

# UHS Capital Facilities Process



**12 May 2010**

# **TEXAS SPACE MODEL**

# TEXAS SPACE MODEL

Calculates Educational and General (E&G)  
Space Needs Based on:

- Enrollment
- Levels of Instruction
- Programs
- Research Activity
- Clinic Activity
- Public Service Activity

# TEXAS SPACE MODEL

Calculates space requirements for:

- Teaching
- Library
- Research
- Office
- Support

Does not include:

- Auxiliaries (Housing, Athletics, Retail, Student Center)

On-Line Calculated Same as In Person Instruction

## FALL 2009 Space Summary

		UH	UH-Clear Lake	UH-Downtown	UH-Victoria
Teaching	Predicted	1,439,691	213,228	404,509	84,166
	Actual	946,915	163,108	192,326	54,535
Library	Predicted	570,550	90,377	100,662	42,656
	Actual	439,209	91,251	67,245	16,197
Research	Predicted	482,824	13,977	24,130	6,078
	Actual	427,615	12,578	5,425	561
Office	Predicted	1,306,273	193,812	217,549	67,605
	Actual	974,084	172,663	173,928	53,807
Support	Predicted	341,940	46,025	67,216	18,045
	Actual	236,675	40,273	28,838	11,037
Total	Predicted	4,141,278	557,419	814,066	218,551
	Actual	3,024,498	479,873	467,762	136,137

Fall 2009 Unadjusted Surplus (Deficit)		(1,116,780)	(77,546)	(346,304)	(82,414)
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Education and General Approved - Not Online		124,913	33,300	-	29,250
Total Actual Adjusted		3,149,411	513,173	467,762	165,387

Fall 2009 Adjusted Surplus (Deficit)		(991,867)	(44,246)	(346,304)	(53,164)
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# Space Usage Efficiency

# THECB Space Usage Efficiency

- Purpose: To comprehensively and effectively identify actual instructional space use and need
- Based on 3 Factors:
  - Overall facilities demand and usage standards for classrooms (45 hours/week) and class labs (35 hours/week)
  - Instructional utilization standards for classrooms (38 hours/week) and class labs (25 hours/week)
  - Space occupancy standards for classrooms (68%) and class labs (77%)
- Score based on points awarded by formula in each category.

**CLASSROOMS****CLASS  
LABORATORY**

Institution	Demand	Utilization	Average Percent Fill	Classroom Score	Demand	Utilization	Average Percent Fill	Class Lab Score	Overall Score
University of Houston	42	36	68%	83	32	21	74%	75	158
University of Houston - Clear Lake	37	30	56%	58	31	18	63%	59	117
University of Houston - Downtown	34	32	63%	58	28	24	75%	74	132
University of Houston - Victoria	5	5	32%	25	4	3	31%	25	50

- **THECB 100% utilization = 300 points**
- **THECB minimum utilization = 150 points**
- **Minimum utilization required for THECB approval of all future projects.**

**HEAF**

## Higher Education Assistance Fund (HEAF)

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- The Higher Education Assistance Fund (HEAF) was created as a counterpart to the Permanent University Fund by an amendment to the Texas Constitution in 1984.
- The HEAF provides funds for most public universities that were outside The University of Texas and The Texas A&M University Systems in 1984 to acquire land; construct, equip, repair or rehabilitate buildings; acquire capital equipment; and library books and materials.
- Expenditures involving HEAF are restricted to E&G space.
- The first appropriation of HEAF, for 1985 to 1995, allocated \$100 million annually to the eligible institutions.
- When the HEAF was reallocated for the fiscal years 1996 to 2005, the appropriation was increased to \$175 million.
- The \$175 million appropriation was increased to \$262.5 million starting in FY2008.

### **THE MODEL AND ITS THREE ELEMENTS**

The HEAF model is based on three elements: *space deficit*, *condition of facilities*, and *institutional complexity*.

Space Deficit	+	Condition of Facilities	+	Institutional Complexity	=	Allocation
22.6%		27.4%		50%		100%

# FY2010

\$540.9 Million

# FY2010

\$262.5 Million

<b>PUF Institutions</b>	<b>HEAF Institutions</b>
<p>The University of Texas at Arlington                      The University of Texas at Austin                      The University of Texas at Dallas                      The University of Texas at El Paso                      The University of Texas of the Permian Basin                      The University of Texas at San Antonio                      The University of Texas at Tyler                      The University of Texas SWMC at Dallas                      Texas A&amp;M University                      Prairie View A&amp;M University                      Texas A&amp;M University Services Agencies                      Texas A&amp;M University at Galveston                      Tarleton State University                      The University of Texas Medical Branch at Galveston                      The University of Texas HC at Tyler                      The University of Texas HSC at Houston                      The University of Texas MD Anderson Cancer Center                      The University of Texas HSC at San Antonio                      Texas A&amp;M University System HSC                      The University of Texas System Administration                      Texas A&amp;M University System Administration</p>	<p>Texas A&amp;M University–Corpus Christi                      Texas A&amp;M International University                      Texas A&amp;M University–Kingsville                      Texas A&amp;M University–Commerce                      Texas A&amp;M University–Texarkana                      West Texas A&amp;M University                      Lamar University                      Lamar Institute of Technology                      Lamar State College at Orange                      Lamar State College at Port Arthur                      Sul Ross State University                      Sul Ross State University–Rio Grande College                      Sam Houston State University                      University of Houston                      University of Houston–Clear Lake                      University of Houston–Downtown                      University of Houston–Victoria                      The University of Texas–Pan American                      The University of Texas at Brownsville                      Midwestern State University                      Stephen F. Austin State University                      Texas Southern University                      Texas Woman’s University                      Texas Tech University                      Texas Tech University HSC                      University of North Texas                      University of North Texas HSC                      Texas State University–San Marcos                      Texas State Technical College System                      Angelo State University</p>

State-wide HEAF Allocations  
FY2007 and FY2008

Institution	FY2007	FY2008
Lamar University	\$ 7,473,672	\$ 11,210,508
Lamar - Orange	743,365	1,115,048
Lamar - Port Arthur	793,412	1,190,119
Sul Ross State University	1,362,515	2,043,772
Sul Ross State University - Rio Grande	253,220	379,831
Angelo State University	2,390,535	3,585,802
Sam Houston St. University	6,610,870	9,916,306
Texas State University - San Marcos	13,199,517	19,799,276
<b>Subtotal</b>	<b>32,827,106</b>	<b>49,240,662</b>
Texas A&M University - Corpus Christi	5,519,329	8,278,993
Texas A&M International University	2,086,807	3,130,211
Texas A&M University - Kingsville	3,368,155	5,052,232
Texas A&M University - Commerce	3,563,785	5,345,678
Texas A&M University - Texarkana	1,097,568	1,646,352
West Texas A & M University	3,184,593	4,776,890
<b>Subtotal</b>	<b>18,820,237</b>	<b>28,230,356</b>
University of Houston	23,517,427	35,276,140
University of Houston - Clear Lake	4,000,892	6,001,337
University of Houston - Downtown	6,418,767	9,628,151
University of Houston - Victoria	1,521,922	2,282,883
<b>Subtotal</b>	<b>35,459,008</b>	<b>53,188,511</b>
The University of Texas - Pan American	8,588,232	12,882,348
The University of Texas at Brownsville	2,791,194	4,186,790
<b>Subtotal</b>	<b>11,379,426</b>	<b>17,069,138</b>
<b>Texas State Technical College</b>	<b>3,850,000</b>	<b>5,775,000</b>
Midwestern State University	2,289,567	3,434,348
Stephen F. Austin State University	4,683,847	7,025,771
Texas Southern University	7,437,642	11,156,463
Texas Woman's University	5,616,139	8,424,209
<b>Subtotal</b>	<b>20,027,195</b>	<b>30,040,791</b>
Texas Tech University	17,886,318	26,829,477
Texas Tech Health Sciences Center	11,899,627	17,849,441
<b>Subtotal</b>	<b>29,785,945</b>	<b>44,678,918</b>
University of North Texas	17,424,822	26,137,233
UNT Health Science Center - Fort Worth	5,426,261	8,139,391
<b>Subtotal</b>	<b>22,851,083</b>	<b>34,276,624</b>
<b>Total</b>	<b>\$ 175,000,000</b>	<b>\$ 262,500,000</b>

# HEAF Appropriations from HB 51, 81st Legislature

<b>Institution</b>	<b>FY2007 Appropriated</b>	<b>FY2008 Appropriated</b>	<b>FY2009-FY2010 Appropriated</b>	<b>FY2011-FY2015 Appropriated</b>
University of Houston	\$23,517,427	\$35,276,140	\$36,091,538	\$35,885,768
UH - Clear Lake	4,000,892	6,001,337	5,355,874	5,214,167
UH - Downtown	6,418,767	9,628,151	9,548,995	7,435,238
UH - Victoria	1,521,922	2,282,883	2,335,692	2,393,921
<b>Total</b>	<b>\$35,459,008</b>	<b>\$53,188,511</b>	<b>\$53,332,099</b>	<b>\$50,929,094</b>

# **TUITION REVENUE BONDS**

## UH System Total Bond Debt Service

	<u>FY2010</u>	<u>FY2011</u>
Tuition Revenue Bonds	\$24,009,705	\$23,976,939
Non-Tuition Revenue Bonds	\$25,407,795	\$30,608,476
<b>Total TRB and Non-TRB Debt Service</b>	<b><u><u>\$49,417,500</u></u></b>	<b><u><u>\$54,585,415</u></u></b>

## Tuition Revenue Bond Debt Service

	<u>FY2010</u>	<u>FY2011</u>
University of Houston	\$10,700,361	\$10,690,487
University of Houston - Clear Lake	\$3,028,763	\$3,024,313
University of Houston - Downtown	\$6,196,115	\$6,195,967
University of Houston - Victoria	\$4,084,466	\$4,066,172
<b>Total TRB Debt Service - UH System</b>	<b><u>\$24,009,705</u></b>	<b><u>\$23,976,939</u></b>

## Non-Tuition Revenue Bond Debt Service

	<u>FY2010</u>	<u>FY2011</u>
University of Houston	\$24,769,070	\$29,476,333
University of Houston - Clear Lake	\$365,150	\$366,350
University of Houston - Downtown	\$273,575	\$273,689
University of Houston - Victoria	\$0	\$492,104
<b>Total Non-TRB Debt Service</b>	<b><u>\$25,407,795</u></b>	<b><u>\$30,608,476</u></b>

# UH System Total Bonds Outstanding

	<u>FY2010</u>	<u>FY2011</u>
Tuition Revenue Bonds	\$227,154,000	\$213,723,000
Non-Tuition Revenue Bonds	\$457,191,000	\$445,428,000
<b>Total Bonds Outstanding</b>	<b><u><u>\$684,345,000</u></u></b>	<b><u><u>\$659,151,000</u></u></b>

# **MASTER PLAN CONSIDERATIONS**

# MASTER PLAN BACKGROUND

## March – June 2010

- **Existing Plans**
  - BOR Approval Missions & Goals
  - Enrollment & Research Trends
  - Facility Data
- **THECB Plans**
  - Closing The Gap Goals
    - Enrollment Projections - 2015, 2020
  - Research Projections – 2015, 2020
  - Space Model Data & SUE Scores
- **Projections**
  - New Programs, Research & Community Service
- **Board of Regents Retreat Presentation June 5**

# **MASTER PLAN DEVELOPMENT**

**June – October 2010**

- Mission Profile and Benchmarks
- Enrollment Projections
- Faculty and Staff Projections
- Research Projections
- Community Service Projections
- Non E&G Projections (Ex: Housing, Athletics)

**THECB Presentation October 28**

# **MASTER FACILITIES PLAN**

**October 2010 – May 2011**

- Overall Campus Facility “Vision”
- Projected Academic, Research & Student Support Needs
- Projected Auxiliary Needs
- Campus IT & Infrastructure Needs
- Transportation & Parking Requirements
- Campus Design & Construction Standards

**Board of Regents Approval May 2011**

# **UHS FACILITIES DEVELOPMENT PROCESS**

# **UHS FACILITIES DEVELOPMENT PROCESS**

## **PREDESIGN**

- **INITIATE PROJECT/ESTABLISH PRELIMINARY GOALS**
- **PRELIMINARY ASSESSMENT OF EXISTING FACILITIES AND NEEDS**
- **EVALUATE RESOURCES AND STRATEGIES**
- **IDENTIFY AND EVALUATE INITIAL POTENTIAL SITES**

## **PROGRAMMING**

- **DATA GATHERING**
- **ESTABLISH RESEARCH AND ACADEMIC DESIGN CRITERIA**
- **DEVELOP PROJECT SCOPE AND TEST “FIT”**
- **EVALUATE SITE AND UTILITIES, REVISE CAMPUS MASTERPLAN IF NEEDED**
- **DEVELOP ORDER OF MAGNITUDE COSTS AND INTIAL BUDGET**
- **DEVELOP PRELIMINARY PLAN OF FINANCING, FUNDRAISING**
- **DEAN AND PROVOST APPROVALS**

# UHS FACILITIES DEVELOPMENT PROCESS

## CONCEPTUAL DESIGN

- REFINE PROJECT SCOPE AND SIZE
- DEVELOP ROOM SIZES AND ADJACENCY REQUIREMENTS
- BEGIN PRELIMINARY BUILDING “BLOCK DIAGRAMS”/LAYOUTS
- EVALUATE, SELECT AND COST FACILITY SITE
- CAMPUS, DEAN, VP, PRESIDENT AND CHANCELLOR APPROVALS
- **BOR FC&MP COMMITTEE PROJECT SITE AND SCOPE APPROVAL**

## PROJECT COST DEVELOPMENT AND BUSINESS PLAN

- DEVELOP BUILDING “SYSTEMS” AND EQUIPMENT REQUIREMENTS
- DEVELOP UTILITY AND SITE REQUIREMENTS
- REFINE SCHEDULE AND COST ESTIMATES
- DEVELOP FINANCIAL PLAN INCLUDING DONATIONS, DEBT, REVENUE
- DEAN, VP, PRESIDENT AND CHANCELLOR APPROVALS
- **BOR F&A COMMITTEE PROJECT COST AND BUSINESS PLAN APPROVAL**
- THECB AND BOND REVIEW BOARD APPROVAL

# UHS FACILITIES DEVELOPMENT PROCESS

## SCHEMATIC DESIGN

- DEVELOP CONSULTANT RFQ/RFP
- PROCURE PROJECT DESIGN AND CONSTRUCTION TEAM
- DEVELOP HUB PLAN
- DEVELOP DETAILED ROOM BY ROOM LAYOUTS AND REQUIREMENTS
- DEVELOP BUILDING”STACKING DIAGRAMS”
- BEGIN EXTERIOR DESIGN “CHARACTER”
- BEGIN CONSTRUCTION PHASING AND FEASIBILITY STUDIES
- BEGIN ENGINEERING HVAC AND BUILDING SYSTEMS
- VALUE ENGINEER PROJECT REQUIREMENTS
- REFINE PROJECT COST ESTIMATES AND PROJECT CONTROL BUDGET
- DEAN AND VP APPROVALS

# UHS FACILITIES DEVELOPMENT PROCESS

## DESIGN DEVELOPMENT

- DETAIL FLOOR PLANS AND OCCUPANCY PLANS
- DEVELOP MECH/ELECTRICAL SYSTEMS
- REFINE SITE AND UTILITIES
- DEVELOP BUILDING EXTERIOR AND INTERIOR DESIGN
- DEVELOP CONSTRUCTION PHASING AND FEASIBILITY
- VALUE ENGINEER PROJECT REQUIREMENTS
- REFINE PROJECT COST ESTIMATES AND PROJECT CONTROL BUDGET
- CAMPUS, DEAN AND VICE PRESIDENTIAL APPROVALS

# UHS FACILITIES DEVELOPMENT PROCESS

## CONTRACT DOCUMENTS

- FINALIZE CONSTRUCTION DRAWINGS AND SPECIFICATION
- FINALIZE CONSTRUCTION PHASING, LOGISTICS AND SCHEDULE
- REFINE PROJECT COST ESTIMATES AND PROJECT CONTROL BUDGET
- VALUE ENGINEER PROJECT REQUIREMENTS & DEVELOP BIDDING OPTIONS
- DEAN AND VICE PRESIDENTIAL APPROVALS

## PROJECT BIDDING

- SOLICIT AND EVALUATE BIDS
- REFINE SUBCONTRACTOR AND HUB PLAN
- FINALIZE VALUE ENGINEERING AND PROJECT CONTROL BUDGET
- FINALIZE CONSTRUCTION CONTRACTS INCLUDING BID OPTIONS
- VP, PRESIDENT AND CHANCELLOR APPROVALS

# **UHS FACILITIES DEVELOPMENT PROCESS**

## **CONSTRUCTION**

- FINALIZE CONSTRUCTION PHASING AND BEGIN CONSTRUCTION
- PROCURE FURNITURE AND EQUIPMENT

## **PROJECT COMPLETION/OCCUPANCY**

- FINISH CONSTRUCTION
- BUILDING COMMISSIONING
- FURNITURE AND EQUIPMENT INSTALLATION
- DEPARTMENT AND PLANT OPERATIONS PROJECT ACCEPTANCE
- BUILDING AS-BUILTS AND PROJECT CLOSE-OUT
- EVALUATION OF ARCHITECT AND CONSTRUCTION TEAM
- POST OCCUPANCY EVALUATION/BUILDING DEVELOPMENT