TEXAS A&M UNIVERSITY **Department of Architecture**

STRATEGIC PLAN 2011-2015

January 2010

BACKGROUND AND HISTORY: SETTING THE SCENE

The first formal program in architectural education in the state of Texas was begun at the Agricultural and Mechanical College of Texas September 1, 1905 with the inauguration of the curriculum in architectural engineering by the late Dr. Frederick E. Giesecke. From 1905 to the present, degrees in both engineering and architecture have been created. During the period 1905 to 1941, a four-year course of study leading to a Bachelor of Science degree in Architectural Engineering was offered by the Department of Architecture in the College of Engineering. In 1914, a four-year program leading to a Bachelor of Science degree in Architecture was established. This degree was replaced by a five-year Bachelor of Architecture degree in 1931. In 1941, a five-year program leading to a Bachelor of Science degree in Architectural Construction replaced the B.S. in Architectural Engineering. The first Master of Science degree in Architecture was awarded in 1921, and the first Master of Architecture degree was awarded in 1950. The Architecture program received professional accreditation for the first time in 1948.

In 1956, the Department of Architecture became the Division of Architecture; in 1963, the Division of Architecture evolved into the School of Architecture. The College of Architecture and Environmental Design, comprised of departments of Architecture, Environmental Design, Building Construction, Landscape Architecture, and Urban and Regional Planning, was formed in 1969.

Along with the formation of the College of Architecture and Environmental Design, 1969 also marks a significant shift in the pattern of architectural education at Texas A&M University. After extensive study and discussion, the faculty decided that the architectural program would break with tradition and embark on a 4+2 pattern of study. By 1973, the transition to the new pattern was complete.

In fall 1986, it was decided to consolidate the administration of the departments of Environmental Design (undergraduate studies) and Architecture (graduate studies). The Department of Architecture then administered undergraduate courses leading to the four-year Bachelor of Environmental Design (pre-professional) degree, as well as graduate courses leading to the

Master of Architecture (accredited professional degree); the Master of Science in Architecture (research degree); the Master of Science in Visualization; and the Doctor of Philosophy in Architecture.

In 1989, the College was renamed the College of Architecture. Departments were consolidated into a three-department structure: Architecture; Construction Science; and Landscape Architecture and Urban Planning. In spring 2007, the Texas Higher Education Coordinating Board approved a fourth department, Visualization.

In spring 2008, all programs in visualization studies were unbundled from the Department to form a new Department of Visualization, making it the fourth in the College.

Today the Department of Architecture enrolls approximately 420 BED students, 110 MArch students, 5 MSc students and 50 PhD students. We have an excellent line up of about 50 faculty with expertise in architectural design, technology, theory and history, as well as in specialised areas such as BIM, sustainability, energy efficiency, heritage preservation, health facilities, facility management, and low-income housing.

VISION

Our vision, in broad terms, is to be a well-defined, clearly differentiated department of architecture. More specifically, we aim to be a center of excellence, which contributes to the making of sustainable built environments through high quality design education and world-class research that are relevant nationally and globally.

VALUES

Our vision is underpinned by five key values:

- Design excellence
- · Research excellence
- Leadership
- Social responsibility.

MISSION

Our vision and values enable us to fulfill our mission to Texas A&M University and society as a whole. This includes our mandate to teach, undertake research and engage in service. In broad terms our mission is to:

- Nurture progressive design thinkers and scholars
- Contribute to advanced understandings of how built environments work
- · Educate socially responsible graduates.

At a more detailed level, the mission of the Department of Architecture is to create and disseminate knowledge and understandings of buildings and cities that are sustainable economically, socially, and ecologically. To achieve this mission, we place architectural design, and therefore the design studio, at the center of the BED and MArch curricula.

OUR FUTURE STRATEGIC PATHWAY

Leading schools of architecture around the world, such as at Cambridge, the Architectural Association, University College London, Harvard, Yale, Columbia and Princeton, offer professional architectural degrees that emphasize strong relationships between architectural theory and design. We regard these schools as our benchmark competitors who have raised the bar to which most schools now strive. In order to rise to this opportunity we need to leverage our strengths in everything we do.

The unbundling of Visualization studies in 2008 has created the impetus for us to focus on our core competency, architectural design. To this end the Department is intensifying the conversation about architecture across the board...in studios, classrooms, seminars, committees, lecture series, and so on. It is in the spirit of this conversation that we teach architectural design by embracing theory more intensely and, in the process, developing sophisticated visions of world history and technology, creating critical applications in architectural tectonics and communications, and advancing expertise in professional practice. It is this integrated approach to architectural design that forms the fundamental basis, not only of the BED and MArch curricula, but to our approach to the research components of our MS and PhD programs. It is therefore a highly promoted approach, one that is advanced by scholars, as well as by licensed professionals, who design buildings and engage in teaching and research by focusing on specific subjects in contemporary theory and how this informs design.

The emerging point of departure for our creative and scholarly endeavors is that how we design buildings and cities is a function of how well we understand them. Therefore the links between understanding (knowledge) and design (creativity) are enhanced and made more explicit and meaningful. This more intense and focused approach to the generation of design knowledge and creativity gives us a strong platform for defining the intellectual basis of the studio. But it also enables us to more clearly articulate the links between subjects such as theory and history. For example, we have faculty who are thought leaders in the historiography of theory, a subject that

includes surveys on the history of the most important 20th century architectural design theories. We are consequently able to offer critiques on modernism, neo-rationalism, regionalism, recent post-colonial studies and multi-culturalism, as well as on theories of globalization, global cities and global practice. This history/theory discourse on 20th century architecture and urbanism also emphasizes various dimensions of material culture, including the communication of architecture (such as publications, film, popular culture), semiotics, experimental radicalism, mega-structures, popular housing, suburbia, informal settlements, land-art and ideology generally.

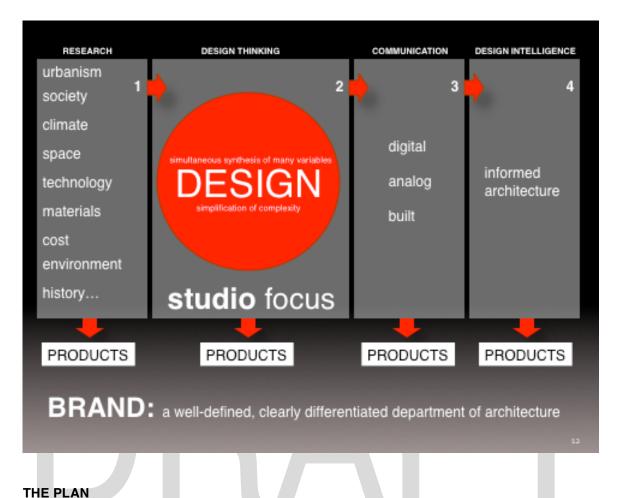
Part of our strategy for the Department is, eventually, to get all professors involved in studios, including those who specialise in technology and the history and theory of architecture. This will enhance the academic function of the studio because it will yield new sources of design innovation and creativity for students. The studio is therefore a critical component of our strategic pathway and is the armature not only for integrating all subjects in the curriculum, but also for leveraging our key strengths.

These strengths, which include a record of success in research and creative practice, define our strategic advantage in the landscape of architectural education nationally and globally. That landscape is increasingly competitive. But, given our strengths, the Department is well positioned to compete effectively in the medium- to long-term. This is because our strengths differentiate our brand, which in short, is a matrix of expertise, infrastructure and technology. This matrix of strengths includes the following (in no particular order):

- 1. Faculty
 - a. Resident full-time faculty
 - b. Academic integration of faculty
- 2. Proud of who we are and what we are producing
- 3. Staff
- 4. Research record
 - a. Faculty and student participation in College Centers
- 5. Strong PhD program
- 6. Speciality expertise
 - a. Emphasis on sustainable design
 - b. Digitial Design (BIM and CAD)
 - c. History
 - d. Technology
 - e. Evidence-based design

- f. Health facilities design
- g. Heritage preservation
- h. Energy
- i. Growing theory presence
- 7. Study Abroad program (undergraduate)
- 8. Edited journals
- 9. Practioners value our graduates
- 10. Strong foundations
- 11. Excellent students
 - a. Professional and scholarly connection
 - b. Local and international
- 12. Resources (faculty, facilities and finance)
- 13. Alumni participation
- 14. Multidisciplinary College
- 15. University-wide Interdisciplinary opportunities
- 16. Size and diversity

Our design-centric approach is summarized in the following diagram:



IIIL FLAN

In order to articulate our strategic pathway we are working according to a plan. The basis of our plan rests upon three inter-related strategic domains:

- First, there are the global contours of higher education
- Second, Texas A&M University's Vision 2020
- And third, the future pattern of architectural practice.

Design and research are infused throughout all three of these domains.

Taken together, these domains define today's context for educating architecture students at Texas A&M. We need to adapt to that context in order to ensure that our future graduates have the savvy and intellectual agility for a world of professional practice that will be vastly different to the one we recognise today.

Domain 1: Our global context

Following Howard Davies, the Director of the London School of Economics and Political Science, the major trends setting the pace for managing contemporary universities, regardless of their geographic location, may be summarised as follows¹:-

- Firstly, higher education is now a growth phenomenon, whether in less-developed or more-developed countries. Estimates suggest there are more than 100 million students in the world, a figure that could double by 2025
- Secondly, English is already the main language for higher education, meaning that
 international migrations, or *mobility*, for jobs and degrees is increasingly easier. For
 example, the Bologna Declaration is a proactive model for enabling greater mobility in
 higher education within the European Union
- Thirdly, universities are increasingly differentiating themselves by the way they specialise
 their offerings. The result is a growing constellation of specialist universities that are
 diversely focused. Thus, being *niched and networked* is becoming the leading source of
 competitive advantage for individual universities
- Fourthly, government funding of universities everywhere is in decline. The growth of *other income sources* is increasing, meaning that the stakeholder base is expanding. Various interests now need to be accommodated by both scholars and administrators
- And finally, the days of the university as an ivory tower appear to be over. Universities
 increasingly play important roles in the *development of their local economies* by being
 good neighbours and citizens. This, together with a diverse funding base, is leading to
 more external interests in the affairs of universities, which in turn demands more
 transparency and disclosure by them.

Universities are arguably at the forefront of global economic growth. This is because innovation and creativity are hallmarks of the 21st century's economy and universities remain fountainheads of creative outputs...artistic, scientific, technological and cultural. Therefore, the exposure of students and faculty to interdisciplinary teaching and research needs to be nurtured because it adds intellectual fuel and positive energy to the growth of creativity, innovation and esteem.

Action:

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¹ See Howard Davies' Peking University Speech entitled, '<u>Developing a University Strategy in the 21st Century</u>', London School of Economics, 4 August 2004

The Department's future orientation will grow from these global realities and trends, and constantly adapt to them as they evolve. But our strategic and tactical operational plans must also be tailored to suite our local conditions and circumstances.

In this regard, the Department is committed to three things. First, we fully endorse and support the Study Abroad program. We will therefore continue to add value to Texas A&M programs in Italy, Spain, Germany and Costa Rica by running studio and classroom-based courses at those sites. But we will also work with the College and the University to identify and implement programs in new geographic locations, particularly those prioritised by the University, such as Africa, India and China. This will enable us to enlarge our global footprint as well as expose students to different conditions of existence and the tangible realities of a global economy and a networked society.

Second, we remain committed to serving the people of Texas, the United States, and the world by engaging in projects of lasting value to communities. The studio and various research activities provide students with several opportunities to work with disadvantaged communities, such as the people of the *colonias* along the US-Mexico border, as well as those affected by natural disasters. We will apply the same approach to projects involving the upgrading of informal, self-built settlements, as well as the design of low-cost housing, in regions such as southern Africa.

Third, we offer positive support to the dissemination of architectural knowledge on global and local scales. The Department consequently provides material support to journals whose editors are faculty members. Appendix A contains details of these journals.

Specific Initiatives:

- Develop consortium of sister universities (link to specialties)
 - Link to specialties
 - First examples (collaborative studios)
 - Turkey
 - China
 - Important areas
 - South America
 - Africa
 - Asia
- Develop and market specialties
 - o Develop brand

- Expand use of "visitor offices" for A/E firms to drop in.
- Expand use of technology (SKYPE, video, podcasts)
- Expand semester away to be summer away for career change students

Domain 2: Vision 2020

The overall goal of achieving a 'culture of excellence' quite clearly impacts all entities and academic units on campus. The ambition of being a 'consensus top 10 public university' in the country means not that all departments need to pull in that direction, but that they exceed it. In order to 'hit the long shot' the Department is making all 13 imperatives of the strategic plan run upwards. Indeed, we see Vision 2020 as an important structure for this Department to position itself in relation to our competitors in Texas, the country and the world.

Action:

The Department is an important player in making the strategy work because, as mentioned in this document, our core competency is design. We regard realizing the ambitions of Vision 2020 as a design challenge, and in order to map our Department to this challenge, we have prepared a template in which our strengths are correlated with each imperative. The result of that mapping is illustrated in the following template, where an 'X' indicates that a strength is able to help realise an imperative:

	ching,	ams	demic	es Core	Education	mmunity	ources		onnections	and and	st Public	xas		
	 Elevate Our Faculty and Their Teaching, Research and Scholarship 	Strengthen Our Graduate Programs	 Enhance the Undergraduate Academic Experience 	Build the Letters, Arts, and Sciences Core	Build on the Tradition of Professional Educatior	Diversify and Globalize the A&M Community	Increase Access to Knowledge Resources	8. Enrich our Campus	Build Community and Metropolitan Connections	10. Demand Enlightened Governance and Leadership	Attain Resource Parity with the Best Public Universities	Meet Our Commitment to Texas	*13. Space Needs/Facilities	
	1. Elevate O Resi	2. Strengt	3. Enhance	4. Build the L	5. Build on the T	6. Diversify an	7. Increase A	.8	9. Build Commu	10. Demand	11. Attain Res	12. Meet	*13.	
STRENGTHS														
1. Faculty														
a. Resident full-time faculty	х	Х	х	х	х			х	х	х		х		8
b. Academic integration of faculty	х	Х	х	х	х									5
Proud of who we are and what we are producing	х	Х	х		х			х	х	х		х		7
3. Staff	х	Х	х					х				х		5
4. Research record														0
a. Faculty and student participation in College Centers	х	х	х	х	х	х	х	х	х		х	х		11
5. Strong PhD program	х	х	х	х		х	х	х			х	х		9
Speciality expertise														0
a. Emphasis on sustainable design	х	х	х		х	х	х	х			х	х		9
b. Digitial Design (BIM and CAD)	х	х	х		х	х	х	х						7
c. History	х	х	х	х	х	х	х	х	х			х		10
d. Technology	х	х	х		х		х	х				х		7
e. Evidence-based design	х	х	х		х	×	х	×	х		х	×		10
f. Health facilities design	х	х	х		х	x	х	х	х		х	х		10
g. Heritage preservation	х	x	х	х	x	x	х	х	×		х	х		11
h. Energy	х	х	х		х	×	х	х				х		8
i. Growing theory presence	х	х	х		х				х					5
Study Abroad program (undergraduate)	x	х	х	х	х	x		х				х		8
8. Edited journals	х	x				х	x	х		х	х			7
Practioners value our graduates					х				х			х		3
10. Strong foundations	х		x					х	х	х		х		6
11. Excellent students				1										0
a. Professional and scholarly connection					х	х		х		х				4
b. Local and international					х	х		х						3
12. Resources (faculty, facilities and finance)	х	х	х		х	х	х	х						7
13. Alumni participation	х	х	х		х	х		х	х	х		х		9
14. Multidisciplinary College	х	х	х		х	х		х		х				7
15. University-wide Interdisciplinary opportunities	х	х	х		х	х		х						6
16. Size and diversity		х	х		х	х		х						5
	22	22	22	7	22	18	12	23	12	7	7	16		

Specific Initiatives:

• Become the model for innovation and quality for architectural design in the future.

Domain 3: The changing nature of architectural practice

A defining feature of our architectural programs is that they prepare students to be socially responsible citizens of a global future. Essentially, we see architectural design as a socially responsible activity, in the sense that it is ethical and that it embraces sustainability as broadly as possible. Ethical, sustainable design is a cornerstone of practice in the 21st century and is

therefore fundamental to the values that we inculcate in the Department. We therefore use our core value system to guide our understanding of the future shape of practice.

In that regard, the presidents of the five collateral associations (ACSA, AIA, AIAS, NAAB, NCARB) who keep watch over the quality of architectural education in this country recently asked the question, 'What will the practice of architecture look like in 2025?' In response to this question, Kim Tanzer, a former president of the Association of Collegiate Schools of Architecture, articulated the following observations²: -

- Practice will be global. Indeed it is already. In South Africa, for example, most large
 projects, such those that are part of the 2010 Soccer World Cup involve consortia of local
 and international firms. And the basis of much of these collaborations are digital files that
 circulate 24/7
- 2. Practice will be highly interdisciplinary. Professional diversity in the office is broadening. Large firms are taking on board individuals not only from the traditional allied professions, but specialists from the domains of psychology, anthropology and branding
- Teams will be assembled for specific projects. Outsourcing and freelance work are becoming common. They create space for professional flexibility both for individuals and firms
- 4. Design will not be limited to the scale of buildings. Most things are being considered from a design point of view. From election campaigns and corporate identities, to business models and everyday utensils, design is everywhere.

Action:

The Department is proactive in relation to the understanding and evolution of global practice and in 2008 installed a new classroom subject on the ethical and cultural dimensions of international work.

But what do these trends, and the questions they raise, mean for 21st century architectural education? We believe they point us in the direction of competencies that our graduates at Texas A&M should attain. For example, in a survey recently carried out in Europe by the European Network of Heads of Schools of Architecture (ENHSA), several competencies have been highlighted by Constantin Spiridonidis³. The following is a sample of these required competencies:

· The ability to work in an interdisciplinary team

² Tanzer K (2007) What will the practice of architecture look like in 2025?, ACSA NEWS, vol. 37, no.1, September:2-4

³ See 'The Tuning Project' led by Constantin Spiridonidis of Aristotle University of Thessaloniki (<u>www.enhsa.net</u>)

- Capacity to apply a spirit of synthesis of ideas and forms
- Ability to create architectural designs that that satisfy both aesthetic and technical requirements
- Necessary design skills to meet building users' requirements within the constraints imposed by cost factors and building regulations
- Critical awareness of the relationship between current architectural discourse and practice and the architecture of the past
- Ability to define research projects which will contribute to knowledge and debate within architecture.

One of the principal reasons for installing our new Advisory Council in 2008 is to obtain top-tier counsel on issues surrounding future required competencies, such as those listed above. The members serving on the Advisory Council are listed in Appendix B.

Competencies such as these are important learning outcomes that should be incubated on the basis of a few strategic issues that we recognise in the Department:

- 1. The studio is a value-adding milieu for developing and testing cutting-edge design ideas, and nurturing best practice through Socratic debate. It is a model for dismantling barriers between education and practice, between architecture schools on the one hand, and the profession on the other. Its pedagogic role is therefore tactical
- There is a need to bring the research world closer to the realities of practice. Questions about how research can be more closely integrated with practice can be forged and developed through experimentation and simulation
- Likewise there is a need to integrate research and teaching in the interests of excellence in practice. Much more emphasis needs to be placed on experimental research involving multidisciplinary collaboration
- 4. There is a need to sculpt new, progressive and creative design theories that are more analytical and less normative. My understanding is that good, creative theories are those that both shape and reflect best practices in design.

Specific Initiatives:

 Create an organization of health innovation which partners with other universities, and includes corresponding fellows.

- Participate in pre-college programs in order to identify and 'groom' gifted students
- Pattern the curriculum after leading global architectural practices to become the leader in innovative pedagogy.

CONCLUDING REMARKS

In summary, our future pathway to success is designed on the basis of three domains:

- Global context
- Vision 2020
- Changing nature of practice.

These are the pillars of our strategy to future success. We are committed to being a well-defined, clearly differentiated school of architecture with a powerful focus on design and knowledge generation. This commitment rests on our core values and strengths, and is aimed at making us one of the finest schools in the world. This strategy is about achieving that objective...about cementing the global brand of the Department.... about exploiting the intellectual horsepower and creative energy in the Department...and it's about putting design and scholarship at the forefront of what we stand for.

This strategy is aimed at forging a local and global identity for the Department. It is therefore grounded by the need to educate graduates who are adaptable and savvy, as well as internationally mobile.

We see sparkling opportunities as we move into our next era of development. This document should therefore be viewed as a means of intensifying new conversations, involving many voices, about who we are, what we stand for, and what we want to be.

APPENDIX A

Journals supported in the Department of Architecture

List journal titles

APPENDIX B

Department of Architecture Advisory Council

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