



THE UNIVERSITY OF TEXAS AT DALLAS

STRATEGIC PLAN

“Creating the Future”

Contents

- Introduction 3**
 - 1. Texas and Dallas Need UTD to Become a Great Research University3
 - 2. UTD Has Positioned Itself by Developing Focused Areas of Excellence.....3
 - 3. The Dallas-Fort Worth Metroplex Provides the Necessary Synergy for UTD to Succeed4
 - 4. Strong Private and Community Support 5
- Vision, Mission and Goals 6**
- Rationale..... 6**
- Strategic Initiatives..... 7**
- Initiative One: Discovering Tomorrow’s Inventions Today 9**
 - Action 1.1: Research Enterprise Initiative..... 9
 - Action 1.2: The BioWorld..... 9
 - Action 1.3: Nanotechnology10
- Initiative Two: Preparing Students for Tomorrow’s Challenges 10**
 - Action 2.1: The Education of Leaders10
 - Action 2.2: Living-Learning Communities11
 - Action 2.3: Investment in People11
 - Action 2.4: Enhancement of Diversity and Inclusion.....12
- Initiative Three: Managing Change in a Constantly Changing Society12**
 - Action 3.1: Dynamic Change Management 12
 - Action 3.2: Innovative Centers and Institutes 13
- Initiative Four: Securing the Safety of the Future.....13**
 - Action 4.1: National and Global Security..... 13
 - Action 4.2: Energy and the Environment.....14
- Initiative Five: Improving the Health and Quality of Life of Individuals and Society 14**
 - Action 5.1: Life Science Health Collaborations14
 - Action 5.2: Enhanced Quality of Life..... 15
- Initiative Six: Making a Great City Even Greater.....15**
 - Action 6.1: K-16 Education16
 - Action 6.2: The Arts.....16
 - Action 6.3: Business Leadership..... 17
 - Action 6.4: Community Outreach.....17
 - Action 6.5: University Village 18
- Quantitative Targets18**
- Imperatives.....21**
 - Imperative 1: Double Size of Faculty 21
 - Imperative 2: Add 5,000 New Students 22
 - Imperative 3: More than Double Research Funding 22
 - Imperative 4: Tell UTD’s Story Better..... 22
 - Imperative 5: Improve Annual Giving and Endowment..... 23
 - Imperative 6: Increase Number of Ph.D.’s Granted 23
 - Imperative 7: Enhance Graduation Rates 23
 - Imperative 8: Reduce Costs 24
- Business Model and Implementation Plan..... 24**

Introduction

The University of Texas at Dallas (UTD) was founded as a scientific research institute in 1962 by a bold group of innovators and entrepreneurs who also founded the company that invented the integrated circuit and changed the world. In 1969 the University joined the University of Texas System. UTD focused its initial energy on recruiting outstanding faculty and establishing first-rate graduate programs. In 1990 the University began admitting lower division students and has ever since had one of the most distinguished, ambitious freshman classes in the State of Texas.

Today, The University of Texas at Dallas stands poised to become one of the nation's premier public research universities. Many universities have similar, lofty aspirations, but UTD's position and opportunity are unique for four reasons: (1) Texas and the Dallas-Fort Worth Metroplex need world-class research universities to compete effectively in a technologically intensive, global world; (2) UTD's emphasis on focused excellence positions it exceptionally well to evolve into a top-tier university; (3) the Metroplex provides a powerful, synergistic environment in which UTD can succeed; and (4) the community has already demonstrated strong support for UTD.

1. Texas and Dallas Need UTD to Become a Great Research University

The State of Texas annually produces about \$900B of gross state product and ranks as the nation's third most economically productive state, trailing only California and New York. If Texas were a nation, it would rank 9th in the world, ahead of India, despite the fact that Texas's population is barely 2% of India's.

Regrettably, Texas does not rank highly with respect to the number of leading research universities in the state. The Association of American Universities (AAU), which is comprised of the nation's top research universities, includes only three Texas universities: Rice University, the University of Texas at Austin, and Texas A&M University. California has nine AAU universities, and New York has seven. Based on relative population, if Texas were to have the same proportion of AAU universities as California, Texas should have six (rather than just three) AAU institutions.

The Dallas-Fort Worth Metroplex has achieved greatness through the natural resources of the region and the tremendous success of key entrepreneurs, but future success will depend on knowledge and education rather than natural resources. As Tony Blair said, "Talent is the 21st Century wealth." California's economic miracle has been driven in no small measure by its great research universities, which have helped to educate its workforce, create new companies, and attract people and capital from around the world. Texas's per capita income of \$30,000 trails California's (\$35,000) and New York's (\$38,000), and if Texas is to keep pace with or surpass California and New York, Texas must not lose ground in the competition to educate and attract the nation's best minds.

2. UTD Has Positioned Itself by Developing Focused Areas of Excellence

As a relatively young university, UTD has been built upon a foundation of focused excellence. The decision to focus on specific areas of excellence in each of its seven Schools rather than build horizontally for the sake of overall coverage has created a strong intellectual, innovative environment that allows for rapid yet controlled growth. The faculty at UTD consists of some of the nation's best scholars and researchers, and in the most recent five years, research funding has increased by 72%.

The faculty includes Nobel Prize winners as well as members of the National Academy of Sciences and the National Academy of Engineering. Only three other universities in Texas can make this claim about their faculty.

UTD has an excellent undergraduate student profile that matches or exceeds the quality of the nation's best research universities. For the last several years, the freshman class at UTD has had the highest average SAT score of any public university in Texas. In fact, based on SAT scores and high school performance, UTD has a stronger freshman class than 7 of the schools in the Big 10 Conference, a majority of schools in the Pac 10 conference, and all but two schools in the Big 12 conference.

UTD's academic programs are focused on the University's core strengths in high quality science, technology, engineering, cognition, and business education and research, and the University has excelled at and will continue to excel at providing a strong liberal arts' education. UTD's commitment to the liberal, practical, and creative arts must be strongly supported as the University continues to evolve. As part of that evolution, UTD has recently added innovative programs in Arts and Technology, Communications Sciences and Disorders, Cognition and Neuroscience, Computer Engineering, Software Engineering, Geospatial Information Sciences, and Public Affairs—all designed to meet the rapidly changing needs of the Metroplex and the nation—and UTD's programs in Audiology and Management are recipients of prestigious national rankings. UTD has produced outstanding graduates in literary and historical studies, and the University has strong programs that emphasize joint majors, like business and biology, and that educate elementary, middle, and high school teachers in core disciplines in the liberal arts and sciences rather than in generic education programs.

3. The Dallas-Fort Worth Metroplex Provides the Necessary Synergy for UTD to Succeed

Several essential ingredients are needed for universities to become top-tier research institutions:

Location

Today, top-tier research universities are severely handicapped if they are not located in a major metropolitan area with access to globally connected airports, a variety of job opportunities for companions or spouses of key staff members, and opportunities for cultural enrichment and excellent quality of life. The Dallas-Fort Worth Metroplex is an excellent location to build a great university: it has great international and regional airports, abundant job opportunities, and a rapidly growing and improving arts scene. The Metroplex is also the home of three strong community college districts that produce highly able students. Additionally, the UTD campus is surrounded by high tech industries, leading medical institutions, and other businesses, ideal for mutual interaction as well as for employment of UTD graduates.

Resources

Public research universities across the nation have struggled to cope with reduced state funding, a trend that is unlikely to change. Successful public universities will, by necessity, have to turn to other types of support to ensure their success, such as private support from alumni, local companies, and philanthropists. North Dallas is one of the most rapidly growing and wealthiest

regions in Texas and the nation. The Metroplex is home to some of the nation's largest companies, and the Metroplex also has a strong history of philanthropy. Although UTD, like other young universities, has limited near-term prospects for alumni donations to provide essential financial support, the wealth and resources in both the Metroplex and the immediate vicinity of UTD provide a unique and powerful resource base.

Partnership Opportunities

Some have said that the future will belong to collaborators, and UTD's location is ideal for fostering partnerships on multiple levels. In this century of unprecedented medical discovery, it is doubtful that any great research university can sustain excellence without access to a world-class research hospital, and UTD has that in UT Southwestern Medical Center (UTSWMC), located in downtown Dallas. Moreover, UTD has the opportunity to partner with other universities in Texas, such as the University of Texas at Arlington, which offers complimentary programs and important assets in many fields. Additionally, opportunities to partner with industry in research and to transfer UTD's technology to the private sector are almost limitless, given the richness of companies located in the Metroplex. Boundless opportunities for collaboration can also be found in schools, community colleges, museums, performing arts programs, city and county governments, and other institutions.

4. Strong Private and Community Support

The University of Texas at Dallas was founded by a group of visionary leaders who donated land and the institution to the UT System. Private support created what would become UTD and has sustained the University's excellence through programs such as the endowment of the Eugene McDermott Scholars Program, the establishment of the Center for BrainHealth, the creation of numerous endowed chair positions, and the leveraging of public and private support for infrastructure and other major initiatives. Without strong private and community support, no university can become a great institution—UTD has a history of receiving such support.

UTD's continued development into one of the nation's best public research universities will require that the University build upon existing strengths and areas of greatest opportunity, remaining true to the institution's roots and legacy while addressing the need to change and innovate to meet today's and tomorrow's challenges. Perhaps more than anything, in its pursuit of excellence, UTD must emphasize leadership, both as an institution and as a place that develops and cultivates leaders who will create the future.

Vision

To be one of the nation's best public research universities and one of the great universities of the world.

Mission

The University of Texas at Dallas serves the Metroplex and the State of Texas as a global leader in innovative, high quality science, engineering, and business education and research.

The University is committed to (1) producing engaged graduates, prepared for life, work, and leadership in a constantly changing world, (2) advancing excellent educational and research programs in the natural and social sciences, engineering and technology, management, and the liberal, creative, and practical arts, and (3) transforming ideas into actions that directly benefit the personal, economic, social, and cultural lives of the citizens of Texas.

Goals

The University of Texas at Dallas aspires to be:

- A first-rank public research university with focused centers of excellence, prepared to meet the challenges of a rapidly changing, technology-driven global society
- A global force in innovative, transdisciplinary research and education in emerging areas of technology, science, and learning
- A ground-breaking leader in both framing and answering the questions faced by business, policy makers, healthcare, and the public
- A synergistic partner with local industry, government, and cultural organizations as well as local K-12 schools, community colleges, and universities
- One of the most creative, innovative universities in the nation and world.

Meeting these goals will require that all stakeholders—faculty, staff, students, business leaders, philanthropists, teachers, civic leaders—unite and work to help UTD establish world-rank stature in already established areas of excellence and in new areas that will be crucial in the different world that will define tomorrow. Without internal synergy and active external collaborations, without diversity of opinion, without dedication to transcending traditional boundaries, UTD will not be able to fulfill its promise or meet the expressed aim of its founders—to become “a great university.”

Rationale

The University's goals can be achieved because UTD:

- Resides in one of the nation's largest, most vibrant metropolitan areas, one which urgently needs a top-tier research university.
- Focuses on areas that are of critical importance to the region, state, and nation—science, technology, engineering, business, cognition, and teacher preparation.

- Is a young, agile university undergoing rapid growth while maintaining highest quality teaching and research.
- Has an exceptionally talented student body, a world renowned faculty, and innovative transdisciplinary programs.
- Is surrounded by excellent community colleges, cutting-edge high tech industries, leading medical institutions, and innovative business partners who have a history of collaboration with the University.
- Is part of the dynamic UT System with the added benefits of a close association with UT Southwestern Medical Center (one of the world's premier medical research facilities) in downtown Dallas and UTD's sister institution, UT Arlington.
- Has a remarkable history of strong private and public support.

The combination of need, focus, youth, quality, location, collaboration, and UT System resources makes UTD's goal to become one of the nation's premier public research universities a realistic possibility. UTD has consciously avoided the structure of the traditional university with traditional academic disciplines that often become academic silos. Rather than trying to offer all programs for all people, the University will continue to build by adding to strengths, to those focused areas of excellence where individuals are encouraged to break free of constricted modes of thinking. Although UTD does offer bachelor's, master's, and doctoral degrees in most of the core disciplines of the liberal arts and sciences, management, and engineering, there is a great deal of flexibility in all areas so that the programs and Schools can proactively respond to new ideas, new technology, and new challenges.

UTD faces significant challenges and is by no means assured success. UTD's youth contributes to its status as relatively unknown. The University is too small, especially in terms of faculty size and infrastructure, to compete effectively with the nation's premier research universities. Moreover, UTD currently lacks the operating revenue and endowment income necessary to achieve its aspirations in the short term.

This strategic plan defines the institution that UTD aspires to be, states its vision and mission, identifies its goals, lays out the strategies necessary to achieve these goals, spells out an implementation plan, and identifies measures of progress. This strategic plan sets forth a proactive set of bold actions that over time will secure UTD's place as one of the world's great universities.

Strategic Initiatives

UTD will invest in 6 strategic initiatives for success:

1. Discovering Tomorrow's Inventions Today
2. Preparing Students for Tomorrow's Challenges
3. Managing Change in a Constantly Changing Society
4. Securing the Safety of the Future
5. Improving the Health and Quality of Life of Individuals and Society
6. Making a Great City Even Greater

These six initiatives are interlocked and deliberately overlap each other. They transcend traditional disciplines, involve the entire UTD community, and will enable UTD to better fulfill its mission to serve the region and the State. The goal of these initiatives is to transform UTD into a dynamic, intellectual, research force that has direct and powerful impact on the quality of the intellectual, cultural, physical, and economic life of Dallas's citizens as well as the citizens of the world, and the initiatives go hand in hand with meeting face-on the challenges which UTD must overcome. Over the next ten years, these initiatives will provide a roadmap for UTD's future.

Initiative One: Discovering Tomorrow's Inventions Today

To become one of the nation's best public research universities, UTD must invest heavily in research. The University will have to focus those investments in critical areas of opportunity that are logical in terms of current strengths, are of high importance to the Metroplex and the State, and represent areas where the most important discoveries are needed and can realistically be made. UTD must ensure that technology that is developed is transferred where appropriate to the private sector and that this technology and knowledge transfer serves as a major driver for economic development in the Metroplex.

Action 1.1: Research Enterprise Initiative

The Eric Jonsson School of Engineering and Computer Science has launched a campaign appropriately named "Invent Tomorrow." The collaboration of the State of Texas, Texas Instruments, The University of Texas System, and UTD will soon result in one of the most technologically advanced research buildings in the nation. Beyond the construction of a new building, this venture involves the investment of significant new resources in advancing Engineering and Computer Science and the raising of private funds to support the project. UTD stands poised not only to create new technology and spin off high tech companies but also to build on its strengths in nanotechnology, cochlear implants, geospatial information systems, and advanced telecommunications systems and to establish new degree programs and academic units in materials sciences engineering, mechanical engineering, systems engineering, and arts and technology. These new programs must remain agile and avoid becoming traditional, stagnant academic units, and the technology produced must be designed to serve the citizens of the Metroplex and the world. UTD is committed to delivering the anticipated results and will meet or exceed expectations for the project.

Action 1.2: The BioWorld

The 21st century has been called by many "The Century of Biology." Regardless of whether biology and biomedical advances will, upon reflection a hundred years from now, define the 21st century, there is no doubt that advances in biomedicine over the next several decades will likely turn out to be some of the most significant advances in human history. UTD must position itself to contribute to and play a leadership role in developing those advances. The School of Natural Sciences and Mathematics' commitment to expanding and enhancing its emphasis on "living systems" is an important step in securing the future. New technology that recognizes the advances in, for example, sequencing the human genome will enable doctors to treat diseases in ways not imaginable 10 years ago—today, UTD can develop tailor-made treatments and new drugs that can save millions of lives and protect against bioterrorism. Similarly, new technology is waiting to be developed that will protect the environment and the security of the nation. To these ends, the School of Natural Sciences and Mathematics has teamed with the School of Behavioral and Brain Sciences and other Schools and with UTSWMC to form programs in Bioinformatics and Computational Biology, Biostatistics, Bio-Imaging, Biodefense, Biotechnology, and Systems Biology. The proposed Department of Bioengineering in the School of Engineering and Computer Science will further enhance these collaborative efforts and will play a significant role in developing both the technology and the knowledge that will make UTD a major player in the BioWorld. These collaborative programs provide an integrated approach to creating tomorrow's technology, and the University will

place high priority on investing in these areas to ensure that they achieve a level of national visibility and excellence and that that technology reaches the public domain.

Action 1.3: Nanotechnology

The advent of more powerful microscopes about 15 years ago that could “see” individual atoms revolutionized the world of micro-science and caused an explosion of research and advances in “nano-science.” Though the fruits of this work have yet to yield a whole new class of marketable materials, the promise of such materials is so compelling that “nanoscale” research will continue to be a major field of discovery for many years and will undoubtedly spur many technology transfer developments in this post-silicon era. With the collaborative efforts of the Strategic Partnership for Research in Nanotechnology (SPRING), universities in Texas have partnered with UTD in its nanotechnology research efforts. The nanotechnology team has already produced the first transparent carbon nanotube sheets that are stronger than same-weight steel sheets and have a demonstrated applicability in several commercial areas, and recently the work of UTD researchers in nanotechnology was featured in the journal *Science*. UTD is well positioned to be a leader in the creation of new nanotechnology inventions that will benefit numerous industries, including electronics and telecommunications. The University must scale up its operations and seek even more partnerships in this rapidly evolving field of research. The University will make the support of its nanoscale research and teaching a top priority through faculty hiring, infrastructure investment, program development, and technology transfer.

Initiative Two: Preparing Students for Tomorrow’s Challenges

Above all else, the purpose of universities is to educate students, and no university’s strategic plan would be complete without addressing the education of its students. UTD’s student body is one of its strongest assets. The University must provide a strong liberal arts education as well as a variety of educational opportunities inside and outside the classroom that will empower students not just to learn but to become leaders in the world of tomorrow. UTD must also strongly support both excellence and inclusion and, therefore, must play a leadership role in meeting the needs of all of Texas’s citizens in a time of unprecedented change in demographics and increasing diversity of the State’s population.

Action 2.1: The Education of Leaders

The global economy has shifted from a resource-driven economy to a manufacturing-driven economy and is now becoming an information-driven economy. Knowledge and information, and the management and development of knowledge and information, are increasingly becoming the resources that form the basis for commerce and social infrastructure. To meet the region’s and world’s changing needs, UTD must identify new fields of study and must create innovative and coherent curricula that will prepare students to enter the workforce and to be ethical and principled leaders at every level. These leaders will face global challenges, and the education they receive at UTD must have a problem-solving orientation that prepares them to overcome those challenges and to take responsibility for their actions. UTD will, therefore, augment its current educational programs by expanding upon, rounding out, and interrelating existing Schools and programs to

enhance student understanding of the interconnected nature of human existence. Additionally, UTD will create an innovative, efficient, interactive Center for Teaching and Learning Excellence, designed to help faculty provide the very best teaching possible by means of clearly defined outcomes and assessments, and the Career Center will proactively work to place its students in the best employment opportunities available. By embracing a value-added, learning centered approach to education and by providing an environment where concerned, ambitious students and faculty can work cooperatively to create innovative solutions to today's and tomorrow's challenges, UTD will offer its students the opportunity not only to serve the community but to improve the world in which they live.

Action 2.2: Living-Learning Communities

Learning does not take place in the classroom alone. UTD must work to develop a living-learning environment. The establishment of living-learning communities focused on student and faculty interests will greatly enhance the overall experiences of the students and will foster lifelong learning. These communities can also promote partnerships with industry and charitable institutions. Such communities will be established by the Office of Student Affairs on the basis of focus groups of concerned stakeholders, surveys of students and faculty, and interviews of students and faculty. In the meantime, advisors will be directly associated with the students' living spaces; faculty members need to be identified and associated with residential life, beginning with the freshmen and eventually advancing to all undergraduate classes. Faculty participation in open mic nights, fireside chats, study groups, etc., will also be promoted; and where possible First Year Experience freshman university orientation seminars will be held in the clubhouses in the apartments. The Community Outreach Office will serve as a valuable resource for the living-learning communities and will help identify opportunities for the students and the faculty to get involved in community efforts through internships as well as volunteer activities.

Action 2.3: Investment in People

Universities are defined by the people who comprise them. Excellence in education is only achieved with outstanding undergraduate students, graduate students, staff, and faculty. To succeed, UTD must establish successful programs of recruitment and retention at all levels, which will involve resources (scholarships, fellowships, and endowed chairs, for example), recognize and reward excellence (awards and other forms of recognition), expand active people-to-people engagement (recruiting and placement services, for instance), and establish a proactive institutional culture of attracting and retaining the very best people. As UTD continues to grow, student and campus life will be given a high priority at UTD. The cultural, professional, and social organizations on campus must be supported and empowered, and their efforts must be publicized. The Student Government Association, the Multicultural Center, the *Mercury*, Radio UTD, the Student Union and Activities Advisory Board, and Greek life will play increasingly important roles in invigorating the intellectual and cultural climate of the campus. Sports at the intramural level and at NCAA Division III level will be enhanced with the goal of strengthening the impact of sports for UTD's student athletes and the University's broader community of students, staff, and faculty. Although virtually all the nation's leading public research universities participate in Division I, UTD does not plan to develop a Division I athletics program in the next five years but leaves open the longer-term question of Division I athletics for a future date after extensive university-wide discussion and deliberation. At

this time, UTD will focus on high-quality sports programs at the Division III level, as do outstanding private academic institutions such as the University of Chicago, MIT, and Emory University.

Action 2.4: Enhancement of Diversity and Inclusion

The State and Nation are being transformed into far more diverse places where no one ethnic group will comprise a majority. This development, coupled with the increasing globalization of nearly all activities, makes it clear that future success will hinge on being able to engage a broad, diverse spectrum of people, cultures, and ideas. Special attention needs to be given to recognizing, enhancing, and celebrating diversity. A vigorous diversity program will be initiated and coordinated by a university leader, such as a Vice President for Diversity. Diversity and gender equity must be encouraged at all levels of UTD, throughout the hiring, recruitment, and admissions processes, and in the curriculum where appropriate. Perhaps most importantly, UTD must establish a culture that welcomes and celebrates diversity, and prepares all its constituents to engage and succeed in an increasingly diverse state and nation. UTD must play a leadership role in meeting Texas's challenges as it endeavors to close the gaps during a period of significant changes in the State's demographics, making special efforts to include all qualified students and to assure timely graduation. Specific metrics will be developed and periodically integrated into broader goals of the UT System to ensure that component institutions, including UTD, help to meet the needs of the State. The goal of this initiative will be the creation of a community that actively and vigorously supports its many diverse stakeholders—faculty and staff and students alike—and that promotes campus culture of inclusiveness, openness, and understanding. This endeavor will require serious conversations about sometimes controversial issues, but UTD cannot shy away from tackling socially challenging issues and must promote a thoughtful, learned dialogue from a range of perspectives in order to prepare its students for success and global leadership in tomorrow's world.

Initiative Three: Managing Change in a Constantly Changing Society

Perhaps the biggest challenge that Texas and the nation face is coping with the changing global economy, demographic shifts, and innumerable other changes that seem to be accelerating every day. UTD will be a leader in addressing change in a proactive, rather than reactive, way.

Action 3.1: Dynamic Change Management

Given UTD's emphasis on technology, engineering, management, and transdisciplinary education, UTD is strategically poised to pursue innovative research that will make change productive rather than destructive. A campus-wide program for "dynamic change management" will be created to serve as a spark and catalyst for leadership in managing change. The change management initiative will bring the Schools of Engineering and Computer Science, Management, Social Sciences, and Arts and Humanities together with faculty from other Schools to create synergistic research with practical applications to the nation's global society—ideas will literally be turned into actions that value and respect the environment and human welfare. New programs will be created and strong partnerships will be formed with the individual entrepreneurs as well as international corporations and local governments and schools. The newly created Laboratory for Experimental Social Science, the Center for Values in Medicine, Science, and Technology, and the proposed Survey Research and

Training Center along with The Institute for Innovation and Entrepreneurship at UTD hold substantial promise for both understanding and harnessing change. A high priority will be placed on hiring outstanding faculty who will reach out to stakeholders, and continued development of innovative instructional delivery will be emphasized (for example, the Global Leadership Executive MBA's distance learning technology).

Action 3.2: Innovative Centers and Institutes

Without a significant effort to incubate new research (and hence new programs), the research goals of the University will not be achieved. Accordingly, innovative centers and institutes that will become global leaders for positive change will be established to complement the outstanding centers, programs, and institutes already in place, such as the Callier Center for Communication Disorders, the Sickle Cell Disease Research Center, the Center for BrainHealth, the Advanced Hearing Research Center, the Institute of Biomedical Sciences and Technology, the NanoTech Institute, and the Institute for Interactive Arts and Engineering. A Consortium for Innovation, consisting of leaders of industry, deans, and leading researchers, will be established and funded in order to incubate transdisciplinary research and new research centers for up to three years. These centers might focus on such diverse themes as “innovation,” “creativity,” “global software,” “multinational business,” “global communications,” “the health care system,” “multicultural issues in a global world,” and “public policy in a flat world.” The centers will be selected around topics that are natural strengths for UTD and that have a very high potential of making a major impact on the Metroplex, Texas, and the nation. Each year, the Consortium for Innovation will identify two or more new programs for seed funding and incubation in the expectation that most will evolve into major new research and education centers or institutes, attracting major extramural funding and establishing themselves among the most significant programs in their area in the world.

Initiative Four: Securing the Safety of the Future

The threats of terrorism and natural disasters are an unfortunate reality, are not likely to abate, and may grow worse. The nation's security is threatened, and UTD has an opportunity and responsibility to contribute to ensuring the safety of the nation's citizens and of people throughout the world, not only through new technology and new knowledge, but also by promoting global awareness in the curriculum.

Action 4.1: National and Global Security

Today the threats of terrorism and natural disasters are no longer threats—they are reality. UTD has a responsibility to contribute to ensuring the safety of the nation's citizens and of people throughout the world. UTD already has excellent programs in information security, and the faculty in the School of Natural Sciences and Mathematics are ideally situated to make major contributions in the areas of bio-threats (neurotoxins, bacterial toxins, and pathogens) and chemical threats (gas analysis and separation). The School of Social Sciences, with its strengths in Geospatial Information Science and Criminal Justice, has developed strong transdisciplinary programs at the interface with psychology and economics as well as geophysics and computer science that will contribute greatly to this initiative, and the faculty in Social Sciences are teaming with faculty across UTD, especially in

Behavioral and Brain Sciences, to understand the risks that the nation faces by using game theory and by examining the links between individual choices and the behavior of complex systems. The Physics and Geosciences programs in Natural Sciences and Mathematics, in particular the Center for Space Sciences, have additional expertise that can assist in understanding and abating impacts of natural disasters, such as hurricane impacts. The CyberSecurity and Emergency Preparedness Institute provides a focus on secure information systems, and the International Center for Decision and Risk Analysis offers a global perspective on risk management. Finally, the School of Engineering and Computer Science's research programs in cyber security, telecommunications, and space and satellite technologies are crucial to UTD's effort to secure the future. By coordinating existing efforts and by placing high priority on research and education regarding the effects of continued globalization, UTD will make a significant advance in preparing students who will make the nation and the world a safer place to live.

Action 4.2: Energy and the Environment

The world's growing population and escalating development are creating unprecedented demands for energy. The threats to the environment are substantial and are driven increasingly by concerns about global climate change, creating new demands for scientifically credible research to understand the complexities of these interactions and to search for solutions that will provide the energy the nation needs while protecting the environment. The threat to the nation from the possibility of energy shortages, or from adverse environmental impacts related to energy choices, is substantial. The nation must assure reasonable energy supply and security to ensure its overall security. The School of Natural Sciences and Mathematics has been home to important programs in geosciences and atmospheric sciences, and the Center for Space Sciences receives a constant influx of data about atmospheric weather and other atmospheric events from the orbiting instruments the Center's faculty have built. Emerging programs in the School of Engineering and Computer Science will provide strengths in addressing energy efficient materials and systems. Public policy issues such as those addressed in the School of Social Sciences are a key facet to addressing the complex issues of energy and environment. UTD will establish itself in a leadership position in this increasingly complicated and important intersection of energy and environment.

Initiative Five: Improving the Health and Quality of Life of Individuals and Society

The University of Texas at Dallas has established several important and successful programs such as those initiated by the nationally renowned Callier Center for Communication Disorders and the Center for BrainHealth that positively impact the quality of life in the Dallas-Fort Worth community. These critical programs will be strengthened so that UTD can play an even more positive role in the community's quality of life and future.

Action 5.1: Life Science Health Collaborations

The establishment of a collaborations program with UT Southwestern Medical Center is especially critical because the UTSWMC-UTD-UT Arlington team has the potential to transform the Metroplex into a global leader in biomedical research, with enormous positive benefits to society and to the

economy of the region. The School of Behavioral and Brain Sciences has increasingly emphasized its research role in the diagnosis and treatment of cognitive and communication disorders and is already collaborating with UTSWMC and local high tech industries in the areas of face recognition, aging disorders, medical imaging, natural language processing, computer processing of text, and human-machine interaction. Additionally, in another collaborative effort, the School has established a neurotechnology initiative that is dedicated to creating and implementing technology that repairs and strengthens human abilities. This initiative builds on the internationally respected work the faculty has done at the Callier Center with cochlear implants and is closely aligned with work being done in the School of Engineering and Computer Science. The School of Social Sciences is engaged in a broad program of epidemiological research with UT Brownsville and UTSWMC, and faculty from both the Chemistry and Biology departments have a long-standing tradition of collaborating with UTSWMC and UT Arlington. A very promising new collaborative effort is the Green Center for Systems Biology with its close relationship with UTSWMC. The transdisciplinary and inter-institutional synergy from these collaborations promises to strengthen core areas in the sciences as well as the humanities, and these collaborations will be strongly supported and expanded.

Action 5.2: Enhanced Quality of Life

UTD's responsibility to society and individuals goes beyond security; UTD's responsibility also goes beyond merely training technicians or preparing individuals for medical schools (of course, both of these tasks are important). UTD's emphasis on engineering, technology, science, and cognition positions the University to make significant breakthroughs in public and personal health. The initiative to improve health and quality of life cuts across many of the Schools. In addition to the Callier Center and the Center for BrainHealth, the School of Behavioral and Brain Sciences has embarked on a program to enhance the health, education, and quality of life of children and families by establishing a Center for Child and Family Development which is investigating early childhood intervention, social and communication skills, and optimal aging. This Center also works as a community outreach program and has a strong clinical component. The School of Social Sciences is working on health policies for underserved populations in Texas, and the School of Arts and Humanities has founded a Center for Values in Medicine and Technology and is in the process of creating an undergraduate major and an M.A. program in Medical and Scientific Humanities. The School of Natural Sciences and Mathematics' research efforts in medical imaging and visualization and in bioengineering also directly and positively impact the welfare of the citizens of the Metroplex and the nation. For example, the Sickle Cell Disease Research Center is on the cutting edge of finding a cure for this debilitating disease. The Medical Management MBA (in partnership with UTSWMC) trains physicians and healthcare administrators to serve citizens effectively and efficiently. And perhaps most exciting of all, the proposed new department of Bioengineering holds tremendous promise for the invention of cures for many illnesses and defects. UTD will continue to grow in these crucial areas and thereby even better serve the Metroplex and the State.

Initiative Six: Making a Great City Even Greater

A leading university impacts the community in several ways: by adding to the intellectual capital of that community, by strengthening the workforce, by enriching the community's artistic and cultural environment, by attracting research dollars that are spent in the community, by sharing practical knowledge with the business and technology sectors, by improving public and private education, and

by providing a physically attractive environment that becomes an asset to the community. Very often, as is the case with many of UTD's students, students stay in the community after they finish their education. A leading university also impacts the community by the prestige it brings, making the community more appealing to outsiders. A great university—its faculty, staff, and students—partners with the community to make a great city even greater, economically, socially, and culturally.

Action 6.1: K-16 Education

An educated public is at the heart of a great city, and UTD is committed to producing first-rate elementary, middle, and high school teachers and to improving education, especially science and math education, in the Metroplex and throughout the State. The Teacher Development Center, housed in the School of General Studies, has expanded rapidly in recent years, and the teaching candidates that the Center has produced have had a 100% pass rate on certification exams for the most recent three years. The School of Natural Sciences and Mathematics has one of the few long-standing, well established programs specializing in science and math education in the nation. Both initiatives directly affect the quality of life in the Metroplex, and both programs will continue to expand and develop as they respond to new and exciting needs, for instance, by providing in-service academic training for math science, and technology teachers and mid-level administrators (principal preparation). The School of Social Sciences' Texas Schools Project is a unique information system that is invaluable in understanding what is happening in K-12 education in Texas and in helping provide information to improve education. The Ph.D. program in Public Affairs is also helping as it prepares many school administrators. The School of Arts and Humanities has partnered with local school districts to win \$2,000,000 in grants from the Department of Education to improve the quality of instruction in American History. The UTD Academic Bridge program is a powerful and successful program that aids students, most often from the inner city schools in the Dallas Independent School District, to enter and succeed at UTD. The High Technology Education Coalition—a collaborative effort among Plano Independent School District, the Collin Community College District, UTD, and industry leaders from Lockheed Martin, Nortel Networks, Raytheon, and Texas Instruments—has been designed to ensure that area students receive a high quality education in the fields of science, technology, engineering, and math. All these existing programs form the foundation for a strong and useful relationship between UTD and the surrounding community's K-16 programs. The School of Arts and Humanities' proposed Institute for Creativity and Innovation will promote the understanding of creativity in scientific discovery and technological invention and will take that understanding directly into the local public schools, and the current collaborations with the Dallas Museum of Natural History, The Science Place, and The Sci-Tech Discovery Center must be maintained and expanded. By emphasizing and enhancing these relationships and by building new ones where needed, UTD will fulfill its role in bringing out the best in the community's primary and secondary school students. Extremely high priority will be placed on preparing the teachers that the region will need (particularly, to teach math and science), providing leadership in understanding educational policies and their impact on the quality of education, and enhancing the learning experiences of children throughout the Metroplex.

Action 6.2: The Arts

No city can achieve or maintain greatness without a vibrant arts scene. As the University continues to grow, the arts must be an integral part of that growth. The School of Arts and Humanities offers a uniquely integrative, transdisciplinary program that fuses the arts with the humanities as it explores

the connections between critical and creative thinking. The School has highly regarded programs in literature, history, and translation that produce outstanding teachers and citizens, and its programs place creative expression in the broader, relevant context of human experience. The arts, in particular, provide the School and UTD with exciting opportunity to directly impact the cultural life of the Metroplex. Even with a relatively small visual and performing arts faculty, the School has gained a reputation for excellence in the creative arts and sponsors a diverse, high quality arts season with everything from plays and art exhibits to concerts and ballets. The new major in Arts and Technology, the Institute for Interactive Arts and Engineering and the motion capture lab are at the forefront of artistic and cultural innovation. The School has forged links with the Dallas Museum of Art and other cultural institutions and arts groups in the Metroplex and will continue to not only provide even more quality events but also nurture the arts and artists in the community as well as provide a first-rate art education to UTD's students.

Action 6.3: Business Leadership

The vibrant business climate that characterizes the Metroplex is one of the State's and the nation's most valuable assets. The University will be an important driving force in promoting local businesses and advancing the economic climate of the region. The School of Management is UTD's largest school and has core strengths that include Marketing Science, Information Systems, and Operations Management, and the School has recently made significant hires in Accounting, Strategy, International Business, Entrepreneurship, and Finance and has the State's second-highest research output in leading journals. One of UTD's most successful programs is its Executive MBA Program, which is ranked 25th in the nation by the *Financial Times* and which provides invaluable education to current and aspiring business leaders. The Executive MBA Program is continuing to expand and is adding more programs designed to give specific skills to middle- and upper-level managers. Beyond educating leaders, the University will play an increasingly important role as a key asset in strengthening the business environment in the Metroplex through adult education, guest lectures, workshops, and leadership programs for businesses of all sizes and types. The University will also greatly strengthen its activities in technology transfer and serve as a leader in promoting regional economic development in existing and start-up companies.

Action 6.4: Community Outreach

Great universities have a large and positive impact on their community, from hosting outstanding forums to share ideas with community leaders to providing opportunities in the visual and performing arts to providing a place to get research done to being a destination for visitors and friends. All units of the University will be encouraged to volunteer and to be involved in the Metroplex, and events will be sponsored by the University so that members of the public have the chance to be involved. A Community Outreach Office will be established. The Office will work with faculty, staff, and students, and will coordinate outreach efforts, including the incorporation of service learning into the curriculum as well as facilitating volunteer efforts and internships with local businesses and organizations. The Office will also work to provide local business and industries with opportunities to work with faculty on campus on joint projects and will sponsor lecture series and other community events. Alliances—such as those already formed by the School of Social Science's Institute for Public Affairs with municipal governments throughout the State and the School of Management with the Greater Dallas Chamber of Commerce, the Richardson Chamber of Commerce, the Metroplex Technology Business Council, the Greater Dallas Asian American

Chamber of Commerce, and the Indo-American Chamber of Commerce—will be augmented and expanded. Collaboration with the Dallas Museum of Natural History, The Science Place, the Holocaust Center, and the Dallas Museum of Art will also be strengthened, and new ventures such as the Sci-Tech Discovery Center will be pursued. The University will be an active participant in the community and, through that participation, will make a significant and positive impact on the Metroplex.

Action 6.5: University Village

North Dallas, Richardson, and Plano are UTD’s physical home. With its land, sports facilities, library, and other infrastructure, UTD serves as a “go to” place for local citizens and visitors. Beautification efforts will be undertaken to make UTD a more inviting and beautiful campus, with the understanding that UTD is a public resource for the community as well. Places of special beauty and inspiration will be created. The physical appearance of the University will be consistent with the high level of excellence defined by its people. UTD will work closely with Richardson, Dallas, and Plano on projects such as roads, traffic, parking, bicycle paths, jogging trails, sports facilities, parks, etc. But most importantly, UTD will work with the neighboring communities to create a University Village on the unoccupied land currently surrounding the campus. Through mixed-use land development, UTD’s land will be rented to developers for bookstores, restaurants, theaters, and other businesses specifically designed to meet the needs of the growing student population and those who live in the surrounding communities.

Quantitative Targets

To achieve a level of excellence consistent with UTD’s vision, it is instructive to examine characteristics of the nation’s premier public research universities. This group, for purposes of this examination, has been selected from the relatively smaller top-forty ranked public research universities according to 2006 *U.S. News and World Report* rankings. The average characteristics of these top public research universities are as follows:

- Number of Faculty: 1,000
- Number of Students: 21,000
- Student/Faculty Ratio: 20
- Annual State Funding: \$10,000 per student
- Annual Tuition Income: \$7,250 per student
- Total Annual Operating Income: \$17,250 per student

In comparison, UTD has less than 350 tenure system faculty members and less than 15,000 total students. Some of these students are part-time, and the number of full time equivalent (FTE) students is just over 10,000. Unlike many leading public research universities, UTD does not have a medical school, and its School of Management (about 40% of UTD’s current students) is proportionally larger than most business schools at other top-tier public research universities.

Because UTD is relatively small, it is useful to compare UTD with a subset of the top-forty public universities, focusing on relatively small but highly regarded public universities, even though UTD’s

current metrics are unique. Table 1 summarizes some key characteristics of relatively small public universities that are among the 40 highest ranked public universities in the U.S.

**Table 1.
Summary of Key Characteristics of Relatively Small, Top Tier Public Research Universities**

University	Ranking among Top Public National Universities*	Medical School?	Full Time Equivalent Students*	No. of Full Time Tenure Track Faculty†	Annual Funding (State + Tuition) per FTE Student††
Virginia	2	Yes	20,416	1,018	\$16,805
North Carolina	5	Yes	23,588	1,041	\$22,655
UC San Diego	8	Yes	23,476	836	\$18,325
Georgia Tech	10	No	15,605	787	\$19,537
UC Irvine	12	Yes	23,513	783	\$16,134
UC Santa Barbara	13	No	20,358	799	\$15,600
Miami U. of Ohio	26 (tie)	No	16,190	849	\$16,259
U. of Delaware	26 (tie)	No	19,086	1,120	\$15,704
UC Santa Cruz	28 (tie)	No	14,560	485	\$14,038
U. of Connecticut	28 (tie)	Yes	19,758	1,075	\$20,146
Clemson	34 (tie)	No	15,634	826	\$16,443
North Carolina State	34 (tie)	No	25,356	1,408	\$17,887
Virginia Tech	34 (tie)	No	25,902	1,260	\$14,924
Auburn	38 (tie)	No	21,271	1,153	\$16,321
Iowa State	38 (tie)	No	25,150	1,241	\$15,191
Tennessee	38 (tie)	Yes	24,853	1,283	\$20,114
Average			20,920	998	\$17,255
Average (No Medical School)			19,911	995	\$16,243
UTD -			10,247	327	\$11,557

* U.S. News 2006 edition

** Source IPEDS Peer Analysis, Fall 2003

† Faculty holding the rank of Professor, Associate Professor or Assistant Professor

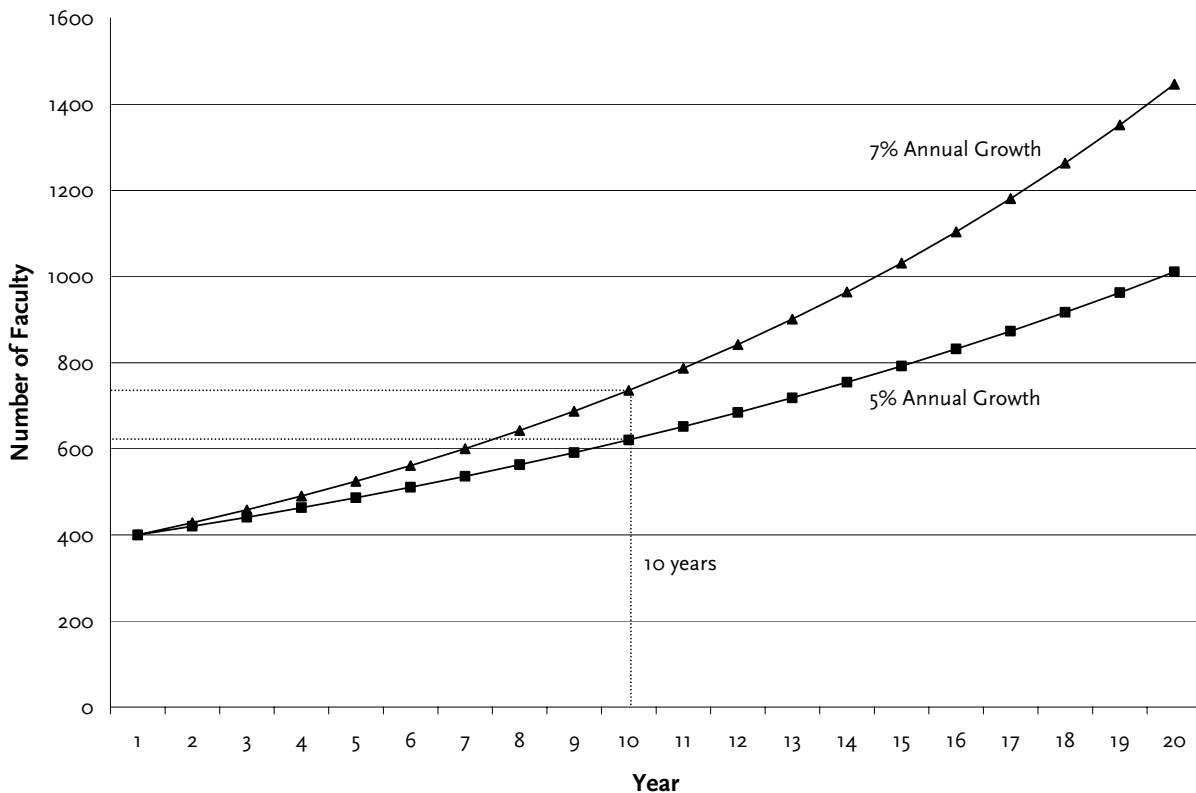
†† IPEDS Finance FY 2003-04

It is evident that UTD is somewhat smaller in terms of number of students and very substantially smaller in terms of number of faculty, compared to the sixteen universities listed in Table 1. It is clear that if UTD is to attain a scale that will enable it to compete with the nation's premier public research universities, UTD must grow, especially with regards to the number of faculty, while maintaining excellence. It is also clear that UTD does not have the level of funding from state

appropriations and tuition necessary to compete with this set of top public universities. Of the approximately \$5,700 per student per year differential with the average of the entire group in Table 1, most (about \$4,000) is related to state appropriations that lag those of the other states and a lesser fraction of the shortfall is attributable to tuition income differences. If UTD is compared only to those universities in Table 1 without medical schools, UTD falls short in funding by approximately \$4,600; and of that amount, approximately \$2,600 is the result of lower State funding per student. The remaining \$2,000 results from lower tuition revenue per student.

The University of Texas at Dallas must grow in order to achieve a scale of impact necessary to develop into one of the country’s premier public research universities. The main challenge is to increase the size of the faculty in a way that builds even stronger quality and impact. Without massive infusions of money (not likely for UTD), and perhaps even with such infusions, growth in the size of faculty at top-quality universities always occurs over periods of years to decades. A growth rate on the order of 5% per annum, perhaps topping out at 7% in some years, is probably the maximum rate that can be sustained in a manner that ensures excellence. Figure 1 charts growth from the current size of 400 faculty members at growth rates of 5% and 7% per annum.

Figure 1



At these growth rates, a reasonably achievable faculty size in a decade is 600 to 800. The time required to achieve a faculty size of 1,000 to 1,200 is 15 to 20 years. In all cases, each person hired must increase the overall quality of the faculty, and serious efforts must be made to ensure that there is no dissolution of the current excellence.

Thus, UTD must view this strategic plan in both the near term (principally, advancing programs and initiatives that can be created immediately) and the long term (principally, building a faculty and infrastructure consistent with the nation's premier public research universities). A time frame stretching from 10 to 20 years is appropriate for UTD's planning.

The following metrics provide a way for UTD to measure its growth as well as set goals that will allow UTD to become a top-tier, public research university:

- 800 tenure-system faculty members
- 15,000 full-time-equivalent (FTE) students
- Student/faculty ratio of approximately 20
- \$100,000,000 in annual research expenditures
- \$15,000,000 in annual endowment distributions (\$320M endowment)
- 300 doctoral degrees awarded annually
- Academic ranking of entering freshmen in the top 50 of public universities
- 10 members of the National Academies of science and engineering
- 15% annual giving participation rate of alumni
- 10% of entering freshmen from out of state
- Overall university ranking among the top 50 public research universities and, eventually, among the top 20

Imperatives

Growth and success rely on concentrated efforts within the context of a reasonable plan that must be considered a "living document," one subject to periodic review and reasoned changes. To meet the objectives listed above, UTD will need to focus its administrative efforts on the following 8 imperatives:

Imperative 1: Double Size of Faculty

The University of Texas at Dallas will increase the size of its tenure-track faculty to 800 within the next 10 to 20 years. Its five-year goal is to grow to a minimum of 500 faculty members, and its 10 year goal is a faculty size of at least 600 to 700, or more. It will achieve this growth at a steady rate, measured carefully to build excellence and enhance quality. The growth will include many junior faculty members, but will also include exceptionally distinguished faculty members, such as, chaired professors, Nobel laureates, and elected members of the National Academies. It is important to emphasize that these individuals should fit within the inclusive, transdisciplinary culture of UTD and should serve to help others in the University with their research trajectory. Of course, not all areas receive external funding, and research funding alone is not a sufficient reason to hire anyone. Publication, national recognition, and leadership qualities are critical elements to consider as well as teaching abilities. Young, dynamic faculty with new ideas in Arts and Humanities and in Social Sciences will also be crucial for the University's success. UTD must recruit individuals who understand and support UTD's commitment to a multicultural understanding of the demands of a global society, and UTD needs to increase the gender and multicultural diversity among the faculty (as well as the students). UTD must provide adequate salaries and a productive, secure environment

for the teaching and research professional faculty who are not tenure track and may be part-time. These individuals will play a vital role as UTD advances to top-tier status.

Imperative 2: Add 5,000 New Students

The size of the student body needs to increase, but not in proportion to the increase in faculty numbers. The University currently has 10,000 FTE students—an additional 5,000 FTE students would bring UTD to 15,000 FTE students, and probably about 19,000 total students. With 15,000 FTE students and 700 faculty members, UTD’s student/faculty ratio would average 21, competitive with leading public universities. Thus, the student body will be increased gradually by 5,000 additional FTE students by vigorously recruiting highly able students locally, nationally, and internationally. This growth will be based upon areas of focused excellence in each and every School and must be commensurate across the University. In making choices regarding admissions, UTD will choose first to sustain or build the quality of its student body first and to add to the FTE total second. The five-year goal is to add 2,000 FTE students. The ten-year goal is to add at least 5,000 FTE students. Highly able students will be actively recruited, particularly in science, mathematics, and engineering. Additionally, recruitment of underrepresented populations will be emphasized so that the student population can more closely mirror the population of the Metroplex. The goal of the University is to have a student body that exhibits not only excellence but is also reflective of the gender and ethnic demographics of Texas. The current mix of about 35% graduate students to 65% undergraduate students may shift slightly toward a higher percentage of undergraduate students, but large changes are not planned. As UTD grows, the University will undoubtedly continue to increase the relative proportion of its full-time students, but UTD will maintain and emphasize its outstanding offerings and welcoming climate for transfer and part-time students. Therefore, in addition to recruiting traditional freshmen, UTD must preserve its long-standing partnerships with the high quality community colleges in the Metroplex, actively embrace those students into our academic community, and make their transition as seamless and advantageous as possible.

Imperative 3: More than Double Research Funding

Annual research expenditures are increasing steadily and are currently \$42M per year. To fulfill its vision, UTD’s research expenditures must increase, probably to \$100M or more. The University will increase its research funding to at least \$100M over time by hiring new faculty with a strong emphasis on research, by replacing departing faculty with research-active scholars, by aggressively pursuing post-docs, and by building the requisite infrastructure and support structure to support a top-tier research university. The five-year goal is research expenditures in excess of \$60M, and its ten-year goal is expenditures exceeding \$100M per year. The number of grants being written on campus will need to be significantly increased; UTD cannot continue to rely on the relatively small cadre of individuals who are now having such phenomenal success, nor can UTD expect the success rate of funded proposals to remain as high as it is. Seed money will have to be raised to help researchers launch their projects, and a program will be established across the University to fund for the first year research programs that received positive reviews from outside agencies but were unfunded. The Office of Sponsored Projects will continue to improve its operations and will be more proactive with regard to grant writing.

Imperative 4: Tell UTD’s Story Better

The University has not placed a sufficient emphasis on communications or telling its story well. All of the nation's premier universities, public and private, have strong and often very aggressive communications and marketing programs. UTD must reach out to local businesses, industries, and schools and share with them the opportunities available at the University and must make the world aware what is happening at UTD. Additionally, UTD must actively promote its focused areas of excellence and its unique heritage and exceptionally promising future. Therefore, a unified, first-rate marketing and communications effort with a substantial increase in staffing and funding, along with the development and periodic updating of UTD's communication plan, will be an integral part of UTD's future operations. High priority will be placed on spreading the word throughout the Metroplex and beyond about student and faculty accomplishments and on continuing to improve UTD's website to make it user friendly and to maximize its role in marketing and recruitment efforts. Newsletters and other forms of publications will be developed for each School and will be distributed to alumni and other stakeholders both locally and nationally.

Imperative 5: Improve Annual Giving and Endowment

UTD will increase its endowment to at least \$320M. Because of the institution's youth, UTD has a relatively small number of graduates in comparison to other top public research universities; UTD must aggressively track its graduates and offer them the opportunity to participate in UTD's continued growth. Alumni operations, therefore, must be strengthened, and student satisfaction (and the measuring thereof) must be a constant priority. UTD will increase the percentage of alumni who participate in annual giving to a goal of 15%, a rate that is competitive with leading public research universities. The five year goal is a participation rate of 7%, and the ten-year goal is a participation rate of 11%. In addition, UTD will add \$100M in total giving within 3 years and will work to achieve an aggressive goal of \$150M within five years. During the next 3 years, UTD will assess its capacity for successfully completing a comprehensive campaign that will continue the aggressive growth of the University's financial resources. To accomplish these goals, UTD will build a culture that supports and encourages giving among students, alumni, faculty, philanthropists, regional companies, and other stakeholders. The administration will work with the deans and others to make the appropriate institutional changes and to raise the necessary funds, with a top priority on meeting UTD's fundraising goals.

Imperative 6: Increase Number of Ph.D.'s Granted

Graduate education is the point of true distinction among the nation's premier universities. The University will increase the number of Ph.D.s granted to 300 per year (200 within five years) while maintaining high admission standards. This increase will require additional resources, including graduate student fellowships and enhanced research infrastructure. Additionally, graduate student recruitment and the acceptance process will be streamlined, and more faculty will become actively involved in the recruitment process, from writing to colleagues to visiting campuses to recruit. High priority will be placed on recruiting highly able students, and recruitment of underrepresented populations (for example, women in engineering and Hispanics in the hard sciences) will be vigorously pursued. Mentoring programs will be established to facilitate a smooth transition into graduate training and to stimulate additional research.

Imperative 7: Enhance Graduation Rates

UTD has a responsibility to see that its students graduate in a timely manner, and the University needs to develop a culture where both faculty and students believe that if the students are good enough to get into UTD, they are good enough to stay in the University. The current graduation rates for UTD—30% - 4 years, 51% - 5 year, and 56% - 6 year—approximate the national average for all universities. In the next five years, the University will increase those rates respectively to 40% - 4 years, 60% - 5 years, and 70% - 6 years. In ten years, the graduation rates will increase to 50% - 4 years, 65% - 5 years, and 75% - 6 years. The proposed rates for the ten year goal are well above the national average and are comparable to the graduation rates of the sixteen benchmark universities in Table 1. To be able to reach these goals, UTD will use midterm grades to track student progress proactively in individual classes, require students to meet with advisors for 75 hour degree audits, and use the undergraduate advising survey to improve advising where needed. The University will also propose a fixed tuition rate for 4 years and cap tuition at 15 hours to encourage students to enroll in additional classes. Finally, UTD will examine the so-called gateway courses to determine how they can be improved to ensure student success and to provide students with the requisite skills and knowledge that they need to prosper at the University.

Imperative 8: Reduce Costs

The landscape of public higher education is changing in Texas and the nation as a result of population growth, technology advances, reduced state funding, and other shifts. UTD must strive to be both efficient and cost effective. The University will carefully assess all its major business costs. Particular attention will be focused on optimizing instructional costs through careful allocation of resources and use of technology. The University will also explore ways to collaborate with the UT System and other UT System universities to reduce additional costs and attain administrative efficiencies. A detailed assessment of business and administrative costs will become part of UTD's culture as the University maximizes its overall efficiency. Specific metrics will be developed and tracked.

Business Model

The demands of institutional growth will require resources. The business model that UTD will employ must be thoughtfully developed and implemented, and must be a “living business model” because the dynamics of state and tuition funding, as well as technology transfer opportunities, are subject to change. The University will maintain and periodically update a business model that is consistent with meeting the resource needs of this strategic plan. This business model will closely monitor the cost reduction metrics and the success rate of attaining administrative efficiencies. In addition, the business model will identify where faculty and student growth will occur and will describe how space and other resource needs will be met. The business model will also assure that physical facilities are updated and maintained and that there will be commensurate growth in staff to meet the needs of the additional faculty and students.

Implementation Plan

Strategic planning will be a shared responsibility across the institution. To ensure that this strategic plan becomes the true guidance document of the institution, UTD's President will assign an individual with responsibility for monitoring the progress of each action. The administration will

establish specific growth goals, benchmarks, and persons of responsibility for each action. Measures of success will be specifically defined and periodically updated for each action.

Each School and each major operational unit will develop and maintain its own related strategic plan, vetted and approved by the University.

The President will report annually on the progress achieved toward the implementation of the plan. The UTD Development Board will actively assist with implementing and raising funds for the plan. At the three-year mark, the institution will perform a detailed and critical review of the plan, and make changes as appropriate to ensure that it is a living document.