy emphasis on the Texas alumni."

—Alum

"We love our small size, the exclusivity of our campus, and the clique we feel a part of. But in the end, it's not worth it. We are simply too small for our own good. By increasing our undergraduate body we will not only increase funds and opportunities, but also we will, if it is done intelligently, increase our national visibility."

—Undergraduate Student

"Nothing should be permitted to compromise the quality of our student body or the integrity of our admissions and recruitment process. It is vitally important to extend our student recruiting to all areas of the country and the world. Few other things can have as much impact on broadening the recognition and appreciation of Rice than attracting students from beyond Texas."

—Alum

"I recognize that if Rice is to gain recognition nationally and internationally, we must recruit and graduate more out-of-state students. It bothers me enormously when I leave Texas and mention to someone that I went to Rice and they have no idea what Rice is."

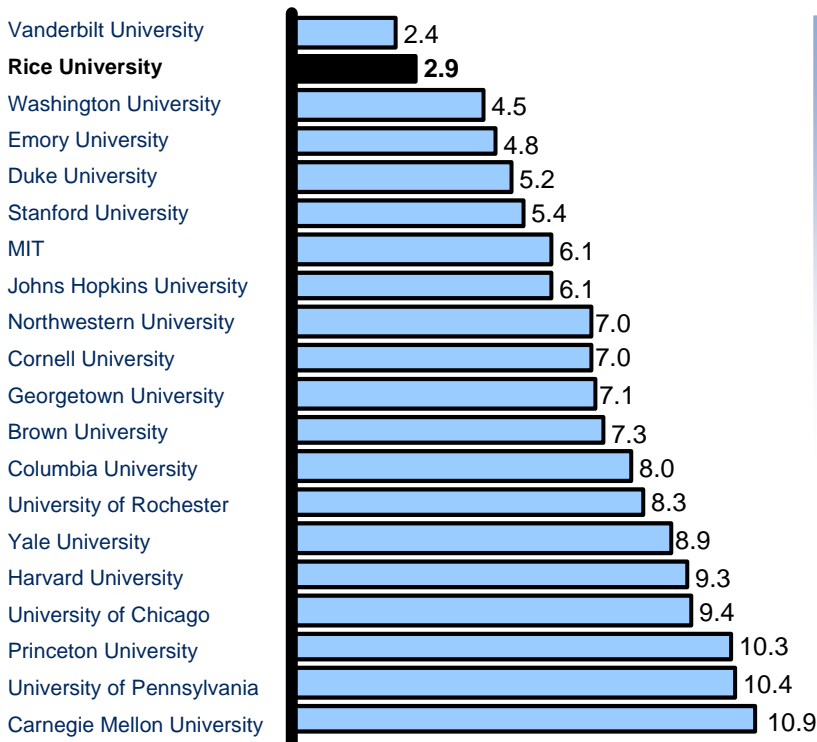
—Alum

Making a Commitment to a More International Student Body

On the question of international undergraduate students, Rice also falls on the far low end of the spectrum in terms of their presence in the student body. With increased recruitment efforts and support for international students, we hope to achieve in the short to intermediate term an approximate doubling (to about six percent) of the number of such students in each class. This would move us more in line with our peers, although still below the median.

Based on what we learn from our efforts, however, we should consider opportunities to dramatically increase even more the representation of foreign students of the highest caliber in our undergraduate population.

Figure 7. Percentage International Freshmen Students (2004)



“Rice is in a good location to take advantage of ties to Latin America relative to its competitors, and therefore efforts at international outreach would probably be best directed there.”

—Alum

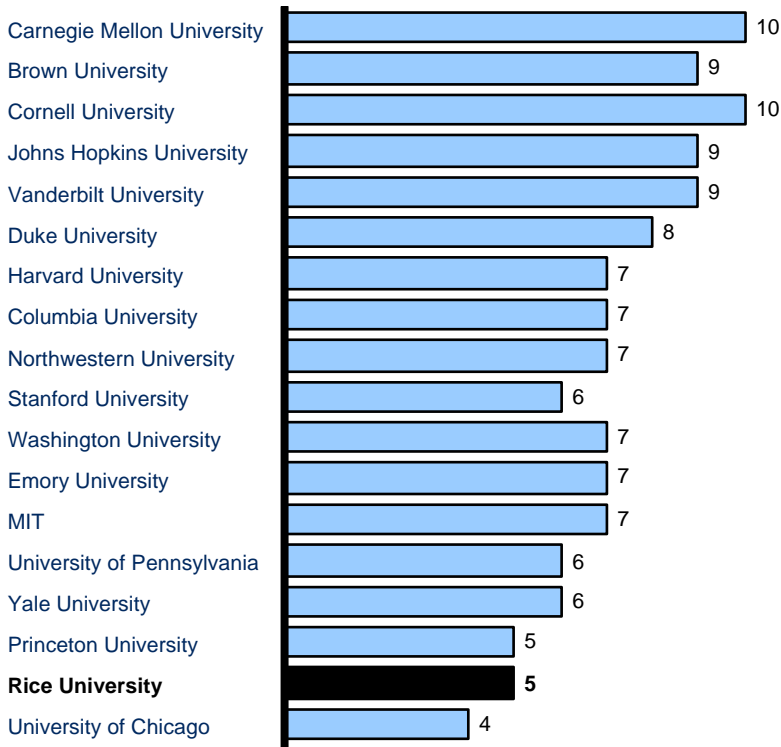
“I wholeheartedly support efforts to draw a more national and international student body. As a recent graduate of Rice, I valued immensely the opportunities I had not just to learn within the classroom, but to learn from a diverse student population composed of people who were not just brilliant, but who each had a unique perspective on the world around them.”

—Alum

Preserving Rice Values: Student–Faculty Ratio

The Rice experience is a distinctive one, defined by the direct access our undergraduate students have to faculty. Currently, our student–faculty ratio is slightly above 5:1, which is at the low end of the spectrum compared to our peers. Although this ratio does not accurately describe the classroom experiences of all of our students, it does reflect a value at Rice of meaningful faculty interaction as an essential part of the undergraduate experience. The growth we are planning, including some expansion of the faculty, would likely move this ratio to between 6:1 and 7:1. It is worth noting that we are at a low point in Rice’s history as the student–faculty ratio has historically been as high as 9:1. At least one of our peers (Princeton) decided that its student–faculty ratio may be too low and it would undertake an expansion of its student body without a proportional increase in faculty.

Figure 8. Undergraduate to Faculty Ratio (2004–05)



“The Rice experience is about small class size and actual contact with professors. If the university is to be expanded, that experience must not be altered.”

—Alum

“I understand we do not need to increase the faculty size by the same amount, but I do want to see the high percentage of faculty teaching courses preserved.”

—Undergraduate Student

“Without a doubt, increasing enrollment of undergraduate and graduate student bodies is necessary to accomplish the goals that you have discussed in this section. The 30 percent increase in enrollment should not substantively impact, in a negative way, the low student–professor ratio which has been a hallmark of our university.”

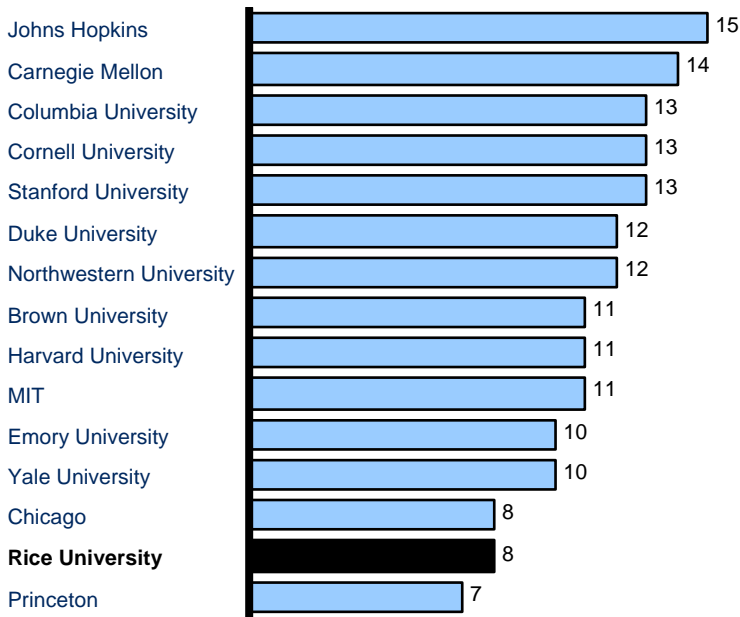
—Alum

Source: U.S. News Rankings. Ratio is calculated by comparing FTE students (full time plus 1/3 part time) to FTE instructional faculty (full time plus 1/3 part-time). Excludes students and faculty in stand-alone graduate or professional programs (e.g., medicine, law, business) and does not count graduate student teaching assistants as faculty.

Understanding the Ratio with Graduate Students Included

The student–faculty ratio is usually reported as including only undergraduate students, assuming (rather unrealistically) that faculty members do not spend any of their time with graduate students. To better understand this dynamic, we calculated a ratio of the combined total of undergraduate and graduate students to faculty. The results reveal that Rice is in an extremely favorable position and that low undergraduate–faculty student ratios at some of our peer schools mask the influence of graduate students in assessing the potential opportunities for interactions with faculty members.

Figure 9. Undergraduate Plus Graduate Student to Faculty Ratio (2004-05)



“We have long been proud of the fact that the vast majority of undergraduate classes are taught by faculty (even Nobel prize winning faculty!), and I think it is imperative that this continues.

Small class sizes and easy access to faculty make Rice unique among universities. I strongly valued this as a student and continue to highlight this as I conduct interviews of high school applicants. Their reaction is always deep appreciation or astonishment if they don’t already know a great deal about the university.”

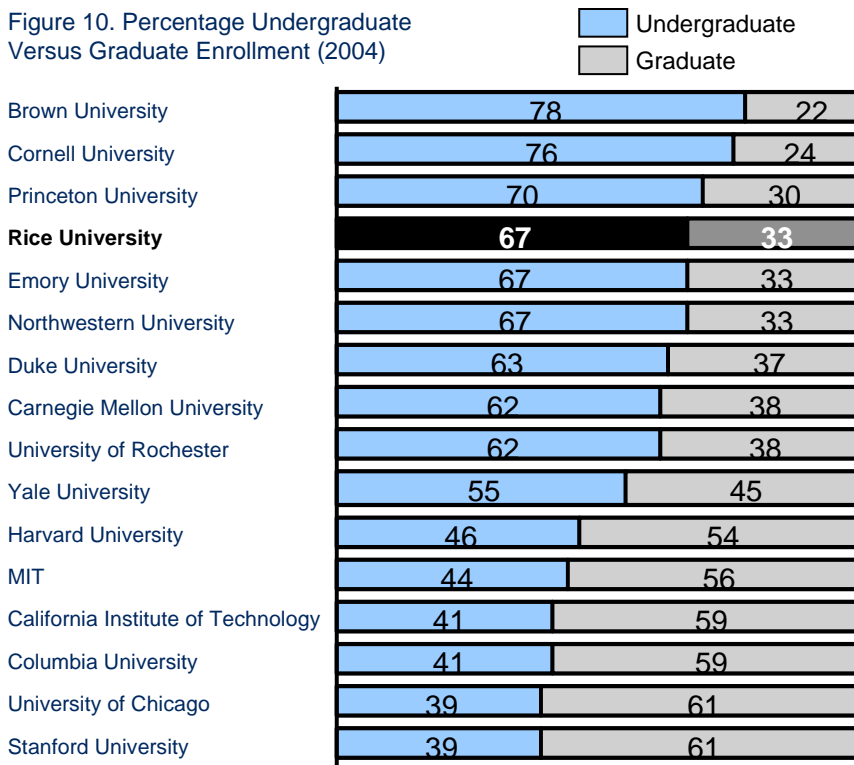
—Alum

Source: U.S. News and information from institutions. Ratio of FTE students to FTE faculty equals full time plus 1/3 part time. Excludes students and faculty in medicine, law, and business and excludes graduate students teaching assistants as faculty.

Considering Graduate School Enrollment

The current plan for expansion should not significantly alter Rice's proportion of undergraduate to graduate students. The C2C process has made clear that the expansion of graduate student enrollment can not be determined as the result of a centralized decision. This growth depends on a range of factors that differ by school and by department. As departments and schools develop their own strategic plans and assess their need for additional graduate students, this expansion should be justified in large measure by the research opportunities that faculty can provide to additional graduate students, the quality of the students they are able to attract, and the placement opportunities that are available and viable for their graduate students. As with faculty growth, this expansion must be strategic and selective.

Figure 10. Percentage Undergraduate Versus Graduate Enrollment (2004)



“From the student perspective, our comfortably small enrollment is paramount to maintaining the strong sense of community and the collaborative environment we enjoy today. Though, as you point out, to achieve the more ambitious—and indeed necessary—goals we must increase our enrollment at the undergraduate, graduate, and post-graduate levels while also increasing our faculty size to maintain the current student–faculty ratio that is such a critical factor in attracting top students. Increasing undergraduate enrollment to 3,600 seems a very reasonable approach.

“That said, we must realize that this increase should occur gradually to allow . . . most importantly our students to adjust to the growing population of our community . . . it is imperative to grow all areas of our community at an even, measured pace.”

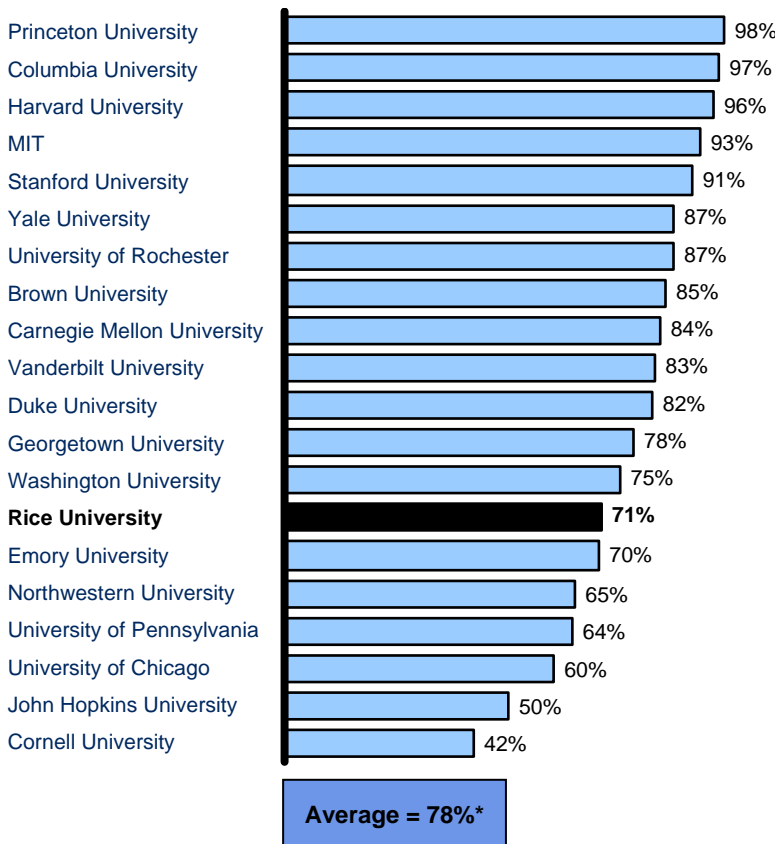
—Undergraduate Student

Note: Graduate headcount excludes business, law, medical, and other first professional enrollment
Source: Fall 2004 IPEDS-EF for all schools except Harvard (Harvard provided numbers for Fall 2004)

Assuring Sufficient Housing Before Rice Expands

Because of the centrality of the residential experience, undergraduate growth should not take place before additional housing is in place, with an eventual goal of increasing the percentage of students housed on campus from its present level of 71 percent to approximately 80 percent. This will require the construction of two new colleges, somewhat larger in scale than the present colleges, and the expansion of some existing colleges. Furthermore, we will in addition begin exploring Rice-affiliated housing near the campus that could accommodate both undergraduate and graduate students.

Figure 11. Percentage Undergraduates Housed on Campus (2004)



* Excluding Rice

Source: Princeton Review 2005

"I believe that creating university-affiliated undergraduate housing opportunities next (or very close) to campus will be a momentous first step which will ameliorate both the problems of inconvenience and (lack of) sense of community currently plaguing the off-campus population."

—Undergraduate Student

"Rice-supported off-campus housing would alleviate many of the major concerns that parents have about sending their kids away, which may be beneficial for enrollment."

—Alum

"I wholeheartedly agree that we should explore off-campus housing opportunities for undergraduates similar to our current graduate student apartments. I think you may find that such opportunities would be incredibly popular, perhaps more so than the residential colleges."

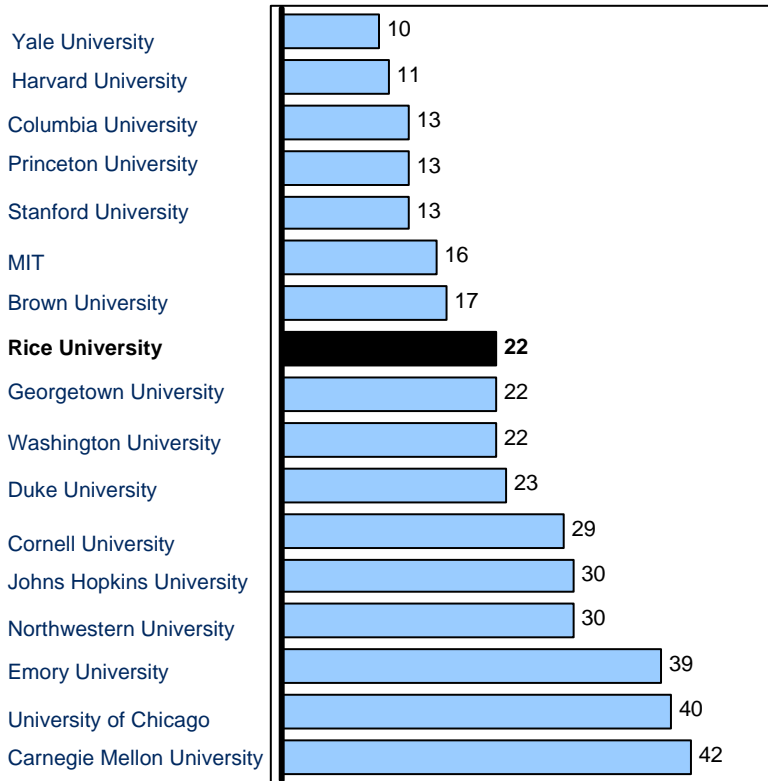
—Undergraduate Student

"I support the idea of increasing undergraduate enrollment with a commensurate increase in on-campus housing and other facilities required to properly support such an increase."

—Staff

In expanding its class, Rice should never sacrifice quality but continue to seek a diverse and talented group of undergraduates. We must maintain our commitment to attracting, recruiting, and enrolling the best students from all over the nation and world. As compared to peer schools, Rice is very well positioned in terms of the selectivity of its students. We currently admit 22 percent of our applicants, placing us in very good company with some of the best universities in the country. As we expand the student body, we will adopt a recruiting and marketing strategy to increase the applicant pool over time from its current 8,000 applications received to a number closer to 10,000 to assure that our selectivity is preserved.

Figure 12. Percentage of Applicants Offered Admission (2004)



Source: New York Times, November 5, 2005, Education Life, 12-13

“I do believe that the growth of the student body, both graduate and undergraduate, will enhance, not detract from, the rich experience valued by all students. Affirming the value of students who bring diverse backgrounds and experiences, I feel, is central to enlarging the student body that will achieve the goals of the expanded university.”

— Staff

“I have supported increasing the size of Rice’s undergraduate student body for more than 20 years for most of the reasons cited above. Increasing enrollment will give the university the opportunity and resources to excel across a much broader range. In addition, more graduates mean more alumni and a greater presence in the world for an outstanding institution. A great university should be larger than a large public high school, and it is hard to argue that increasing the size of Rice’s undergraduate population will harm the academic quality of entering students.”

—Alum

“Although I was initially against the idea of increasing the size of the school, it is clear that the benefits outweigh the losses. I especially like the idea of creating a more national and international body. This would lead to a more diverse and holistic experience for undergraduates as well as spreading our name to the rest of the world.”

—Undergraduate Student

Opportunities Presented by Growth, Including Faculty Enhancements

Growth in our undergraduate student body will generate strategic opportunities for the university, and it is vital that we select those opportunities carefully. One such opportunity is an increase in the size of our faculty. For the most part, we must view such growth not as a cost of expansion, but rather a strategic opportunity generated by it. Taking into account other needs of the university, including staffing, we should plan to grow the faculty by 30 to 50 members as we grow the student body. This growth must be strategic and selective, enhancing departments with real opportunities to achieve a new level of excellence and influence.

We must also enhance the role of postdoctoral fellows at the university, as they also are well positioned to help fulfill the university's research and teaching needs and are a good way of realizing that aspect of our mission which consists of the training of the future knowledge-makers. As with graduate students, the more specific aspects of faculty growth is a topic for further discussion beyond the scope of this document. The schools and departments will engage in a process of determining where this selective growth will strategically enhance the university.

Conversations with students, faculty, staff, and alumni also revealed the many other opportunities that growth presents, including enhanced offerings for our students, increased access to a national pool of recruiters and employers, and a greater sense of vibrancy on the campus.

"I think growth is an excellent idea. I have recruited at Rice for undergraduate hires, and the small size of the candidate pool often forces me to look to other, larger schools despite my loyalty to Rice."

—Alum

"A small student body at Rice affords our student body a wide range of benefits. Small class sizes create welcoming classroom environments, open up research opportunities for all who seek it, and also foster close-knit college communities. However, by expanding our student population to approximately 3,800, we can still benefit from these luxuries in addition to gaining new ones. I have noticed for quite some time that our limited departments have severely hampered not only class selection, but also competitiveness with other top research universities."

—Undergraduate Student

"I wholeheartedly think that Rice should expand it's size. I feel that we are too small and that increasing by 30 percent at least, if not more, would benefit us in so many ways, socially and academically. Many of my upper-level courses have 10 people or less, which limits me in choosing a study group, project partners, and in class participation. Adding 1,000 or so more students will still let us have the one-on-one interaction with professors and teaching assistants that I enjoy so much. I think we have more than enough space on campus to add two new residential colleges, and I think we can expand our existing colleges a little bit, not too much, and still keep the sense of community and not get too crowded."

—Undergraduate Student