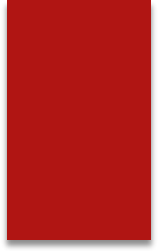
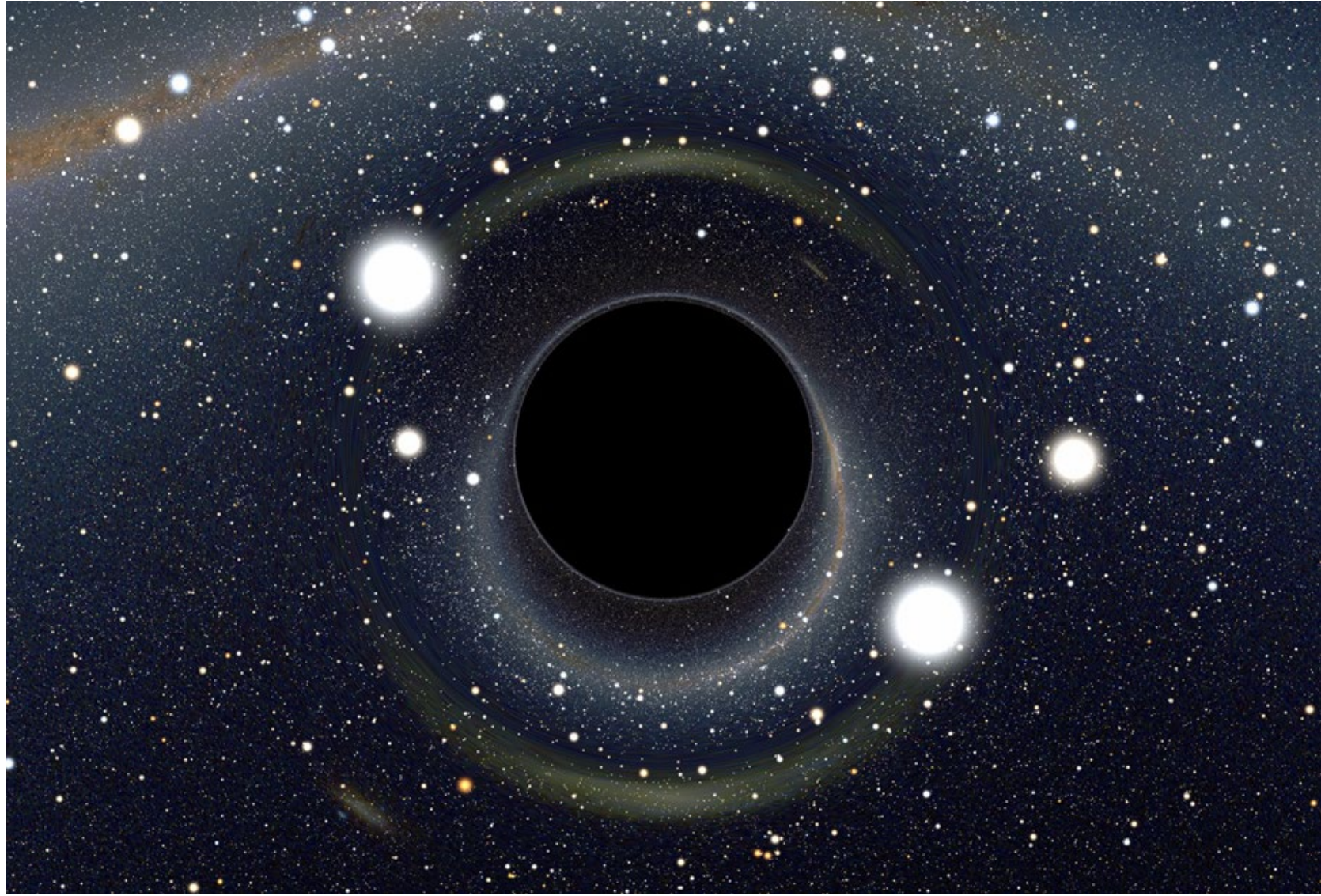


# Demystifying Higher Education Finance

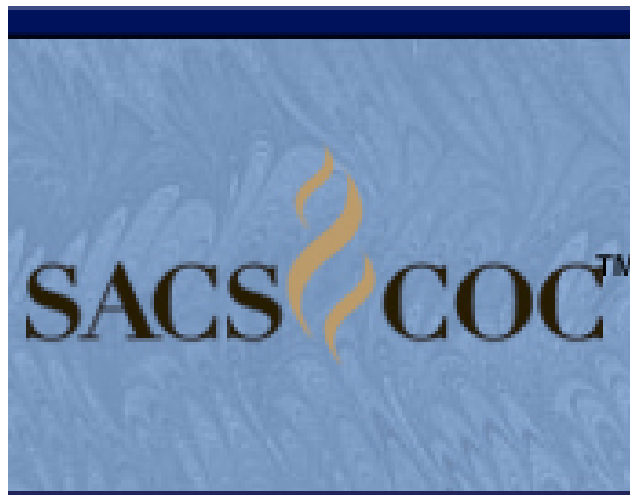
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SIMPLIFYING THE COMPLICATED: UNDERSTANDING BASIC FINANCIAL  
MODELS IN HIGHER EDUCATION

MATTHEW OLMSTEAD



# 60x30TX



National Association of College and  
University Business Officers

# Overview

- ▶ Common questions/beliefs
- ▶ High-level funding overview
- ▶ The trend of higher education funding
- ▶ The future of higher education funding
- ▶ College-level funding models: Does one size fit all?
- ▶ Q&A

“

If you can't explain it simply, you don't understand it enough”

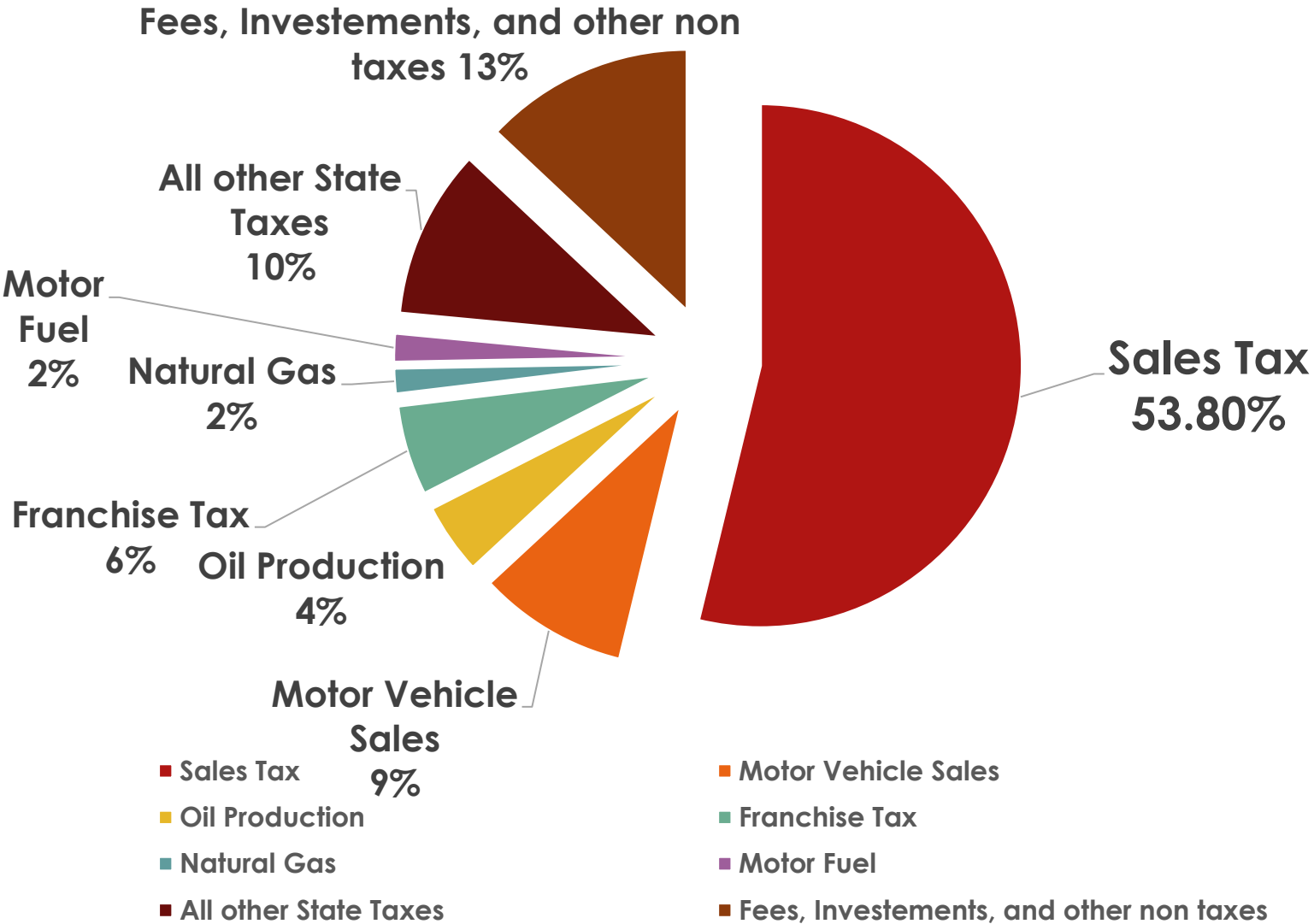
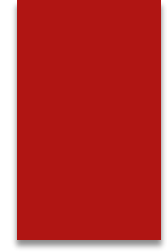
”

- Albert Einstein

# Six Common Questions & Beliefs

- ▶ Why don't we just pull extra from savings?
- ▶ If you paid for that, why can't you pay for this?
- ▶ If we don't have it, why don't you just ask for it?
- ▶ We are here for our students. How can we *not* afford to add more sections?
- ▶ Can't we just do it and ask for the money later?
- ▶ Why is the budget person handling academic issues?

# Texas Biennial Revenue Estimate – 2018-2019



≈\$105 Billion

≈\$119.1 Billion\*

\* Biennial projection for 2020-2021 is \$119.1 M

Source: retrieved from <https://comptroller.texas.gov/transparency/reports/biennial-revenue-estimate/2018/19/>

# 2022-23 REVISED BIENNIAL REVENUE ESTIMATE

UPDATED May 2021

Before each legislative session, the Texas Comptroller issues the Biennial Revenue Estimate (BRE) to project the amount of money available to spend through the next two-year state budget period. The Comptroller is revising the BRE to reflect higher-than-expected revenues as the state navigates unprecedented economic uncertainty in the pandemic's wake.

## Revenue Available for General-Purpose Spending

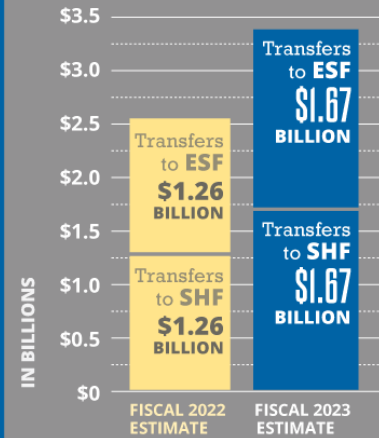
In Billions of Dollars

		2020-21	2022-23
General Revenue-Related (GR-R) Tax Collections	+	\$98.79	\$106.48
Other GR-R Revenue	+	\$15.04	\$15.65
<b>Total GR-R Revenue</b>	=	\$113.83 <small>SUBTOTAL</small>	\$122.13 <small>SUBTOTAL</small>
<b>Beginning Balance</b>	+	<b>\$4.84</b>	<b>\$0.73</b>
<b>Total GR-R Revenue &amp; Fund Balances</b>	=	\$118.67 <small>SUBTOTAL</small>	\$122.86 <small>SUBTOTAL</small>
Revenue Reserved for Transfers to the Economic Stabilization and State Highway Funds	-	\$4.80	\$6.94
Amount Needed for Transfer to the Texas Tomorrow Fund*	-	N/A	\$0.27
<b>Total Revenue Available for General-Purpose Spending</b>	=	\$113.88	<b>\$115.65</b> <small>TOTAL</small>

\* The original, constitutionally guaranteed prepaid tuition program is projected to have a cash shortfall of \$271 million in the 2022-23 biennium. The BRE assumes the shortfall will be paid from general revenue.

Note: Totals may not sum because of rounding.

### Severance Tax Transfers to the Rainy Day Fund and the State Highway Fund



The State Highway Fund (SHF) and Economic Stabilization Fund (ESF) both receive oil and gas severance tax dollars. The SHF also receives a share of sales tax revenue when annual collections exceed \$28 billion.



# Texas Higher Education Funding

**State funding in Texas is discretionary**



“Higher educational formulas do not create a statutory or constitutional entitlement.”

(Legislative Budget Board, 2018, p.3)

# State Formula Funding

- ▶ Texas colleges and universities have a 2-year budget cycle (i.e., biennial)
- ▶ We begin our fiscal year (FY) on September 1<sup>st</sup>
  - ▶ FY22 begins on 9/1/21.
  - ▶ Most states begin their FY on July 1<sup>st</sup>
- ▶ Texas is one of 16 states currently enacting biennial budgets

# State-Appropriated Funding Types

- ▶ How are calculations determined?
  - ▶ Mostly by enrollment (i.e., *weighted* SCHs) and student's discipline of study
  - ▶ Infrastructure funding (square footage x rate)
  - ▶ Teaching Experience
- ▶ Non-Formula Funding - Special items

# Weighted SCH Explained

- ▶ The base period used for the 2018-19 biennium was Summer and Fall of 2016 and Spring of 2017
- ▶ SCHs are weighted by discipline (e.g., agriculture weighs more than liberal arts) and level (e.g., undergraduate, masters, and doctoral)

<b>Semester Credit Hours</b>	<b>X</b>	<b>Program/Level Weight</b>	<b>X</b>	<b>Rate (\$55.82)</b>
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- ▶ Hours taught by tenured or tenure-track faculty qualify for the teaching experience supplement.
- ▶ Semester Credit Hours X Program/Level Weight X Supplement (0.10) X Rate (\$55.82)

(Source: Legislative Budget Board, 2018)

## Simply Put. . . .

- ▶ SCH and enrollment are the major determinants for university formula funding
- and
- ▶ Faster growing universities get more formula funding

# Non-Formula Support From State

- ▶ Non-Formula Support Items
  - ▶ New Programs
  - ▶ Ongoing state supported programs
- ▶ Other areas include, but not limited to:
  - ▶ Insurance
  - ▶ HE(A)F Funds
  - ▶ Financial Aid

# Tuition and Fees

- ▶ Tuition Fees
  - ▶ Statutory tuition (\$50/undergraduate credit hour)
  - ▶ Tuition deregulation (i.e., designated tuition)
    - ▶ Since 2003 every major university in Texas has increased designated tuition over 100%
    - ▶ Academic Charges for students have increased 138% from 2003-2017 (McGee, 2019)
    - ▶ Tuition set-aside from increase in designated tuition
  - ▶ Board authorized tuition (does not affect general state revenue)

# Was there a turning point?

## THE WALL STREET JOURNAL.

DOWJONES \*\*\*\*\* TUESDAY, SEPTEMBER 30, 2008 • VOL. CCLII NO. 77 \*\*\*\*\* \$2.00  
DIA 10365.45 ▼ 777.68 -7.0% NASDAQ 1983.73 ▼ 9.1% NIKKEI 11741.63 ▼ 1.9% DJ STOIX 50 2588.72 ▼ 4.9% 10-YR TREAS 1 2 1/2, yield 3.630% OIL \$96.37 ▼ \$10.52 GOLD \$888.20 ▲ \$5.30 EURO \$1.4441 YEN 104.29

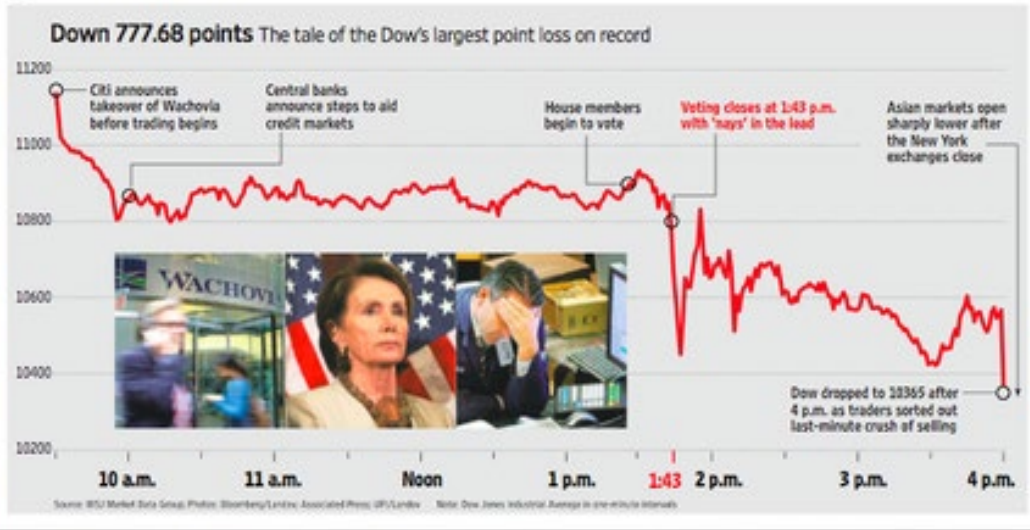
### Bailout Plan Rejected, Markets Plunge, Forcing New Scramble to Solve Crisis

BY SARAH LUECK,  
DAMIAN PALETTA  
AND GREG HITT

WASHINGTON—The House of Representatives defeated the White House's historic \$700 billion financial-rescue package—a stunning turn of events that sent the stock market into a tailspin and added to concerns that the U.S. faces a prolonged recession if the legislation isn't reviewed.

The Dow Jones Industrial Average sustained its biggest point drop in history and its biggest closing decline since the day the markets re-opened after the Sept. 11, 2001, terrorist attacks. The Dow, which had opened sharply lower on fears of more possible bank failures, finished the day down 7%, with a 777.68 point drop to 10365.43. Losses to shares on the broader Dow Jones Wilshire 5000 Index amounted, on paper, to \$1.2 trillion—eclipsing the size of the proposed bailout package. The Nasdaq Stock Market finished down 9.3%.

The widely watched VIX index, a measure of market volatility often called "the fear index," closed at its highest levels in its 28-year history. In early trading

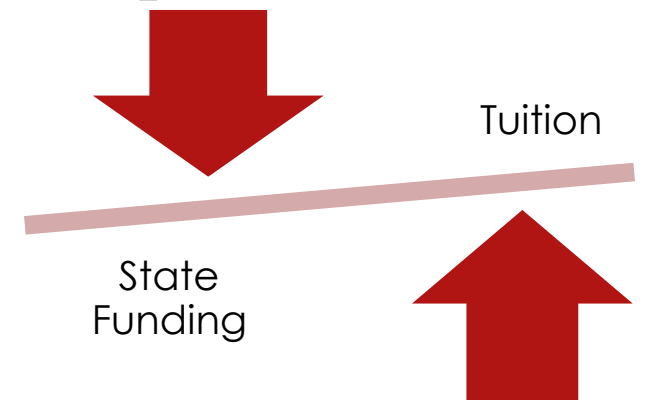




# Trends in state funding

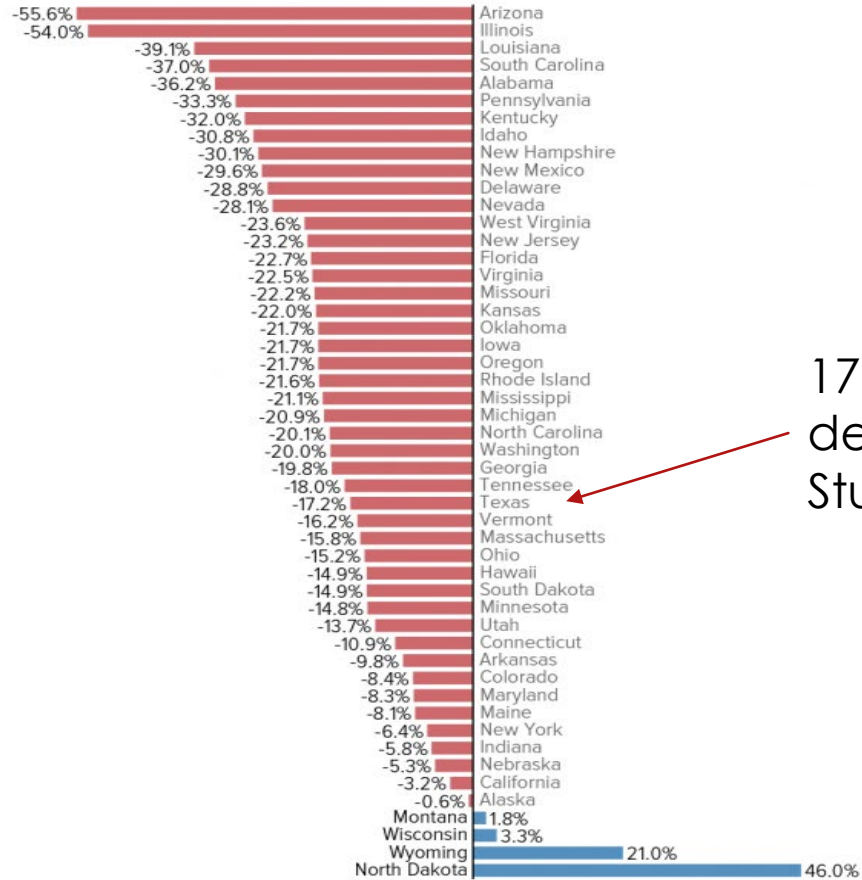
- ▶ Since 2008, overall state-funding for colleges and universities was approximately \$9B below 2008 level, after adjusting for inflation.
- ▶ Between 2008-2016 funding for universities in the state of Texas decreased over 17%.
- ▶ States are spending approximately \$1600 less per student than prior to recession.

Source: (Mitchell, Leachman, & Masterson, 2017)



## State Funding for Higher Education Remains Far Below Pre-Recession Levels in Most States

Percent change in state spending per student, inflation adjusted, 2008-2016



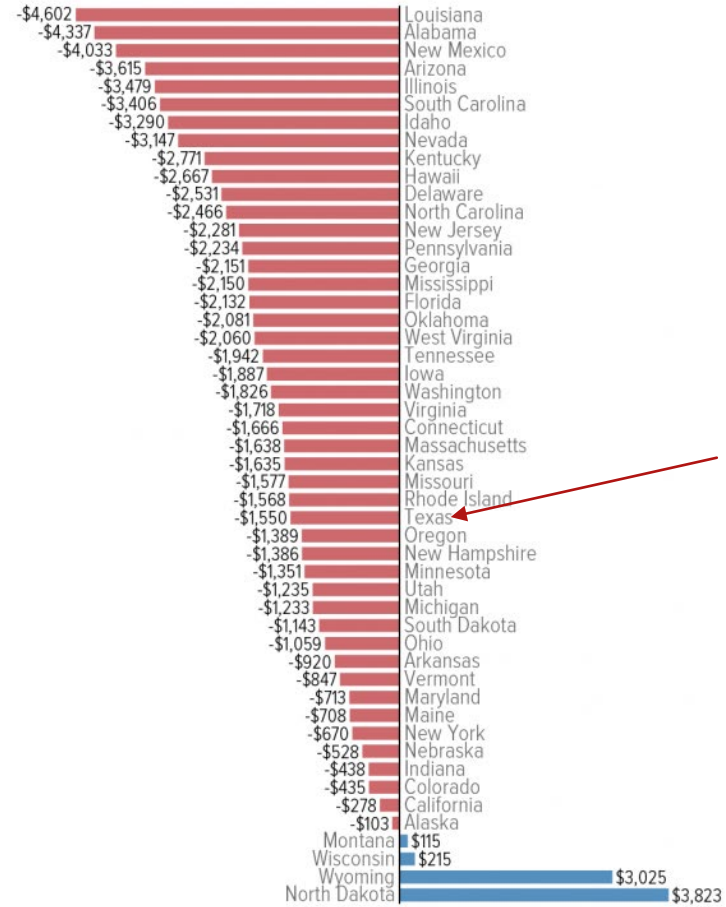
17.2% decrease per Student FTE

Note: Since enrollment data is only available through the 2014-15 school year, we have estimated enrollment for the 2015-16 school year using data from past years. In the 2013-15 biennial budget, Wisconsin state lawmakers changed the funding model for Wisconsin's Technical College System, shifting support from the local property tax to state General Purpose Revenue. This change reflects a shift of roughly \$406 million in annual support from the local to state levels in Wisconsin but did not result in an overall increase in support for Wisconsin's higher education institutions. Excluding this shift, per-student funding fell by 25.2 percent over 2008-2016.

Source: CBPP calculations using the "Grapevine" higher education appropriations data from Illinois State University, enrollment and combined state and local funding data from the State Higher Education Executive Officers Association, and the Consumer Price Index, published by the Bureau of Labor Statistics. Illinois funding data is provided by the Fiscal Policy Center at Voices for Illinois Children. Kentucky funding data is provided by the Kentucky Center for Economic Policy. Pennsylvania funding data is provided by the Pennsylvania Budget and Policy Center.

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Change in state spending per student, inflation adjusted, 2008-2016



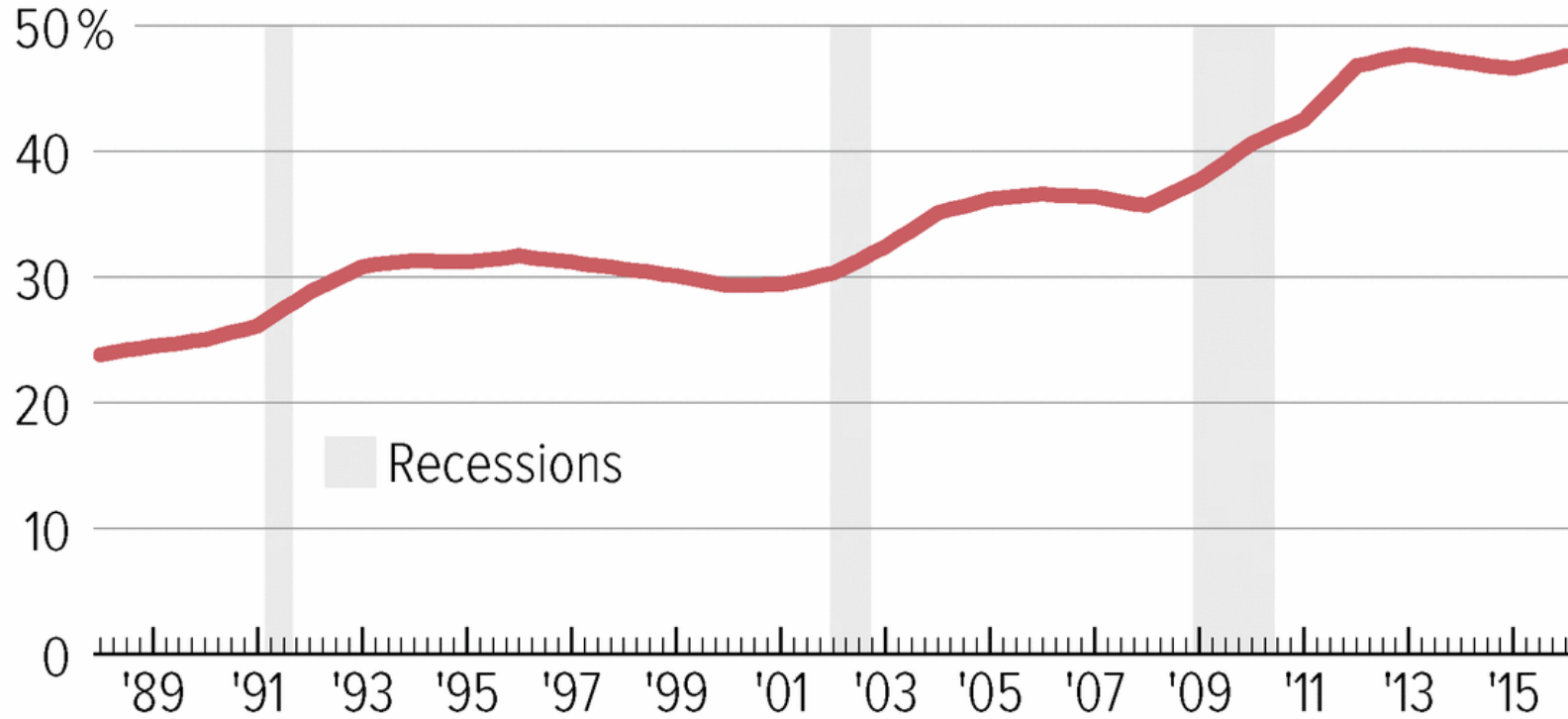
-\$1,550 per student FTE

Note: Since enrollment data is only available through the 2014-15 school year, we have estimated enrollment for the 2015-16 school year using data from past years. In the 2013-15 biennial budget, Wisconsin state lawmakers changed the funding model for Wisconsin's Technical College System, shifting support from the local property tax to state General Purpose Revenue. This change reflects a shift of roughly \$406 million in annual support from the local to state levels in Wisconsin but did not result in an overall increase in support for Wisconsin's higher education institutions. Excluding this shift, per-student funding fell by \$1,634 over 2008-2016.

Source: CBPP calculations using the "Grapevine" higher education appropriations data from Illinois State University, enrollment and combined state and local funding data from the State Higher Education Executive Officers Association, and the Consumer Price Index, published by the Bureau of Labor Statistics. Illinois funding data is provided by the Fiscal Policy Center at Voices for Illinois Children. Kentucky funding data is provided by the Kentucky Center for Economic Policy. Pennsylvania funding data is provided by the Pennsylvania Budget and Policy Center.

# Students Funding Larger Share of Education Funds After Recessions

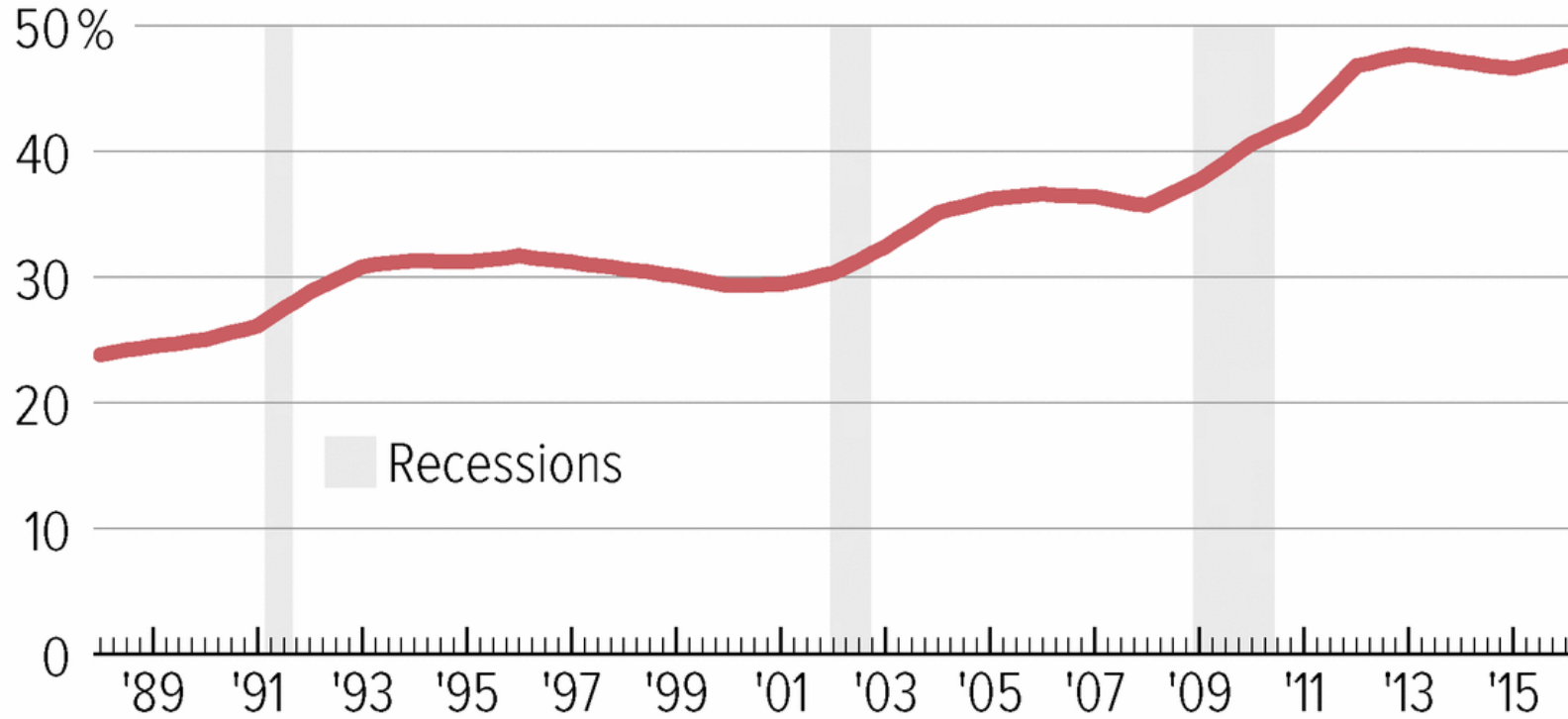
Tuition as a percent of “total educational revenue,” 1988 -2016



Source: State Higher Education Financing FY2016, State Higher Education Executive Officers Association. Total educational revenue is the sum of educational appropriations and net tuition revenue excluding any tuition revenue used for capital and debt service. It measures the amount of revenue available to public institutions to support instruction (excluding medical students).

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Source: State Higher Education Financing FY2016, State Higher Education Executive Officers Association. Total educational revenue is the sum of educational appropriations and net tuition revenue excluding any tuition revenue used for capital and debt service. It measures the amount of revenue available to public institutions to support instruction (excluding medical students).

# Trends in state funding

- ▶ As state funding continues to decrease, colleges and universities are tasked with finding ways to be more creative in generating revenue (i.e., designated tuition, auxiliary accounts, and distance learning revenue). As you know, these come with its challenges.
- ▶ Bottom line does not necessarily align with strategic plan

# The future of university funding?

- ▶ Performance-based funding has been discussed the past four legislative sessions
- ▶ Texas community colleges now receive a portion of their funding based on student performance and the generation of *student success points*. Many universities nation-wide also are funded based on performance (i.e., funding based on student outcomes)
- ▶ \$171.56 per success point generated

# Examples of performance based measurement

Metric	Points
Student successfully completed development education in mathematics	1.0
Student successfully completes development education in reading or writing	.50
Student successfully completes 15 SCH	1.0
Student successfully completes 30 SCH	1.0
Student receives degree	2.0
Student receives STEM degree	2.5

Source: (Legislative Budget Board, 2018)

# Types of Budget Models

- ▶ Incremental
- ▶ Zero-Based Budgeting
- ▶ Responsibility Center Management
- ▶ Centralized Budgeting



# Incremental Funding

- ▶ Most traditional budget model
- ▶ Your balance rolls from year to year. What you used last year as a base will be your base for the next year
- ▶ Your area may receive money for new initiatives, which is typically added to your base budget as ongoing expenses

# Incremental Funding – Advantages

## ▶ Advantages

- ▶ Easy to implement
- ▶ Marginal changes to budget year after year
- ▶ Makes budget planning simple
- ▶ Predictable
- ▶ Little oversight in how money is spent

# Incremental Funding – Disadvantages

- ▶ Disadvantages
  - ▶ Assumes that status-quo is sufficient
  - ▶ Discourages innovation
  - ▶ Lacks vision and strategy
  - ▶ Not a forward-thinking model
  - ▶ Does not react well to unexpected changes
  - ▶ *Little oversight in how money is spent*

# Zero-based budgeting

- ▶ Start from scratch every year (\$0)
- ▶ All units/area budgets are cleared and all budgeted funds must be re-requested every year, along with justification
- ▶ Allows units to understand their own budgets
- ▶ Time Consuming and hard to get buy-in

# Activity-Based Costing (ABC)

- ▶ Funding based on specific activities, rather than broad functions.
- ▶ Activities can be linked to student outcomes.

# Zero-Based Budgeting

- ▶ In higher education, ZBB typically needs to be modified to be successful (e.g., FT positions)
- ▶ There needs to be light at the end of the tunnel

# Responsibility Centered Management

- ▶ Each academic unit carries its own costs and revenues
- ▶ Allows academic units to determine what works best for them and their areas
- ▶ Decentralized delegation of authority to deans, department heads, etc.
- ▶ Units are responsible for its own expenses as they are incurred

# Responsibility Centered Management

- ▶ RCM does create incentives to increase revenue.
- ▶ Although RCM creates incentives for deans to manage costs, it often requires more administrative support staff.
- ▶ RCM focuses resources at the unit-level and often makes it harder to accumulate funds for strategic or centralized investments.
- ▶ Can create competition among units



# Centralized

- ▶ Upper-level administration makes the decisions
- ▶ Many believe that at least a portion of funding or decisions should be centralized
- ▶ Centralized funding may discourage competition

# References

- Mitchell, M., Leachman, Michael, & Masterson, K. (2017). A lost decade in higher education funding: State cutes have driven up tuition and reduced quality [website]. Retrieved from <https://www.cbpp.org/research/state-budget-and-tax/a-lost-decade-in-higher-education-funding>
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Questions?