HEARING AGENDA

SENATE FINANCE COMMITTEE
SENATOR STEVE OGDEN, CHAIRMAN
WEDNESDAY, AUGUST 4, 2010, 10:00 A.M.
CAPITOL EXTENSION E1.036

I. Call to Order
II. Roll Call
III. Committee Business

Study and make recommendations regarding formula funding and its impact on the cost of attendance and methods of financing higher education institutions, including funding differences for pharmacy and nursing programs; research funding; performance funding; and funding for institutions that face capacity student enrollment. Specifically address the following:

- *Methods of financing capital projects at higher education institutions, including the levels of deferred maintenance on the ability to offer basic instructional services, and the methods used to finance deferred maintenance projects. Recommend alternatives for providing a structured and recurring funding mechanism more suited to the state's fiscal capacity and institutional needs.*
- *Supplemental funding for structured programs that are essential for student success and for meeting the goals of Closing the Gaps, including those that provide concentrated student academic and personal support services for universities that enroll a high proportion of non-traditional or at-risk students. Study and make recommendations regarding the quality and effectiveness of academic advising, focusing on resources, staff development, and impact on time-to-degree.*

Monitor the implementation of legislation addressed by the Senate Committee on Finance, 81st Legislature, Regular and Called Sessions, and make recommendations for any legislation needed to improve, enhance, and/or complete implementation. Specifically, monitor the following:

- *Monitor ongoing faculty recruitment and retention for Texas nursing schools, and assess the impact of increased state funds to nursing schools to increase salaries and add new teaching schools.*

A. Invited Testimony

1. Research Funding

- Higher Education Coordinating Board
  Dr. Kevin Lemoine, Deputy Assistant Commissioner for Academic Affairs and Research
- University of North Texas System
  Dr. Rosemary Haggett, Vice Chancellor for Academic Affairs and Student Success
- University of Houston System
  Dr. Renu Khator, Chancellor
- University of Texas at Dallas
  Dr. David Daniel, President
- Texas Tech University
  Dr. Taylor Eighmy, Vice President for Research
- Texas A&M University
  Dr. Jeffrey R. Seemann, Vice President for Research and Graduate Studies
- University of Texas Health Science Center at Houston
  Dr. Peter Davies, Provost and Executive Vice President for Research

2. Capital Funding

- Higher Education Coordinating Board
  Fred W. Heldenfels IV, Chair
- Deferred Maintenance Workgroup
  Lee Brittain, Director of Physical Plant, Stephen F. Austin University
  Charles Brady, Executive Director of Facilities Design & Construction Services, University of Texas System

3. Nursing

- Texas Nursing Workforce Shortage Coalition
  Dr. Paulette Burns, RN, Dean of Nursing, Texas Christian University
- Higher Education Coordinating Board
  Susan Brown, Assistant Commissioner for Planning and Accountability
- University of Texas at Arlington
  Dr. Donald R. Bobbitt, Provost and Vice President for Academic Affairs
  (over)
- Texas Tech Health Sciences Center
  Dr. Alexia Green, RN, FAAN, Dean Emeritus, School of Nursing
- Texas A&M University Health Science Center
  Dr. Regina Bentley, Associate Dean for Academic Affairs

4. Exemptions & Waivers

- Higher Education Coordinating Board -
  Dan Weaver, Assistant Commissioner for Business and Support Services
- Legislative Budget Board
  Susan Sherman, Analyst
- West Texas A&M University
  Dr. J. Patrick O'Brien, President
- Texas A&M International University
  Dr. Ray M. Keck, III, President
- University of Texas at Austin
  Dr. Marvin Hackert, Associate Dean, Office of Graduate Studies

B. Public Testimony

IV. Recess/Adjourn

Higher Education Coordinating Board

Texas Higher Education Coordinating Board

Closing the Gaps in Research

Kevin Lemoine, Ph.D.
Deputy Assistant Commissioner
Academic Affairs and Research Division

Texas Higher Education Coordinating Board

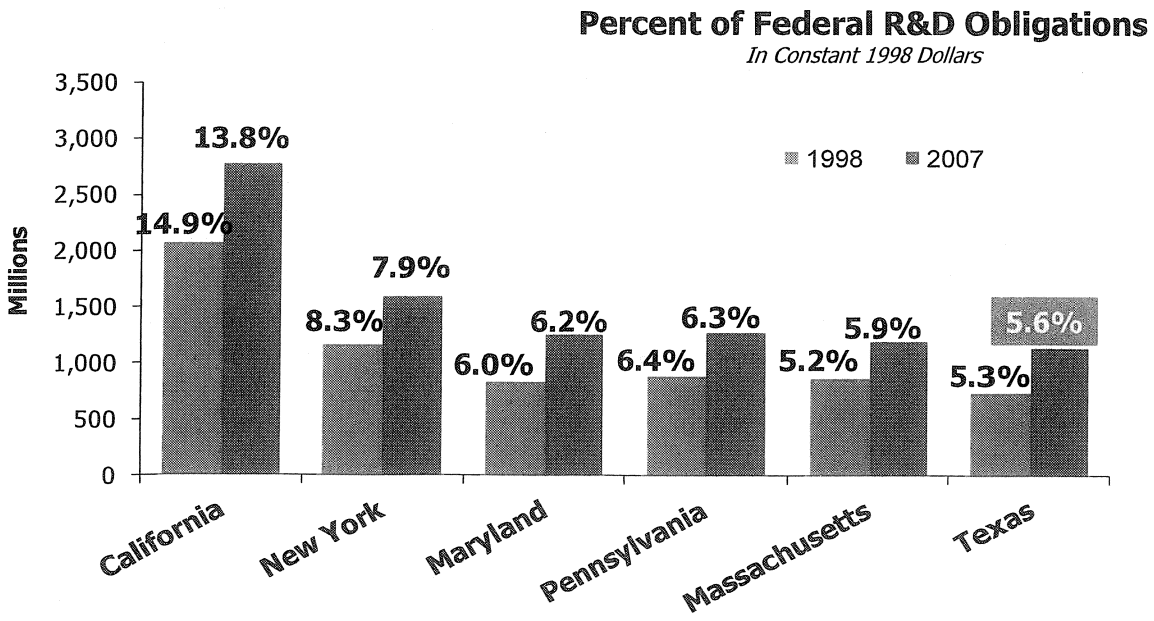
By 2015, increase the level of federal science and engineering research funding to Texas institutions to **6.5 percent** of obligations to higher education institutions across the nation.

State Support for Research Efforts

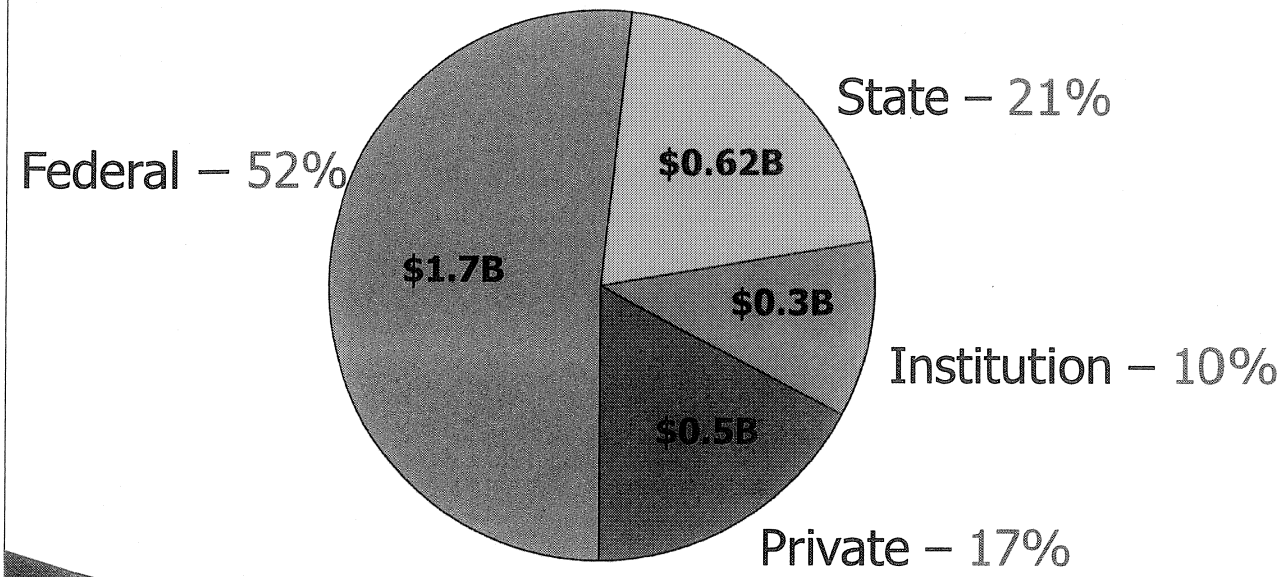
Program	FY10-11 Appropriation
Norman Hackerman Advanced Research Program	**$16.7 million**
Texas Research Incentive Program	**$50 million**
National Research University Fund	**$0.0**
Texas Emerging Technology Fund	**$109 million**
Competitive Knowledge Fund	**$126 million**
Research University Development Fund	**$0.0**
Cancer Prevention and Research Institute	**$600 million**
Research Development Fund	**$42.8 million**

Amounts above represent appropriations and do not include 5% reduction

Texas has made progress in securing federal research obligations

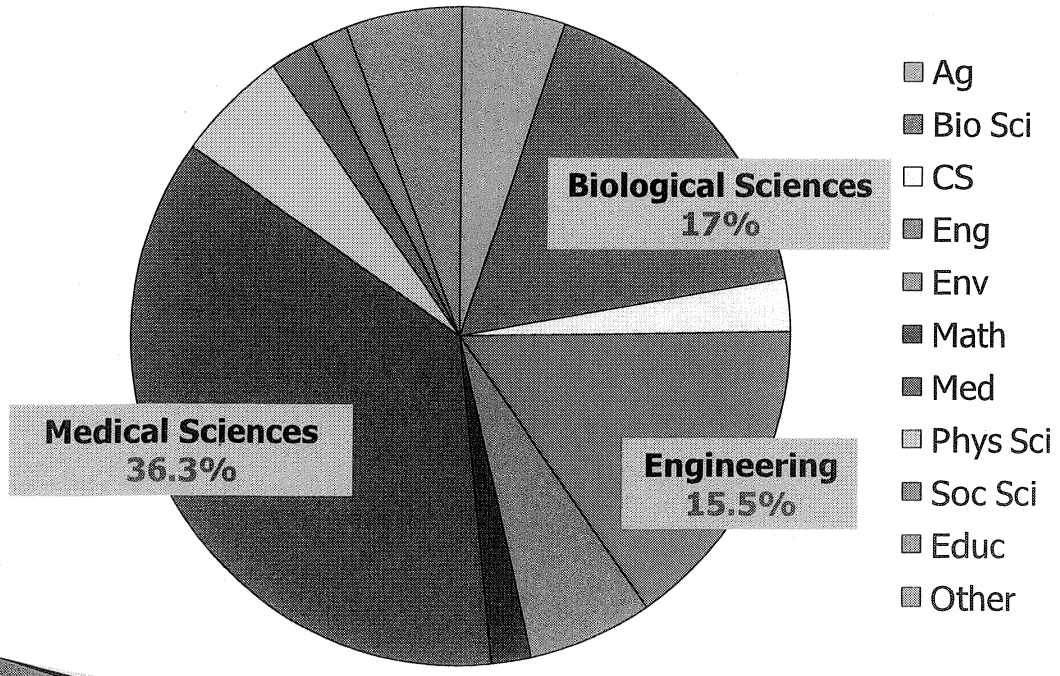


Federal funds support more than half of research at public institutions



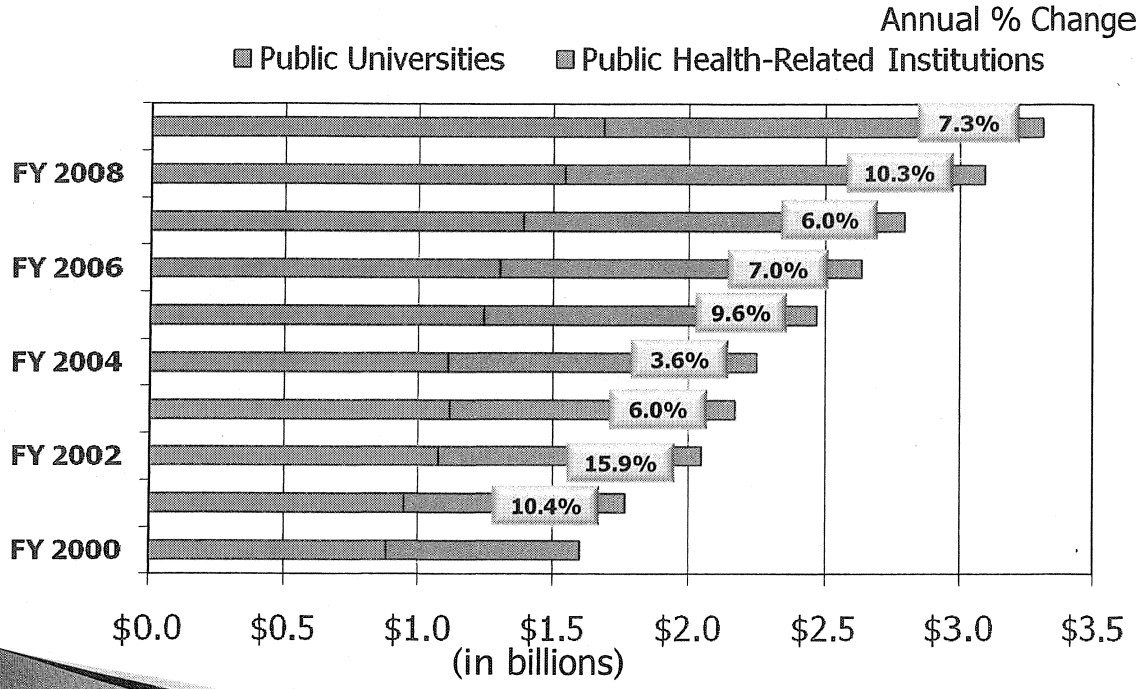
THECB 8/2010

Life sciences receive more than half of research funding at publics



THECB 8/2010

Research Expenditures for R&D at Public Universities and Health-Related Institutions



Conclusions

- Texas **ranks 6th among states** in federal R&D obligations.
- In FY 2009, Texas public higher education institutions **expended $3.3 billion in research expenditures**.
- Federal government supplies more than half of the **academic** R&D funds.
- Top three fields: medical sciences, biological sciences, and engineering.

Texas Higher Education Coordinating Board

OVERVIEW

Research Funding in Texas

Why is research important at the higher education level?

Scientific research conducted at higher education institutions is vital for identifying and developing new knowledge that leads to ground-breaking innovations that drive the state's economy and improve quality of life. High-quality, effective, and efficient research efforts require the appropriate level of funding, particularly from the federal government – the major source of research funds. Strong programs at all levels – basic research, applied research, and technology transfer – build on one another, so all are paramount to a strong economy. They also provide state-of-the-art educational opportunities for college students and attract the best faculty for our institutions of higher education.

What are the research goals of *Closing the Gaps by 2015*?

Obtaining more federal funds is the expressed research goal in *Closing the Gaps by 2015.* It states:

> *By 2015, increase the level of federal science and engineering research and development obligations to Texas institutions to 6.5 percent of obligations to higher education institutions across the nation.*
>
> - *Increase federal science and engineering obligations to Texas universities and health-related institutions from 5.5 percent of the obligations in 2000 (or $1.1 billion in 1998 constant dollars) to 6.2 percent in 2010, and to 6.5 percent of obligations to higher education by 2015.*
> - *Increase research expenditures by Texas public universities and health-related institutions from $1.45 billion to $3 billion by 2015 (approximate 5 percent increase per year).*

How is Texas currently doing in the research field?

In 2006, Texas institutions of higher education ranked sixth in federal obligations for science and engineering research and development. Texas ranked fourth in federal research expenditures for 2007. The National Institutes of Health provided Texas higher education institutions with 64 percent of the federal research support for science and engineering received in 2006. Other sources include the Department of Defense, the National Science Foundation, and the National Aeronautics and Space Administration (NASA).

Federal Obligations for Research (FY06)*		Federal Research Expenditures (FY07)*	
California	$3.46 billion	California	$4.04 billion
New York	$2.07 billion	New York	$2.45 billion
Maryland	$1.68 billion	Maryland	$1.90 billion
Pennsylvania	$1.54 billion	**Texas**	**$1.84 billion**
Massachusetts	$1.48 billion	Pennsylvania	$1.69 billion
Texas	**$1.40 billion**	Massachusetts	$1.67 billion

*Funds obligated in any given year may be expended over a number of years. Expenditures occur in one or more years after funds are obligated.

The growth rate for federal research expenditures in Texas increased by only 1.5 percent from **2006 to 2007**. None of the top five states saw double-digit increases: Maryland had the highest with 2.1 percent; California saw a modest increase of 1.2 percent.

Bringing more federal research dollars to Texas remains a critical priority to keep Texas competitive with other large states and to develop an appropriate leadership role in research projects in the United States.

All figures in this section from National Science Foundation, WebCASPAR Database System.

What is retention of the overhead portion of research grants?

Prior to the 79th Texas Legislature, Texas public universities were permitted to retain only 50 percent of the amounts they received for "overhead" – primarily administrative costs – in research grants from external sources. However, since 2003, the Legislature has allowed institutions to retain all of their overhead funds as recommended in *Closing the Gaps by 2015*. This allows institutions to increases their ability to engage in research projects. Since FY 2004, this change has resulted in an estimated $290 – $350 million of additional research investment.

Which research programs does the state of Texas employ?

Texas employs multiple programs and strategies to increase research activity, including the Norman Hackerman Advanced Research Program/Advanced Technology Program, retention of overhead portion of research grants, the Research Development Fund, the Texas Emerging Technology Fund, the Competitive Knowledge Fund, the Cancer Prevention and Research Institute of Texas, and the Academy of Medicine, Engineering and Science of Texas.

What is the Norman Hackerman Advanced Research Program/Advanced Technology Program?

In 1987, the Texas Legislature established the Advanced Research Program, renamed in October 2007 to the Norman Hackerman Advanced Research Program (NHARP), and Advanced Technology Programs (ATP). The NHARP focuses on basic research and the ATP focuses on applied research. The programs have provided competitive, peer-reviewed grants to researchers and were designed to enhance research activities in Texas. Benefits of these programs include state-of-the-art educational opportunities for college students, seed money for efforts to raise more research funds from external sources, and the programs' attraction to the best faculty that the state must recruit and retain. The NHARP, for example, has provided research opportunities to more than 4,100 undergraduate students, more than 6,700 graduate students, and more than 90 high school science and math teachers, and has generated more than 5,000 refereed (peer-reviewed evaluation) papers.

How are the NHARP and ATP funded?

For several biennium after they were established, state appropriations funded these programs at approximately $60 million per biennium – $40 million for the ATP and $20 million for the NHARP. The 2004-2005 biennium was the last year ATP was funded – at $19.5 million. The funding level for NHARP for the 2004-2005, 2006-2007, 2008-2009, and 2010-2011 biennia was $9.5 million, $8.4 million, $16.7 million, and $16.7 million, respectfully.

What is the Research Development Fund?

In 2001, the Texas Legislature created the Texas Excellence Fund and the University Research Fund to enhance research. In 2003, the Texas Legislature combined the two funds to establish the Research Development Fund (RDF), effective September 1, 2005, for FY 2006. The RDF supports increased research capacity at eligible public universities (all public institutions, except UT- Austin, Texas A&M University, and Prairie View A&M), distributing funds by a set allocation formula to faculty for individual projects, such as laboratory and equipment upgrades and graduate student tuition. For the 2006-2007 biennium, $42.8 million was appropriated, and funding was increased to $80.9 million for the 2008-2009 biennium. In the 2010-2011 biennium, $42.8 million was appropriated.

What is the Texas Emerging Technology Fund?

In 2005, the Texas Legislature appropriated $200 million to establish the Texas Emerging Technology Fund. Additional appropriations for the 2008-2009 and 2010-2011 biennia were $117.3 million and $109 million, respectfully. This fund supports emerging technology activities that create high quality new jobs or have the potential to result in medical or scientific breakthroughs. There are three major areas of investment: 1) increasing research and commercialization collaboration between public and private sector entities and to developing new products marketed by new firms, 2) matching research grants provided by federal and private sponsors to help innovators acquire the capital they need to develop their ideas, and 3) attracting more top research teams from other universities throughout the nation to help put Texas universities on the cutting edge of technology research and development. As of June 2009, over $241 million in contracts has been awarded to Texas companies to attract high-tech scientists and jobs.

What is the Competitive Knowledge Fund?

In 2007, the Competitive Knowledge Fund (restricted to UT- Austin, Texas A&M University, the University of Houston, and Texas Tech University) was established to enhance the support of faculty for the purpose of instructional excellence and research. Eligibility is reserved for institutions with total research expenditures of more than $50 million and is appropriated based on a ratio of $1 million for each $10 million in research expenditures between 2003 and 2005. The Texas Legislature appropriated $93.2 million for the 2008-2009 biennium and $126.2 million for the 2010-2011 biennium.

What is the Cancer Prevention and Research Institute of Texas?

In November 2007 Texas voters passed an amendment to the Texas State Constitution creating the Cancer Prevention and Research Institute of Texas. The amendment sets the total bond amount at $3 billion dollars with a $300 million limitation each year for 10 years. The institute is tasked with implementing the Texas Cancer Plan, aimed towards finding a cure for cancer. Grants will be distributed to learning institutions and advanced medical research facilities to research the causes of and cures for cancer, provide cancer research facilities, research therapies, protocols, and treatments for the cure or substantial mitigation of cancer, and develop cancer prevention and control programs. Recipients of those bond proceeds must already have funds equal to one-half of the amount of the grant dedicated to research that is the subject of the requested grant. The first grants will become available in 2010, and funding is eligible to continue until August 31, 2020.

What role do special item appropriations play in funding research?

Texas uses a formula funding system to allocate resources to public colleges and universities. The Texas Legislature may also authorize additional direct appropriations to a specific institution for special items, which are funds to support a specific program or activity. For the 2010-11 biennium, appropriations for special items related to research activities totaled approximately $312.8 million. Examples of such items are the McDonald Observatory at UT- Austin and the Superconductivity Center at the University of Houston.

What is the Academy of Medicine, Engineering and Science of Texas?

The Academy was created to improve the state's position as a research leader, to develop the next generation of scientists, and to increase awareness and communication among the state's scientific researchers. The Academy is made up of the 10 Nobel Laureates who work in Texas and more than 200 members of the National Academy of Sciences, the National Academy of Engineering, and the Institute of Medicine.

For more information:

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Texas Higher Education Coordinating Board

OVERVIEW

HB 51, 81ST TEXAS LEGISLATURE

HB 51 was a major piece of legislation passed by the 81st Texas Legislature that covered a number of important higher education topics including funding and incentives to emerging research universities, incentives for institutes of undergraduate excellence, conversion of the Higher Education Fund to the National Research University Fund, and the authorization of revenue bonds for certain institutions of higher education. Due to its significance and long-term implications, a section by section summary is provided below.

Text of the entire bill may be found at www.capitol.state.tx.us. Highlights of the bill include:

- Requires long-term strategic plan for each research and emerging research university;
- Authorizes tuition revenue bonds for renovations related to Hurricane Ike at Texas A&M University at Galveston ($5 million) and The University of Texas Medical Branch at Galveston ($150 million);
- Establishes funding criteria as well as incentive grants for excellence programs at universities; requires Coordinating Board to make funding recommendations for this purpose;
- Allocates the annual $262.5 million from the Higher Education Fund (HEF) to authorized institutions for FY 2011-2015 (funded through general revenue);
- Codifies provision of performance incentive funding to universities based on at-risk student enrollments and graduation rates of students in high-need fields;
- Changes the constitutionally dedicated HEF to the National Research University Fund (NRUF) with approval from voters; specifies criteria for institutions to be eligible for proceeds from the fund to support research;
- In addition to NRUF, creates two other funds to support the development of national research universities:
    - Research University Development Fund (RUDF) based on research expenditures at eligible institutions;
    - Texas Research Incentive Program (TRIP) to match certain gifts and endowments at eligible institutions;
- Creates a select interim committee to be coordinated by the Coordinating Board to study the feasibility of collecting data and maintains a searchable electronic database regarding technology research projects conducted at public universities;

- Directs the Coordinating Board to study and make recommendations regarding the appropriate definitions and categories of research expenditures for eligibility for the RUDF.

HB 51 Section-by-Section Analysis

Section 1

Long-term strategic plan: Requires a long-term strategic plan for each institution designated as a research university or emerging research university under the Coordinating Board accountability system to submit a detailed, long-term strategic plan to the Coordinating Board. The plan must document how the institution intends to achieve recognition as a research university or enhance the university's reputation as a research university.

Section 2

Tuition revenue bonds (TRB): Authorizes the issuance TRBs to assist with recovery of damages or other impact caused by Hurricane Ike. The Texas A&M University System is authorized to issue an amount not to exceed $5 million for damages at Texas A&M Galveston, and the University of Texas System is given authority for $150 million for the University of Texas Medical Branch at Galveston (UTMB-Galveston). Authority includes acquisition, construction, improvement, equipping, etc. of property, buildings, roads, etc. The governing boards of both institutions are given authority to transfer funds among institutions for debt service, subject to the Legislative Budget Board's (LBB) prior approval. In determining approval for the UTMB-Galveston bonds, the LBB must also consider the impact of reimbursement agreements with the Galveston County Commissioner's Court, or the impact of ad valorem taxes imposed by a hospital district.

Section 3

Coordinating Board approval of TRB property financing: Provides that the Coordinating Board does not have to approve real property financed by bonds under two TRBs authorized in Section 2 above except to determine if property meets standards adopted by board for cost, efficiency, and space use.

Section 4

Coordinating Board approval of TRB construction financing: Provides that the Coordinating Board does not have to approve construction, repair, or rehabilitation financed by bonds under two TRBs authorized above except to determine if they meet the standards adopted by the Board for cost, efficiency, and space use.

Section 5

Funding for excellence programs: Requires the Coordinating Board to biennially determine the amount the Board considers appropriate for funding excellence in specific programs and fields and for incentive grants as outlined in Section 6 below.

Section 6

Funding criteria for excellence programs grants: This section addresses university funding for excellence in specific programs and fields.

(a) Directs the Coordinating Board to encourage General Academic Teaching Institutions (GATI) that are not research or emerging research universities to develop and maintain programs or fields-of-study of the highest national rank or recognition;
(b) Authorizes the Coordinating Board to award incentive grants for purposes of (a) above;
(c) Provides that an institution may designate only one degree program at a time for consideration;
(d) Requires the Coordinating Board to establish benchmarks for each program under consideration and determine the amount of funding appropriate for each benchmark;
(e) Requires at least three benchmarks for each program;
(f) Requires institutions to reimburse the Coordinating Board for administrative costs; and
(g) Authorizes the Coordinating Board to provide other funds in addition to incentive grants, to assist the institutions in achieving national ranking or recognition for specific programs.

No appropriations may be made by the Legislature before the Coordinating Board certifies that one or more institutions have reached at least one of the benchmarks established for a specific program.

Section 7
Accountability system review: Requires the Coordinating Board to conduct a review of the groupings in the accountability system at least once every 10 years.

Section 8
Section renaming: Renames Chapter 62 of the Education Code to "Constitutional and Statutory Funds To Support Institutions of Higher Education" (Previous title was "Constitutional and Statutory Division of Constitutionally Appropriated Funds Among Certain Institutions of Higher Education").

Section 9
Eligible institution for Research Development Fund (RDF): Defines what an eligible institution is considered for the RDF (currently in statute) to provide funding to promote increased research capacity at eligible general academic teaching institutions.

Section 10
Higher Education Funds (HEF): Allocates the annual $262.5 million HEF proceeds to authorized institutions for FY 2011 - 2015. Also authorizes the University of North Texas at Dallas to participate in the funding as soon as it operates as a general academic teaching university.

Section 11
Cleanup: Removes dated language regarding funds prior to August 31, 2008.

Section 12

Funding streams: Establishes three funding streams for different purposes.

- **Research University Development Fund (RUDF)**
  (Added as Subchapter C to Chapter 62 of the Education Code)

  The purpose of the fund is for recruitment and retention of faculty and to enhance research productivity at research and emerging research universities. The Coordinating Board will distribute any funds appropriated by the Legislature among the eligible institutions in proportion to the total amount of restricted research funds expended by each institution in the two most recent fiscal years.

- **Performance Incentive Funding**
  (Added as new Subchapter D to Chapter 62 of the Education Code)

  The Coordinating Board will distribute this funding to eligible institutions as follows:
  - 50 percent in proportion to the increase in the average number of degrees awarded in the two most recent fiscal years compared to the average number in the two preceding fiscal years based on certain weights (points).
  - 50 percent in proportion to the average number of degrees awarded by each institution in the three most recent fiscal years based on certain weights (points).

  A table of number of points assigned for each degree awarded is provided within the legislation. The points are based on such factors as at-risk students and critical fields.

- **Texas Research Incentive Program (TRIP)**
  (Added as new Subchapter F to Chapter 62 of the Education Code)

  Under this fund, the state would match a certain percentage of the total amount of gifts received by an emerging research university if certain conditions are met. The Coordinating Board will develop and administer this fund. (Note: SB 1, General Appropriations Act, 81st Texas Legislature, allocates $25 million each year of the 2010-2011 biennium for TRIP).

Section 13

National Research University Fund (NRUF) (Added as new Subchapter G to Chapter 62 of the Education Code): Provides funding to emerging research universities that meet critical benchmarks for achieving national research university criteria such as certain levels of endowments, certain numbers of Ph.D. degrees awarded, etc.

Section 14

Funding for Research Development Fund (RDF): The RDF already exists in statute. This provision removes the requirement for the comptroller to deposit $50 million into the fund at the beginning of each fiscal year.

Section 15
Lamar Institute of Technology: Establishes the institute as a lower-division institution of higher education.

Section 16
Higher Education Fund repeal: Repeals sections 62.025 and 62.026 of the Education Code dealing with the HEF. *Note: If approved by voters, this constitutional fund will be "re-purposed" as the NRUF. See Section 21 below as well as provisions of HJR 14, 81st Texas Legislature.*

Section 17
Use of funds for Lamar Institute of Technology: Repeals section authorizing expenditure of Lamar University funds for the Lamar Institute of Technology.

Section 18
Interim study on technology research data collection:

- Creates a select interim committee to study the feasibility of collecting data and maintaining a searchable electronic database regarding specialized technology research projects conducted at public universities or similar facilities. Outlines a number of issues which must be considered in the study including appropriate entities to administer the data collection, the extent of legislative oversight needed, and information to be included in the data collection;
- The interim committee will be composed of one representative from each of the research or emerging research universities (nine members) and an unspecified number of members appointed by the Coordinating Board as the Board deems appropriate; and
- The interim committee will report its findings and recommendations to the governor, lieutenant governor, and speaker of the house no later than December 1, 2010.

Section 19
Study and recommendations on Research University Development Fund (RUDF):

- Directs the Coordinating Board, in consultation with the institutions eligible for RUDF funding, to study and make recommendations regarding the appropriate definitions and categories of research expenditures to be included and applied in determining eligibility for and distributions from the RUDF.
- The Coordinating Board is to report its findings and recommendations to the governor, lieutenant governor, speaker of the house, and the chairs of various legislative committees by December 1, 2010.
- The written response of a participating institution to the Board's recommendations shall be included with the report upon the request of the institution.

Section 20
Rulemaking: Grants rulemaking authority for the Coordinating Board. Rules are to be developed "as soon as practicable."

Section 21
Enabling provisions/effective dates: Provides that funding for the RUDF (see Section 12 above) may not be appropriated or distributed prior to September 1, 2011.

Provides that funding for the NRUF (see Section 13 above) may not be appropriated or distributed prior to September 1, 2011. Further provides that funding for the NRUF is contingent on the approval of the voters of the constitutional amendment proposed by the 81st Texas Legislature.

Funding chart is on page seven of this overview.

For more information:

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TEXAS HIGHER EDUCATION COORDINATING BOARD

HB 51 Funding for FY 2010 - 2011

HB 51 Provision	FY 2010	FY 2011	Notes
THECB Administration/Studies (HB 51 Sections 1, 5, 7, 12, 13 and 18)	$0	$0	No appropriation/funding. CB estimates cost of administering funds and studies required by HB 51 at $281,608 in FY 2010 and $247,810 in FY 2011 for staffing, computer, and travel expense.
TRB TX A&M-Galveston (HB 51 Sections 2, 3, and 4)	$0	$0	No appropriation/funding. CB estimates debt service on $5 million TRB at $435,923 per year.
TRB UT Medical Branch (HB 51 Sections 2, 3 and 4)	$0	$0	No appropriation/funding. CB estimates debt service on $150 million TRB at $14.6 million/year
Excellence in specific programs and fields; incentive grants (HB 51 Sections 5 and 6)	$0	$0	No appropriation/funding. Cost for awards estimated at $500,000 in FY 2011.
Performance incentive funding (HB 51 Section 12)	$40,000,000	$40,000,000	Appropriation (SB 1, III-58, Sec. 46) using federal stimulus funds. CB to distribute funds to universities based on at-risk student enrollments and graduation rates of students in high-need fields.
Higher Education Fund (HEF) allocations (HB 51 Section 10)	$262,500,000	$262,500,000	General revenue appropriation (SB 1, III-61). HEF is an existing constitutional fund, the interest of which was supposed to fund certain allocations to eligible institutions. The corpus has never provided sufficient income so Legislature provides general revenue instead. HB 51, Sec.21 converts the constitutional HEF to the NRUDF if approved by voters (see NRUDF below).
National research university development: *Research University Development Fund* (RUDF) (HB 51 Section 12 and 21)	$0	$0	No appropriation/funding. HB 51, Sec. 21 provides that no appropriation or distribution can be made until FY 2012. When available, distribution of funds will be based on research expenditures at eligible institutions currently estimated by CB at $117 million per year.
National research university development: *Texas Research Incentive Program* (TRIP) (HB 51 Section 12)	$25,000,000	$25,000,000	General revenue appropriation (SB 1, IX-75, Sec. 17.28). CB to distribute funds as percentage match of certain gifts and endowments at eligible institutions currently estimated by CB at $47 million per year.
National research university development: *National Research University Fund* (NRUF) (HB 51 Sections 13 and 21; See also HJR 14, Sec. 2)	$0	$0	Existing constitutional fund (HEF) to be converted to NRUF with approval of voters in Nov. 3, 2009, referendum authorized in HJR 14, Sec. 2. Fund corpus now about $425 million generating about $70 million in income each year. HB 51, Sec. 21 provides no appropriation or distribution can be made until FY 2012. When available, distribution of funds will be for research support at eligible institutions based on criteria specified in bill.
Total Funding	**$327,500,000**	**$327,500,000**	

College for all Texans

Texas Higher Education Coordinating Board

CLOSING THE GAPS PROGRESS REPORT 2010

June 2010

Progress on Excellence and Research Goals of Closing the Gaps by 2015

Excerpt from

Closing the Gaps Progress Report

2010

Full report is available online at:

http://www.thecb.state.tx.us/files/dmfile/ClosingtheGapsProgressRpt20103.pdf

Closing the Gaps in Excellence

Goal: to substantially increase the number of nationally recognized programs/services.

The quality of an institution's educational units and services contributes to its reputation and fosters national recognition. When *CTG* was first implemented, institutions were asked to demonstrate efforts toward achieving excellence by providing a program or service that they wanted to develop to garner national recognition. Many institutions have identified not one, but several, programs for this assignment, and most institutions report that at least one program has received some type of national recognition. Consideration of the excellence goal has been increasingly geared toward the need for both individual program excellence and overall institutional quality.

While little progress toward reaching the excellence goals tied to national rankings has been made, discussions about the nature of excellence and how to best achieve it have refocused attention on this goal. Funding allotments in HB 51, 81st Texas Legislature, will provide opportunities to reward universities that achieve program excellence and, as a consequence, to make progress towards the excellence goals in *CTG*.

In recent years, excellence issues have arisen during national conversations about the value of higher education. These conversations have led to renewed attention on the topic of general education and those educational outcomes that should be expected for any student who completes a college degree. Research with employers and educators suggests the need for additional emphasis in higher education on broad-based skills such as critical thinking, effective communication, and teamwork, in addition to content knowledge.

In FY 2010, Coordinating Board staff and peer accountability groups from Texas public institutions have discussed excellence-related topics spawned by the national conversations including: assessing general education/core curriculum learning outcomes, especially in the areas of writing and critical thinking, and determining the meaning of value-added in higher education.

A value-added measure will be incorporated into the excellence measures in the Texas Higher Education Accountability System's December 2010 edition. The short-term measure of value-added will be a temporary surrogate that responds to requests for some way of determining institutions' value-added while accurate and meaningful measures are developed.

Excellence Targets: Increase the number of research institutions ranked in the top 10 among all research institutions from zero to one, and two additional research universities ranked in the top 30 by 2010; increase the number of public research universities ranked in the top 10 among all public research universities from zero to two, and four ranked among the top 30 by 2015.

Increase the number of public liberal arts universities ranked in the top 30 among all public liberal arts institutions from zero to two by 2010, and four by 2015.

Increase the number of health science centers ranked among the top 10 medical institutions from zero to one by 2010, and two by 2015.

Status: Well Below Target: Regarding top-ranked research institutions, public liberal arts universities, and health science centers, Texas has made no appreciable progress since the start of *CTG*.

Background

- The *U.S. News & World Report* (*U.S. News*) 2010 edition of "America's Best Colleges" ranked The University of Texas at Austin (UT-Austin) in a tie for 15th place among national public universities, the same as in 2009. UT-Austin has been in a tie for number 15, plus or minus two positions, since 2000. Texas A&M University (TAMU) tied for 22nd place in the 2010 rankings. TAMU was ranked the same as UT-Austin in 2002 (tied for 15th), but dropped to a tie for 24th in 2003 and has been ranked no higher than 21st since then. No other public university in Texas has made the list of the top public national universities since 2000.
- No public institution in Texas was ranked among the 126 "Best Liberal Arts Colleges" by *U.S. News'* 2010 edition. One reason is that few public institutions in Texas, or anywhere else in the U.S., meet *U.S. News'* definition of a liberal arts college: emphasis on undergraduate education and awarding of at least half of all degrees in the arts and sciences. Midwestern State University became the only officially designated public liberal arts university in Texas when Governor Perry signed HB 602 in May 2009.
- UT-Austin and TAMU were tied for 13th place among public U.S. research universities, based on data from the Center for Measuring University Performance's (CMUP) 2009 report of "Top American Research Universities." Both institutions were tied for number 14 in 2008. The University of Texas Southwestern Medical Center (UT Southwestern) and The University of Texas M.D. Anderson Cancer Center (UT M.D. Anderson) were the only public health-related institutions in Texas that were cited by the CMUP in the top listing. They ranked 24th and 32nd, respectively, based on the CMUP's data, little changed from the previous year. Note that the Center does not actually provide rank numbers, but ranks can be derived using their listing.
- No emerging research universities vying for national research status have broken into the listings of top public universities from *U.S. News* and the CMUP.

- Despite the caliber of UT Southwestern and UT M.D. Anderson, their rankings leave them far short of the *CTG* target of two institutions in the top 10 of health-related institutions.

Rankings among National Public Universities by *U.S. News*

Institution	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010
UT-Austin	13*	16	15*	14*	17*	14*	17	13*	13*	15*	15*
TAMU	18*	17	15*	24*	27*	22*	21*	21*	23	24*	22*

*Tie.

Rankings among American Research Universities
Based on Data from the Center for Measuring University Performance

Texas Public Institution	Rank Among Public and Independent Universities**				Rank Among Public Universities**			
	2006	2007	2008	2009	2006	2007	2008	2009
UT-Austin	28*	25*	19*	18	12*	8*	14*	13*
TAMU	32	31*	30*	28*	20	14*	14*	13*
UT Southwestern	43	-	-	-	18*	23	25	24
UT M.D. Anderson	51	52	47*	49*	32*	32*	28	32

*Tie.
**The Center does not actually assign rank numbers to institutions as *U.S. News* does, but rank numbers can be assigned using the Center's listing.

Analysis and Observations

- Although the validity and relevance of rankings are often questioned, they do influence perceived stature. But a ranking by itself does not provide any information to assess and improve an institution; for that it is necessary to examine the components of the ranking. For example, six campuses of the University of California (UC) were ranked higher than UT-Austin by *U.S. News*. One reason is that UT-Austin did worse than all six UC campuses in three of the 15 "indicators of academic excellence" that go into *U.S. News'* rankings: six-year graduation rate, educational spending per student, and percent of freshmen in the top 10 percent of their high school class. This poor showing was magnified because those three indicators made up nearly one-third of the ranking score for national universities. Improvement in those areas would improve UT-Austin's national stature, as measured by *U.S. News*.
- UT-Austin's standing in *U.S. News* was helped by having a better than expected graduation rate and a relatively high alumni giving rate; only UC-Santa Barbara did better than UT-Austin for those two indicators among UC campuses.
- Examination of CMUP data shows that TAMU's ranking among public research universities was helped by its large endowment assets (exceeded only by the University of Michigan and UT-Austin) but hurt by its relatively low number of postdoctoral appointees and low undergraduate SAT scores.

Excellence Targets: Each college and university will have identified by 2002 at least one program to achieve nationally recognized excellence.

Community and technical colleges and universities will have at least one program or service nationally recognized: 75 percent of the institutions by 2010 and 100 percent by 2015.

Status: On Target

Past progress reports on *CTG* noted that all Texas public higher education institutions had identified at least one program to develop for national recognition, and that all received national recognition of some type in one or more programs. Therefore, the state's colleges and universities are "on target" for these excellence goals.

Background

- In spring 2008, institutions informed the Coordinating Board of their progress towards achieving excellence in their programs identified for excellence.
- The process of identifying programs for excellence and then reporting on achievements focuses attention on the quality of specific programs and services and on the totality of institutional performance.

Analysis and Observations

- While the peer accountability groups that focused on excellence in their FY 2009 discussions addressed the difficulties of measuring excellence, their discussions served to highlight many of the processes critical to the development of quality programs.
- Development of national-quality programs at universities will be aided by HB 51, 81st Texas Legislature. The bill includes funding to develop and maintain specific programs of the highest national rank at non-research or emerging research universities. Incentive grants are authorized for eligible universities that are the most committed to specific program quality. The Coordinating Board, in collaboration with experts from outside the state, will identify three benchmarks to serve as quality standards for each program. Funding is associated with each benchmark met. Once a program has met all three benchmarks, the institution can nominate another program for development.
- The standards developed for distribution of the HB 51 excellence fund may be applied to evaluation of the excellent programs that institutions submit as part of their annual *CTG* institutional target update process. For example, most institutions identify many programs and services for recognition. Asking institutions to narrow their lists to only one or two items, agreeing to the standard for measuring achievement, and then requiring that the recognition be achieved before adding another program/service to the excellence list may help institutions refocus efforts related to this goal.

Closing the Gaps in Research

Goal: Increase the level of federal science and engineering research and development obligations to Texas institutions to 6.5 percent of obligations to higher education institutions across the nation.

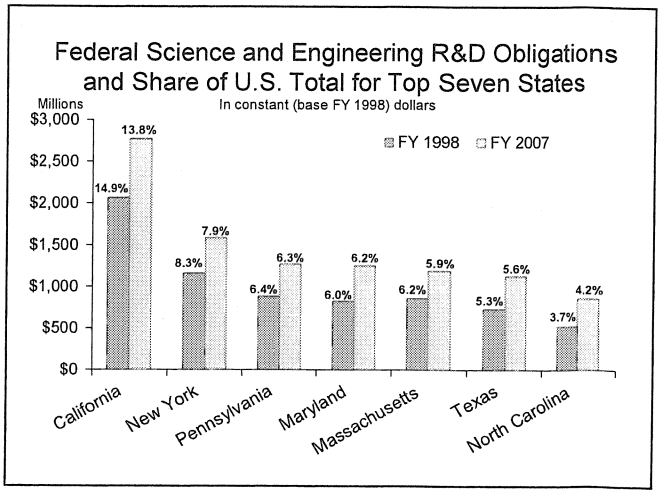
Capturing a significant portion of the federal science and engineering research and development obligations is, and must remain, a primary focus of the Texas higher education agenda. The *CTG* research goal serves to keep attention on the need for Texas to compete with other states for national research dollars and projects. The state seemed to be competing well between FY 2001 and FY 2003, when its share of national obligations ranged from 5.8 to 6.1 percent. Since then, however, its share has held at around 5.6 percent.

Texas public universities have done much better with respect to their expenditures for research and development. Steady growth since 2000 enabled them to reach the $3 billion level (the 2015 target) seven years early, in FY 2008.

***CLOSING THE GAPS* IN RESEARCH GOAL: By 2015, increase the level of federal science and engineering research and development obligations to Texas institutions to 6.5 percent of obligations to higher education institutions across the nation, from 5.5 percent in FY 2000. Increase to 6.2 percent by 2010.**

Status: Somewhat Below Target

Texas public and independent institutions had a 5.6 percent share of federal obligations for science and engineering research and development (R&D) in FY 2007 (the most recent data available), up 0.1 percentage points from FY 2006 and FY 2000. The state's share reached 6.1 percent in FY 2003, but dropped the next year and has been at 5.6 percent three out of the last four years.



Background

- Federal science and engineering obligations for R&D received by Texas' public and independent higher education institutions totaled $1.42 billion in FY 2007, up 1.2 percent from FY 2006. On a constant dollar basis (FY 1998 base), Texas obligations were $1.13 billion in FY 2007, compared with $0.73 billion in FY 1998.

Analysis and Observations

- In 2003, when Texas had 6.1 percent of national obligations, the state seemed to be on course to meet or exceed the *CTG* target. However, since 2003, obligations to Texas institutions grew by only 2.4 percent ($32.9 million), while total national obligations grew by 11.1 percent ($2.53 billion).
- HB 51 from the 81st Texas legislative session responds to the call for more nationally prominent research universities in Texas. Among its provisions are:
  - Creation of the Texas Research Incentive Program, which awards matching funds for leveraging private gifts to enhance research activities at the state's emerging research universities.
  - Creation of the National Research University Fund, which provides funds to emerging research universities that meet benchmarks in areas such as research expenditures and quality of entering students, faculty, and graduate programs.
  - Creation of the Research University Development Fund, intended to help research and emerging research universities attract high quality faculty and enhance research productivity. Appropriated funds would be distributed based on an institution's total research expenditures for the most recent three years.
  - The Governing Board of each research and emerging research university is to submit to the Coordinating Board a detailed, long-term strategic plan addressing how it will achieve or enhance its recognition as a national research university. Collaboration with the Coordinating Board on these plans should focus attention on the state's *CTG* research goal and target.

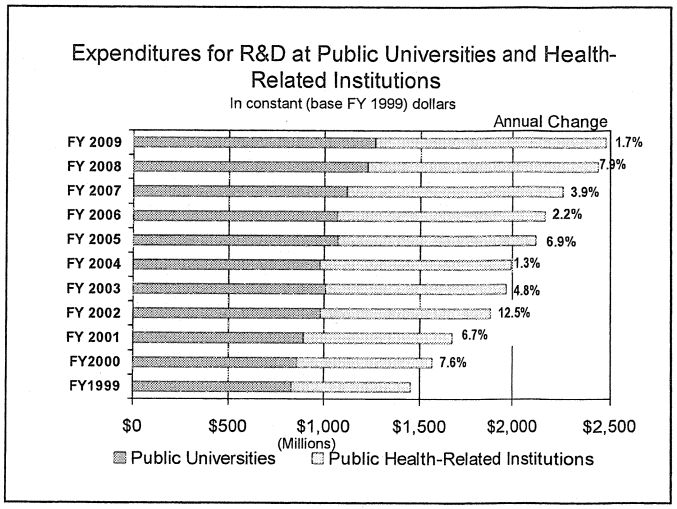
Research Target: Increase research expenditures by Texas public universities and health-related institutions from $1.45 billion in FY 1999 to $3 billion by 2015 (approximate 5 percent increase per year). Increase expenditures to $2.2 billion in constant (FY 1999 base) dollars by 2007.

Status: Well Above Target

Public universities and health-related institutions reported $3.31 billion in R&D expenditures from federal, state, institutional, and private sources in FY 2009, 6.7 percent above expenditures in FY 2008 and 36.9 percent above the target trend line for the 2015 target. In constant (FY 1999 base) dollars, expenditures increased from $2.44 billion to $2.48 billion between FY 2008 and FY 2009, a 1.7 percent increase. Expenditures totaled $2.26 billion (constant dollars) in FY 2007, meeting that year's target.

Background

- Expenditures grew at a faster rate at public universities (8.4 percent) than at public health-related institutions (5.0 percent) from 2008 to 2009.
- In constant dollars, the annual increase in FY 2009 (1.7 percent) was the second smallest since FY 2000 (the smallest was 1.3 percent in FY 2004).
- The federal government was the largest provider of funds for public R&D expenditures in FY 2009, with a 51.8 percent share, down from 53.6 percent in FY 2008. State government provided the next largest share (20.5 percent) in appropriations, contracts, and grants.



Analysis and Observations

- HB 51, 81st Texas Legislature, calls for a searchable database on technology research projects. Improved access to the existence of ongoing research projects will increase their exposure and possibly create new linkages with other research efforts.

Appendix C: Research Data

Appendix Table C-1: Federal Science and Engineering Obligations for Research and Development (Current $ Thousands), U.S. and Top Seven States, FY 1999-2007

State	1999	2000	2001	2002	2003	2004	2005	2006	2007
U.S. Total	$15,569,103	$17,289,808	$19,390,153	$21,154,640	$22,804,253	$23,810,968	$25,025,362	$25,361,561	$25,335,978
California	$2,247,783	$2,517,086	$2,697,229	$2,951,472	$3,193,421	$3,458,540	$3,562,040	$3,458,085	$3,487,825
% of U.S. Total	14.4%	14.6%	13.9%	14.0%	14.0%	14.5%	14.2%	13.6%	13.8%
New York	$1,269,773	$1,410,518	$1,580,912	$1,682,187	$1,857,646	$1,948,714	$2,048,855	$2,010,960	$1,991,832
% of U.S. Total	8.2%	8.2%	8.2%	8.0%	8.1%	8.2%	8.2%	7.9%	7.9%
Pennsylvania	$990,736	$1,082,830	$1,239,294	$1,378,756	$1,417,348	$1,489,570	$1,491,231	$1,536,857	$1,591,859
% of U.S. Total	6.4%	6.3%	6.4%	6.5%	6.2%	6.3%	6.0%	6.1%	6.3%
Maryland	$1,004,165	$1,051,387	$1,122,508	$1,296,852	$1,294,617	$1,382,909	$1,461,924	$1,652,290	$1,569,606
% of U.S. Total	6.4%	6.1%	5.8%	6.1%	5.7%	5.8%	5.8%	6.5%	6.2%
Massachusetts	$937,584	$998,935	$1,072,841	$1,147,934	$1,220,700	$1,342,039	$1,377,471	$1,483,191	$1,491,859
% of U.S. Total	6.0%	5.8%	5.5%	5.4%	5.4%	5.6%	5.5%	5.8%	5.9%
Texas	$834,577	$958,185	$1,147,752	$1,222,324	$1,385,229	$1,342,911	$1,396,643	$1,401,353	$1,418,120
% of U.S. Total	5.4%	5.5%	5.9%	5.8%	6.1%	5.6%	5.6%	5.5%	5.6%
North Carolina	$573,092	$636,881	$766,285	$841,951	$938,818	$948,086	$1,020,230	$1,079,329	$1,076,694
% of U.S. Total	3.7%	3.7%	4.0%	4.0%	4.1%	4.0%	4.1%	4.3%	4.2%

Source: National Science Foundation, Survey of Federal S&E Support to Universities, Colleges, and Nonprofit Institutions: Federal Obligations for Research and Development. Available online at: https://webcaspar.nsf.gov/index.jsp?subHeader=WebCASPARHome

Appendix Table C-2: Trend Line Data Points for Percent of U.S. Total Research and Development Obligations to Meet *CTG* Targets, FY 2000-2015

Type of Data	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015
% of U.S. Total	5.50%	5.57%	5.64%	5.71%	5.78%	5.85%	5.92%	5.99%	6.06%	6.13%	6.20%	6.26%	6.32%	6.38%	6.44%	6.50%

Appendix Table C-3: Expenditures for Research and Development (Current $ Thousands) by Source of Funds at Texas Public Four-Year Institutions, FY 1999-2009

Type of Institution and Source	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009
Public Universities											
Federal	$429,469	$466,342	$501,649	$564,550	$581,314	$598,223	$687,231	$715,512	$762,459	$828,254	$860,044
State Appropriated	$113,107	$146,241	$154,227	$181,170	$192,545	$164,060	$178,457	$188,607	$194,793	$239,248	$261,504
State Grants and Contracts	$80,162	$70,326	$80,609	$96,572	$98,792	$89,478	$99,235	$98,129	$112,385	$112,838	$126,235
Institutional	$88,518	$80,512	$77,158	$92,735	$102,690	$109,589	$129,826	$139,173	$144,064	$178,282	$208,213
Private-Profit	$29,205	$53,546	$63,347	$64,765	$61,670	$62,315	$71,011	$79,413	$86,185	$115,434	$128,414
Private-Non-Profit	$88,733	$64,305	$71,233	$76,996	$81,401	$85,935	$76,930	$77,920	$84,960	$84,659	$104,711
Total	$829,194	$881,271	$948,223	$1,076,789	$1,118,412	$1,109,602	$1,242,691	$1,298,753	$1,384,846	$1,558,716	$1,689,121
Public Health-Related Institutions											
Federal	$367,176	$421,090	$479,224	$577,718	$639,417	$709,811	$752,991	$787,661	$796,944	$836,908	$857,479
State Appropriated	$83,801	$90,655	$94,141	$119,859	$133,768	$149,561	$164,507	$205,871	$210,984	$251,078	$261,218
State Grants and Contracts	$4,114	$8,082	$13,790	$16,843	$10,414	$11,525	$11,621	$18,810	$24,294	$21,305	$30,767
Institutional	$11,367	$27,624	$38,793	$38,501	$38,962	$43,951	$51,283	$70,291	$82,275	$110,797	$134,385
Private-Profit	$60,196	$57,762	$63,032	$78,841	$79,164	$67,522	$78,454	$82,281	$93,615	$112,523	$109,732
Private-Non-Profit	$95,875	$116,072	$132,457	$141,687	$154,054	$160,926	$167,100	$178,450	$207,523	$212,997	$229,945
Total	$622,528	$721,284	$821,437	$973,451	$1,055,780	$1,143,296	$1,225,956	$1,343,363	$1,415,636	$1,545,608	$1,623,526
Public Universities and Health-Related Institutions											
Federal	$796,645	$887,432	$980,873	$1,142,269	$1,220,731	$1,308,035	$1,440,222	$1,503,173	$1,559,403	$1,665,163	$1,717,523
State Appropriated	$196,908	$236,896	$248,368	$301,029	$326,314	$313,621	$342,964	$394,478	$405,778	$490,325	$522,722
State Grants and Contracts	$84,275	$78,408	$94,400	$113,415	$109,206	$101,004	$110,856	$116,939	$136,679	$134,143	$157,002
Institutional	$99,885	$108,135	$115,951	$131,237	$141,652	$153,540	$181,109	$209,463	$226,339	$289,079	$342,598
Private-Profit	$89,400	$111,308	$126,379	$143,606	$140,835	$129,837	$149,465	$161,694	$179,800	$227,957	$238,146
Private-Non-Profit	$184,609	$180,376	$203,690	$218,683	$235,455	$246,861	$244,030	$256,369	$292,482	$297,657	$334,656
Total	$1,451,722	$1,602,555	$1,769,660	$2,050,240	$2,174,192	$2,252,898	$2,468,647	$2,642,116	$2,800,482	$3,104,324	$3,312,647

Appendix Table C-4: Trend Line Data Points for Research and Development Expenditures ($ Billion) to Meet *CTG* Targets

Type of Data	1999	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015
Total Expenditures	1.452	1.549	1.646	1.742	1.839	1.936	2.033	2.129	2.226	2.323	2.420	2.516	2.613	2.710	2.807	2.903	3.000

Texas Higher Education Coordinating Board

This document is available on the Texas Higher Education Coordinating Board Website: **http://www.thecb.state.tx.us**

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University of North Texas System

Written Testimony before the Senate Finance Committee: August 4, 2010

Rosemary Haggett, PhD
Vice Chancellor for Academic Affairs and Student Success
University of North Texas System

Advanced Research Program: Supporting Basic Research in Texas

Background: Norman Hackerman Advanced Research Program

- In 1987, the Texas Legislature established the Advanced Research Program (ARP), renamed in 2007 to the Norman Hackerman Advanced Research Program.
- ARP provides competitive, peer-reviewed grants to researchers for basic research.
- According to the Texas Higher Education Coordinating Board, ARP has provided research opportunities for more than 4,100 undergraduates, more than 6,700 graduate students and has generated more than 5,000 peer-reviewed papers.
- In addition to public institutions, the 81st Texas Legislature expanded participation in ARP to include independent higher education institutions. All funded projects must use a portion of awards to support undergraduate students at general academic institutions and undergraduate and/or graduate students at health-related institutions.
- Typically, the maximum award amount a researcher may receive is $200,000.
- ARP was originally funded at about $20 million per biennium. During the last Legislative Session, $16.7M was appropriated for the 2010-2011 biennium. Of that, about $400,000 funds the competition's external review process. The program was then subject to the 5% budget reduction, leaving $15.4 million supporting 112 projects.

The importance of state support of basic research

- Basic research is the seed from which all discovery grows. It serves as the foundation of all other knowledge, providing researchers with a big-picture understanding of issues and concepts. It is the founding of innovation that begins the chain leading to technology transfer and commercialization.
- It has long been recognized that basic research results in new knowledge and innovation. The year was 1944 and America was at war. President Roosevelt sent a letter to Vannevar Bush, Director of the Office of Scientific Research and Development asking him, "What can the Government do now and in the future to aid research activities by public and private organizations. Bush's response was the report *Science the Endless Frontier* (which led to the founding of the National Science Foundation), Bush wrote this about basic research :"This general knowledge provides the means of answering a large number of important practical problems, though it may not give a complete specific answer to any one of them. The function

of applied research is to provide such complete answers. The scientist doing basic research may not be at all interested in the practical applications of his work, yet the further progress of industrial development would eventually stagnate if basic scientific research were long neglected."

- Basic research provides the answers Texans and the rest of the world seek to solve basic scientific problems. The challenge when embarking on basic scientific discovery is we don't always know when or how the answer will come, but without basic research, we wouldn't have discoveries such as DNA structure, new sources of renewable energy, or many other societal progressions we have enjoyed throughout history.
- Universities and health science centers are the ideal places to conduct basic research because big-picture questions are well-suited to researchers exposed to the broad curriculums in academia. The academic requirement of publication permits rapid dissemination of research findings, allowing a broad community of researchers to benefit from discoveries. Graduate and undergraduate students who perform research as part of their education may then take this knowledge into the workplace.

Supporting basic research through ARP makes a difference

- Having built my career through the ranks of academia and the federal government, I have seen first-hand the importance, potential, and realization of seed-funding for basic research. Finding seed money for projects and collecting preliminary data is often one of the biggest obstacles to discovery.
- Through its competitive, peer-reviewed grants to researchers, ARP plays an important and contributive role for Texas basic research by providing seed money to create leveraging opportunities for researchers, institutions, and our state to attract additional funds from philanthropic, federal government, and other external sources.
- ARP funding can lead to additional external funding from outside sources and be used as a tool to recruit top faculty and researchers to our state.
- Programs such as ARP provide much-needed funding for researchers who make basic discoveries and technological breakthroughs. Discovering scientists are then positioned to transfer their knowledge to those who will develop it commercially, evolving intellectual discovery to real world application.

ARP's impact on UNTS

- ARP dollars have created important opportunities for our System research programs. UNT has received 51 ARP awards totaling about $4.7M and UNTHSC has received 19 ARP awards totaling about $2.4M.
- ARP provided the seed money for one of UNT's most promising young scientists.

- In 2006, UNT Associate Professor Dr. Rada Mihalcea received an ARP award of $99,800 for her computer science research, which finds ways to combine several different lexical resources across a large number of languages to assess the meaning of written text. These tools can then be adapted to specific computerized language-processing applications, including artificial intelligence tools.
- The ARP basic science seed funding led to subsequent National Science Foundation grants, including the prestigious NSF CAREER Award in 2008, providing multi-year funding for her research. Dr. Mihalcea was recognized by the President of the United States in 2009 with the Presidential Early Career Award for Science and Engineering (PECASE), the first UNT faculty member ever to receive this distinction.

- Receipt of an ARP award has on several occasions led to subsequent federal funding for UNTHSC investigators, leading to discoveries improving the lives of Texans.
  - One example is vision scientist Dr. Thomas Yorio, whose lab discovered the presence of endothelin, a potent vasoactive peptide, in the eye.
  - Dr. Yorio received an ARP grant for $198,815 to study the involvement of endothelin and its receptors in regulating critical aspects of the visual system. The results of Dr. Yorio's ARP-supported research provided the basis for submission and receipt of $1.9M from the National Institutes of Health to further study the impacts of endothelin, and its potential involvement in glaucoma, a leading cause of blindness.
  - Dr. Raghu Krishnamoorthy, Assistant Professor of Cell Biology & Anatomy, received a $1.6M NIH award based on the endothelin work funded initially by ARP and subsequently developed further by Dr. Yorio's NIH grants. Dr. Krishnamoorthy was a scientist in Dr. Yorio's lab before gaining a faculty position at UNTHSC.
  - The work from Dr. Yorio's lab, and others, has shown that modulation of endothelin's actions in the eye may now serve as a new treatment for glaucoma.

- Summary
  - The ARP program has had many positive effects on UNT System institutions, other higher education institutions in Texas and its citizens with highly likely additional returns on these investments in the future.

University of Houston System

Senate Finance Committee
Hearing on University Research

Testimony of Dr. Renu Khator
Chancellor, UH System and President, University of Houston

August 4, 2010

Introduction

Good morning, Chairman Ogden and members of the Finance Committee, and thank you for the opportunity to speak to you today about state funding for research universities in Texas.

It has now been a full decade since legislation was first filed in the Texas Legislature to support the development of more nationally competitive research universities. And though that bill ultimately did not pass, it began a discussion that has since produced one of the most innovative and effective approaches to creating tier-one universities in the nation.

As a result of your vision and hard work, we now have multiple funds that incentivize and reward universities for improved research performance. Combined, the resources appropriated from these funds are being used to build the research infrastructure and develop the workforce that Texas must have to be competitive in the 21st century economy.

I will focus my remarks this morning on the first of these funds created – the Research Development Fund.

History and Elements of the Research Development Fund

The RDF began its life in 2001 as two funds: the Texas Excellence Fund (for HEF institutions) and the University Research Fund (for PUF institutions not having access to the Available University Fund). In total, the Legislature appropriated $34.8 million to these funds.

Given the state's limited resources – as well as the belief that competition breeds excellence – allocation was through a formula based on a university's research performance. <u>This is a characteristic that has persisted in all of the tier-one funding mechanisms created since.</u>

In 2003 the funds were combined into the Research Development Fund, and a single distribution methodology was created to allocate the resources:

- Dollars are apportioned among the eligible universities based on the average amount of restricted research funds expended for the three preceding fiscal years.
- RDF appropriations may be used only for educational and general activities that promote increased research capacity at the university.

RDF Appropriations Today and their Use at the University of Houston

For the 2010-11 biennium, the Legislature appropriated $80.9 million from the Research Development Fund to the 32 institutions eligible to receive funding. In total, the University of Houston received $12.8 million from the RDF for the biennium. Investments we have made over the past several years using RDF resources include:

- Lab Renovations and Equipment
- Faculty Salaries
- Graduate Student Stipends

These investments are essential to building the research infrastructure the University of Houston needs to compete for research funding on a national basis, particularly in the university's key research areas of energy and the health sciences.

For example, RDF funds are being used to develop the university's new Center for Nuclear Receptors and Cell Signaling. The Center, which was established last year and is a partnership between UH and The Methodist Hospital, has already been awarded a $3.2 million grant from the EPA to study the effects of environmental toxins on human health.

This result reflects the positive overall trend in research funding at UH. Last year total research expenditures were a record $99.3 million, and year-to-date expenditures as of May are up 18 percent over last year.

Looking to the Future

As we look to the upcoming legislative session and the next biennium, we realize that you will have some very difficult and sobering decisions to make with respect to the state budget. Given the importance of higher education to the future of Texas, we hope that you will be able to preserve, to the greatest extent possible, the appropriations to the Research Development Fund, the other funds you will hear about today, and the state's universities, in general.

From our end, we are doing everything possible to ensure that the University of Houston's resources are invested as effectively as possible. In addition to the 5% state budget reductions, we have reallocated an additional $16.5 million from low priority areas to high priority areas for the current biennium.

We realize that we have very ambitious goals that cannot be funded by the state and students alone. The university must be an equal partner in moving the institution forward.

I will be happy to answer any questions.

University of Texas at Dallas

Remarks to Senate Finance Committee Regarding the Importance of the Texas Research Incentive Program (TRIP)

David E. Daniel
President, UT Dallas
August 4, 2010

What TRIP is:

- $50 million matching gifts program
- Qualifying gifts are for endowed chairs, professorships, facilities, research equipment, research program costs, or graduate stipends or fellowships
- Gifts over $2 million are matched 1:1, gifts between $1 and $2 million are matched 0.75 to 1, and gifts between $0.1 and $1 million are matched 0.5 to 1
- Essentially all of the $50 million in matching gifts funds were earned on the opening day of the program when the universities raised $60 million in qualifying gifts

Why TRIP is important:

- It is impossible to build a great research university without strong private support
- The program targets key parameters for developing research capacity:
    - Top faculty (chairs and professorships)
    - Top graduate students (fellowships)
    - Research equipment and infrastructure
    - Research program support

- The program leverages state money with private money – the State invested $50 million to obtain $110 million of value for these universities, or 45 cents of state money for each $1 the university received
- TRIP is not a handout – universities must earn the matching funds, and the university's supporters must make large gifts if they believe that becoming a tier-one research university is a worthy goal for the institution

The Future of TRIP:

- No improvements are suggested – TRIP parameters were very well thought out
- If TRIP can be sustained over multiple sessions, it will have a profound effect on developing more nationally competitive research universities – Texas will have dozens of top professors recruited as a result of the newly created chairs and professors, it will attract and retain more of the nation's best graduate students, and it will have new research facilities and research support

TRIP – The UT Dallas Experience:

- UT Dallas deposited 17 gifts totaling more than $16.9 million – seven of them in amounts of $1 million or more and all greater than $100,000
- Through TRIP, the State provided matching funds of more than $15.2 million
- Thus, the total new money raised by UT Dallas equaled $32.1 million
- Without TRIP, we would have raised an estimated $2 million
- Thus, TRIP gifts earned UT Dallas $30 million of additional funds (gifts that would not have occurred without TRIP and matching funds)

TRIP – Selected Examples of Gifts Making a Difference at UT Dallas:

- $7.3 million – This gift supports faculty chairs and graduate student fellowships; all of the gift has already been committed to new faculty chairs
- $2 million – This gift supports research in the UT Dallas Center for BrainHealth, which is studying how school children can improve their learning and reasoning skills, and how to manage quality-of-life issues such as aging
- $2 million – This gift creates the Dee Wyly Distinguished Chair for BrainHealth
- $1.145 million – This gift supports research and graduate students working in micro- and nano-electronics technology
- $1 million – This gift creates a distinguished chair in the Arts and Technology Program, and provides support for faculty and graduate students in that program
- $1 million – This gift supports research in the visual arts
- $1 million – This gift supports endowed professorships and an endowed chair for engineering and computer science

TRIP – Summary:

- At UT Dallas, TRIP increased private giving from an estimated $2 million without TRIP to a total of $32 million with TRIP (gifts plus matching funds)
- TRIP motivated donors to get out their checkbooks
- The gifts received are focused on the key elements needed to build a great research university: faculty chairs and professorships, graduate student support, and research program support in critical areas of investment
- If the TRIP program is sustained for several sessions, it will have a profound effect on higher education in Texas and rapidly accelerate institutions in their quest to become major, nationally competitive research universities

Texas Tech University

TEXAS TECH UNIVERSITY™

National Research University Fund

Taylor Eighmy
Vice President for Research
Texas Tech University

Wednesday, August 4th

National Research University Fund (NRUF)

Importance:

- ❑ NRUF is the permanent endowment for the emerging research universities.

- ❑ Access to NRUF is the goal of the emerging research universities.

Transformational:

- ❑ Attract the very best faculty "strategic hires."

- ❑ Graduate research assistantships and undergraduate research stipends.

- ❑ Leveraging opportunities.

NRUF Purpose and Facts

Purpose:

- Provide a ***"dedicated, independent, and equitable source of funding to enable emerging research universities in this state to achieve national prominence as major research universities."***

Facts:

- Voters approved Proposition 4 on November, 3, 2009.

- Value of Fund: $552,711,746 as of June 27th, 2010.

Constitutional Limitations

Constitutional restrictions on the NRUF:

- Distributions from the fund may be used only for the ***support and maintenance of educational and general activities that promote increased research capacity***

- Distribution limitations on the ***purchasing power and fair market value of fund assets*** *similar to other constitutional endowments.*

Enabling Language

Eligible for distributions from the NRUF:

- ❑ Designated by the THECB as Emerging Research University.

- ❑ At least 2 yrs. of annual Restricted Research expenditures ≥ $45M (must be both years of the biennium).

- ❑ At least 4 of the following for both years of the biennium:
  - Endowment ≥ $400M
  - Ph.D.s awarded ≥ 200
  - High achieving of entering freshman class (TBD by the THECB)
  - Membership in Association of Research Libraries OR Phi Beta Kappa
  - High quality faculty (TBD by the THECB)
  - High quality graduate-level programs (TBD by the THECB)

Implementation

Implementation:

- THECB is in the process of adopting rules on eligibility criteria.
- Multiple stakeholder meetings followed by publication of the proposed rules and formal comment period.
- Final adoption scheduled for the October board meeting.

Distribution Methodologies

Distribution Methodology:

- Not established in enabling legislation
- 82nd Legislature will need to enact legislation
- Considerations:
  - Balancing corpus growth versus impact of distributions
  - Related leveraging opportunities

Potential Impacts from NRUF Funding

A Texas Tech University Perspective:

- We have a ten year strategic plan and NRUF is essential to the plan.
- NRUF status is a waypoint towards becoming a comprehensive public research university.
- There are performance measures regarding undergraduate quality, faculty quality, and graduate program quality.
- Specific efforts targetting strategic hires, graduate program growth, and undergraduate research opportunities.

Expected Use of NRUF Funding

Our expected approach:

- ❑ Strategic hires
- ❑ Graduate research assistantships
- ❑ Undergraduate research stipends
- ❑ Focus on our eight strategic research themes
  - Sustainable Society: Energy, Water, Agriculture and the Built Environment
  - Computational and Theoretical Sciences
  - Innovative Education and Assessment
  - Advanced Electronics and Materials
  - Integrative Biosciences
  - Community Health and Wellness
  - Culture and Communication
  - Creative Capital: Arts and Design Technology

Texas A&M University

TEXAS A&M UNIVERSITY

WRITTEN TESTIMONY

Public Hearing
Senate Finance Committee

Public Testimony on Study and Recommendations Regarding Formula Funding and its Impact on the Cost of Attendance and Methods of Financing Higher Education Institutions – Research Funding

The Value and Importance of University Research to Texas

Jeffrey R. Seemann, Ph.D.
Vice President for Research and Graduate Studies
Texas A&M University

Wednesday, August 4, 2010
Finance Room, E1.036
10:00 a.m.

The Value and Importance of University Research to Texas

Mr. Chairman and members of the committee, my name is Jeff Seemann and I have the privilege to serve as the Vice President for Research and Graduate Studies at Texas A&M University. I am here to speak with you today on the value and importance of the continued investment in research at Texas A&M University and the other great universities in the State of Texas. These critical investments, including the Competitive Knowledge Fund that I will speak to you about in more detail, provide an extraordinary benefit to the citizens of Texas. They help create a world-class learning environment for our children, they help create new knowledge that underpins the amazing technologies of the 21st century, and they drive economic growth, job creation and a well-diversified, knowledge-based economy for Texas. Investment by the State of Texas in Texas A&M University research funds discoveries and applications that improve the quality of life for citizens of Texas, help save lives through medical breakthroughs, makes this State one of the agricultural powerhouses of America, and provides a state-of-the-art training ground for the next generation of Texas' workforce. At the heart of this highly productive research engine that is Texas A&M University and the other research universities are the faculty, and we are proud to say that we have, throughout Texas, attracted some of the greatest minds, the finest scientists, and the most accomplished engineers to turn the State of Texas research investment into a competitive advantage that will continue to make the economy of Texas and the lives of Texans second to none.

In 2007, the Texas Legislature established the Competitive Knowledge Fund, an additional source of critically needed resources to further enhance the support of faculty for the purpose of achieving instructional excellence and research preeminence. This fund is appropriated to eligible research institutions based on a ratio of about $1 million for each $10 million in total research expenditures, averaged over a three-year period. The Texas Legislature thus appropriated $93.2 million for the 2008-2009 biennium and $126.2 million for the 2010-2011 biennium, and Texas A&M University was specifically appropriated $28,068,280 for each year of the 2010-2011 biennium. The strategic investment of these funds has been crucial in continuing and augmenting the dramatic growth of research at Texas A&M.

Since 2007, the continued state funding of research at Texas A&M University and the strengthening of faculty excellence and research by the Competitive Knowledge Fund has resulted in:

- An increase in national research ranking: Since 2007 Texas A&M has increased its rankings from #22 nationwide to #20 in total science and engineering research expenditures, as published by the National Science Foundation (NSF) for all public and private institutions. Additionally, NSF ranked Texas A&M University #3 in the nation in total science and engineering research expenditures for institutions without medical schools, behind only MIT and UC Berkeley.

- An increase in research funding: Since 2007, there has been a 30% growth in research expenditures at Texas A&M as reported by the NSF, which includes a 28% growth in federal funding. Additionally, Texas A&M continues to increase its research collaborations with private industries that are seeking solutions from the R&D capabilities of the University.

- A growing emphasis on technology development/transfer and commercialization: Recruitment and retention efforts funded by the Competitive Knowledge Fund have resulted in a growing number of faculty at Texas A&M University whose research is being actively translated into new technologies, applications, commercial opportunities, and new companies that will power the broadly diversified Texas economy through the 21st century.

- State-of-the-art equipment and research facilities: In order to retain the best and brightest faculty and to compete internationally for sources of funding for research and scholarship, the University must maintain state-of-the-art research infrastructure. Through the use of Competitive Knowledge Fund resources and other state research support, new capabilities have been assembled to accompany the recruitment and/or retention of the highest qualified faculty members and support cutting-edge research and development for Texas.

- Training outstanding graduate students: Another result of recruiting and retaining the best and brightest of faculty are the extremely qualified graduate students who seek to attend Texas A&M in order to become the workforce, scientists and engineers of tomorrow.

- Support for the state research agenda: Texas A&M is responsible for much of the agricultural and engineering related statewide research through its land grant mission. The Competitive Knowledge Fund helps to recruit and retain the best and brightest faculty to advance the State's research agenda, as well as to work on the federal research agenda.

Examples of current research at Texas A&M University that benefit Texas and Texans include:

Human Health Research:

- Delivery of affordable health care solutions that are vital to the economic growth of the State of Texas, including statewide health care information technology infrastructure that allows for the use of patient health care records digitally, and designing health care facilities that promote increased job satisfaction of the service providers.

- Development and commercialization of a new heart assist device that could offer new hope of recovery to people with congestive heart failure.

- Discovery of an endogenous retrovirus that regulates placental development and regulation of puberty that will create new solutions to fertility management in animals and humans.

- Development of an insect cell protein expression system that is currently being used commercially to produce large quantities of an FDA approved vaccine used to treat patients with advanced prostate cancer.

- Two diagnostic patents issued to our scientists for using non-invasive gene expression profiles to study changes in the colon of infants and cancer patients.

Energy Efficiency and Security Research:

- Activities of the Energy Systems Laboratory to bring energy efficiency assessments and improvements to scores of public buildings, schools, and private enterprises across Texas through research and deployment of energy-efficient technologies and techniques, including the integration of renewable energy sources in buildings.

- Development and licensure of technology that converts biomass into high-octane gasoline or jet fuel rather than ethanol.

- Development of technology that monitors and avoids electric power outages -- an occurrence that costs Texas industry millions each year.

Homeland Security Research:

- Establishment of a nuclear security institute with the DOE to develop technologies to guard against nuclear terrorism.

- Studies of the best strategies for identifying and interdicting highly enriched uranium that could be used in terrorist attacks on the U.S. and our allies.

Disaster Response and Preparedness Research:

- The TABS (Texas Automatic Buoy System), providing continuous information on winds, waves and currents from 8 sites along the Texas coast to assist in search and rescue at sea and in oil spill tracking/forecasts.

- Planning for the $3 billion coastal surge barrier system known as the Ike Dike, which now is undergoing review by a 6-county organization working with the Governors' Disaster Response Commission formed following Hurricane Ike.

- Assessment of the status and trends of coastal vulnerability to natural hazards, since Texas is one of the most flood-prone states in the country. Such research is currently being used to improve evacuation communication, as well as improve recovery planning, mitigation planning, and comprehensive planning.

Quality of Life Research:

- Examination of household water security variability in low-income Mexican-American communities in the lower Rio Grande Valley of Texas, one of the poorest regions with the largest population lacking suitable water supply and basic sanitation in the United States.

- Application of social science methodology to understanding public issues in order to help state agencies formulate and evaluate policies relating, for example, to youth drug use, employment, health, and education.

- Development of a novel water treatment technology to effectively and affordably remove heavy metals and other contaminants from water. Application of this research will result in safer water supplies in urban and rural areas.

By investing in the capacity to carry out research projects like those described above, including resources from the Competitive Knowledge Fund, Texas has clearly strengthened the global competitiveness of our University, industry and the State of Texas. Through this fund, the State has strengthened the national reputation of its Tier I research institutions and international visibility.

National reputations of research institutions are built based on the research and scholarship accomplishments of the faculty and their ability to provide solutions to the scientific, technological, health-related, economic and social problems facing today's society. By being able to recruit and retain the best minds in the fields to Texas A&M, the University and the State have enhanced its reputation while solving problems that will improve the quality of life for Texans and the world and address the economic issues facing our state and nation.

Finally, the investment by the State of Texas in the research capacity of Texas A&M University and the other universities in the state powers an extraordinary return on investment by:

- Helping to educate a modern workforce required by a rapidly developing, information-based economy.
- Producing new knowledge that catalyses industrial and economic development.
- Supporting the growth and advancement of our universities, which are critically important to recruiting high impact, technologically developed industries to the State.

We encourage the Senate Finance Committee to continue their strong support of research at Texas A&M University and the other great universities in Texas.

The Value of Biomedical Research:

The UTHealth Perspective

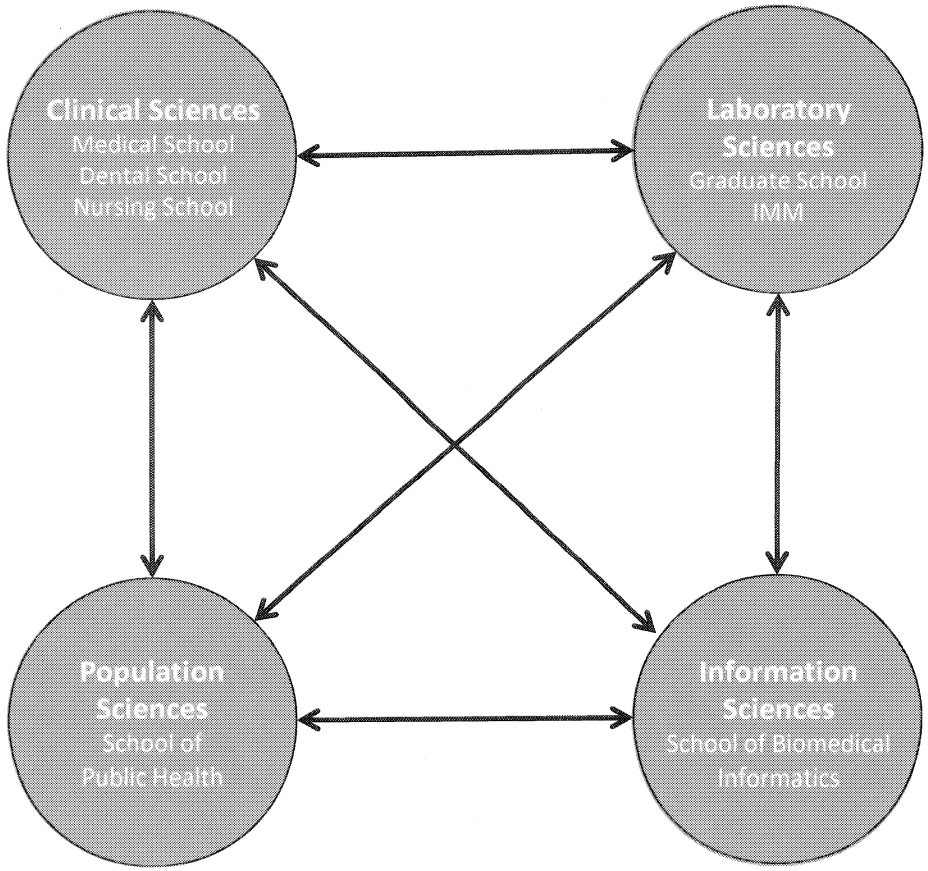
Senate Finance Committee

August 4, 2010

Peter J. A. Davies MD, PhD
Provost and Executive Vice-President for Research
The University of Texas Health Science Center at Houston (UTHealth)

UTHealth™
The University of Texas
Health Science Center at Houston

UTHealth: an academic health center



UTHealth
The University of Texas
Health Science Center at Houston

Why should Texas continue to fund research?

- Life saving solutions to human diseases
- World-class medical centers: healthcare for Texans
  - Value to education – homegrown best minds in world
  - Recruit the best minds in the world in medicine and research
- Economic impact of biomedical research
  - Federal Funding for Research
  - Biotechnology Industry

Texas Medical Center

Member Institutions: 49 Institutions

Univ. of Texas MD Anderson Cancer Center
Baylor College of Medicine
UTHealth – The UT Health Science Center at Houston
Univ of Houston
Texas Children's Hospital
Memorial Hermann Hospital – TMC
Memorial Hermann Hospital – Children's Hospital
Memorial Hermann Hospital – TIRR
The Methodist Hospital
Texas Heart Institute
St. Luke's Hospital
etc

Annual Patient Visits – 6.0 million

Employees – 93,500
Physicians, Scientists, Researchers and other advanced degree professionals– 21,000
Students – 71,500, including high school, college and health profession graduate programs.

Annual Research Expenditures - $1.2 billion
Regional Annual Economic Impact - $14 billion
Future Growth -$7.1 billion in approved building and infrastructure investments between 2008 and 2012

UTHealth
The University of Texas
Health Science Center at Houston

Economic Impact of Biomedical Research: Federal Funding

Economic Multiplier for NIH funding

1. **Texas: $2.49 per $1 of NIH research grant funding**.
   Texas has the highest return on the dollar of any state.
2. Illinois: $2.43
3. California: $2.40
4. Georgia: $2.36
5. Colorado: $2.34

Economic Impact of Biomedical Research: Federal Funding

NIH Funding 2009 (not ARRA funding)

- $31.01 billion total NIH funding
- $21.5 billion NIH grants
- $1.1 billion to Texas institutions
  @ $2.49/$1 of NIH funding= $2.6 billion of business activity
- By state:

1. California	$3.2 billion	4. Pennsylvania	$1.3 billion
2. Massachusetts	$2.3 billion	5. Texas	$1.1 billion
3. New York	$1.9 billion		

Economic Impact of Biomedical Research: Federal Funding

ARRA / NIH Funding 2009-2010

- $10 billion total ARRA / NIH funding
- $8.2 billion ARRA / NIH grants
- $322 million to Texas institutions
  @ $2.49/$1 of NIH funding= $800 million of business activity
- By state:

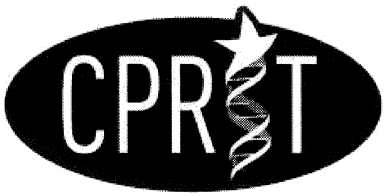
1. California	$933 million	4. Pennsylvania	$419 million
2. Massachusetts	$670 million	5. Texas	$321 million
3. New York	$590 million		

Economic Impact of Biomedical Research: Federal Funding

UTHealth ARRA / NIH Funding

- $260 million total all research FY 2010 (FY2000: $138 million; 190%)
- $165 million NIH grants ($114 million NIH + $51 million ARRA)

  @ $2.49/$1 of NIH funding= $250 million of business activity



CANCER PREVENTION &
RESEARCH INSTITUTE OF TEXAS

Cancer Research Grants

High Impact Grants
Individual Investor Grants
Multiple Investor Grants

Cancer Prevention Grants

Cancer Training Grants

Commercialization Grants

Cancer Recruitment Grants

New Investor
Rising Star
Established Investor

$216 million in grants for the State

- $194 million in research or company commercialization / recruitment
  ($20 million for recruitment)
- $21 million in prevention grants
- $13 million UTHealth

UTHealth
The University of Texas
Health Science Center at Houston

CANCER PREVENTION &
RESEARCH INSTITUTE OF TEXAS

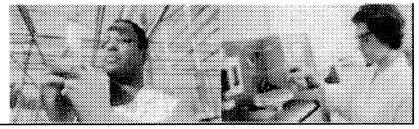
Scientific Recruitment Award Slate: $16,000,000
June 2010

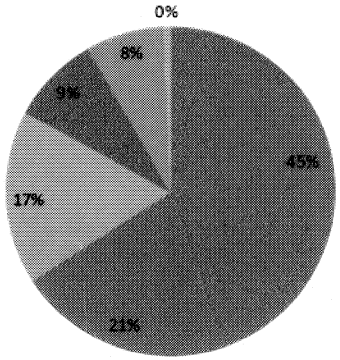
Candidate	Award Mechanism	Successfully Recruited	Recommended Award*	Nominator Institution	Candidate Present Institution
Li Ma	First-Time, Tenure-Track Faculty Member	Yes	$2,000,000	University of Texas M.D. Anderson Cancer Center	Whitehead Institute for Biomedical Research at MIT
Jeffrey Chang	First-Time, Tenure-Track Faculty Member	Yes	$2,000,000	University of Texas Medical School at Houston	Duke University
Lauren Ehrlich	First-Time, Tenure-Track Faculty Member	Yes	$2,000,000	University of Texas at Austin	Stanford University
Lidong Qin	First-Time, Tenure-Track Faculty Member	Pending	$2,000,000	University of Texas Health Science Center Houston	California Institute of Technology
Joshua Mendell	Rising Star	Pending	$4,500,000	University of Texas Southwestern Medical Center at Dallas	Johns Hopkins University
Jessica Tyler	Rising Star	Yes	$3,500,000	University of Texas M.D. Anderson Cancer Center	University of Colorado School of Medicine
David Johnson	Established Investigator	Yes	$0	University of Texas Southwestern Medical Center at Dallas	Vanderbilt University School of Medicine

The University of Texas
Health Science Center at Houston

Economic Impact of Biomedical Research: Biotechnology

TEXAS EMERGING TECHNOLOGY FUND
OFFICE OF THE GOVERNOR
WWW.EMERGINGTECHFUND.COM





- Biotechnology & Life Sciences
- Advanced Technology & Manufacturing
- IT / Computer Technology
- Energy
- Aerospace & Defense
- Petroleum & Chemical

UTHealth Experience – Emerging Technology Fund

Statewide Research Superiority Awards: $68 million (industry match $73 million)
UTHealth Awards:

- Dr. John Holcomb (CeTIR): $5.0 million
- Dr. Mario Ferrari (ANH): $2.5 million
- Dr. Tom Caskey (TTI): $6.0 million
- Dr. Cox / Dr. Lally (Pedi TBI): $3.0 million

Statewide Commercialization Awards: $129 million (45% in Biotech)
UTHealth Awards:

- PLx: $2.0 million
- Leonardo: $2.5 million
- Nanomedical: $3.5 million
- Cryopen: $2.0 million
- Endothelix: $1.0 million

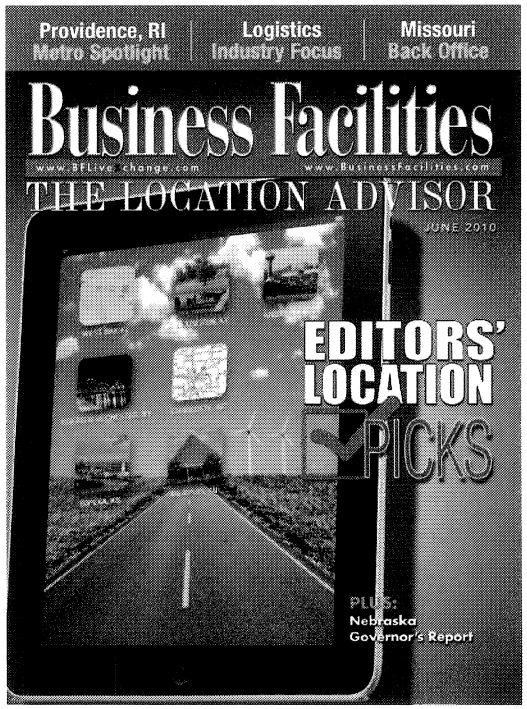
UTHealth
The University of Texas
Health Science Center at Houston

Economic Impact of Biomedical Research: Biotechnology

Business Facilities Breaking News

2010 Rankings: KS, TX Surge in Biotech

Kansas and Texas flexed their biotech muscles in Business Facilities' annual Rankings Report



." ..... Texas surged from sixth place to second place in the Biotechnology Strength ranking, firmly establishing the Lone Star State as a major national hub for bioscience-related industries.

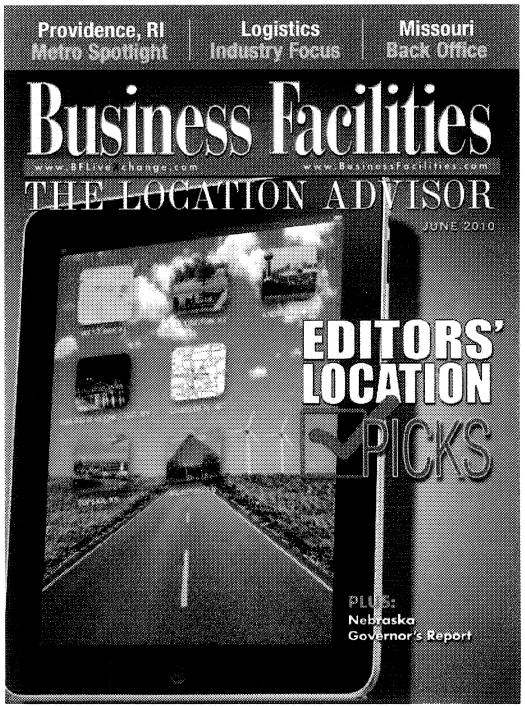
Texas has continued to build its biotech industry, notching a 35 percent increase in biotech-related facilities and an 11 percent increase in total bioscience employment, according to the 2010 *Battelle/BIO State Bioscience Initiatives* report. Battelle reported that Texas now has nearly 3,000 biotech facilities and about 65,000 bioscience workers.

"We were particularly impressed by the amount of R&D funding for biotech in Texas (approx. $2.5 million) and the number of higher education degrees in bioscience, which exceeded 10,000," Rogers said. "Texas not only is building a biotech manufacturing base, it is growing a skilled workforce to support it."

Economic Impact of Biomedical Research: Biotechnology

Here are the complete Biotechnology Strength results:

1. CALIFORNIA
2. TEXAS
3. PENNSYLVANIA
4. MASSACHUSETTS
5. KANSAS
6. NEW JERSEY
7. NORTH CAROLINA
8. ILLINOIS
9. MARYLAND
10. OHIO



UTHealth Technology Transfer

Office of Technology Management

- Annual Gross Revenue > $4 million
- Cumulative licensing revenues exceeds $35 million
- 30 new license/option agreements per year
- 267 license/option agreements cumulative
- > 1000 patents/patent applications
- > 190 products on the market

UTHealth Portfolio Companies

- 23 portfolio companies to date; 21 active
- >$40M capital raised in current private companies
- 2 companies IPO/acquired with market cap totaling $2.9B
- ~30 jobs held or created in private portfolio companies
- (>1200 in 2 public companies)
- **ETF** Texas Emerging Technology Fund recipient

UTHealth
The University of Texas
Health Science Center at Houston

Biotechnology Commercialization Center

- 20,000+ sq. ft of laboratory / office dedicated to startup companies
- 9 current and / or committed tenants, including:

Ensysce™ biosciences

n3D Biosciences, Inc.

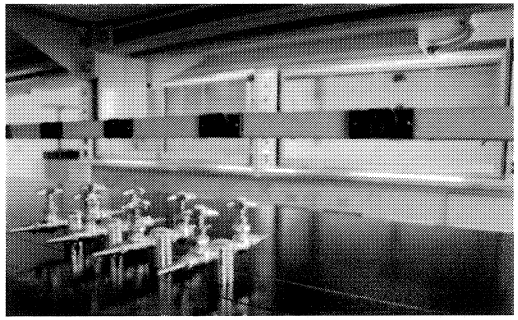
PHusis Therapeutics

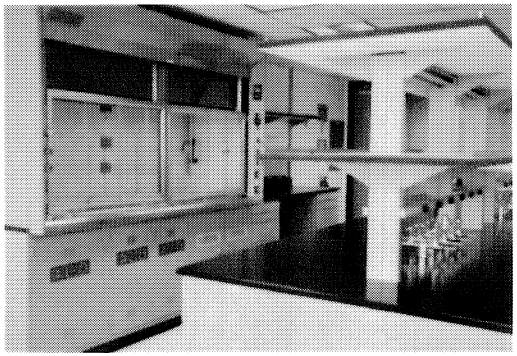
CorInnova Technologies that Lead to Heart Recovery

Assurance Biosciences, Inc.

BISSEX & WATSON, P.C.

bcc Biotechnology Commercialization Center





UTHealth™
The University of Texas
Health Science Center at Houston

Higher Education Coordinating Board

Funding Sources for Repair and Renovations
FY2010

Funding Source	Amount	Percent
Current Appropriations	$125,177,389	3.4%
Master Lease Purchase	$0	0.0%
Other	$895,302,619	24.4%
Revenue Bonds	$1,045,983,234	28.5%
Unspecified	$1,608,751,711	43.8%
TOTAL	$3,675,214,953	100.0%

Source: THECB – FY2010 MP1 Reports

Capital Funding Sources
FY2010-2014

Source	FY 2010	2010 PCT	FY 2009	2009 PCT	PCT CHG
Auxiliary Enterprise Fund	$148,964,000	0.80%	$47,950,000	0.28%	210.67%
Auxiliary Enterprise Revenues	$288,487,222	1.54%	$557,255,328	3.28%	-48.23%
Available University Fund	$18,158,000	0.10%	$16,000,000	0.09%	13.49%
Designated Tuition	$392,723,819	2.10%	$227,463,000	1.34%	72.65%
Energy Savings	$36,060,000	0.19%	$18,000,000	0.11%	100.33%
Federal Funds	$126,574,800	0.68%	$63,752,960	0.38%	98.54%
Federal Grants	$388,110,011	2.07%	$96,000,000	0.57%	304.28%
General Revenue	$255,950,000	1.37%	$319,700,000	1.88%	-19.94%
Gifts/Donations	$1,293,554,000	6.90%	$1,508,555,910	8.89%	-14.25%
Higher Education Assistance Fund Proceeds	$336,801,203	1.80%	$489,400,124	2.88%	-31.18%
Housing Revenue	$670,935,633	3.58%	$760,466,434	4.48%	-11.77%
Lease Purchase other than MLPP	$0	0.00%	$0	0.00%	0.00%
Legislative Appropriations	$115,500,000	0.62%	$42,500,000	0.25%	171.76%
Other	$1,409,215,430	7.52%	$981,256,839	5.78%	43.61%
Other Local Funds	$1,932,978,229	10.32%	$2,036,212,151	12.00%	-5.07%
Other Revenue Bonds	$1,082,929,000	5.78%	$989,984,000	5.83%	9.39%
Performance Contracting Energy Conservation	$28,500,000	0.15%	$50,000,000	0.29%	43.00%
Permanent University Fund	$510,825,181	2.73%	$1,049,287,885	6.18%	-51.32%
Private Development Funds	$269,500,000	1.44%	$68,300,000	0.40%	294.58%
Student Fees	$291,382,538	1.56%	$435,640,198	2.57%	-33.11%
Tuition Revenue Bond Proceeds	$3,049,775,746	16.27%	$3,648,667,171	21.50%	-16.43%
Unexpended Plant Funds	$47,516,178	0.25%	$19,222,408	0.11%	147.19%
Unknown Funding Source	$6,042,461,711	32.25%	$3,542,738,885	20.88%	70.56%
Total	$18,736,402,701	100.00%	$16,968,353,293	100.00%	10.42%

Source: THECB - FY2010 MP1 Reports

College for all Texans

Texas Higher Education Coordinating Board

Summary of Deferred Maintenance Needs

FY 2010 to FY 2014

Deferred Maintenance Plans (MP2) and Campus Addressed Deferred Maintenance (MP4)

February 2010

Division of Planning and Accountability
Finance and Resource Planning

Texas Higher Education Coordinating Board

Texas Higher Education Coordinating Board

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Mission of the Coordinating Board

The Texas Higher Education Coordinating Board's mission is to work with the Legislature, Governor, governing boards, higher education institutions, and other entities to help Texas meet the goals of the state's higher education plan, *Closing the Gaps by 2015*, and thereby provide the people of Texas the widest access to higher education of the highest quality in the most efficient manner.

Philosophy of the Coordinating Board

The Texas Higher Education Coordinating Board will promote access to quality higher education across the state with the conviction that access without quality is mediocrity and that quality without access is unacceptable. The Board will be open, ethical, responsive, and committed to public service. The Board will approach its work with a sense of purpose and responsibility to the people of Texas and is committed to the best use of public monies. The Coordinating Board will engage in actions that add value to Texas and to higher education. The agency will avoid efforts that do not add value or that are duplicated by other entities.

The Texas Higher Education Coordinating Board does not discriminate on the basis of race, color, national origin, gender, religion, age, or disability in employment or the provision of services.

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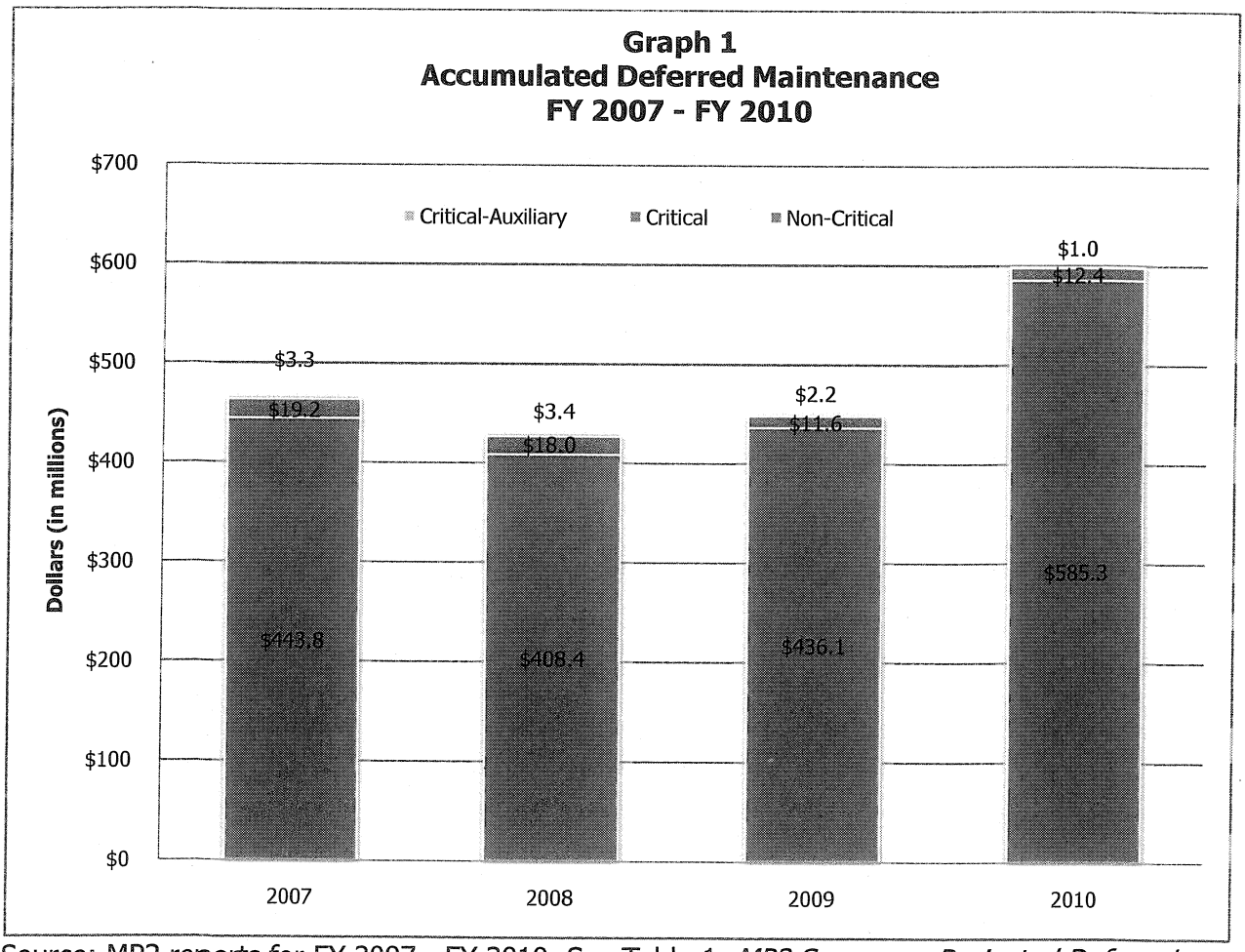
Summary

Texas Education Code, Section 61.0582, directs the Texas Higher Education Coordinating Board (THECB) to collect information on deferred maintenance needs of public institutions of higher education (not including community colleges). This data is collected annually by means of the following Master Plan (MP) reports:

- The MP2 identifies current accumulated deferred maintenance (ADM) needs and lists projects planned to address accumulated deferred maintenance needs in the next five years.
- The MP4 lists actual expenditures for ADM in the most recent fiscal year.

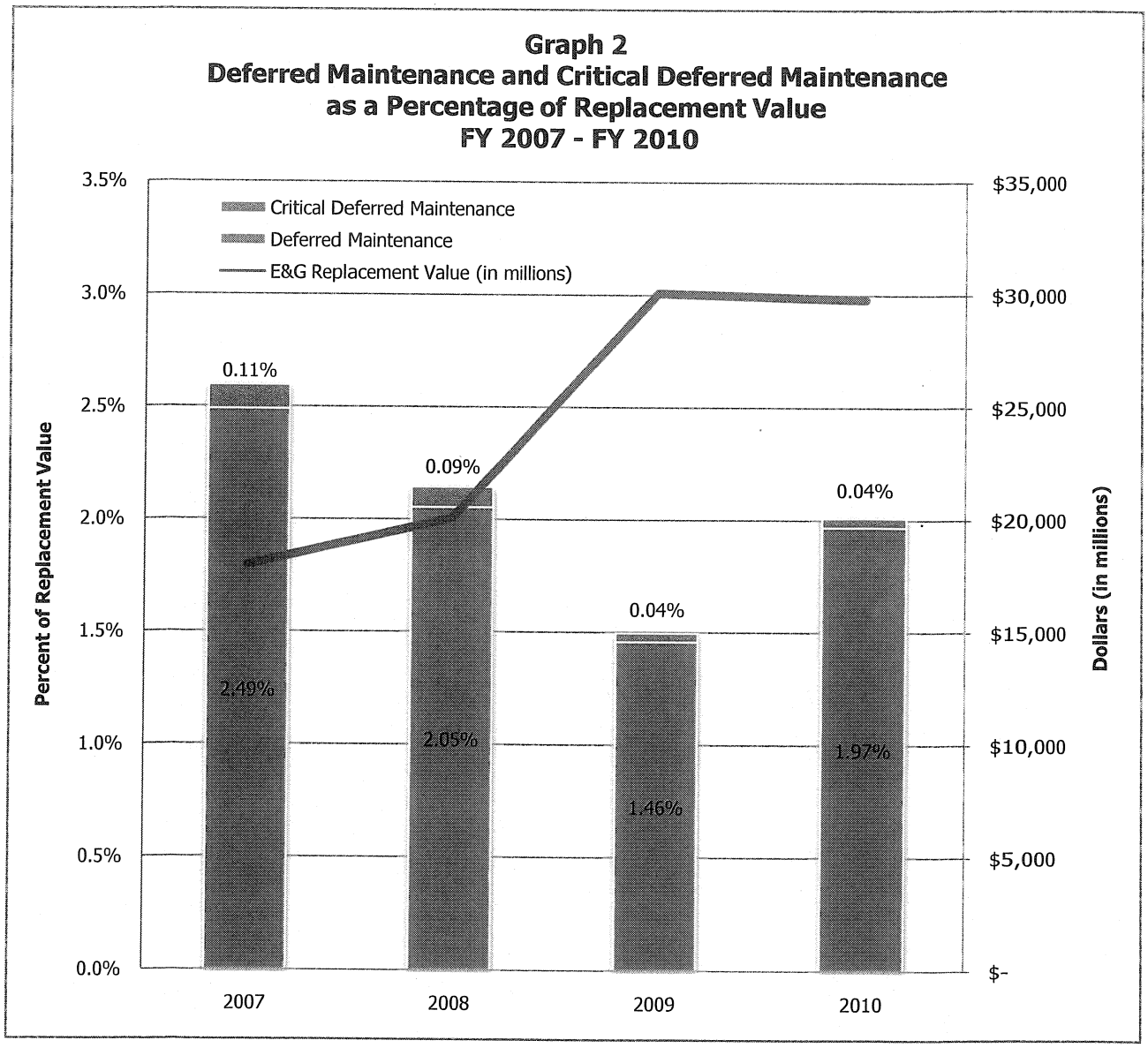
The following information summarizes MP2 and MP4 data submitted to the THECB in October 2009 and covers the deferred maintenance plans for Fiscal Years (FY) 2010 – 2014 and actual expenditures made in FY 2009.

Graph 1 displays the projected expenditures for ADM for FY 2010 – 2014, which totaled $598.7 million, up 33 percent from the $449.9 million reported for FY 2009 and up 39 percent from FY 2008.



Source: MP2 reports for FY 2007 - FY 2010. See Table 1, *MP2 Summary, Projected Deferred Maintenance Expenditures by Year*, reported fall 2009.

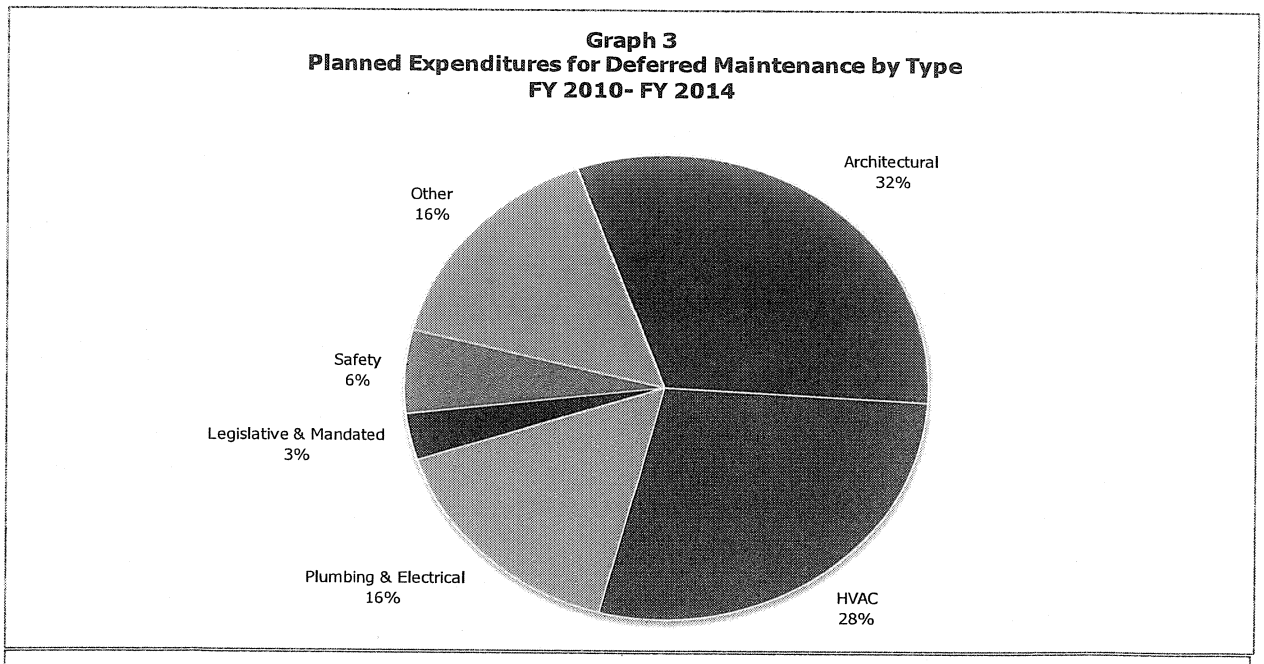
The bars in Graph 2 represent ADM over the past four years and the line represents the overall Educational and General (E&G) replacement value. The FY2010 E&G replacement value decreased by 0.8 percent from FY 2009. The base rate of the 10 latest projects decreased 3 percent from $358 per square foot to $347 per square foot. The amount of ADM increased 34 percent from $436 million for FY 2009 to $585 million in FY 2010. The $12.4 million in critical deferred maintenance (CDM) remained consistent to FY 2009 at 0.04 percent of replacement value in FY 2010.

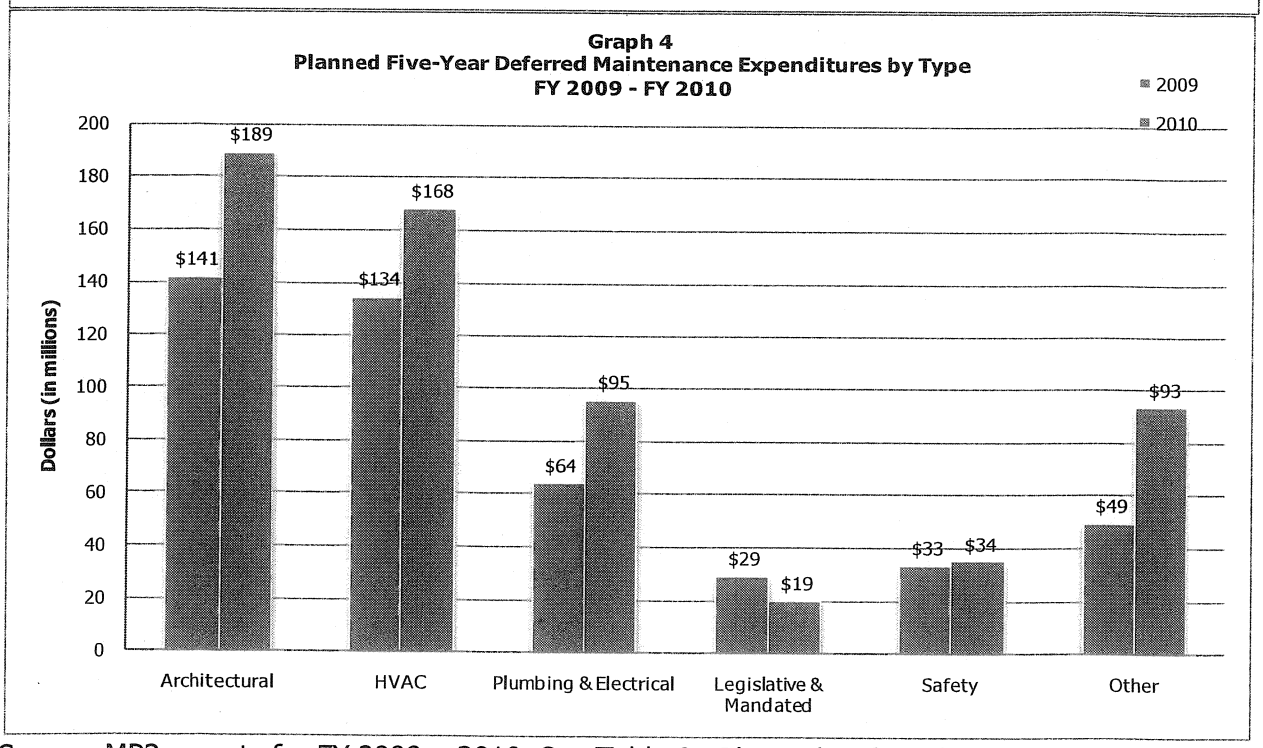


Source: Deferred & Critical Deferred Maintenance as a Percentage of Replacement Value reports for FY 2007 – FY 2010. See Table 2, *Institutional Deferred Maintenance to Replacement Value Summary, 2010.*

Graph 3 shows the total plans for FY 2010 – 2014 by project type. Thirty two percent of the funding is dedicated to architectural projects and another 28 percent to Heating, Ventilation, and Air Conditioning (HVAC). This distribution remains consistent with previous years' planned expenditures by project type.

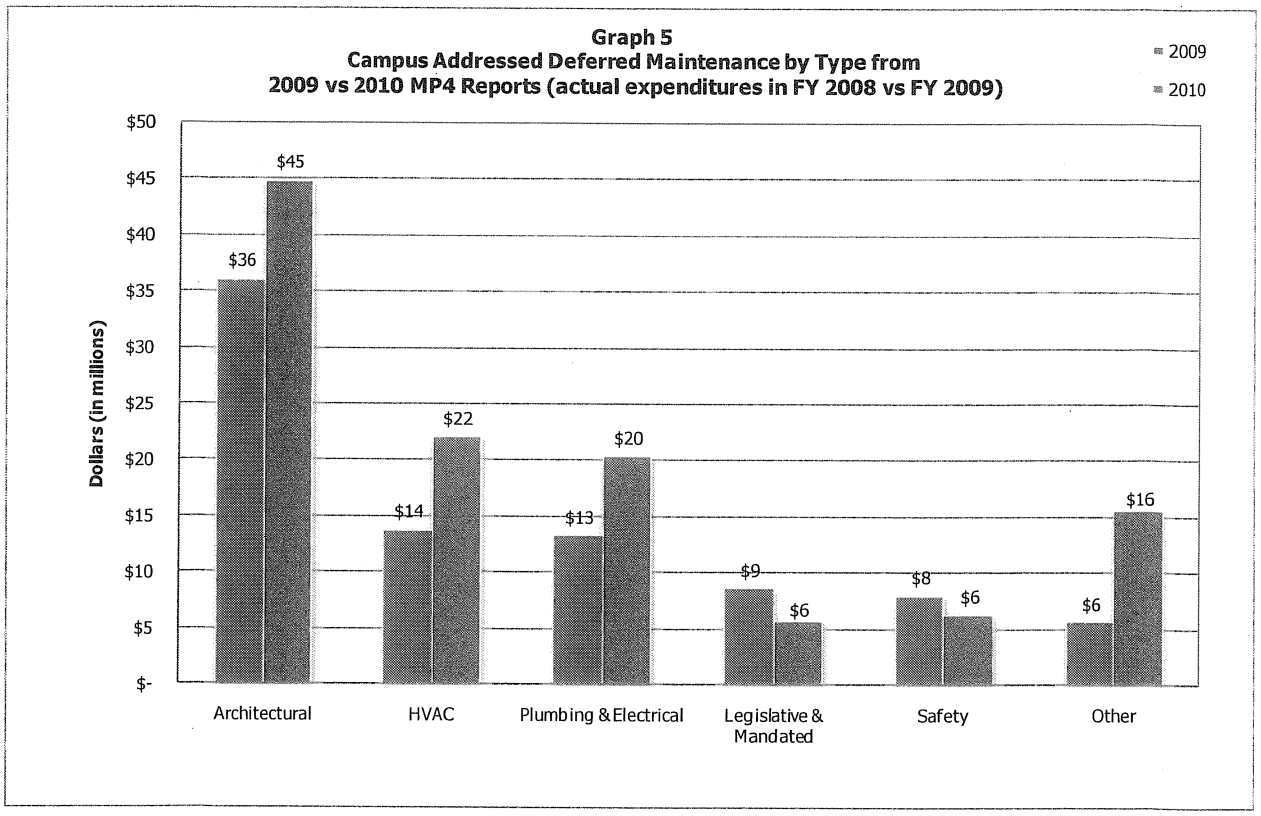
The planned five-year expenditures by project type for FY 2010 compared to FY 2009 (Graph 4) indicate HVAC, Plumbing and Electrical spending is up 57 percent from FY 2009, while Legislative, Mandated and Safety spending is down 28 percent.





Source: MP2 reports for FY 2009 – 2010. See Table 3, *Planned Deferred Maintenance by Type.*

The graph below shows the distribution of expenditures submitted in the FY 2009 and FY 2010 MP4 reports. The institutions reported actual expenditures of approximately $115 million on deferred maintenance for FY 2010. This is $29 million more than what was reported for actual expenditures in FY 2009. The other spending category increased 177 percent while the Architectural, HVAC, and Plumbing and Electrical all increased 38 percent from FY 2009. Safety and legislative and mandated spending decreased 28 percent as compared to FY 2009.



Source: MP4 reports for 2009 – 2010. See Table 4, *2009 MP4 Summary, Actual Expenditures for FY 2009*, summarizes reported expenditures by institution.

The Campus Master Planning Process

Section 17.101 of the Coordinating Board's rules and regulations provide the mechanisms for fulfilling the intent of the law. All general academic institutions, technical and state colleges, as well as health-related institutions, are required to submit data to the Coordinating Board for the following reports:

17.101 (2) Facilities Development Reports. The Board shall consider projects that are included in the facilities development plans (MP1 and MP2). A project that is not included in the plan may be considered if the Board determines that the institution, even with careful planning, could not reasonably have foreseen the project need.

(B) Campus Deferred Maintenance Plan (MP2). On or before October 15 of every year, an institution shall submit an update to its Campus Deferred Maintenance Plan (MP2) on file with the Board. This report does not include capital renewal projects. The report shall include:

(i) a list of an institution's facilities backlogged or deferred maintenance needs for the next five years that cost $10,000 or greater;

(ii) the amount the institution plans to designate each fiscal year for the next five years to address the backlogged or deferred maintenance reported in the Campus Deferred Maintenance Plan;

(iii) the amount of an institution's facilities critical backlogged or deferred maintenance needs for the next five years that cost $10,000 or greater;

(iv) a plan to address deferred maintenance if a project is delayed three years beyond its originally scheduled completion date; and

(v) an explanation for the delay in a project and a plan to address deferred maintenance if a project has remained on the institution's MP2 report for a third year.

(C) Campus Addressed Deferred Maintenance Report (MP4). On or before October 15 of every year, an institution shall submit an update to its Campus Addressed Deferred Maintenance Report (MP4) on file with the Board. The report shall include the amount of backlogged or deferred maintenance addressed in previous fiscal year.

The Coordinating Board uses deferred maintenance data to gauge how well institutions are taking care of their facilities. The MP2 and MP4 data collected from each institution by THECB each October is compiled into a master database and summarized in a report.

The Board uses the ratios of deferred and critical deferred maintenance to building replacement value to evaluate construction project applications that are submitted for review. Deferred maintenance is considered critical if it places the institution's facilities, occupants, or mission at risk. Critical auxiliary deferred maintenance is not considered in the deferred maintenance to replacement value ratio because auxiliary enterprise entities receive funds through services provided. Currently, the Board standard requires the ratio of ADM to replacement value be five percent or less. The Board's standard for CDM is zero. A ratio above the standard may cause the Board to question whether proposed project funds might best be used to address the backlog of deferred maintenance on a campus.

Table 1
MP2 Summary, Projected Deferred Maintenance Expenditures by Year

INSTITUTION	FY 2010	FY 2011	FY 2012	FY 2013	FY 2014
The University of Texas System					
The University of Texas Medical Branch at Galveston	6,056,000	8,201,200	10,062,000	12,039,200	14,277,600
The University of Texas - Pan American	2,047,037	820,000	2,356,000	538,000	0
The University of Texas of the Permian Basin	437,000	1,360,000	735,000	400,000	45,000
The University of Texas Health Science Center at San Antonio	12,750,000	5,593,000	6,128,000	4,129,000	8,733,500
The University of Texas Health Science Center at Houston	4,149,371	5,226,589	5,226,589	5,226,589	5,226,588
The University of Texas Health Center at Tyler	2,236,000	0	100,000	0	0
The University of Texas at Tyler	100,000	940,000	132,000	120,000	240,000
The University of Texas at El Paso	1,933,000	1,515,000	1,525,000	2,975,000	2,741,000
The University of Texas at Dallas	1,805,000	1,800,000	2,030,000	1,750,000	1,150,000
The University of Texas at Brownsville	245,000	150,000	0	0	0
The University of Texas System	1,300,000	668,000	0	0	0
The University of Texas at Austin	13,235,000	15,993,155	17,189,070	17,181,699	16,815,990
The University of Texas at Arlington	7,353,000	7,857,000	6,852,000	7,704,000	10,071,000
The University of Texas at San Antonio	2,449,631	3,430,395	2,495,515	2,464,865	2,464,865
Subtotal	**56,096,039**	**53,554,339**	**54,831,174**	**54,528,353**	**61,765,543**
The University of Houston System					
University of Houston	12,400,000	13,732,000	12,918,437	2,345,000	2,213,422
University of Houston - Clear Lake	675,000	800,000	680,000	200,000	380,000
University of Houston - Downtown	1,150,000	50,000	50,000	50,000	50,000
Subtotal	**14,225,000**	**14,582,000**	**13,648,437**	**2,595,000**	**2,643,422**
Texas A&M University System					
Texas A&M University at Galveston	2,275,000	0	0	0	0
Prairie View A&M University	3,500,000	2,500,000	1,500,000	1,700,000	4,198,000
Tarleton State University	380,116	81,490	1,374,325	0	0
Texas A&M International University	130,000	0	0	0	0
Texas A&M University	10,761,495	7,966,996	11,087,582	5,855,000	8,021,724
Texas A&M University - Commerce	1,930,000	515,000	855,000	517,000	0
Texas A&M University - Corpus Christi	690,425	1,832,000	496,550	625,000	860,000
Texas A&M University Engineer Experiment Station[1]	180,000	0	0	0	0
Texas A&M University System Health Science Center	955,000	350,000	325,000	270,000	265,000
West Texas A&M University	2,705,000	150,000	2,482,000	250,000	300,000
Texas A&M University - Texarkana	78,500	0	0	0	0
Texas A&M University - Kingsville	4,386,376	2,303,000	2,120,000	3,456,200	2,850,000
Subtotal	**27,971,912**	**15,698,486**	**20,240,457**	**12,673,200**	**16,494,724**
Texas Tech University System					
Angelo State University	3,900,000	115,000	80,000	350,000	0
Texas Tech University	2,231,000	1,252,000	1,454,000	1,311,000	1,480,000
Texas Tech University Health Sciences Center	3,768,450	1,890,000	1,293,500	1,520,000	1,601,000
Subtotal	**9,899,450**	**3,257,000**	**2,827,500**	**3,181,000**	**3,081,000**
The University of North Texas System					
University of North Texas	17,749,000	4,917,000	7,826,000	8,865,000	5,460,000
University of North Texas System	1,125,000	0	0	0	0
Subtotal	**18,874,000**	**4,917,000**	**7,826,000**	**8,865,000**	**5,460,000**

Table 1
MP2 Summary, Projected Deferred Maintenance Expenditures by Year

INSTITUTION		FY 2010	FY 2011	FY 2012	FY 2013	FY 2014
The Texas State University System						
Lamar State College - Orange		0	288,750	362,250	231,000	0
Texas State University - San Marcos		1,499,000	1,709,000	2,177,000	2,053,000	1,710,000
Sul Ross State University		3,080,000	3,110,000	35,000	0	0
Sam Houston State University		2,410,000	930,000	2,815,000	1,125,000	840,000
Lamar State College - Port Arthur		234,480	5,500	87,000	195,000	146,000
Lamar Institute of Technology		600,000	0	0	0	0
Lamar University		762,300	762,300	762,300	762,300	2,032,800
	Subtotal	**8,585,780**	**6,805,550**	**6,238,550**	**4,366,300**	**4,728,800**
Texas State Technical College System						
Texas State Technical College - Harlingen		2,665,000	1,595,000	375,000	0	0
Texas State Technical College - Marshall		90,000	85,000	55,000	35,000	60,000
Texas State Technical College - Waco		4,360,000	320,000	65,200	449,150	1,108,500
Texas State Technical College - West Texas		1,053,500	58,000	0	0	0
	Subtotal	**8,168,500**	**2,058,000**	**495,200**	**484,150**	**1,168,500**
Independent						
Texas Woman's University		2,338,620	5,492,759	8,055,000	2,087,500	617,500
Midwestern State University		860,000	2,923,500	1,110,000	1,025,000	925,000
Stephen F. Austin State University		6,850,000	3,150,000	150,000	150,000	2,400,000
Texas Southern University		6,166,543	6,166,545	6,166,547	6,166,571	3,054,128
	Subtotal	**16,215,163**	**17,732,804**	**15,481,547**	**9,429,071**	**6,996,628**
	Grand Total	**160,035,844**	**118,605,179**	**121,588,865**	**96,122,074**	**102,338,617**

Table 2
Institutional Deferred Maintenance to Replacement Value Summary – Fall 2009

FICE	Institution	DM to RV	CDM to RV	Deferred Maintenance (DM)	Critical Deferred Maintenance (CDM)	Educational and General Replacement Value (RV)
The University of Texas System						
003655	The University of Texas System Administration	2%	0.0%	$ 1,968,000	$ -	$ 79,938,292
003656	The University of Texas at Arlington	4%	0.0%	$ 39,837,000	$ -	909,833,468
003658	The University of Texas at Austin	3%	0.0%	$ 80,414,914	$ -	2,613,674,434
009741	The University of Texas at Dallas	3%	0.0%	$ 8,535,000	$ -	333,792,481
003661	The University of Texas at El Paso	1%	0.0%	$ 10,689,000	$ -	729,415,485
003599	The University of Texas - Pan American	1%	0.0%	$ 5,761,037	$ -	436,758,418
030646	The University of Texas at Brownsville	0%	0.4%	$ -	$ 395,000	106,791,667
009930	The University of Texas of the Permian Basin	3%	0.0%	$ 2,977,000	$ -	111,819,621
010115	The University of Texas at San Antonio	2%	0.0%	$ 13,305,271	$ -	587,895,673
011163	The University of Texas at Tyler	1%	0.0%	$ 1,532,000	$ -	136,420,161
	Subtotal	3%	0.0%	$165,019,222	$ 395,000	$ 6,046,339,700
Texas A&M University System						
003629	Texas A&M University System Administration[1]	0%	0.0%	$ -	$ -	$ 53,698,268
003632	Texas A&M University[1]	2%	0.0%	$ 43,692,797	$ -	2,447,272,115
010298	Texas A&M University at Galveston	2%	0.0%	$ 2,275,000	$ -	95,615,046
003630	Prairie View A&M University	4%	0.0%	$ 13,398,000	$ -	300,507,186
003631	Tarleton State University	1%	0.0%	$ 1,835,931	$ -	266,983,272
011161	Texas A&M University - Corpus Christi	2%	0.0%	$ 4,503,975	$ -	182,085,113
003639	Texas A&M University - Kingsville	4%	0.1%	$ 14,905,576	$ 210,000	346,355,636
009651	Texas A&M International University	0%	0.0%	$ 130,000	$ -	150,755,808
003665	West Texas A&M University	2%	0.0%	$ 5,887,000	$ -	322,127,965
003565	Texas A&M University - Commerce	2%	0.0%	$ 3,817,000	$ -	232,691,593
029269	Texas A&M University - Texarkana	0%	0.0%	$ 78,500	$ -	38,669,921
103631	Texas A&M University - Central Texas	0%	0.0%	$ -	$ -	-
103639	Texas A&M University - San Antonio	0%	0.0%	$ -	$ -	-
	Subtotal	2%	0.0%	$ 90,523,779	$ 210,000	$ 4,436,761,923
University of Houston System						
011721	University of Houston System Administration	0%	0.0%	$ -	$ -	$ 70,787,580
003652	University of Houston	3%	0.0%	$ 43,608,859	$ -	1,437,439,028
011711	University of Houston - Clear Lake	1%	0.0%	$ 2,735,000	$ -	214,665,975
012826	University of Houston - Downtown	1%	0.0%	$ 1,350,000	$ -	235,610,720
013231	University of Houston - Victoria	0%	0.0%	$ -	$ -	50,055,897
	Subtotal	2%	0.0%	$ 47,693,859	$ -	$ 2,008,559,201
University of North Texas System						
103594	University of North Texas System Administration	9%	0.0%	$ 1,125,000	$ -	$ 12,572,279
003594	University of North Texas	4%	0.7%	$ 37,727,000	$ 7,090,000	955,798,915
113594	University of North Texas at Dallas	0%	0.0%	$ -	$ -	26,488,451
	Subtotal	4%	0.7%	$ 38,852,000	$ 7,090,000	$ 994,859,645
Texas Tech University System						
439154	Texas Tech University System Administration	0%	0.0%	$ -	$ -	$ -
003644	Texas Tech University	1%	0.0%	$ 7,728,000	$ -	910,541,030
003541	Angelo State University	2%	0.0%	$ 4,445,000	$ -	231,922,613
	Subtotal	1%	0.0%	$12,173,000	$0	$1,142,463,643

Table 2
Institutional Deferred Maintenance to Replacement Value Summary – Fall 2009

Texas State University System						
000110	Texas State University System	0%	0.0%	$ -	$ -	$ -
003581	Lamar University	1%	0.0%	$ 4,932,000	$ -	401,813,508
036273	Lamar Institute of Technology	1%	0.0%	$ 580,000	$ 20,000	44,561,380
023582	Lamar State College - Orange	2%	0.0%	$ 882,000	$ -	54,316,437
023485	Lamar State College - Port Arthur	1%	0.0%	$ 667,980	$ -	50,078,905
003606	Sam Houston State University	2%	0.0%	$ 8,120,000	$ -	331,072,213
003615	Texas State University - San Marcos	1%	0.0%	$ 9,148,000	$ -	784,930,727
003625	Sul Ross State University	5%	0.0%	$ 6,225,000	$ -	116,784,866
000020	Sul Ross State University Rio Grande College	0%	0.0%	$ -	$ -	-
	Subtotal	2%	0.0%	$ 30,554,980	$ 20,000	$ 1,783,558,037
The Independent Institutions						
003592	Midwestern State University	4%	0.0%	$ 6,843,500	$ -	$ 155,359,371
003624	Stephen F. Austin State University	3%	0.0%	$ 12,700,000	-	384,982,077
003642	Texas Southern University	5%	0.0%	$ 26,840,108	-	503,781,880
003646	Texas Woman's University	5%	0.0%	$ 18,591,379	-	363,975,404
	Subtotal	5%	0.0%	$64,974,987	$0	$1,408,098,732
Health-Related Institutions						
000030	The University of Texas Southwestern Medical Center at Dallas	0%	0.0%	$ -	-	2,528,301,077
104952	The University of Texas Medical Branch at Galveston	3%	0.0%	$ 50,636,000	-	1,947,715,672
011618	The University of Texas Health Science Center at Houston	2%	0.0%	$ 25,055,726	-	1,399,291,476
000040	The University of Texas Health Science Center at San Antonio	4%	0.0%	$ 37,333,500	-	1,019,942,921
25554	The University of Texas MD Anderson Cancer Center	0%	0.0%	$ -	-	2,941,229,713
000404	The University of Texas Health Center at Tyler	1%	0.0%	$ 2,336,000	-	206,341,021
000089	Texas A&M University Health Science Center	1%	0.0%	$ 2,165,000	-	404,340,402
000130	University of North Texas Health Science Center at Fort Worth	0%	0.0%	$ -	-	356,761,885
000412	Texas Tech University Health Sciences Center	1%	0.0%	$ 10,072,950	-	755,149,266
	Subtotal	1%	0.0%	$127,599,176	$ -	$ 11,559,073,433
Texas State Technical College System						
009642	Texas State Technical College System	0%	0.0%	$ -	$ -	$ 3,862,264
009225	Texas State Technical College - Harlingen	2%	0.5%	$ 3,885,000	750,000	155,678,450
009932	Texas State Technical College - West Texas	2%	0.0%	$ 1,111,500	-	49,426,331
033965	Texas State Technical College - Marshall	0%	0.0%	$ 325,000	-	22,041,155
003634	Texas State Technical College - Waco	1%	2.2%	$ 2,402,850	3,900,000	179,497,131
	Subtotal	2%	1.1%	$ 7,724,350	$ 4,650,000	$ 410,505,331
	Public Universities Total	3%	0.0%	$ 449,791,827	$ 7,715,000	$ 17,820,640,881
	Public Health-Related Institutions Total	1%	0.0%	$ 127,599,176	$ -	$ 11,559,073,433
	Texas State Technical College System Total	2%	1.1%	$ 7,724,350	$ 4,650,000	$ 410,505,331
	All Institutions Total	2%	0.0%	$ 585,115,353	$ 12,365,000	$ 29,790,219,645

Note 1: Total Deferred Maintenance to Replacement Value of $585,115,353 + $12,365,000 = $586,480,353.
The above report does not include Agency or critical-auxiliary deferred maintenance:

Critical-Auxiliary Deferred Maintenance (Texas Southern and Lamar University's)	$1,030,226
Texas A&M University Engineer Experiment Station (Agency)	$180,000
Total Deferred Maintenance as reported on the FY 2010 MP2 report ($586,480,353 + $1,030,226 + $180,000) =	$598,690,579

Table 2
Institutional Deferred Maintenance to Replacement Value Summary – Fall 2009

Notes:

1. The Memorial Student Center, with joint use between TAMU & TAMU System, is currently under major renovation. Due to very limited use during this time, the replacement value has been adjusted accordingly.

2. Overall, there was a seven percent increase in reported critical deferred maintenance from Fall 2008 to Fall 2009. Non-critical deferred maintenance of $585 million was reported at an increased 34 percent to the previous year's $438 million. While the total E&G square footage has increased 5.7% (from 70.3 million SF in Fall 2008 to 74.4 SF in Fall 2009), the E&G replacement value decreased slightly at 0.8 percent (from $30.1 billion in Fall 2008 to $29.8 billion in Fall 2009). This is attributable to the calculation's base rate decreasing three percent this year.

Definitions:

Critical Deferred Maintenance - The physical conditions of a building or facility that place its occupants at risk of harm or the facility at risk of not fulfilling its functions.

Deferred Maintenance - An existing or imminent building maintenance-related deficiency from prior years that needs to be corrected, or scheduled preventive maintenance tasks that were not performed because other tasks funded within the budget were perceived to have higher priority status. The accumulation of facility components in need of repair brought about by age, use, or damage for which remedies are postponed or considered backlogged. This may include those repairs postponed due to insufficient funding.

Education and General (E&G) - Space used for teaching, research, or the preservation of knowledge, including the proportional share used for those activities in any building or facility used jointly with auxiliary enterprise, or space that is permanently unassigned. E&G space is supported by state appropriations.

Replacement Value - The value of an institution's overall campus facilities, as determined annually by the Board. The method of calculation is based upon recently approved Board project costs, with adjustments for room type and institutional location within the state. Replacement values are calculated only for E&G space (exception: health-related institutions are calculated on NASF space). Deferred critical-auxiliary projects are not included in the value. These values are used to measure the validity of construction projects that are submitted to the Board for approval and are not recommended for insurance purposes.

Net Assignable Square Feet (NASF) - The sum of all areas within the interior walls of rooms on all floors of a building assigned to, or available for assignment to, an occupant or use, excluding unassigned areas. NASF includes auxiliary space and E&G space.

Sources: THECB Fall 2009 Certified Facilities Inventory, MP2, and MP4 Reports (submitted Fall 2009)
2010 RSMean Square Foot Costs, 31st Annual Edition, Published December 2009
RSMeans Reed Construction Data QuickCost Estimator (www.rsmeans.com)

Table 3

2010 MP2 Summary, Planned Deferred Maintenance by Type, FY 2010 – 2014

INSTITUTION	Architectural	HVAC	Plumbing Electrical	Safety	Legislative Mandated	Other	Total Cost
The University of Texas System							
The University of Texas Medical Branch at Galveston	14,153,600	7,577,400	12,923,600	8,790,700	4,650,000	2,540,700	50,636,000
The University of Texas - Pan American	705,000	3,556,037	0	1,500,000	0	0	5,761,037
The University of Texas of the Permian Basin	2,120,000	127,000	230,000	5,000	400,000	95,000	2,977,000
The University of Texas Health Science Center at San Antonio	4,411,000	26,316,000	2,640,500	771,000	380,000	2,815,000	37,333,500
The University of Texas Health Science Center at Houston	2,980,227	16,701,755	25,000	1,318,744	0	4,030,000	25,055,726
The University of Texas Health Center at Tyler	186,000	625,000	415,000	0	0	1,110,000	2,336,000
The University of Texas at Tyler	1,300,000	0	232,000	0	0	0	1,532,000
The University of Texas at El Paso	4,392,000	2,363,000	2,746,000	988,000	200,000	0	10,689,000
The University of Texas at Dallas	2,765,000	800,000	3,870,000	0	900,000	200,000	8,535,000
The University of Texas at Brownsville	150,000	175,000	40,000	0	30,000	0	395,000
The University of Texas System	0	0	0	0	0	1,968,000	1,968,000
The University of Texas at Austin	33,876,475	10,072,000	7,651,500	0	3,633,500	25,181,439	80,414,914
The University of Texas at Arlington	18,344,000	13,879,000	4,826,000	2,750,000	10,000	28,000	39,837,000
The University of Texas at San Antonio	2,831,764	6,509,021	2,670,051	529,435	50,000	715,000	13,305,271
Subtotal	**88,215,066**	**88,701,213**	**38,269,651**	**16,652,879**	**10,253,500**	**38,683,139**	**280,775,448**
The University of Houston System							
University of Houston	4,401,859	374,000	938,000	450,000	300,000	37,145,000	43,608,859
University of Houston - Clear Lake	500,000	1,685,000	250,000	0	0	300,000	2,735,000
University of Houston - Downtown	0	250,000	0	0	0	1,100,000	1,350,000
Subtotal	**4,901,859**	**2,309,000**	**1,188,000**	**450,000**	**300,000**	**38,545,000**	**47,693,859**
Texas A&M University System							
Texas A&M University at Galveston	75,000	690,000	1,000,000	10,000	0	500,000	2,275,000
Prairie View A&M University	1,787,500	3,722,500	3,870,000	1,860,000	0	2,158,000	13,398,000
Tarleton State University	981,079	448,540	347,301	0	0	59,011	1,835,931
Texas A&M International University	0	60,000	70,000	0	0	0	130,000
Texas A&M University	29,163,418	5,840,168	2,450,683	146,184	625,000	5,467,344	43,692,797
Texas A&M University - Commerce	1,145,000	1,330,000	1,007,000	0	75,000	260,000	3,817,000
Texas A&M University - Corpus Christi	929,550	2,581,225	627,550	140,650	0	225,000	4,503,975
Texas A&M University Engineer Experiment Station	0	180,000	0	0	0	0	180,000
Texas A&M University System Health Science Center	1,140,000	760,000	265,000	0	0	0	2,165,000
West Texas A&M University	3,482,000	200,000	475,000	25,000	1,125,000	580,000	5,887,000
Texas A&M University - Texarkana	78,500	0	0	0	0	0	78,500
Texas A&M University - Kingsville	5,649,430	6,385,000	1,506,146	1,350,000	225,000	0	15,115,576
Subtotal	**44,431,477**	**22,197,433**	**11,618,680**	**3,531,834**	**2,050,000**	**9,249,355**	**93,078,779**
Texas Tech University System							
Angelo State University	2,460,000	15,000	265,000	1,485,000	220,000	0	4,445,000
Texas Tech University	4,357,000	1,102,000	1,475,000	237,000	557,000	0	7,728,000
Texas Tech University Health Sciences Center	3,996,500	2,312,450	1,028,250	1,265,000	765,500	705,250	10,072,950
Subtotal	**10,813,500**	**3,429,450**	**2,768,250**	**2,987,000**	**1,542,500**	**705,250**	**22,245,950**
The University of North Texas System							
University of North Texas	8,748,000	22,645,000	11,700,000	0	853,000	871,000	44,817,000
University of North Texas System	75,000	1,000,000	0	50,000	0	0	1,125,000
Subtotal	**8,823,000**	**23,645,000**	**11,700,000**	**50,000**	**853,000**	**871,000**	**45,942,000**

Table 3

2010 MP2 Summary, Planned Deferred Maintenance by Type, FY 2010 – 2014

INSTITUTION		Architectural	HVAC	Plumbing Electrical	Safety	Legislative Mandated	Other	Total Cost
The Texas State University System								
Lamar State College - Orange		882,000	0	0	0	0	0	882,000
Texas State University - San Marcos		2,261,000	4,422,000	10,000	2,455,000	0	0	9,148,000
Sul Ross State University		185,000	0	6,000,000	0	0	40,000	6,225,000
Sam Houston State University		2,905,000	1,250,000	2,450,000	25,000	1,490,000	0	8,120,000
Lamar State College - Port Arthur		94,000	445,000	128,980	0	0	0	667,980
Lamar Institute of Technology		246,000	209,000	35,000	0	15,000	95,000	600,000
Lamar University		22,000	685,000	1,420,000	2,150,000	650,000	155,000	5,082,000
	Subtotal	**6,595,000**	**7,011,000**	**10,043,980**	**4,630,000**	**2,155,000**	**290,000**	**30,724,980**
Texas State Technical College System								
Texas State Technical College - Harlingen		1,530,000	880,000	375,000	1,850,000	0	0	4,635,000
Texas State Technical College - Marshall		0	265,000	5,000	0	0	55,000	325,000
Texas State Technical College - Waco		166,650	4,393,700	528,000	192,500	612,000	410,000	6,302,850
Texas State Technical College - West Texas		194,000	907,500	0	10,000	0	0	1,111,500
	Subtotal	**1,890,650**	**6,446,200**	**908,000**	**2,052,500**	**612,000**	**465,000**	**12,374,350**
Independent								
Texas Woman's University		3,890,530	5,400,000	3,610,000	2,890,000	1,160,849	1,640,000	18,591,379
Midwestern State University		2,665,500	1,897,000	2,281,000	0	0	0	6,843,500
Stephen F. Austin State University		1,850,000	5,325,000	3,875,000	1,175,000	475,000	0	12,700,000
Texas Southern University		14,753,442	1,195,102	9,070,706	60,000	0	2,641,084	27,720,334
	Subtotal	**23,159,472**	**13,817,102**	**18,836,706**	**4,125,000**	**1,635,849**	**4,281,084**	**65,855,213**
	Grand Total	**188,830,024**	**167,556,398**	**95,333,267**	**34,479,213**	**19,401,849**	**93,089,828**	**598,690,579**

Table 4
2010 MP4 Summary, Actual Expenditures for FY 2009

INSTITUTION	Architectural	HVAC	Plumbing/ Electrical	Safety	Legislative/ Mandated	Other	Total Cost
The University of Texas System							
The University of Texas Health Science Center at Houston	838,723	2,104,393	33,439	433,406	0	411,193	3,821,154
The University of Texas - Pan American	1,058,971	40,650	0	7,183	0	0	1,106,804
The University of Texas Health Science Center at San Antonio	1,106,301	370,416	544,177	208,210	34,503	62,765	2,326,372
The University of Texas Health Center at Tyler	467,672	324,913	335,057	330,216	4,163	0	1,462,021
The University of Texas at Tyler	53,190	0	0	0	0	0	53,190
The University of Texas at San Antonio	975,514	628,970	508,537	143,899	90,346	357,043	2,704,309
The University of Texas at El Paso	1,106,000	811,000	281,511	0	0	485,000	2,683,511
The University of Texas at Dallas	1,135,000	250,000	1,175,000	0	320,000	0	2,880,000
The University of Texas at Brownsville	0	27,367	0	0	0	0	27,367
The University of Texas at Austin	4,165,936	5,438,497	1,697,256	155,640	2,695,857	3,122,318	17,275,504
The University of Texas at Arlington	1,097,055	547,785	1,210,175	76,710	0	13,726	2,945,451
The University of Texas Medical Branch at Galveston	1,325,484	508,381	1,042,372	1,486,942	1,486,942	0	5,850,121
Subtotal	**13,329,846**	**11,052,372**	**6,827,524**	**2,842,206**	**4,631,811**	**4,452,045**	**43,135,804**
The University of Houston System							
University of Houston	3,045,699	511,353	923,535	0	31,686	745,087	5,257,360
University of Houston - Clear Lake	32,003	383,465	0	0	0	0	415,468
University of Houston - Downtown	0	112,820	0	0	0	101,923	214,743
Subtotal	**3,077,702**	**1,007,638**	**923,535**	**0**	**31,686**	**847,010**	**5,887,571**
Texas A&M University System							
Texas A&M University at Galveston	0	0	82,335	0	0	209,550	291,885
Texas A&M University - Kingsville	9,334,185	1,617,713	3,859,895	1,235,312	314,815	0	16,361,920
Prairie View A&M University	0	649,000	0	0	0	583,000	1,232,000
Tarleton State University	1,024,637	0	0	0	0	40,000	1,064,637
Texas A&M University	4,998,062	2,220,825	232,770	140,851	0	3,753,080	11,345,588
Texas A&M University - Commerce	0	0	243,141	0	0	0	243,141
Texas A&M University System Health Science Center	17,789	239,000	0	0	0	0	256,789
West Texas A&M University	691,211	42,845	409,124	56,700	45,475	0	1,245,355
Texas A&M University - Corpus Christi	444,642	34,517	31,440	9,350	0	0	519,949
Subtotal	**16,510,526**	**4,803,900**	**4,858,705**	**1,442,213**	**360,290**	**4,585,630**	**32,561,264**
Texas Tech University System							
Angelo State University	699,601	0	744,060	0	0	116,705	1,560,366
Texas Tech University	2,831,396	722,000	3,215,000	330,700	494,156	0	7,593,252
Texas Tech University Health Sciences Center	2,401,228	569,191	166,309	672,602	26,690	159,646	3,995,666
Subtotal	**5,932,225**	**1,291,191**	**4,125,369**	**1,003,302**	**520,846**	**276,351**	**13,149,284**
The University of North Texas System							
University of North Texas	920,056	1,275,262	748,738	119,513	0	386,217	3,449,786
Subtotal	**920,056**	**1,275,262**	**748,738**	**119,513**	**0**	**386,217**	**3,449,786**

Table 4
2010 MP4 Summary, Actual Expenditures for FY 2009

INSTITUTION	Architectural	HVAC	Plumbing/ Electrical	Safety	Legislative/ Mandated	Other	Total Cost
The Texas State University System							
Lamar University	0	0	0	20,858	129,088	0	149,946
Texas State University - San Marcos	193,846	1,344,851	0	422,982	0	0	1,961,679
Sam Houston State University	666,984	0	0	0	0	0	666,984
Lamar State College - Port Arthur	23,951	0	5,500	0	5,818	43,586	78,855
Lamar Institute of Technology	16,014	23,332	0	0	0	23,680	63,026
Sul Ross State University	0	60,000	30,000	0	0	0	90,000
Subtotal	**900,795**	**1,428,183**	**35,500**	**443,840**	**134,906**	**67,266**	**3,010,490**
Texas State Technical College System							
Texas State Technical College - Harlingen	41,107	0	0	230,979	0	0	272,086
Texas State Technical College - Marshall	0	25,467	0	1,028	0	0	26,495
Texas State Technical College - Waco	30,002	0	0	0	0	108,101	138,103
Texas State Technical College - West Texas	83,853	0	0	17,491	0	0	101,344
Subtotal	**154,962**	**25,467**	**0**	**249,498**	**0**	**108,101**	**538,028**
Independent							
Texas Woman's University	1,347,593	0	299,000	0	0	0	1,646,593
Midwestern State University	2,006,218	78,174	65,000	0	0	0	2,149,392
Stephen F. Austin State University	0	0	0	27,966	0	0	27,966
Texas Southern University	670,895	1,079,450	2,471,329	173,496	375	4,861,591	9,257,136
Subtotal	**4,024,706**	**1,157,624**	**2,835,329**	**201,462**	**375**	**4,861,591**	**13,081,087**
Grand Total	**44,850,818**	**22,041,637**	**20,354,700**	**6,302,034**	**5,679,914**	**15,584,211**	**114,813,314**

This document is available on the Texas Higher Education Coordinating Board Website:
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College for all Texans

Texas Higher Education Coordinating Board

Report and Recommendations of the Workgroup on Campus Condition Index

FY 2010

DRAFT

July 2010

Division of Planning and Accountability
Finance and Resource Planning

Texas Higher Education Coordinating Board

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Mission of the Coordinating Board

The Texas Higher Education Coordinating Board's mission is to work with the Legislature, Governor, governing boards, higher education institutions and other entities to help Texas meet the goals of the state's higher education plan, *Closing the Gaps by 2015*, and thereby provide the people of Texas the widest access to higher education of the highest quality in the most efficient manner.

Philosophy of the Coordinating Board

The Texas Higher Education Coordinating Board will promote access to quality higher education across the state with the conviction that access without quality is mediocrity and that quality without access is unacceptable. The Board will be open, ethical, responsive, and committed to public service. The Board will approach its work with a sense of purpose and responsibility to the people of Texas and is committed to the best use of public monies. The Coordinating Board will engage in actions that add value to Texas and to higher education. The agency will avoid efforts that do not add value or that are duplicated by other entities.

The Texas Higher Education Coordinating Board does not discriminate on the basis of race, color, national origin, gender, religion, age, or disability in employment or the provision of services.

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Charges to the Workgroup

Replacement Value:

Charge 1: Comment on the validity of replacing the multiplier with 1.67 (or 60 percent efficiency).

Charge 2: Comment on the validity of calculating an Institution-Wide Replacement Value to be used as a measure of accumulated deferred maintenance.

Charge 3: Comment on the validity of removing the Room Adjustment Coefficients (RAC) from the calculation.

Charge 4: Comment on the validity of removing the Location Adjustment Coefficients (LAC) from the calculation.

Charge 5: Comment on the validity of using CPI-U versus RS Means Historical Data for calculating the Time Adjustment Factor (Inflation Factor).

Deferred Maintenance:

Charge 1: Assess the definitions currently used by the THECB and provide recommendations for modification.

Charge 2: Consider the use of an ordinal measure (e.g. facilities condition index) as opposed to a nominal measure (i.e. the currently used 5% cap) and provide recommendations for implementation.

Charge 3: Identify the disincentives to accurate and complete reporting of deferred maintenance. Provide recommendations that meet the statutory requirements in place for the THECB, minimize the real and perceived disincentives to accurate reporting, and that meet the needs of the institution; using existing reporting data if possible.

Charge 4: Consider the integration of energy conservation into the reporting of deferred maintenance.

Charge 5: Discuss and provide recommendations for a target amount of an institutional operating budget that should be spent on the various aspects of deferred maintenance/capital renewal.

The Coordinating Board staff would like to express our sincere gratitude to the open and meaningful comments offered by the workgroup members. The majority of the workgroup dedicated more than 20 hours of their time in meetings and untold hours outside of meetings shaping the recommendations included in this report. We extend a special note of appreciation to the leadership displayed by Russell Wallace of Texas A&M System and Lee Britain of Stephen F. Austin State University in chairing their respective workgroups.

Workgroup Roster

System	Name	Email	Phone
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Executive Summary

The staff recommends reengineering the deferred maintenance standard by implementing a Campus Condition Index (CCI).

- Evaluate deferred maintenance with an ordinal measure (Good, Fair, and Poor).
- Collect maintenance data at the building level.
- Report deferred and planned maintenance for current year and next four years.
- Report funded and unfunded maintenance.
- Revise maintenance definitions to reduce the scope of deferred maintenance and account for all but on-going maintenance.
  - Critical Deferred Maintenance – Any deferred maintenance that if not corrected in the current budget cycle places its building occupants at risk of harm or the facility at risk of not fulfilling its functions.
  - Deferred Maintenance – The accumulation of facility components in need of repair or replacement brought about by age, use, or damage for which remedies are postponed or considered backlogged that is necessary to maintain and extend the life of a facility. This includes repairs postponed due to funding limitations. Deferred maintenance excludes on-going maintenance, planned maintenance performed according to schedule, and facility adaptation items.
  - Facility Adaptation – Includes facility improvements and changes to a facility in response to evolving needs. The changes may occur because of new programs or to correct functional obsolescence. This category is sometimes referred to as Capital Renewal.
  - Planned Maintenance – A systematic approach to repairing or replacing major building subsystems including, but not limited to roofs, HVAC, electrical and plumbing systems, which have predictable life-cycles, to maintain and extend the life of the facility. This category is sometimes referred to as Facility Renewal or Capital Repair. Planned maintenance is normally funded by an institution's capital budget.
  - On-going Maintenance – Routine upkeep to include, but not limited to, the lubrication of moving parts, checking electrical systems, and patching of roofs. Failure to attend to these tasks may result in accelerated deterioration of facilities and increases the likelihood of extensive emergency repairs. On-going maintenance is normally funded by an institution's operating budget.
- Implement an Institution-Wide Campus Condition Index Value (IWCCIV) and simplify the current educational and general Campus Condition Index (CCI) Value calculation.
- Replace the current variable building with a constant of 1.67.

- Remove the Room Adjustment Coefficient (RAC).
- Remove the Location Adjustment Coefficient (LAC).
- Use CPI-U (instead of RS Means) to adjust project costs for inflation.
- Use separate base rates for General Academic Institutions (GAI) and Health-Related Institutions (HRI).
- Exclude projects submitted with the "Other" facility type from the GAI base rate.
- Include an infrastructure allowance of 25 percent in institution-wide value calculation.
  - E&G CCI Value: Sum of (E&G NASF $_{Building}$ * Base Rate $_{sector}$ * Multiplier $_{GSF}$)
  - Institution-Wide CCI Value: Sum of (GSF $_{Building}$ * Base Rate $_{sector}$ * Multiplier $_{Infrastructure}$)
  - The staff analyzed the past five-year's data to conclude the simplified equation materially replicates the more complex version in use.

DRAFT

Objective

The Campus Condition Index (CCI) provides a measure to inform policymakers as to the condition of facilities. The index is used as an evaluation standard on capital project requests, and the CCI value is used in determining the "condition" element of the Higher Education Assistance Fund (HEAF) allocation model[1].

Scope

The index compares the deferred maintenance of a given building to the building's calculated value. The CCI index scope includes Texas public general academic institutions, health-related institutions, and technical colleges' facilities. Excluded are the facilities of Texas public community colleges and independent institutions of higher education, as the State does not fund for these facilities.

Authority

Texas Education Code (TEC) 61.0572 (b)(4)

CONSTRUCTION FUNDS AND DEVELOPMENT OF PHYSICAL PLANTS: ...The board shall...require, and assist the public technical institutes, public senior colleges and universities, medical and dental units, and other agencies of higher education in developing long-range campus master plans for campus development...

Texas Education Code, 61.0582

CAMPUS MASTER PLAN; DEFERRED MAINTENANCE – Requires institutions to report deferred maintenance to the board, allows the Board to set rules defining required data elements, and requires the Board to report the facilities' condition to the State.

Texas Administrative Code (TAC), Section 17.100 (3)

Deferred Maintenance and Replacement Value – requires the Board to calculate a facilities value for comparison to reported deferred maintenance. Establishes the ratio to be used for announcing the facilities' condition and project evaluation.

TAC, Section 17.101 (2)(B)

Campus Deferred Maintenance Plan (MP2) – sets the data elements and parameters of the deferred maintenance plans reported.

TAC, Section 17.101 (2)(C)

Campus Addressed Deferred Maintenance Report (MP4) – sets the data elements and parameters of deferred maintenance expenditures reported.

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[1] The Higher Education Assistance Fund allocation model consists of three elements: Need, Condition, and Complexity. The institution's space projection model deficit is used to allocate the portion of the fund dedicated to the need element based of the portion of an institution's deficit compared to the sum of all HEAF eligible institutions. An institution's Campus Condition Index Value (historically calculated using the replacement value) is used to allocate the condition element funding providing the institution's portion of the total CCIV of all HEAF eligible institutions. The complexity element is allocated by the institution's portion of the total HEAF eligible institutions' formula funding.

Background

Texas is no exception to the significant issues higher education faces in regards to managing Deferred Maintenance. The campus growth spike of the last five decades amplifies the situation as facilities' average age exceeds 30 years and maintenance requirements place more demands on limited resources. The data quantity and usability of the annual Institution Deferred Maintenance Report questionable. However, the more apparent issue in recent years has been the gap between the data needed and received to make informed facilities management decisions.

1992 – Advisory Committee on Deferred Maintenance: Charged with defining the causes of deferred maintenance and advising on actions to reduce the backlog and postpone the need for maintenance and rehabilitation. The committee cited the primary causes of age and underfunding, and the secondary causes as state and federal legislation mandates, poor construction and design, reprioritization of funds, building use changes, and weather and soil conditions. The committee recommended revising definitions, requiring all Capital Project Requests address deferred maintenance, and implementing a Facilities Condition Index (Kaiser , 1993) .

1999 – Texas Performance Review ED 13: Called for the Board to monitor progress in clearing deferred maintenance by tracking Facility Condition Indices and baselines and to conduct facility audits (financed by institutions' appropriations). The Board maintains a database of Institution Deferred Maintenance Report data, but it is insufficient to calculate a Facility Condition Index (Texas Comptroller of Public Accounts , 1999) .

2000 – Campus Building Condition Advisory Committee: Charged with studying building conditions and defining a process, implementable with existing resources, to provide building condition data of sufficient quality to allocate HEAF funds; defining deferred maintenance and building condition more precisely; and developing a facilities replacement value methodology. The committee recommended institutions conduct peer review facility assessments, eliminate the deferred maintenance standard for capital project requests, implement a complex replacement value formula (modified version in use today), and separate the deferred maintenance definition (budgeted and scheduled, critical, and unbudgeted).

2004 – Working Group on Deferred Maintenance/Replacement Values: Reviewed deferred maintenance and replacement cost issues and recommended increasing deferred maintenance report accuracy with peer or contracted audits. The group was to review and validate the current process for calculating deferred maintenance, recommend adjustments, and validate or recommend adjustments to the current methodology for determining replacement value. The Board partially implemented the group's recommendations.

Campus Condition Index Value Recommendations

Charge 1
Comment on the validity of replacing the multiplier with 1.67 (or 60 percent efficiency).

Staff: Recommends implementing the use of a constant 1.67 building gross square foot multiplier to replace the variable multiplier calculation.

Workgroup: Concurs with the staff's recommendation under the condition all of the staff's recommendations are adopted.

Justification: While the variable building multiplier methodology would logically result in a more precise Campus Condition Index Value than a constant value, the calculation is skewed as non-E&G rooms are optionally reported to the Board.

The current methodology calculates the multiplier as the ratio of reported building gross square feet and the sum of the net assignable square feet (NASF) of all the rooms reported for the building. With non-E&G rooms excluded, the denominator of the ratios is smaller than real. In mixed use buildings the denominator can be dramatically small, which results in dramatically higher than real multipliers. The value has been calculated with multipliers as high as 1060 during the last five years. If the ideal building efficiency is 60 percent, which would result in a multiplier of 1.67, then this maximum was more than 600 times greater than ideal and would have suggested the building had an efficiency of 9 hundredths of a percentage point.

The majority of buildings on Texas public university campuses are mixed use; however, the distribution of the current multiplier is well below the recommended multiplier at 1.44 or 70 percent efficient. Using the past five years of data, the staff has calculated the effects of all the recommended changes, however the effects of using a static multiplier overshadow the other recommended changes (Figure 1: Percent Change).

A constant multiplier of 1.67 was determined valid and reasonable as the two facility types included in calculating the base rate have a recommended Board standard efficiency of 60 percent (the inverse of 1.67). Therefore, the building cost is being applied to the grossed-up NASF for space at 60 percent efficiency. While the staff could not calculate an average efficiency from the reported inventories, project application data was available and indicated projects were on average estimated to be built with an efficiency of 38 to 87 percent. The majority and average of all projects submitted since 2007 was about 60 percent (Figure 2: Project Efficiencies).

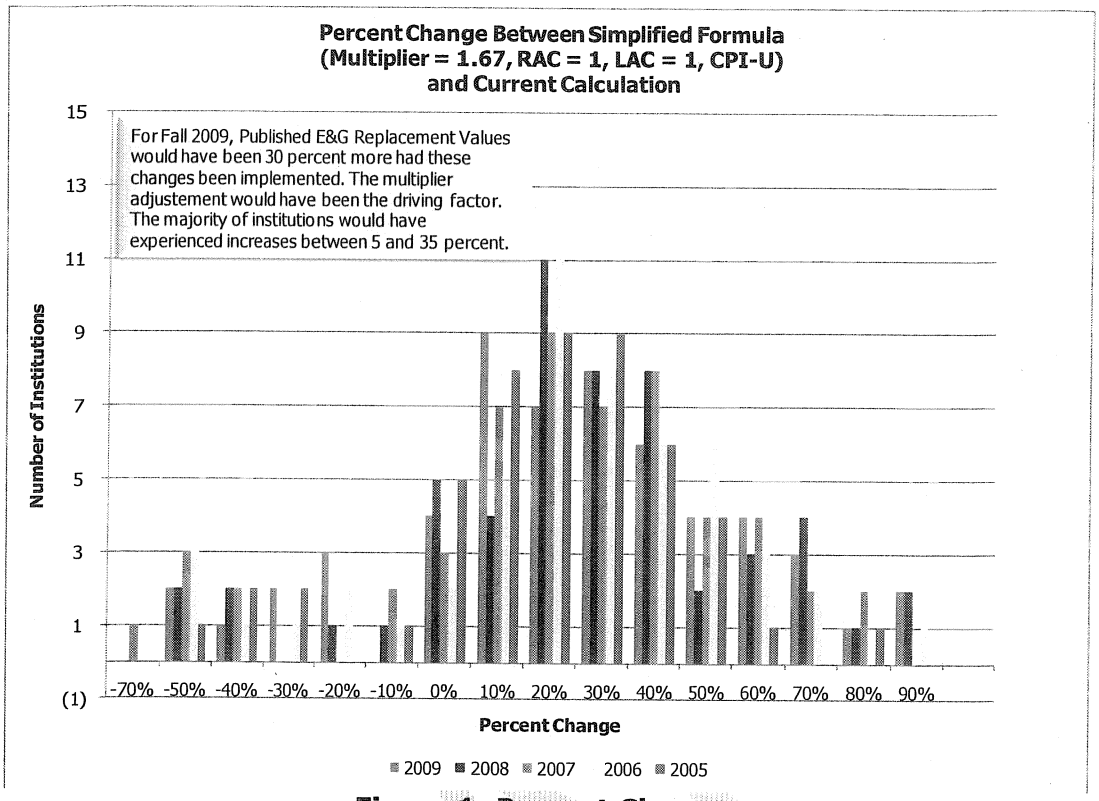

Figure 1: Percent Change

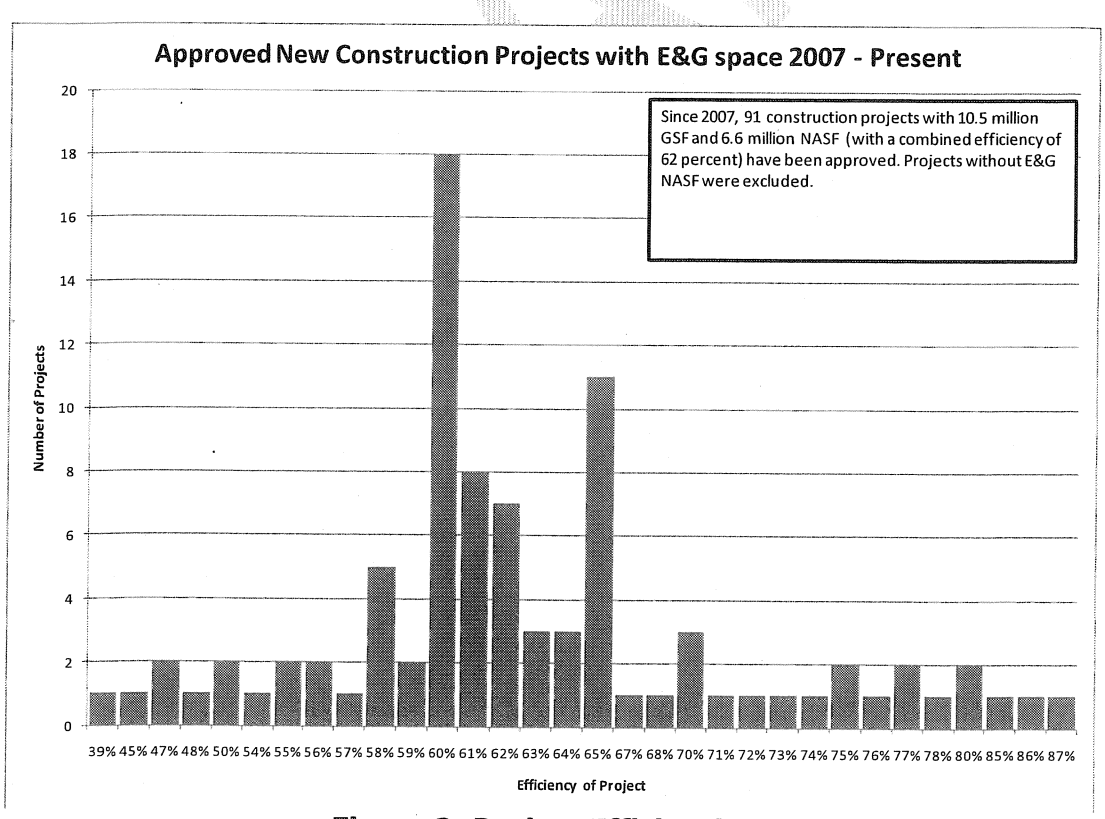

Figure 2: Project Efficiencies

Charge 2
Comment on the validity of calculating an Institution-Wide Replacement Value to be used as a measure of accumulated deferred maintenance.

Staff: Recommends calculating an Institution-Wide Campus Condition Index Value (IWCCIV) using the E&G base rate and reported building gross square feet. An additional 25 percent of the building's gross square feet should be included to account for infrastructure value.

Workgroup: Concurs with the staff's recommendation under the condition all of the staff's recommendations are adopted.

Justification: The staff sees the need for an institution-wide Campus Condition Index Value when reviewing overall institution deferred maintenance. Comparing the deferred maintenance for all space types with the Campus Condition Index Value of only E&G space does not accurately reflect the true condition of the buildings.

The staff recommends the institution-wide calculation include an additional 25 percent of the building's gross square feet to account for infrastructure costs. The 25 percent increase is based on an article published by Facilities Manager in 2004 (Weidner , 2004) .

The workgroup surveyed their institutions and concluded that of the four institutions (two partial) that replied the campuses had a 27 percent infrastructure to non-infrastructure value. The workgroup realized this was not a representative sample, concurred with the use of 25 percent, and agreed this coefficient should be reviewed during the next workgroup session planned in 2013.

The group discussed adding the infrastructure coefficient to the E&G formula; however, it is the staff's intention to use the E&G CCI value at the building level. The reporting tool as recommended directs institutions to report deferred maintenance at the building level with infrastructure projects as a separate entity. Including the infrastructure coefficient in the E&G formula would complicate comparing a building's E&G CCI value to its deferred maintenance.

Charge 3
Comment on the validity of removing the Room Adjustment Coefficients (RAC) from the calculation.

Staff: Recommends removing the RAC from the calculations.

Workgroup: Concurs with the staff's recommendation under the condition all of the staff's recommendations were adopted.

Justification: Initially introduced by the 2000 advisory committee to account for the varying cost of constructing different types of space, the coefficient is based on data provided by RS Means. The coefficient is calculated by matching RS Means building types to the Board published Space Use Codes. The value for each space use code is divided by the value for a

classroom (110). While calculated each year by the staff, these ratios have not changed in the 10 years they have been used.

The staff calculated Campus Condition Index Values for the last five years excluding the RAC and compared to the published values. The results show over 25 institutions' values would increase less than 10 percent by excluding the coefficient. One institution would have lost less than 5 percent and less than 10 institutions would have gained more than 10 percent. Removing the coefficient has no material impact to the values and therefore the complexity of maintaining the coefficient is not warranted.

Charge 4
Comment on the validity of removing the Location Adjustment Coefficients (LAC) from the calculation.

Staff: Recommends removing the LAC from the calculations.

Workgroup: Concurs with the staff's recommendation under the condition all of the staff's recommendations are adopted.

Justification: Initially introduced by the 2000 advisory committee to account for the varying construction cost for similar space types in varying locations across the state, the coefficient is based on data provided by RS Means. The staff matches the institution's main campus zip code to the RS Means cost to construct a two-story classroom building. Each institution's value is divided by the value for Houston to establish the coefficient.

The workgroup stated RS Means does not accurately reflect the construction cost variances experienced at the institutional level as they often hire out of region labor forces due to lack of local expertise and availability.

When values are calculated without the LAC using the last five years' data, the results show the values on average would have been 8 percent higher with the majority of institutions gaining less than 13 percent and no more than 30 percent. Removing the coefficient has no material impact to the values; therefore the complexity of maintaining the coefficient is not warranted.

Charge 5
Comment on the validity of using CPI-U versus RS Means Historical Data for calculating the Time Adjustment Factor (Inflation Factor).

Staff: Recommends using CPI-U to adjust project costs in the base rate calculation.

Workgroup: Concurs with the staff's recommendation under the condition all of the staff's recommendations are adopted.

Justification: As shown in Figure 3: CPI-U vs RS Means, CPI-U does not significantly vary from the index calculated on RS Means historical data in the short-term. In the last five years, the base rate has been calculated on projects no older than three years. Additionally, the CPI-U is readily available to all institutions unlike the RS Means data, which is purchased annually by the Board.

Workgroup members stated RS Means does not accurately account for the inflation experienced by the institutions. Figure 4: UT System Cost Escalation depicts the change in cost experienced by The University of Texas System.

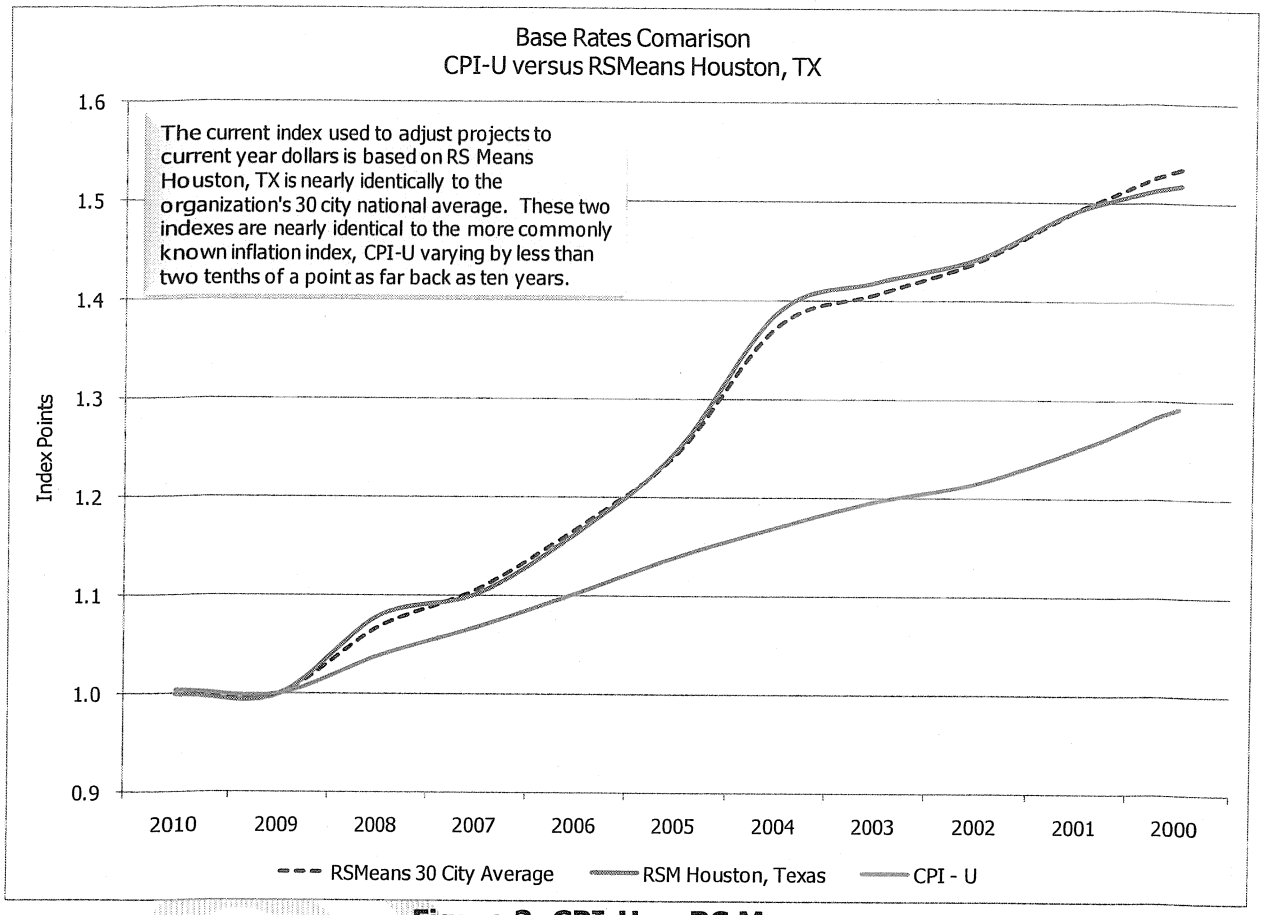

Figure 3: CPI-U vs RS Means

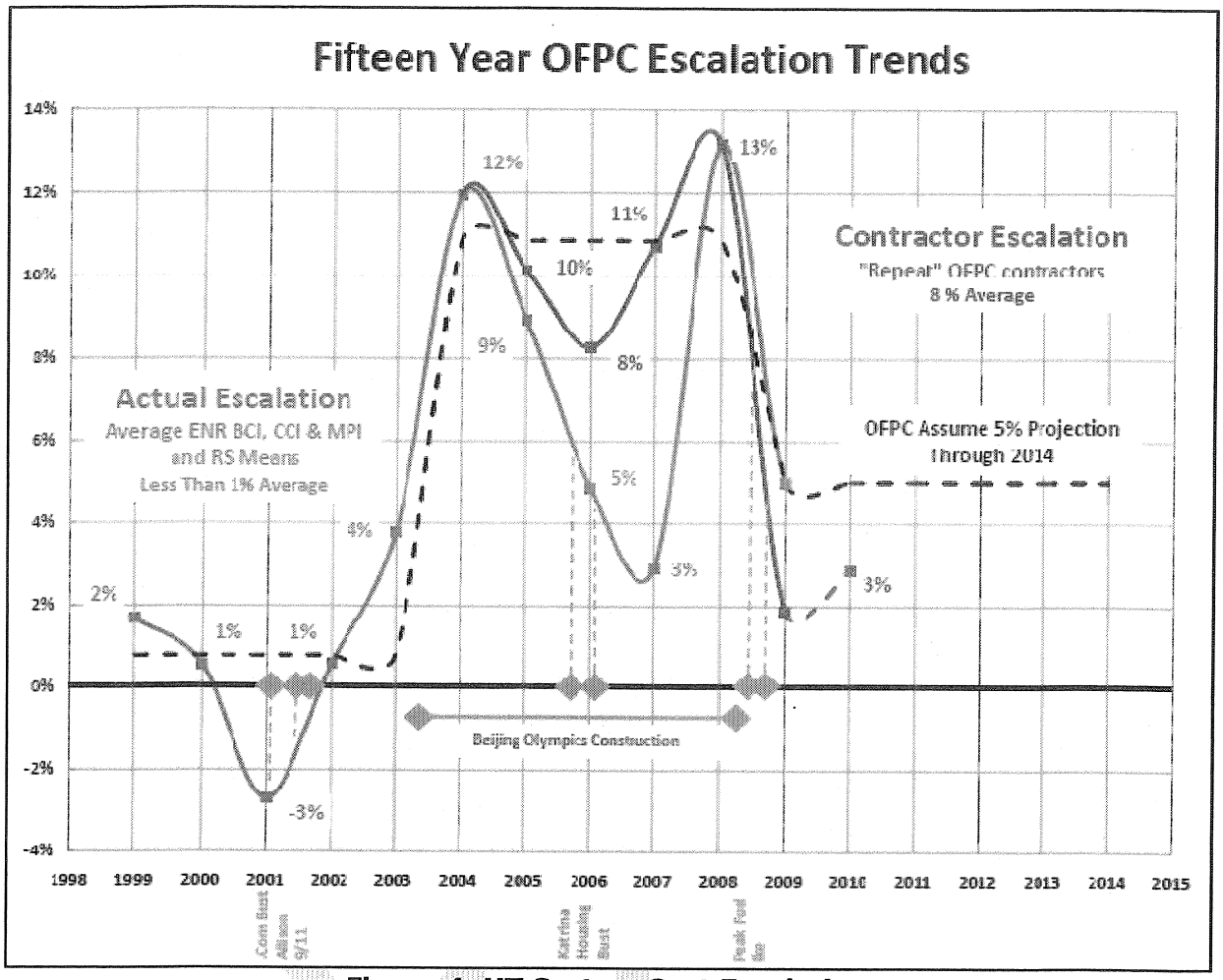

Figure 4: UT System Cost Escalation

Base Rate Review: The workgroup added a review of the existing base rate calculation to the set of charges.

Workgroup: Recommends applying both a General Academic Institution (GAI) and a Health-Related Institution (HRI) base rate to the staff recommended formulas.

Base Rate $_{GAI}$ - the latest 10 approved GAI projects with more than 50,000 GSF and some E&G NASF space, General Classroom and General Office facility types, and project costs CPI-U adjusted by project start year (no adjustment for location).

Base Rate $_{HRI}$ - the latest 10 approved HRI projects with more than 50,000 GSF and some E&G space, all facility types (Classroom, General; Office, General; Other; Medical/Healthcare, RHAC; Laboratory, Medical/Healthcare; Laboratory, General; Healthcare Facility, Hospital; Healthcare Facility, Clinic; Classroom, Medical/Healthcare), and project costs CPI-U adjusted by project start year (no adjustment for location).

Staff: Concurs with the workgroup's recommendations.

Justification: The group reviewed and determined a base rate that includes all Auxiliary facility types did not add enough value to warrant its use and concluded the E&G base rate adequately approximated the value of non-E&G space.

Some members preferred a minimum of two years or 15 projects included in the base rate. However, the majority concluded the latest 10 projects made the base rate more meaningful to the current construction environment. The group reviewed the inclusion of projects with the facility type "other" and deemed that it was falsely skewing the GAI base rate.

The group determined the average size of buildings in Texas public institutions to be 35,000 gross square feet. Base rates were calculated using this threshold in place of the 50,000 gross square feet in use today. The resulting base rates did not accurately reflect the value of the space over the last five years, so the group recommends maintaining the 50,000 gross square foot threshold and only including projects with educational and general space in the base rate calculation.

Note: A building's Campus Condition Index Value is set to zero if the Owner Code does not equal 1, 2, or 3; or the Building Type does not equal 1, 2, 3, 4, 5, 6, 7, or H in the building inventory. This is consistent with the calculations of the last 10 years with the exception of rooms and buildings under renovation. Buildings under renovation at the time of inventory have historically been excluded; however the workgroup proposed including the buildings in the institution-wide valuation and the staff concurred. The E&G Campus Condition Index Value calculation will continue to exclude buildings and rooms under renovation as there is no way to determine the amount of E&G NASF space planned for the rooms at the completion of the renovations with the data that is collected at this time.

DRAFT

Deferred Maintenance

Charge 1
Assess the definitions currently used by the THECB and provide recommendations for modification.

Staff: Recommends the modified definitions listed in the glossary of terms in this document to replace the existing terms.

Workgroup: Concurs with the staff's recommendation under the condition all of the staff's recommendations are adopted.

Justification: The reengineered definitions, used to define the calculation parameters, refine the ratio used to quantify the condition of the institutions' facilities. The proposal reduces the scope of deferred maintenance to items in need of repair and replacement and clarifies the terms used to define the types of maintenance that are not deferred maintenance. The objective of these changes is to reduce confusion and better inform the Board.

Figure 5: Maintenance Flow Chart shows a decision chart mapping how different maintenance items flow into the various types of maintenance defined.

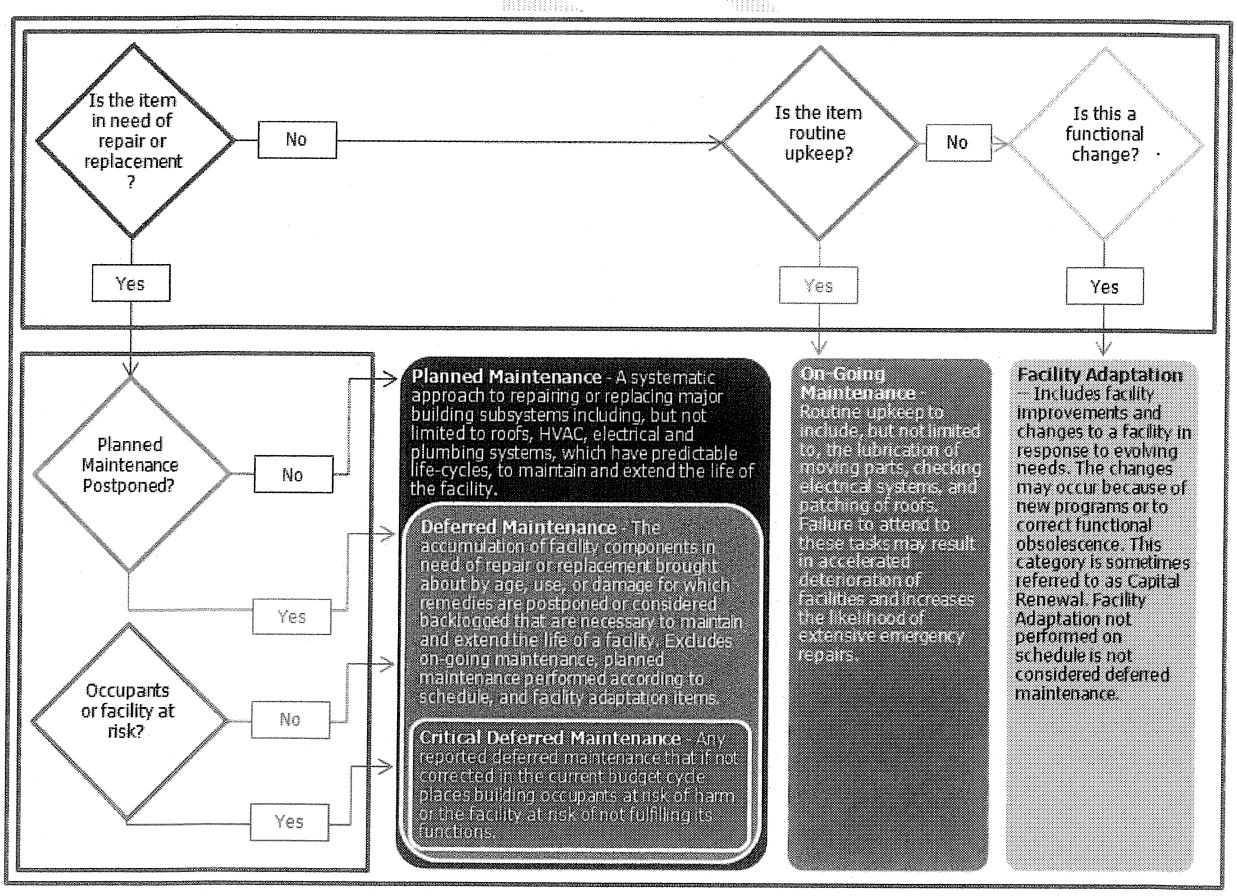

Figure 5: Maintenance Flow Chart

Charge 2
Consider the use of an ordinal measure (e.g. facilities condition index) as opposed to a nominal measure (i.e. the currently used 5% cap) and provide recommendations for implementation.

Staff: Recommends implementing an ordinal measure to categorize institutions with a Campus Condition Index (CCI) up to 5 percent as "Good", between 5 and 10 percent as "Fair", and 10 percent or greater as "Poor". Additionally, institutions with a Fair or Poor CCI would submit a plan of action on how to address deferred maintenance upon the publication of the Board's annual report. Institutions with a rating of good would be considered as meeting Board standard.

The measure is the sum of the institution's deferred maintenance reported on the "Institution Maintenance Report" divided by the Campus Condition Index value. The E&G standard is calculated by multiplying the deferred maintenance for a building by the E&G gross square feet and dividing by the building gross square feet. This product is divided by the E&G CCI value. E&G NASF is converted to E&G gross using the multiplier (1.67).

Workgroup: Concurs with the staff's recommendation under the condition all of the staff's recommendations are adopted with the alteration that only institutions with a Poor CCI submit a plan of action on how to address deferred maintenance upon the publication of the Board's annual report and be required to present at committee and Board meetings.

Justification: The staff and the group agree that the proposed system varies from the nationally accepted definition of a facilities condition index (FCI); however, the system is similar enough in measure to afford the application of the qualifying range suggested in much of the literature around FCI. This range is suggested to be set at 5 and 10 percent of the estimated facilities' value (State Council of Higher Education , 2001) . The application of an ordinal measure makes ready ease to not only a positive result, but also the severity of a negative one.

Charge 3
Identify the disincentives to accurate and complete reporting of deferred maintenance. Provide recommendations that meet the statutory requirements in place for the THECB, minimize the real and perceived disincentives to accurate reporting, and that meet the needs of the institution; using existing reporting data if possible.

Staff: Recommends reducing the disincentives associated with accurate and complete reporting by requesting institutions report all but on-going maintenance annually to the Board. Institutions would report maintenance by building instead of by project. The report would include a summarization of the building maintenance by type. Additionally, institutions would report their priority (top five) maintenance projects (Figure 6: Institution Maintenance Report).

Workgroup: Concurs with the staff's recommendation under the condition all of the staff's recommendations are adopted with the exception that the proposed report include an emergency item in the list of summary maintenance types and that the unbudgeted-current year category be replaced with a residual backlog category and include only critical and deferred maintenance.

Justification: The group reviewed a variety of disincentives associated with fully reporting deferred maintenance. The main issues hinged on the fact the number is used to control a standard applied to capital project requests. The group accepts the continuation of this use of the data and sees the alteration of the scope of the definitions and thresholds as an alternative resolution to the disincentives of continuing the use of the standard. As seen in

		Recommended Campus Condition Index Values		Percent of Campus Condition Index Value		Fall 2
FICE	Institution	Educational and General	Institution-Wide	5%	10%	Published Educational and General
003655	UT-System	96,882,240	214,185,358	4,844,112	9,688,224	79,938,292
003656	UT-Arlington	1,027,852,452	2,159,255,437	51,392,623	102,785,245	909,833,518
003658	UT-Austin	4,185,220,583	9,577,146,719	209,261,029	418,522,058	2,613,674,435
009741	UT-Dallas	622,144,474	1,256,300,966	31,107,224	62,214,447	333,791,963
003661	UT-El Paso	822,841,293	1,970,809,418	41,142,065	82,284,129	729,415,486
003599	UT-Pan American	579,663,146	1,017,848,849	28,983,157	57,966,315	436,758,382
030646	UT-Brownsville	117,440,243	164,163,096	5,872,012	11,744,024	106,791,667
009930	UT-Permian Basin	132,960,918	349,524,168	6,648,046	13,296,092	111,817,756
010115	UT-San Antonio	826,877,007	1,928,391,186	41,343,850	82,687,701	587,896,534
011163	UT-Tyler	206,469,007	487,578,797	10,323,450	20,646,901	136,420,529
000030	UT-SMC-Dallas	1,661,289,569	4,378,676,831	83,064,478	166,128,957	2,528,301,380
104952	UT-MB-Galveston	1,133,356,445	3,312,325,444	56,667,822	113,335,645	1,947,715,673
011618	UT-HSC-Houston	1,181,274,555	2,733,627,544	59,063,728	118,127,455	1,399,291,476
000040	UT-HSC-San Antonio	1,105,122,194	1,904,532,225	55,256,110	110,512,219	1,019,942,922
025554	UT-MD-Anderson	1,348,851,124	5,897,519,025	67,442,556	134,885,112	2,941,229,712
000404	UT-HSC-Tyler	97,072,807	382,655,906	4,853,640	9,707,281	206,339,200
003629	TAMU-System	60,262,600	136,427,846	3,013,130	6,026,260	86,427,275
003632	TAMU (Includes Agencies)	4,038,850,144	9,740,389,835	201,942,507	403,885,014	2,458,909,522
010298	TAMU-Galveston	104,725,989	211,498,370	5,236,299	10,472,599	95,615,110
003630	Prairie View	458,571,034	1,051,303,612	22,928,552	45,857,103	300,511,520
003631	Tarleton	380,163,941	767,641,434	19,008,197	38,016,394	266,982,246
011161	TAMU-Corpus Christi	301,562,433	508,321,152	15,078,122	30,156,243	182,085,113
003639	TAMU-Kingsville	421,357,508	895,256,520	21,067,875	42,135,751	346,356,279
009651	TAM-International	193,852,963	373,384,232	9,692,648	19,385,296	150,755,632
003665	West Texas	413,283,386	1,071,465,410	20,664,169	41,328,339	322,128,156
003565	TAMU-Commerce	355,431,034	893,508,733	17,771,552	35,543,103	232,689,501
029269	TAMU-Texarkana	44,616,983	69,263,643	2,230,849	4,461,698	38,669,969
103631	TAMU-Central Texas	-	-	-	-	-
103639	TAMU-San Antonio	-	-	-	-	-
000089	TAMU-SHSC	402,374,051	739,099,256	20,118,703	40,237,405	404,340,402
011721	UH-System	55,283,038	119,274,985	2,764,152	5,528,304	70,787,467
003652	UH	1,529,097,481	3,133,681,764	76,454,874	152,909,748	1,437,428,137
011711	UH-Clear Lake	255,606,653	343,137,167	12,780,333	25,560,665	214,665,417
012826	UH-Downtown	272,992,990	606,959,496	13,649,649	27,299,299	235,610,433
013231	UH-Victoria	48,001,982	86,846,790	2,400,099	4,800,198	50,055,903
439154	TTU-System	-	3,945,516	-	-	-
003644	Texas Tech	1,458,988,386	3,552,471,759	72,949,419	145,898,839	910,541,900
003541	Angelo	295,143,801	788,591,286	14,757,190	29,514,380	231,921,767
000412	Texas Tech-UHSC	842,529,490	1,322,931,788	42,126,474	84,252,949	755,149,266
103594	UNT-System	17,777,377	71,201,891	888,869	1,777,738	12,572,337
003594	North Texas	1,133,642,192	2,705,651,782	56,682,110	113,364,219	955,800,215
113594	North Texas-Dallas	28,171,825	35,214,781	1,408,591	2,817,183	26,488,451
000130	North Texas HSC-Fort Worth	297,745,134	704,247,600	14,887,257	29,774,513	356,761,884

Figure 7: Methodology Comparison, the revised methodology results in a slightly higher denominator for most institutions. The comparison uses the fall 2009 reported deferred maintenance values, which do not include items below $10,000, but does proportion the deferred maintenance by the amount of gross E&G to overall gross square feet in the building. The revised deferred maintenance definition will exclude some items reported in the fall of

2009. The group, while not able to provide revised numbers, anticipated the E&G deferred maintenance numbers would increase. Note that only two institutions reported above 5 percent over the proposed E&G Campus Condition Index Value.

Institutions do not currently report deferred maintenance projects valued below $10,000. Nor are they required to report planned maintenance or facility adaptation projects. The absence of these values results in an erroneous representation of the institutions' facility condition. Including the additional elements to the reported numbers breaks the ability to trend with past reports essentially creating a clean slate incenting full disclosure.

While the workgroup did not find value in limiting the unbudgeted or unfunded planned maintenance and facilities adaptation maintenance items to the current year and would prefer to leave them off the report or report them in the projected category, the staff sees a value in maintaining a category for these items. In the event institutions' funding is reduced to a point they simply cannot fund items in the current year and their completion is imperative, there would be a means to communicate this type of activity to the Board. Referring to the critical and deferred maintenance columns of the "Unbudgeted" category as "Residual Backlog" could be confusing, as the schema does not employ the term "Backlog". The staff considers all deferred maintenance to be current year. While the portion of the deferred maintenance scheduled in the projected category is not to be reported in the unbudgeted category, all uncompleted deferred maintenance is to be reported in one of the three future looking categories in the report (Budgeted, Unbudgeted, or Projected).

Texas Higher Education Coordinating Board – Institution Maintenance Report

Institution Name	Mountain View University
FICE	000000
Report Year	2020

Section 1: Building Summary – Institution Planned Maintenance and Facility Adaptation itemized by building. Budgeted and Unbudgeted Planned Maintenance should total to be the complete known maintenance need (excluding on-going maintenance and including deferred and critical deferred). All buildings on a campus both Educational and General and Auxiliary should be reported. Maintenance on leased buildings where the institution is not financially responsible for maintaining the building's condition should not be included. Projects scopes including multiple structures should be prorated out to each structure to be improved. Infrastructure projects should be combined into a single reported item.

Building		Expenditures – Previous Year				Budgeted – Current Year				Unbudgeted – Current Year				Projected – Years 2 Through 5			
		Planned Maintenance	Deferred Maintenance	Critical Deferred	Facility Adaptation	Planned Maintenance	Deferred Maintenance	Critical Deferred	Facility Adaptation	Planned Maintenance	Deferred Maintenance	Critical Deferred	Facility Adaptation	Planned Maintenance	Deferred Maintenance	Critical Deferred	Facility Adaptation
Number	Name																
	Total	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -

Section 2: Maintenance Type – Categorize the totals reported in section 1 of this report by maintenance type. The totals at the bottom of this section must match section 1.

Maintenance Type	Expenditures – Previous Year				Budgeted – Current Year				Unbudgeted – Current Year				Projected – Years 2 Through 5			
	Planned Maintenance	Deferred Maintenance	Critical Deferred	Facility Adaptation	Planned Maintenance	Deferred Maintenance	Critical Deferred	Facility Adaptation	Planned Maintenance	Deferred Maintenance	Critical Deferred	Facility Adaptation	Planned Maintenance	Deferred Maintenance	Critical Deferred	Facility Adaptation
Architectural																
HVAC																
Plumbing and Electrical																
Safety																
Legal and Mandatory																
Other																
Total	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -

Section 3: Top Five Projects – Of the amounts listed in section 1 of this report, list the institution's top five projects. The totals on this section will not match, but cannot exceed the totals in sections 1.

Project		Budgeted – Current Year				Unbudgeted – Current Year				Projected – Years 2 Through 5			
		Planned Maintenance	Deferred Maintenance	Critical Deferred	Facility Adaptation	Planned Maintenance	Deferred Maintenance	Critical Deferred	Facility Adaptation	Planned Maintenance	Deferred Maintenance	Critical Deferred	Facility Adaptation
Priority	Name: Description												
1													
2													
3													
4													
5													
	Total	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -

Figure 6: Institution Maintenance Report

FICE	Institution	Recommended Campus Condition Index Values		Percent of Campus Condition Index Value		Fall 2
		Educational and General	Institution-Wide	5%	10%	Published Educational and General
003655	UT-System	96,882,240	214,185,358	4,844,112	9,688,224	79,938,292
003656	UT-Arlington	1,027,852,452	2,159,255,437	51,392,623	102,785,245	909,833,518
003658	UT-Austin	4,185,220,583	9,577,146,719	209,261,029	418,522,058	2,613,674,435
009741	UT-Dallas	622,144,474	1,256,300,966	31,107,224	62,214,447	333,791,963
003661	UT-El Paso	822,841,293	1,970,809,418	41,142,065	82,284,129	729,415,486
003599	UT-Pan American	579,663,146	1,017,848,849	28,983,157	57,966,315	436,758,382
030646	UT-Brownsville	117,440,243	164,163,096	5,872,012	11,744,024	106,791,667
009930	UT-Permian Basin	132,960,918	349,524,168	6,648,046	13,296,092	111,817,756
010115	UT-San Antonio	826,877,007	1,928,391,186	41,343,850	82,687,701	587,896,534
011163	UT-Tyler	206,469,007	487,578,797	10,323,450	20,646,901	136,420,529
000030	UT-SMC-Dallas	1,661,289,569	4,378,676,831	83,064,478	166,128,957	2,528,301,380
104952	UT-MB-Galveston	1,133,356,445	3,312,325,444	56,667,822	113,335,645	1,947,715,673
011618	UT-HSC-Houston	1,181,274,555	2,733,627,544	59,063,728	118,127,455	1,399,291,476
000040	UT-HSC-San Antonio	1,105,122,194	1,904,532,225	55,256,110	110,512,219	1,019,942,922
025554	UT-MD-Anderson	1,348,851,124	5,897,519,025	67,442,556	134,885,112	2,941,229,712
000404	UT-HSC-Tyler	97,072,807	382,655,906	4,853,640	9,707,281	206,339,200
003629	TAMU-System	60,262,600	136,427,846	3,013,130	6,026,260	86,427,275
003632	TAMU (Includes Agencies)	4,038,850,144	9,740,389,835	201,942,507	403,885,014	2,458,909,522
010298	TAMU-Galveston	104,725,989	211,498,370	5,236,299	10,472,599	95,615,110
003630	Prairie View	458,571,034	1,051,303,612	22,928,552	45,857,103	300,511,520
003631	Tarleton	380,163,941	767,641,434	19,008,197	38,016,394	266,982,246
011161	TAMU-Corpus Christi	301,562,433	508,321,152	15,078,122	30,156,243	182,085,113
003639	TAMU-Kingsville	421,357,508	895,256,520	21,067,875	42,135,751	346,356,279
009651	TAM-International	193,852,963	373,384,232	9,692,648	19,385,296	150,755,632
003665	West Texas	413,283,386	1,071,465,410	20,664,169	41,328,339	322,128,156
003565	TAMU-Commerce	355,431,034	893,508,733	17,771,552	35,543,103	232,689,501
029269	TAMU-Texarkana	44,616,983	69,263,643	2,230,849	4,461,698	38,669,969
103631	TAMU-Central Texas	-	-	-	-	-
103639	TAMU-San Antonio	-	-	-	-	-
000089	TAMU-SHSC	402,374,051	739,099,256	20,118,703	40,237,405	404,340,402
011721	UH-System	55,283,038	119,274,985	2,764,152	5,528,304	70,787,467
003652	UH	1,529,097,481	3,133,681,764	76,454,874	152,909,748	1,437,428,137
011711	UH-Clear Lake	255,606,653	343,137,167	12,780,333	25,560,665	214,665,417
012826	UH-Downtown	272,992,990	606,959,496	13,649,649	27,299,299	235,610,433
013231	UH-Victoria	48,001,982	86,846,790	2,400,099	4,800,198	50,055,903
439154	TTU-System	-	3,945,516	-	-	-
003644	Texas Tech	1,458,988,386	3,552,471,759	72,949,419	145,898,839	910,541,900
003541	Angelo	295,143,801	788,591,286	14,757,190	29,514,380	231,921,767
000412	Texas Tech-UHSC	842,529,490	1,322,931,788	42,126,474	84,252,949	755,149,266
103594	UNT-System	17,777,377	71,201,891	888,869	1,777,738	12,572,337
003594	North Texas	1,133,642,192	2,705,651,782	56,682,110	113,364,219	955,800,215
113594	North Texas-Dallas	28,171,825	35,214,781	1,408,591	2,817,183	26,488,451
000130	North Texas HSC-Fort Worth	297,745,134	704,247,600	14,887,257	29,774,513	356,761,884

Figure 7: Methodology Comparison

Charge 4
Consider the integration of energy conservation into the reporting of deferred maintenance.

Staff: Recommends not integrating energy conservation into the reporting of deferred maintenance.

Workgroup: Concurred with the staff's recommendation.

Justification: The workgroup and staff agreed that energy conservation projects do not functionally fit into deferred maintenance reporting. While many of these projects effect the cost of clearing deferred maintenance items depending on the level of energy conservation deployed in the solutions, the logical reporting vehicle is the capital expenditures plan (though most would not meet the threshold) or the facility adaptation columns of the proposed reporting tool.

Charge 5
Discuss and provide recommendations for a target amount of an institutional operating budget that should be spent on the various aspects of deferred maintenance/capital renewal

Staff: Recommends a target of 3 percent of an institution's annual operating budget be spent on the various aspects of deferred maintenance and facilities adaptation.

Workgroup: Recommends the collection of more data prior to declaring the appropriate level of an operating budget to be declared. In three years, enough data should have been collected to make an informed decision on this matter.

Justification: Well-founded authors on this subject support the dedication of 1.5 to 3.0 percent of an operating budget to deferred maintenance and facilities adaptation (Bareither , 1977) and (Kaiser , 1996) .

The workgroup recommended the implemented solution be reviewed by a similar workgroup on its third anniversary.

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Glossary of Terms

Architectural – items performed to correct architectural structure deficiencies in the building to include the correction to defects in the foundation, walls, ceiling, roof, etc.

Base Rate $_{sector}$ – Calculated annually, the average cost per square foot of the 10 latest THECB approved new construction projects with more than 50,000 gross square feet and some Educational and General Net Assignable Square Feet. Project costs are CPI-U inflation adjusted. Costs in scope include all Professional Services (Architectural/Design Service, Project Management (System), Project Management (Contract), Other Professional Fees, Administrative Costs, and Property Acquisition Fees).

> The General Academic Institution sector rate is based on projects with office, general; and classroom, general facility types only.
>
> The Health-Related Institution sector rate is based on projects with facility types classroom, general; office, general; other; Medical/ Healthcare, RHAC; Laboratory, Medical/Healthcare; Laboratory, General; Healthcare Facility, Hospital; Healthcare Facility, Clinic; Classroom, Medical/Healthcare.

Budgeted – Items planned and funded in the next five years.

Critical Deferred Maintenance – Any deferred maintenance that if not corrected in the current budget cycle places its building occupants at risk of harm or the facility at risk of not fulfilling its functions.

Deferred Maintenance – The accumulation of facility components in need of repair or replacement brought about by age, use, or damage for which remedies are postponed or considered backlogged that is necessary to maintain and extend the life of a facility. This includes repairs postponed due to funding limitations. Deferred maintenance excludes on-going maintenance, planned maintenance performed according to schedule, and facility adaptation items.

Campus Condition Index (CCI) – A comparative indicator of the relative condition of facilities calculated by dividing the deferred maintenance backlog by the current Campus Condition Index value. This may be calculated for an individual building, group of buildings, or an entire campus.

Campus Condition Index Value – The Institution-Wide relative value of an institution's facilities, as determined annually by the Board. The method of calculation is based on approved Board project costs. Campus Condition Index Values are calculated for Educational and General (EGCCIV) space and Institution-Wide (IWCCIV) space. A 25 percent add-on is included to account for the cost of necessary infrastructure. These are NOT to be used for insurance purposes.

Educational and General Net Assignable Square Feet (E&G NASF) – Institution report NASF not meeting the following criteria:

> Building Type is 6, 7, 8, 9, or R

Space Use Code is 050, 060, 070, 523, 630, 635, 660, 665, 670, 675, 750, 755, M10, U10, W10, WWW, XXX, YYY, ZZZ, or is greater than 899

Space Use Code is between 800 and 899 without a Functional Category of 11, 12, 15, 21, or 22

Functional Category is less than 10, between 29 and 41, greater than 89, or is 42, 52, 65, or 66

Functional Category is 55, 56, or 57 with a CIP Code not between 740000 and 750000

CIP Code is between 850001 and 859999, 817500, or between 720000 and 739999.

Educational and General Campus Condition Index Value (EGCCIV) Formula –
Sum of (E&G NASF $_{Building}$ * Base Rate $_{sector}$ * Multiplier $_{GSF}$)

Expenditures – Items completed in the prior fiscal year. Payments may or may not have been booked, but items are complete.

Facility Adaptation – Includes facility improvements and changes to a facility in response to evolving needs. The changes may occur because of new programs or to correct functional obsolescence. This category is sometimes referred to as Capital Renewal.

Gross Square Feet - Building (GSF $_{building}$) – The GSF in the Facilities Building Inventory.

Infrastructure - The basic physical structures needed for the operation of a campus to include roads, water supply, sewers, power grids, telecommunications, and so forth. Systems within five feet of a building are considered building systems and are not infrastructure.

Inflation Factor (IF) – CPI-U index based on current year and inflation adjusting past year projects to current year from estimated project start year. No inflation forecast is used. It is assumed inflation adjustments are included in the estimates of approved projects with future year start dates.

Institution-Wide Campus Condition Index Value Formula (IWCCIV) –
Sum of (GSF $_{Building}$ * Base Rate $_{sector}$ * Multiplier $_{Infrastructure}$)

HVAC – items performed to correct deficiencies in the heating, ventilation, and air conditioning systems in the building.

Legal and Mandatory Requirements (L&M) – item performed to comply with legislative and mandated requirements (Americans Disabilities Act, Texas Water Commission, asbestos abatement, PCB removal, underground storage tank removal, CFC reduction, hazardous waste, recycling, historical buildings, etc

Multiplier $_{GSF}$ – The Gross Square Foot Multiplier converts E&G NASF to GSF. A standard multiplier of 1.67 (60 percent efficiency) is assumed for all buildings. The product of this multiplier and the building's E&G NASF will exceed the reported gross for buildings with efficiencies higher than 60 percent. The building's gross is substituted for the product in these

instances.

Multiplier $_{\text{Infrastructure}}$ – The Infrastructure Multiplier accounts for the cost of the surrounding infrastructure required to support campus facilities. A standard 25 percent is used for all institutions.

On-going Maintenance – Routine upkeep to include, but not limited to, the lubrication of moving parts, checking electrical systems, and patching of roofs. Failure to attend to these tasks may result in accelerated deterioration of facilities and increases the likelihood of extensive emergency repairs. On-going maintenance is normally funded by an institution's operating budget.

Other – maintenance items not fitting the Architectural, HVAC, Plumbing and Electrical, Safety, or Legal and Mandatory Requirements types.

Planned Maintenance – A systematic approach to repairing or replacing major building subsystems including, but not limited to roofs, HVAC, electrical and plumbing systems, which have predictable life-cycles, to maintain and extend the life of the facility. This category is sometimes referred to as Facility Renewal or Capital Repair. Planned maintenance is normally funded by an institution's capital budget.

Plumbing and Electrical – items performed to correct deficiencies in the plumbing and electrical systems in the building.

Safety – items performed to ensure the safety of the occupants of a building.

Unbudgeted – Items not scheduled or items not funded.

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Appendix A: Campus Condition Index Value Calculation Examples

Base Rate Calculation

Calculate separate base rates for General Academic Institutions (GAI) and Health-Related Institutions (HRI) sectors using the latest 10 projects approved by the Board for institutions in the given sector. Data on the projects is collected from the ICPS database using the following parameters:

Note: Technical State Colleges are considered GAI's for the purposes of these calculations.

Capital Project Sampling Date:
- Immediately following the October Board Meeting

Project Status:
- Approved-Online and Approved-Not-Online

Gross Square Feet (GSF):
- 50,000 or More

Educational and General Gross Net Assignable Square Feet (E&G NASF):
- Greater Than Zero

Facility Type:
- GAI-Classroom, General and Office, General
- HRI-Classroom, General; Office, General; Other; Medical/Healthcare, RHAC; Laboratory, Medical/Healthcare; Laboratory, General; Healthcare Facility, Hospital; Healthcare Facility, Clinic; Classroom, Medical/Healthcare

Construction Type:
- New Construction

Project Costs:
- Total Building Costs
  - Building Costs (New Construction)
  - Fixed Equipment
- Professional Services
  - Architectural/Design Service
  - Project Management (System),
  - Project Management (Contract),
  - Other Professional Fees,
  - Administrative Costs
  - Property Acquisition Fees

Selection Criteria:
- Latest 10 projects sorted by project start date (not approval date)

The green columns in table 1 are an example of a list of projects that would result from the query. To establish the base rate, average the adjusted cost per GSF of the 10 projects for both the GAI and HRI projects.

Cost per GSF:
- For a given project, project cost divided by gross square feet
- [Project Cost/ Gross Square Feet]

Inflation Factor:

- CPI-U Annual Average indexed by project start year
- For a given project, current-year CPI-U value divided by the CPI-U value for the year the institution estimated the project would start
- Projects with a future-year start-year use current-year CPI-U values in the denominator assuming project estimates for projects starting in future-years have been inflation adjusted by the contractors and therefore no inflation adjustment is necessary in these calculations to establish a base rate representative to current cost.
- [Current Year CPI-U/ Start Year CPI-U]

Adjusted Cost per GSF:

- For a given project, Cost per GSF multiplied by the inflation factor.
- [Cost Per GSF/ Inflation Factor]

Base Rate (Average adjusted historical cost per gross square foot):

- Sum of the Adjusted cost per GSF for the 10 projects of a sector and divide by 10
- $\frac{\sum\ (Adjusted\ Cost\ per\ GSF)}{10}$

Table 1 Base Rate Calculations

Project Name	Project Number	Gross Square Feet	Educational and General Square Feet	Facility Type	Start Date	Project Cost	Cost per GSF	Inflation Factor	Adjusted Cost per GSF
ICPS	ICPS	ICPS	ICPS	ICPS	ICPS	ICPS	[Project Cost/ Gross Square Feet]	[Current Year CPI-U/ Start Year CPI-U]	[Cost Per GSF * Inflation Factor]
Project 1	999999-08-001	60,000	36,000	Classroom, General	10/2007	$22,000,000	$367	1.034	$379
Project 2	999998-08-002	110,000	66,000	Office, General	09/2009	41,000,000	$373	1.000	$373
Project 3	999991-08-003	70,000	1	Classroom, General	08/2009	9,250,000	$132	1.000	$132
Project 4	999995-08-004	140,000	84,000	Classroom, General	11/2007	61,600,000	$440	1.034	$455
Project 5	999995-08-005	60,000	31,000	Classroom, General	01/2008	8,917,200	$149	1.000	$149
Project 6	999991-09-006	160,000	96,000	Office, General	06/2008	60,000,000	$375	1.000	$375
Project 7	999999-09-002	90,000	50,000	Classroom, General	01/2009	21,870,000	$243	1.000	$243
Project 8	999991-09-002	70,000	36,000	Classroom, General	06/2008	22,784,000	$326	1.000	$326
Project 9	999999-09-001	60,000	28,000	Office, General	05/2008	22,300,000	$372	1.000	$372
Project 10	999999-09-152	100,000	70,000	Classroom, General	07/2010	19,732,000	$197	1.000	$197
Average Adjusted Historical Cost per Gross Square Foot (Base Rate)									$300

For Example:

In table 1, the Adjusted Cost per GSF for Project 1
Gross Square Feet = 60,000 Project Cost = $22,000,000 Cost per GSF = [Project Cost] / [Gross Square Feet] Cost per GSF = [$22,000,000] / [60,000] Cost per GSF = $367 Start Year = 2007 Current Year = 2009 CPI-U 2007 = 207.342 CPI-U 2009 = 214.537 Inflation Factor = [Current Year CPI-U] / [Start Year CPI-U] Inflation Factor = [214.537] / [207.342] Inflation Factor = 1.034 Adjusted Cost per GSF = [Cost Per GSF] * [Inflation Factor] Adjusted Cost per GSF = [$367] * [1.034] **Adjusted Cost per GSF = $379**

In table 1, the Adjusted Cost per GSF for Project 10
Gross Square Feet = 100,000 Project Cost = $19,732,000 Cost per GSF = [Project Cost] / [Gross Square Feet] Cost per GSF = [$19,732,000] / [100,000] Cost per GSF = $197 Start Year = 2010 Current Year = 2009 CPI-U 2007 = 214.537 [1] CPI-U 2009 = 214.537 Inflation Factor = [Current Year CPI-U] / [Start Year CPI-U] Inflation Factor = [214.537] / [214.537] Inflation Factor = 1.000 Adjusted Cost per GSF = [Cost Per GSF] * [Inflation Factor] Adjusted Cost per GSF = [$197] * [1.000] **Adjusted Cost per GSF = $197** Note 1: Since the start year is a future year, the current year Annual Average CPI- Value is used.

In table 1, the Base Rate
Base Rate = [Sum of 10 Projects' Adjusted Cost per GSF] / 10 Base Rate = [$379 + $373 + $132 + $455 + $149 + $375 + $243 + $326 + $372 + $197] / 10 Base Rate = [$3,000] / 10 **Base Rate = $300**

Education and General Campus Condition Index Value (EGCCIV) Calculation

An institution's EGCCIV is the sum of all building EGCCIVs. Calculate the building EGCCIV by multiplying the building E&G NASF, 1.67, and the sector's base rate. The building E&G NASF is the sum of the room E&G NASF values building's room inventory (Table 2). The EGCCIV value is the product of E&G NASF, 1.67, and the sector's base rate.

The Educational Research Center uses the criteria as defined in the glossary of terms to calculate the E&G NASF reported totals by building in the edit report of the CBM014-Building Inventory Report.

$$\text{Sum of } (\text{E\&G NASF}_{\text{Building}} * \text{Base Rate}_{\text{sector}} * \text{Multiplier}_{\text{GSF}})$$

Table 2 Room Inventory

FICE	Building	Room	NASF	E&G NASF	Space Use Type
999999	000001	000001	1,000	1,000	110
999999	000001	000002	2,000	2,000	210
999999	000001	000003	3,000	2,000[2]	210
999999	000002	000001	4,000	4,000	110
999999	000002	000002	5,000	5,000	210

Note 2: The room's E&G NASF is less than its NASF due to proration. The room has been coded using both E&G and Non-E&G CIP and Functional Use Codes. This is an indication of a mixed-use building.

Table 3 Building Inventory

FICE	Building	GSF	NASF	E&G NASF
999999	000001	10,000	6,000	5,000
999999	000002	15,000	9,000	9,000

Note 3: The NASF and E&G NASF values are summed from Table 2 Room Inventory by building.

For Example:

From table 3, Building 000001
E&G NASF = 5,000 Base Rate = $300 Multiplier = 1.67 EGCCIV = [E&G NASF] * [Base Rate] * [Multiplier] EGCCIV = [5,000] * [$300] * [1.67] **EGCCIV = $2,505,000**

Note 4: The EGCCIV for each building in an institution's building inventory is summed when comparing the overall E&G Campus Condition Index. The E&G CCI excludes infrastructure maintenance or calculated value as infrastructure is defined in the glossary of terms.

Institution-Wide Campus Condition Index Value (IWCCIV) Calculation

Calculate the IWCCIV by summing the product of each building's gross square feet, the sector's base rate, and 1.25.

$$\text{Sum of } (GSF_{Building} * \text{Base Rate}_{sector} * \text{Multiplier}_{Infrastructure})$$

For Example:

From Table 3
Building 000001 GSF = 10,000 Building 000002 GSF = 15,000 Base Rate = $300 Infrastructure Multiplier = 1.25 Building 000001 IWCCIV = [GSF] * [Base Rate] * [Infrastructure Multiplier] Building 000001 IWCCIV = [10,000] * [$300] * [1.25] Building 000001 IWCCIV = $3,750,000 Building 000002 IWCCIV = [15,000] * [$300] * [1.25] Building 000002 IWCCIV = $5,625,000 IWCCIV = [Building 000001 IWCCIV] + [Building 000002 IWCCIV] IWCCIV = [$3,750,000] + [$5,625,000] **IWCCIV = $9,375,000**

Appendix B: Deferred Maintenance Reporting Examples

Institutions are expected to perform comprehensive facility audits either utilizing resident staff or competent consultants. The results of these audits should provide detailed system level maintenance requirements to afford an institution the ability to schedule and budget for the proper maintenance of all institution facilities. The data elements in the Institutional Maintenance Report assume institutions are maintaining a comprehensive system-level maintenance schedule of all facilities to include the cost of completing those maintenance items. In addition to the results of facilities audits, institutions should include any ad hoc maintenance requests that are within the reporting scope.

Institutions should disaggregate maintenance items to the building system level when considering which category and column to report the item under on the Institution Maintenance Report. Remove infrastructure elements from building projects and report the institution-wide infrastructure projects' cost on a single building line in section one of the report. The following examples are to serve as a guideline to demonstrate the intent of the report; however, we recommend experienced professionals be consulted when determining an item's best fit.

Example 1: Expenditures – Previous Year, Planned Maintenance
A 20-year-old building was built with a 20-year roof, which is leaking, but can be repaired with current year funding. The repairs to the roof are significant, but do not involve installing a new roof. The repairs are completed in the current year and the roof is determined to be in good condition and scheduled for inspection in the following year with the expectation the roof is serviceable for another 10 years. Timing – Repaired in the fiscal year discovered Report the cost of repairing this item under the "Expenditure – Previous Year" category in the planned maintenance column. This item would have been considered on-going maintenance if the repairs were insignificant. The scheduled follow-up inspection is considered on-going maintenance and not reported. It was not determined the roof needed to be replaced within the five year period of this report so nothing should be reported in the other categories.

Example 2: Budgeted – Current Year, Planned Maintenance
A building is 20 years old and built with a 20-year roof. The roof is budgeted to be replaced in the current year. Timing – Scheduled to be repaired in the current fiscal year Report the cost to repair or replace this item under the "Budgeted – Current Year" category in the planned maintenance column.

Example 3: Unbudgeted – Current Year, Planned Maintenance

A building is 20 years old and built with a 20-year roof. The roof was scheduled to be replaced in the current year, and upon inspection, it is failing. Due budget cuts, it is determined the project cannot be funded this year. Therefore, the roof will not be budgeted for replacement or repair in the five-year scope of the Institution Maintenance Report.

Timing – Not scheduled to be repaired in the current fiscal year or any other report year.

Report the cost to repair or replace this item under the "Unbudgeted – Current Year" category in the planned maintenance column. Note: the roof continues to function as designed and therefore is not deferred maintenance.

Example 4: Projected – Years 2 through 5, Planned Maintenance

A building is 20 years old and built with a 20-year roof. The roof was scheduled to be replaced in the current year, but upon inspection, it is determined the maintenance item can be delayed until the following year. Therefore, the roof will not be budgeted for replacement or repair until the next fiscal year.

Timing – Rescheduled to be repaired in the next fiscal year.

Report the cost to repair or replace this item under the "Projected – Years 2 through 5" category in the planned maintenance column. Note: the roof continues to function as designed and therefore is not deferred maintenance.

Example 5: Expenditures – Previous Year, Deferred Maintenance

A building is 4 years old and built with a 30-year elevator (one of four). The elevator is planned to be replaced in 26 years, but was determined or discovered to be nonoperational during the previous year. It was decided that the building could function without the fourth elevator and management budgeted for its repair or replacement in the following year. The maintenance was completed this year.

Timing – Repaired in the fiscal year after discovered

Report the cost of repairing or replacing this item under the "Expenditures – Previous Year" category in the Deferred Maintenance column. The item was completed after being deferred for one year. If the expenditure is not being recorded in the institution's annual financial report the same year it is completed, report the item on the Institution Maintenance Report the year it was completed.

Example 6: Budgeted – Current Year, Deferred Maintenance

A building is 4 years old and built with a 30-year elevator (one of four). The elevator is planned to be replaced in 26 years, but was determined or discovered to be nonoperational during the previous year. It was decided that the building could function without the fourth elevator and management budgeted for its repair or replacement in the following year.

Timing – Scheduled to be repaired in the fiscal year after discovered

Report the cost of repairing or replacing this item under the "Budgeted – Current Year" category in the Deferred Maintenance column. The item is funded to be corrected in the budget year following its discovery.

Example 7: Unbudgeted – Current Year, Deferred Maintenance

A building is 4 years old and built with a 30-year elevator (one of four). The elevator is planned to be replaced in 26 years, but it was decided that the building could function without the fourth elevator and management decided to not repair or replace it due to the inconvenience of the work or funding limitations. The elevator is not projected to be repaired in the next five years.

Timing – Scheduled to be repaired more than five fiscal years after discovered or never scheduled to be repaired

Report the cost of repairing or replacing this item under the "Unbudgeted – Current Year" category in the Deferred Maintenance column. The item is not funded to be corrected in the budget year following its discovery or any year in the scope of the current-year's report. As all deferred maintenance planned or unplanned, scheduled or unscheduled, budgeted or unbudgeted, funded or unfunded must be reported on the Institution Maintenance Report, this item must be reported in the Unbudgeted – Current Year, Deferred Maintenance column.

Example 8: Projected – Years 2 through 5, Deferred Maintenance

A building is 4 years old and built with a 30-year elevator (one of four). The elevator is planned to be replaced in 26 years, but it was decided that the building could function without the fourth elevator and management decided to repair or replace it in three years the due to the inconvenience of the work or funding limitations.

Timing – Scheduled to be repaired two to five fiscal years after discovered

Report the cost of repairing or replacing this item under the "Project – Years 2 through 5" category in the Deferred Maintenance column. The item is not funded to be corrected in the budget year following its discovery, but is projected to be repaired within five years.

Example 9: Budgeted – Current Year, Facilities Adaptation

The engineering building classrooms were constructed with a 20-student capacity, but in order to meet the institution's *Closing the Gaps* goals the classes need to be modified to a 40-student capacity. The dean of engineering has requested the walls between adjacent classrooms be removed and the classroom teaching stages be repositioned. She has dedicated funds from her budget to complete the work in the current fiscal year.

Timing – Scheduled to be adapted in the current fiscal year.

Report the cost of adaptation under the "Budgeted – Current Year" category in the Facility Adaptation column. The classrooms have no material defects and function as designed. The project calls for changing the design to fit a new need.

Example 10: Unbudgeted – Current Year, Facilities Adaptation

The engineering building classrooms were constructed with a 20-student capacity, but in order to meet the institution's *Closing the Gaps* goals the classes need to be modified to a 40-student capacity. The dean of engineering has requested the walls between adjacent classrooms be removed and the classroom teaching stages be repositioned. There are no funds in the next five years for these modifications.

Timing – Scheduled to be adapted in more than five fiscal years or never scheduled to be adapted.

Report the cost of adaptation under the "Unbudgeted – Current Year" category in the Facility Adaptation column. The classrooms have no material defects and function as designed. The project calls for changing the design to fit a new need. This is appropriately placed in the unbudgeted category because it is desired, but there is no funding available. By scheduling items in this category and column, the legislature will have an understanding of the unfunded needs at institutions.

Example 11: Projected – Years 2 through 5, Facilities Adaptation

The engineering building classrooms were constructed with a 20-student capacity, but in order to meet the institution's *Closing the Gaps* goals the classes need to be modified to a 40-student capacity. The dean of engineering has requested the walls between adjacent classrooms be removed and the classroom teaching stages be repositioned. There are no funds available in the current fiscal year, but the funding is projected to be available in the following fiscal year.

Timing – Scheduled to be adapted in two fiscal years.

Report the cost of adaptation under the "Projected – Years 2 through 5" category in the Facility Adaptation column. The classrooms have no material defects and function as designed. The project calls for changing the design to fit a new need. This is unbudgeted, but because funding is potentially available in the following budget cycle, it is not appropriate to place it in the unbudgeted category. It is appropriately considered a projected facility adaptation.

Example 12: Expenditures – Previous Year, Facilities Adaptation

The engineering building classrooms were constructed with a 20-student capacity, but in order to meet the institution's *Closing the Gaps* goals the classes needed to be modified to a 40-student capacity. The dean of engineering had requested the walls between adjacent classrooms be removed and the classroom teaching stages be repositioned. She has dedicated funds from her budget last year to complete the work. The work was completed last fiscal year.

Timing – The work was completed last fiscal year.

Report the cost of adaptation under the "Expenditures – Previous Year" category in the Facility Adaptation column. The classrooms had no material defects and functioned as designed. The project called for changing the design to fit a new need. Items from the previous year's "Budgeted – Current Year, Facility Adaptation" column or ad hoc items can feed into this column, with dollar amounts updated to actual spend.

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This document is available on the Texas Higher Education Coordinating Board Website: **http://www.thecb.state.tx.us**

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Higher Education Coordinating Board

Professional Nursing Shortage Reduction Program

Presentation for the
Senate Committee on Finance
Interim Charge #10

August 4, 2010

Nursing Shortage Reduction Program Descriptions

- Regular Program
  - Program based upon **net increase in graduates between years**
- Nursing Graduation Rate - Over 70 Program
  - New program for FY 2010-11 based on **targeted increases in enrollment**
  - Program results for FY 2010 will be available in November 2011
- Nursing Graduation Rate - Under 70 Program
  - New program for FY 2010-11 based on **targeted increase in graduates**
  - Program results will be available in November 2012

THECB 8/4/2010

Top Performers for the Nursing Shortage Reduction Program

- **Regular Program**

  Top Performers for four of last five years

  Community Colleges
  - South Texas College – All 5 years
  - Lee College – All 5 years
  - El Paso Community College District
  - Houston Community College
  - Collin County Community College District

THECB 8/4/2010

Top Performers for the Nursing Shortage Reduction Program

- Regular Program

  Top Performers for 4 of last 5 years

  State Universities
  - Texas A&M University Corpus Christi – All 5 years
  - West Texas A&M University
  - Midwestern State University
  - Stephen F. Austin State University
  - The University of Texas at Arlington
  - The University of Texas at Tyler

THECB 8/4/2010

Top Performers for the Nursing Shortage Reduction Program

- Regular Program

  Top Performers for 4 of last 5 years

  Independent Institutions

  - Texas Christian University

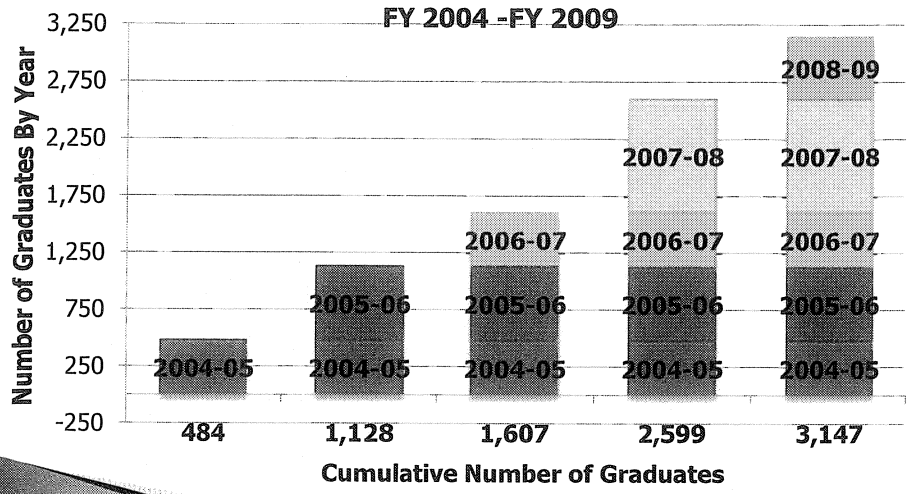
  Health-Related Institutions

  - Texas Tech University Health Sciences Center
  - The University of Texas Health Science Center - Houston

Summary of Regular Program - Nursing Shortage Reduction Program

	Number of Institutions Applying	Number of Awards	Total Amount of Awards	Allocation Basis	Average Award	Average CC Award
FY 2006	40	28	$ 2,850,000	549	$ 5,191	$ 5,191
FY 2007	50	36	$ 4,354,246	842	$ 5,134	$ 5,134
FY 2008	58	45	$ 6,982,500	947	$ 7,802	$ 6,812
FY 2009	61	51	$ 6,982,500	1,124	$ 7,415	$ 4,996
FY 2010	63	44	$ 7,228,478	1,055	$ 6,818	$ 6,887

Professional Nursing and Nursing Education Graduates – Net Change



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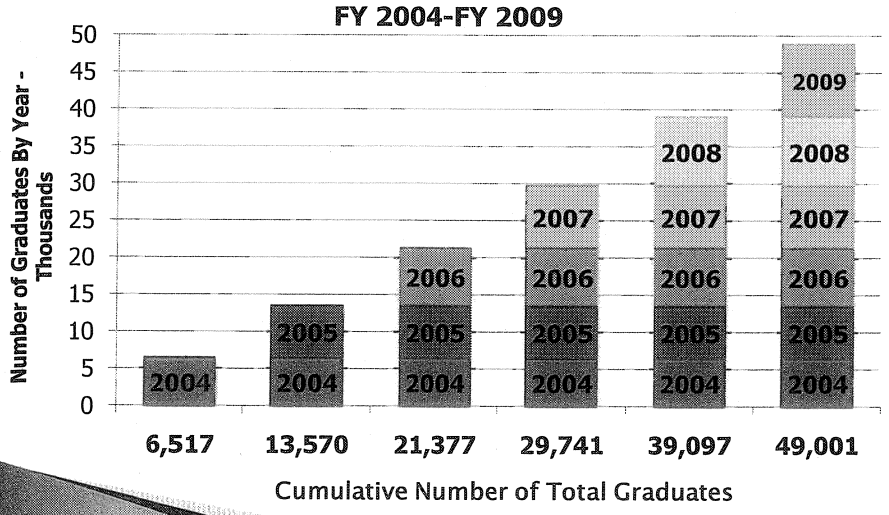
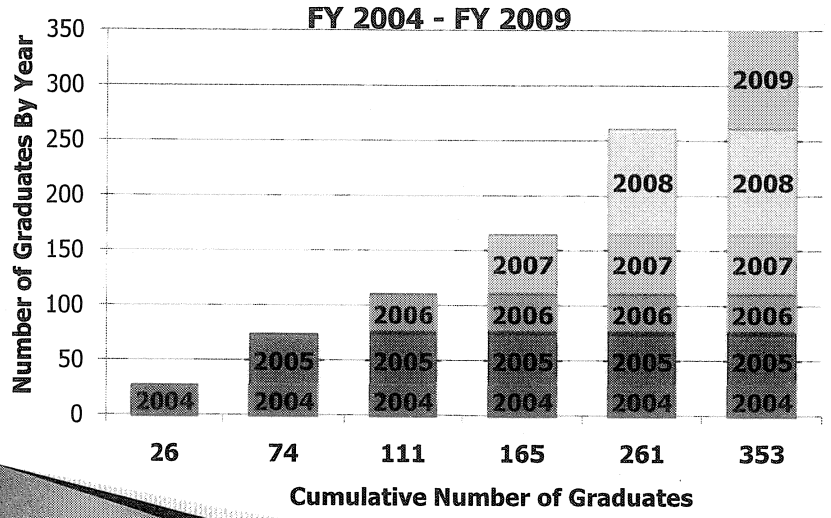
Professional Nursing Graduates – Cumulative Total



THECB 8/4/2010

Nursing Education Graduates – Cumulative Total



THECB 8/4/2010

Professional Nursing Shortage Reduction Program - Expenditures

Award Year	Additional Nurse Faculty Positions	Temp. Salary Supplement Positions	Qualified Preceptors Positions	Total Expenditures	Percent of Total Award Expended
FY 2006	36	374	65	$ 2,850,000	100.00%
FY 2007	98	474	18	4,244,468	97.48%
FY 2008	98	530	94	6,057,952	86.76%
FY 2009	98	530	94	6,057,952	86.76%
FY 2010	47	486	38	3,730,515	53.43%
Totals	376	2,394	309	$ 22,940,888	

THECB 8/4/2010

University of Texas at Arlington

The University of Texas at Arlington

Senate Finance Committee
Wednesday, August 4, 2010
Capitol Extension Room E1.036

Testimony

Mr. Chairman, members of the committee. I am Donald Bobbitt, Provost at the University of Texas at Arlington. With me today as a resource witness is Dr. Elizabeth Poster, Dean of the UT Arlington College of Nursing. We would first like to express our gratitude to you and the committee members for this invitation to provide testimony on this critically important matter.

As you are aware, UT Arlington received $5 million from the legislature during the current biennium to support the Regional Nursing Education Center. As part of this center, we proposed to establish a simulation learning facility to benefit not only UT Arlington students, but also to support partnerships across the region specifically oriented toward advanced nursing training and to support research into best practices for nursing education.

The specific goals for the center were to:

1. Increase the number of nursing students and BSN nurses licensed to practice in Texas.
2. Develop and refine the use of simulation exercises as a pedagogical tool in nursing education.
3. Prepare the next generation of Nursing Educators so they can assume positions of leadership in the profession or faculty appointments in schools and colleges of nursing.
4. Develop partnerships with healthcare institutions across the region so best practices can be disseminated to those involved in patient care.

I am pleased today to report on our progress in meeting these four overarching goals.

By way of background, the UT Arlington College of Nursing is ranked in the top 15 largest schools of nursing in the United States, with 84 full-time faculty teaching over 4000 nursing students in degree programs such as the Bachelor of Science in Nursing (BSN), the Registered Nurse (RN) to BSN, the Master of Science in Nursing (MSN), Post MSN, the Doctorate in Nursing Practice and the Doctor of Philosophy (Ph.D). Much of this growth has occurred over the past 2 years and can be directly related to the $5 million appropriation. I would like to point out that over 95% of the college's BSN graduates remain in Texas as new RN's. Further, each year 70-80 MSN and post-masters alumni assume advanced roles as nurse practitioners, administrators and educators, while the college's Ph.D. graduates assume positions as scholars and educators.

The college has been an innovator in the use of technology to enhance and expand nursing education, including the use of web-based and on-line courses, standardized patients (actors) and patient simulators (manikins). The unique feature of the integration of innovative educational experiences is the 23-bed Smart Hospital which has been designated a national showcase of excellence and is also internationally recognized.

In order to greatly expand the number of qualified students we can accept and train we have developed several unique approaches. For example, UT Arlington's College of Nursing faculty utilize simulation as pedagogy to expand the range of medical situations nurses in training can be exposed to and ensure they have competence in caring for high risk patients.

Through our academic partnerships we can provide accessible and affordable nursing education by leveraging technology and resources. Academic Partnerships are a specific approach by UT Arlington that provide accessible and affordable nursing education for the BSN, RN-BSN, and MSN Programs by leveraging technology and resources to deliver coursework online while using the partner's facilities for the student cohort to receive their clinical experience.

The unique feature of the Academic Partnerships program is that content is delivered through an on-line format in 5 to 12 week modules. Students receive their clinical training in a partner health system. Through this approach, students graduate fully acclimated to their clinical environment and are able to transition to employment as a nurse in less time. This approach allows us to efficiently meet the needs of students in both urban and rural settings. Academic Partnership students have the same number of clinical hours, but at non-traditional times such as weekends and consolidated over a shorter length of time rather than a 15-week semester.

Evidence of the recognition of the quality of the BSN program is found in the fact that the UT Arlington College of Nursing has been designated by the Texas Higher Education Coordinating Board as one of only nine high performing schools with over a 90% graduation rate and a 93-98% first time pass rate on the initial licensure examination. This last week we received notification that we are one of 3 of the 9 to be recognized for innovation in retention strategies and were awarded $25,000 for those efforts by the Coordinating Board.

Enrollment in the College of Nursing has doubled over the past 2 years and these students are being taught through a combination of simulation, educational technologies, and partnerships. Our on-campus BSN program is growing from 400 to 800 students, while total enrollment in the college of Nursing's degree programs has increased from 2048 for the Spring 2009 semester to 4132 for Spring 2010 due to the Academic Partnerships.

Our Smart Hospital is a unique resource that we use with our own students, but we also share what we learn through research and development with our partners. Through such partnerships, we are serving as a resource for the community and the State. Some

examples of large health care systems that are partnering with us include: John Peter Smith Hospital, Parkland Medical Center, Texas Health Resources hospitals, the Medical Center of Arlington, Baylor Health Systems hospitals, Methodist System hospitals, and the Children's Medical Center.

Through these efforts the College of Nursing is bridging the preparation-practice gap and meeting the needs of employers. The potential for cost savings and efficiencies in bringing new nurses up to speed is recognized and valued by our partners and the list of existing and future partners is long and growing.

Finally, the College of Nursing believes it is their responsibility to share their best practices by hosting a regional 3-day summer session in order to train nursing faculty who can then take this knowledge to the 15 nursing programs in the North Texas region.

The $5 million appropriation has been used to:

a. purchase new equipment including advanced manikins;
b. add video capability to all beds - which allows students to view and critique their practice in debriefing sessions. Furthermore, video monitoring can now be conducted at partner institutions and evaluated by experienced faculty at UT Arlington, thus removing geographical proximity as a limiting factor in nursing education.
c. support stipends for Graduate Teaching Assistants so we can train the 'faculty of the future' in how to use the Smart Hospital simulation with the understanding that they will carry these lessons to other schools.
d. host regional meetings; for example the North Texas Consortium Annual Summer Institute included sessions on simulation and exposed over 300 nursing faculty to these innovative approaches.
e. offer competitive faculty stipends to retain the best and brightest – Texas data shows faculty earn on the average $55,000 while in practice the average is $75,000.
f. support the hiring of additional faculty and staff:
   - 19 new faculty (11 in the clinical sites)
   - 11 Staff – housed in both the College of Nursing and the Smart Hospital (3 RN's)
   - 4 BSN Advisors
   - 10 graduate teaching assistants (GTAs).

With a continued need for additional nurses, there is still room for growth in our program. We recognize that there are many needs in higher education as well as in other areas. With a continued investment in this program we would be able to continue to increase student enrollment in order to continue to meet the demand for nurses in the state.

I would like to conclude my comments by emphasizing that the development of evidence-based methods using simulation to improve patient safety and nursing education is one of the significant contributions of this effort – it is not possible to have Smart Hospitals everywhere but UT Arlington faculty and students can perform the research &

development of best practices, implement their findings at UT Arlington, and then translate this expertise to other schools and settings to improve patient care and safety across Texas. It is important for you to know, that the development of these innovative methods to solve the nursing shortage is possible only because of the $5 million funding you authorized last session.

In my written comments you will find a link to a short video of UT Arlington College of Nursing students describing the impact their educational experience had on them, their profession and their families. I urge you to take the opportunity to hear these compelling stories.

http://media.higheredholdings.com/video/uta_pinning/)

Thank you again for this opportunity. I hope the committee finds this information useful and I would be happy to answer any questions.

Texas Tech University Health Sciences Center

TEXAS TECH UNIVERSITY
HEALTH SCIENCES CENTER
Anita Thigpen Perry School *of* Nursing™

Meeting Texas Nursing Workforce Needs of 2020

Presented to the Texas Senate

Finance Committee

August 4, 2010 by

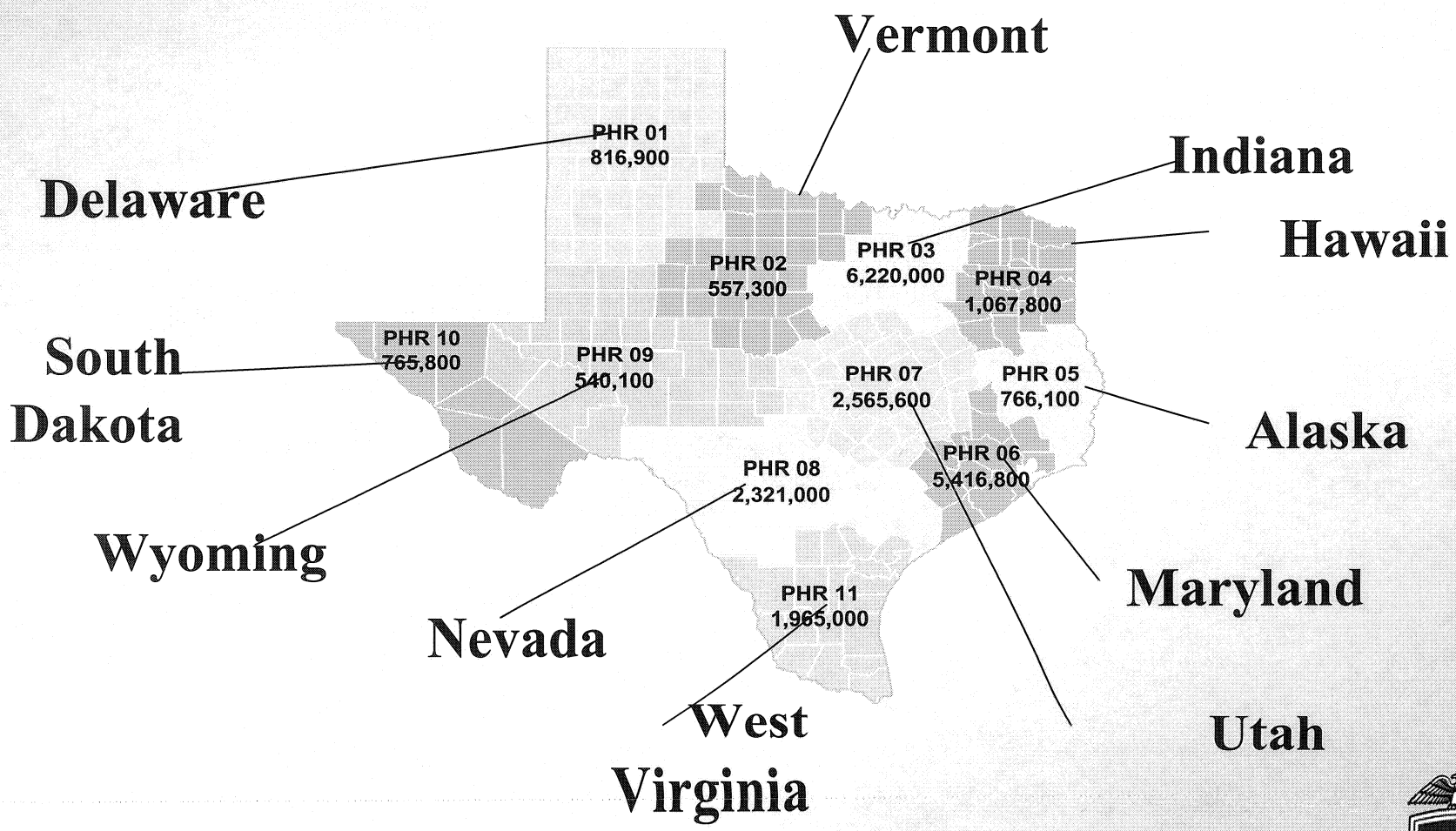
Alexia Green RN, PhD, FAAN

Professor & Dean Emeritus

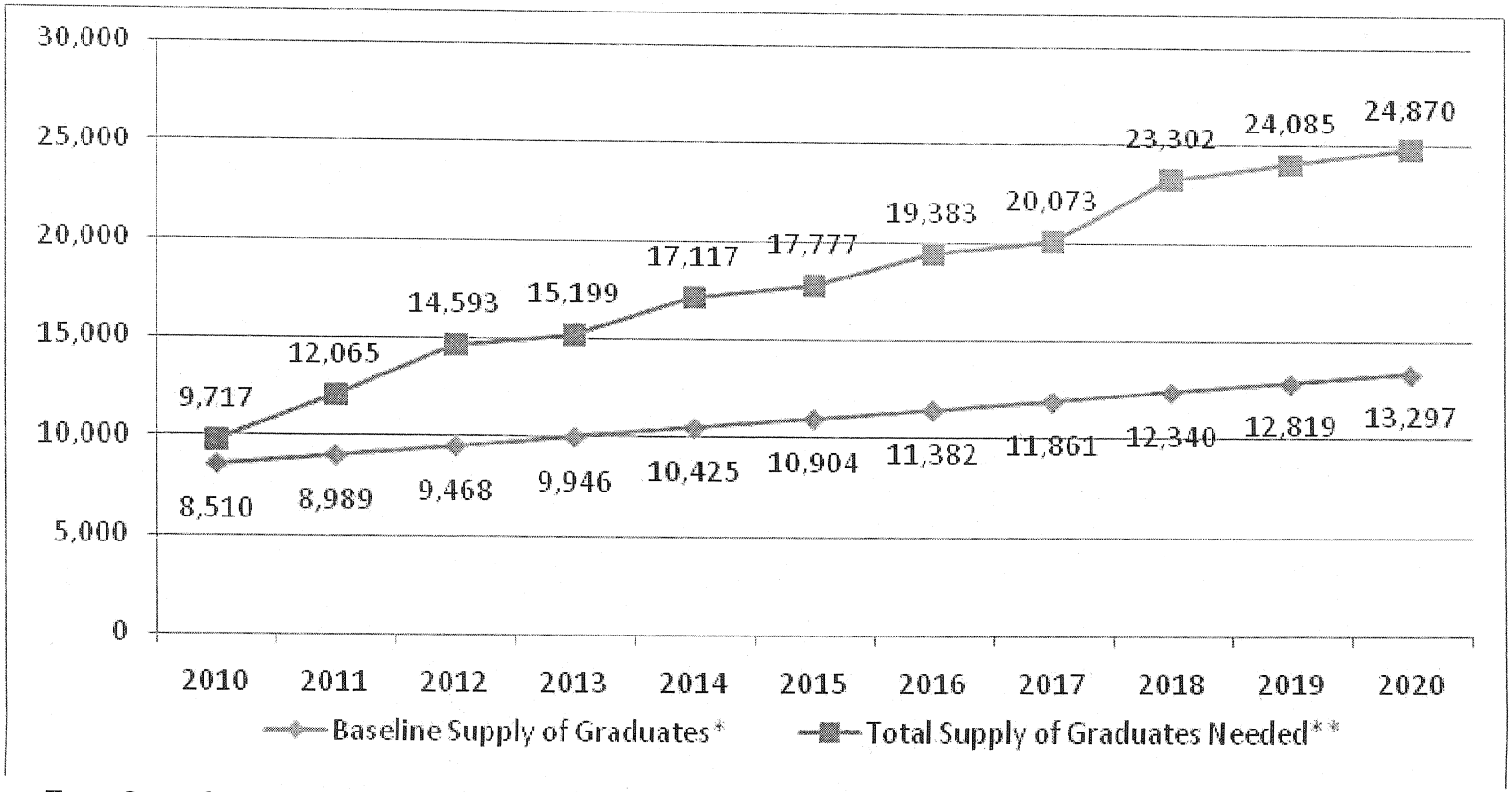
Why Texas Must Still Increase Nursing Workforce?

- Texas is BIG….really BIG!
- Exploding Texas Population
- Young and Aging Texas Population
- Insufficient Capacity in Schools and Aging Nursing Workforce

Texas is BIG: State's health regions have populations comparable to those of many states



Insufficient Capacity to Meet Demand for Texas Nursing Workforce by 2020

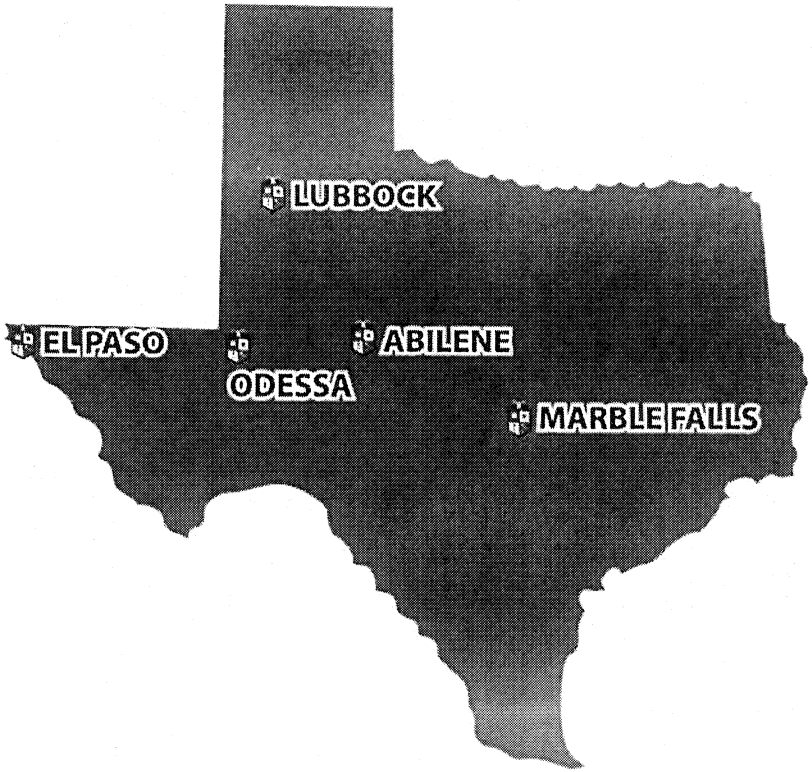


Sources: Texas Center for Nursing Workforce Studies and Coordinating Board.
*Numbers are based on a simple regression formula of actual graduation data reported from 2002 to 2010.
Graduation numbers do not include those from programs that have not yet produced graduates.
**U.S. Health Resources and Services Administration, Supply Model.

Facts About Texas Tech University Health Sciences Center Nursing

- **Established in 1981***

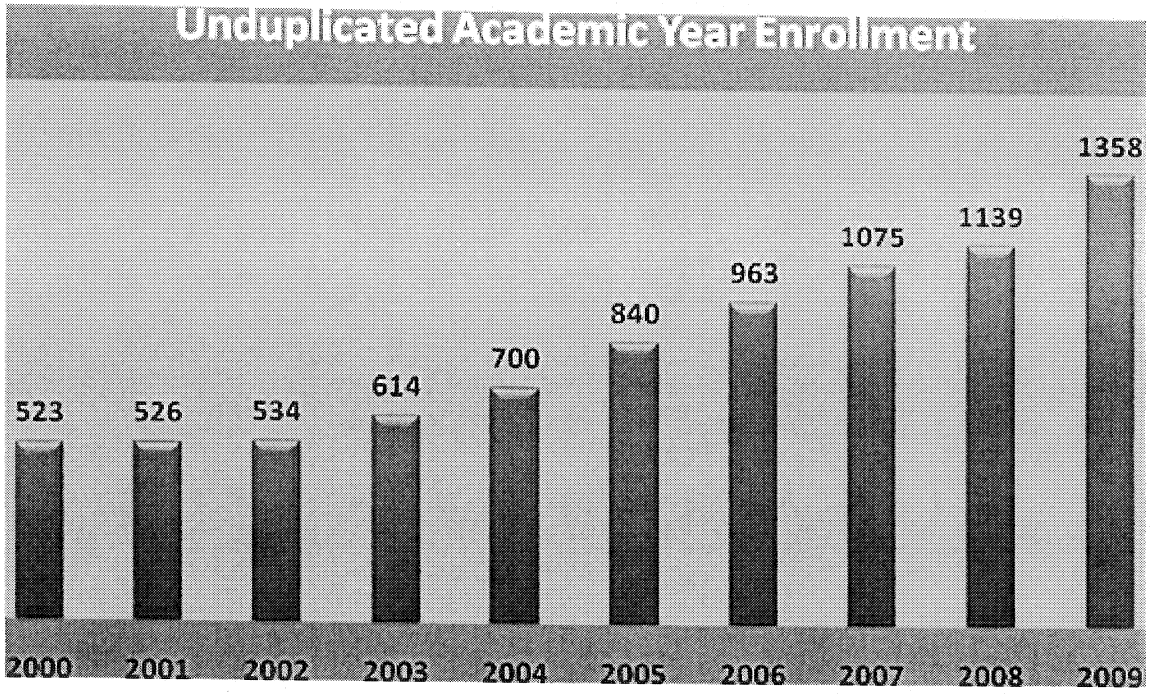
- 3910 alumni
- Over 1300 students enrolled in AY 2010
- BSN, MSN & DNP Degrees



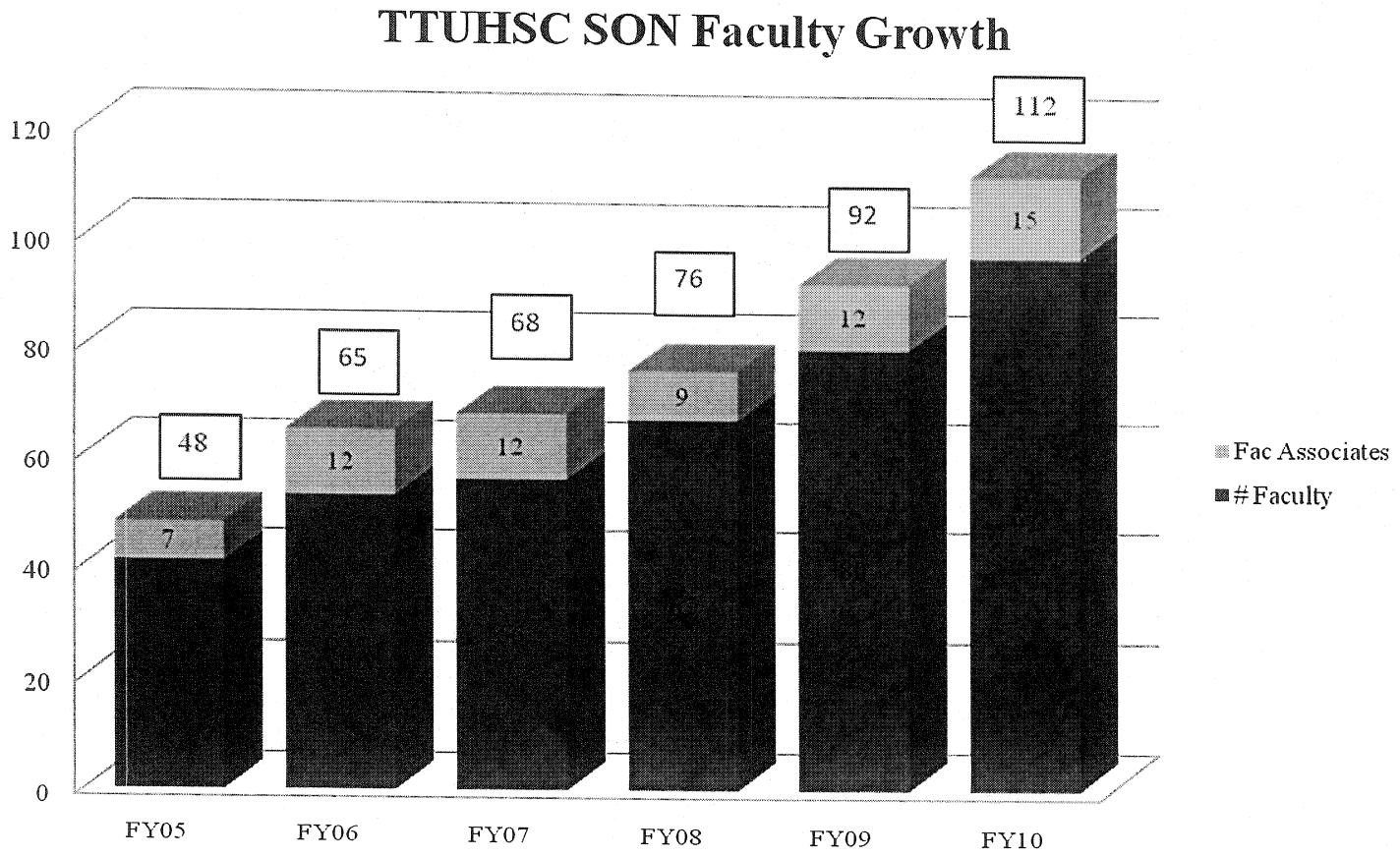
Facts About Texas Tech Nursing

- 2009 - Largest producer of baccalaureate nurse graduates in state (THECB Report April 22, 2010)
- Pacesetter for Innovation – Center for Innovation in Nursing Education
- One of the largest producers of nurse practitioners in the state (primary care providers)
- Operate– Nurse managed Federally Qualified Health Center (FQHC) (only one in Texas and only one of four nationally)

TTUHSC Nursing Enrollment Growth 2000-2009



Faculty Growth AY 05-10



Enrollment Growth Correlated with NSRP, Formula and Federal/State Grant Funding

Yr	# Graduates	Increase	NSRP Funding^	Federal / State Grant Expenditures	Formula Funding **
2005	262	21	$ 109,016	$ 3,300,206	$ 4,114,674
2006	360	98	$ 584,143	$ 3,353,342	$4,527,079
2007	450	90	$ 702,150	$ 2,296,051	$ 4,836,842
2008	427	-23*	No Funds Received	$ 3,353,342	$ 7,433,656
2009	522	95	$ 666,266	$ 4,871,557	$ 7,564,870
2010	614~	94~	TBD	> $ 5 Million~	$ 8,531,677

* Insufficient Clinical Capacity – Embarked on Building new Clinical Simulation Center
**Funds Allocated to School
^ Funds actually awarded to School in Following Year (i.e. 2005 increase in grads generated $109,016 in 2006)
~ Estimated

TEXAS TECH UNIVERSITY
HEALTH SCIENCES CENTER
F. Marie Hall SimLife Center

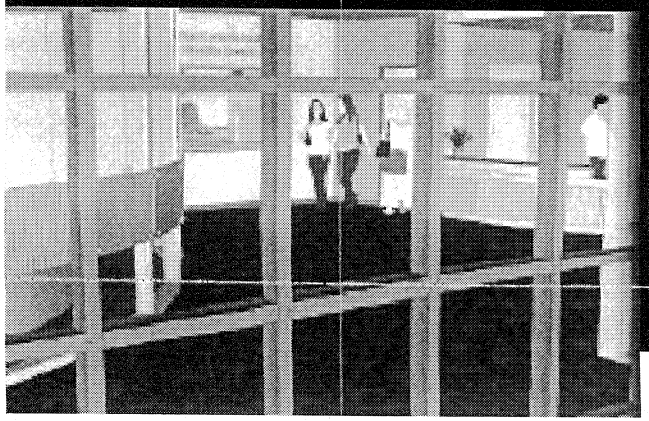
Bringing Learning to Life

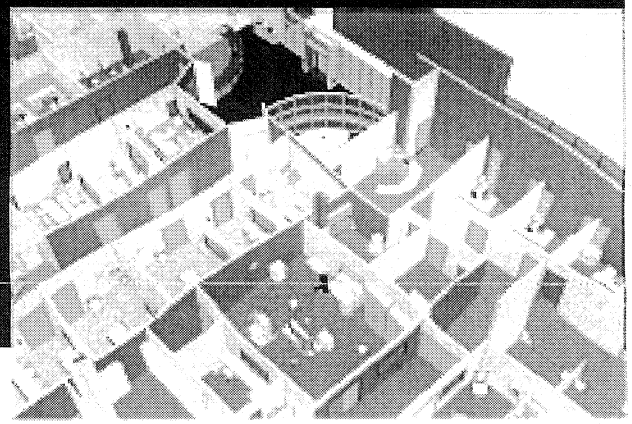
What is it?

The F. Marie Hall SimLife Center is a 24,415 square foot interprofessional, multimethod clinical simulation center where students and practitioners engage in cutting edge learning and research. Medical, nursing, and pharmacy students are able to improve upon discipline-specific competencies while also building effective collaborative teamwork and communication skills.

This state-of-the-art learning center provides a risk-free environment where students and practitioners can gain proficiency and enhance their performance proficiency in the competencies that vastly improve the quality of safe, patient care.

Practicing physical examination skills





Examples of Federal and State Grant Awards

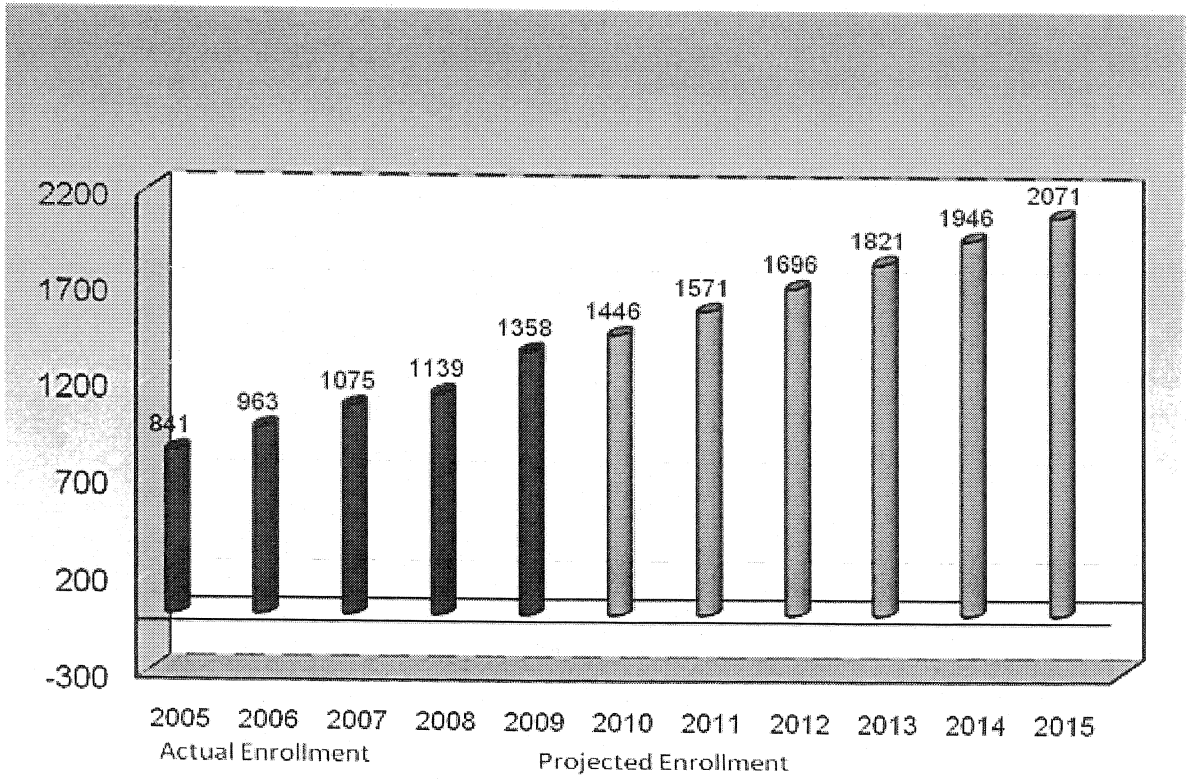
- National Science Foundation Grant – improve undergraduate education via technology developed by public/private partnerships (2005)
- US Dept. HHS (HRSA) – Program expansion grants (2002-2009)
- THECB – Nursing Innovation Grant Programs (NIGP) – awarded to expand undergraduate education (2006, 2007, 2008, 2009)
- THECB Hospital Partnership Grants (2010):
  - *University Medical Center Hospital El Paso - $900K*
  - *Hendrick Health Care System Abilene- $ 500 K*

Unprecedented Support & Collaboration Among Hospital Partners, Academic Partners and Communities

- University Medical Center Lubbock – endowed chair $1 Million
- Covenant HC System Lubbock – endowed chair $1 Million
- Medical Center Hospital Odessa – endowed chair $1 Million
- THECB Hospital Partnership Grants (2010):
  - *University Medical Center Hospital El Paso - $900K*
  - *Hendrick Health Care System Abilene - $ 500 K*

- Team Texas/TTUHSC/TWC Nursing Education Capacity Grant (2010) - $ 1 Million (ARRA funds)

Future Enrollment Projections



Texas A&M University System Health Science Center

TEXAS A&M
HEALTH SCIENCE CENTER

Senate Finance Committee Hearing
August 4, 2010

Regina Bentley, Ed.D., RN
Associate Dean for Academic Affairs
Texas A&M Health Science Center College of Nursing

Chairman Ogden and members of the Committee: Thank you for inviting me to speak with you today. I am Dr. Regina Bentley, Associate Dean for Academic Affairs with the Texas A&M Health Science Center (TAMHSC) College of Nursing. It is my pleasure to participate in today's hearing on issues surrounding the nursing shortage in Texas and ways that is being addressed through innovations in education.

1. History of the Texas A&M Health Science Center College of Nursing

The shortage of nurses in Texas and the U.S. is well documented. In order to contribute much-needed bachelor's level nurses to the workforce, the TAMHSC recently undertook development of a College of Nursing, using internal resources to support the start-up phase. Now fully accredited, the College of Nursing offers the Bachelor of Science in Nursing (BSN) degree through one of three tracks:

- the generic 2+2 BSN, where the student completes the first two years of education requirements at an accredited college or university and then seeks admission to the College of Nursing to complete the upper division courses in nursing;
- the accelerated BSN where the student seeks admission after completing a bachelor's degree in another related field of study; and
- the RN to BSN where the student has received a diploma or associate degree in nursing from another institution and subsequently seeks admission from the College of Nursing to complete the requirements for a BSN degree.

Presently, the College of Nursing has campuses in Bryan and Round Rock with a total of 116 BSN students enrolled in all three of the tracks offered. The following timeline reflects the rapidity with which the HSC was able to establish the new College:

- March 2005: TAMU System Board of Regents authorized the HSC to request approval from the Texas Higher Education Coordinating Board for planning authority for a new nursing program.

- August 2005: HSC partnered with TAMU - Corpus Christi on an accelerated nursing program to transition to an independent TAMHSC program.
- 2007 - 2008: Three BSN classes graduated through the cooperative program.
- January 2008: Texas Higher Education Coordinating Board (THECB) approved the College to offer baccalaureate-nursing education.
- July 2008: Established in College Station, the College admitted its inaugural classes, including 22 generic 2+2 BSN students and 22 accelerated BSN students.
- Fall 2009: The Commission on Collegiate Nursing Education gave a full five-year accreditation to the College.
- December 2009: The College graduated its first portion of the inaugural class consisting of 19 accelerated BSN students, with 100% passage on the national licensure examination on their first attempt, thus becoming Registered Nurses in the State of Texas.
- April 2010: Texas Board of Nursing granted full approval of the College of Nursing, paving the way for expansion of the program to the TAMHSC-Round Rock Campus.
- May 2010: The generic 2+2 BSN inaugural class of 20 graduated in May 2010.

2. CURRENT AND FUTURE EXPANSION PLANS

Since 2008, the class size of BSN students has grown from 44 students admitted to 75 students admitted during the 2010 fiscal year. The total number of students currently enrolled is 116. Our planned growth includes expanding the class by 10 BSN students every two years, reaching an ultimate class size of 106 with a total enrollment of 170 including returning students. As class sizes increase across the state, additional faculty will be needed to teach the increasing number of BSN students. In addition to the growth in class size, the College plans to increase the number of nursing faculty available through the addition of a Master of Science in Nursing Education (MSN). Planning for the program is expected to begin in 2011 with a potential start date of 2012. Future growth plans for the College include a doctorate in nursing education program. Enrollment growth of the BSN program and the addition of graduate programs such as the MSN or doctoral education are dependent on the availability of funding.

3. ADDRESSING THE NURSING SHORTAGE

The demand for registered nurses in clinical and hospital settings is rapidly increasing but the supply is not keeping up with the increasing number of nursing positions (Texas Center for Nursing Workforce Studies (TCNWS) Report to the Legislatures 2006). A growing number of nurses reaching the age of retirement coupled with a trend that shows nurses leaving the profession after only a few short years, are two factors that are recognized as major contributors to the shortage. According to a 2006 report by the TCNWS, the number of new nursing graduates in Texas needs to grow almost four-fold from approximately 6500 in 2006 to 9,700 in 2010, to 18,000 in 2015, and finally to a daunting 25,000 new graduates in 2020 in order for supply to meet demand. Unfortunately, an estimated 4000 to 6000 qualified applicants annually are being turned away (TCNWS, 2006).

An exacerbating factor is the shortage of nursing faculty. According to the American Association of Colleges of Nursing (AACN), faculty shortages across the country are limiting student

capacity at a time when nursing needs are growing. Causes include faculty retirements, higher compensation offered in clinical and private-sector settings, and master's and doctoral programs in nursing not producing a large enough pool. Recommendations from AACN include increased funding for more nursing education programs. This documented nursing shortage as well as the current budget dynamic has created challenging times for nursing education programs. Many nursing programs find it difficult to increase capacity and maintain a quality educational experience for the students. Schools of nursing throughout the state of Texas, but particularly those located in non-urban areas, struggle to meet minimum contact hours with actual patients in specialty settings (e.g., pediatrics, behavioral health and critical care).

4. INNOVATIVE SOLUTIONS USING CLINICAL SIMULATION

Innovative ideas that have been proposed to increase nursing school capacity include using simulation technology as a substitute for some aspects of clinical education (Joynt & Kimball, 2008). The emerging data clearly supports the efficacy of using sophisticated educational technology to support skills training in the health professions and to better utilize scarce faculty resources (THECB, 2004). Clinical simulation provides educational opportunities in an environment where students receive immediate feedback from their professors, practice similar skills repeatedly and learn new skills with no risk of impacting patient outcomes. This simulated learning method teaches student nurses how to communicate ethically, effectively and accurately with health care colleagues as well as families of patients.

One of the many resources provided by the TAMHSC is the capacity for state-of-the-art education provided through its clinical simulation centers on both the Bryan and Round Rock campuses. The TAMHSC's Simulation Centers are designed to be multidisciplinary, experiential and interactional. Both centers feature a state-of-the-art operating room, emergency room, labor and delivery room, with a nursery and hospital rooms. The technology in the TAMHSC Simulation Centers allows the facilitator to operate, record and review with the students as they enact patient scenarios in the simulated setting. The planned case scenarios enable the students to experience patients who present unusual symptoms or are high risk, or disaster scenarios that may not be readily accessible during clinical rotations.

The College of Nursing uses the "Sim Centers" to offer a highly effective and innovative teaching practice of simulated case scenarios utilizing high fidelity human patient simulators and standardized patients. Simulation provides students with realistic patient centered interaction while promoting critical thinking in a non-threatening environment. Simulated human patients used in the lab—adult, infant, pediatric and obstetric—introduce students to new content as well as reinforce content already learned. Combining the expertise and skills of nursing students, medical students, pharmacy students, future hospital administrators and public health professionals, the centers promote collaborative partnerships and relationships on many levels.

Future Simulation Innovations

Today's students are driven by technology. TAMHSC is implementing a cutting-edge tool in technology to introduce the latest virtual simulation teaching method, clinical simulation in Second Life (SL). SL provides a virtual simulation experience using technology with which many students are familiar. Faculty facilitates this educational tool, but it is driven by students.

SL allows the faculty member to provide a variety of virtual clinical simulations while maintaining a consistent, safe experience for each student. Our goal for the use of SL is to create a virtual hospital with mental health and pediatric units. The benefit of SL will add to the number of clinical sites available to nursing students. This use of virtual simulation will support growth in class size for the College by accommodating more students in a clinical setting.

5. FACULTY DEVELOPMENT IN CENTRAL TEXAS

Recently, to help address the capacity issues, the College of Nursing took the lead on a grant awarded for the Central Texas Region team, which consists of 12 nursing programs from various Colleges. The purpose of this grant is to assess and meet the simulation training needs of nursing education faculty and increase the use of interprofessional simulation as a substitute for clinical experiences. Three faculty workshops have been completed this year with a final workshop planned for December to conclude the grant project. Workshops have been held in Austin, Temple and Bryan to provide the opportunity for all nursing programs in the region to participate. Twelve nursing programs have collaborated under the leadership of the TAMHSC College of Nursing serving as the project director. This faculty development initiative will encourage more effective and efficient use of simulated learning in order to expand the capacity of existing schools beyond their current clinical experiences.

6. FUNDING ISSUES AND FUTURE GROWTH

TAMHSC provided internal funds to support start-up for the College and continues to provide support to cover costs that exceed the initial formula funding received in this biennium. Expenditures related to the startup of the College include operating expenses, support staff and faculty salaries, which consist of 16 full-time nursing faculty, two part-time nursing faculty and a small number of adjunct faculty. Other educational resource expenditures include computing and information resources, library facilities, financial aid and other student-related services.

In addition, the $697,599 in funding received in FY2010 from the Nursing Shortage Reduction Program (NSRP) has helped to support growth in class size despite the budget reversion; however we are now faced with a reduction in the amount we will receive from the NSRP for FY2011 from an expected amount of $439,422 to a reduced amount of $236,894. This reduction in NSRP funding brings into question our ability to maintain our current class size. With the financial support of TAMHSC, formula funds based on initial enrollment, and the NSRP funds, the College has been able to provide the faculty needed to educate the current number of nursing students enrolled. The TAMHSC will request support from the 82nd Legislature, including approval for the College to receive the Small Class Supplement in the Instruction and Operations formula. For now, the current and possible future budget reductions threaten our progress and plans for class expansion and the addition of graduate programs.

Nonetheless, the TAMHSC College of Nursing is strategically positioned to serve the state by educating highly competitive students seeking a career in nursing, and we stand ready to continue to address the shortage by graduating as many new nurses as possible based on future funding that we may receive.

Higher Education Coordinating Board

Exemptions & Waivers

Presentation for the
Senate Committee on Finance
Interim Charge #7

August 4, 2010

Exemptions & Waivers
Definitions

*Exemption & Waiver programs are **authorized by the Texas Legislature** and provide a monetary benefit to qualifying students via a reduction in tuition, fees, or both.*

Exemptions:
Allow special groups of resident or non-resident students to pay a reduced amount of tuition and fees.

Waivers:
Allow special groups of non-resident students to pay a reduced non-resident tuition rate.

Slide 2

THECB
08/2010

Exemptions & Waivers

Implementation

Implementation of exemption & waiver programs vary by statute.

Mandatory:
Require all institutions to honor provisions in statute for all qualifying students

Optional:
Allow governing boards to choose whether to implement the program or not.

Slide 3

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08/2010

Exemptions & Waivers

Funding

With few exceptions, exemption and waiver programs ***do not receive state appropriations*** *. Instead, institutions are required to cover the "costs" of the programs via foregone tuition and fees.*

FY2009
✓ 209,200 students served
✓ Approx. $359 million in foregone tuition and fees (FY09 dollars).

Mandatory:
$264 million

Optional:
$95 million

Slide 4

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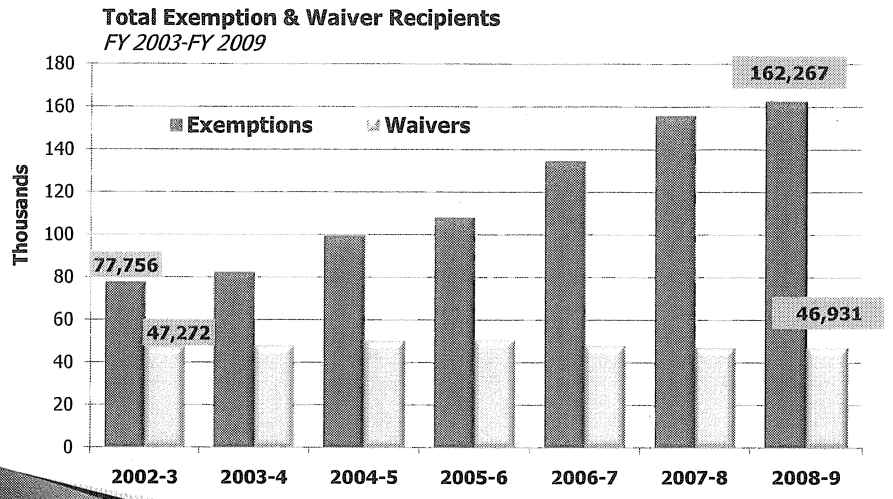
Exemptions & Waivers

Recipient Trends



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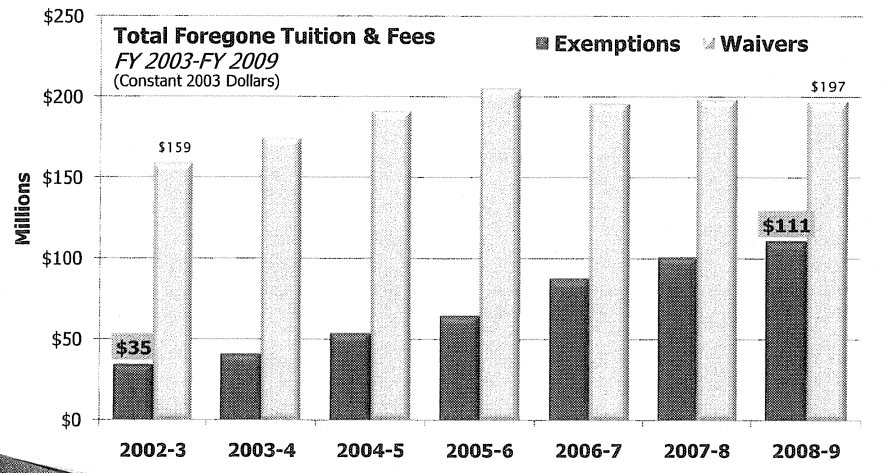
Exemptions & Waivers

Financial Impact



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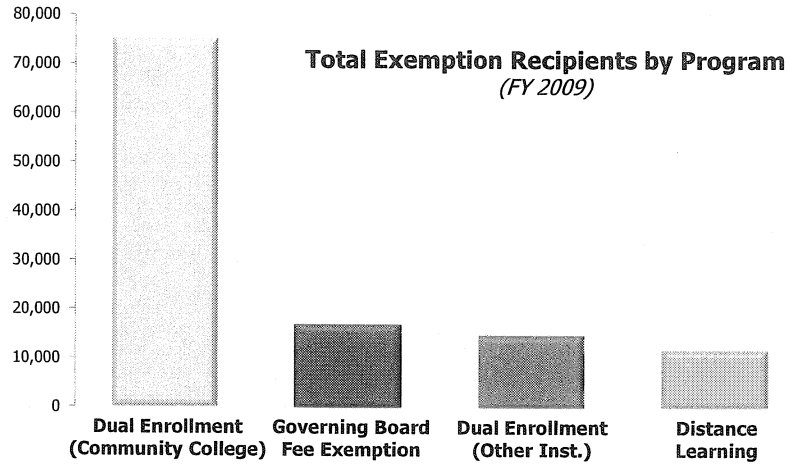
Exemptions

Top 4 Programs



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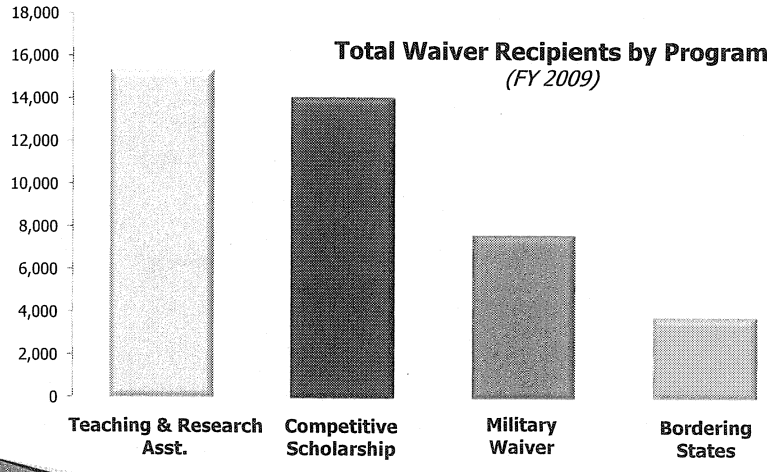
Waivers

Top 4 Programs



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Exemptions & Waivers

Considerations

✓ Include ***Satisfactory Academic Progress*** requirements for all exemption programs.

✓ Close the **"repeated courses"** and **"excessive hours"** loophole for all exemption programs.

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Texas Higher Education Coordinating Board

OVERVIEW

Exemptions and Waivers

Texas currently maintains a variety of programs aimed at exempting or waiving tuition, fees, and other expenses related to attending public colleges and universities. These exemption and waiver programs are targeted to specific populations that the Texas Legislature has identified as warranting special consideration related to paying for higher education costs. Statutes are inconsistent in the use of the terms "exemption" and "waiver", so for the purposes of this overview we have defined an exemption as a program that allows special groups of Texas residents or nonresidents to enroll and pay a reduced amount of tuition and/or fees. A waiver allows special groups of nonresidents to enroll and pay a reduced nonresident tuition rate. We are also limiting the use of these terms to programs whose costs are absorbed by the institutions.[1]

Exemptions allow special groups of Texas residents or nonresidents to enroll and pay a reduced amount of tuition and fees.

Waivers allow special groups of nonresidents to enroll and pay a reduced nonresident tuition rate.

Some programs are large and well known, such as the Hazlewood Exemption which provides an exemption from tuition and some fees for eligible Texas veterans. Others are relatively obscure and uniquely targeted, such as the Olympic Programs Waiver which waives out-of-state tuition rates for any student attending The University of Texas Brownsville or Texas Southmost College while participating in a Community Olympic Development Program or training at a U.S. Olympic training center in Texas.

All exemption and waiver programs are authorized or mandated by the Texas Legislature. Most exemption and waiver programs were designed to reward individuals or their families for services rendered. Others are used to strengthen the basic infrastructure of higher education, in that institutions use them to recruit faculty, research assistants, teaching assistants, and highly-qualified students. Today, Texas has 39 exemption programs and 21 waiver programs. In FY 2009, more than 209,500 students received assistance through these programs, and the amount of tuition and fee revenue foregone by institutions totaled more than $361 million in FY 2009 dollars.

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[1] The state appropriates funds to the Coordinating Board for use in reimbursing the costs of five programs referred to in statute as "exemptions." Because of this reimbursement, however, these programs have not been included in the cost estimates and analyses of this report. The programs function more like grants than exemptions. These programs include the Educational Aides Exemption Program (TEC 54.214), the Temporary Assistance to Needy Families Exemption (TEC 54.212), the Tuition Assistance Program for Members of State Military Forces, (TEC 54.2155 and Texas Government Code 431.090), the Early High School Graduation Scholarship Program (TEC Chapter 56, Subchapter K,) and the Combat Exemption Program (TEC Chapter 54.203 (b-2)).

Mandatory exemption and waiver programs are dictated in statute for all institutions to honor.

Optional exemption and waivers provide discretion for governing boards to implement.

Common Questions

Are all exemption and waiver programs mandated by the Texas Legislature?
Most programs are mandated for all institutions to implement and serve the defined program population. However, some programs are optional – implementation is left to the discretion of the governing boards at each institution. If the institution chooses to offer the program, however, it must serve all eligible students.

Does the Coordinating Board administer exemption and waiver programs?
No. The Coordinating Board performs a variety of tasks for a few programs as prescribed by statute, but exemption and waiver programs are generally administered locally at each institution.[2]

How do institutions administer the exemption and waiver programs?
While eligibility requirements and benefits are stated in statutes, how the programs are administered varies by institution. The greatest variation exists in the location(s) on campus where the programs are administered. Many institutions, for example, administer military-related waiver and exemption programs from a Veterans Affairs office. Conversely, some scholarship/academic waiver programs may be handled in the relevant academic department. Still other programs may be administered by the business, admissions, or financial aid offices.

Institutions have, in most cases, local discretion to identify the documentation needed to support a student's claim of eligibility. Once eligibility is determined by the appropriate institutional authority, billing is adjusted accordingly and the student pays the remaining balance of expenses (if any). Complicating administration, statutes usually do not define a deadline for students to prove eligibility. Therefore, institutions may have to revise billing, make refunds, and submit revised reports to the Coordinating Board for students proving eligibility after the census or billing date of an academic semester or year.

How are exemption and waiver programs funded?
The state does not fund the exemption and waiver programs described in this overview. (See footnote 1, page 1.) The all funds formula funding allocations to institutions do not include any set aside or funding line item to offset tuition and fees lost to exemptions and waivers claimed at an institution. We cannot estimate the overall net effect of tuition and fee losses to the institutions. However, of the $361 million in tuition and fees forgone in FY2009, $266.5 million was associated with the cost of mandatory exemption and waiver programs, and $94.6 million in institutional revenue was associated with optional programs that some institutions elected to administer.

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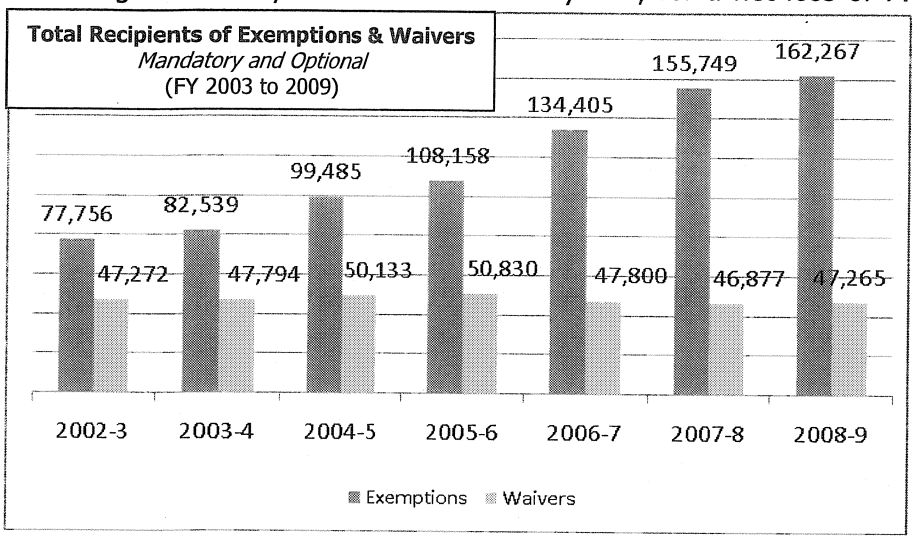
[2] Statutes call for the Board to adopt rules for the administration of several programs, including the Hazlewood Act (TEC 54.203), Exemption Program for Nurse Faculty Children (TEC 54.221), Exemption for Preceptors and their Children (TEC 54.222), and Exemptions for Firefighters Enrolled in Fire Science Curriculum. Statutes also call for the Board to maintain a database for tracking student progress through their 150 hours of eligibility for the Hazlewood Exemption, to design applications for the Nurse Faculty and Preceptor Exemptions, and to compile a list of degree programs eligible for the Firefighter Exemption.

How many students participate in exemption and waiver programs?
Since FY 2003, total participation in exemption and waiver programs has increased 68 percent. However, all the growth has occurred in exemption programs. An additional 84,500 students received exemptions in FY 2009 than in FY 2003. During this period, participation increased mostly in dual enrollment programs, fee exemptions for distance learners, and students receiving exemptions to cover the Texas Tomorrow Fund shortfall.

Meanwhile, overall participation in waiver programs has dropped slightly since FY 2003. Although the number of students receiving optional waivers increased by 274, the number receiving mandatory waivers decreased by 281, for a net loss of 7. Among waiver programs, participation increased most in academic competitive scholarship-based waivers and in waivers for students from states bordering Texas. The greatest decrease was in waivers for military personnel stationed in Texas, which experienced a decline of more than 2,500. The Coordinating Board has been advised that the decline in this area is primarily due to increased military deployments since 2003 and competition with private and border-state institutions.



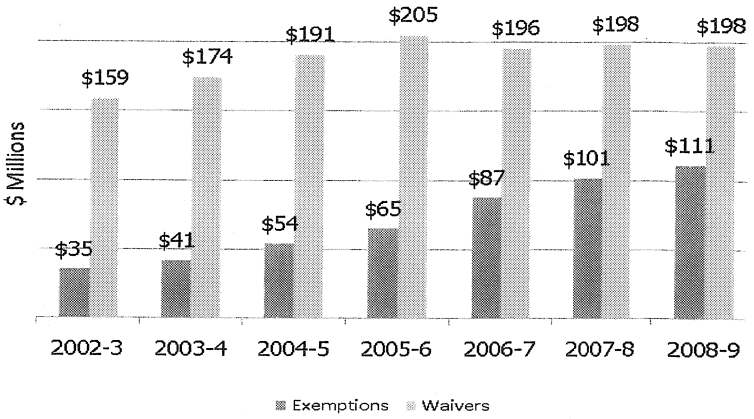
How do exemption and waiver programs interact with state provisions related to limitations on formula funding for excess hours or dropped courses?
State statutes exclude course hours from an institution's formula funding calculation if the hours are:

- Generated by undergraduates who have already attempted 30 hours beyond their degree plan (TEC 61.0595);
- Generated by graduates who have already have a total of 100 or more semester credit hours of doctoral work (TEC 61.069); and
- Generated by undergraduates who are repeating a course for the third time (Rider 42, Page III-247, General Appropriations Act).

Additionally, statutes (TEC 54.014) authorize institutions to pass the cost of this lost formula funding on to the students by raising the students' tuition rates to an amount as high as the nonresident rate. However, students exempted from the payment of tuition are exempt from the penalty tuition rates, also. In short, only the institutions and not the students are penalized under these provisions if a tuition exemption is provided for a student that triggers one of these thresholds.

How much institutional revenue is lost because of exemption and waiver programs?
Between FY 2003 and FY 2009 the total value of exemptions and waivers increased by more than $115 million in constant 2003 dollars. Mandatory exemptions and waivers account for 59 percent of the total increase. Among exemptions, the greatest dollar increases were in programs for dual enrolled students, participants in the Texas Tomorrow Fund (for whom institutions are to exempt the difference between the value of the state's pre-paid tuition plan and actual tuition and fee charges) and for fee exemptions for blind and deaf students. The largest dollar increases for waivers were for competitive scholarship recipients, followed by research and teaching assistants.

Tuition and Fee Revenues foregone through Exemptions and Waivers
Mandatory and Optional
(FY 2003-2009, Constant 2003 Dollars)



Are all exemption programs similarly structured in statute and applied uniformly?
No. As exemption and waiver programs have been added and amended by the Texas Legislature over many decades, there has been limited uniformity in definition, application, or structure for the programs. A clear example of the lack of uniformity is evident in how the programs are distributed throughout Texas code, to include Texas Education Code Chapter 54 (Tuition and Fees) and Chapter 130 (Junior College Districts), as well as the Texas Government Code, Chapter 615 (Financial Assistance to Survivors of Certain Law Enforcement Officers, Fire Fighters, and Others).

More importantly is the disparity and variation in definitions related to eligibility, benefits, academic requirements and residency. For example, some programs limit the total credit hours that will qualify for exemption (120, 150 or 200). Others authorize exemptions until such time a degree is awarded, while others have no apparent restriction on total hours once the student initially qualifies for the exemption. In terms of eligibility, some programs require financial need while others include some merit components (such as a recommendation from a high school principal). Some require Texas residency as defined in the Texas Education Code, others are silent on residency. The value of awards varies from a single fee or charge to "all dues, fees, and charges whatsoever." And, the terminology is also varied as some programs refer to exempting "mandatory fees," while others reference only "fees," and still others use the term "tuition fees."

Additional Exemption and Waiver Program Data

Total Program Costs (Mandatory & Optional), FY 2003 and FY 2009

(Constant 2003 Dollars)

	FY 2003		FY 2009	
Exemptions	Award Recipients	Forgone Revenue	Award Recipients	Forgone Revenue
Public Universities	28,414	$16,838,897	58,488	$58,454,547
Public Health Related	841	633,227	2,604	1,741,833
Public Community Colleges	46,021	16,317,797	86,875	47,069,954
Public State Colleges	193	264,621	6,196	2,405,792
Public Technical Colleges	2,287	649,881	1,586	967,420
Total - All Institutions	**77,756**	**$34,704,423**	**155,749**	**$110,639,546**
Waivers				
Public Universities	33,747	$139,719,140	33,399	$175,709,136
Public Health Related	1,534	8,302,693	2,435	12,789,928
Public Community Colleges	11,513	9,718,031	10,534	7,362,098
Public State Colleges	46	101,284	33	85,662
Public Technical Colleges	432	1,133,098	476	2,214,406
Total - All Institutions	**47,272**	**$158,974,246**	**46,877**	**$198,161,230**

Sources: FY 2003 and FY 2009 Integrated Fiscal Reporting System reports

Mandatory Program Statistics, FY 2003 and FY 2009

(Constant 2003 Dollars)

	FY 2003		FY 2009	
Exemptions	Award Recipients	Forgone Revenue	Award Recipients	Forgone Revenue
Public Universities	5,942	$10,601,802	18,646	$38,655,418
Public Health Related	226	520,079	284	1,072,035
Public Community Colleges	10,215	6,358,876	17,098	8,683,944
Public State Colleges	182	258,927	264	416,510
Public Technical Colleges	384	177,000	375	431,543
Total - All Institutions	**16,949**	**$17,916,684**	**36,667**	**$49,259,450**
Waivers				
Public Universities	30,460	$125,009,378	30,463	$160,050,532
Public Health Related	1,512	8,219,946	2,364	12,361,908
Public Community Colleges	9,295	8,878,828	7,997	6,211,380
Public State Colleges	30	69,481	21	37,941
Public Technical Colleges	1	4,578	3	3,233
Total - All Institutions	**41,298**	**$142,182,210**	**40,848**	**$178,664,994**

Sources: FY 2003 and FY 2009 Integrated Fiscal Reporting System reports.

Optional Program Statistics, FY 2003 and 2009
(Constant 2003 Dollars)

	FY 2003		FY 2009	
Exemptions	Award Recipients	Forgone Revenue	Award Recipients	Forgone Revenue
Public Universities	22,472	$6,237,095	39,842	$19,799,129
Public Health Related	615	113,148	2,320	669,798
Public Community Colleges	35,806	9,958,921	69,777	38,386,010
Public State Colleges	11	5,694	5,932	1,989,282
Public Technical Colleges	1,903	472,881	1,211	535,877
Total - All Institutions	**60,807**	**$16,787,739**	**119,082**	**$61,380,096**
Waivers				
Public Universities	3,287	$14,709,762	2,936	$15,658,603
Public Health Related	22	82,747	71	428,021
Public Community Colleges	2,218	839,203	2,537	1,150,718
Public State Colleges	16	31,803	12	47,721
Public Technical Colleges	431	1,128,520	473	2,211,173
Total - All Institutions	**5,974**	**$16,792,035**	**6,029**	**$19,496,236**

Sources: FY 2003 and FY 2009 Integrated Fiscal Reporting System reports.

Resources

College for All Texans: www.collegeforalltexans.com
Exemption Programs: http://www.collegeforalltexans.com/apps/financialaid/tofa.cfm?Kind=E
Waiver Programs: http://www.collegeforalltexans.com/apps/financialaid/tofa.cfm?Kind=W

Appendix A

Exemption and Waiver

Alpha Listing

(E)xemption or (W)aiver	Target Population	Optional or Mandatory	Citation	Value
E	Adopted	Mandatory	TEC 54.2111	tuition and fees, no limit
E	Children of Disabled Firemen/Peace Officers	Mandatory	TEC 54.204	tuition and required fees for 120 hours
E	Children of Military Deployed to Combat	Mandatory	TEC 54.203(b-2)	tuition while parent deployed to combat zone -- NEW in 2010
E	Children of Nurse Faculty	Mandatory	TEC 54.221	tuition for up to 10 semesters
E	Children of POWs and MIAs	Mandatory	TEC 54.209	tuition and fees other than deposit fees until age 21 (25 if still dependent)
E	Community College Employees (NEW)	Optional	TEC 130.0851	all or part of tuition and fees
E	Concurrent Enrollment / Min Tuition	Mandatory	TEC 54.011	difference between minimum and per hour tuition
E	Deaf or Blind	Mandatory	TEC 54.205	tuition and fees, no limit
E	Dependents of Deceased Public Servants	Mandatory	TGC 615.0225	tuition and fees, books and living stipend for earlier of 200 hours or BA
E	Designated Tuition Exemption	Optional	TEC 54.0513(d)	designated tuition
E	Disabled Peace Officer	Optional	TEC 54.2041	tuition and required fees for 12 semesters undergraduate work, 1st masters; 1st doctoral degree
E	Distance Learning Exemption from Fees	Optional	TEC 54.218	fees irrelevant to off-campus learners
E	Dual Enrollment Jr. College	Optional	TEC 130.008	some or all tuition and fees, as negotiated with ISD
E	Dual Enrollment All Inst.	Optional	TEC 54.216	some or all tuition and fees, as negotiated with ISD
E	Ex-Prisoners Of War	Mandatory	TEC 54.219	tuition and fees, books and living stipend for 120 hours
E	Firefighters taking Fire Science Courses	Mandatory	TEC 54.208	tuition and lab fees for courses of fire science curriculum
E	Foster Care/TX Dpt. Family Protective Services	Mandatory	TEC 54.211	tuition and fees, no limit
E	Fully Funded Courses	Optional	TEC 54.217	tuition and fees, if already paid by a third party

Appendix A

Exemption and Waiver

Alpha Listing

(E)xemption or (W)aiver	Target Population	Optional or Mandatory	Citation	Value
E	Governing Board Exemptions	See Osteopathic Manipulative Medicine Exemption and Presidential Educational Scholarship		
E	Hazlewood Dependents (Credit Hrs)	Mandatory	TEC 54.203(b)	tuition and fees other than property and student service fees, for 150 hours
E	Hazlewood Dependents (Non-credit)	Mandatory for funded courses; otherwise optional	TEC 54.203(b)	tuition and fees other than property and student service fees, for 150 hours
E	Hazlewood Vets (Credit Hrs.)	Mandatory	TEC 54.203(a)	tuition and fees other than property and student service fees, for 150 hours
E	Hazlewood Vets (Non-Credit Hrs.)	Mandatory for funded courses; otherwise optional	TEC 54.203(a)	tuition and fees other than property and student service fees, for 150 hours
E	Highest Ranking HS Scholar	Optional	TEC 54.201	tuition only for 2 regular terms
E	Interinstitutional Academic Programs (NEW)	Optional	TEC 54.224	tuition and required fees
E	Irrelevant Fees Exemption	Optional	TEC 54.5035(a)	fees irrelevant to off-campus learners
E	National Guard Waiver (FY08)	Mandatory	TEC 54.2155	tuition
E	Osteopathic Manipulative Medicine	Optional	TEC 54.5035(b)	a mandatory or discretionary fee
E	Out-of-District Students	Optional	TEC 130.0032	all or part of out-of-district tuition
E	Peace Officer Exemption	Mandatory	TEC 54.208	tuition and lab fees for courses of criminal justice or law enforcement
E	Preceptors and/or their Children	Mandatory	TEC 54.222	up to $500 tuition per term for 10 terms
E	Presidential Educational Scholarship	Optional	TEC 54.5035(b)	a mandatory or discretionary fee
E	Prorated Fees for Term Length	Optional	TEC 54.5025	fees
E	Senior Citizen Lowered Tuition 55 +	Optional	TEC 54.013	lowered tuition rate
E	Senior Citizen 65+ for Audit Hours	Optional	TEC 54.210(b)	tuition and fees
E	Senior Citizen 65+ for <=6 SCH	Optional	TEC 54.210(c)	tuition for up to 6 hours/term

Appendix A

Exemption and Waiver

Alpha Listing

(E)xemption or (W)aiver	Target Population	Optional or Mandatory	Citation	Value
E	Student Services Fee Exemption	Optional	TEC 54.503(e)	student services fee
E	"Taps" Performers	Mandatory	TEC 54.215	$25 towards tuition and fees each performance of Taps at a military funeral
E	Texas Tomorrow Fund	Mandatory	TEC 54.624	difference between contract value and actual tuition and fees
E	Three Peat Fee	Optional	TEC 54.014(f)	no 3-peat penalty (difference between resident and nonresident tuition)
E	Tuition Reduction for >= 15 Hours	Optional	TEC 54.010	up to 3 hours' tuition reduction for person taking at least 15 hours
W	100 Mile-from TX-Border GATI*	Optional	TEC 54.0601	reduced nonresident tuition, not less than resident rate + $30/hr
W	Academic Common Market	Optional	TEC 160.07	pay resident, rather than nonresident rate
W	Biomedical MD/PhD	Mandatory	TEC 54.065	pay resident, rather than nonresident rate
W	Border County / Parish	Optional	TEC 54.060(g)	same rate as Texan pays in student's home state
W	Border States	Optional	TEC 54.060(a)	same rate as Texan pays in student's home state
W	Citizens of Mexico in Border Insts.	Mandatory	TEC 54.060(b)	pay resident, rather than nonresident rate
W	Citizens of Mexico (Pilot)	Optional	TEC 54.060(c)	pay resident, rather than nonresident rate
W	College Teachers, Profs. etc.	Mandatory	TEC 54.059	pay resident, rather than nonresident rate
W	Compet. Schol. Graduate Academic	Mandatory until fall 2009/Now Optional	TEC 54.064	pay resident, rather than nonresident rate
W	Compet. Schol. Undergraduate Academic	Mandatory until fall 2009/Now Optional	TEC 54.064	pay resident, rather than nonresident rate
W	Compet. Schol. Graduate Nonacademic	Mandatory until fall 2009/Now Optional	TEC 54.064	pay resident, rather than nonresident rate
W	Compet. Schol. Undergraduate Nonacademic	Mandatory until fall 2009/Now Optional	TEC 54.064	pay resident, rather than nonresident rate
W	Economic Development	Mandatory	TEC 54.073	pay resident, rather than nonresident rate

Appendix A

Exemption and Waiver

Alpha Listing

(E)xemption or (W)aiver	Target Population	Optional or Mandatory	Citation	Value
W	Foreign Service Officer	Mandatory	TEC 54.070	pay resident, rather than nonresident rate
W	Good Neighbor	Optional	TEC 54.207	pay resident, rather than nonresident rate
W	Military in Texas	Mandatory	TEC 54.058	pay resident, rather than nonresident rate
W	NATO Members and Families	Mandatory	TEC 54.074	pay resident, rather than nonresident rate
W	Nursing Grad Students Planning to Teach	Optional	TEC 54.069	pay resident, rather than nonresident rate
W	Olympic Programs Waiver	Mandatory	TEC 54.073	pay resident, rather than nonresident rate
W	Public Health Grad Students from Mexico	Mandatory	54.060(b)	pay resident, rather than nonresident rate
W	Radiology Student at MSU in Military	Optional	TEC 54.058(h)	pay resident, rather than nonresident rate
W	Teaching and Research Assistants	Mandatory	TEC 54.063	pay resident, rather than nonresident rate
W	Tech fee at UT Austin	Optional	TEC 65.45	pay resident, rather than nonresident rate
W	Texas Tomorrow Fund Contract	Mandatory	TEC 54.621(c)	waived nonresident tuition in excess of contract

Appendix B

Exemption and Waiver

Descriptions

(E)xemptions or (W)aiver	Target Population	Description	FY09 Total Recipients	FY09 Total Value
E	Adopted	was formerly in foster or other residential care; was adopted; was subject of adoption assistance agreement under Subchapter D, Ch 162, Family Code. No limit once in program	278	$745,047
E	Children of Disabled Firemen/Peace Officers	child of disabled eligible employee; enter by age 21 unless eligible to participate in a school district's special education program under 29.003; meet all entrance requirements of institution.; meet institution's academic progress requirements. Must use by age 26; current tenure is 1st 120 undergraduate credit hours	117	$395,801
E	Children of Military Deployed to Combat	child, age 25 or younger, must be TX resident, or eligible to pay resident tuition; parent, or step-parent, must be actively deployed on active combat duty outside the US for the purpose of engaging in combat	New in 2010	
E	Children of Professional Nurse Faculty	resident of TX; 25 yrs.of age of younger; enrolled as undergrad.; child of person employed or under contract to be employed full-time as member of professional. nursing faculty or staff at the beginning of term or some point during term; enrollment at same inst. where parent is employed. Current tenure is 10 sem. or summer sessions or until received bachelor's degree	98	$227,925
E	Children of POWs and MIAs	child of Texas resident on active duty as member of US armed forces who, at time of registration is classified by DOD as MIA or POW. Current tenure is while under 21, or under age 25 if receiving majority of support from parent & parent continues to be MIA or POW	1	$228
E	Community College Employees -- NEW	employees of community college districts. Only applies to district in which person is employed. Does not include spouse or children	New in 2010	
E	Concurrent Enrollment / Min Tuition	concurrent enrollment in more than one institution of higher education that charges a minimum tuition rate; no limit as long as student meets program	2,389	$1,161,158
E	Deaf or Blind	resident of TX; blind as defined in 91.051(5), Human Resources Code or deaf; certification of disability by appropriate state agency; written statement of educational purpose & degree or certification to be pursued; HS diploma or equivalent; letter of recommendation; proof meets all other institutional entrance requirements; no limit, as long as student meets requirements	3,480	$8,607,500
E	Dependents of Deceased Public Servants	surviving dependent child or spouse of deceased public servant; enroll full-time for lesser of 200 SCH or until receive bachelor's degree	231	$295,028
E	Designated Tuition Exemption	institution determines payment of tuition would work an undue financial hardship on the student; no limit	4,598	$3,082,175
E	Disabled Peace Officer	resident of TX; resided in TX the 12 months prior to enrollment; permanently disabled from injury suffered in performance of duty as peace officer of state or political subdivision of state; unable to continue employment as a peace office because of disability; tenure is 12 semesters or sessions of undergraduate work; plus hours for 1st master's degree; plus hour. for 1st doctorate degree	37	$122,830
E	Distance Learning Exemption from Fees	student must be enrolled only in distance learning courses or other off-campus courses and cannot be reasonably expected to use the services/facilities on which the fee is based	11,741	$3,476,978
E	Dual Enrollment Jr. College	enrollment in course for which student may receive joint high school and college credit; agreement between school district and community college for the waiver; no limit as long as student meets program requirements	75,206	$42,705,071
E	Dual Enrollment All Inst.	enrollment in a course for which student is entitled to simultaneously receive credit towards HS academic requirements & course credit towards college degree; no limit as long as student meets program requirements	14,743	$8,409,111
E	Ex-Prisoners Of War	resident of TX, resident when entered service; identified by Dept.of Defense as POS on or after 1/1/1999; enrolled for at least 12 hours per semester until BA or 120 hrs.	0	$0
E	Firefighters taking Fire Science Courses	a person employment as a fireman by any political subdivision of the state or currently and for the past year serving as an active member of an organized volunteer fire department in this state, as defined by the fire fighters' pension commissioner; enrolled in courses offered as part of a fire science curriculum. Current tenure no limit, as long as student meets requirements. A volunteer firefighter must hold (1) an Accredited Advanced level of certification, or an equivalent successor certification, under the State's Firemen's and Fire Marshals' Association of Texas volunteer certification program; or (2) Phase V (Firefighter II) certification, or an equivalent successor certification, under the Texas Commission on Fire Protection's voluntary certification program under Section 419.071. Government Code. Unless a previous recipient (FY2009 or earlier), must meet institution academic progress requirements to continue receiving exemptions, and cannot use the exemption to avoid increased tuition due to excess undergraduate or graduate hours under (TEC 54.014(a) or (f) or 61.059(l)(1) or (2).	2,102	$1,948,564

Appendix B

Exemption and Waiver

Descriptions

(E)xemptions or (W)aiver	Target Population	Description	FY09 Total Recipients	FY09 Total Value
E	Foster Care/TX Dpt. Family Protective Services	under the conservatorship of the Texas Dept. of Protective & Regulatory Services on or after (1) day preceding student's 18th birthday, (2) day of 14th birthday if also eligible for adoption on/after that date, or (3) on the day student graduated from HS or received GED; or during academic term while dual enrolled as a high school student. Deadline for entry is 25th birthday; enrollment as undergraduate. Current tenure- no limit once in program. May be used for taking dual enrollment courses.	2,293	$4,950,684
E	Fully Funded Courses	enrollment in courses fully funded by federal or other sources; no limit as long as student meets program requirements	241	$123,727
E	Governing Board Exemptions	inst. determines that waiver of mandatory or discretionary fee for a specific category of students is in the best interest of the inst. or is critical to the viability of an academic initiative & that waiver won't impair institution's ability to meet debt obligations or otherwise support the activity/service/facility. In FY 2008, included Osteopathic Manipulative Medicine Exemption and a Presidential Education Scholarship.	16,899	$6,814,467
E	Hazlewood Dependents (Credit Hrs)	child or spouse of deceased or severely disabled member of US Armed Forces who was a TX resident at time of entry & died or suffered disabling injuries as a result of injury/illness related to service; exhaust federal veterans benefits 1st; no default on a state or federal student loan; resident at time of using exemption; current limit 150 credit hrs. child or spouse of deceased or severely disabled member of TX Nat'l Guard or TX Air Nat'l Guard killed since 1/1/1946 while on active duty for US or state; resident at time of using exemption; current tenure 150 credit hrs. (spouse added by 81st Legislature)	21	$45,672
E	Hazlewood Dependents (Non-credit)	same as above, but enrolled in non-credit courses	0	$0
E	Hazlewood Vets (Credit Hrs.)	resident at time of entry; service in required point in history &/or length of time; honorable discharge; federal Ch 33 benefits may not exceed Hazlewood; no default on state loan; current tenure 150 credit hrs.	9,526	$24,194,977
E	Hazlewood Vets (Non-Credit Hrs.)	same as above, but enrolled in non-credit courses	335	$416,129
E	Highest Ranking HS Scholar	highest ranking graduate of accredited TX high school; deadline for entry and use first 4 regular sessions following graduation; tenure is 2 regular semesters	1,062	$5,116,293
E	Interinstitutional Academic Program - NEW	written agreement required between participating institutions under which a student may take courses at each institution to fulfill the interinstitutional academic program's degree or certificate requirements. Participants may include students from public or private or independent institutions of higher education.	New in 2010	
E	National Guard Fee Waiver (FY08)	member of Texas Nat'l Guard, tuition for up to 12 hours per semester. for up to 10 semesters or 5 academic years whichever comes first. Limited to 1 degree per level (certif., associate's, bachelor's, graduate degree). Student must meet institutional SAP.	5	$2,950
E	Out-of-District Students	ownership of property subject to ad valorem taxation by the district by student (or parent, if student is a dependent); no limit as long as student meets program requirements. reside outside the granting school's district but in taxing district of a contiguous public junior college; no limit as long as student meets program requirements reside in service area of district; not residing in junior college district; demonstrates financial need; no limit as long as student meets program requirements	570	$395,569
E	Peace Officer Exemption -- NEW	undergrad enrolled in eligible course employed as peace officer by state or a political subdivision of the state, enrolled in criminal justice or law enforcement degree program. Must be making academic progress, apply for exemption no less than one week prior to end of registration period. Cannot use exemption to avoid penalties for excess hours under 61.0595. No more than 20% of a class's capacity may be receiving the exemption.	New in 2011	
E	Preceptors and/or their Children	resident of TX; preceptor must be registered nurse serving under written preceptor agreement with an undergraduate professional nursing program as a clinical preceptor at time of enrollment; current tenure no limit as long as student meets program requirements resident of TX; child of registered nurse serving under written preceptor agreement with an undergraduate professional nursing program as a clinical preceptor at time of child's enrollment; enrolled as an undergraduate 10 semesters or summer sessions or until received bachelor's degree	208	$137,207
E	Prorated Fees for Term Length	enrollment in semester or term the institution deems to be short enough to justify the decreased charges; no limit as long as student meets program requirements	0	$0
E	Senior Citizen Lowered Tuition 55 +	at least 55 yrs of age; enrollment cannot preclude a less-than-55 year old from enrolling in a course for credit toward a degree or certificate; no limit as long as student meets program requirements	885	$213,872
E	Senior Citizen 65+ for Audit Hours	at least 65 years of age; auditing class; space available in the class; no limit as long as student meets program requirements	179	$152,462

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Exemption and Waiver

Descriptions

(E)xemptions or (W)aiver	Target Population	Description	FY09 Total Recipients	FY09 Total Value
E	Senior Citizen 65+ for <=6 SCH	at least 65 years of age; space available in the class; no limit as long as student meets program requirements	2,959	$684,040
E	Student Services Fee Exemption	enrollment in more than 1 institution within a college or university system under concurrent enrollment provisions of joint or cooperative programs between institutions.; no limit, as long as student meets requirements.	599	$468,906
E	"Taps" Performers	Each institution of higher education shall provide a $25 exemption from tuition and required fees to students providing vouchers for performing "Taps" at a veteran's funerals held in TX during grades 6-12 or while in post-secondary ed.	0	$0
E	Texas Tomorrow Fund	tuition and fees at institution exceeds the statewide average of tuition & fees used to determine the value of Texas Tomorrow Prepaid Tuition Program contract for relevant year	11,464	$14,465,194
E	Three Peat Fee	inst. may charge a higher tuition rate for any course in which the student enrolls that is the same as or substantively identical to a course for which the student previously completed. The Coordinating Board shall adopt a rule that exempts the student from the penalty if the repeated course is due to a hardship or other good cause	0	$0
E	Tuition Reduction for >= 15 Hour	student taking at least 15 hours in a term, if governing board determines it is in the interest of the institution or the student.	0	$0
		Exemption Totals (2009 $)	162,267	$129,359,565
W	100 Mile-from TX-Border GATI*	be enrolled in a general academic teaching institution located within 100 miles of the TX border and approved by CB to participate in program. Does not apply to spouse or children.	590	$3,073,266
W	Academic Common Market	Student must be graduate student enrolled in program of study offered in TX that is not offered in their home state. Done on a reciprocal basis with other states of the Regional Education Pact. Student may receive award as long as he meets requirements. Does not apply to spouse or children	101	$282,119
W	Biomedical MD/PhD	Must hold a competitive academic scholarship or stipend & be accepted into a clinical & biomedical research training program leading to both MD & PhD & is not a TX resident; may receive award as long as meeting program requirements. Does not apply to spouse or child.	71	$757,644
W	Border County / Parish	be from a county or parish of one of the states adjacent to Texas. Does not apply to spouse or children.	1,217	$5,861,139
W	Border States	register in public upper-level inst, LSC-O, LSC-PA, junior college or tech college in a county adjacent to state in which student resides. Does not apply to spouse or children. Register in technical college in county within 100 miles of state in which student resides. Does not apply to spouse or children	3,777	$7,673,419
W	Citizens of Mexico in Border Institutions.	show financial need & register in university or technical college located in county adjacent to Mexico, TX Southmost College, TAMU-CC, TAMU-K or UTSA. Does not apply to spouse or children.	2,443	$14,951,972
W	Citizens of Mexico (Pilot)	show financial need and enroll in an institution NOT participating in 54.060(b) waiver program; follow rules as adopted by the CB. Does not apply to spouse or children.	265	$2,917,513
W	College Teachers, Profs. etc.	Be employed as teacher or professor by institution of higher education at least 1/2-time on a regular monthly salary basis. May continue to receive award as long as meeting program requirements. Applies to spouse & children.	770	$3,706,081
W	Competitive Scholarships	Receive a competitive scholarship from the institution for at least $1000. TX residents must also be eligible for the scholarships. Cannot exceed 5% of enrollment for like sem., previous yr. Tenure 1 yr., but may compete for waivers in more than 1 yr. Does not apply to spouse or children.	14,073	$90,536,107
W	Economic Development	be employed by company and transferred to TX as part of the Economic Development and Diversification program within the past 5 years, or be the child of such a person, and give institution a letter of intent to make TX home. May receive award as long as meeting requirements. Applies to child but not spouse.	334	$1,880,435
W	Foreign Service Officer	Be assigned to an office of the Department of State in Mexico. May continue to receive ward as long as meeting requirements. Does not apply to spouse or children	0	$0
W	Good Neighbor	be native-born citizen and resident of a nation in Western Hemisphere other than Cuba, selected by CB in state-side competition. Does not apply to spouse or children.	260	$2,624,297

Appendix B

Exemption and Waiver

Descriptions

(E)xemptions or (W)aiver	Target Population	Description	FY09 Total Recipients	FY09 Total Value
W	Military in Texas	Be currently assigned to active duty in TX or be a member of a TX unit of NG or reserves; may continue to receive award while stationed there. Applies to spouse & children.	7,624	$12,711,425
		Spouse or child of member assigned to duty elsewhere after duty in TX. May continue to receive award as long as residing continuously in TX.		
		lived in TX at least 6 mo. some time in the past; at least 1yr. prior to enrollment - member filed paperwork with military to make TX home & have TX legal residency. for income tax purposes + registered to vote in TX + either owned real property in TX, had auto registered in TX, or has had valid will on file with county clerk of home county		
		child or spouse of member provides institution a letter of intent to make TX his/her home		
		Member has retired or is hon. discharged & at least 1yr prior to enrollment filed paperwork w/ military to make TX home & have TX legal residency for income tax purposes + reg. to vote in TX + either owned real property in TX, had auto reg. in TX or has had valid will on file w/ county clerk of home county		
		Met one of the sets of requirements for a waiver outlined above and remains continuously enrolled in a degree or certificate program. Does not terminate by leaving service or by divorce from member.		
		Veteran eligible for fed veterans benefits and spouse and children under age 26 who provide institution a letter of intent to establish residence in Texas and resides in Texas while going to college	New in FY2010	
W	NATO Members and Families	reside in TX in accordance with NATO agreement. Includes spouse and children	198	$1,183,684
W	Nursing Grad Students Planning to Teach	be enrolled in program designed to lead to MS or higher degree in nursing and intend to teach in Texas in program designed to prepare students as registered nurses. Does not apply to spouse or children.	15	$26,709
W	Olympic Programs Waiver	be a participating athlete in a Community Olympic Dev. Program or at a US Olympic training center located in TX; or be residing here while in training as a participating athlete in a Community Olympic Dev. Program in TX or at a US Olympic training center in TX in a program approved by the governing body for the athlete's Olympic sport; or residing here as a participating athlete at a facility in TX approved by the governing body for the athlete's Olympic sport, in a program approved by that body. Does not apply to spouse or children.	0	$0
W	Public Health Grad Students from Mexico	show financial need and enroll in courses that are part of graduate degree program in public health conducted in county adjacent to Mexico. Does not apply to spouse or children.	0	$0
W	Radiology Student at MSU in Military	begin radiological science program while stationed in TX; continue program by telecommunications after reassigned duty elsewhere	0	$0
W	Teaching and Research Assistants	employment by institution on at least a half-time basis as RA or TA in a field related to field of study. May attend any public institution.	15,335	$82,470,475
W	Tech fee at UT Austin	student must be employed by an entity with which the UT System has entered into an agreement in keeping with the Science and Technology Program	23	$336,503
W	Texas Tomorrow Fund Contract	be the beneficiary of a Texas Pre-paid tuition contract who was a resident of Texas when the contract was purchased. Does not apply to spouse or children.	169	$696,980
		Waiver Total (2009 $)	47,265	$231,689,768

Appendix C.1

Exemptions, FY 2003-FY 2009
(Current Dollars)

Program	Adopted		Children of Disabled Firemen/ Peace Officers		Children of Nurse Faculty		Children of POWs and MIAs	
Statute	54.2111		54.204		54.221		54.209	
Type	Mandatory		Mandatory		Mandatory		Mandatory	
Fiscal Year	Recipients	Total $	Recipients	Total $	Recipients	Total $	Recipients	Total $
2002-3	0	0	152	273,091	0	0	0	0
2003-4	11	21,455	116	290,107	0	0	2	1,075
2004-5	52	162,915	140	359,862	0	0	4	17,127
2005-6	109	341,766	122	432,592	0	0	0	0
2006-7	197	528,785	118	429,697	80	154,240	0	0
2007-8	224	668,710	139	430,418	87	159,479	1	810
2008-9	278	745,047	117	395,801	98	227,925	1	228
% change	2427.27%	3372.66%	-23.03%	44.93%	22.50%	47.77%	-50.00%	-78.79%
# change since first record	267	723,592	-35	122,710	18	73,685	-1	-847

Program	Concurrent Enrollment / Min Tuition		Deaf or Blind		Dependents of Deceased Public Servants		Designated Tuition Exemption	
Statute	54.011		TEC 54.205		TGC 615.0225		54.0513(d)	
Type	Mandatory		Mandatory		Mandatory		Optional	
Fiscal Year	Recipients	Total $	Recipients	Total $	Recipients	Total $	Recipients	Total $
2002-3	3,327	1,551,800	2,929	3,889,285	7	22,173	3,755	146,438
2003-4	4,215	2,142,084	3,278	5,013,001	65	55,733	3,893	154,115
2004-5	5,365	3,481,707	3,424	5,989,262	167	73,233	2,065	199,100
2005-6	5,065	3,610,508	3,410	6,455,725	92	76,210	2,027	187,310
2006-7	10,849	5,438,056	3,530	7,116,459	198	199,128	3,635	2,369,684
2007-8	8,372	7,510,280	3,547	7,895,874	180	238,031	3,889	2,618,658
2008-9	2,389	1,161,158	3,480	8,607,500	231	295,028	4,598	3,082,175
% change	-28.19%	-25.17%	18.81%	121.31%	3200.00%	1230.57%	22.45%	2004.76%
# change since first record	-938	-390,642	551	4,718,215	224	272,855	843	2,935,737

Program	Disabled Peace Officer		Distance Learning Fee Exemption		Dual Enrollment, Jr. College		Dual Enrollment, All Insts.	
Statute	54.2041		54.218		130.008		54.216	
Type	Optional		Optional		Optional		Optional	
Fiscal Year	Recipients	Total $	Recipients	Total $	Recipients	Total $	Recipients	Total $
2002-3	7	26,576	6,752	1,167,806	30,475	8,927,285	0	0
2003-4	23	105,617	8,781	1,717,157	30,919	9,991,693	2,541	429,442
2004-5	31	130,069	10,538	2,026,861	39,681	12,150,585	3,646	1,132,770
2005-6	36	110,658	12,645	2,300,276	41,416	15,271,189	5,655	1,945,816
2006-7	39	117,411	15,534	2,966,825	54,180	22,445,933	4,615	3,331,626
2007-8	37	112,884	23,701	3,534,786	62,432	29,807,207	8,810	7,022,350
2008-9	37	122,830	11,741	3,476,978	75,206	42,705,071	14,743	8,409,111
% change	428.57%	362.18%	73.89%	197.74%	146.78%	378.37%	246.71%	1535.23%
# change since first record	30	96,254	4,989	2,309,172	44,731	33,777,786	12,202	7,979,669

Program	Ex-Prisoners of War		Firefighters in Fire Science Courses		Foster Care/TX Dpt. Family Protective Services		Fully-Funded Programs	
Statute	54.219		54.208		54.211		54.217	
Type	Mandatory		Mandatory		Mandatory		Optional	
Fiscal Year	Recipients	Total $	Recipients	Total $	Recipients	Total $	Recipients	Total $
2002-3	0	0	1,255	495,984	692	1,068,523	0	0
2003-4	0	0	1,456	504,956	950	1,516,086	0	0
2004-5	0	0	1,584	659,088	1,324	2,402,494	0	0
2005-6	0	0	1,393	705,086	1,563	2,776,286	75	15,573
2006-7	1	1,123	1,661	1,106,579	1,689	3,371,813	223	100,151
2007-8	0	0	1,706	1,394,202	2,030	4,134,826	133	50,825
2008-9	0	0	2,102	1,948,564	2,293	4,950,684	241	123,727
% change	-100.00%	-100.00%	67.49%	292.87%	231.36%	363.32%	221.33%	694.50%
# change since first record	-1	-1,123	847	1,452,581	1,601	3,882,161	241	123,727

Appendix C.1

Exemptions, FY 2003-FY 2009

(Current Dollars)

Program	Governing Board Exemptions		Hazlewood Dependents (Credit Hours)		Hazlewood Dependents (Non-Credit Hours)		Hazlewood Vets (Credit Hours)	
Statute	54.5035		54.203 (b)		54.203 (b)		54.203 (a)	
Type	Optional		Mandatory		Mandatory		Mandatory	
Fiscal Year	Recipients	Total $	Recipients	Total $	Recipients	Total $	Recipients	Total $
2002-3	11,972	3,065,238	31	45,709	0	0	8,556	10,570,118
2003-4	10,175	3,008,375	8	24,098	0	0	8,858	12,974,952
2004-5	10,567	3,129,033	9	4,928	0	0	8,885	14,379,025
2005-6	10,924	4,335,256	20	28,836	0	0	8,810	16,852,836
2006-7	12,574	9,818,294	17	18,226	0	0	9,096	19,633,735
2007-8	13,446	11,648,886	35	54,509	3	1,670	9,306	21,814,203
2008-9	16,899	6,814,467	21	45,672	0	0	9,526	24,194,977
% change	41.15%	122.31%	-32.26%	-0.08%	-100.00%	-100.00%	11.34%	128.90%
# change since first record	4,927	3,749,229	-10	-37	-3	-1,670	970	13,624,859

Program	Hazlewood Vets (Non-Credit Hours)		Highest Ranking HS Scholar		National Guard Exemption		Out-of-District Students (Ad Valorem)	
Statute	54.203 (a)		54.201		54.2155		130.0032	
Type	Mandatory		Optional		Mandatory		Optional	
Fiscal Year	Recipients	Total $	Recipients	Total $	Recipients	Total $	Recipients	Total $
2002-3	0	0	1,008	2,017,144	0	0	876	422,814
2003-4	0	0	1,102	2,492,342	0	0	879	928,785
2004-5	0	0	1,014	3,007,586	0	0	608	339,094
2005-6	0	0	1,090	4,214,337	0	0	688	351,330
2006-7	0	0	1,077	4,612,080	7	5,049	761	442,416
2007-8	288	313,062	1,068	4,999,269	7	4,230	617	396,309
2008-9	335	416,129	1,062	5,116,293	5	2,950	570	395,569
% change	16.32%	32.92%	5.36%	153.64%	-28.57%	-41.57%	-34.93%	-6.44%
# change since first record	47	103,067	54	3,099,149	-2	-2,099	-306	-27,245

Program	Preceptors and/or their Children		Prorated Fees for Term Length		Senior Citizen Lowered Tuition 55+		Senior Citizen 65+ for Audit Hours	
Statute	54.222		54.5025		54.013		54.210(b)	
Type	Mandatory		Optional		Optional		Optional	
Fiscal Year	Recipients	Total $	Recipients	Total $	Recipients	Total $	Recipients	Total $
2002-3	0	0	0	0	1,101	142,144	266	106,888
2003-4	0	0	0	0	904	146,924	165	98,824
2004-5	0	0	0	0	833	160,371	164	107,869
2005-6	0	0	0	0	838	151,228	147	105,621
2006-7	88	44,911	0	0	761	136,413	221	180,899
2007-8	136	77,759	0	0	793	219,640	174	155,294
2008-9	208	137,207	0	0	885	213,872	179	152,462
% change	136.36%	205.51%	0.00%	0.00%	-19.62%	50.46%	-32.71%	42.64%
# change since first record	120	92,296	0	0	-216	71,728	-87	45,574

Program	Senior Citizen 65+ for <= 6 SCH		Student Services Fee Exemption		"Taps" Performers		Texas Tomorrow Fund	
Statute	54.210(c)		54.503(e)		54.215		54.624	
Type	Optional		Optional		Mandatory		Mandatory	
Fiscal Year	Recipients	Total $	Recipients	Total $	Recipients	Total $	Recipients	Total $
2002-3	3,634	571,883	695	178,352	0	0	0	0
2003-4	3,122	538,544	701	135,036	0	0	0	0
2004-5	2,582	562,152	632	374,912	0	0	5,589	6,518,802
2005-6	2,403	480,690	534	361,762	0	0	8,464	10,328,874
2006-7	3,299	753,956	402	200,504	0	0	9,537	12,988,773
2007-8	3,422	751,481	405	276,394	0	0	10,606	13,871,412
2008-9	2,959	684,040	599	468,906	0	0	11,464	14,465,194
% change	-18.57%	19.61%	-13.81%	162.91%	n/a	n/a	89.77%	112.79%
# change since first record	-675	112,157	-96	290,554	0	0	5,017	7,352,610

Appendix C.1

Exemptions, FY 2003-FY 2009
(Current Dollars)

Program	Three Peat Fee		Tuition Reduction for >= 15 Hours	
Statute	54.014(F)		54.010	
Type	Optional		Optional	
Fiscal Year	Recipients	Total $	Recipients	Total $
2002-3	0	0	266	15,171
2003-4	0	0	375	40,584
2004-5	0	0	581	65,799
2005-6	0	0	632	154,836
2006-7	16	6,200	0	0
2007-8	155	72,325	0	0
2008-9	0	0	0	0
% change	-100.00%	-100.00%	-100.00%	-100.00%
# change since first record	-16	-6,200	-266	-15,171

Appendix C.2

Waivers, FY 2003-FY 2009

(Current Dollars)

Program	100 Mile		Academic Common Market		Biomedical MD/PhD		Border County / Parish	
Statute	54.0601		160.07		54.065		54.060(g)	
Type	Optional		Optional		Mandatory		Optional	
Fiscal Years	Recipients	Total $	Recipients	Total $	Recipients	Total $	Recipients	Total $
2002-3	888	3,664,669	157	316,997	71	659,002	2,094	7,620,576
2003-4	734	3,908,500	118	313,983	76	727,722	2,044	8,597,619
2004-5	770	3,970,783	108	361,210	92	833,944	1,984	8,741,495
2005-6	654	3,861,754	118	332,555	104	848,877	1,938	9,084,908
2006-7	627	3,263,050	109	330,517	87	878,235	1,886	8,633,050
2007-8	485	2,771,741	105	296,184	76	728,837	1,875	8,758,131
2008-9	590	3,073,266	101	282,119	71	757,644	1,217	5,861,139
% change, FY2003-FY2008	-33.56%	-16.14%	-35.67%	-11.00%	0.00%	14.97%	-41.88%	-23.09%
# change since first record	-298	-591,403	-56	-34,878	0	98,642	-877	-1,759,437

Program	Border States		Citizens of Mexico		Citizens of Mexico (Pilot)		College Teachers, Profs. etc.	
Statute	54.060(a)		54.060(b)		54.060(b)		54.059	
Type	Optional		Mandatory		Optional		Mandatory	
Fiscal Years	Recipients	Total $	Recipients	Total $	Recipients	Total $	Recipients	Total $
2002-3	2,369	2,658,627	2,175	10,685,539	249	1,164,791	1,219	3,938,677
2003-4	2,819	3,257,169	2,428	12,858,495	203	1,183,898	1,172	3,913,907
2004-5	3,129	4,249,509	2,613	14,316,487	274	1,733,287	1,058	4,472,406
2005-6	2,998	4,406,648	2,507	14,771,726	280	1,920,975	845	4,171,296
2006-7	2,865	4,825,294	2,625	15,138,435	301	2,016,925	818	3,965,871
2007-8	3,009	4,770,565	2,589	15,316,015	280	2,576,647	766	3,684,422
2008-9	3,777	7,673,419	2,443	14,951,972	265	2,917,513	770	3,706,081
% change, FY2003-FY2008	59.43%	188.62%	12.32%	39.93%	6.43%	150.48%	-36.83%	-5.91%
# change since first record	1,408	5,014,792	268	4,266,433	16	1,752,722	-449	-232,596

Program	Competitive Scholarships (All)		Economic Development		Foreign Service Officer		Good Neighbor	
Statute	54.064		54.073		54.070		54.207	
Type	Mandatory in 09		Mandatory		Mandatory		Optional	
Fiscal Years	Recipients	Total $	Recipients	Total $	Recipients	Total $	Recipients	Total $
2002-3	11,768	55,161,646	85	189,759	0	0	217	1,366,375
2003-4	13,059	65,262,436	72	235,984	0	0	208	1,552,166
2004-5	13,417	75,223,647	240	1,119,072	0	0	219	1,600,815
2005-6	14,236	86,802,822	238	1,303,262	0	0	211	1,660,227
2006-7	15,466	86,926,512	170	1,514,503	0	0	233	2,102,331
2007-8	14,525	95,919,294	268	1,654,596	0	0	246	2,436,769
2008-9	14,073	90,536,107	334	1,880,435	0	0	260	2,624,297
% change, FY2003-FY2008	19.59%	64.13%	292.94%	890.96%	0.00%	0.00%	19.82%	92.06%
# change since first record	2,305	35,374,461	249	1,690,676	0	0	43	1,257,922

Program	Military in Texas		NATO Families		Nursing Graduates		Olympic Programs Waiver	
Statute	54.058		54.074		54.069		54.073	
Type	Mandatory		Mandatory		Optional		Mandatory	
Fiscal Years	Recipients	Total $	Recipients	Total $	Recipients	Total $	Recipients	Total $
2002-3	10,184	15,873,823	374	1,134,841	0	0	0	0
2003-4	10,333	15,893,423	398	1,322,987	4	13,844	0	0
2004-5	11,600	18,897,952	283	1,267,592	3	20,785	0	0
2005-6	8,847	18,123,607	185	1,073,766	2	6,669	1	828
2006-7	7,385	16,028,406	202	1,194,545	5	10,517	0	0
2007-8	7,779	13,457,990	203	1,247,692	10	18,292	2	10,564
2008-9	7,624	12,711,425	198	1,183,684	15	26,709	0	0
% change, FY2003-FY2008	-25.14%	-19.92%	-47.06%	4.30%	275.00%	92.93%	-100.00%	-100.00%
# change since first record	-2,560	-3,162,398	-176	48,843	11	12,865	-1	-828

Table does not include discontinued programs.

Appendix C.2

Waivers, FY 2003-FY 2009
(Current Dollars)

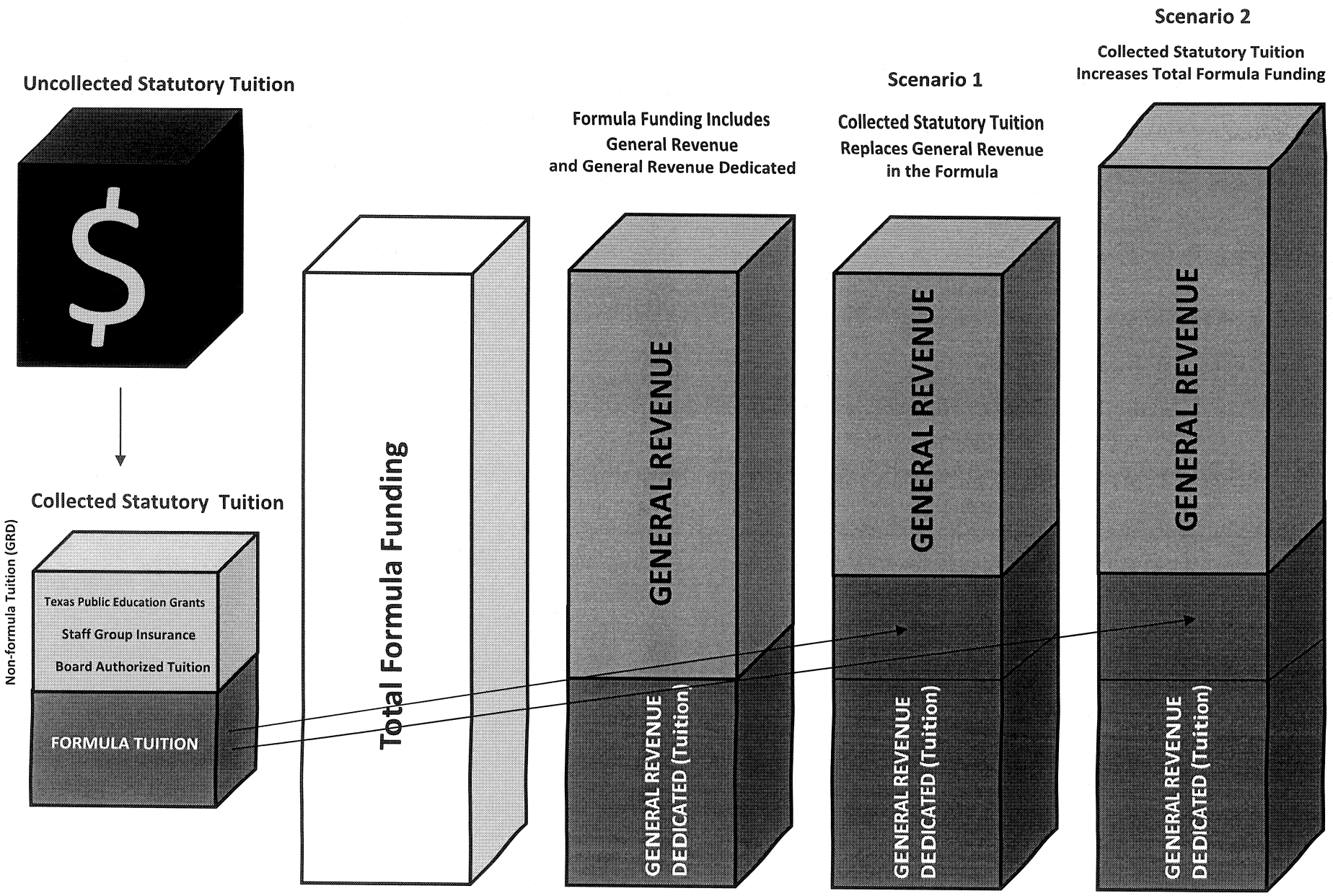
Program	Public Health		Radiology at MSU		TA and RA		Tech fee at UT Austin	
Statute	54.060(b)		54.058(h)		54.063		65.45	
Type	Mandatory		Optional		Mandatory		Optional	
Fiscal Years	Recipients	Total $	Recipients	Total $	Recipients	Total $	Recipients	Total $
2002-3	4	15,689	0	0	15,147	54,063,602	0	0
2003-4	0	0	0	0	14,116	59,900,144	0	0
2004-5	0	0	0	0	14,291	66,065,697	0	0
2005-6	0	0	0	0	14,736	71,953,761	6	48,133
2006-7	0	0	0	0	14,886	72,873,683	19	167,083
2007-8	0	0	0	0	14,575	80,952,727	19	241,257
2008-9	0	0	0	0	15,335	82,470,475	23	336,503
% change, FY2003-FY2008	-100.00%	-100.00%	0.00%	0.00%	1.24%	52.54%	283.33%	599.11%
# change since first record	-4	-15,689	0	0	188	28,406,874	17	288,370

Program	Texas Tomorrow Fund Contract	
Statute	54.621(c)	
Type	Mandatory	
Fiscal Years	Recipients	Total $
2002-3	0	0
2003-4	0	0
2004-5	42	199,624
2005-6	43	680,753
2006-7	100	455,691
2007-8	65	556,669
2008-9	169	696,980
% change, FY2003-FY2008	302.38%	249.15%
# change since first record	127	497,356

Table does not include discontinued programs.

Legislative Budget Board

Effects of Statutory Tuition (General Revenue Dedicated) On the General Academic Institution Formulas



Prepared By LBB

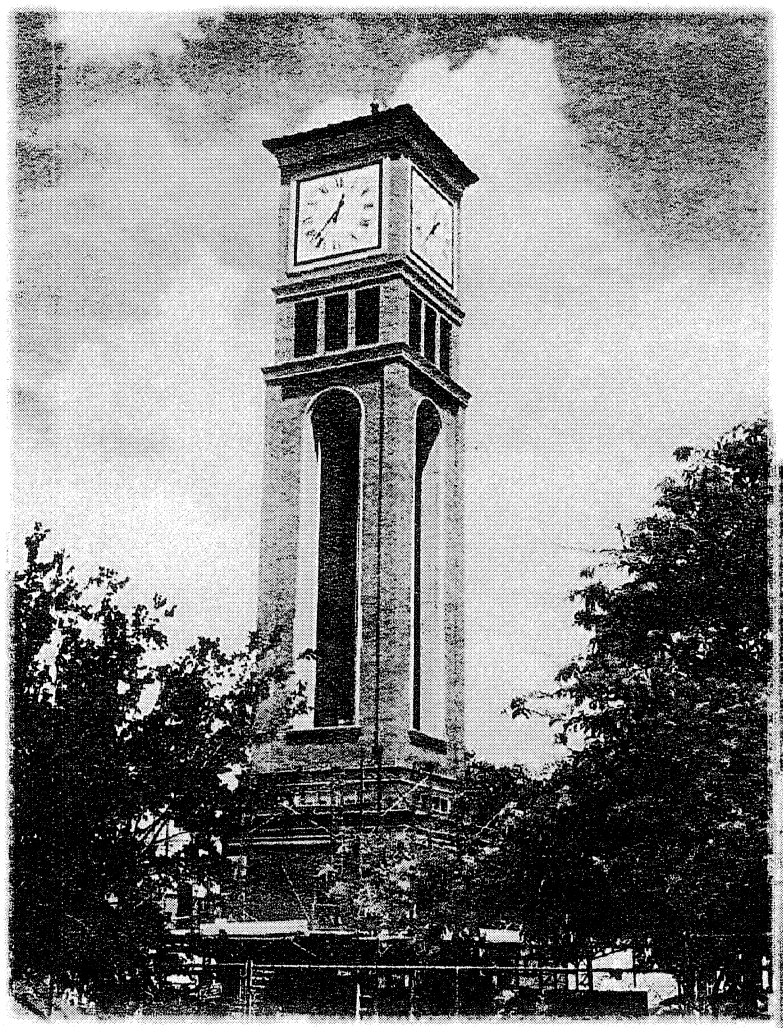
August 4, 2010

West Texas A&M University

Senate Finance Committee Hearing
August 2010

West Texas A&M University

J. Patrick O'Brien



100 Mile Waiver

Table of Contents

I. Introduction

II. Nature of Waiver

III. Characteristics of Students at WTAMU with Waivers

IV. Potential Tuition Loss

V. Benefit of Waiver to WTAMU

VI. Benefit of Waiver to State

VII. Conclusion

Section I

Introduction

Section II

Nature of Waiver

Nature of Waiver

Sec. 54.0601. NONRESIDENT TUITION RATES AT CERTAIN INSTITUTIONS. On the written request of the governing board of a general academic teaching institution located not more than 100 miles from the boundary of this state with another state, the Texas Higher Education Coordinating Board may set a nonresident tuition rate that is lower than the nonresident tuition rate otherwise provided by this chapter if the coordinating board determines that the lower rate is in the best interest of the institution and will not cause unreasonable harm to any other institution of higher education.

Section III

Characteristics of Students at WTAMU with Waivers

Characteristic of Students at WTAMU with Waivers

- Over Past Five Years, 1,094 students received a waiver; average of 457 out of an average total enrollment of 7,409
- Students come from New Mexico (46%), Colorado (20%), Oklahoma (19%), Kansas (15%)
- Undergraduates - 85%, Graduates – 15%
- Full-time – 74%, Part-time – 26%
- 32% live on campus
- Four-Year Graduation Rate of 2005-06 cohort of first-time, full-time, degree seeking freshmen receiving waivers – 36.1%, as compared with 22.3% for full cohort.

Section IV

Potential Tuition Loss

If we were to make the assumption that the demand for higher education by border state students is perfectly insensitive to tuition rate changes, then we could say the lost tuition revenue as a result of the border state/border county waivers over the past five years was:

$13,253,221

Note: To say that the demand for higher education by border state student is perfectly insensitive to tuition rate changes is to say enrollment would not change regardless of tuition rate.

Number and Costs of Waivers

Residency Status	FY 2005		FY 2006	
	Count	Total Waived	Count	Total Waived
Border County	219	$ 1,185,474	165	$ 1,098,114
Border State	237	$ 1,300,074	245	$ 1,482,704
Totals	456	$ 2,485,548	410	$ 2,580,818

	FY 2007		FY 2008	
	Count	Total Waived	Count	Total Waived
Border County	186	$ 1,094,490	219	$ 1,204,454
Border State	263	$ 1,501,190	252	$ 1,502,321
Totals	449	$ 2,595,680	471	$ 2,706,775

	FY 2009		Total For Period	
	Count	Total Waived		Total Waived
Border County	211	$ 1,198,465		$ 5,780,997
Border State	287	$ 1,685,935		$ 7,472,224
Totals	498	$ 2,884,400		$ 13,253,221

This represents the maximum amount of additional tuition revenues that would be generated if the waivers were to be eliminated.

Again, if demand is perfectly insensitive to tuition changes this amount would still be collected by WTAMU.

However

The demand for higher education by border state students is NOT perfectly insensitive to tuition rate changes, therefore we know the lost tuition revenue as a result of the border state/border county waivers over the past five years is <u>less than</u> $13,253,221.

Section V

Benefit of Waiver to WTAMU

Revenue Benefits to WTAMU

- The estimated revenues collected by WTAMU over the five year period as a result of the enrollment of students with border state/border county waivers are estimated to be:
  - Tuition $4,764,720
  - Residence Halls $2,017,820
  - Dining Facilities $ 34,932[1]
  - Fees $1,254,047

1. By contract Aramark provides dining services on the WTAMU campus. This amount represents the net revenue associated with the contract.

If we were to make the assumption that the demand for higher education by border state student is perfectly sensitive to tuition rate changes, then we could say the lost revenue to WTAMU as a result of eliminating the border state/border county waivers over the past five years would have been at least:

$8,071,519

Note: To say that the demand for higher education by border state student is perfectly sensitive to tuition rate changes is to say enrollment would fall to zero if the tuition rate rises even slightly.

Section VI

Benefit of Waiver to State

Benefit to State From Off-Campus Students

- **Benefits to State's Economy (Over Five Year Period)**
  - **Housing: Estimated Rental Income** **$2,758,806**
  - **Food & other Goods and Services[1]** **$4,449,240**
  - **Expenditures by Visiting Family Members** **> 0**

  - **Income from New Residents Per Year** **> $1,000,000**
- **Benefits to State Government**
  - **Increased Sales Taxes**

1. Estimates based on a study by Geoffrey D. Paulin, "Expenditures of college-age students and nonstudents," *Monthly Labor Review*, July 2001

Section VII

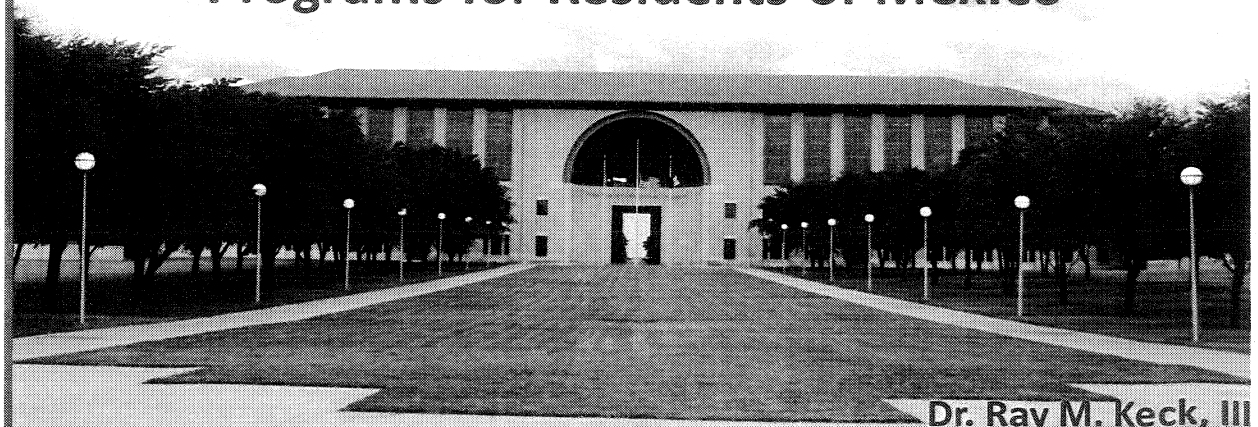
Conclusion

Texas A&M International University

Texas A&M International University

Senate Finance Committee

Programs for Residents of Mexico



Dr. Ray M. Keck, III
Dr. Minita Ramirez
August 4, 2010

Good morning, Senator Ogden and members of the Senate Finance Committee. Thank you for this opportunity to come before you and address the matter of Mexican citizens attending Texas universities. Under present guidelines, a Mexican citizen and resident of México *who shows financial need* may attend an eligible public university in Texas for the same tuition and fees charged a US citizen and resident of Texas. This is commonly referred to as the "Mexican Tuition Waiver."

This phrase is an unfortunate one, for it creates the impression that tuition and fees are somehow forgiven, that the State is sponsoring education here for foreign nationals at a cost to the taxpayers. In fact, Mexicans who attend a Texas university under this policy must pay in-state tuition and fees. Though poor, they are ineligible for state and federal entitlements—Texas Grant and Pell Grant. They must find their own mechanism for covering these costs. Were these students not allowed to pay the Texas tuition, were their charges to be the standard fees for international students, or more than double the in-state rate, few would come.

It is therefore a mistake to consider "lost revenue," or the difference between what these students pay as in-state fees and what they might have paid were they charged the full international fee. Were this program eliminated, we would simply lose all these students, many of whom, as our figures reveal, are quite able. The State would in fact *lose* revenue. On page 10, you see what Mexicans, able to attend TAMIU because of this program, pay in tuition and fees. The figures represented on page 11, do not represent real money that would ever be available to the State. Imagine the impact upon attendance if costs to attend the university

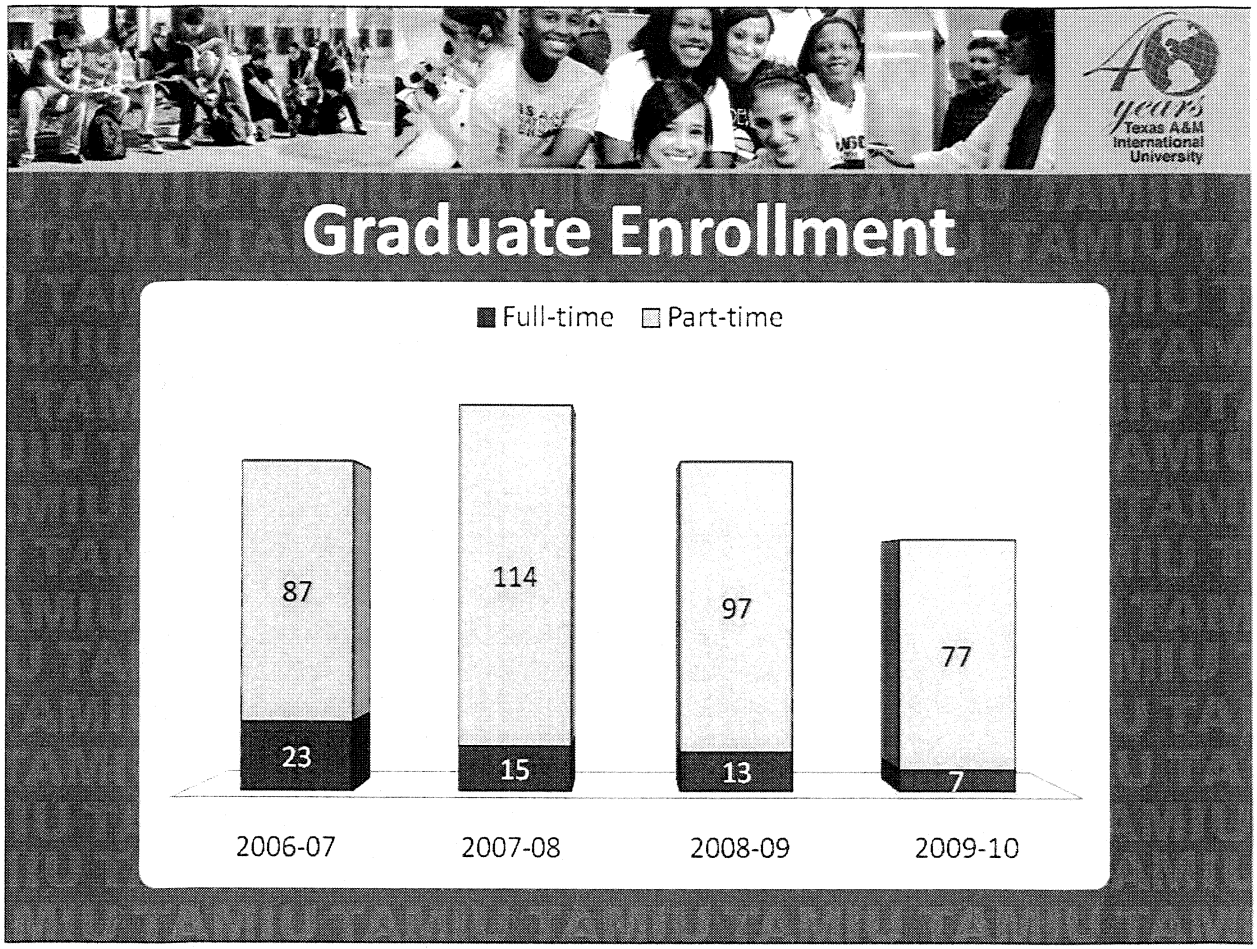
suddenly more than doubled, and students had no access to Pell or Texas Grant. This would be the scenario faced by Mexican students if this program ceased to be.

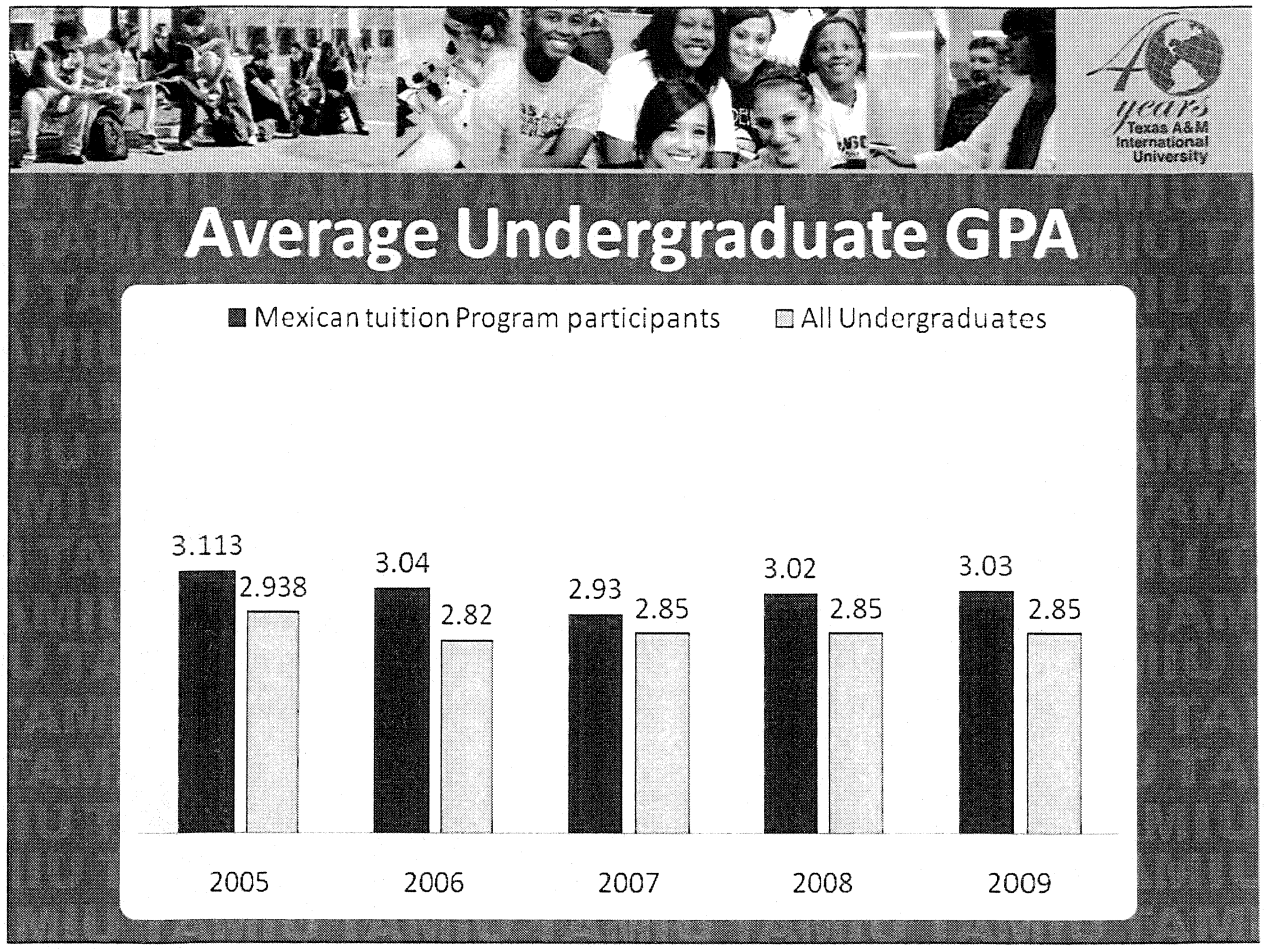
Texas at present offers in-state tuition to residents of bordering states: New Mexico, Oklahoma, Arkansas, Louisiana. This is a neighborly gesture and solid economic policy. We are all better for any young man or woman receiving a college education. Why should the largest population sharing our border, the Mexicans, not be allowed access to higher education if they pay the same fees as a young person from Arkansas? Our best future—economic and social—requires a prosperous and stable México. We Americans have developed the finest system of higher education in the world. This program does not waive fees for Mexicans. It offers an opportunity to those who can pay, treats them as though they were residents of Texas, and recognizes that proximity makes their prosperity of vital importance to us all.

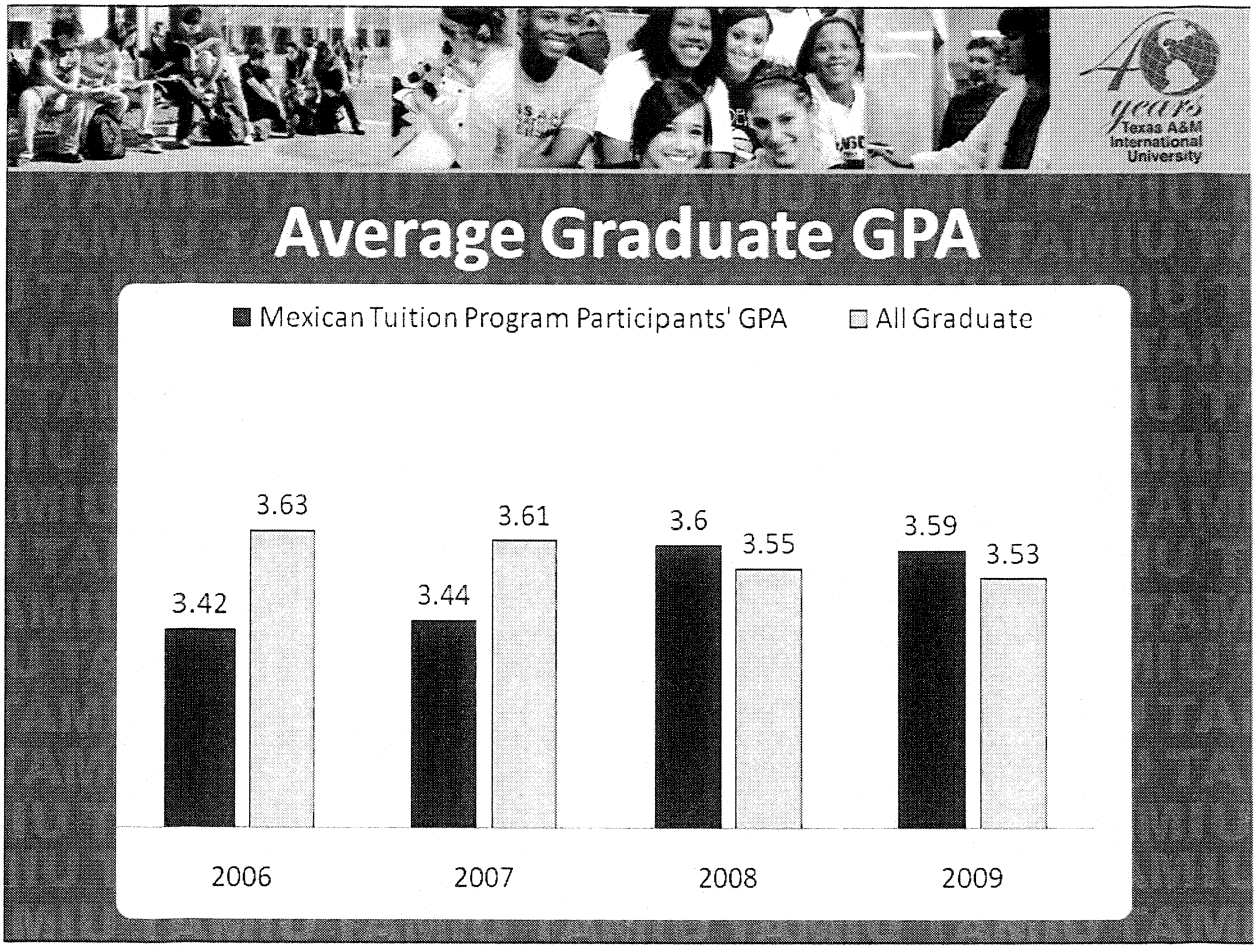
Programs for Residents of Mexico

- The purpose of the Mexican Tuition Program is to permit "an unlimited number of individuals with financial need, who are citizens of Mexico, to enroll in any Texas public university and pay resident tuition."
- Student eligibility for a waiver must be established prior to enrollment:
  - Must be a citizen of Mexico and reside in Mexico
  - Must show financial need
  - Must attend an eligible Texas public university

Texas A&M International University
Undergraduate Enrollment
Full-time
Part-time
7
1
8
5
65
63
55
62
2006-07
2007-08
2008-09
2009-10


Texas A&M International University
Graduate Enrollment
Full-time
Part-time
87
23
114
15
97
13
77
7
2006-07
2007-08
2008-09
2009-10


40 years
Texas A&M International University
Average Undergraduate GPA
Mexican tuition Program participants
All Undergraduates
3.113
2.938
3.04
2.82
2.93
2.85
3.02
2.85
3.03
2.85
2005
2006
2007
2008
2009


40 years
Texas A&M International University
Average Graduate GPA
Mexican Tuition Program Participants' GPA
All Graduate
3.42
3.63
3.44
3.61
3.6
3.55
3.59
3.53
2006
2007
2008
2009

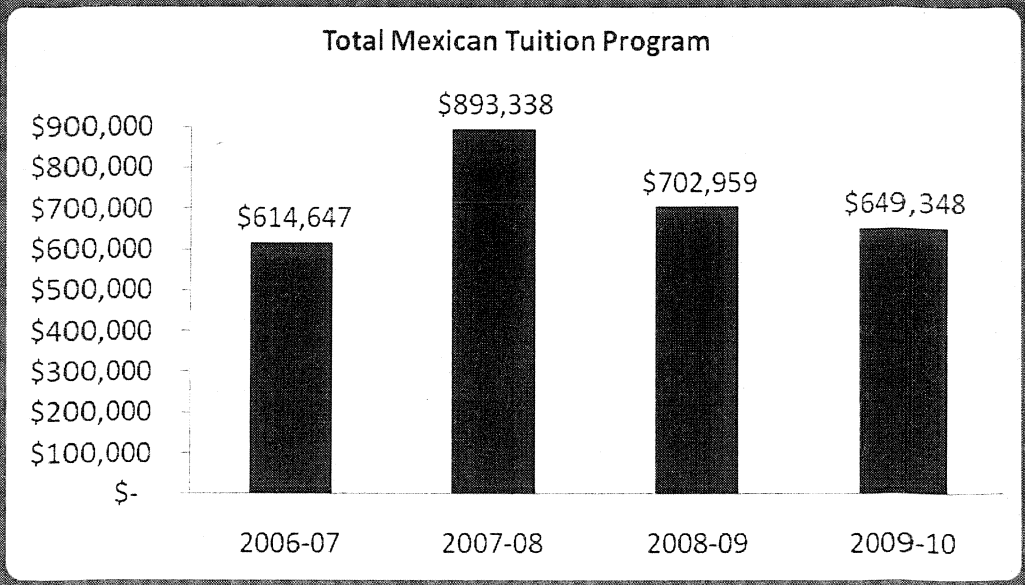
The Reality

To qualify for the Mexican Tuition Program, Mexican nationals must demonstrate financial need.

10 years
Texas A&M International University
The Reality
Students who could not otherwise afford to attend college must still pay resident tuition.
Total Resident Tuition Collected
$600,000
$500,000
$400,000
$300,000
$200,000
$100,000
$-
$541,975
$542,363
$545,862
$576,773
2006-07
2007-08
2008-09
2009-10

The Misnomer

Mexican tuition waivers result in lost revenues for Texas universities.



The Value of Biomedical Research:

The UTHealth Perspective

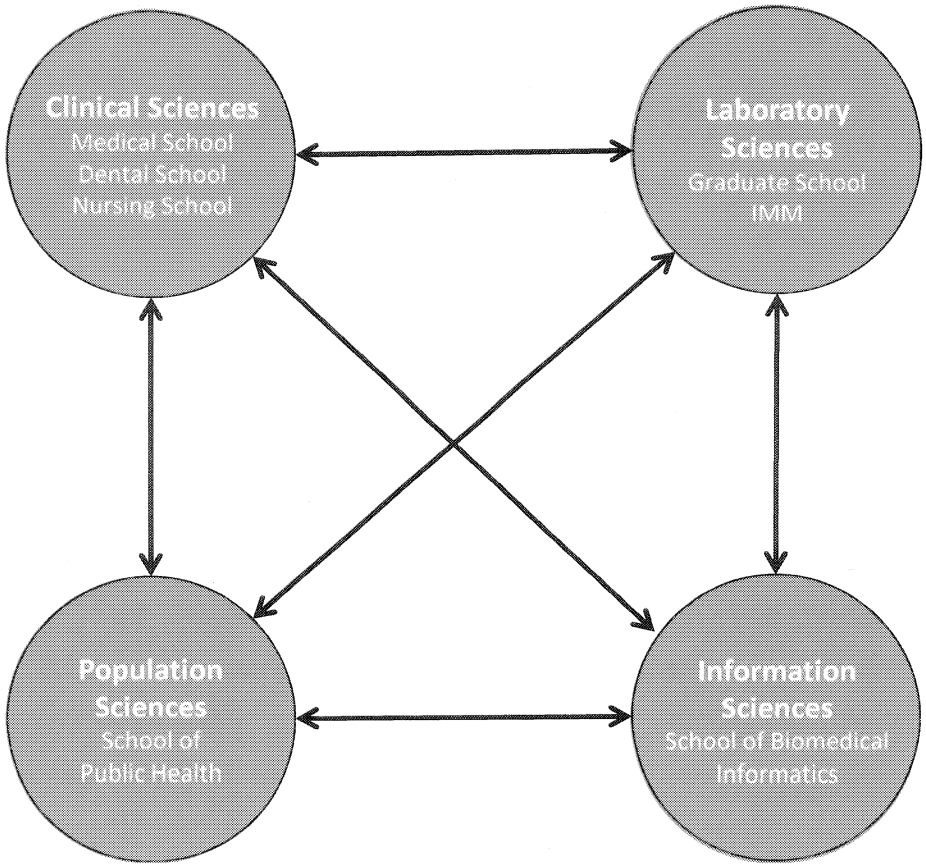
Senate Finance Committee

August 4, 2010

Peter J. A. Davies MD, PhD
Provost and Executive Vice-President for Research
The University of Texas Health Science Center at Houston (UTHealth)

UTHealth™
The University of Texas
Health Science Center at Houston

UTHealth: an academic health center



Why should Texas continue to fund research?

- Life saving solutions to human diseases
- World-class medical centers: healthcare for Texans
  - Value to education – homegrown best minds in world
  - Recruit the best minds in the world in medicine and research
- Economic impact of biomedical research
  - Federal Funding for Research
  - Biotechnology Industry

Texas Medical Center

Member Institutions: 49 Institutions
Univ. of Texas MD Anderson Cancer Center
Baylor College of Medicine
UTHealth – The UT Health Science Center at Houston
Univ of Houston
Texas Children's Hospital
Memorial Hermann Hospital – TMC
Memorial Hermann Hospital – Children's Hospital
Memorial Hermann Hospital – TIRR
The Methodist Hospital
Texas Heart Institute
St. Luke's Hospital
etc

Annual Patient Visits – 6.0 million

Employees – 93,500
Physicians, Scientists, Researchers and other advanced degree professionals– 21,000
Students – 71,500, including high school, college and health profession graduate programs.

Annual Research Expenditures - $1.2 billion
Regional Annual Economic Impact - $14 billion
Future Growth -$7.1 billion in approved building and infrastructure investments between 2008 and 2012

UTHealth
The University of Texas
Health Science Center at Houston

Economic Impact of Biomedical Research: Federal Funding

Economic Multiplier for NIH funding

1. **Texas: $2.49 per $1 of NIH research grant funding.**
   Texas has the highest return on the dollar of any state.
2. Illinois: $2.43
3. California: $2.40
4. Georgia: $2.36
5. Colorado: $2.34

Economic Impact of Biomedical Research: Federal Funding

NIH Funding 2009 (not ARRA funding)

- $31.01 billion total NIH funding
- $21.5 billion NIH grants
- $1.1 billion to Texas institutions
  @ $2.49/$1 of NIH funding= $2.6 billion of business activity
- By state:

1. California	$3.2 billion	4. Pennsylvania	$1.3 billion
2. Massachusetts	$2.3 billion	5. Texas	$1.1 billion
3. New York	$1.9 billion		

Economic Impact of Biomedical Research: Federal Funding

ARRA / NIH Funding 2009-2010

- $10 billion total ARRA / NIH funding
- $8.2 billion ARRA / NIH grants
- $322 million to Texas institutions
  @ $2.49/$1 of NIH funding= $800 million of business activity
- By state:

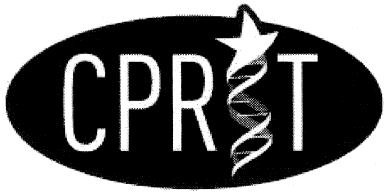
1. California	$933 million	4. Pennsylvania	$419 million
2. Massachusetts	$670 million	5. Texas	$321 million
3. New York	$590 million		

Economic Impact of Biomedical Research: Federal Funding

UTHealth ARRA / NIH Funding

- $260 million total all research FY 2010 (FY2000: $138 million; 190%)
- $165 million NIH grants ($114 million NIH + $51 million ARRA)

  @ $2.49/$1 of NIH funding= $250 million of business activity



CANCER PREVENTION &
RESEARCH INSTITUTE OF TEXAS

Cancer Research Grants

High Impact Grants
Individual Investor Grants
Multiple Investor Grants

Cancer Prevention Grants

Cancer Training Grants

Commercialization Grants

Cancer Recruitment Grants

New Investor
Rising Star
Established Investor

$216 million in grants for the State

- $194 million in research or company commercialization / recruitment
  ($20 million for recruitment)
- $21 million in prevention grants
- $13 million UTHealth

UTHealth
The University of Texas
Health Science Center at Houston

CANCER PREVENTION & RESEARCH INSTITUTE OF TEXAS

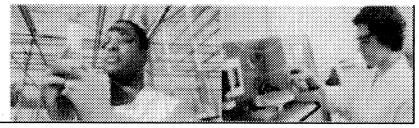
Scientific Recruitment Award Slate: $16,000,000

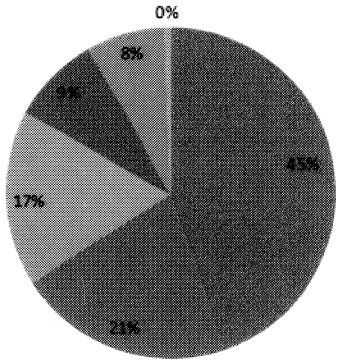
June 2010

Candidate	Award Mechanism	Successfully Recruited	Recommended Award*	Nominator Institution	Candidate Present Institution
Li Ma	First-Time, Tenure-Track Faculty Member	Yes	$2,000,000	University of Texas M.D. Anderson Cancer Center	Whitehead Institute for Biomedical Research at MIT
Jeffrey Chang	First-Time, Tenure-Track Faculty Member	Yes	$2,000,000	University of Texas Medical School at Houston	Duke University
Lauren Ehrlich	First-Time, Tenure-Track Faculty Member	Yes	$2,000,000	University of Texas at Austin	Stanford University
Lidong Qin	First-Time, Tenure-Track Faculty Member	Pending	$2,000,000	University of Texas Health Science Center Houston	California Institute of Technology
Joshua Mendell	Rising Star	Pending	$4,500,000	University of Texas Southwestern Medical Center at Dallas	Johns Hopkins University
Jessica Tyler	Rising Star	Yes	$3,500,000	University of Texas M.D. Anderson Cancer Center	University of Colorado School of Medicine
David Johnson	Established Investigator	Yes	$0	University of Texas Southwestern Medical Center at Dallas	Vanderbilt University School of Medicine

Economic Impact of Biomedical Research: Biotechnology

TEXAS EMERGING TECHNOLOGY FUND
OFFICE OF THE GOVERNOR
WWW.EMERGINGTECHFUND.COM





- Biotechnology & Life Sciences
- Advanced Technology & Manufacturing
- IT / Computer Technology
- Energy
- Aerospace & Defense
- Petroleum & Chemical

UTHealth Experience – Emerging Technology Fund

Statewide Research Superiority Awards: $68 million (industry match $73 million)
UTHealth Awards:

- Dr. John Holcomb (CeTIR): $5.0 million
- Dr. Mario Ferrari (ANH): $2.5 million
- Dr. Tom Caskey (TTI): $6.0 million
- Dr. Cox / Dr. Lally (Pedi TBI): $3.0 million

Statewide Commercialization Awards: $129 million (45% in Biotech)
UTHealth Awards:

- PLx: $2.0 million
- Leonardo: $2.5 million
- Nanomedical: $3.5 million
- Cryopen: $2.0 million
- Endothelix: $1.0 million

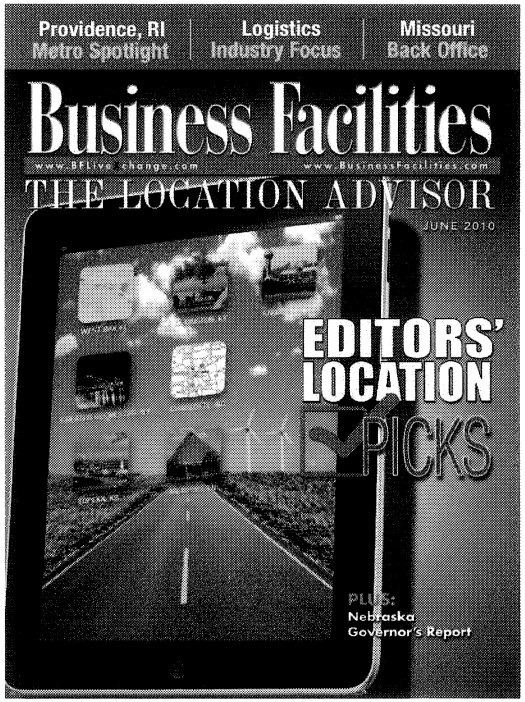
UTHealth
The University of Texas
Health Science Center at Houston

Economic Impact of Biomedical Research: Biotechnology

Business Facilities Breaking News

2010 Rankings: KS, TX Surge in Biotech

Kansas and Texas flexed their biotech muscles in Business Facilities' annual Rankings Report



." ..... Texas surged from sixth place to second place in the Biotechnology Strength ranking, firmly establishing the Lone Star State as a major national hub for bioscience-related industries.

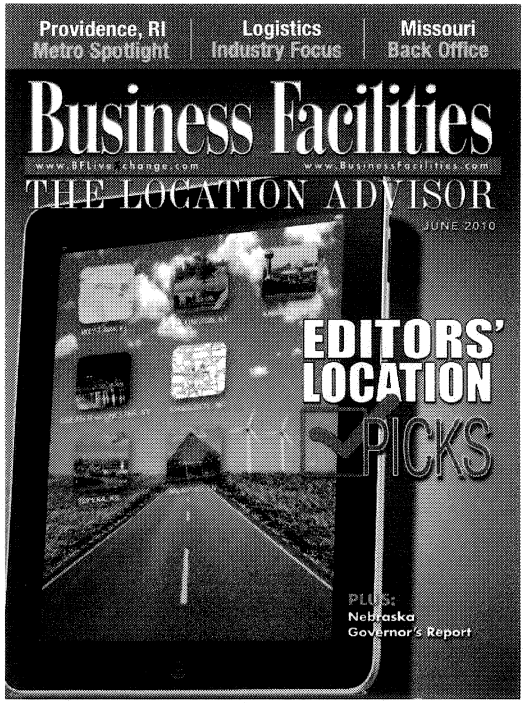
Texas has continued to build its biotech industry, notching a 35 percent increase in biotech-related facilities and an 11 percent increase in total bioscience employment, according to the 2010 *Battelle/BIO State Bioscience Initiatives* report. Battelle reported that Texas now has nearly 3,000 biotech facilities and about 65,000 bioscience workers.

"We were particularly impressed by the amount of R&D funding for biotech in Texas (approx. $2.5 million) and the number of higher education degrees in bioscience, which exceeded 10,000," Rogers said. "Texas not only is building a biotech manufacturing base, it is growing a skilled workforce to support it."

Economic Impact of Biomedical Research: Biotechnology

Here are the complete Biotechnology Strength results:

1. CALIFORNIA
2. TEXAS
3. PENNSYLVANIA
4. MASSACHUSETTS
5. KANSAS
6. NEW JERSEY
7. NORTH CAROLINA
8. ILLINOIS
9. MARYLAND
10. OHIO



UTHealth Technology Transfer

Office of Technology Management

- Annual Gross Revenue > $4 million
- Cumulative licensing revenues exceeds $35 million
- 30 new license/option agreements per year
- 267 license/option agreements cumulative
- > 1000 patents/patent applications
- > 190 products on the market

UTHealth Portfolio Companies

- 23 portfolio companies to date; 21 active
- >$40M capital raised in current private companies
- 2 companies IPO/acquired with market cap totaling $2.9B
- ~30 jobs held or created in private portfolio companies
- (>1200 in 2 public companies)
- ETF Texas Emerging Technology Fund recipient

Portfolio Companies

MARVAL BIOSCIENCES
LifeCell
ses
LEONARDO BIOSYSTEMS
Your Doctor Program
Fixing Healthcare One Patient At A Time.
VOLCANO
Assurance Biosciences, Inc.
EMIT CORPORATION
ISOVAX Therapeutics
PLx Pharma ETF
ENDOTHELIX ETF
ACCUMED
ETF
NANOMEDICAL SYSTEMS
AMPHOLIFE TECHNOLOGIES, INC.
Advanced Guidance Systems, LLC
WINDMILL CARDIOVASCULAR SYS
TMI TELEMEDICUS, INC
Vanjan

UTHealth
The University of Texas
Health Science Center at Houston

Biotechnology Commercialization Center

- 20,000+ sq. ft of laboratory / office dedicated to startup companies
- 9 current and / or committed tenants, including:

Ensysce™ biosciences

n3D Biosciences, Inc.

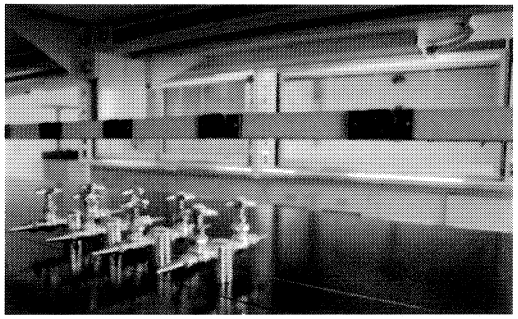
PHusis Therapeutics

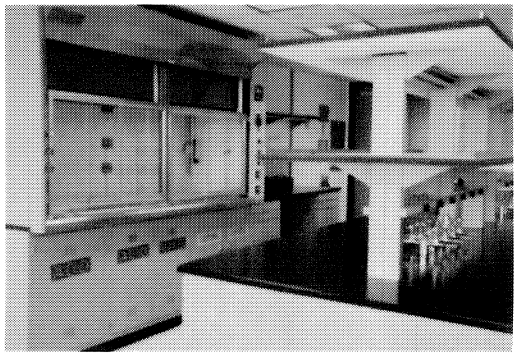
CorInnova Technologies that Lead to Heart Recovery

Assurance Biosciences, Inc.

BISSEX & WATSON, P.C.

bc Biotechnology Commercialization Center





UTHealth™
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