University of Houston

Plan to Achieve Recognition as a National Research University

April 2010

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Part I. University of Houston Mission and Vision

Mission Statement

The mission of the University of Houston is to offer nationally competitive and internationally recognized opportunities for learning, discovery and engagement to a diverse population of students in a real-world setting. The University of Houston offers a full range of degree programs at the baccalaureate, master's, doctoral and professional levels and pursues a broad agenda of research and creative activities. As a knowledge resource to the public, the university builds partnerships with other educational institutions, community organizations, government agencies, and the private sector to serve the region and impact the world.

Vision Statement

The University of Houston aspires to be a tier-one university in Texas and the nation, whose academic programs are recognized for the highest levels of excellence, and whose diversity and global connections are integral to the educational experience and distinguish UH among universities nationally and internationally.

Why This Vision?

With 37,000 students, more than 7,000 degrees awarded, and $87.4 million in research expenditures annually, the University of Houston is the largest university in the Houston metropolitan area and the region's only comprehensive public university – with academic programs from the baccalaureate through the doctorate and a national research agenda. As such, the university plays a critical role in meeting the educational, workforce, and economic development needs of the region, which are, in turn, critical to meeting these needs on behalf of the entire state. The Houston metropolitan area's population of 5.9 million and its gross domestic product of $403 billion constitute 24 percent and 33 percent respectively of the state's population and economy. In other words, the future of the state is dependent upon the future of Houston. The University of Houston's vision has been established within this context. If Houston and the state are to compete nationally and internationally, it is imperative that Houston possess a large, comprehensive, public tier-one university.

Achieving Tier-One

Pursuing the university's vision represents not a change in direction for the institution but a natural expansion of its mission. On quality measures such as research, publications, scholarly citations and national academy members, the University of Houston is already well on its way to national excellence. But to achieve the level of success to which the university aspires will require much more. As articulated in the pages that follow, the University of Houston plans to increase research expenditures by over 70 percent in the next five years (to $150 million);

enhance the quality, size and success of its student population (both undergraduate and graduate); and build a campus environment of classrooms, labs, libraries and residence halls that is the equivalent of any public university in the United States.

At the same time, the University of Houston wants to distinguish itself from other tier-one universities in terms of its diversity and international connections. With no single ethnic group constituting a majority, UH is already one of the most ethnically diverse research universities in the United States. This is a distinction the university is very proud of and intends to maintain as a tier-one institution. Indeed, the changing demographics of Texas demand that UH and the state's other universities remain committed to diversity – especially with respect to the growing Hispanic population. If more is not done to increase the number of Hispanics and African-Americans participating in higher education, Texas will face an uncertain future. But diversity for the University of Houston extends beyond national borders. Houston is an extraordinarily international city, and UH's enrollment reflects this fact, with 8.6 percent of the university's students coming from other nations. UH sees this as an opportunity to distinguish itself among universities nationwide and provide students with educational opportunities that truly prepare them for success in the global economy.

Planned Investments

To achieve the university's vision will require major investments in new faculty positions, undergraduate scholarships, nationally competitive financial packages for graduate students, research facilities, classrooms, library resources, student success programs, and support staff. The University of Houston has estimated that an additional $70 million in annual recurring funds would move the university to tier-one levels of performance as quickly as possible. Currently, UH possesses four sources of state funding that it uses exclusively for tier-one research initiatives – the Research Development Fund, the Competitive Knowledge Fund, the Texas Research Incentive Program, and research special items. The university's annual appropriation from these sources totals $27.1 million, in addition to which the university allocates significant resources from its state formula funding and Higher Education Fund appropriations to tier-one initiatives. The National Research University Fund – once UH meets the established criteria – will also serve as an important source of funding for tier-one investments.

Despite the valuable investments the state is making in the creation of more tier-one universities, funding is still limited, so the University of Houston must be very strategic in how its resources are allocated. As described in this plan, rather than investing broadly, UH is investing primarily in two major research areas that represent institutional strengths, align with major industries in the Houston area, and for which there is the potential for significant amounts of external funding – energy and the health sciences. In developing these research areas, the university is focusing on hiring faculty of national reputation and building core research facilities to be shared by groups of faculty (rather than individual labs). Doing so will produce the largest return on investment in the shortest time possible.

Part II. Plan for Research Funding and Productivity

Overview

Achieving the University of Houston's goal of becoming the state's next nationally recognized tier-one research institution will require UH to make the investments in faculty and infrastructure needed to increase total research expenditures to $150 million from their current level of $87 million. Rather than investing broadly, UH is allocating resources to specific research areas where the university is best positioned to succeed, hiring faculty in those areas only at the very highest levels of achievement, and developing research facilities to be shared by multiple groups of faculty with related interests (instead of developing labs for individual faculty members). Using this return-on-investment approach is necessary given the extraordinary costs of the research enterprise and the limited resources the university has to invest. In addition to these direct investments, the University of Houston is supporting researchers in other key ways, including increased administrative support to help faculty secure and manage grants and resources for students to work in research labs.

Goal: **Increase the level of annual research expenditures to be commensurate with that of a tier-one university by 2015**

Objectives: Increase by 2015 –

1. Total research expenditures to $150 million
2. Federal research expenditures to $105 million
3. Combined Department of Defense (DoD) and Department of Homeland Security (DHS) research expenditures to $12 million
4. Combined Department of Energy (DOE) and Environmental Protection Agency (EPA) research expenditures to $12 million

Performance Data and Targets

	2007	2008	2009	2015 Target
Total Research Expenditures	$78.1M	$84.8M	$87.4M	$150M
Federal Research Expenditures	40.6M	44.3M	35.3M	105M
DoD/DHS Research Expenditures	1.7M	1.8M	2.5M	12M
DOE/EPA Research Expenditures	3.3M	2.9M	2.7M	12M

Summary of Strategies:

1. Invest in areas of research that align institutional strengths with high levels of external funding opportunities and industry strengths in Houston and Texas (i.e., energy, the health sciences)

2. Implement a strategic cluster hiring model to increase the number of productive research faculty on campus

3. Develop core research facilities that align with the university's research priorities, enhance the recruitment and retention of top faculty and students, and facilitate the acquisition of external research funding

4. Build interdisciplinary research centers and institutes that enable UH to secure large federal research grants

5. Use the federal initiatives process to seed fund larger strategic endeavors

6. Secure private gifts for research that enable UH to maximize state appropriations from the Texas Research Incentive Program

7. Build partnerships among the UH System universities and other educational institutions that take advantage of combined strengths in order to enhance research productivity

Description of Strategies

Strategy 1: Invest in areas of research that align institutional strengths with high levels of external funding opportunities and industry strengths in Houston and Texas (i.e., energy, the health sciences)

UH's two main research priorities – UH Energy and UH Health – hold great promise for dramatically increasing UH's annual sponsored research expenditures to tier-one levels. These two research "super" clusters are each comprised of smaller, theme-based research clusters that benefit from a larger network of shared resources and interdisciplinary expertise.

UH Energy is a constellation of researchers, industry leaders and students whose innovative work is supported by a solid foundation of more than 15 institutes and centers across campus involved in energy-related activities. The UH Energy research organization is structured around the following clusters: Subsurface Resources, Renewables and Alternatives, Conservation and Sustainability, and Energy Management and Policy.

UH Health, the second major initiative the university is pursuing in order to achieve tier-one status, is structured around the following clusters: Biomedical and Genetic Engineering, Imaging and Neurocognitive, Clinical Research and Trials, Health Care Policy and Management, and Infectious Diseases, Bio-Warfare, Genetics, and Proteomics.

Strategy 2: Implement a strategic cluster hiring model to increase the number of productive research faculty on campus

In order to achieve tier-one status within five years, UH needs to increase research by approximately $70 million. To do so, there must be a significant investment in new research faculty using the university's strategic cluster hiring model, which involves recruiting a nationally recognized faculty star and building a cluster of faculty, graduate students and post-docs around that senior hire. Recent faculty cluster hires include:

Center for Applied Geosciences and Energy

The Center for Applied Geosciences and Energy is built around Dr. Rob Stewart, who applies his geological expertise in fields as diverse as space exploration and archaeology. Two other leading geophysicists, Dr. Chris Liner and Dr. Evgeny Chesnokov, have been hired and will be joined by four more scientists in the near future. The investment in these and other new faculty lines will position UH as a world leader in petroleum geology and geophysics.

TcSUH Applied Research Hub

Last year the University of Houston received a $3.5 million Emerging Technology Fund (ETF) award for the creation of the TcSUH Applied Research Hub, which is a partnership between the Texas Center for Superconductivity at the University of Houston (TcSUH), the UH Department of Mechanical Engineering, and SuperPower, Inc. The recruitment of Dr. Venkat Selvamanickam, a world-renowned expert in superconductivity, and the team he will build through this ETF grant, will bring international recognition and attention to Texas. The TcSUH Applied Research Hub will establish UH as the leading international center for high temperature superconductor-based research, applications development, and manufacturing.

Texas International Center for Cell Signaling and Nuclear Receptors

The University of Houston's largest cluster hire to date involves the creation of the Texas International Center for Cell Signaling and Nuclear Receptors led by Dr. Jan-Ake Gustafsson, M.D., Ph.D., an internationally recognized hormone researcher from Sweden. The University of Houston, in collaboration with The Methodist Hospital Research Institute, jointly secured a $5 million ETF award to establish the center on the UH campus. The center engages in basic, translational and clinical biosciences research through which new treatments will be developed for an array of ailments, including cancer, diabetes and obesity.

Strategy 3: Develop core research facilities that align with the university's research priorities, enhance the recruitment and retention of top faculty and students, and facilitate the acquisition of external research funding

Given the extraordinary costs of scientific laboratories and equipment, the University of Houston has adopted a strategy of developing core research facilities to be used by groups of faculty with related interests rather than assuming the expense of developing labs for individual faculty members. The development of core facilities at UH is linked to strategic faculty cluster

hiring in areas where the university can maintain a clear, sustained, national, competitive advantage (e.g., energy, the health sciences). UH's current targets for core facility development are described below (more specific information on the university's major construction projects can be found in Appendix B). Each of these facilities will constitute shared, multi-use research space, which is key to promoting multidisciplinary faculty collaboration (an important factor in securing large federal research grants).

Science and Engineering Research Center (SERC)

The initial SERC project included the design and construction of a classroom building and a shell research building to house approximately 40 science and engineering laboratories. UH is currently completing the build-out of the research building, which will be home to the Texas International Center for Cell Signaling and Nuclear Receptors and other research programs in the health sciences.

Renovation of the Fleming, Science, and Science & Research 1 Buildings

The renovation of the Science, Science & Research 1, and Fleming buildings, as well as the construction of an addition to Fleming, will address a severe space shortage in all of the scientific disciplines, especially Chemistry, whose teaching lab needs exceed half of the total deficit. Other issues being addressed include outdated and deteriorated lab conditions, inadequate ventilation, fragmented lab organization, pressing life safety issues, and the availability of "swing space" to allow labs to continue functioning during renovation/ construction.

UH Energy Research Park

Last year, the University of Houston purchased the University Business Park (UBP) one mile from the main campus. The property consists of 15 buildings occupying 69 acres and housing 580,552 square feet of office, office/warehouse, and light manufacturing space. The university's plan for the UBP is to transform it into the UH Energy Research Park (ERP). The ERP will be home to the university's new petroleum engineering program, the Texas Diesel Testing and Research Center, the Texas Wind Alliance, the TcSUH Applied Research Hub and its industry partner, SuperPower, Inc., and other energy research programs. The mission of the ERP is to address research, education, workforce, and economic development issues related to energy.

Health and Biomedical Sciences Center

The Health and Biomedical Sciences Center will be a six-story building housing multiple programs in the health sciences. Among these are the UH College of Optometry Vision Institute (which will include an ambulatory surgical center, a laser center, and specialized research laboratories), animal care facilities, Neuropsychology and Neurosciences, and programs associated with the Texas Institute for Measurement, Evaluation, and Statistics (one of UH's most productive research centers).

Strategy 4: Build interdisciplinary research centers and institutes that enable UH to secure large federal research grants

The University of Houston's approach of hiring faculty clusters in strategic research areas and developing core research facilities on their behalf is in service to the establishment of new interdisciplinary research centers and institutes (including, as described above, the Center for Applied Geosciences and Energy, the TcSUH Applied Research Hub, and the Texas International Center for Cell Signaling and Nuclear Receptors). As the National Academies' landmark 2005 report, *Facilitating Interdisciplinary Research*, demonstrates, research universities seeking to be competitive nationally and internationally must develop the infrastructure necessary to support collaboration across the disciplines in order not only to respond to complex problems that span disciplines, but also to secure large awards from federal agencies, which now typically require that proposed projects include an interdisciplinary element. These institution-transforming awards, which can be used to establish national centers and build state-of-the-art research facilities, will further assist UH in attracting top faculty and students, as well as in strengthening the university's research profile and competitiveness for future awards.

In addition, UH is currently evaluating existing centers and institutes on campus using a return on investment (ROI) model. Based on these evaluations, the university will seed fund existing centers and institutes that have significant potential and phase out those with diminishing returns on investment.

Strategy 5: Use the federal initiatives process to seed fund larger strategic endeavors

The University of Houston is very focused on securing Congressionally directed funding for major research initiatives. These resources are used as start-up for UH programs in critical areas of need for the nation (e.g., energy, the health sciences, defense, national security). Programs for which UH has recently received earmark funding include the UH Wind Energy Center and the Center for Clean Fuels and Power Generation.

Strategy 6: Secure private gifts for research that enable UH to maximize state appropriations from the Texas Research Incentive Program

Through the Texas Research Incentive Program (TRIP), the State of Texas began in FY10 to match private donations for research to the state's emerging research universities. In response, the University of Houston has re-focused its fundraising efforts (e.g., with respect to proposal development and target donors) to maximize the resources the university can receive through TRIP. The university's initial appropriation was $4.9 million. This appropriation and those received in future years will be invested in initiatives designed to enhance the research productivity and overall national competitiveness of the University of Houston.

Strategy 7: **Build partnerships among the UH System universities and other educational institutions that take advantage of combined strengths in order to enhance research productivity**

Through partnerships with UH-Downtown (UHD) and Texas Southern University (TSU), the University of Houston has the opportunity to explore federal research funding opportunities that are set aside for Hispanic-serving and minority-serving institutions. As a result, UH can receive up to 49% of the funding on projects in which it partners with UHD and TSU. To explore these opportunities, UH has hired an Executive Director for UH System Research and Diversity Initiatives, who will also serve as a liaison with the National Institutes of Health and the National Science Foundation to identify appropriate diversity or minority institution funding opportunities. In addition, UH has recently hired an Assistant Vice President for Health Initiatives, whose responsibilities include identifying ways the four UH System universities can work together in the development and delivery of health science programs. The Assistant Vice President also coordinates UH's efforts to obtain research funding from the Cancer Prevention Research Institute of Texas.

Part III. Plan to Improve Undergraduate Education

Overview

Improvements in undergraduate education are key to improving the University of Houston's stature as a nationally recognized research university. In particular, UH must enhance the academic qualifications of its undergraduates (especially freshmen), as well as their persistence and timely completion of a bachelor's degree. The two are unquestionably related, since demonstrated preparation for college (as measured by the academic achievement of incoming students) is a significant contributor to student success. With respect to student qualifications, UH is making changes to admissions requirements and enhancing the ways in which highly qualified students are recruited. With respect to student persistence and graduation, the university is instituting programs that address the hurdles that slow progress to degree: financial difficulties, academic challenges, course scheduling, and the student life issues associated with attending college for the first time. In addition, the University of Houston is focused on other imperatives related to undergraduate education, including improvements in student learning, the need to enroll and graduate more undergraduate students (especially Hispanics and African-Americans), and the need to produce more graduates in STEM fields.

Goal 1: Build an undergraduate student body that is both highly qualified and diverse

Objectives: By 2015 –

1. Increase the average SAT score of first-time-in-college (FTIC) students to 1160
2. Increase the percentage of first-time-in-college (FTIC) students who graduate in the top 10% of their high school graduating class to 25%
3. Reduce the acceptance rate of first-time-in-college (FTIC) students to 52%
4. Increase the number of undergraduates enrolled to 30,206
5. Increase the number of African-American undergraduates enrolled to 4,467
6. Increase the number of Hispanic undergraduates enrolled to 7,148

Performance Data and Targets

	2007	2008	2009	2015 Target
Average SAT	1055	1061	1079	1160
Percent of Top 10% FTICs	17.7%	15.9%	17.6%	25.0%
FTIC Acceptance Rate	78.2%	78.7%	69.7%	52.0%
Total Undergraduates	27,572	28,800	29,298	30,206
African-American Undergraduates	3,948	4,174	4,223	4,467
Hispanic Undergraduates	5,958	6,328	6,733	7,148

Summary of Strategies:

1. Implement an admissions process that raises the academic qualifications of the entering freshman class

2. Increase the number and value of academic scholarships for highly qualified freshmen

3. Expand and improve recruiting and communication efforts for highly qualified freshmen

4. Attract highly qualified students through participation in the UH Honors College

5. Increase the number of undergraduate students living on campus

6. Recruit more highly qualified African-American and Hispanic undergraduate students

Description of Strategies

Strategy 1: Implement an admissions process that raises the academic qualifications of the entering freshman class

By changing certain elements of the admissions process, the University of Houston is raising the qualifications of the freshman class. First, the university is currently developing new, more rigorous admissions requirements for entering freshmen. The standards have not been finalized yet, but the intent is to implement them over multiple years to ensure the university meets enrollment and diversity goals. Additionally, UH has moved the priority application deadline from April 1 to February 1 and plans to move it again to December 1. Prospective students who meet the priority deadline are not subject to individual review of their applications. Early priority deadlines are common at major universities and contribute to the selection of a highly-qualified freshman class.

Strategy 2: Increase the number and value of academic scholarships for highly qualified freshmen

Increasing the number and value of academic scholarships has been one of the University of Houston's top budget and fundraising priorities over the past several years. To that end, the university has created a new Tier One Scholarship, which is awarded to freshmen based on merit. Recipients receive the award for up to four years and must maintain a high grade point average. In addition, UH Tier One Scholars are guaranteed additional aid if they participate in undergraduate research or study-abroad experiences. UH has also increased requirements for its Academic Excellence Scholarship to allocate more funds to students who rank in the top 20% of their high school graduating class and score 1100+ on the SAT. Finally, UH has streamlined financial aid processing to expedite the review and awarding of scholarships.

Strategy 3: Expand and improve recruiting and communication efforts for highly qualified freshmen

In addition to having adequate scholarship dollars, competing for highly qualified students requires stepping up recruitment activities and communications about the advantages of a UH education. To that end, the University of Houston is increasing the number of freshman recruiters and recruiting activities both in the Houston area and beyond (for example, UH has established a recruiting office in Dallas and plans to open additional offices in San Antonio, Austin and the Rio Grande Valley). If UH is to become a national university, it must draw students from throughout the state and nation. In addition, the university is increasing communications to both prospective and admitted students. Providing timely information on the strength of UH academic and research programs, the Honors College, financial aid/scholarships, campus life, orientation and the benefits of living in Houston are critical to increasing the selectivity of the freshman class. Finally, UH has opened a $26 million Welcome Center for prospective students and their families, as well as current students. At a main entrance to the campus, the Welcome Center serves as a "one-stop shop" for important student services, including admissions, registration and financial aid.

Strategy 4: Attract highly qualified students through participation in the UH Honors College

The UH Honors College is a key attraction for high-ability high school students looking for a challenging and rewarding undergraduate experience. Through dedicated efforts on and off campus, Honors continues to work toward raising its freshman class profile. By participating in university-wide recruitment activities, the college is able to fold the Honors experience into the traditional experience for incoming freshmen. In an effort to increase the average SAT of its applicant pool, Honors has instituted open house programs targeted to high scoring PSAT and SAT test takers. These activities allow Honors applicants to connect with current students and faculty and thereby gain a better understanding of the program. The Honors College also hosts receptions in Houston and around Texas. These events increase awareness of the Honors College and the overall strength of UH academic programs to high-achieving students, their parents, and high school administrators.

Strategy 5: Increase the number of undergraduate students living on campus

The University of Houston has established a goal of having 25% of its undergraduates living on campus (currently 14% live on campus). Expanding and improving the quality of campus residential living is essential if UH is to successfully compete for more highly qualified students – particularly from outside the Houston metropolitan area. In fall 2010, the University of Houston will open a 1,000-bed residence hall for freshmen (see Appendix B for more information) and plans to construct an additional 1,000-bed facility in the future. In addition to student

recruitment, these residence halls will aid in student retention by creating a high quality living and learning environment on campus. In fact, selected classes and seminars will be held at learning areas in the residence halls to provide freshmen with a top-rate first year experience as they transition from high school to college.

Strategy 6: Recruit more highly qualified African-American and Hispanic undergraduate students

The University of Houston is already one of the most ethnically diverse research universities in the nation (no single ethnic group constitutes a majority) and is intent on becoming the most ethnically diverse tier-one university in the nation. With respect to awarding academic scholarships and expansion of recruitment activities, the University of Houston is making special efforts to target high achieving African-American and Hispanic students and high schools with large African-American and Hispanic student populations. Doing so will enable UH to increase the number of African-American and Hispanic students on campus. Specific programs include The Event, a recruiting program that brings African-American high school juniors to campus once per year, and the Academic Achievers Program at the UH Center for Mexican-American Studies. AAP recruits highly qualified Hispanic students to UH and provides them with scholarships, academic support and a community of learners in order to help them succeed.

Goal 2: Increase the success of undergraduate students completing a bachelor's degree to tier-one performance levels

Objectives: Increase by 2015 –

1. The one-year retention rate of first-time-in-college (FTIC) students to 90%
2. The six-year graduation rate of first-time-in-college (FTIC) students to 54%
3. The number of bachelor's degrees awarded to 5,820
4. The number of bachelor's degrees awarded to African-American students to 640
5. The number of bachelor's degrees awarded to Hispanic students to 1,339
6. The number of bachelor's degrees awarded in high demand fields to 863

Performance Data and Targets

	2007	2008	2009	2015 Target
One-Year FTIC Retention Rate	77.5%	79.2%	79.3%	90.0%
Six-Year FTIC Graduation Rate	42.7%	41.8%	40.8%	54.0%
Bachelor's Degrees Awarded	4,810	4,759	4,874	5,820
Bachelor's Degrees Awarded to African-American Students	548	510	567	640
Bachelor's Degrees Awarded to Hispanic Students	1,003	1,043	1,071	1,339
Bachelor's Degrees Awarded in High Demand Fields*	567	599	544	863

*Includes engineering, computer science, math and physical sciences

Summary of Strategies:

1. Implement programs that address challenges students face as they transition from high school to college

2. Reduce the impact of cost as a barrier to student participation and success in college

3. Increase the number and enhance the skills of UH academic advisors

4. Expand the number of course, degree program, and pricing options in ways that encourage timely graduation

5. Increase classroom space on campus to facilitate timely graduation

6. Address student success issues in the core curriculum

7. Implement programs that encourage students to pursue and earn degrees in STEM fields

8. Facilitate the enrollment and degree completion of transfer students at the University of Houston

9. Utilize technology as a means of improving student retention and graduation

Description of Strategies

Strategy 1: Implement programs that address challenges students face as they transition from high school to college

Students are particularly vulnerable to dropping out of college as they make the difficult transition from high school. This is especially true for first generation college students. The University of Houston is implementing numerous programs to address freshman transition issues, including:

New Mandatory Student Orientation

The new two day orientation is mandatory for freshmen. In addition to participating in campus life activities, students spend significant time with faculty and academic advisors who assist them in planning their academic career. Upon completion of orientation, students will have registered for classes, arranged for housing, confirmed financial aid and scholarships, and received all necessary documents and information on parking, student services, etc.

JUMP

UH began the JUMP program in the summer of 2006 to provide students with a head start into their first year of study. Core courses are offered at half price in the summer prior to the freshman year to assist students financially. The program also affords a cohort of entering freshmen a six-week period to orient themselves to the campus and learn about available resources before the fall semester begins. The first three cohorts of JUMP students have one-year retention rates at least 7% higher than the average freshman.

Undergraduate Scholars

Data indicate that UH students who have not declared a major are especially vulnerable to dropping out. UH has implemented the Undergraduate Scholars program to address the needs of these students. UScholars students have a designated advisor to monitor their progress until a major is declared. There is also a website that helps students compare majors so they can make a proper selection. In addition, all undeclared students take a one-credit course that addresses such issues as study habits, decision making and critical thinking. Finally, UScholars students are block scheduled in nine hours of core curriculum classes during the fall semester. Doing so encourages these students to form study groups and participate in other campus activities together.

Strategy 2: Reduce the impact of cost as a barrier to student participation and success in college

As a traditionally commuter institution that enrolls a large number of students who pay for their own education, the University of Houston is taking steps to reduce the impact of cost as a barrier to participation and success in college. First, UH has implemented the Cougar Promise, through which the university covers (with financial aid and institutional resources) the tuition and fees of incoming freshmen with family incomes of $40,000 or lower. The family income threshold for the Cougar Promise will be increased to $45,000 in Fall 2010. Second, the university has implemented the Graduation Pledge program. Students who sign the pledge and complete at least 30 hours per year during their freshman, sophomore and junior years will receive up to $3,000 in financial support. Doing so has the impact of covering any tuition and fee increases the university might implement during the student's college career. Since the inception of the Graduation Pledge, students who meet the established benchmarks of the pledge consistently earn a higher grade point average and complete more credit hours toward their degrees than non-participating UH undergraduates.

Strategy 3: Increase the number and enhance the skills of UH academic advisors

Historically, the University of Houston's student/advisor ratio has been far higher than national standards. To address this issue, UH has been engaged in a multi-year plan to increase the number of advisors on campus and enhance their professional skills. In total, 17 new advisor positions have been created in the past few years. All academic advisors are also now required to participate in the Academic Advisor Certification Program, which was developed by UH staff and has won an award from the National Academic Advising Association (NACADA). The program consists of 15 hours of web-based training, 28 hours of workshop sessions, and a 13-hour advising practicum and portfolio review. Also, for continuing education, advisors have access to five training webinars per year, and the UH colleges are encouraged to join NACADA and send their advisors to regional conferences. The goal is to provide a consistent knowledge base for advisors to work with students. In addition, all academic advisors meet twice every semester, with the lead advisors from each college also meeting once per month to ensure that policies and procedures are working effectively and are communicated properly.

Strategy 4: Expand the number of course, degree program, and pricing options in ways that encourage timely graduation

UH enrolls a large number of students who work while attending college or have family responsibilities. These students often find it difficult to take classes according to a traditional college course schedule. As a result, time to degree is frequently lengthened. To accommodate these students and others who face degree completion challenges, the University of Houston is offering a number of alternative course, degree and pricing options designed to facilitate degree

completion. They include 5% discounted summer courses, a winter program between the fall and spring semesters (1,000 students participated this year), hybrid courses (part classroom/part online, which reduces time spent in the classroom), and a new liberal studies degree, which allows students to combine three minors into a single major.

Strategy 5: Increase classroom space on campus to facilitate timely graduation

As enrollment grows, additional classrooms enable the University of Houston to meet instructional demand and expand class offerings, both of which have a positive effect on student retention and reducing time to degree. Currently, the University of Houston is completing construction of Cemo Hall at the Bauer College of Business. The new building will include a 400-seat lecture hall, three 80-seat classrooms, and an academic center (including a career center, and offices for teaching assistants). Cemo Hall will be completed in Spring 2010. Board of Regents approval has also been secured for an additional, 112,000 square foot classroom and business building. (See Appendix B for more information on these construction projects.)

Strategy 6: Address student success issues in the core curriculum

The core curriculum represents over one-third of the traditional 120-hour degree plan. Thus, any improvement made in core courses will have a lasting impact on student success and provide a strong foundation for students as they move to their upper level classes. The University of Houston is exploring numerous strategies for improving student success in the core. These include, in high enrollment courses, "drop in" sections – small sections in which at-risk students are placed based on early performance in a course; recitation sections – to more fully engage high ability students in the subject matter of a course; Student Success Grants – awarded to faculty for making pedagogical changes that enhance student engagement and learning; and the creation of a Core Faculty Council – which would include faculty members who teach in the core and who would meet periodically within their departments and as a body to discuss best teaching and engagement practices.

Strategy 7: Implement programs that encourage students to pursue and earn degrees in STEM fields

Programs in the sciences, engineering and mathematics offer twin challenges for higher education. Not only is it imperative that universities increase the number of students earning degrees in STEM disciplines, but because of their difficulty, the courses in these fields are often stumbling blocks to student success. To address these issues, the University of Houston is implementing numerous programs that encourage students to pursue degrees in STEM fields, while also providing them with the academic support they need to succeed in these challenging disciplines:

Program for Mastery in Engineering Studies (PROMES)

The PROMES program was established for the recruitment, retention and academic development of Hispanic, African-American, and Native American students in the Cullen College of Engineering. Today PROMES is open to all students in the college, but the focus remains on providing a positive learning environment that supports the needs of underrepresented groups (women and minorities) and first generation college students. PROMES activities include recruitment, academic advising, course workshops, scholarships and job placement.

Houston-Louis Stokes Alliance for Minority Participation (H-LSAMP)

The Houston-Louis Stokes Alliance for Minority Participation (H-LSAMP) was instituted at UH to recruit and retain African-American and Hispanic students in the sciences. H-LSAMP and the affiliated Scholars Enrichment Program provide financial assistance, tutoring, enrichment workshops, and mentoring services. Since its inception, the number of minority undergraduates receiving science or engineering degrees at UH has risen 50 percent.

Center for Academic Support and Assessment (CASA)

To assist students in mastering mathematics and progressing in their mathematics course work, the UH Department of Mathematics designed the Center for Academic Support and Assessment (CASA). At CASA students can seek one-on-one tutoring for help with homework and for exam preparation for their undergraduate mathematics courses. Students can also use the computer workstations to access course materials, watch streaming lectures, or take their weekly online quizzes.

Strategy 8: Facilitate the enrollment and degree completion of transfer students at the University of Houston

The majority of undergraduates coming to UH are not FTIC freshmen but transfer students – primarily from regional community colleges. The University of Houston, therefore, is implementing strategies designed to facilitate the enrollment and success of transfer students at the institution. Currently, six full-time academic advisors are deployed at community colleges in the Houston area to advise students on course selection for their intended majors (so the loss of transfer credits can be reduced or eliminated). The Advising and Registration for Transfers Program also provides students with the information they need regarding enrollment and financial aid, so they will be ready for class when school begins. Finally, the University of Houston awards transfer scholarships to the most academically gifted transfer students.

Strategy 9: Utilize technology as a means of improving student retention and graduation

The University of Houston is taking advantage of technology in order to enhance student retention and graduation. First, a web-based degree audit program, which identifies remaining courses students must take in order to complete their degree, is available to all UH students and advisors. Second, a plan is underway for advisors to begin monitoring student credit hours and intervene when students complete fewer than 30 hours per year.

Part IV. Plan for Doctoral Programs

Overview

As outlined in the University of Houston vision statement, UH endeavors to enter the top ranks of national research universities. A critical component of achieving this stature is the development and maintenance of a broad range of very high quality doctoral programs – especially Ph.D. programs. To ensure the quality of its graduate programs, UH engages in regular, comprehensive program evaluation, the overarching goal of which is for 50% or more of the university's Ph.D. programs to be considered, by external criteria from multiple sources, in the top national quartile, while concomitantly having no Ph.D. programs ranked in the bottom quartile. With respect to new doctoral programs, development is driven by three criteria: the extent to which the program fits into the research priorities of the university (e.g., energy, the health sciences), represents an area of strength in which the university already has or can achieve national recognition (e.g., the arts, hotel and restaurant management), or serves the professional workforce needs of the region and state (e.g., education).

Quality Control and Enhancement

Comprehensive Program Review Process

In 2000, the University of Houston began developing an integrated quality improvement process to address its graduate and professional degree programs. This on-going process includes the gathering of internal and external qualitative and quantitative information on quality indices, as well as a feedback system for administrators and faculty responsible for particular programs. Integral to this process is the establishment of targeted, comprehensive external reviews. Unlike routine, scheduled reviews common at other universities, this process focuses on doctoral/terminal degree programs that are already considered, by internal and external indices, as being already strong or "on the cusp" of national prominence. In addition, a smaller component of the comprehensive review focuses on programs in crisis (as identified by faculty or administration), but to date less than 10% of internal or external reviews have this focus. The selection of which programs to review is a complex process involving graduate programs, departments, colleges and central administration (the academic program review policy is outlined in Appendix C). Of critical importance to the success of these reviews is the establishment of an accountability process, where college deans are asked to provide plans for addressing the recommendations from external reviews during the annual plan and budget process with the Provost.

General Program Review Process

In addition to comprehensive external reviews, the University of Houston evaluates the performance of all doctoral programs on a regular basis. The recent development by the Coordinating Board of the 18 Characteristics of Doctoral Programs has served as an organizing schema for assessing existing programs. However, the university's process includes much more than the 18 characteristics. UH is, for example, a full subscriber to the Academic Analytics

Faculty Scholarly Productivity database and utilizes it both to evaluate and track the progress of doctoral programs. In addition, UH conducts internal analyses of faculty scholarship on an annual basis and tracks various external comparative ratings of its graduate programs. With the expected arrival of the National Research Council Assessment of Research Doctoral Programs, UH will have a comprehensive quantitative and qualitative database to further guide rational resource allocation and the development of new programs.

Elimination or Consolidation of Programs

Elimination or consolidation of programs is undertaken as part of the university's comprehensive review process. Initiation of this review can occur at any level in the university and is keyed by a number of variables, including low productivity (both in number of graduates and faculty scholarship), mission relevance, quality of graduate students, and placement. When a graduate program is identified as "at-risk," the first step is the placement of that program "on hiatus," which essentially means that all new admissions to the program are suspended pending review. The actual process of this review can lead to a number of results, including program reorganization, consolidation or elimination. In the case of elimination, the UH Graduate and Professional Studies Council has developed a policy for shared governance input into this decision (See Appendix D).

Summary of Existing Programs

The University of Houston has examined each of its Ph.D. programs and grouped them into one of the following four tiers:

- Distinguished: Competes with the best programs in the nation for students and faculty – top quartile in external indices
- Strong: In or close to the top half of programs in the nation
- Adequate but Needs Improvement: Generally in the third quartile on external indices
- Needs Attention: In the bottom quartile on external indices or other concerns exist

These tiers are meant as a guide for internal interpretation and are necessarily fluid (the demarcations are subjective). Using a number of criteria, including Academic Analytics and comparisons to established peer institution data for each program, UH can safely defend the notion that more than half of its programs are either "distinguished" or "strong" according to the classifications identified above.

Over the past ten years several programs have been reorganized, consolidated, eliminated or are in hiatus status, while other programs have seen a significant influx of resources with a goal of raising their status. For example, Developmental Psychology has been reorganized and has risen to the status of distinguished; Clinical Neuropsychology was consolidated into the already distinguished Clinical Psychology program; Spanish was moved to a new, independent department and is now distinguished; and Allied Health Education has been eliminated. Currently, the university is examining degree programs identified by the Coordinating Board as

low producing in terms of degrees awarded (including 12 doctoral programs). The UH colleges responsible for these programs have been asked, in accordance with CB guidelines, to eliminate the programs, consolidate them, or justify their continued existence. Decisions as to their continuation will be made later this spring.

In addition, several programs have received significant resources over the past ten years to either maintain their current strength or raise their quality. These include Chemical Engineering, Mechanical Engineering, Civil/Environmental Engineering, Computer Science, Biology, Biochemistry, Geophysics, Clinical Psychology, Developmental Psychology, Kinesiology, Economics, English and Chemistry.

New Doctoral Programs

The University of Houston is currently in the process of developing and seeking approval for three new Ph.D. programs: Atmospheric Sciences, Biomedical Engineering, and Hospitality Management. Both the Atmospheric Sciences and Biomedical Engineering programs are key components of the university's health and energy foci, while the Hospitality Management Ph.D. is critical to maintaining the stature of UH's internationally ranked programs in Hotel and Restaurant Management. The Atmospheric Sciences Ph.D. will capitalize on Houston's position as an ideal test-bed for the analysis of air pollution and the current strength of UH faculty (in several departments) in multidimensional measurement and mathematical modeling of complex systems. The Biomedical Engineering Ph.D. is a natural fit with UH's recent full membership in the Texas Medical Center and its partnership with The Methodist Hospital. This program will leverage these relationships to address major health care issues. Two additional Ph.D. programs, in Curriculum and Instruction and Educational Leadership, will focus on addressing the critical questions facing urban public education systems both regionally and nationally.

As with all of UH's Ph.D. programs, these five new programs will be part of the comprehensive review process outlined above. Given the university's expectations for doctoral programs, UH anticipates that these programs will rise quickly to the top ranks of comparable programs in the nation. These new programs will also support the university's goal (discussed in the Plan for Faculty and Student Development) to increase the number of doctoral degrees awarded on campus.

Part V. Plan for Faculty and Student Development

Overview

As described in the Plan for Research Funding and Productivity and the Plan to Improve Undergraduate Education, the University of Houston has set high performance standards for its faculty and students. In order to achieve the goals identified in these plans, the university must supply the resources, infrastructure and professional support needed for faculty and students to perform at the highest levels. With respect to faculty, the University of Houston is implementing numerous initiatives designed to help faculty increase their research and scholarly productivity, achieve broad recognition for their work (which is key to the university's national reputation), and enhance their performance in the classroom (which is key to the university's student success goals). UH is also increasing the number of faculty on campus. As important as it is to increase the productivity of faculty, UH must increase their absolute numbers, as well, if the university is to achieve its research goals and meet the instructional demands of a growing student population.

With respect to students, in addition to the strategies UH is pursuing in order to enhance student persistence and graduation (e.g., financial support, retention programs, advising), the university is implementing numerous programs designed to facilitate and recognize student research, scholarship and learning at the undergraduate level. As for graduate and professional students – particularly doctoral students – they represent an integral part of the university's research workforce, the future professional workforce for the region and state, and the next generation of scholars for colleges and universities. The academic qualifications of graduate and professional students also reflect the quality of the university's programs. Therefore, the university is intent on building a graduate and professional student population that is larger, more diverse, and more talented than it is today.

Goal 1: Increase the number of faculty on campus and provide them with the support they need to achieve, and receive recognition for, the highest quality research, scholarship and instruction

Objectives: Increase by 2015 –

1. The number of tenured/tenure-track faculty to 1,033
2. National Academy members and Nobel laureates to 10
3. The number of scholarly citations to 30,000
4. The number of scholarly papers published to 6,000
5. The number of Top American Research University (TARU) faculty awards to 8

Performance Data and Targets

	2007	2008	2009	2015 Target
Total Tenured/Tenure-Track Faculty	890	911	933	1,033
National Academy Members, Nobel Laureates	8	8	8	10

	2002-06	2003-07	2004-08	2015 Target
Number of Citations	18,964	20,933	22,755	30,000
Number of Papers	4,284	4,481	4,677	6,000

	2005	2006	2007	2015 Target
Top American Research Universities (TARU) Faculty Awards	1	5	3	8

Summary of Strategies:

1. Create new faculty positions through the annual planning and budgeting process

2. Provide faculty with research development support in order to increase their research and scholarly productivity

3. Provide faculty with instructional development support in order to improve their performance in the classroom

4. Assist faculty in achieving national recognition for their research and scholarship

5. Create opportunities for faculty to collaborate in order to increase their research and scholarly productivity

Description of Strategies

Strategy 1: Create new faculty positions through the annual planning and budgeting process

Central to the University of Houston's goal of becoming a nationally recognized research university is increasing the number of UH faculty, both to support the growing number of students on campus (UH's student-to-faculty ratio of 24/1 is too high for a tier-one university) and to increase research and scholarly productivity to tier-one levels. The creation of new faculty positions is, therefore, one of the university's top priorities during its annual planning and budgeting process. New faculty lines are allocated to the UH colleges when they meet one of the following criteria: (1) they are part of the university's strategic cluster hiring model (see Plan to Increase Research Funding and Productivity); (2) they are in a program where the

university already has or can achieve national excellence; or (3) they are in a program with high enrollment demand or demonstrated need within the region. The university seeks to create approximately 20 new positions per year.

Strategy 2: Provide faculty with research development support in order to increase their research and scholarly productivity

Research Development and Grants Administration

Effective research administration is essential to assist faculty in identifying grant opportunities, writing grants, and managing grants once awarded. The University of Houston is developing the research administration infrastructure necessary to support the increased research activity of a tier-one university and the development of large, multidisciplinary proposals. Currently, the research development team consists of an Executive Director of UH System Research and Diversity Initiatives, a Director of Research Initiatives, a Funding Specialist, a Research Development Project Manager, and a Research Liaison Officer. UH is also in the process of recruiting an Executive Director of Research Development. In addition, the UH Office of Contracts and Grants has been divided into pre-award and post-award departments to better serve faculty in the management of grants.

Center for Industrial Partnerships

The University of Houston has established the Center for Industrial Partnerships (CIP) to enhance faculty research productivity through technology development and transfer. The CIP partners with companies, non-profit organizations, and economic development entities (such as the Greater Houston Partnership) to grow UH's research enterprise by securing research and intellectual property agreements.

Internal Research Grants Programs

Each year, the University of Houston implements three internal grants programs designed to seed fund faculty research and scholarship that will ultimately lead to external grants and publications. These include (1) the Small Grants Program, to provide funding for unique or unusual research or scholarly projects not routinely supported by the UH colleges; (2) the GEAR Program, to invest in research likely to return substantial indirect costs from external sources (particularly the federal government) to the university in the near future; and (3) the New Faculty Research Program, to aid faculty who wish to initiate research for the first time and who have not had previous support.

Strategy 3: Provide faculty with instructional development support in order to improve their performance in the classroom

The University of Houston has a robust faculty development program designed to improve the quality of teaching/learning and to promote a greater degree of student engagement across the curriculum. The cornerstone is the Faculty Development and Instructional Support Program (FDIS). FDIS provides one-on-one consultations, group workshops, and regular teaching/

learning events to promote best practices in the field of university teaching. In many cases, workshops and conferences are presented by teaching faculty as a way to acknowledge their work while presenting relevant information to their peers. FDIS also supports a host of university-sponsored instructional technologies, including Blackboard (online course management system), TurningPoint (in-class, student response system), Turnitin (anti-plagiarism software), MediaSite (classroom capture tool), and digital media streaming (i.e. podcasting, YouTube). In addition, FDIS administers the Faculty Development Initiative Program (FDIP), a grant program that provides funding to faculty interested in integrating technology into the delivery of instruction for the purpose of improving learning outcomes. Over $300,000 is awarded every year, with awards ranging from $4,000 to $25,000. Finally, UH is in the process of establishing a Center for Teaching Excellence on campus, the initial focus of which will be enhancement of instruction in the core curriculum.

Strategy 4: Assist faculty in achieving national recognition for their research and scholarship

Faculty recognition for research and scholarship is essential to enhancing the national reputation of the university, with faculty awards – such as membership in the national academies, Fulbright Scholars, and Guggenheim Fellows – factoring significantly into national rankings (e.g., Top American Research Universities) and serving as criteria for state funding through the National Research University Fund. In response, the University of Houston has created a Tier One Faculty Awards Program/web site that highlights UH faculty award winners, provides information on national awards, and supports faculty in completing applications and nominations for awards.

Strategy 5: Create opportunities for faculty to collaborate in order to increase their research and scholarly productivity

As indicated in the Plan to Increase Research Awards and Productivity, the development of interdisciplinary research programs has become increasingly important to securing large federal grants. Since the development of such programs can take place only through partnerships and collaboration, creating environments that bring faculty in multiple disciplines together has become a major focus at the University of Houston. The university's faculty cluster hiring model and emphasis on the development of core research facilities for use by multiple faculty teams are evidence of this. In addition, last year, the University of Houston System identified the development of joint research projects among its universities – with the goal of increasing research productivity at each institution – as one of its key strategic initiatives. To that end, the University of Houston is looking for ways it can partner with UH-Downtown (as well as Texas Southern University) to take advantage of those institutions' Minority Serving and Hispanic Serving University designations to secure special research grants from the federal government. UH is also exploring the development of research projects with its sister institutions in the areas of energy and the health sciences – UH's two signature research foci.

Goal 2: Increase opportunities for UH undergraduates to participate in research activities and receive recognition for their work

Objectives: Increase by 2015 –

1. The number of undergraduates participating in a research activity to 14,000
2. The number of undergraduates registered on the eDISCOVERY Portal (UH's online database for student research opportunities) to 5,000

Performance Data and Targets

	2007	2008	2009	2015 Target
Undergraduates Participating in Research	NA	NA	7,000	14,000
Undergraduate eDISCOVERY Registrants	NA	NA	500	5,000

Summary of Strategies:

1. Implement the Learning Through Discovery Initiative in order to increase research opportunities for undergraduates

2. Award fellowships and scholarships to undergraduates for participating in research

Description of Strategies

Strategy 1: Implement the Learning Through Discovery Initiative in order to increase research opportunities for undergraduates

Recognizing that research skills and experience will equip students with the tools they need to compete in the global marketplace or as they pursue graduate studies, the University of Houston began implementing in Fall 2008 the UH Learning Through Discovery Initiative, which promotes a teaching and learning culture supportive of research in all disciplines for all undergraduate students. The initiative focuses on (1) providing students with research skills training and (2) expanding student research opportunities both on and off campus. Core activities include the Learning Through Discovery Curriculum Grant Program, through which faculty receive grants for incorporating research activities into their courses, and the eDISCOVERY Portal, which is a customized online database that matches UH students to available research opportunities. Currently, over 570 students have registered for eDISCOVERY accounts. Both undergraduate and graduate students benefit from the one-stop convenience of searching for research opportunities. The portal also provides faculty with a way to specify available research projects and specific majors of interest – thus facilitating interdisciplinary research. The university is working to increase both faculty mentor and student eDISCOVERY membership.

Strategy 2: Award fellowships and scholarships to undergraduates for participating in research

Summer Undergraduate Research Fellowships (SURF)

The UH SURF program provides funding for rising UH sophomores, juniors and seniors to participate in a focused, full-time, 10-week research experience under the direction of UH faculty. The competitive award requires a minimum 3.5 GPA and provides the SURF student with a $3,500 stipend and $500 reimbursement to faculty. All full-time UH faculty are eligible to mentor a SURF student. During Summer 2009, 44 students were awarded the fellowship. SURF students present their research at the annual Undergraduate Research Day hosted each fall at UH.

Provost's Undergraduate Research Scholarships (PURS)

The PURS program provides UH juniors and seniors with the opportunity to enrich their undergraduate experience by participating in a research project under the direction of a UH faculty mentor. Scholarship recipients receive a $1,000 scholarship to conduct one semester of research and engage in other scholarly activities with faculty members. The scholarship provides support for research during the fall or spring semester while the student is enrolled in courses. During Fall 2008 and Spring 2009, 58 students were awarded the scholarship.

Student Training and Research Scholarships (STAR)

The STAR program provides support for students who have been awarded a federal or Texas work-study grant to participate in a mentored research experience. The STAR Program was piloted in the 2009-2010 academic year. Students are paired with a faculty or staff mentor and conduct research over two semesters. STAR Scholars receive support from their mentor and peer facilitators. Students who successfully complete program requirements and research skills training workshops receive a $500 STAR Scholarship.

Goal 3: Increase the number, diversity and quality of UH graduate students to enhance the research productivity of UH, meet the professional workforce needs of Texas, and prepare the next generation of scholars in higher education

Objectives: Increase by 2015 –

1. The percentage of graduate and professional students to 24% of total enrollment
2. The number of master's students to 5,928
3. The number of professional students to 1,962
4. The number of students enrolled in doctoral programs to 1,792
5. The number of African-American students enrolled in doctoral programs to 177
6. The number of Hispanic students enrolled in doctoral programs to 221
7. The number of doctoral degrees awarded to 351

Performance Data and Targets

	2007	2008	2009	2015 Target
Percent Graduate & Professional Students	20%	20%	21%	24%
Total Master's Enrollment	3,758	3,983	4,287	5,928
Total Professional Enrollment	1,860	1,820	1,768	1,962
Total Doctoral Enrollment	1,473	1,501	1,647	1,792
African-American Doctoral Enrollment	68	77	88	125
Hispanic Doctoral Enrollment	104	113	120	161
Doctoral Degrees Awarded	248	262	235	351

Summary of Strategies:

1. Enhance the number and value of financial packages so that UH can compete on a national basis for the finest graduate and professional students

2. Develop a doctoral student body that represents the diversity of Texas

3. Build a research environment on campus that enhances the ability of graduate students to apply for and secure research grants and publications

Description of Strategies

Strategy 1: Enhance the number and value of financial packages so that UH can compete on a national basis for the finest graduate and professional students

Increasing the financial resources available for graduate and professional students has been an important budget priority for the University of Houston for the past decade. At the institutional level, four approaches are taken. First, in the late 1990s, UH created the Graduate Assistant Tuition Fellowship Program, through which the university pays for the tuition of graduate students employed as research and teaching assistants. The GATF program has been extremely successful – the annual investment has grown from $2.5 million to over $8 million. Second, the university offers privately endowed fellowships to the most talented students. Presidential, Cullen and Erhardt Fellowships provide funds to match or exceed financial assistance packages offered by other institutions. Only students of exceptional promise who represent extraordinary recruitment opportunities receive these fellowships. Third, on an annual basis, the university is increasing through its planning and budgeting process the resources available for graduate student stipends to the UH colleges and departments. And finally, the university is working with faculty to increase the number of research assistants on campus who are supported by external grants. Doing so frees up institutional resources for investment in other elements of the research enterprise.

Strategy 2: Develop a doctoral student body that represents the diversity of Texas

The enrollment of a diverse doctoral student body is one of the greatest challenges facing research universities nationwide, including the University of Houston. To date, UH has been very successful at recruiting students internationally, which, given Houston's position as a cosmopolitan city, reflects an important aspect of the city's diversity (48% of UH graduate students are from other countries). At the same time, UH has been less successful at recruiting African-American and Hispanic doctoral students, who constitute 5% and 7% respectively of the university's doctoral enrollment.

The recruitment of doctoral students at UH takes place almost exclusively at the departmental rather than institutional level. That said, there is a communicated institutional expectation that department chairs will recruit not only the most talented graduate students but those that reflect the diversity of the Houston metropolitan area and Texas. They are doing so through the nationwide network of colleagues in their disciplines that they have developed, who they rely upon to help identify students with talent. Looking locally, as one of the most diverse higher education systems in the nation, department chairs are also encouraged to recruit talented students from the undergraduate student bodies at UH and the other UH System universities.

Strategy 3: **Build a research environment on campus that enhances the ability of graduate students to apply for and secure research grants and publications**

With respect to creating research opportunities for graduate students, the university pays special attention to involving these students in UH's developing research clusters. In addition, the university's close proximity to a strong arts community, an innovative energy industry, and the Texas Medical Center provides an exceptional opportunity to recruit and engage students. Concomitant with this, UH is recruiting faculty who have experience in industry and community settings. By doing so, UH is able to involve students directly in entrepreneurial and commercially related endeavors, where the potential for discovery and recognition is greatly enhanced. In recent years, UH graduate students have received competitive research awards from a variety of granting organizations, including NASA, The Institute for Rehabilitation and Research (TIRR) Memorial Hermann, and several educational institutions (the University of Texas Health Science Center-Houston, Baylor College of Medicine, and Rice University). The total amount requested by UH graduate students increased from $421,114 in FY08 to $679,647 in FY09. The awards granted over the same two-year period rose significantly as well, from $65,114 in FY08 to $94,647 in FY09.

Part VI. Plan for the University of Houston Libraries

Overview

An integral component of a tier-one university is the commitment to build and sustain a tier-one library. The primary goal of an academic library is to support the research and learning activities of the institution's faculty and students. A strong library can enhance the university's efforts to accomplish its goals, especially those in the areas of becoming a nationally competitive research university and increasing student success.

A commitment to excellence requires first-rate collections, both print and electronic, outstanding staff, and innovative services. The collections must be targeted and comprehensive enough to support and enhance the research and teaching missions of the larger institution. The staff must be comprised of a sufficient number of talented individuals who can make these information resources available to students and faculty and teach them how to find and evaluate them. Library services must support and enhance the campus-wide learning process that is the hallmark of higher education. In order to create a tier-one research library the University of Houston Libraries are focusing on the following key areas:

1. Expanding library research and instructional services
2. Enhancing resources in support of the university's doctoral programs and research
3. Advancing the digital library
4. Achieving 60th rank on the American Research Libraries (ARL) Index

Expanding Library Research and Instructional Services

Meeting the information resource needs of faculty and students has always been the primary focus of the University of Houston Libraries. Every semester the UH Libraries provide library instructional sessions, research assistance, and access to print and electronic resources in support of curricular goals. This past year, both the Learning Through Discovery Initiative and the University of Houston' goals challenged the library to enhance the quality of curricular support. In response, librarians increased collaborations with the Learning Through Discovery office, academic support services, and faculty to offer new services that benefit students across the entire curriculum. Librarians have expanded the following services:

Library Instruction

- Initial steps toward a uniform first year library experience in introductory English classes
- 20 instructional sessions that involve hands-on research with primary source materials within four different disciplines
- Training on citation management software (EndNote and RefWorks) for students and faculty
- 259 discipline-specific instructional sessions

Learning Through Discovery Initiative Partnerships

- 10 discipline-specific Discovery Workshops for students offered face to face and online
- Fall and spring Discovery Workshops for faculty teaching research-intensive courses

Faculty and Student Collaborations

- Collaboratively developed class assignments within five different departments that utilize library resources and offered sequential library instructional sessions during the semester to build student research skills
- Developed with faculty 40 Subject Research Portals customized for various courses, the majority available online
- Embedded librarian services within three different Blackboard courses in which a librarian is included as an instructor to address student research questions
- One-on-one research consultations with students in research-intensive courses within several different departments

The core mission of these services is to expand student information skills and success through a comprehensive and systematic approach. The UH Libraries will continue to build on these accomplishments and with support from faculty, will integrate these services more broadly into the curriculum. In addition, the following new services will be developed:

- General and discipline-specific online information literacy tutorials to supplement face-to-face instruction and provide flexibility for students and faculty schedules, reach distance learners, and support diverse learning styles
- Collaborations with instructional designers to embed library tutorials in Blackboard
- Assessment tools to measure student success and growth of information literacy skills

Enhancing Resources in Support of the University's Doctoral Programs and Research

To support the university's doctoral programs and research activities, the UH Libraries are building deeper and broader collections of current and retrospective scholarly materials. The library recently acquired all back files of ProQuest, which includes more than 76 million pages of content in the humanities and social sciences. Among the titles included is *Early English Books Online* – a resource that had been requested by faculty and doctoral students repeatedly. The library is also considering the purchase of the entire back file of Elsevier, the well-known publisher of scientific, technical, engineering and medical journals. These materials would add tremendous depth to UH's holdings in the sciences and would provide greatly improved research support. Additionally, the library is expanding its current, ongoing acquisitions of research materials to support all doctoral programs – both current programs and any that are established in the future.

The library is also developing new and innovative services that target the specific needs of doctoral students and faculty. Additional librarians with greater, more in-depth subject expertise to serve as authoritative guides and partners for graduate students and faculty

engaged in the research process will be hired. With such expert help, researchers will be able to benefit more readily from the vast array of rich resources available to them. Each of these expert librarians will work closely with a few graduate students and faculty to ensure that their research efforts are more productive. Additional staff with technical expertise will be recruited, as well. These individuals will develop sophisticated, powerful discovery and productivity tools to further enrich the research process. In short, the library will provide the expert advice and technological tools (e.g., targeted research portals) to enable graduate students and faculty to locate, organize, and use information in order to develop and demonstrate their research theses.

Advancing the Digital Library

A tier-one library should possess a willingness to develop and use innovative technology to capture and provide access to the intellectual and creative output of the university. Increasingly this output is in digital form. The UH Libraries are developing a cohesive digital library that will enhance the visibility of University of Houston scholarship and support the teaching, research, and administrative activities of the university. In keeping with the UH Libraries' role as a central resource serving the entire campus, they seek to collect, manage, and preserve the university's digital record by bringing together unique special collections, university archives, and scholarly output from faculty and students.

Several key trends are driving digital library development, including: (1) a growing emphasis on collaborative, interdisciplinary, and technology-driven learning; (2) a renewed focus on undergraduate research, where easily accessible primary source materials can be a valuable tool for investigative learning; (3) proliferation of digital literature and historical records that have an uncertain future if they are not aggressively collected and managed; and (4) a research environment where geographic and disciplinary boundaries are fluid. The digital library is an opportunity to build on existing projects and partnerships to cultivate a vibrant local resource that will have global reach.

The Digital Library supports teaching and research by:

- Showcasing unique collections that support curricular and research goals
- Increasing the richness and variety of research resources available to students and faculty who are geographically distant
- Facilitating collaboration across departments and disciplines by providing a central clearinghouse for the scholarly endeavors of students and faculty
- Assisting faculty in meeting federally-mandated deposit requirements
- Providing a platform for students' digital portfolios

The Digital Library looks to the future by:

- Taking affirmative steps to preserve vulnerable digital content
- Designing a web interface that will encourage users to explore the library beyond their research needs

- Seeking out collections from all departments on campus such as video of lectures from distinguished individuals in their fields, campus building blueprints with an interactive map, and students' research and media projects

Achieving 60th Rank on the American Research Libraries (ARL) Index

A useful benchmark for measuring the improvement of a research library is the Association of Research Libraries (ARL) index. The index is based on four factors: (1) total library expenditures, (2) salaries and wages for professional staff, (3) total library materials (collections) expenditures, and (4) number of professional and support staff. Currently the UH Libraries are ranked 81st on this index. An achievable goal for the library would be to increase its ranking to 60th among research libraries. The dollar amounts and level of staffing necessary to achieve a ranking of 60th are provided in the table below. The table also compares the current amounts for each of these factors for the UH Libraries and a relevant subset of ARL libraries.

Data for Selected ARL Libraries (2007-08)					
	Total Library Expenditures	Professional Staff Salaries	Library Materials Expenditures	Professional plus Support Staff	Rank
Value for library ranked 60th in each category	$22,863,907	$5,225,694	$10,097,607	199	60
University of Houston	**$19,286,301**	**$2,795,072**	**$8,911,877**	**153**	**81**
University of Illinois at Chicago	$19,258,880	$3,717,050	$9,128,496	175	78
University of South Carolina	$19,742,585	$4,058,321	$8,051,804	179	77
Texas Tech University	$25,184,730	$4,929,494	$11,079,689	232	52
University of Cincinnati	$20,205,911	$5,360,452	$10,283,685	134	72
North Carolina State University	$28,249,762	$7,228,469	$9,809,078	229	39
University of Pittsburgh Libraries	$31,660,109	$6,678,904	$14,857,024	293	30

Part VII. Plan for National Visibility

Overview

Institutional recognition and reputation are important to universities because higher education is, in part, a reputation-driven industry. The best faculty, students and staff are drawn to institutions with the best reputations. In addition, alumni giving and participation are based at least in part on how alumni perceive the university and how much they know about its activities. The University of Houston is focused on improving recognition of the university at both a local and national level through a defined branding initiative and enhancing the university's reputation through consistent messaging aimed at demonstrating UH's value. The major goals of these activities are to:

1. Increase positive visibility for the University of Houston
2. Build the university's reputation around the quality and accomplishments of its faculty
3. Increase the number and quality of student applications by enhancing institutional reputation
4. Increase donor and alumni support through improved communication and engagement

Increase Positive Visibility for the University of Houston

Determining how people perceive the University of Houston, communicating a positive image of the university to the public, and evaluating the effectiveness of these communications is critical to enhancing UH's national reputation. To that end, UH is conducting a current perception study of the university; reviewing and analyzing all marketing and public relations activities from the last two years; realigning resources for marketing and public relations to optimize reputational impact; and implementing a culture of continuous assessment of the impact of marketing and public relations activities. In addition to these benchmarking and market research activities, the university has implemented a comprehensive workflow system to track all activities and outcomes (this will provide data to support continuous assessment of how the marketing effort correlates to university goals for recognition and reputation-building); developed an online dashboard to display key performance indicators for all marketing/communications campaigns; and initiated a partnership with a graduate-level Six Sigma class to continuously improve measurement, service and outcomes.

Build the University's Reputation around the Quality and Accomplishments of its Faculty

As the University of Houston continues to add faculty of national and international reputation, it must simultaneously communicate the reputation of these scientists and scholars to the public in order to enhance the reputation of the university as a whole. Currently, the university is planning to implement one or more pilot projects in a targeted college, program or department aimed at increasing its reputation nationally and internationally. UH is also helping faculty apply

for national awards (such as those used for the Top American Research Universities rankings) and publicizing the awards and comparable recognitions that UH faculty have already received.

Increase the Number and Quality of Student Applications by Enhancing Institutional Reputation

In the Plan to Improve Undergraduate Education, the university has identified the recruitment of highly qualified students as an objective. Effective marketing and communication to targeted students is critical to this endeavor. In this regard, the university is analyzing marketing and public relations activities aimed at high school students, teachers and counselors and will redesign recruitment and admissions materials and marketing/PR activities to respond to any unmet needs.

Increase Donor and Alumni Support through Improved Communication and Engagement

Given limited state resources and the university's limited ability to increase tuition and fees, UH must increase financial support from alumni and donors in order to achieve its tier-one goals. To that end, the university is working to re-build its endowment; increase the number and funding levels of endowed professorships, chairs and endowed scholarships; and increase annual giving on a national basis.

Appendices

A. A Comparison of University of Houston Performance with National Peer Institutions

B. Status of Major Capital Projects

C. Academic Program Review Policy

D. Graduate Program Termination Process

Appendix A:

A Comparison of University of Houston Performance with National Peer Institutions

Prepared by Becky Claytor
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University of Houston
February, 2010

Note: Data in this report may vary with data in the UH Plan to Achieve Recognition as a National Research University due to different sources/definitions that were used in order to secure data for national peer institutions.

A Comparison of University of Houston Performance with National Peer Institutions

National Peer Institutions Overview

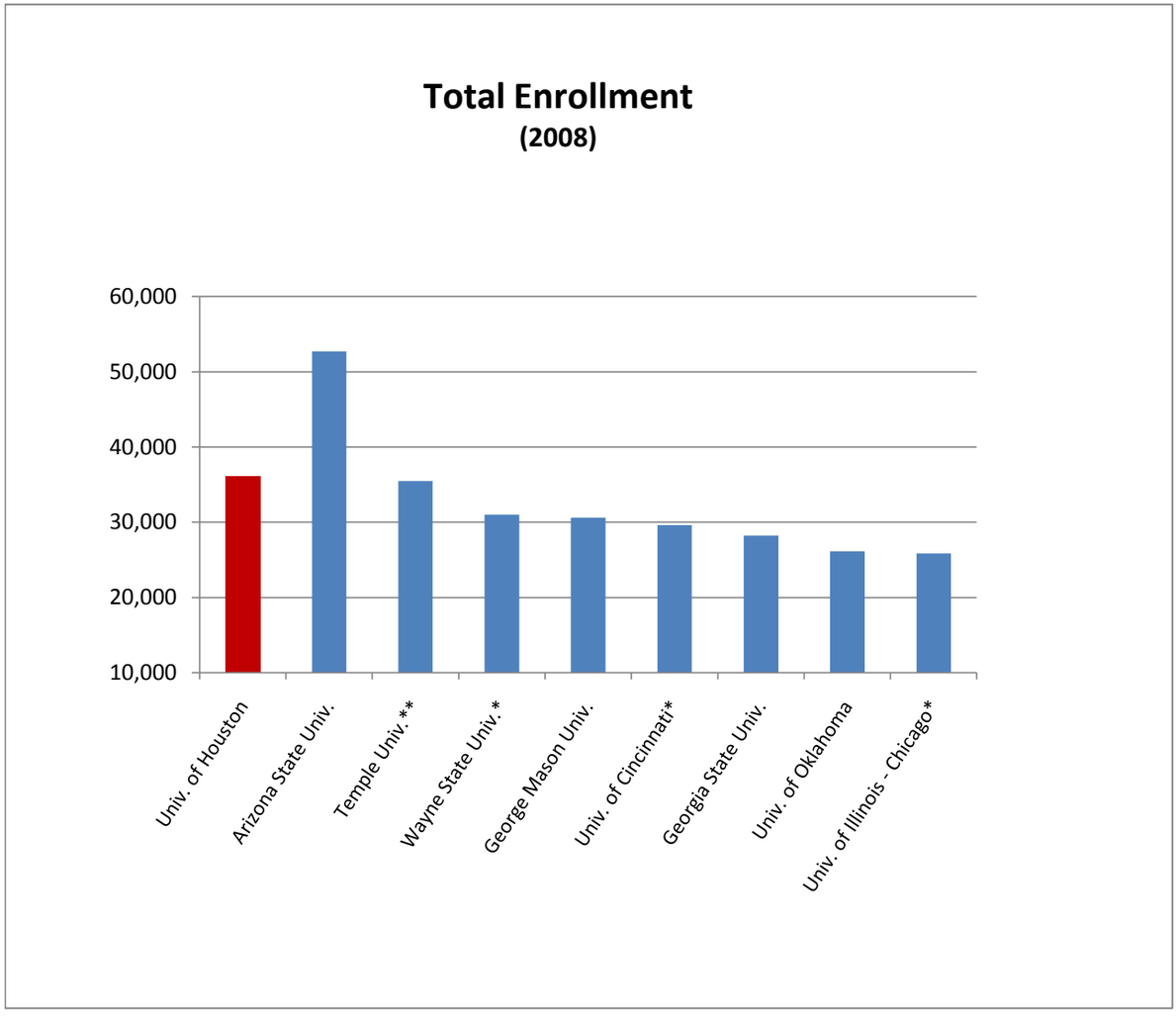
National Peers	2007 Enrollment	2007 % Minority	2007 % Graduate	2007 6-Year Grad Rate	2007 Top 10% Freshmen	% UG Residential	Residential/ Commuter	FY 2010 Tuition & Fees	2008 Total Degrees	2007 Doctoral Degrees	2008 Total Research	2008 Federal Research	2009 USNWR Rank/Tier	2005 Carnegie Status	TARU 25 Ranks	TARU 50 Ranks	2007 Endowment
University of Houston	34,663	52%	21%	43%	20%	8%	Commuter	$8,496	7,016	239	$84M	$43M	IV	HRA	0	1	$402M
Arizona State University	51,481	21%	19%	56%	27%	14%	Commuter	$6,334	14,444	376	$260M	$126M	121	VHRA	2	3	$478M
George Mason University	30,276	25%	39%	58%	18%	25%	Residential	$8,024	6,763	181	$73M	$50M	III	HRA	0	1	$55M
Georgia State University	27,134	41%	27%	47%	NA	12%	Commuter	$7,298	5,705	170	$78M	$26M	IV	HRA	0	0	$98M
Temple University**	34,696	28%	27%	60%	19%	19%	Commuter	$11,764	7,472	392	$92M	$59M	III	HRA	1	0	$237M
University of Cincinnati*	29,319	15%	30%	43%	20%	20%	Commuter	$9,399	6,441	261	$344M	$221M	III	VHRA	2	5	$1B
University of Illinois - Chicago*	25,747	40%	39%	50%	23%	22%	Commuter	$12,034	5,938	317	$335M	$197M	III	VHRA	0	5	$195M
University of Oklahoma	26,068	15%	25%	62%	33%	32%	Residential	$7,483	5,630	174	$192M	$92M	108	HRA	0	3	$792M
Wayne State University*	32,380	35%	35%	32%	25%	8%	Commuter	$8,598	5,810	213	$249M	$116M	IV	VHRA	0	4	$237M

*Institution with a medical school

**Institution with a medical school, but with medical research reported separately

Total Enrollment

	2004	2005	2006	2007	2008	% Δ 2004-2008
Univ. of Houston	35,180	35,344	34,334	34,663	36,104	2.6%
Arizona State Univ.	49,171	51,612	51,234	51,481	52,734	7.2%
Temple Univ.**	33,551	33,695	33,865	34,696	35,490	5.8%
Wayne State Univ.*	32,386	32,160	32,061	32,380	31,024	-4.2%
George Mason Univ.	28,874	29,728	29,889	30,276	30,613	6.0%
Univ. of Cincinnati*	27,178	27,932	28,327	29,319	29,617	9.0%
Georgia State Univ.	27,261	25,967	26,135	27,134	28,229	3.6%
Univ. of Oklahoma	27,483	26,506	25,923	26,068	26,140	-4.9%
Univ. of Illinois - Chicago*	24,865	24,812	24,644	25,747	25,835	3.9%



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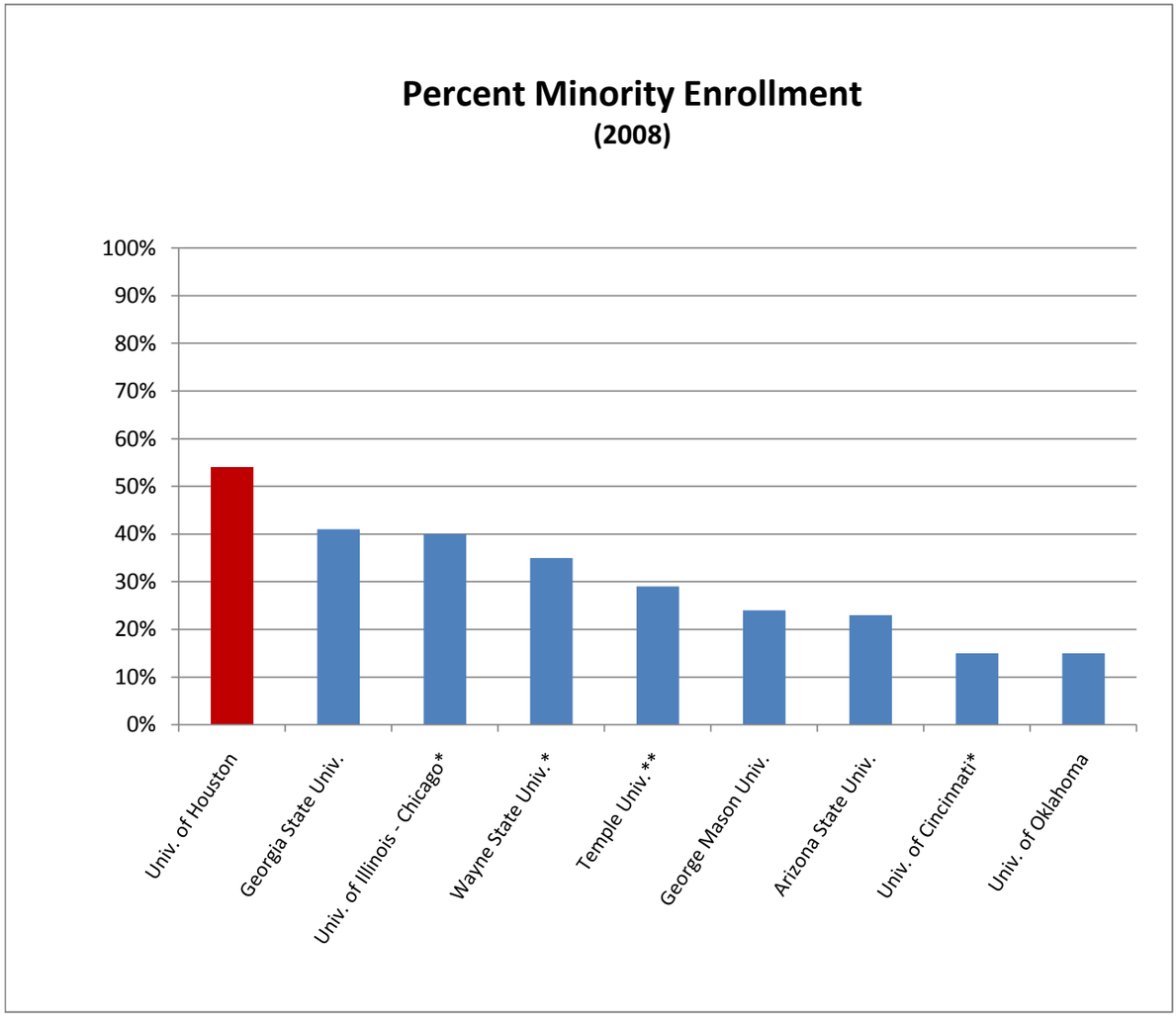
Source: IPEDS

Percent Minority Enrollment

	2004	2005	2006	2007	2008	% Pt. Δ 2004-2008
Univ. of Houston	**50%**	**51%**	**52%**	**52%**	**54%**	**4**
Georgia State Univ.	42%	41%	40%	41%	41%	-1
Univ. of Illinois - Chicago*	42%	42%	42%	40%	40%	-2
Wayne State Univ.*	34%	34%	34%	35%	35%	1
Temple Univ.**	29%	28%	29%	28%	29%	0
George Mason Univ.	27%	37%	26%	25%	24%	-3
Arizona State Univ.	19%	19%	21%	21%	23%	4
Univ. of Cincinnati*	16%	17%	16%	15%	15%	-1
Univ. of Oklahoma	15%	15%	15%	15%	15%	0



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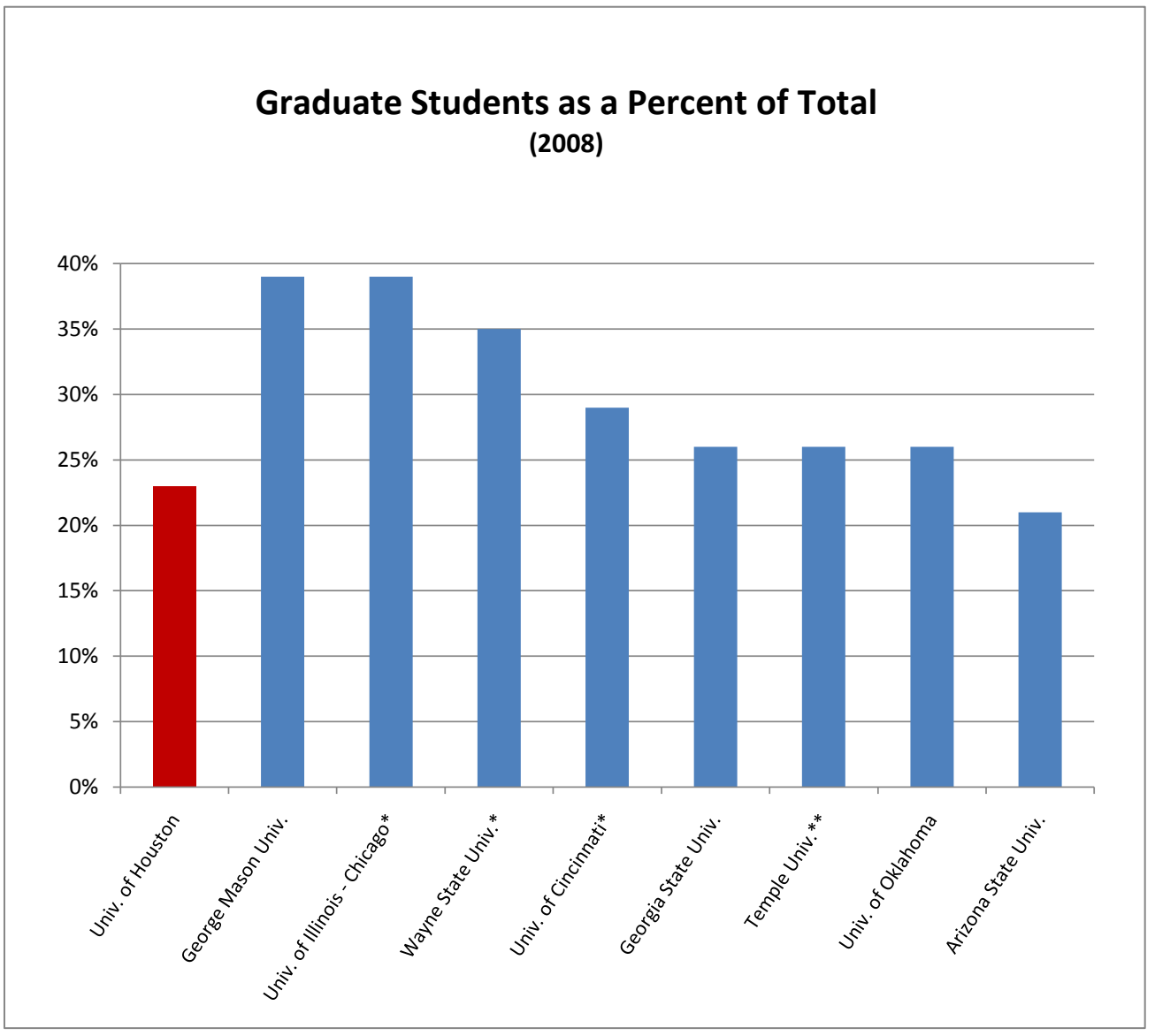
Source: IPEDS. Minority includes African American, Hispanic and Asian.

Percent Graduate Students

	2004	2005	2006	2007	2008	% Pt. Δ 2004-2008
Univ. of Houston	25%	24%	24%	24%	23%	-2
George Mason Univ.	40%	39%	39%	39%	39%	-1
Univ. of Illinois - Chicago*	38%	39%	39%	39%	39%	1
Wayne State Univ.*	36%	36%	35%	35%	35%	-1
Univ. of Cincinnati*	30%	30%	30%	30%	29%	-1
Georgia State Univ.	27%	27%	27%	27%	26%	-1
Temple Univ.**	30%	28%	27%	27%	26%	-4
Univ. of Oklahoma	24%	24%	25%	25%	26%	2
Arizona State Univ.	20%	20%	18%	19%	21%	1



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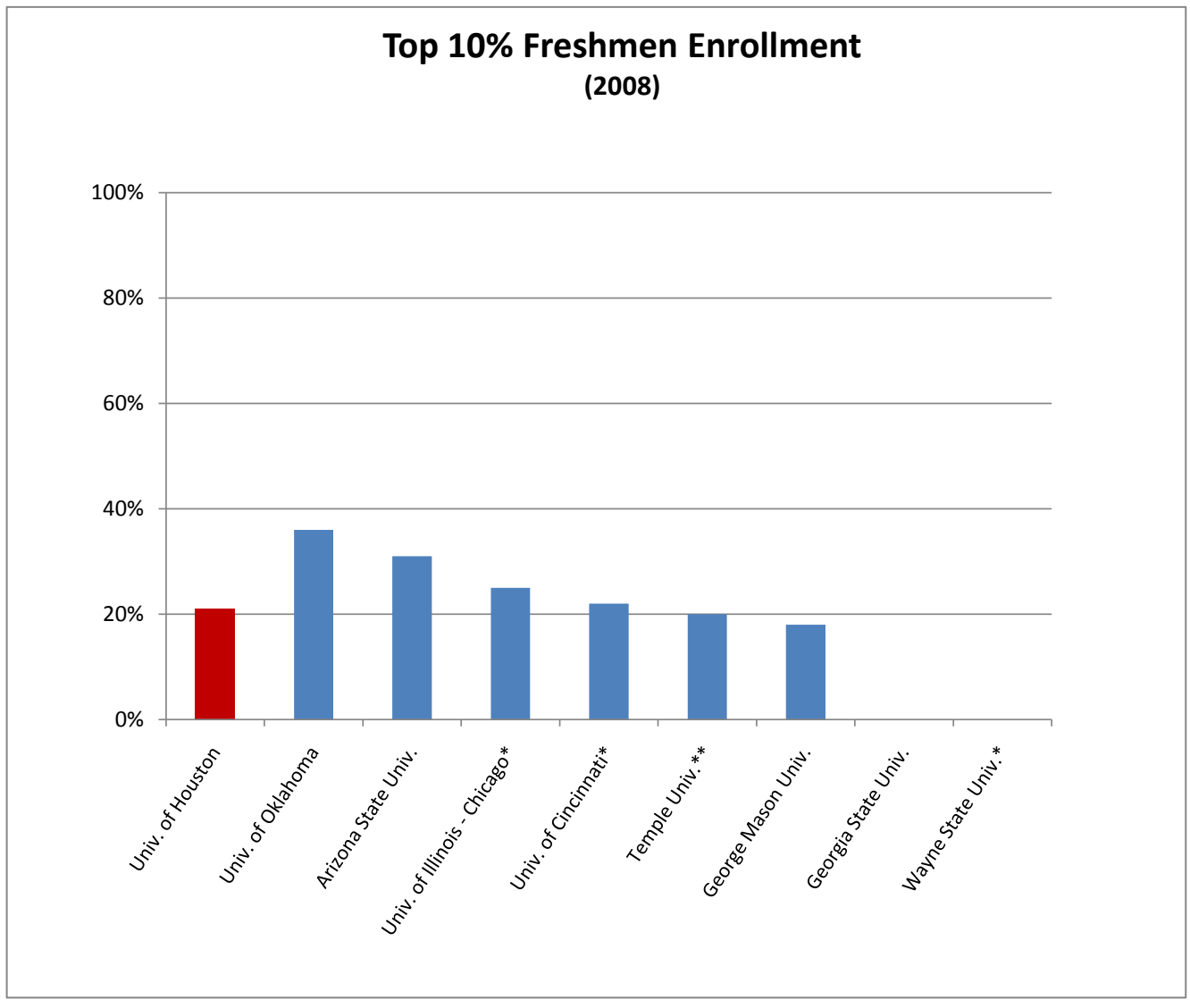
Source: IPEDS

Top 10% Freshmen Enrollment

	2004	2005	2006	2007	2008	% Pt. Δ 2004-2008
Univ. of Houston	23%	21%	22%	20%	21%	-2
Univ. of Oklahoma	36%	37%	35%	33%	36%	0
Arizona State Univ.	27%	27%	28%	27%	31%	4
Univ. of Illinois - Chicago*	24%	25%	23%	23%	25%	1
Univ. of Cincinnati*	21%	19%	21%	20%	22%	1
Temple Univ.**	17%	19%	18%	19%	20%	3
George Mason Univ.	15%	14%	15%	18%	18%	3
Georgia State Univ.	15%	NA	NA	NA	NA	0
Wayne State Univ.*	24%	25%	25%	25%	NA	0



*Institution with a medical school
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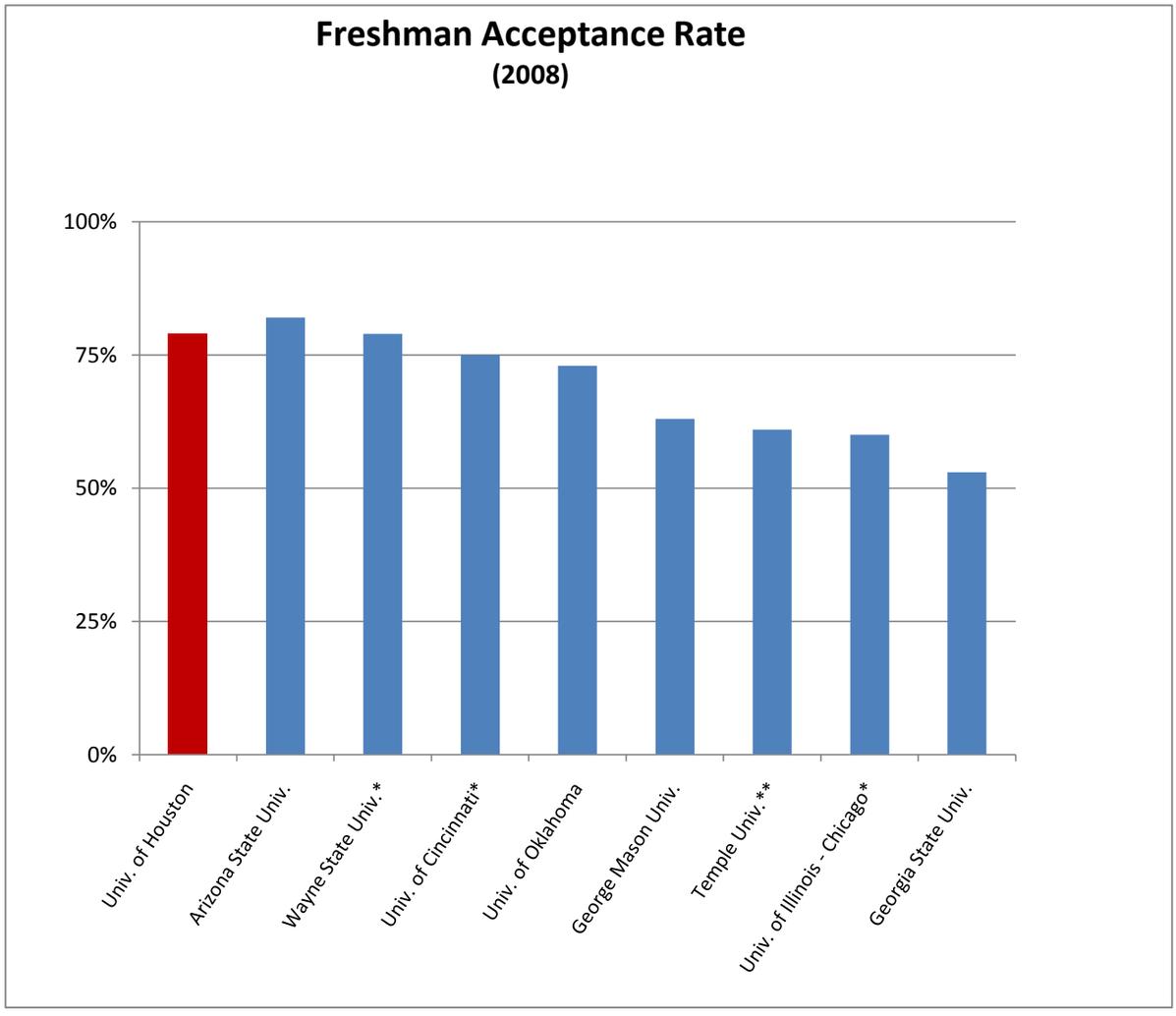
Source: USNews

Freshman Acceptance Rate

	2004	2005	2006	2007	2008	% Pt. Δ 2004-2008
Univ. of Houston	81%	81%	75%	77%	79%	-2
Arizona State Univ.	86%	91%	92%	92%	82%	-4
Wayne State Univ.*	68%	63%	86%	87%	79%	11
Univ. of Cincinnati*	88%	77%	76%	76%	75%	-13
Univ. of Oklahoma	82%	86%	83%	82%	73%	-9
George Mason Univ.	69%	69%	61%	55%	63%	-6
Temple Univ.**	60%	63%	60%	69%	61%	1
Univ. of Illinois - Chicago*	62%	58%	58%	64%	60%	-2
Georgia State Univ.	56%	56%	52%	52%	53%	-3



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Source: IPEDS

SAT 25th-75th Percentile Score

	2004	2005	2006	2007	2008
Univ. of Houston	**940-1170**	**950-1190**	**950-1190**	**940-1170**	**940-1170**
Univ. of Oklahoma[1]	**1070-1260**	**1070-1261**	**1070-1262**	**1070-1263**	**1070-1264**
George Mason Univ.	**990-1200**	**1000-1210**	**1010-1210**	**1030-1210**	**1020-1210**
Temple Univ.**	**980-1180**	**990-1190**	**990-1190**	**980-1180**	**1010-1210**
Univ. of Cincinnati*	**920-1210**	**980-1240**	**1000-1260**	**1000-1230**	**990-1240**
Univ. of Illinois - Chicago*[1]	**950-1140**	**950-1180**	**990-1180**	**990-1181**	**990-1182**
Georgia State Univ.	**990-1190**	**990-1190**	**990-1180**	**990-1180**	**980-1180**
Arizona State Univ.	**990-1220**	**990-1230**	**970-1220**	**970-1220**	**950-1200**
Wayne State Univ.*[1]	**790-1110**	**790-1110**	**830-1070**	**830-1110**	**830-1070**

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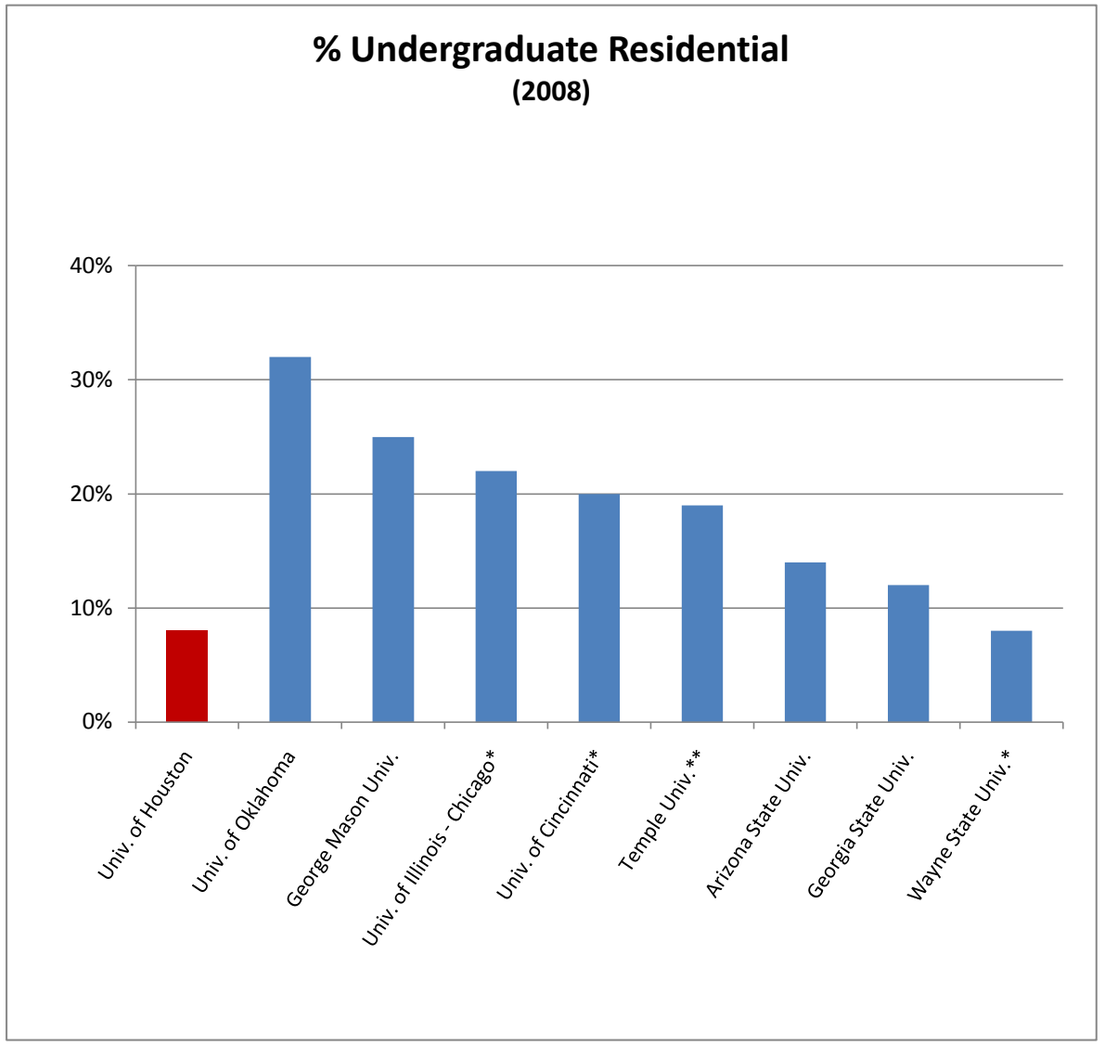
1University of Illinois - Chicago, University of Oklahoma and Wayne State University report ACT scores. A scale comparison was used to convert these scores to SAT equivalents.

Source: IPEDS

Residential/Commuter Status
Undergraduate Students

	Campus Status	% UG Residential
Univ. of Houston	**Commuter**	**8%**
Univ. of Oklahoma	Residential	32%
George Mason Univ.	Residential	25%
Univ. of Illinois - Chicago*	Commuter	22%
Univ. of Cincinnati*	Commuter	20%
Temple Univ.**	Commuter	19%
Arizona State Univ.	Commuter	14%
Georgia State Univ.	Commuter	12%
Wayne State Univ.*	Commuter	8%



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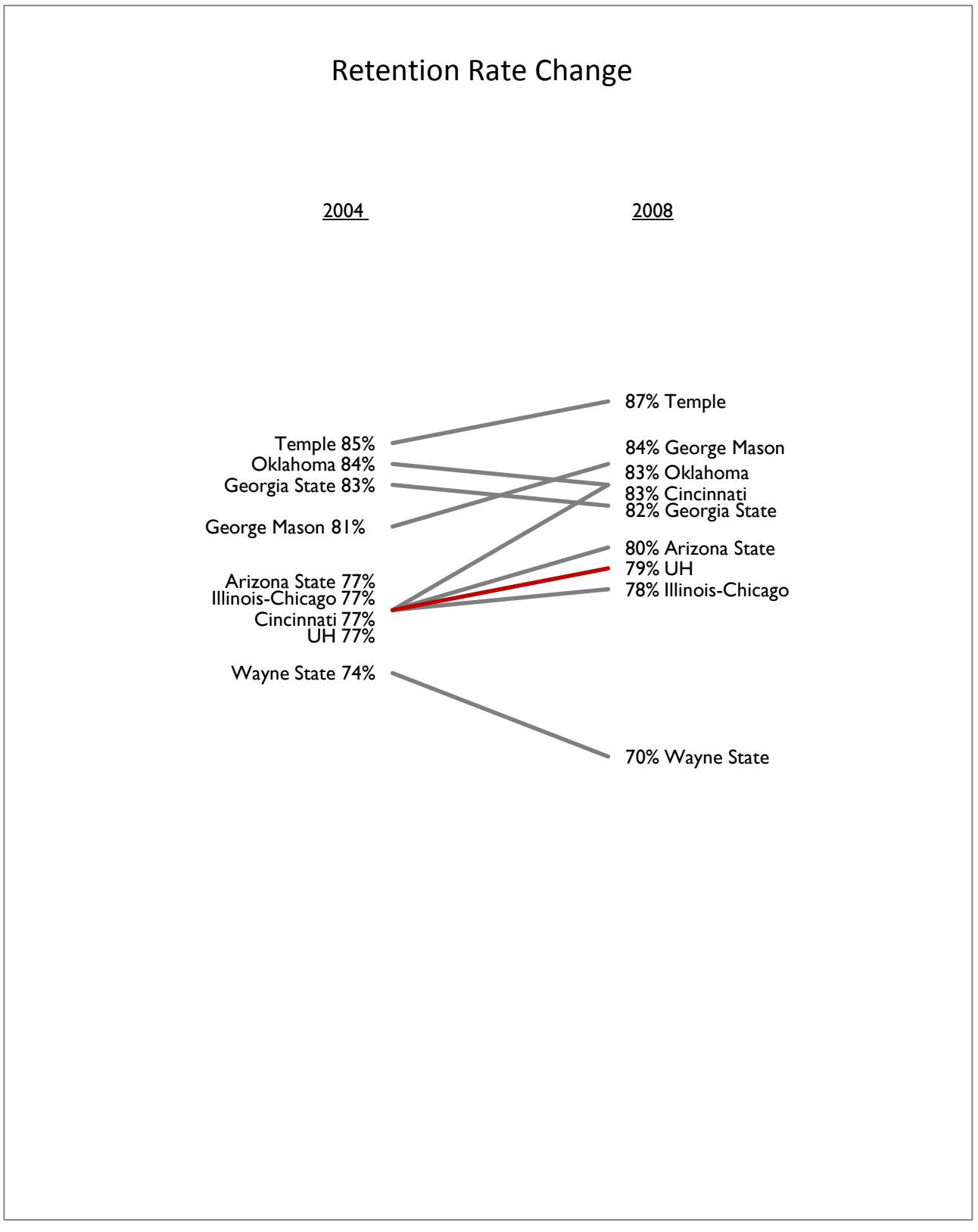
Source: College Board

FTIC Retention Rate

	2004	2005	2006	2007	2008	% Pt. Δ 2004-2008
Univ. of Houston	**77%**	**77%**	**76%**	**77%**	**79%**	**2**
Univ. of Cincinnati*	77%	79%	80%	82%	83%	6
Arizona State Univ.	77%	79%	79%	78%	80%	3
George Mason Univ.	81%	82%	86%	85%	84%	3
Temple Univ.**	85%	84%	87%	85%	87%	2
Univ. of Illinois - Chicago*	77%	77%	79%	79%	78%	1
Georgia State Univ.	83%	80%	79%	82%	82%	-1
Univ. of Oklahoma	84%	83%	85%	84%	83%	-1
Wayne State Univ.*	74%	71%	69%	69%	70%	-4



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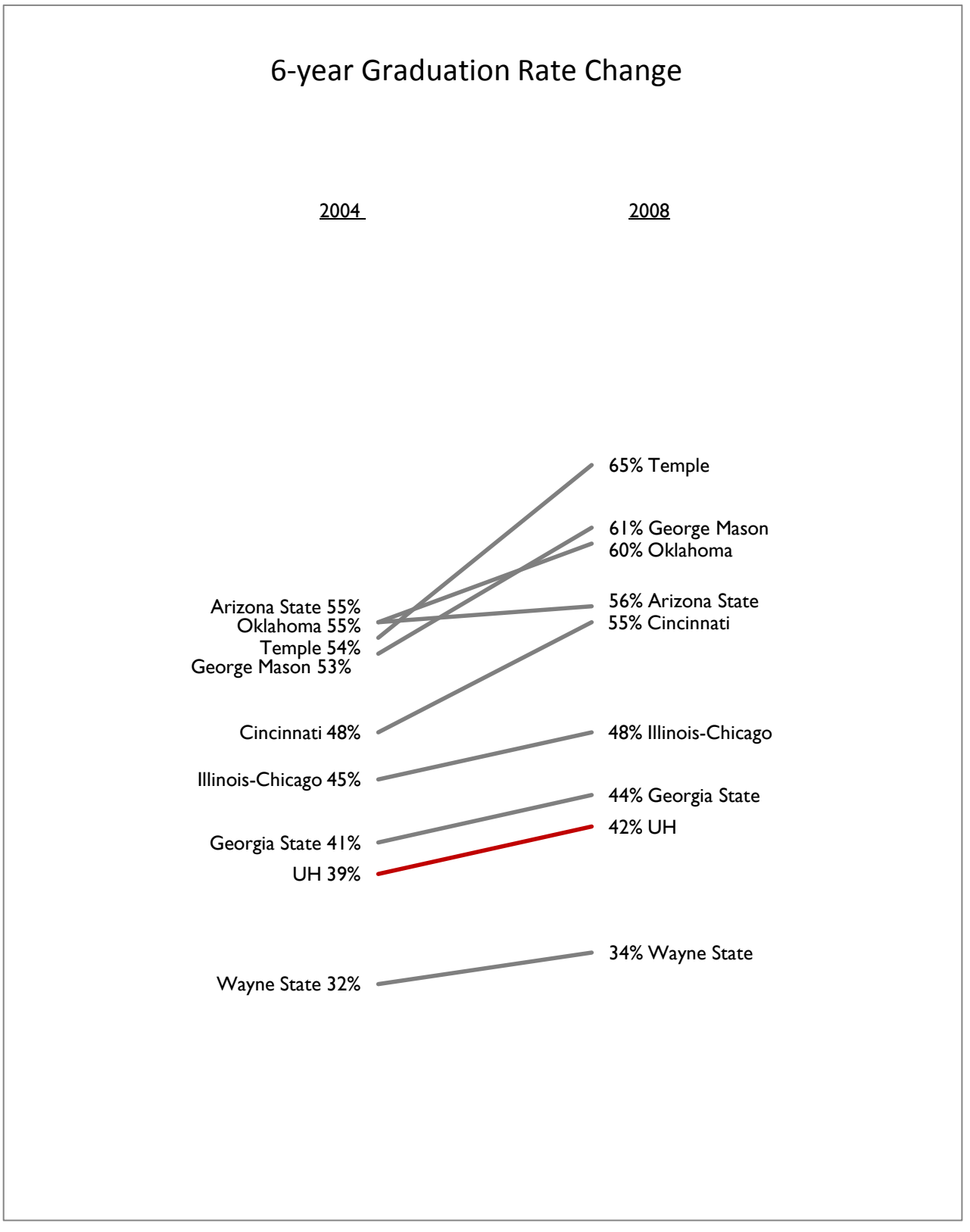
Source: IPEDS

6-Year Graduation Rate

	2004	2005	2006	2007	2008	% Pt. Δ 2004-2008
Univ. of Houston	39%	40%	42%	43%	42%	3
Temple Univ.**	54%	57%	59%	60%	65%	11
George Mason Univ.	53%	53%	56%	58%	61%	8
Univ. of Cincinnati*	48%	49%	52%	43%	55%	7
Univ. of Oklahoma	55%	55%	57%	62%	60%	5
Georgia State Univ.	41%	40%	41%	47%	44%	3
Univ. of Illinois - Chicago*	45%	50%	51%	50%	48%	3
Wayne State Univ.*	32%	33%	36%	32%	34%	2
Arizona State Univ.	55%	55%	56%	56%	56%	1



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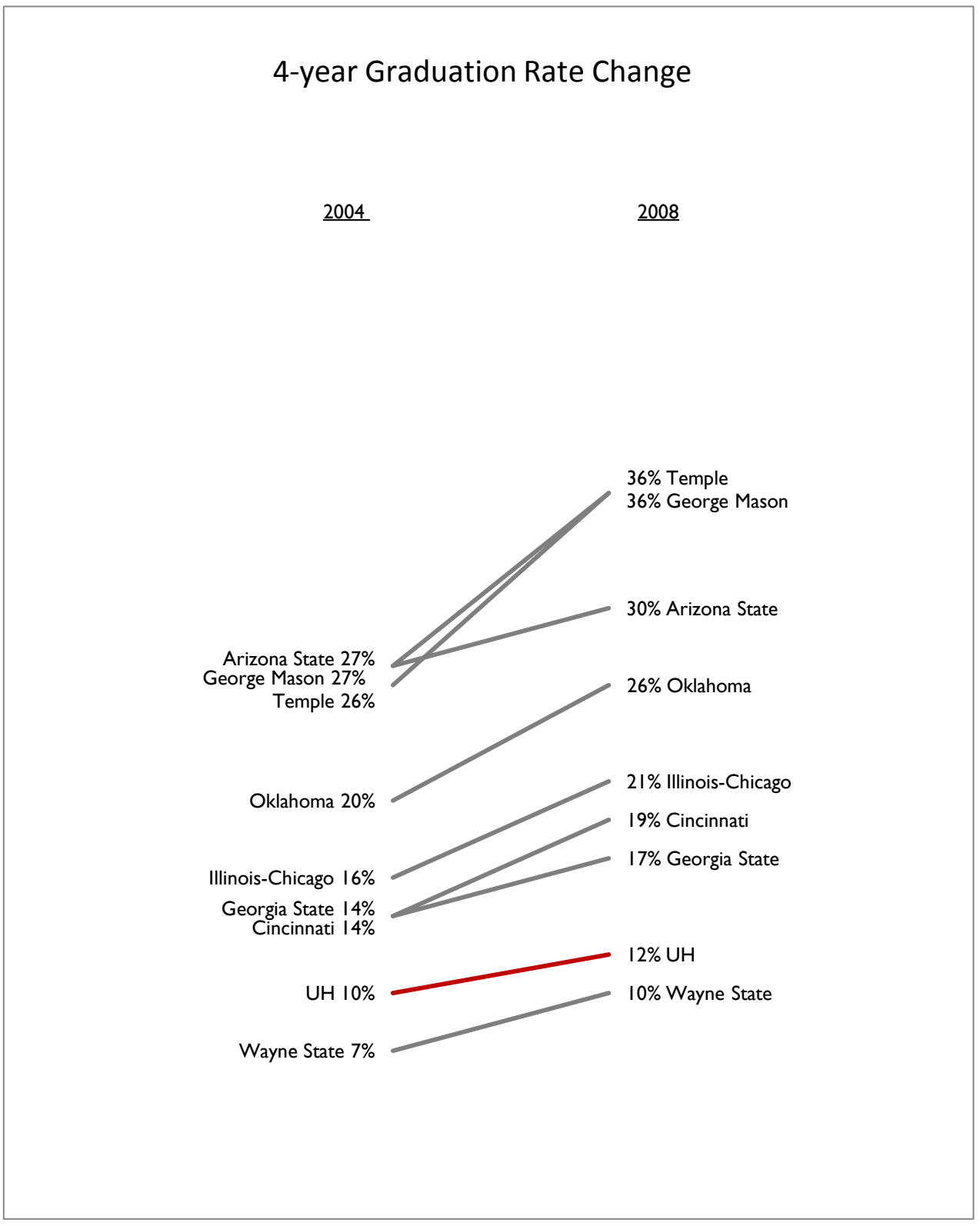
Source: IPEDS

4-Year Graduation Rate

	2004	2005	2006	2007	2008	% Pt. Δ 2004-2008
Univ. of Houston	**10%**	**10%**	**12%**	**13%**	**12%**	**2**
Temple Univ.**	26%	27%	29%	31%	36%	10
George Mason Univ.	27%	26%	31%	31%	36%	9
Univ. of Oklahoma	20%	19%	24%	25%	26%	6
Univ. of Cincinnati*	14%	16%	19%	18%	19%	5
Univ. of Illinois - Chicago*	16%	20%	21%	22%	21%	5
Arizona State Univ.	27%	27%	28%	28%	30%	3
Georgia State Univ.	14%	14%	15%	17%	17%	3
Wayne State Univ.*	7%	7%	13%	13%	10%	3



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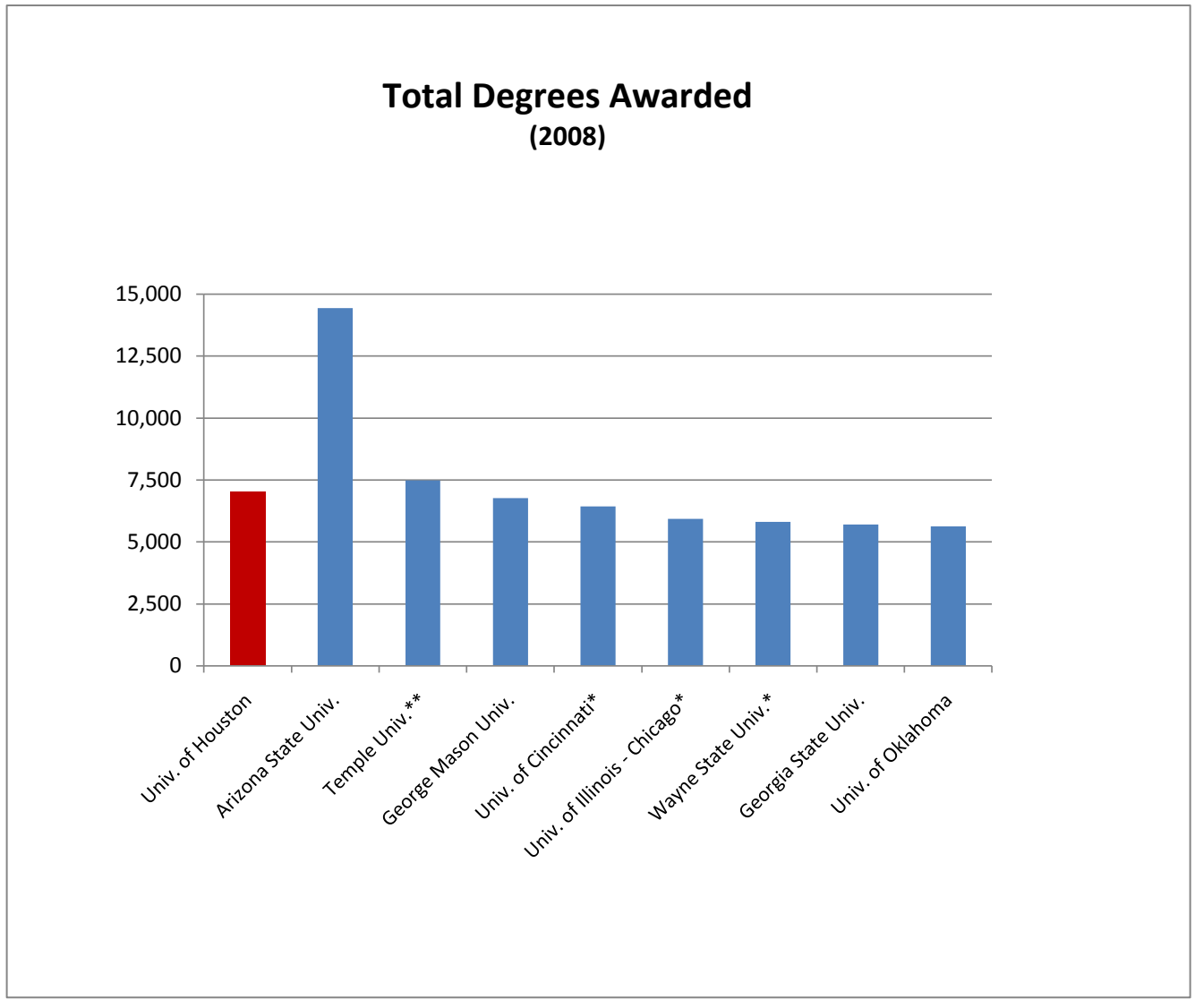
Source: IPEDS

Total Degrees Awarded Annually

	2004	2005	2006	2007	2008	% Δ 2004-2008
Univ. of Houston	6,456	6,780	6,729	6,961	7,016	8.7%
Arizona State Univ.	10,010	10,174	10,273	10,002	14,444	44.3%
Temple Univ.**	6,898	6,991	7,430	7,358	7,481	8.5%
George Mason Univ.	5,653	6,063	6,508	6,657	6,763	19.6%
Univ. of Cincinnati*	5,084	5,094	5,261	5,563	6,441	26.7%
Univ. of Illinois - Chicago*	5,889	5,723	5,756	5,885	5,938	0.8%
Wayne State Univ.*	5,549	5,322	5,227	5,303	5,810	4.7%
Georgia State Univ.	5,455	5,609	5,738	5,831	5,705	4.6%
Univ. of Oklahoma	5,205	5,600	5,708	5,703	5,630	8.2%



*Institution with a medical school

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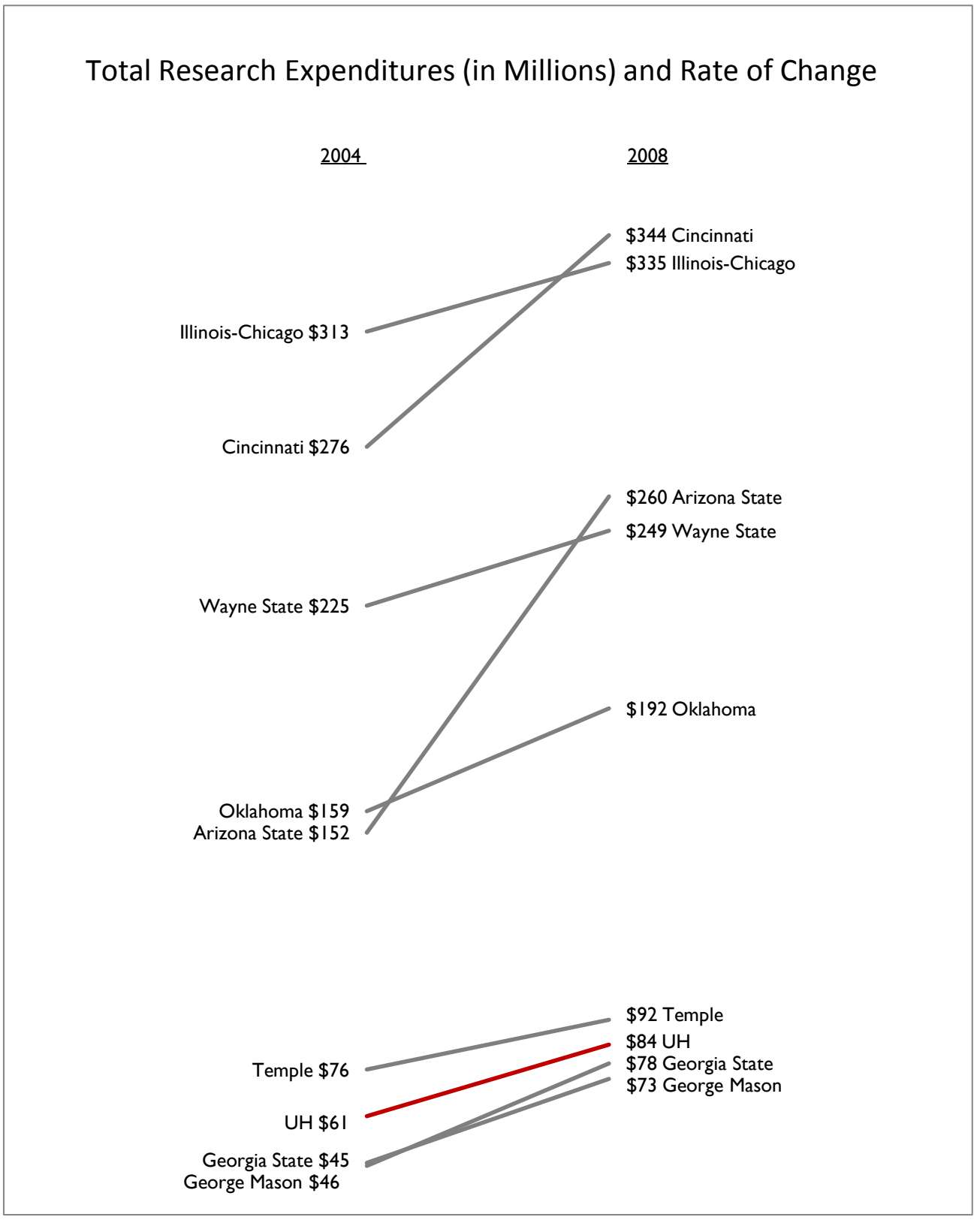
[1] In 2008 ASU changed their reporting to include all campuses and not just Tempe. This caused a large increase for some of their measure

Source: IPEDS

Total Research Expenditures (in millions)

	2004	2005	2006	2007	2008	% Δ 2004-2008
Univ. of Houston	**$61**	**$81**	**$76**	**$74**	**$84**	**37.7%**
Arizona State Univ.	$152	$167	$202	$224	$260	71.1%
Univ. of Cincinnati*	$276	$286	$294	$376	$344	24.6%
George Mason Univ.	$46	$43	$50	$58	$73	58.7%
Univ. of Illinois - Chicago*	$313	$318	$332	$342	$335	7.0%
Temple Univ.**	$76	$83	$80	$85	$92	21.1%
Georgia State Univ.	$45	$50	$53	$51	$78	73.3%
Wayne State Univ.*	$225	$226	$221	$235	$249	10.7%
Univ. of Oklahoma	$159	$174	$179	$177	$192	20.8%



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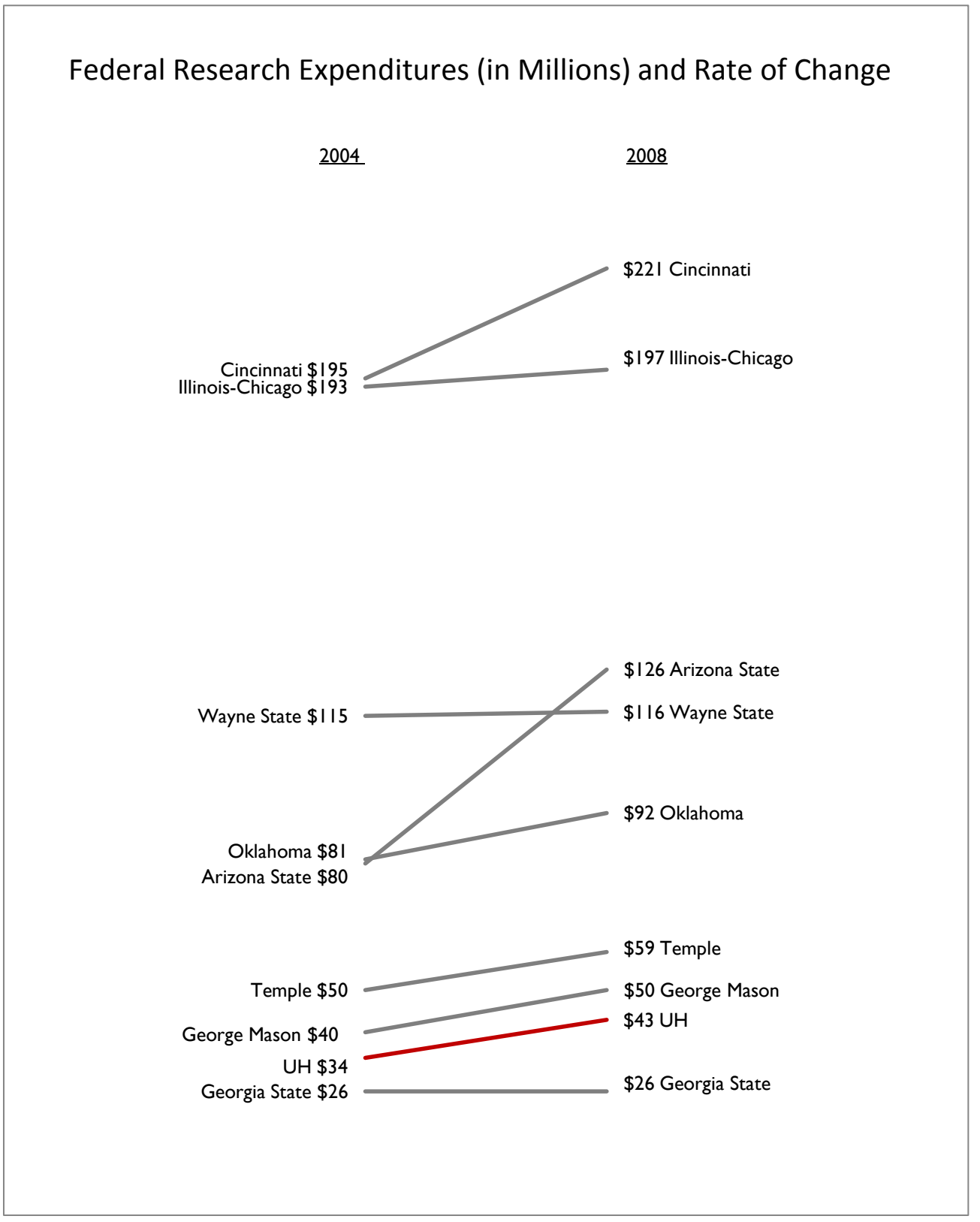
Source: NSF

Federal Research Expenditures (in millions)

	2004	2005	2006	2007	2008	% Δ 2004-2008
Univ. of Houston	**$34**	**$38**	**$39**	**$40**	**$43**	**26.5%**
Arizona State Univ.	$80	$95	$110	$115	$126	57.5%
Univ. of Illinois - Chicago*	$193	$198	$204	$209	$197	2.1%
Univ. of Cincinnati*	$195	$203	$202	$254	$221	13.3%
Univ. of Oklahoma	$81	$88	$91	$86	$92	13.6%
Georgia State Univ.	$26	$25	$25	$25	$26	0.0%
Wayne State Univ.*	$115	$121	$118	$114	$116	0.9%
Temple Univ.**	$50	$54	$51	$54	$59	18.0%
George Mason Univ.	$40	$36	$36	$47	$50	25.0%



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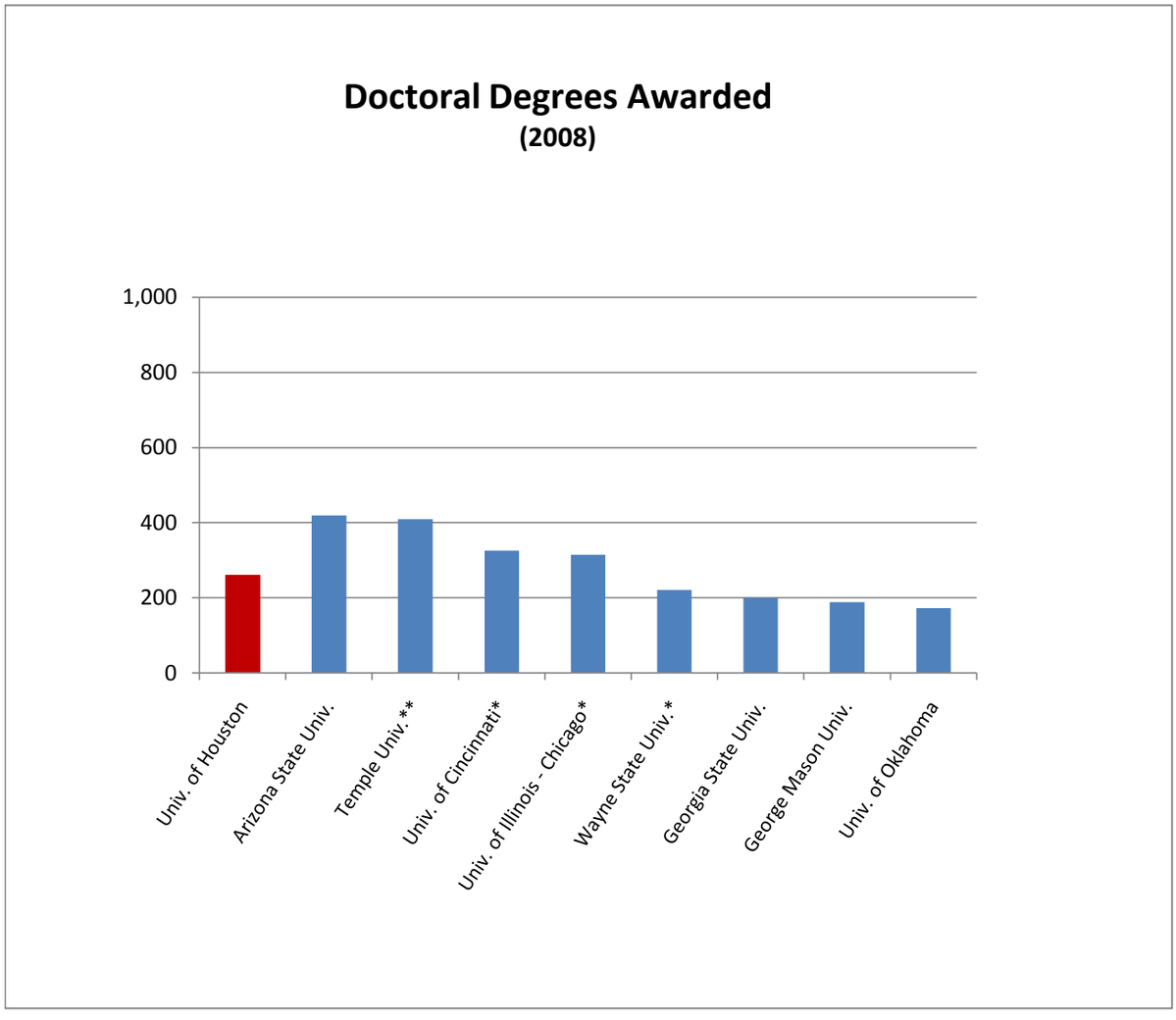
Source: NSF

Doctoral Degrees Awarded Annually

	2004	2005	2006	2007	2008	% Δ 2004-2008
Univ. of Houston	**196**	**211**	**236**	**239**	**259**	**32.1%**
Arizona State Univ.	355	314	389	376	419	18.0%
Temple Univ.**	334	322	383	392	409	22.5%
Univ. of Cincinnati*	212	239	264	261	326	53.8%
Univ. of Illinois - Chicago*	233	286	311	317	315	35.2%
Wayne State Univ.*	194	173	187	213	221	13.9%
Georgia State Univ.	113	123	149	170	200	77.0%
George Mason Univ.	149	167	163	181	189	26.8%
Univ. of Oklahoma	136	160	157	174	173	27.2%



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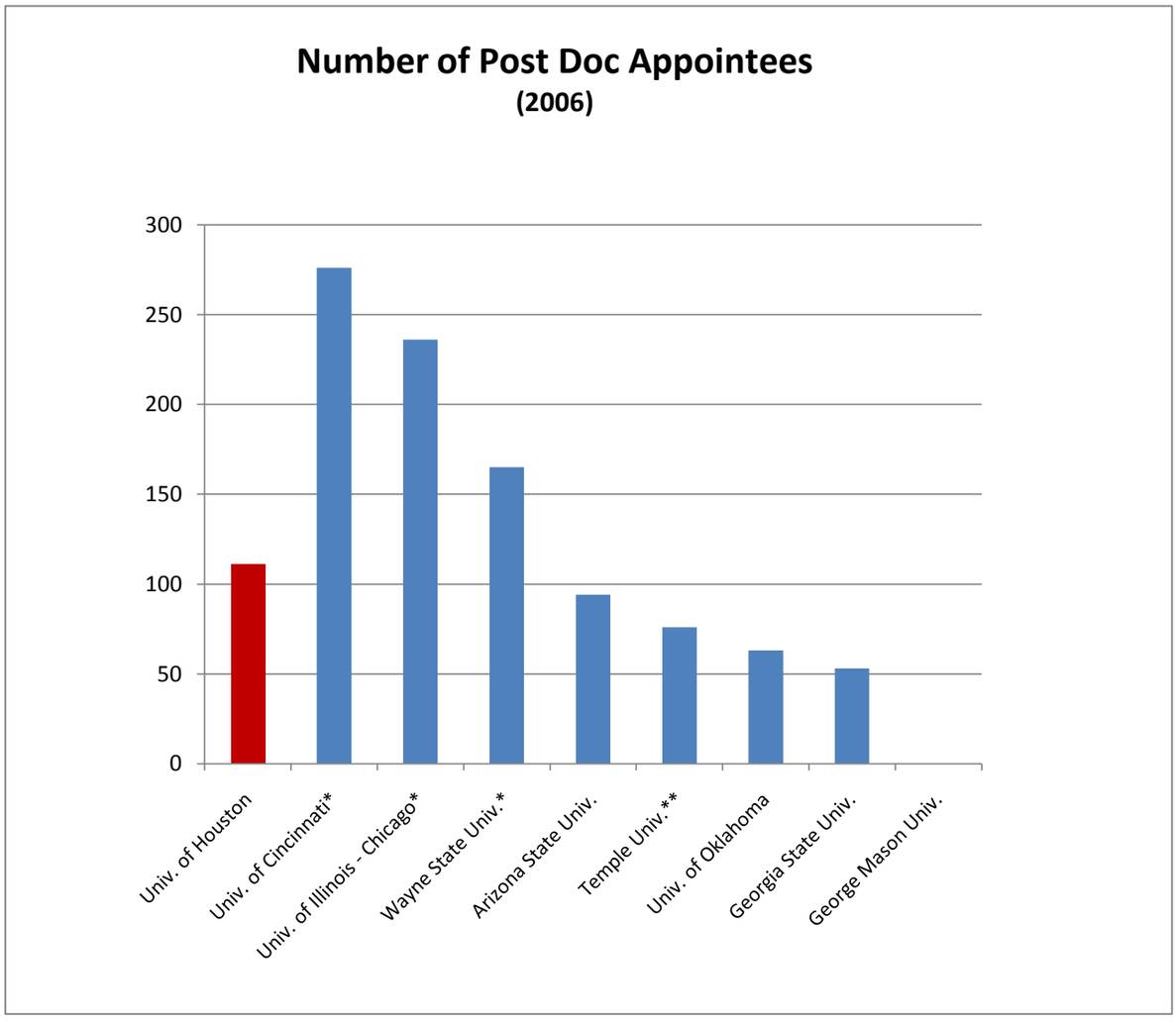
Source: The Center for Measuring University Performance & IPEDS (2008); Arizona 2008 from website

Postdoctoral Appointees

	2002	2003	2004	2005	2006	% Δ 2002-2006
Univ. of Houston	109	75	75	29	111	1.8%
Univ. of Cincinnati*	222	262	262	276	276	24.3%
Univ. of Illinois - Chicago*	292	287	247	235	236	-19.2%
Wayne State Univ.*	276	243	204	185	165	-40.2%
Arizona State Univ.	105	109	116	108	94	-10.5%
Temple Univ.**	78	71	75	75	76	-2.6%
Univ. of Oklahoma	43	36	31	46	63	46.5%
Georgia State Univ.	68	67	59	53	53	-22.1%
George Mason Univ.	NA	NA	0	0	0	0.0%



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Source: NSF/TARU

National Rank/Classification

US News and World Report/Carnegie

	USNWR 2006	USNWR 2007	USNWR 2008	USNWR 2009	USNWR 2010	Carnegie 2005
Univ. of Houston	IV	IV	IV	IV	IV	HRA
Arizona State Univ.	III	III	124	121	121	VHRA
George Mason Univ.	III	III	III	III	III	HRA
Georgia State Univ.	IV	IV	IV	IV	IV	HRA
Temple Univ.**	III	III	III	III	III	HRA
Univ. of Cincinnati*	III	III	III	III	III	VHRA
Univ. of Illinois - Chicago*	III	III	III	III	III	VHRA
Univ. of Oklahoma	109	112	108	108	102	HRA
Wayne State Univ.*	IV	IV	IV	IV	IV	VHRA

TARU 25 Ranks

	2004	2005	2006	2007	2008	# Δ 2004-2008
Univ. of Houston	0	0	0	0	0	0
Arizona State Univ.	1	1	0	2	0	-1
George Mason Univ.	0	0	0	0	0	0
Georgia State Univ.	0	0	0	0	0	0
Temple Univ.**	0	0	0	1	1	1
Univ. of Cincinnati*	1	2	1	2	1	0
Univ. of Illinois - Chicago*	2	0	1	0	0	-2
Univ. of Oklahoma	0	0	0	0	0	0
Wayne State Univ.*	0	0	0	0	0	0

TARU 50 Ranks

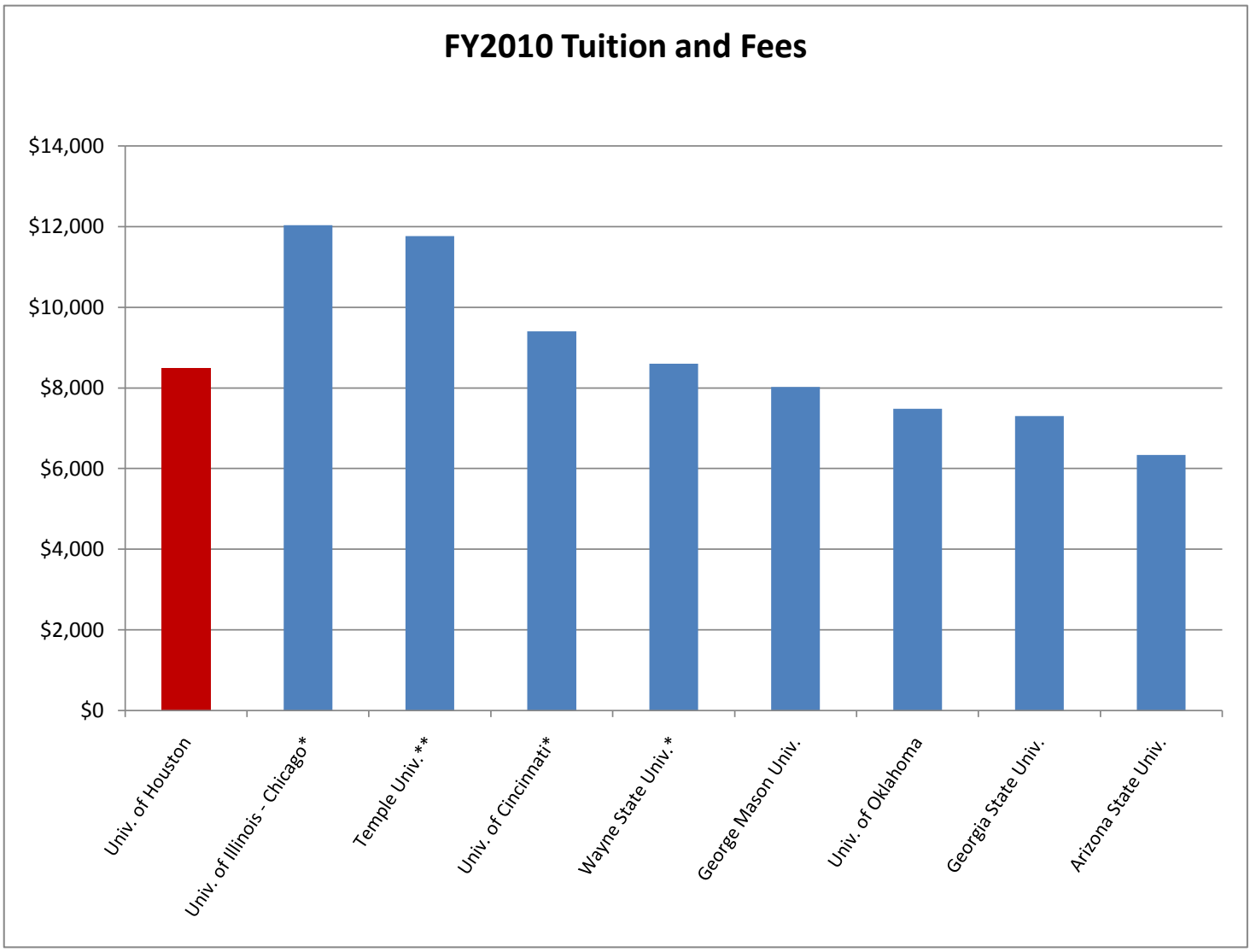
	2004	2005	2006	2007	2008	# Δ 2004-2008
Univ. of Houston	3	2	3	1	0	-3
Arizona State Univ.	3	2	4	3	5	2
George Mason Univ.	0	0	0	1	0	0
Georgia State Univ.	0	0	0	0	0	0
Temple Univ.**	0	1	1	0	0	0
Univ. of Cincinnati*	6	4	7	5	5	-1
Univ. of Illinois - Chicago*	3	6	4	5	6	3
Univ. of Oklahoma	3	2	2	3	2	-1
Wayne State Univ.*	4	4	4	4	3	-1

*Institution with a medical school
**Institution with a medical school, but with medical research reported separately

Source: USNWR
Source: Carnegie Association. Classifications to updated again in 2010.
Source: TARU

Annual Tuition and Fees

	FY2004	FY2005	FY2006	FY2007	FY2008	% Δ 2004-2008	FY 2010[1]
Univ. of Houston	$4,082	$5,296	$5,648	$6,084	$6,658	63.1%	$8,496
Univ. of Illinois - Chicago*	$7,824	$8,498	$9,742	$10,546	$11,716	49.7%	$12,034
Temple Univ.**	$9,102	$9,640	$10,180	$10,802	$11,448	25.8%	$11,764
Univ. of Cincinnati*	$8,379	$8,877	$9,399	$9,399	$9,399	12.2%	$9,399
Wayne State Univ.*	$4,435	$5,208	$5,509	$7,844	$8,109	82.8%	$8,598
George Mason Univ.	$5,448	$5,880	$6,408	$6,840	$7,512	37.9%	$8,024
Univ. of Oklahoma	$4,515	$5,008	$5,110	$6,507	$7,423	64.4%	$7,483
Georgia State Univ.	$4,154	$4,464	$4,818	$5,484	$6,056	45.8%	$7,298
Arizona State Univ.	$4,064	$4,406	$4,688	$4,971	$5,661	39.3%	$6,334



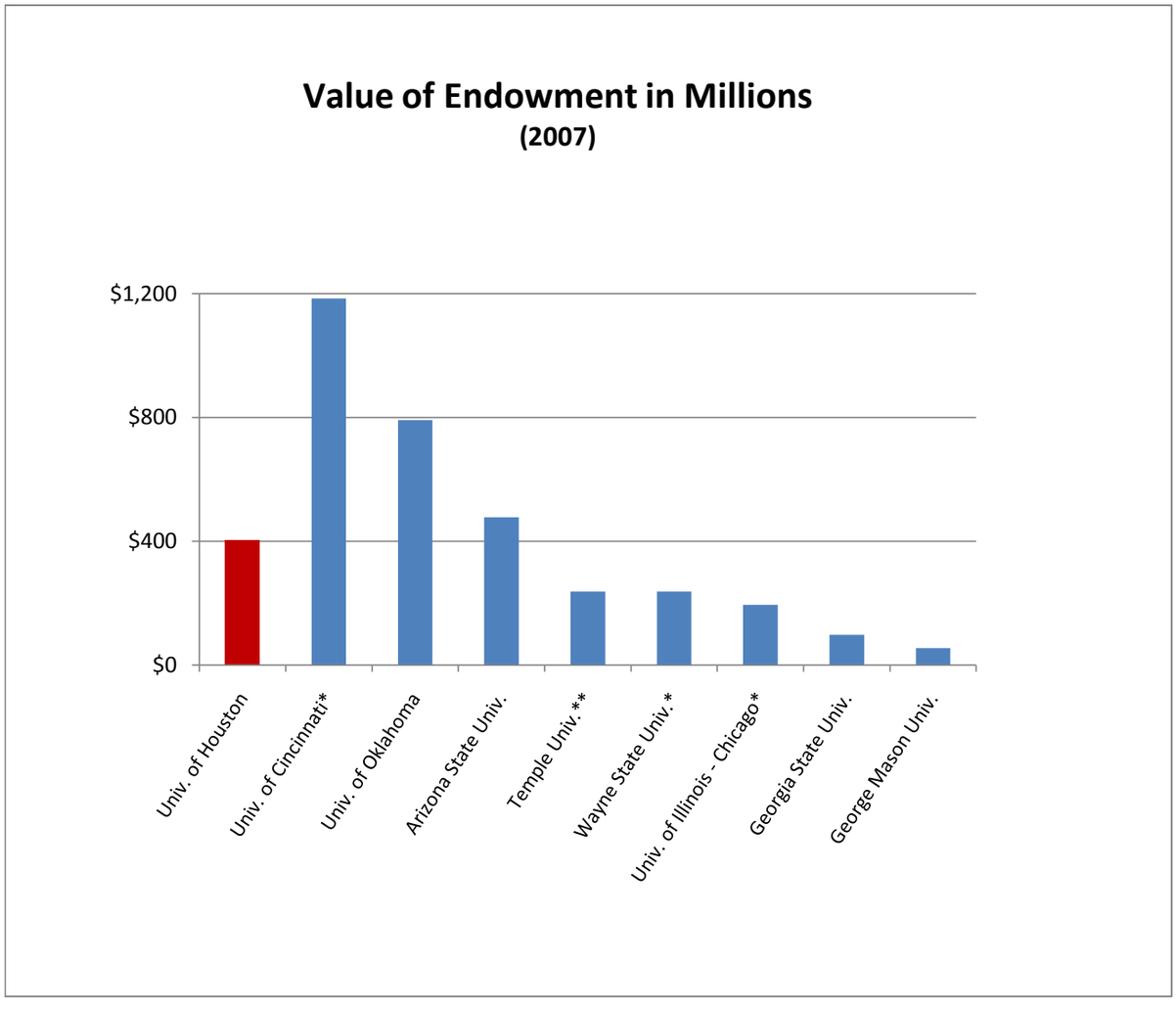
*Institution with a medical school
**Institution with a medical school, but with medical research reported separately

Source: IPEDS. In-state tuition and fees for 24 SCH

[1]Source: College Board. In-state tuition and fees for 30 SCH. FY09 tuition and fees are not available from either source.

Endowment (in millions)

	2003	2004	2005	2006	2007	% Δ 2003-2007
Univ. of Houston	**$280**	**$310**	**$323**	**$350**	**$402**	**43.6%**
Univ. of Cincinnati*	**$873**	**$988**	**$1,032**	**$1,101**	**$1,185**	**35.7%**
Univ. of Oklahoma	**$412**	**$436**	**$536**	**$662**	**$792**	**92.2%**
Arizona State Univ.	**$221**	**$248**	**$277**	**$395**	**$478**	**116.3%**
Temple Univ.**	**$158**	**$166**	**$196**	**$204**	**$237**	**50.0%**
Wayne State Univ.*	**$148**	**$174**	**$185**	$202	**$237**	**60.1%**
Univ. of Illinois - Chicago*	**$118**	**$128**	**$149**	**$163**	**$195**	**65.3%**
Georgia State Univ.	**$51**	**$62**	**$71**	**$82**	**$98**	**92.2%**
George Mason Univ.	**NA**	**$38**	**$41**	**$47**	**$55**	**44.7%**



*Institution with a medical school
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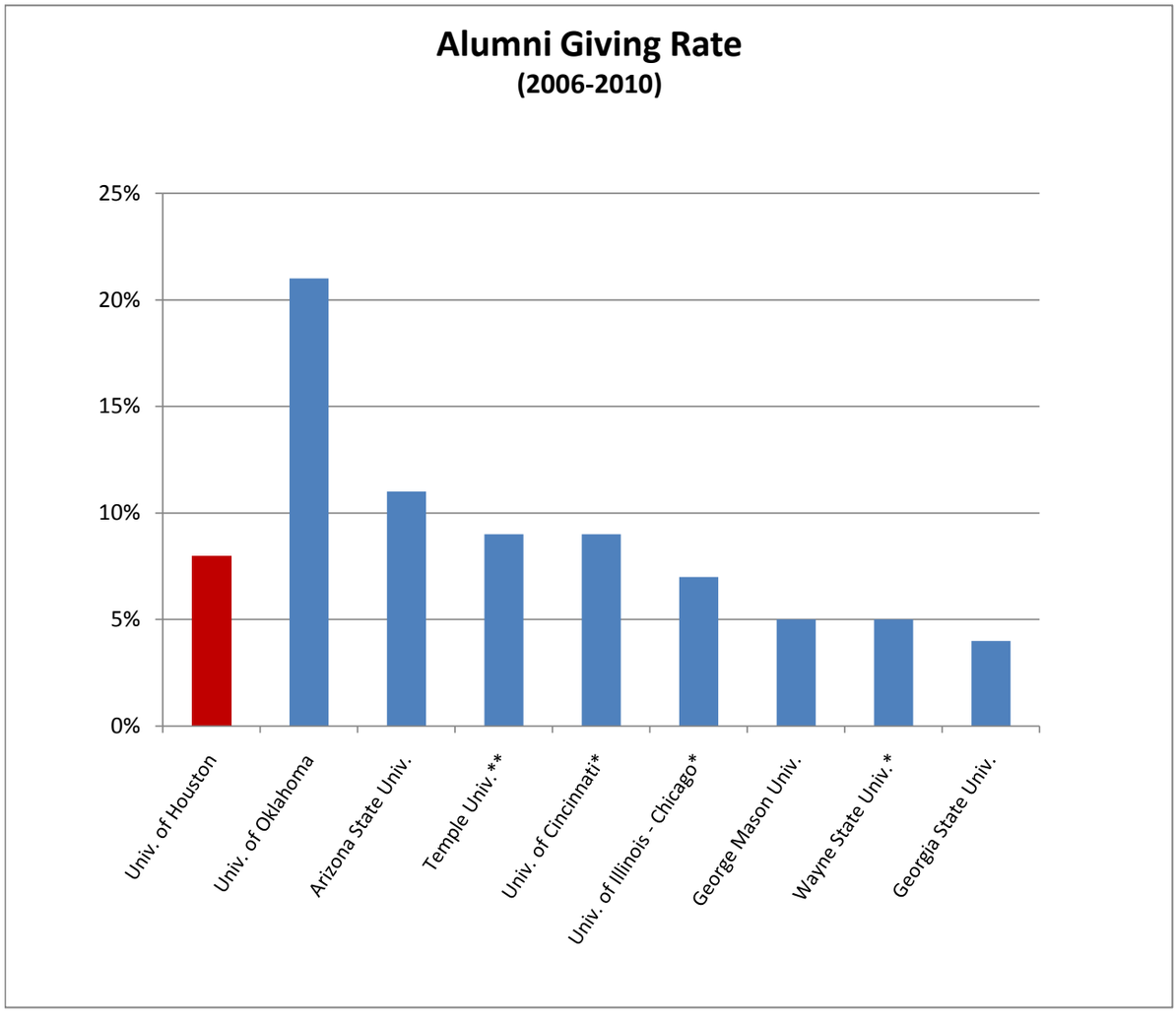
Source: The Center for Measuring University Performance

Alumni Giving Rate

	2006	2007	2008	2009	2010	% Pt. Δ 2006-2010
Univ. of Houston	**6%**	**6%**	**5%**	**5%**	**8%**	**2**
Univ. of Oklahoma	**21%**	**21%**	**21%**	**21%**	**21%**	**0**
Arizona State Univ.	**9%**	**10%**	**11%**	**11%**	**11%**	**2**
Temple Univ.**	**9%**	**10%**	**11%**	**10%**	**9%**	**0**
Univ. of Cincinnati*	**8%**	**8%**	**8%**	**8%**	**9%**	**1**
Univ. of Illinois - Chicago*	**5%**	**6%**	**6%**	**7%**	**7%**	**2**
George Mason Univ.	**9%**	**11%**	**12%**	**8%**	**5%**	**-4**
Wayne State Univ.*	**8%**	**7%**	**6%**	6%	**5%**	**-3**
Georgia State Univ.	**7%**	**7%**	**6%**	**4%**	**4%**	**-3**



*Institution with a medical school
**Institution with a medical school, but with medical research reported separately

Source: US News

Appendix B:

University of Houston

Status of Major Capital Projects - April, 2010

Project Name	UHS Board of Regents Approval	THECB Approval	Project Description	Project GSF	Total Project Cost	Project Design Start Date	Project Design Completion Date	Project Construction Start Date	Project Completion Date
COMPLETED PROJECTS PENDING PUNCH LIST									
East Parking Garage	Aug-08	May-08	This project constructs a 1,500 car garage which will replace lost surface parking spaces, meet the parking needs of the new residence facility (Calhoun Lofts) and provide additional spaces for projected future commuter demand in this area.	**525,000**	**18,000,000**	Aug-08	Jan-09	Dec-08	Nov-09
Science & Engineering Research Center (SERC) Build Out (Phase 2)	Feb-08	Jun-08	This project builds out half of third and half of fifth floor of the existing SERC Building in multiple phases for chemistry, biochemistry, and bio-engineering programs. Total project cost is $12 million.	**50,000**	**12,000,000**	May-08	Apr-09	Nov-08	Dec-09
Energy Research Park/4902 Gulf Renovation	Aug-09	N/A	The scope of this project was reduced to include some demolition, complete roof replacement, electrical/lighting, life safety and security. Initial occupancy to be University general warehouse space.	**102,325**	**1,800,000**	Aug. 09	Dec. 09	Oct-09	Jan-10
PROJECTS UNDER CONSTRUCTION									
Science & Engineering Research Center (SERC) Build Out (Phase 3)	Aug-09	Jan-10	This project builds out half fifth floor and half third floor; it also increases HVAC capacity for the entire building.	**20,000**	**12,000,000**	Sep-09	Jan-10	Feb-10	Sep-10

Appendix B:

University of Houston

Status of Major Capital Projects - April, 2010

Project Name	UHS Board of Regents Approval	THECB Approval	Project Description	Project GSF	Total Project Cost	Project Design Start Date	Project Design Completion Date	Project Construction Start Date	Project Completion Date
Undergraduate Housing	Feb-09	Apr-09	This project constructs a 1,000 bed undergrad residential facility in the Wheeler Precinct. Space will also be provided for amenities, support staff, and resident staff.	**339,000**	**50,000,000**	Jan-09	May-09	Jun-09	Jul-10
Cemo Hall	Apr-07	Jun-07	This project constructs a 34,000 GSF building designed to LEED Silver standards with 400-seat lecture hall; three 80-seat classrooms; and an academic center, which will include a career center and TA offices.	**34,000**	**8,987,800**	Aug.-08	Jan-09	Mar-09	Apr-10
Hilton Hotel Renovation	Aug. 07 and Aug. 09	Oct. 07 and Oct. 09	This project involves the renovation of 90,428 SF of the Hilton College of Hotel and Restaurant Management. The renovation project includes major upgrades of teaching areas, cosmetic upgrades of public areas and building infrastructure and structural upgrades. The renovation project is a result of a memorandum of understanding between UHS, the Hilton Corporation and the Hilton Foundation.	**90,428**	**13,611,000**	May-08	Mar-09	Aug-09	Mar-10

Appendix B:

University of Houston

Status of Major Capital Projects - April, 2010

Project Name	UHS Board of Regents Approval	THECB Approval	Project Description	Project GSF	Total Project Cost	Project Design Start Date	Project Design Completion Date	Project Construction Start Date	Project Completion Date
PROJECTS IN DESIGN									
Science & Research 1 Building Life Safety Issues			This project is a code citation correct project. Scope of work includes installing new stair pressurization system; replace domestic/fire storage tank; installing complete fire sprinkler system; replace fire alarm system; modernize existing elevators and general construction work.	**TBD**	**10,039,214**	Nov-09	Apr-10	May-10	Jul-11
Old Science Renovations	May-08	May-08	This project will renovate the Old Science Building for use by the College of Liberal Arts & Social Sciences	**57,000**	**3,331,000**	TBD	TBD	TBD	TBD
Fleming Renovation	May-08	May-08	This project renovates a portion of the Fleming Building. The project will address major life safety issues. It will also reorganize and relocate labs from Old Science and portions of Fleming, re-configure them for greater functionality and renovate the entire building.	**269,000**	**23,069,000**	TBD	TBD	TBD	TBD
Fleming Addition	May-08	May-08	This project proposes to construct an addition to the Fleming Building. The addition is for Chemistry and Biology teaching labs and constructing it first helps alleviate the problem of swing space. Project bids allowed adding a floor of 20,000 sq. ft. shell space for NSM Research.	**99,906**	**31,200,000**	May-09	Jan-10	Apr-10	Jul-11

Appendix B:

University of Houston

Status of Major Capital Projects - April, 2010

Project Name	UHS Board of Regents Approval	THECB Approval	Project Description	Project GSF	Total Project Cost	Project Design Start Date	Project Design Completion Date	Project Construction Start Date	Project Completion Date
Moody Towers Dining Hall Renovation	Feb. 09 and Nov. 09	Dec-09	Project will gut existing facility and totally renovate it, including new HVAC, building systems, fire life safety systems, new kitchen equipment, code compliance, and new facility layout.	**33,542**	**11,000,000**	Apr-09	Jan-10	May-10	Aug-10
Jack J. Valenti School of Communication	4/1/2009 (Program) Aug. 2009 Budget/Business Plan	N/A	This project proposes to add approximately 4875 GSF of new construction including a new grand entry and new state-of-the-art production studio. There will also be approximately 6520 GSF of renovated space to include classroom upgrades, studio support, facilities, storage, faculty/staff offices.	**11,500**	**2,800,000**	Oct-10	Mar-10	Jun-10	Dec-10
Energy Research Park Infrastructure and Site Improvements	Aug-09	Jan. 10	This project renovates buildings at University Business Park for the UH Energy Research initiative and for the College of Engineering and Petroleum Engineering program. Includes building system upgrades, deferred maintenance, site work, building fit out, IT/communication upgrades and other required improvements.	**478,227**	**20,000,000**	Oct. 09	Mar. 10	TBD	TBD
Energy Research Park Tenant Improvements	Aug-09	Jan-10	Project includes interior build-out, general repairs, IT and infrastructure upgrades and other improvements required by and funded by non-University tenants for use of vacant UBP space.	**478,227**	**20,000,000**	Dec. 09	May-10	TBD	Nov-10

Appendix B:

University of Houston

Status of Major Capital Projects - April, 2010

Project Name	UHS Board of Regents Approval	THECB Approval	Project Description	Project GSF	Total Project Cost	Project Design Start Date	Project Design Completion Date	Project Construction Start Date	Project Completion Date
Central Plant Utilities Expansion	Apr-09	Jan. 10	This project replaces existing Central Plant equipment with two new boilers; the project will also replace existing cooler towers 1 to 4, replace or modify existing boilers, modify existing piper, electrical and controls systems, and replace existing chiller #5.	**10,000**	**45,181,395**	Feb-09	Jan-10	Apr-10	Mar-13
PROJECTS IN RFQ/RFP PHASE									
Classroom & Business Bldg.	Aug-09	Jan-10	This project to construct a four-story 112,000 GSF building. The first 2 floors will be University wide classrooms and academic space. The upper 2 floors will be shell space. In a future phase of the project this space will be finished for space for Bauer College to include EMBA Suite, student organization offices and a Wolff Center for Entrepreneurship. Alternate for additional floor (shell) will be priced in D-B RFP.	**112,718**	**31,000,000**	Jul-10	Dec-10	Nov-10	Jan-12
Health & Biomedical Sciences Building	(program) Dec-08, (business plan) Aug-09	Jan-10	This project constructs a 167,000 GSF building to include an ambulatory surgical center, a laser center, University Vivarium, space for TIMES, research labs and offices.	**167,000**	**70,000,000**	Feb-10	Jan-11	Feb-11	Aug-12
Stadium Parking Garage	Aug-09	Jan-10	This project constructs a 2,000 or a 2,400 plus car garage with 10,000 SF of mixed use space to meet faculty, staff, student and athletic parking needs and to replace parking lost to Metro Light Rail Train.	**790,000**	**26,000,000**	Feb-10	May-10	Jun-10	Aug-11

Appendix B:

University of Houston

Status of Major Capital Projects - April, 2010

Project Name	UHS Board of Regents Approval	THECB Approval	Project Description	Project GSF	Total Project Cost	Project Design Start Date	Project Design Completion Date	Project Construction Start Date	Project Completion Date
PROJECTS DEVELOPING BUSINESS PLAN / PROJECTS IN PRE-DESIGN PHASE									
Robertson Stadium Expansion - Feasibility Study	Sep-08	Aug-08	Project being redeveloped and reprogrammed.	**TBD**	**TBD**	Feb-10	Apr-10		TBD
ADDITIONAL CAPITAL PROJECTS									
Science & Research 2 Bldg. Vivarium (Animal Care Facilities) Restoration	N/A	N/A	This project renovates and corrects deferred maintenance of HVAC, plumbing, building controls, fire systems, and other building systems in order to meet accreditation standards and support increased research.	**20,000**	**2,700,000**	Jun-09	Dec. 09	Feb-10	Sep-10
Science & Engineering Research Center (SERC) Build Out (Phase 4)	Feb.-10	Mar.-10	This project builds out the second and third floors; it also increases HVAC capacity for the entire building.		**12,000,000**	TBD	TBD	TBD	TBD
			UH TOTAL		**$ 424,719,409**				

Appendix C

University of Houston
Academic Program Review Policy 08/22/00

I. Purpose of External Reviews:

1. To assess from a broad perspective the existing strengths and weaknesses of departmental academic programs.
2. To help the department faculty identify areas in which improvement, growth, and development might take place.
3. To improve and broaden the information base available to central administration for use in the allocation of resources.

II. General Schedule for Review:

The following is a general description of the review process. It is designed to provide an **outline** of the process, **not** a detailed, exhaustive description. Details may vary since the process is flexible enough to take into account the special needs of various departments and programs.

Departments will be asked to conduct a self-study in a timely fashion. This self-study will be **guided by, but not limited to,** a set of questions provided in this document (See III. Below). The self-study should be completed two weeks prior to the visit of the External Review Team. The dean of Graduate and Professional Studies will send copies of the completed self-study, as well as the formal charge, to the External Review Team.

The department will provide to the dean of Graduate and Professional Studies a list of possible reviewers. The list should include names, addresses, telephone and email, and brief biographical data. The list should contain at least eight names. The department will also provide a list of addresses of national organizations, accreditation boards, or other groups that might be a source of additional names. The dean of Graduate and Professional Studies will solicit additional names from these organizations as well as from departments at other universities. The dean of Graduate and Professional Studies, after consultation with university, college and departmental leaders, will choose three or more people to comprise the External Review Team. No less than one of the members of this Team will come from the list provided by the department under review.

The External Review Team will visit the campus for a minimum of 1-½ days with expenses borne by the Office of Graduate and Professional Studies. If a department or college, rather than the Office of Graduate and Professional Studies, initiates the review, cost sharing of expenses will be negotiated prior to the visit. The Team will meet with the dean of Graduate and Professional Studies, and the college dean and department chair for a discussion and review of the process. At the conclusion of the visit a similar meeting will be held to review the effectiveness of the process. There will also be exit interviews with the department faculty, the college dean, the dean of Graduate and Professional Studies, the Provost, the Associate Vice-President for Academic and Faculty Affairs, the VP for Research and the President. The purpose of these exit interviews will be the presentation of preliminary findings.

The External Review Team will provide a written report to the dean of Graduate and Professional Studies within a time frame established by the dean and the Review Team. A copy of this report will be given to the department and the college dean. The department and/or the college dean will have the opportunity to provide a written response to this report.

III. Departmental Self-Study Format:

The purpose of a departmental self-study from the point of view of the department is to provide an opportunity for the consideration of long term goals for development, where the department stands in terms of achieving those goals (the department's strengths and weaknesses), and what resources are

necessary to move forward. From the point of view of those conducting an evaluation of a department or program, the self-study is a major source of quantitative and qualitative data for the external reviewers as well as a means of conveying to the university administration a coherent picture of the department. The questions that follow **need not be followed in minute detail**, if for no other reason than some will not be entirely relevant to every department or program. In many cases, other documents might be substituted for the self-study (for example accreditation documents). Nevertheless, the administration and the outside evaluation team will both be seeking information on these questions, and the more information that can be provided, **regardless of format**, the more accurate and complete a review can be.

1. Goals and Objectives: Degree Programs and Curricula
    A. Does the department have a vision of itself that is widely shared among its members? That is, if there is some consensus among members of the department concerning the kind of department they would like to be, describe this shared vision. How does this vision fit with the Provost's vision of selected areas of excellence rather than broad coverage of multiple areas?
    B. Describe the specific departments in the nation with which you wish to be favorably compared, now and in the future. What are the specific aspects of those departments that you wish to emulate?
    C. What specific objectives does the department have over the next five years that it feels will assist it in moving toward this shared vision?
    D. What specific problems, restraints, or weaknesses does the department see as inhibiting or preventing movement toward these goals?
    E. What specific support, or resources, beyond what is already available, is needed to move effectively toward these goals?
    F. How does faculty research and publication support your programs? How do you assess the quality and quantity of faculty scholarship over the last five years? What is being done to broaden and/or deepen scholarship efforts in the department? What does your department do to insure quality rather than just quantity in scholarly production? What steps has the department taken to assist faculty development to keep them current in their respective fields? What resources not now available would assist this faculty development effort?
    G. Comment on the recent history of the department illustrating changes that might have occurred in its goals, the progress that has been made, and special aspects of the department's situation that need articulation.

2. Faculty and Academic Programs
    A. Describe the sub-fields (not specializations) generally accepted as part of your discipline. How are the department's faculty distributed over these sub-fields? How would you assess the strength of your faculty in each of these sub-fields? How do the strengths and weaknesses in the various sub-fields in the department relate to the goals and vision you are pursuing?
    B. Describe the programs and degrees provided by your department. What are the programming strengths and weakness in your department? What programming areas have you developed, or do you need to develop, to assure that your department represents the newer trends of knowledge in your discipline? What programs might need de-emphasis in the future?
    C. Discuss the teaching mission of the department. Speak to this in terms of such factors as the kind of student it produces and the support it gives to the general curriculum and other teaching units in the university. Describe the kind of students

you hope to produce at the undergraduate and graduate/professional levels --- what skills, abilities, and areas of knowledge should they possess (both in terms of what you can provide and what you expect other academic units to provide). How successful do you feel you are at present in producing these kinds of students? What steps do you take to assure quality teaching? How has the department utilized non-traditional modalities of teaching (distance education, web-based, instructional TV, etc.) in its instructional mission? How are the effects of such teaching modalities assessed?

D. Comment on the service your department provides to the rest of the university. What contribution does the faculty in your department make to enhance the reputation of and resources for the university? How do the various aspects of service fit into the overall vision of the department and contribute to departmental goals? If there is extensive outside consulting by your faculty, how does it help or hinder department programs?

3. Students

   Discuss the quality of students in each of your programs. To what extent has departmental programming been forced to respond to the numbers of students it attracts, and the distribution of these students over programs and sub-fields, rather than to its own long-term goals? What evidence can you provide that your graduate/professional and undergraduate students compare favorably with graduates of departments and programs with which you are trying to compete, or with which you hope to compete? What evidence can you provide regarding student satisfaction with their education and training? Describe the advising/counseling processes in the department and assess the effectiveness of these processes. What changes have you made, or are planning, to improve advising/counseling? What resources are needed to effectively assist you in this regard?

4. Further Comments

   Provide any further information or discussion that you feel was not solicited by the above questions but that you think would assist the outside reviewers and the administration in understanding and evaluating the department.

Appendix C

Charge to External Review Team 08/24/00

I. Goals and Objectives

1. Are the goals and objective of each degree program clearly defined? How well are the programs achieving those objectives?
2. Are the curricula, program structure, and instruction well designed and appropriate to the scholarly and creative trends in the discipline?
3. Are the degree programs offered appropriate to the mission of the University of Houston to become the top urban research university in the country? Are these programs commensurate with the qualifications of the faculty? Are there any degree programs that should be offered that currently are not? Are there programs offered that should be de-emphasized and phased-out?
4. Evaluate courses that perform service functions for other departments in the university.
5. Assess the strengths and weaknesses of the graduate (and/or professional) programs.
6. If appropriate, evaluate the opportunities for research, assistantships, internships, or relevant student experiences.
7. What future direction would faculty be advised to take in developing the scholarship and teaching aspects of the degree programs?

II. Faculty

1. How does the quality of the faculty as researchers and the quality and quantity of their scholarly work compare with faculty in similar programs at other universities with whom you are familiar? Please list these universities.
2. What are the areas of particular strength and weakness discernible in the faculty?
3. How does the ability of individual faculty members to attract outside funds compare with that of faculty in other institutions mentioned in the above question?
4. Are there any program/area imbalances that would speak to the need for redirecting the hiring pattern within the department?
5. Are faculty qualifications and current or proposed teaching responsibilities commensurate?
6. Are expectations for faculty performance in teaching, research/scholarship, and service reasonable? Is there flexibility in these expectations to allow for different teaching and service loads? How do these expectations compare to those at the other universities mentioned above?
7. What judgments would you make about teaching effectiveness of faculty members in the department?
8. Evaluate the rigor of promotion standards in the department.

III. Students

1. Evaluate the quality of students in each program.
2. Are student selection and retention criteria adequate?
3. Is there evidence of success of program graduates? For departments where post-graduate licensing and/or board certification examinations are common, evaluate the performance of the graduates.
4. Are student satisfied with the program?
5. Is financial support for students adequate and competitive with peer institutions?
6. Are students properly advised and counseled?
7. Is there evidence that students evaluate individual instructor's teaching and that those evaluations are considered for merit and promotion decisions?

Appendix C

IV. Facilities, Support and Administration

1. Are the maintenance and operation, equipment, and travel budgets supplied by the university adequate given the size, quality and needs of the department?
2. Please assess the adequacy of the facilities and support services, e.g., office space, classrooms, language laboratories, library, secretarial support, Information Technology Support, laboratory equipment.
3. Comment on the organization and administration of the department.
4. Is financial support for research, instruction, and other activities adequate? How does the level of such support compare on a nationwide basis?

V. Comprehensive

1. How do you rate the University of Houston department when compared to: (a) the best departments in the country, (b) the best departments in public universities, (c) the best departments in urban research universities?
2. What recommendations would you make to improve the overall quality of the department: Please be specific.
3. In which two or three particular "niches" might the department be particularly poised to succeed? That is, are there areas of current strength where a modest infusion of targeted resources could result in national-level quality and visibility?

Appendix D:

University of Houston Graduate and Professional Studies Council

Graduate Program Termination Process

In the case of potential graduate program termination, the Dean of Graduate and Professional Studies notifies the chair of the Academic Program Evaluation Committee of the Graduate and Professional Studies Council. This sub-committee will then evaluate the significant issues involved in the potential termination and will offer a faculty, peer-reviewed appraisal and recommendation to the Dean of Graduate and Professional Studies. The sub-committee will request the following in written form in order to make its evaluation:

1. The history of the program
2. The rationale for its termination
3. A five-year summary of student participation and completion statistics, i.e., completed masters and/or doctorates per academic year
4. The names of individual faculty involved in teaching and administering the program
5. A statement approved by faculty who have been involved in the program in the most recent two years summarizing the pros and cons of termination of the program

Individual faculty members involved in the program in question may communicate directly with any of the subcommittee members and will be given the opportunity to attend the GPSC meeting when the subcommittee gives its final report.