Overview of State Research Programs

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Presentation to the
House Higher Education Committee
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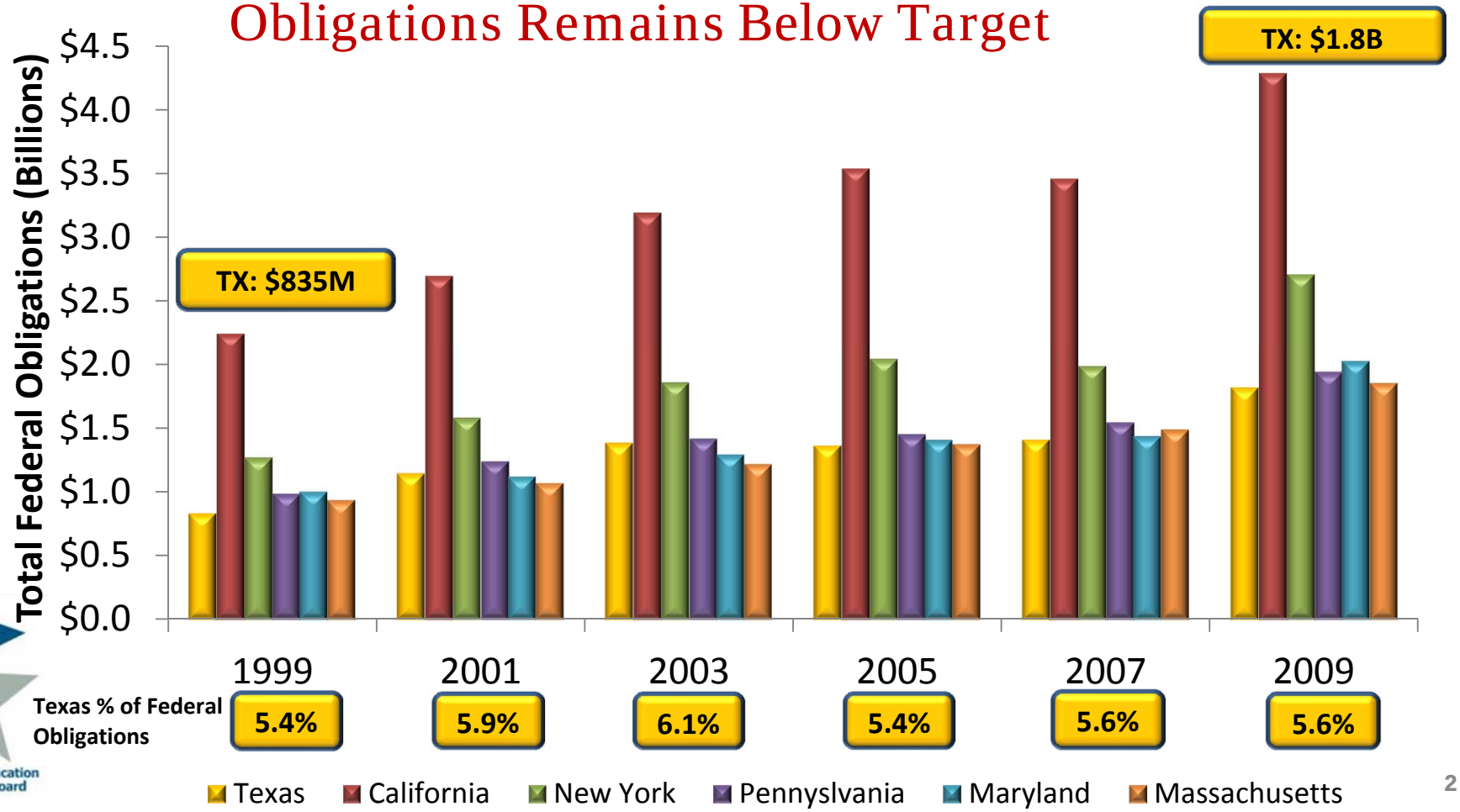
CTG Research Goal: By 2015, increase the level of federal science and engineering research and development obligations to Texas institutions to 6.5 percent of obligations to higher education institutions across the nation.

Federal R&D Dollars Have Increased but Percentage of Obligations Remains Below Target



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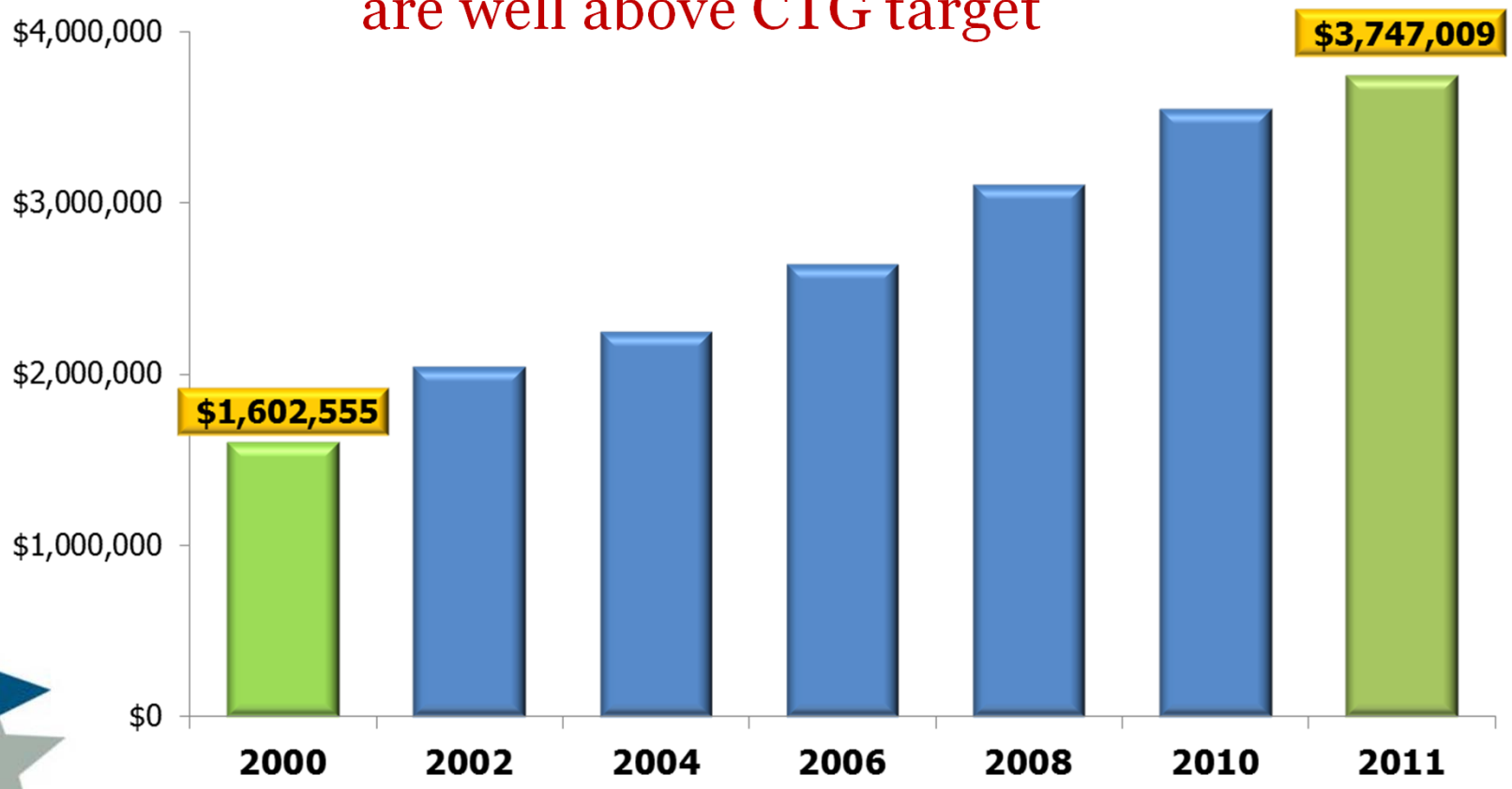
CTG Research Target: Increase research expenditures by Texas public universities and health-related institutions from $1.45 billion in FY 1999 to $3 billion by 2015.

Public Institution Research Expenditures for R&D are well above CTG target



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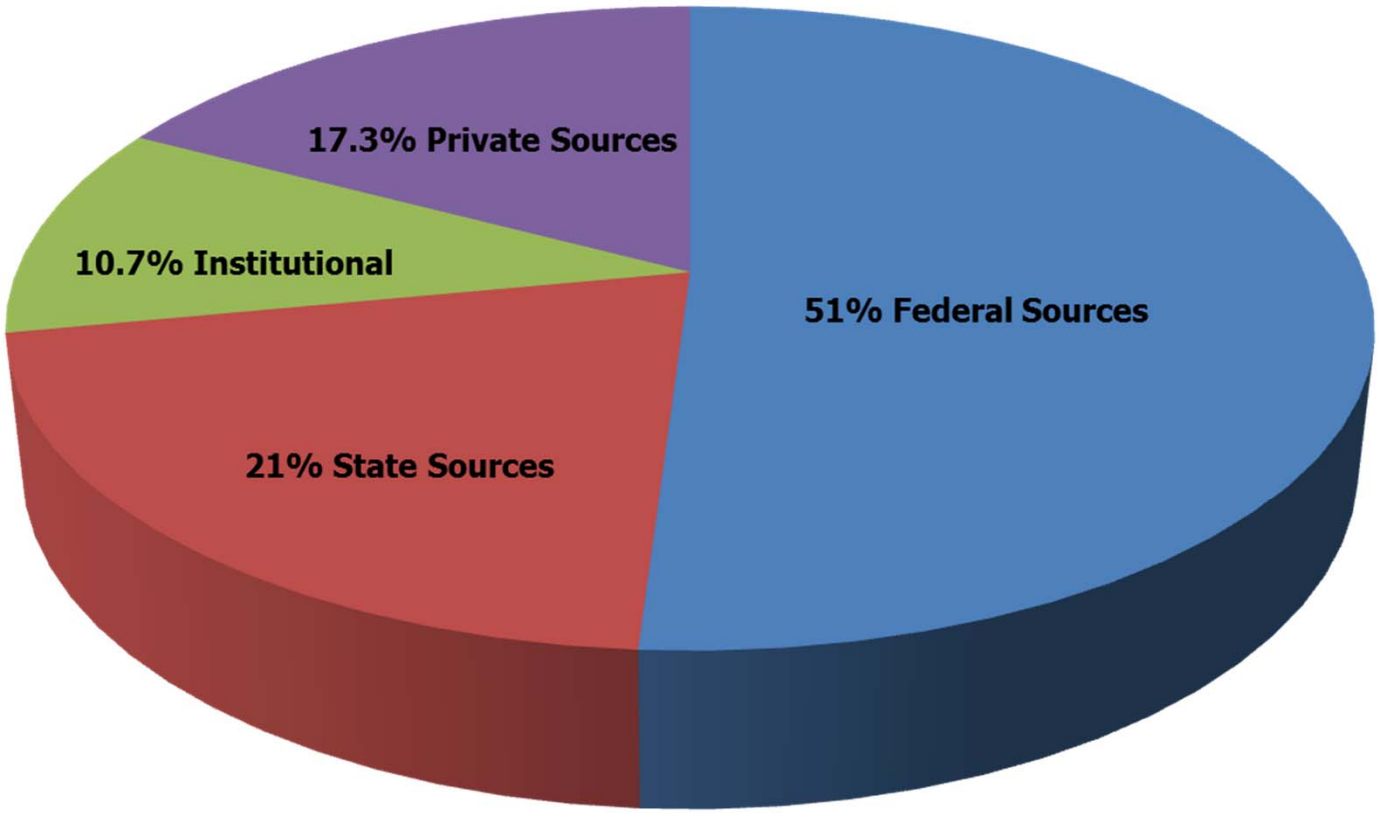
State sources represent a significant portion of total research funds

Fiscal Year 2011 Research Expenditures by Funding Source



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Many state research programs were significantly reduced for FY12-13

Program	FY10-11	FY 12-13	% Change
Norman Hackerman Advanced Research Program	$16M	$1M	**-94%**
Texas Research Incentive Program	$47.5M	$35.6M	**-25%**
Research Development Fund	$76.8M	$65.3M	**-15%**
Competitive Knowledge Fund	$118M	$93.5M	**-21%**
National Research University Fund	$0	$12.2M*	**N/A**
Research University Development Fund	$0	$0	**N/A**

*Estimated

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State research programs are strategically targeted and vary in many respects

Source of Funding
(Constitutional funds, trusteed programs, direct appropriations)

Purpose
(Support basic research, promote private giving, advance institutions toward Tier 1 status)

Eligible Recipients
(Emerging research universities, general academic institutions)

Activities Funded
(Equipment purchase, faculty or student support)

Allocation Methodology
(Competitive, formula or legislatively directed)

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Norman Hackerman Advanced Research Program

- Created in 1987 to support faculty members and students at Texas institutions of higher education to conduct basic research.

- Coordinating Board awards grants through a competitive, peer review process.

- Funding has declined dramatically from $60 million at program inception to $1 million for FY12-13. Recent changes to reflect reduced funding include:
  - ✓ 12 awards at $80,000 each made for the biennium (historical average is 160 awards at $120,000 each).
  - ✓ Only "Early Career Investigators" allowed to submit applications.
  - ✓ Targeted research in Molecular Biology, Cellular Biology, Genetics, and Materials Science/Nanoscience.
  - ✓ Budgets must support undergraduate/graduate students.

- $8 million exceptional item request included in Coordinating Board's FY14-15 LAR.

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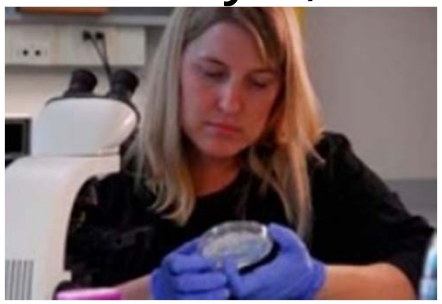
NHARP Case Study: Dr. Sara Sawyer

Sara Sawyer, PhD



Assistant Professor
Molecular Genetics and Microbiology
Institute for Cellular and Molecular Biology
The University of Texas at Austin

Dr. Sawyer was awarded $200K in the 2009 NHARP competition.

On the project, she educated two undergraduates, two graduates, a post-doc, and a high school science teacher.

She published four articles and is preparing another.

She used data from her NHARP project to secure $2.4 million in federal funding.

Dr. Sawyer is a 2011 recipient of the Presidential Early Career Award for Scientists and Engineers (PECASE).

Research Development Fund

- In 2003, Legislature created the RDF from merging the Texas Excellence Fund and the University Research Fund.

- Supports increased research capacity at general academic institutions except UT-Austin, Texas A&M, and Prairie View A&M.

- Although the RDF is statutorily defined as a Comptroller-controlled fund, the Legislature has always allocated the amount directly to the institutions.

- Coordinating Board provides the LBB with the last three years of restricted research expenditure data used for calculating the institutions' allocations.
  - ✓ Sunset Commission recommends eliminating statutory language requiring that Coordinating Board report restricted research expenditure data to Comptroller.
  - ✓ In order to maintain the allocation methodology, the Coordinating Board should retain the statutory authority to collect and report data to the LBB.

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Texas Research Incentive Program

- Created by the Legislature in 2009 to provide matching funds to emerging research universities based on their eligible private gifts.

- The size of the match is set in statute (TEC 62.123):
  - ✓ 50% match for gifts between $100,000 and $1 million,
  - ✓ 75% match for gifts between $1 million and $2 million,
  - ✓ 100% match for gifts of $2 million to $10 million.
  - ✓ Matching grants are awarded in order of the date of certification until funds depleted.

- Institutions report eligible gifts to the Coordinating Board, which facilitates a peer review of all TRIP match requests:
  - ✓ Institutions may challenge eligibility of other institutions' gifts,
  - ✓ Coordinating Board staff make final determination on eligibility.

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National Research University Fund

- In 2009, the Legislature created NRUF, "to 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."
- In order to be eligible for funding, institutions have to meet specific criteria.
- Mandatory eligibility criteria:
  - ✓ Designated as an emerging research in Accountability System;
  - ✓ $45 million in restricted research expenditures for last two years.
- Additional eligibility criteria (institution **must meet 4 of 6**):
  - ✓ An endowment fund in excess of $400 million;
  - ✓ Award more than 200 Ph.D.s per year;
  - ✓ Entering freshman class of high academic achievement;
  - ✓ Recognition of research capability and scholarly attainment;
  - ✓ High quality faculty;
  - ✓ High-quality graduate education programs.
- Only Texas Tech University and University of Houston qualify to receive NRUF distributions this biennium.
  - ✓ Each received approximately $7.9 million for Fiscal Year 2012.
  - ✓ Fiscal Year 2013 allocation will be determined by the Comptroller in accordance with TEC 62.148 (HB 1000, 82nd Legislature).

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Competitive Knowledge Fund

- Established in 2007 to enhance the support of faculty for the purpose of instructional excellence and research.
- Currently provided to UT-Austin, UT-Dallas, Texas A&M, Texas Tech and the University of Houston.
- Legislative Budget Board determines the allocation.

Research University Development Fund

- Created in 2009 (HB 51, 81st Legislature) for recruitment and retention of faculty and to enhance research productivity at research and emerging research universities.
- Coordinating Board to distribute funding in proportion to the amount of total research funds expended by each institution in the two most recent fiscal years.
  - ✓ Funding has not been appropriated by the Legislature.

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