

Formula Funding

Formula Funding

Why are we here?

- ▶ Because they are such an important revenue source, it is important to understand the formulas
- ▶ Certain data included within the LAR plays a big role in how the formulas are calculated

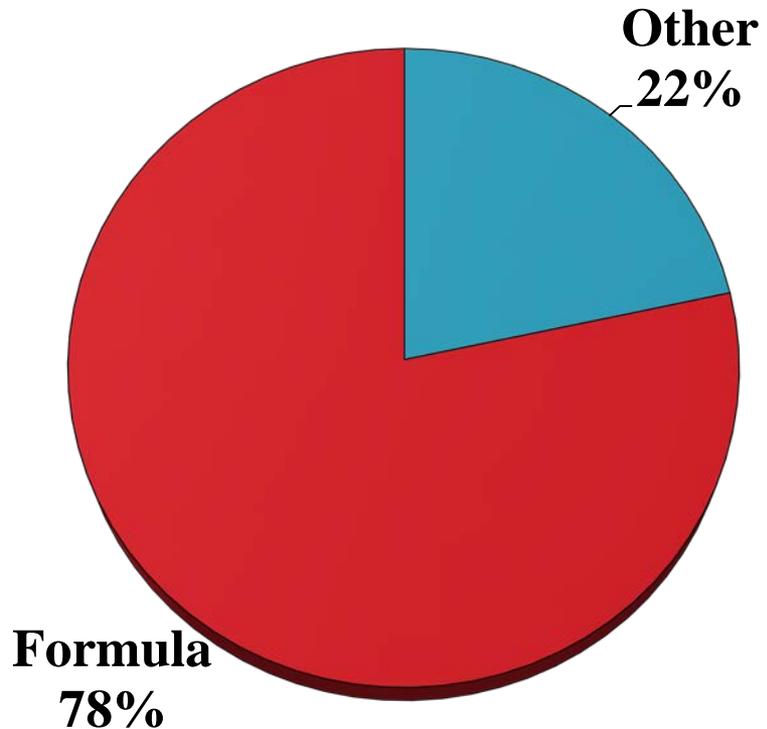
Formula Basics

State Funding

General Academics: \$4.4 B GR (net)*

- Formula GR as percent of Net GR (less TRBs) is 78 percent. No significant change since at least 2008-09 biennium.
- However, significant variation among institutions: from 41% at Texas A&M Texarkana to 93% at UNT.

•GR direct appropriations. Net of TRB debt service. Also does not include HEF, health insurance, or retirement.

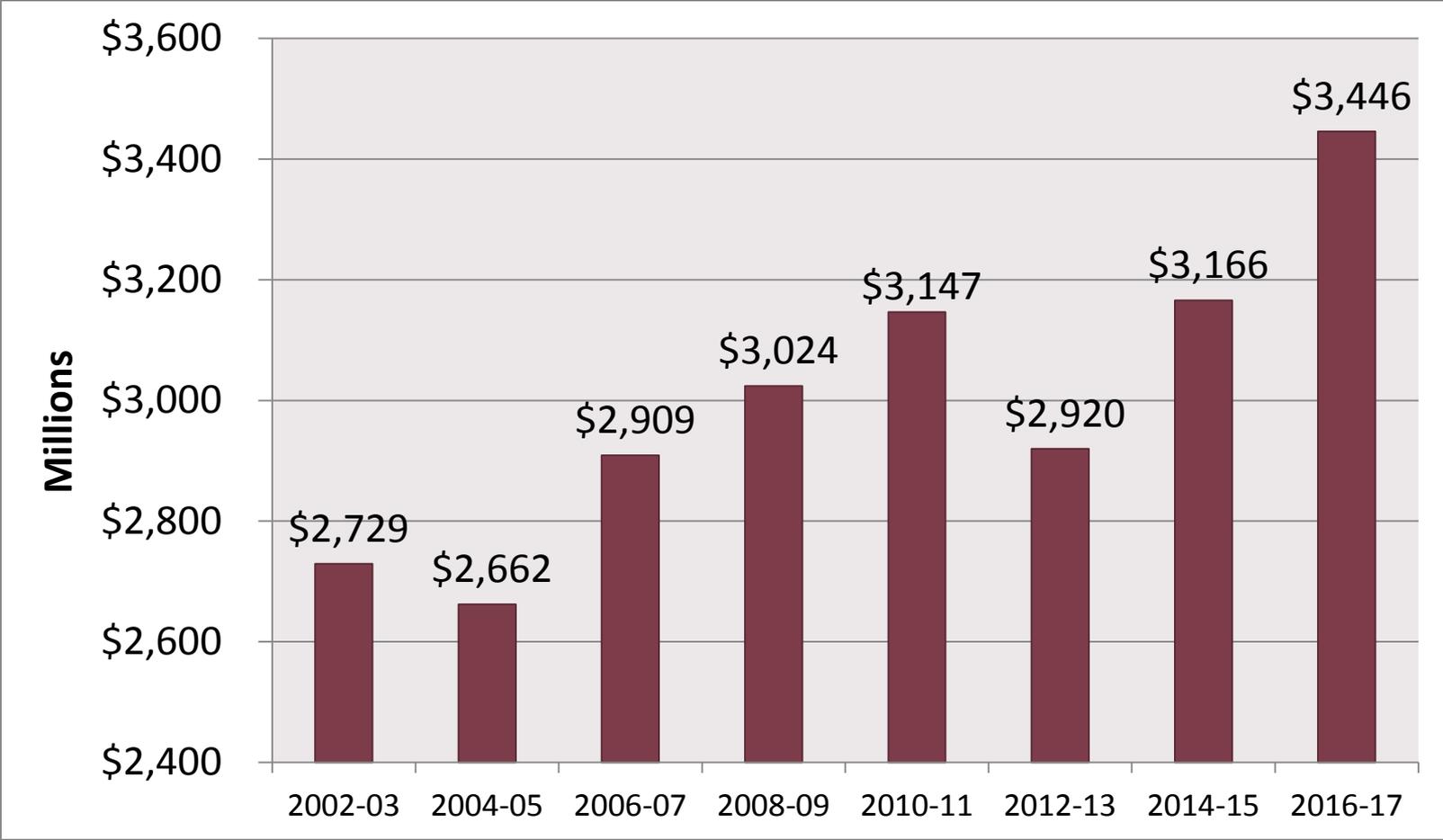


2016-17

Formula Basics

General Academics Formula GR

in millions



Formula Basics

Principles

- Formulas are an allocation methodology for state appropriations. The Legislature sets the rates based on available funding, including consideration of enrollment changes and other factors.
- Formulas use Base Year data
- I & O and Supplemental Formulas are based on weighted semester credit hours (WSCH) for General Academic Institutions and Headcount or full time student equivalent for Health Related Institutions.
- Infrastructure is based on CB's "predicted" needs, not actual space, to encourage efficiency
- Formula Method of Finance uses the "All Funds" methodology where the amount of formula GR is offset by the amount of Other Educational and General Income (E&G) available to each institution

Formula Basics

Base Period for Upcoming Biennium

Enrollment during:

- Summer 2016
- Fall 2016
- Spring 2017*

Determines appropriations for

Fiscal Year 2018

- Fall 2017
- Spring 2018
- Summer 2018

Fiscal Year 2019

- Fall 2018
- Spring 2019
- Summer 2019

*For base bill Spring 2016 will be used as a proxy for Spring 2017. Updates for Spring data are provided in March/April during the Session.

Types of Formulas

General Academic (GAI)

Base Formulas

- ▶ Instruction & Operations (I&O)
- ▶ Infrastructure

Supplemental Formulas

- ▶ Teaching Experience
- ▶ Small Institution

Health Related (HRI)

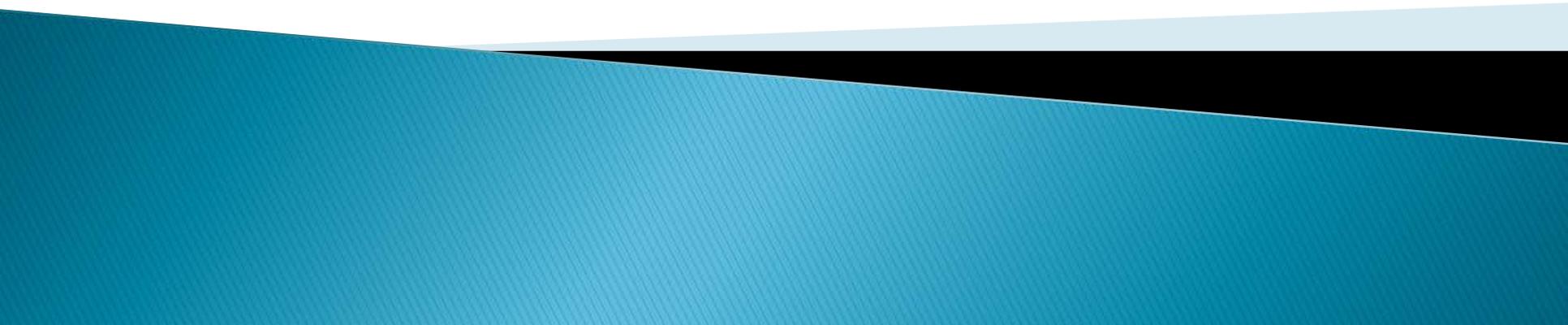
Base Formulas

- ▶ Instruction & Operations (I&O)
- ▶ Infrastructure
- ▶ Research Enhancement
- ▶ Graduate Medical Education
- ▶ Mission Specific

Supplemental Formulas

- ▶ Small Class Supplement
(included in I&O appropriation)

General Academic Formulas



General Academic Institutions

Formula Types

Two Formulas:

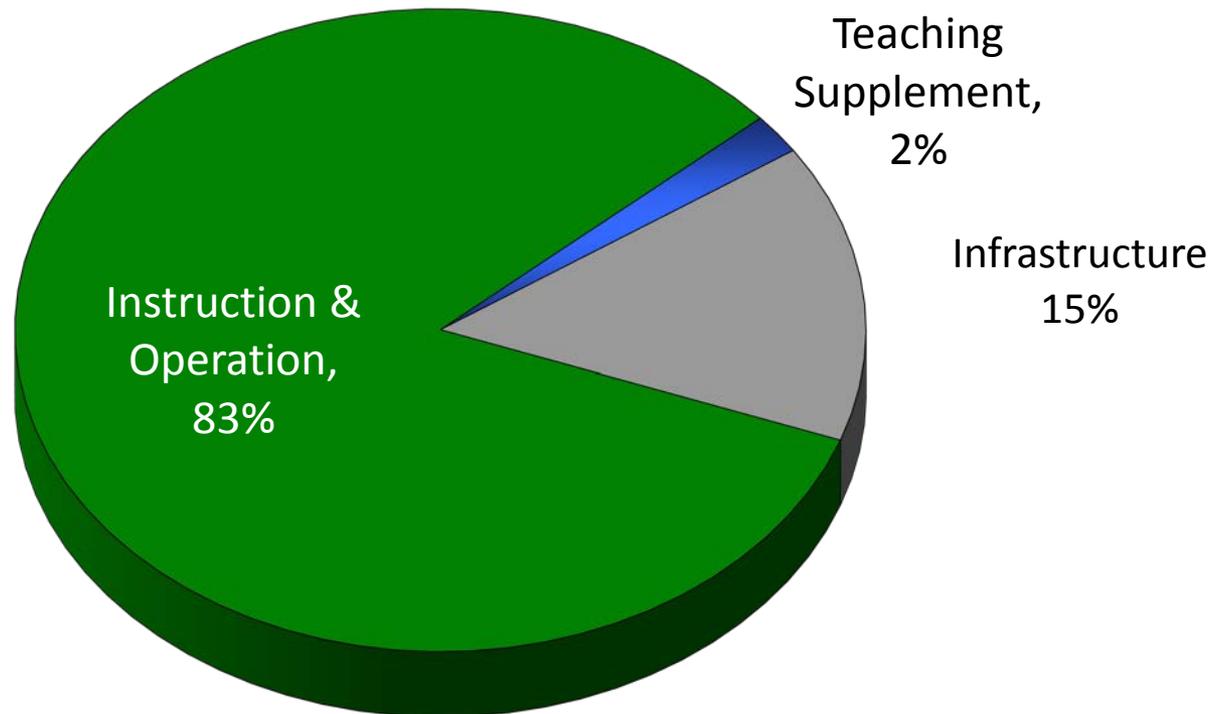
1. **Instruction and Operations:** Provides funding for faculty salaries, departmental operating expense, library, instructional administration, research enhancement, student services, and institutional support
2. **Infrastructure:** Funding associated with plant related expenditures and utilities driven by the predicted square feet produced by the Space Model.

Two Supplements:

1. **Teaching Experience:** 10% premium for undergraduate semester credit hours taught by tenured or tenured track faculty
2. **Small Institution:** for universities with a headcount of less than 10,000 students

General Academic Institutions

Distribution of Formula Funding 2016-17 Biennium



General Academic Institutions

Instruction and Operations Formula

- ▶ Based on academic and student-related functions
- ▶ Includes:
 - Faculty Salaries
 - Department Operating Expenses
 - Library
 - Instructional Administration (e.g. Dean's offices)
 - Research Enhancement
 - Student Services
 - Institutional Support

General Academic Institutions Instruction and Operations Formula

Each SCH is weighted to reflect relative differences in costs. Weights are based on:

Level (lower division, upper division, masters, etc.)

- Example: Graduate courses are expected to be taught in smaller class sections than undergraduate classes so graduate credit hours are weighted heavier than undergraduate credit hours

Program area (liberal arts, science, nursing, etc)

- For example, a credit hour in a lower division History course earns less formula funding than a lower division course in Art or Engineering

General Academic Institutions Instruction and Operations Formula

Weights are determined based on a *cost study* that reflects the relative costs:

- Cost study is an objective, expenditure-based methodology using data from each institution's AFR
- Includes all funding sources, except Auxiliary
- All other weights are relative to lower level liberal arts, which has the weight of 1
- All weights are displayed in a chart called the "Formula Matrix" which is included in the General Appropriations Act
- Matrix is based on a 3-year rolling average of cost study weights. For the 2016-17 biennium, the matrix was based on the cost studies for fiscal years 2012, 2013, and 2014.

2016-17 Cost Study Matrix

	Lower Division	Upper Division	Masters	Doctorate	Special Professional
Liberal Arts	1.00	1.76	4.00	10.77	
Science	1.78	3.02	7.53	20.61	
Fine Arts	1.47	2.52	6.03	7.95	
Teacher Ed	1.63	2.08	2.56	7.42	
Agriculture	2.07	2.75	7.80	11.77	
Engineering	2.38	3.52	7.10	17.98	
Home Economics	1.10	1.75	3.01	8.67	
Law					5.13
Social Services	1.68	2.05	2.93	18.18	
Library Science	1.49	1.57	3.60	12.06	
Voc. Training	1.45	2.64			
Physical Training	1.51	1.26			
Health Services	1.07	1.65	2.79	9.86	2.64
Pharmacy	1.86	5.02	28.29	35.14	4.32
Business Admin.	1.19	1.88	3.39	23.92	
Optometry			37.52	55.92	7.58
Teach Ed. Practice	2.28	2.13			
Technology	2.26	2.41	3.89	5.20	
Nursing	1.72	2.11	3.34	8.99	
Developmental Ed	1.00				
Veterinary Medicine					22.03

General Academic Institutions Instruction and Operations Formula

Semester Credit Hours

SCH in base period (Summer, Fall, Spring)

X

Weight

Based on discipline and level of instruction

X

Rate

Funding rate set by the Legislature in the General Appropriations Act

\$55.39 for 2016-17

General Academic Institutions

Teaching Experience Supplement

- ▶ This is a simple add-on (or supplement) to the Instruction and Operations formula
- ▶ Lower and upper division SCH taught by tenure and tenure track faculty are given an additional 10 percent weight
- ▶ Intended to provide an incentive for the institution to assign tenure/tenure track faculty to teach undergraduate students

General Academic Institutions Infrastructure Support Formula

- ▶ Infrastructure formula has 3 components:
 - Operations and Maintenance (O&M)
 - Utilities
 - Small School Supplement
- ▶ Infrastructure formula is driven by the predicted space (**Net Assignable Square Feet or **NASF**) derived from the Coordinating Board's Space Projection Model**

General Academic Institutions Infrastructure Support Formula

Coordinating Board Space Model

Factor

Teaching Space

Library Space

Research Space

Office Space

Support Space
all

Variables

SCH by program and level

Faculty, students, approved programs and
holdings

SCH and Research expenditures

Faculty, non-faculty, and current fund E&G
Expenditures

Percent of total predicted square feet for
other factors

General Academic Institutions Infrastructure Support Formula

Coordinating Board Space Model

Factor	Percent of Total	
	Predicted	Actual
Teaching	37.3%	36.3%
Library	12.6%	11.7%
Research	11.3%	11.2%
Office	30.5%	33.7%
Support	8.3%	7.2%

General Academic Institutions Infrastructure Support Formula

Predicted Square Feet X
Operations & Maintenance Rate

+

Predicted Square Feet (adjusted based on utility
expenditures) X Utilities Rate

+

Small School Supplement (if applicable)

General Academic Institutions Infrastructure Support Formula

Operations and Maintenance(O&M) **\$3.14 (56.5%)**

- To provide for physical plant, grounds, maintenance, and custodial services

Utilities (statewide rate) **\$2.41 (43.5%)**

- Includes electricity, natural gas, water, wastewater, and thermal energy
- Rate is adjusted for each institution to reflect local utility rates, relative to other institutions

Statewide Avg. Infrastructure Rate/Pred. SqFt **\$5.62**

Note – Rates does not include Texas A&M University at Galveston mission-specific formula funding per Art III Special Provision Sec 27 (5)

Small School Supplement – provides an additional \$750,000 / year to institutions with headcounts of fewer than 5,000. For institutions between 5,000 and 10,000 headcount, the small school supplement proportionally decreases down to zero when an institution reaches 10,000 headcount.

General Academic Institutions Infrastructure Support Formula

Utilities Adjustment by Institution

Statewide Rate

\$2.44

UT -Arlington	2.44
UT -Austin	2.60
UT -Dallas	2.40
UT -El Paso	2.51
UT -Rio Grande Valley	2.54
UT -Permian Basin	2.23
UT -San Antonio	2.58
UT -Tyler	2.26

A&M System Agencies

A&M System Agencies

Principles

- ▶ Most of funding is program based and not driven by formula
- ▶ Only receive formula funding for Infrastructure
 - For facilities in Brazos County to provide for facility maintenance and operations, and utilities
 - Based on the CB space model. Agencies submit data to CB
 - Calculated using the same rate as A&M

Income Estimates and All Funds Methodology

Income Estimates

- ▶ Income that is included in the General Appropriations Act is set forth in statute
- ▶ Legislative Budget Board (LBB) estimates income for each institution
- ▶ Funds in the GAA include
 - GR Dedicated Educational and General Income (E&G)
 - GR Dedicated Board Authorized Tuition Income (BATI)
- ▶ Both Methods of Finance are “estimated appropriations.”

Income Estimates

E&G Income sources that are included in the Method of Finance (as defined in Ed. Code, Ch 51.009):

- Net Statutory tuition
- Special course fees charged under Sections 54.051(e) and (l), Ed. Code
- Lab fees
- Student teaching fees
- Organized activity fees
- Proceeds from the sale of educational and general equipment

DESIGNATED TUITION is NOT included as a part of the method of finance for appropriations

E&G Income Estimates

General Academic Institutions

- ▶ LBB attempts to project income that is analogous to the base period SCH funded in the formula
- ▶ LBB staff begin with actual income as reported by institutions in LARs and other information.
 - First step: Estimate FY 2016 gross tuition:
 - Changes to Enrollment – Gross Resident Tuition:

Actual FY 2014 Gross Resident Tuition reported in LAR	X	% change in SCH (Fall 2013 to Fall 2014)
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E&G Income Estimates

General Academic Institutions

	Fall 2013	Fall 2014			
	<u>Base Period SCH</u>	<u>Base Period SCH</u>	<u>Change</u>	<u>%</u>	<u>Adjustment</u>
UT Arlington	315,028	324,540	9,512	3.02%	103.019%
UT Austin	650,917	640,925	-9,992	-1.54%	98.46%
UT Dallas	230,868	252,458	21,590	9.35%	109.35%
UT El Paso	237,611	240,026	2,415	1.02%	101.02%
UT Rio Grande	310,019	315,578	5,559	1.79%	101.79%
UT Permian Basin	45,985	50,840	4,855	10.56%	110.56%
UT San Antonio	317,133	322,190	5,057	1.59%	101.59%
UT Tyler	75,905	79,890	3,985	5.25%	105.25%
Total, General Academics	6,475,701	6,674,671	196,779	3.04%	103.04%

E&G Income Estimates

General Academic Institutions

- Changes to Rate:
 - Gross Non Resident Tuition:

% SCH change + growth factor calculated by LBB for Non Resident Tuition (Est increases for FY15 & FY16).
 - Note: the LBB can further adjust the GRD estimate during session if final Non Resident Rate published by THECB is higher than original estimate

Non-Resident Tuition Rates, Educ. Code Sec. 54.051 (d)				
	Non-Resident Tuition Rate	estimate used for GAA	% increase	
FY 2002	\$ 253			
FY 2003	262		3.56%	
FY 2004	282		7.63%	
FY 2005	306		8.51%	
FY 2006	326		6.54%	
FY 2007	325		-0.31%	
FY 2008	328		0.92%	
FY 2009	331		0.91%	
FY 2010	327	\$ 328	-1.21%	
FY 2011	360	331	10.09%	
FY 2012	363	376	0.83%	
FY 2013	401	403	10.47%	
FY 2014	404	404	0.75%	
FY2015	412	419	1.98%	
FY 2016	unknown	418	1.36%	*
FY 2017	unknown	425	1.67%	*
*based on 2 year average increase				

E&G Income Estimates

General Academic Institutions

- ▶ Remissions/Exemptions:
 - Resident Waivers & Exemptions and Hazlewood Exemptions -> % SCH change
 - Non Resident Waivers & Exemptions -> % SCH + growth
- ▶ TPEG, OASI, and TRS/ORP are calculated in a similar manner based on proportions
- ▶ The E&G Staff Group Insurance is based on the LBB base bill funding rates for HEGI
- ▶ Other factors are based on what you report in the LAR

Agency Code: 721 THE UNIVERSITY OF TEXAS AT AUSTIN	LAR Act 2013	LAR Act 2014	LAR Bud 2015	LAR Est 2016	LBB 2016	LAR Est 2017	LBB 2017
Gross Resident Tuition	67,320,549	66,275,328	66,300,000	66,500,000		66,500,000	
Gross Non-Resident Tuition	95,565,511	97,825,132	99,000,000	99,000,000		99,000,000	
Gross Tuition	162,886,060	164,100,460	165,300,000	165,500,000	164,206,711	165,500,000	165,552,743
Less: Resident Waivers and Exemptions (Excludes Hazlewood)	(499,987)	(543,757)	(570,969)	(545,000)	(535,410)	(545,000)	(535,410)
Less: Non-Resident Waivers and Exemptions	(44,641,308)	(44,179,951)	(47,029,031)	(47,029,031)	(44,687,402)	(47,029,031)	(45,295,299)
Less: Hazlewood Exemptions	(1,376,522)	(1,511,042)	(1,700,000)	(1,700,000)	(1,487,847)	(1,700,000)	(1,487,847)
Less: Installment Payment Forfeits					-		-
Less: Board Authorized Tuition Increases	(18,845,813)	(18,714,815)	(18,500,000)	(18,500,000)	(18,500,000)	(18,500,000)	(18,500,000)
Less: Statutory Tuition Increases					-		-
Less: Tuition increases charged to doctoral students with hours in excess of 100					-	-	-
Less: Tuition increases charged to undergraduate students with more than 45 hours above degree					-	-	-
Less: Tuition rebates for certain undergraduates	(743,000)	(615,044)	(750,000)	(750,000)	(750,000)	(750,000)	(750,000)
Plus: Tuition waived for Students 55 Years or Older					-	-	-
Less Tuition for Repeated or Excessive Hours (Threepeat)					-	-	-
Plus: j. Tuition waived for Texas Grant Recipients					-	-	-
Subtotal	96,779,430	98,535,851	96,750,000	96,975,969	98,246,052	96,975,969	98,984,187
Less: a. Transfer of Funds for Texas Public Education Grants Program and for Physician Loans	(12,770,857)	(12,697,915)	(12,650,000)	(12,650,000)	(12,706,137)	(12,650,000)	(12,810,291)
Less: b. Transfer of funds (2%) for Physician Loans					-	-	-
Less: c. Statutory Tuition Set Aside for Doctoral Incentive Loan Repayment Program	(185,276)	(183,716)	(195,000)		-	-	-
Less: d. Other Authorized Deduction	(51,152)	(50,837)	(80,000)	(80,000)	(51,404)	(80,000)	(52,095)
Net Tuition	83,772,145	85,603,383	83,825,000	84,245,969	85,488,511	84,245,969	86,121,800

Item in Income Estimate	How LBB Projects
Gross Resident Tuition	LBB Calculation
Gross Non-Resident Tuition	LBB Calculation
Less: Remissions and Exemptions	LBB Calculation
Less: Board Authorized Tuition Increases	FY15
Less: Tuition increases charged to doctoral students with hours in excess of 100	FY15
Less: Tuition increases charged to undergraduate students with more than 45 hours above degree requirements	FY15
Less: Tuition rebates for certain undergraduates	FY15
Less Tuition for Repeated or Excessive Hours (Threepeat)	FY15
Less: Transfer of funds for Texas Public Education Grants Program	LBB Calculation
Less: d. Transfer of Funds for Doctoral Incentive Loan Repayment Program	LBB Calculation
Student Teaching Fees	none reported
Special Course Fees	FY14 or FY15, whichever is higher
Laboratory Fees	FY14 or FY15, whichever is higher
a. Local Funds in State Treasury	FY14 or FY15, whichever is higher
b. Funds in Local Depositories, e.g., local amounts	FY14 or FY15, whichever is higher
c. Other Income	FY14 or FY15, whichever is higher
Less: O.A.S.I. Applicable to Educational and General Local Funds Payrolls	LBB Calculation
Less: Teachers Retirement System and ORP Proportionality for Educational and General Funds	FY14 or FY15, whichever is higher
Less: Staff Group Insurance Premiums	LBB Calculation (HEGI)

Income Estimates

Estimated E&G Income is divided into:

- ▶ **E&G Set Asides:** Funds which are allocated to other strategies and therefore *unavailable* to fund the formulas
 - Texas Public Education Grants (TPEG)
 - Organized Activity fees (Ex. Vet Teaching Hospital)
 - Medical Loans (HRIs only – FY 2015 only)
 - Staff Group Insurance Premiums (*proportional amount for those employees paid from Other E&G income sources*)
- ▶ **Formula E&G:** LBB E&G estimate less the E&G Set Aside total. This is the amount which is allocated across the formula strategies

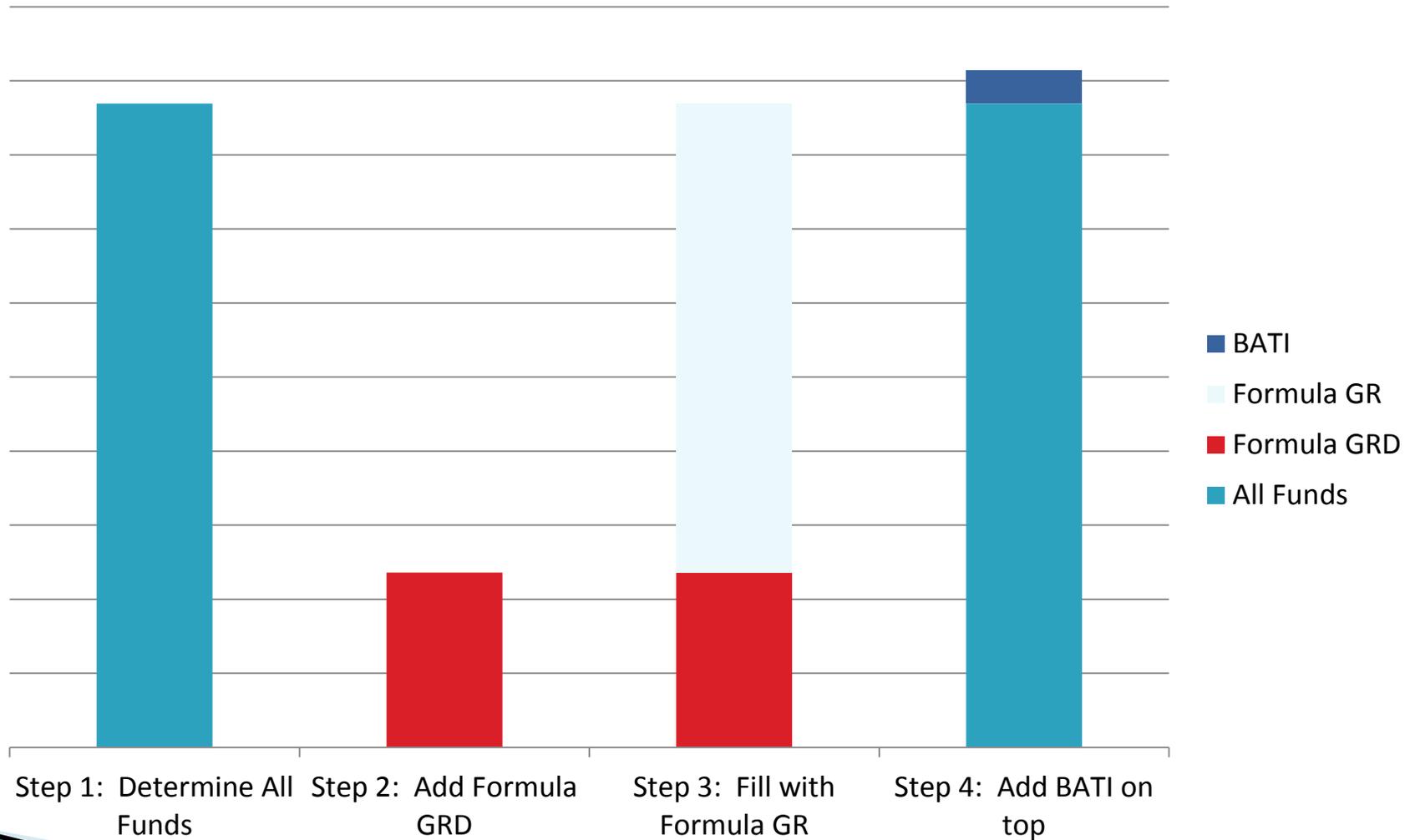
Amount of Formula Other E&G impacts the Formula GR

Income Estimates

- ▶ Use All Funds method to determine GR.
 - Calculate formula total
 - Allocate Formula Other E&G across formula strategies
 - GR is the difference between Formula Total less Formula E&G Income
- ▶ Board Authorized Tuition (graduate tuition charge above the \$50/sch rate) is distributed across formula components **after** GR is determined

Formula GR = Formula Total – Formula Other E&G

All Funds Methodology



All Funds Methodology

- ▶ All Funds Methodology determines each institution's GR funding level
- ▶ Important for E&G Income estimates to be as accurate as possible
 - LBB determines income estimates. If too high, GR is lower. If too low, GR is higher. But if too high or low, it catches up next session.
- ▶ Issues:
 - Significant fluctuations, particularly for fast growing institutions
 - Non Resident Tuition calculations and forecast
 - How to report other E&G income estimate for schools of medicine in Academic Institutions
- ▶ Will work with LBB during interim to improve and stabilize methodology

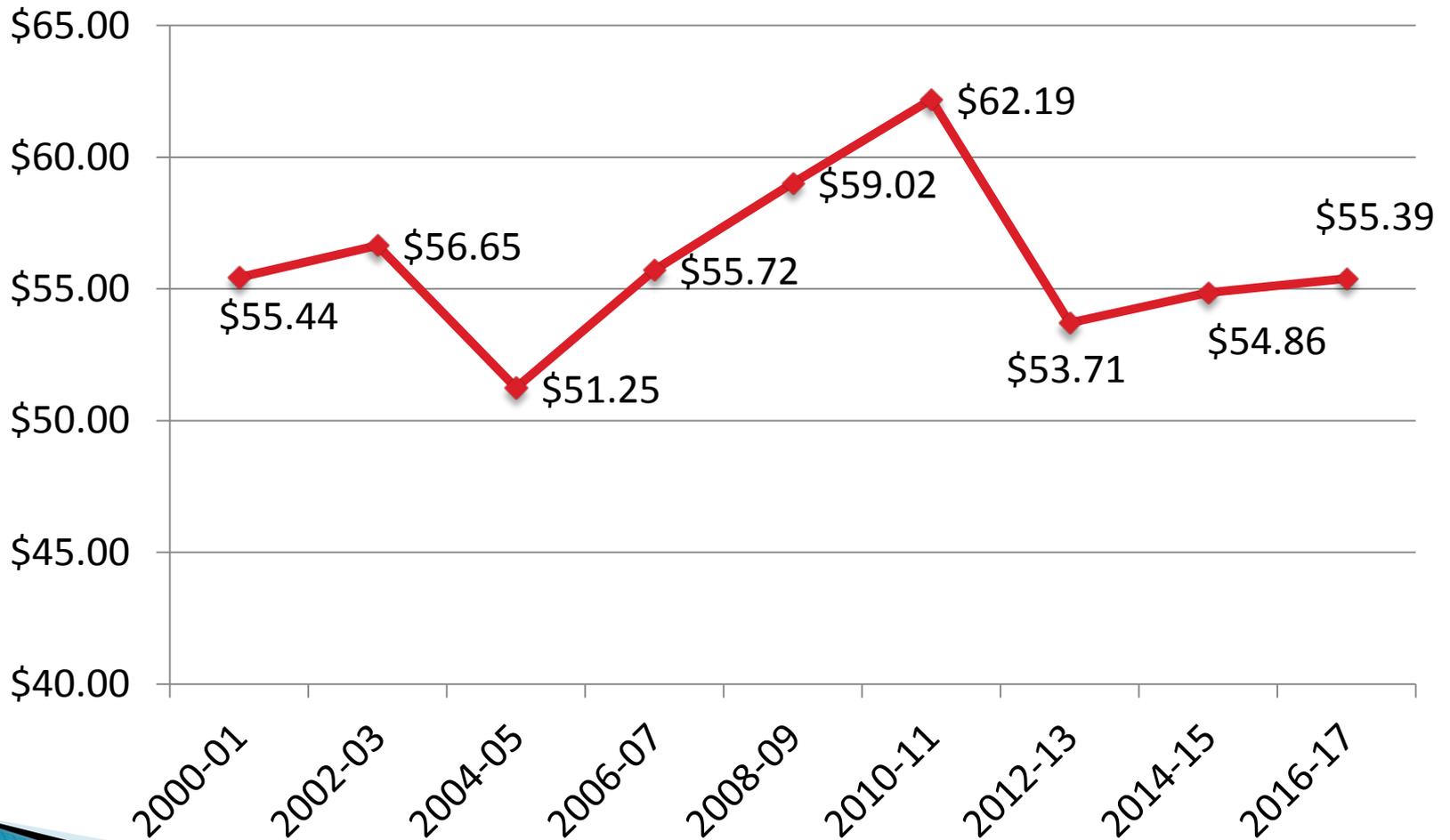
Formula Funding Rates

All Funds Methodology

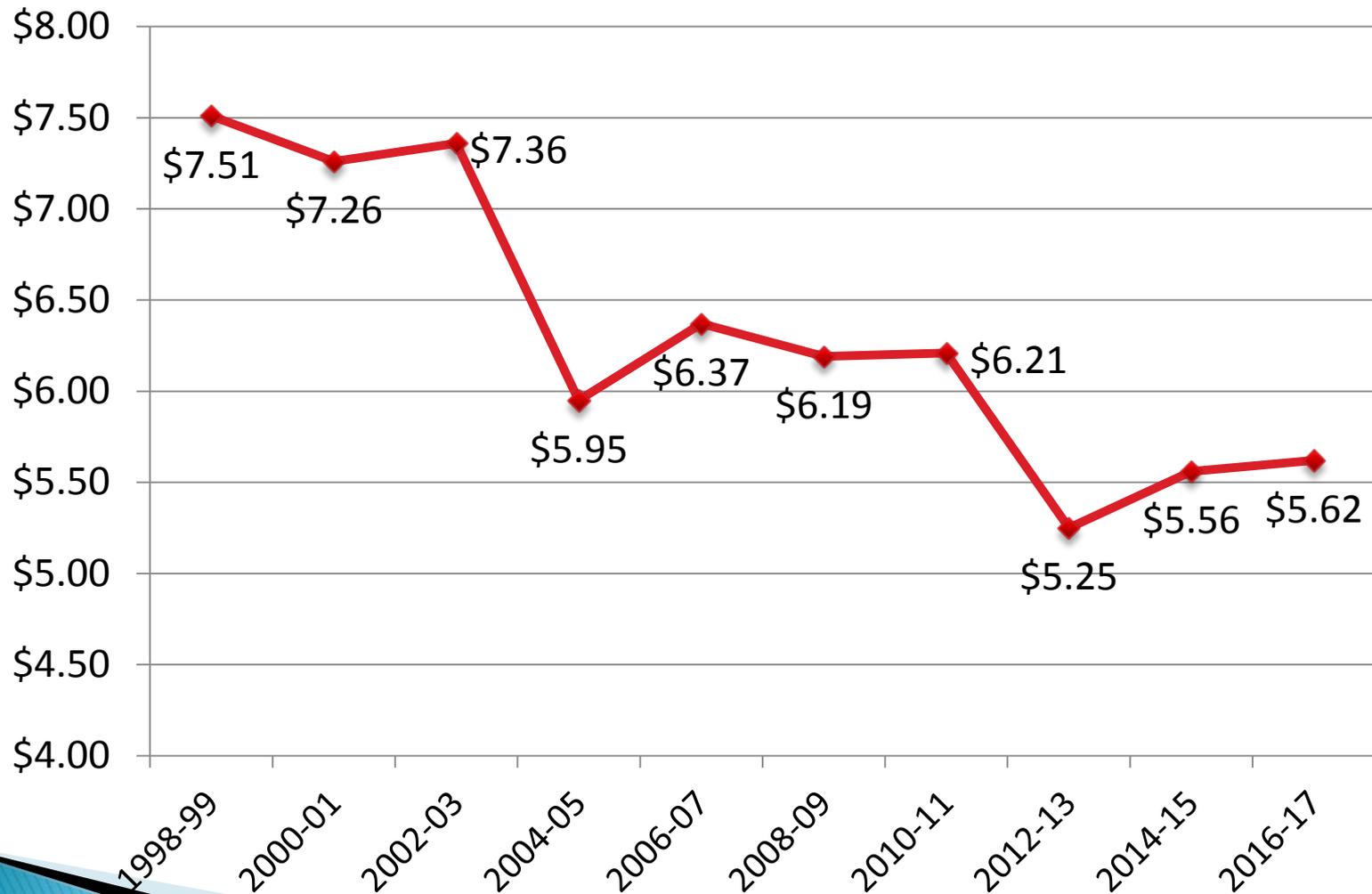
- ▶ Formulas are an allocation methodology for state appropriations. The Legislature sets the rates based on available funding, including consideration of enrollment changes and other factors.
- ▶ Formula method of finance uses the All Funds Methodology where the amount of formula General Revenue is offset by the amount of Other Educational and General Income (E&G) available to each institution.
 - Historically Legislature has provided funding for enrollment increases, but it is not guaranteed.
 - Increases in Other E&G income reduces the amount of GR needed.
 - Decreases in Other E&G income increases the amount of GR needed.

General Academics

Instruction and Operations Rates (per WSCH)



General Academics Infrastructure Formula Rates (per NASF)



Example

UT Arlington

Instruction and Operations Formula Calculation

788,578 SCHs* x Weights from Matrix = 2,024,456 WSCHs

x

\$55.39 Funding Rate set by Legislature =

\$112,139,155 / year

for Instruction and Operations Formula Funding

+

Board Authorized Tuition \$7,684,473 =

A.1.1. Strategy: Operations Support \$119,823,628

**** Summer 14, Fall 14, and Spring 15 SCHs in base period.***

Teaching Supplement Calculation

272,460 WSCHs

Lower level and Upper level SCHs taught by Tenured/Tenured Track faculty

X

10% = 27,246 WSCHs

X

\$55.39 Funding Rate set by Legislature =

\$1,509,224 / year
for Teaching Supplement

Infrastructure Formula Calculation

	<u>Statewide</u>		<u>UT Arlington</u>
Operations and Maintenance (O&M)	\$3.14		\$3.14
Utilities	+ 2.44	+	<u>\$2.44*</u>
Infrastructure Rate	<u>\$5.62</u>		<u>\$5.62</u>

Student Headcount - 34,868. Does not receive a Small School Supplement.

*UT Arlington overall utility costs are 0.12% lower than the statewide average. Therefore, UT Arlington utility rate rounds to the same as the statewide rate.

Infrastructure Formula Calculation, cont.

<u>UT Arlington</u>	<u>Predicted Sq. Ft. (PSF)</u>	<u>Actual</u>
Teaching Space	1,173,051	657,298
Library Space	334,906	208,339
Research Space	326,598	340,000
Office Space	852,249	705,343
Support Space	<u>241,812</u>	<u>97,168</u>
Total	<u>2,928,617</u>	<u>2,008,149</u>
Space Surplus/(Deficit)	<u>(920,468)</u> sq. ft.	

Infrastructure Formula Calculation, cont.

$$\begin{array}{r} \underline{2,928,617} \text{ PSF} \\ \text{(Per CB's space model)} \end{array} \times \begin{array}{r} \underline{\$3.1377} \\ \text{(O\&M Rate)} \end{array} = \underline{\$9,189,338}$$

$$\begin{array}{r} \underline{2,928,617} \text{ PSF} \\ \text{(Per CB's space model)} \end{array} \times \begin{array}{r} \underline{\$2.4134} \\ \text{(Utility Rate)} \end{array} \times \begin{array}{r} \underline{0.9988} \\ \text{(Utility Adjustment)} \end{array} = \underline{\$7,058,357}$$

\$16,247,695 / year for Infrastructure Support

UT Arlington: Formula Breakdown

FY 2016	<u>Actual (base) Formula Amt.</u>	<u>% of Total</u>	<u>Net E&G Income Allocation</u>	<u>GR Allocation</u>	<u>Board Auth. Tuition Allocation</u>
Operations Support	112,139,155	86.3%	35,142,854	76,996,301	7,684,473
Teaching Supplement	1,509,224	1.2%	966,489	542,735	0
Infrastructure Support	<u>16,247,695</u>	<u>12.5%</u>	<u>7,162,058</u>	<u>9,085,637</u>	<u>0</u>
TOTAL	129,896,074	100.0%	<u>43,271,401</u>	<u>86,624,673</u>	<u>7,684,473</u>

Total, Estimated E&G Income (from appropriations bill)			<u>57,628,220</u>
Less:			
	TPEG	(6,461,395)	
	Organized Activities	(0)	
	Staff GIP	<u>(7,895,424)</u>	
NET E&G Income		<u>47,271,401</u>	
(Amount allocated to the Formula totals)			

	FY 2014 TOTAL
Operations	119,823,628
Teaching	1,509,224
Infrastructure**	<u>16,247,695</u>
TOTAL	137,580,547

AMOUNTS AS THEY APPEAR IN THE APPROPRIATIONS BILL.

Est. Board Auth Tuition Increase (BATI) (per appropriation bill)	<u>227,523</u>
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UT Arlington: Formula Breakdown

THE UNIVERSITY OF TEXAS AT ARLINGTON (Continued)

A. Goal: INSTRUCTION/OPERATIONS

Provide Instructional and Operations Support.

A.1.1. Strategy: OPERATIONS SUPPORT	\$ 119,823,628	\$ 119,823,629
A.1.2. Strategy: TEACHING EXPERIENCE SUPPLEMENT	\$ 1,509,224	\$ 1,509,224
A.1.3. Strategy: STAFF GROUP INSURANCE PREMIUMS	\$ 7,895,424	\$ 8,461,527
A.1.4. Strategy: WORKERS' COMPENSATION INSURANCE	\$ 215,308	\$ 215,308
A.1.5. Strategy: UNEMPLOYMENT COMPENSATION INSURANCE	\$ 20,929	\$ 20,929
A.1.6. Strategy: TEXAS PUBLIC EDUCATION GRANTS	<u>\$ 6,461,395</u>	<u>\$ 6,510,719</u>
Total, Goal A: INSTRUCTION/OPERATIONS	<u>\$ 135,925,908</u>	<u>\$ 136,541,336</u>

B. Goal: INFRASTRUCTURE SUPPORT

Provide Infrastructure Support.

B.1.1. Strategy: E&G SPACE SUPPORT Educational and General Space Support.	\$ 16,247,695	\$ 16,247,695
B.1.2. Strategy: TUITION REVENUE BOND RETIREMENT	<u>\$ 7,420,188</u>	<u>\$ 7,414,088</u>
Total, Goal B: INFRASTRUCTURE SUPPORT	<u>\$ 23,667,883</u>	<u>\$ 23,661,783</u>

Bottom Line

- ▶ The formulas and the tuition income estimates are the mechanics of how your GR formula appropriation is determined.
- ▶ LBB takes all the inputs (SCH, space model data, actual expenditures) and uses same methodology for all institutions to determine appropriations.
- ▶ We have very limited ability to change how the inputs are mechanically used but will work with LBB to improve the methodologies.