

General Academic Formula Funding

TASSCUBO Budget Committee



Formula Funding

Why are we here?

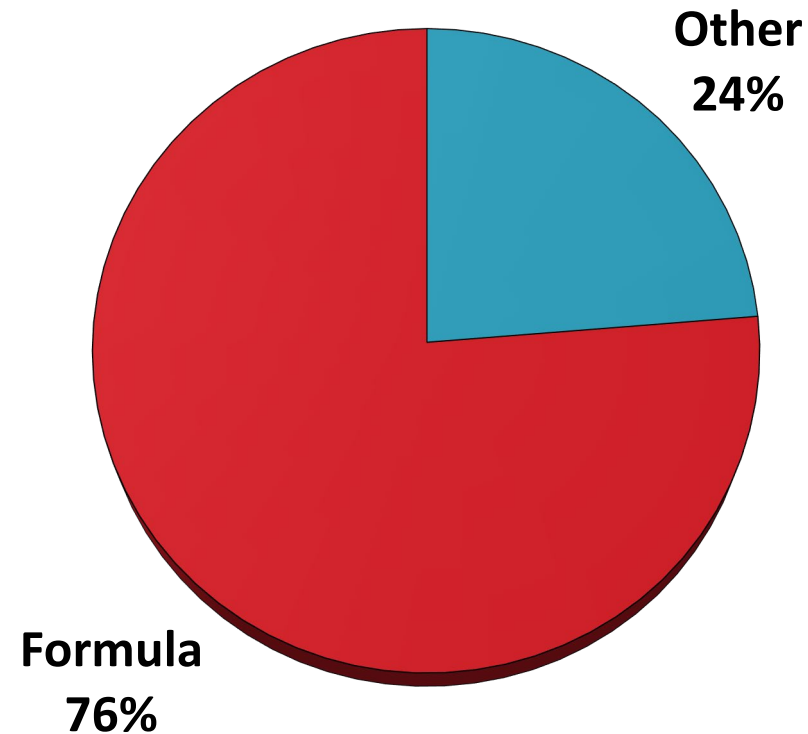
- Because they are such an important revenue source, it is important to understand the formulas.
- Understanding how the formulas work to generate money can help us understand and better prepare the schedules in the LAR.

Formula Basics

State Funding

General Academics: \$4.72 b GR (net)*

- Formula GR as percent of Net GR (less TRBs) is 76 percent. No significant change since at least 2008-09 biennium.
- However, significant variation among institutions:
 - UT Arlington - 90%
 - TAMU Texarkana - 40%

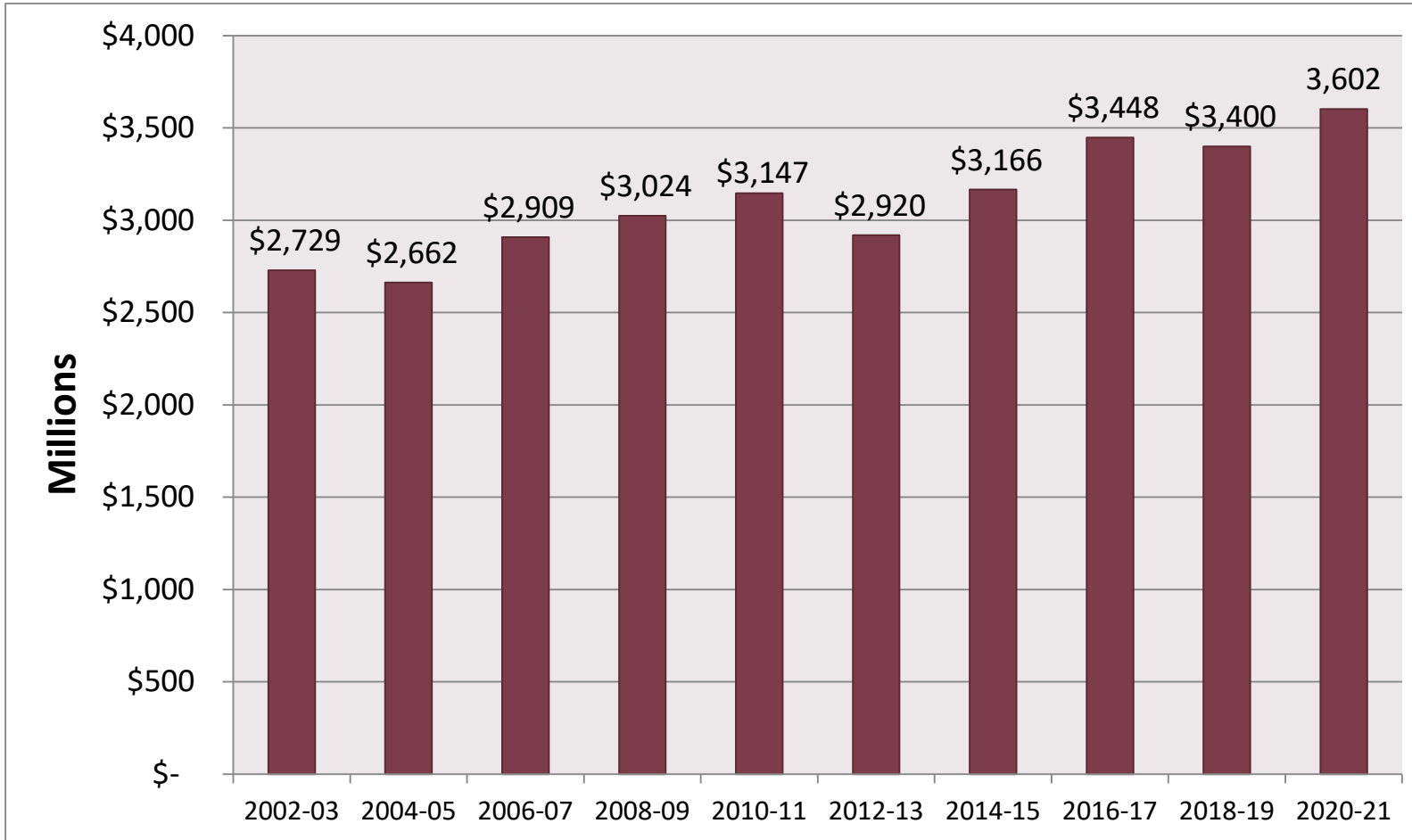


•GR direct appropriations. Net of TRB debt service. Also does not include HEF, health insurance, or retirement.

Formula Basics

General Academics Formula GR

in millions



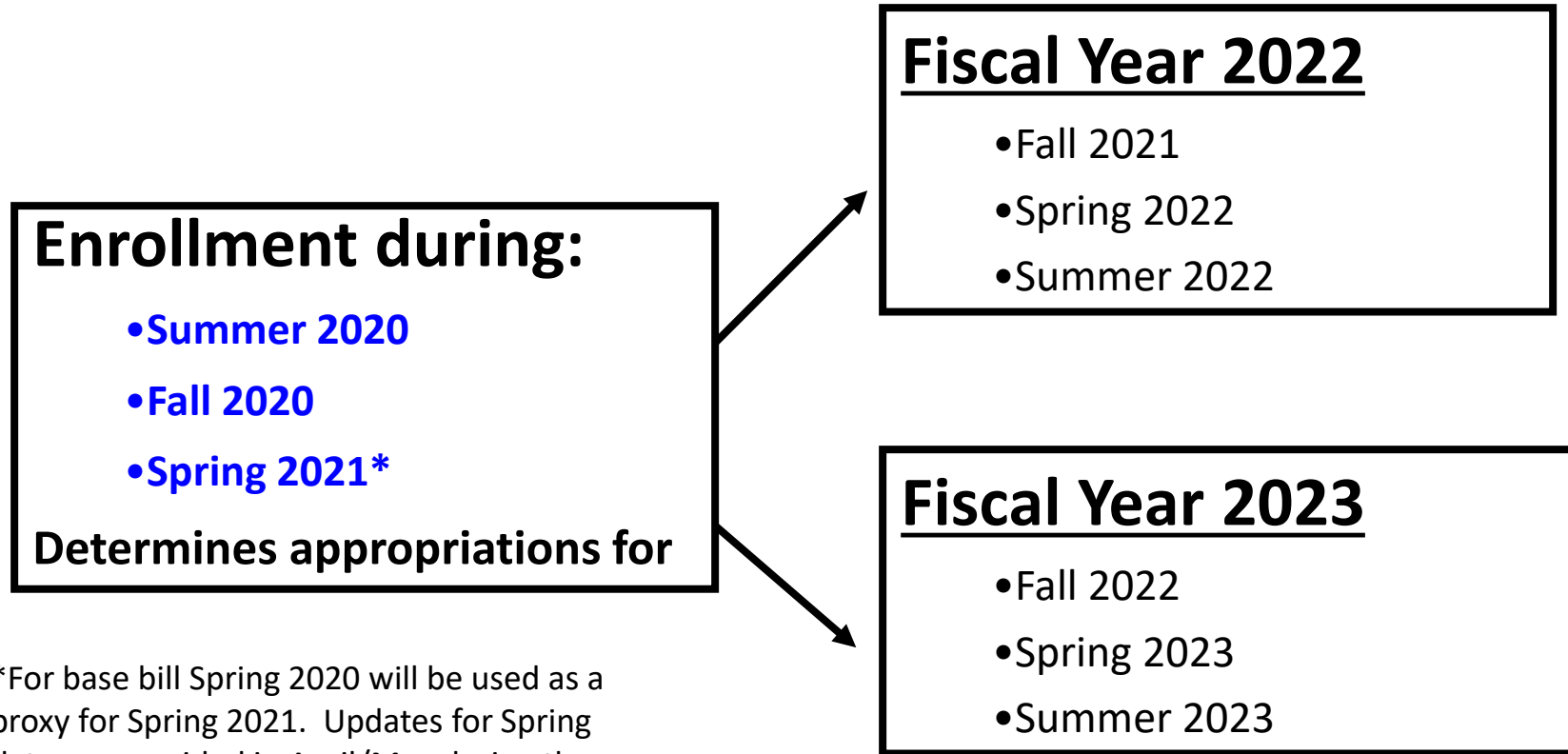
Formula Basics

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 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



*For base bill Spring 2020 will be used as a proxy for Spring 2021. Updates for Spring data are provided in April/May 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

Formula Basics

Principles

Two Formulas:

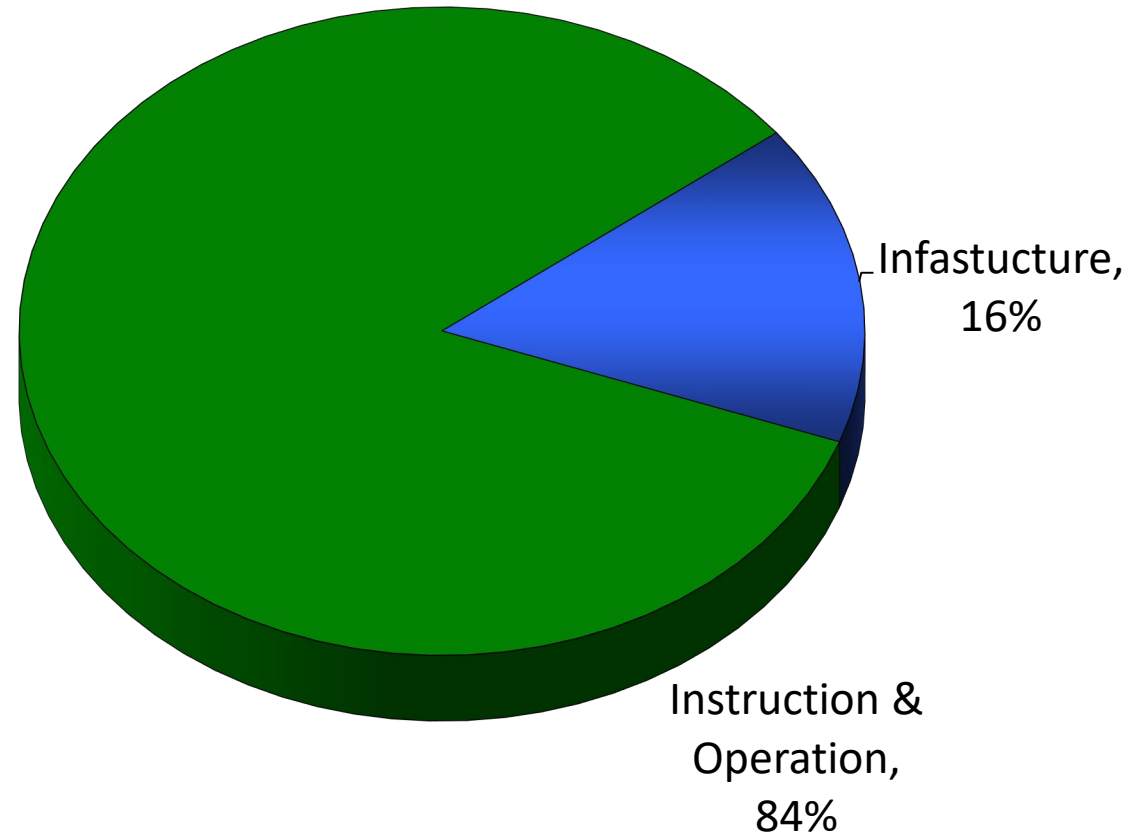
1. **Instruction and Operations:** Provides funding for faculty salaries, departmental operating expense, library, instructional administration, research enhancement, student services, and institutional support.
2. **Infrastructure:** Facility maintenance and operations, utilities.

Two Supplements:

1. **Teaching Experience:** 10% premium for all undergrad SCHs taught by tenured or tenured track faculty.
2. **Small Institution:** for universities with fewer than 10,000 headcount.

Formula Basics

Distribution of General Academic Total Formula Funding 2020-21 Biennium



Formula Basics

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

Formula Basics

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.)

- Example: A credit hour in a lower division History course earns less formula funding than a lower division course in Art or Engineering.

Formula Basics

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 2020-21 biennium, the matrix was based on the cost studies for fiscal years 2016, 2017, and 2018.

2020-21 Cost Study Matrix

	Lower Division	Upper Division	Masters	Doctorate	Special Professional
Liberal Arts	1.00	1.73	4.30	12.38	
Science	1.51	2.76	7.33	21.87	
Fine Arts	1.45	2.66	6.69	8.47	
Teacher Ed	1.46	1.98	2.41	8.12	
Agriculture	1.87	2.38	7.43	13.58	
Engineering	1.96	2.99	6.00	18.47	
Home Economics	1.11	1.80	3.06	10.50	
Law					4.99
Social Services	1.58	1.85	2.31	23.84	
Library Science	2.19	1.75	3.02	15.16	
Voc. Training	1.22	2.93			
Physical Training	1.38	1.33			
Health Services	0.97	1.56	2.62	11.28	2.80
Pharmacy	7.37	4.13	34.67	39.21	4.47
Business Admin.	1.13	1.79	3.27	28.23	
Optometry					7.08
Teach Ed. Practice	2.00	2.19			
Technology	1.91	2.29	3.82	11.55	
Nursing	1.37	2.04	2.74	10.29	
Developmental Ed	1.00				
Veterinary Medicine					24.58

Formula Basics

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

\$55.85 for 2020-21

Formula Basics

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.

Formula Basics

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.**

Formula Basics

Infrastructure Support Formula

Coordinating Board Space Model

Factor

Teaching Space

Library Space

Research Space

Office Space

Support Space

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 all other factors

Formula Basics

Infrastructure Support Formula

Coordinating Board Space Model

Factor	Percent of Total	
	Predicted	Actual
Teaching	37.3%	36.5%
Library	12.1%	11.5%
Research	11.4%	11.3%
Office	30.9%	34.0%
Support	8.3%	6.7%

Formula Basics

Infrastructure Support Formula

Predicted Square Feet X Operations & Maintenance Rate

+

Predicted Square Feet X Utilities Rate

+

Small School Supplement (if applicable)

Formula Basics

Infrastructure Support Formula

Operations and Maintenance(O&M) **\$3.10 (56.7%)**

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

Utilities (statewide rate) **+ \$2.37 (43.3%)**

- 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 **\$5.47**

Small School Supplement – provides an additional \$1,316,566 / 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.

Formula Basics

Infrastructure Support Formula

Utilities Adjustment by Institution

Statewide Rate

\$2.37

Texas A&M University	2.20
TAMU Galveston	2.64
Prairie View A&M	3.13
Tarleton	2.17
TAMU Central Texas	1.58
TAMU CC	3.20
TAMU Kingsville	2.48
TAMU San Antonio	3.07
TAMIU	2.91
WTAMU	2.40
Texas A&M Commerce	2.37
Texas A&M Texarkana	2.62

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

Income Estimates

- LBB methodology intends to project income that is as closely analogous to the base period SCH funded in the formula as possible.
- LBB staff begin with actual income as reported by institutions in LARs and other information.
- First step: Estimate FY 2019 gross tuition:
 - Apply changes in enrollment to Gross Resident Tuition

Actual FY 2018 Gross X % change in SCH
Resident Tuition reported (Fall2017 to Fall2018)
in LAR

Income Estimates

	Fall 2015	Fall 2016			
	Base Period SCH	Base Period SCH	Change	%	Adjustment
	from CB	from CB			
Texas A&M University	704,838	725,261	20,423	2.90%	102.90%
Texas A&M Univ. at Galveston	30,572	31,473	901	2.95%	102.95%
Prairie View A&M University	101,024	108,440	7,416	7.34%	107.34%
Tarleton State University	138,316	145,894	7,578	5.48%	105.48%
Texas A&M - Central Texas	18,490	19,498	1,008	5.45%	105.45%
A&M Corpus Christi	124,225	122,226	-1,999	-1.61%	98.39%
A&M Kingsville	99,508	99,877	369	0.37%	100.37%
Texas A&M - San Antonio	39,184	51,005	11,821	30.17%	130.17%
A&M International	78,096	80,139	2,043	2.62%	102.62%
West Texas State University	105,077	106,998	1,921	1.83%	101.83%
A&M Commerce	118,265	117,019	-1,246	-1.05%	98.95%
A&M Texarkana	17,545	19,561	2,016	11.49%	111.49%

Income Estimates

- Changes to Rate:
 - Gross Non Resident Tuition:
 - % SCH change + rate change calculated by LBB for Non Resident Tuition (Est. increases for FY20 & FY21).

- 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	\$ 440	\$ 440	6.80%
FY 2017	\$ 458	\$ 454	4.09%

Income Estimates

- Remissions/Exemptions:
 - Resident Waivers & Exemptions and Hazlewood Exemptions-> % SCH change
 - Non Resident Waivers & Exemptions-> % SCH+ rate change
- 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: **732**
TEXAS A&M UNIVERSITY - KINGSVILLE

			Est 2018	LBB 2018	Est 2019	LBB 2019
Gross Resident Tuition	9,344,181	9,426,328	9,597,747		9,777,624	
Gross Non-Resident Tuition	20,862,849	21,671,730	21,741,008		21,961,978	
Gross Tuition	30,207,030	31,098,058	31,338,755	31,822,450	31,739,602	32,684,693
Less: Resident Waivers and Exemptions (Excludes Hazlewood)	(255,278)	252,500)	(277,750)	(256,225)	(305,525)	(256,225)
Less: Non-Resident Waivers and Exemptions	(4,572,612)	5,401,000)	(5,694,900)	(4,919,077)	(5,755,790)	(5,108,059)
Less: Hazlewood Exemptions	(468,495)	(473,000)	(520,300)	(470,232)	(572,330)	(470,232)
Less: Board Authorized Tuition Increases	1,474,264)	(1,476,470)	(1,491,000)	(1,476,470)	(1,505,526)	(1,476,470)
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 requirements	(135,827)	133,150)	(134,000)	(133,150)	(135,000)	(133,150)
Less: Tuition rebates for certain undergraduates	53,000)	(30,000)	(33,000)	(30,000)	(33,000)	(30,000)
Plus: Tuition waived for Students 55 Years or Older	-	-	-	-	-	-
Less Tuition for Repeated or Excessive Hours)	(179,382)	(165,400)	(167,000)	(165,400)	(168,000)	(165,400)
Plus: j. Tuition waived for Texas Grant Recipients	-	-	-	-	-	-
Subtotal	23,068,172	23,166,538	3,020,805	24,371,896	23,264,431	25,045,157
Less: a. Transfer of Funds for Texas Public Education Grants Program and for Physician Loans	1,887,911)	1,809,814)	(1,827,892)	(1,988,873)	(1,846,001)	(2,042,763)
Net Tuition	21,180,261	21,356,724	21,192,913	22,383,023	21,418,430	23,002,394
Laboratory Fees	94,068	80,000	80,000	94,068	80,000	94,068
Subtotal, Tuition and Fees (Formula Amounts for Health-Related Institutions)	21,274,329	21,436,724	21,272,913	22,477,091	21,498,430	23,096,462
Other Income						
Interest on General Funds:						
a. Local Funds in State Treasury	141,499	61,000	61,000	141,499	61,000	141,499
Subtotal, Other Income	141,499	61,000	61,000	141,499	61,000	141,499
Subtotal, Other Educational and General Income	21,415,828	21,497,724	21,333,913	22,618,590	21,559,430	23,237,961
Less: O.A.S.I. Applicable to Educational and General Local Funds Payrolls	1,106,809)	(1,226,400)	(1,250,935)	(1,320,262)	(1,275,960)	(1,356,415)
Less: Teachers Retirement System and ORP	954,612)	(1,082,095)	(1,103,725)	(1,106,809)	(1,125,810)	(1,106,809)
Proportionality for Educational and General Funds						
Less: Staff Group Insurance Premiums	(2,494,487)	2,700,000)	(2,750,000)	(3,221,839)	(2,750,000)	(3,368,832)
TOTAL, OTHER EDUCATIONAL AND GENERAL INCOME (Formula Amounts for General Academic Institutions)	16,859,920	16,489,229	16,229,253	16,969,680	16,407,660	17,405,906

Item in Income Estimate	How LBB Projects
Gross Resident Tuition	LBB Calculation
Gross Non-Resident Tuition	LBB Calculation
Less: Remissions and Exemptions	LBB Calculation (proportionate)
Less: Board Authorized Tuition Increases	FY19
Less: Tuition increases charged to doctoral students with hours in excess of 100	FY19
Less: Tuition increases charged to undergraduate students with more than 45 hours above degree requirements	FY19
Less: Tuition rebates for certain undergraduates	FY19
Less Tuition for Repeated or Excessive Hours (Threepeat)	FY19
Less: Transfer of funds for Texas Public Education Grants Program	LBB Calculation (proportionate)
Less: d. Transfer of Funds for Doctoral Incentive Loan Repayment Program	LBB Calculation (proportionate)
Student Teaching Fees	none reported
Special Course Fees	none reported
Laboratory Fees	FY18 or FY19, whichever is higher
a. Local Funds in State Treasury	FY18 or FY19, whichever is higher
b. Funds in Local Depositories, e.g., local amounts	FY18 or FY19, whichever is higher
c. Other Income	FY18 or FY19, whichever is higher
Less: O.A.S.I. Applicable to Educational and General Local Funds Payrolls	LBB Calculation (proportionate)
Less: Teachers Retirement System and ORP Proportionality for Educational and General Funds	LBB Calculation
Less: Staff Group Insurance Premiums	LBB Calculation (HEGI)

All Funds Methodology

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)
 - 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

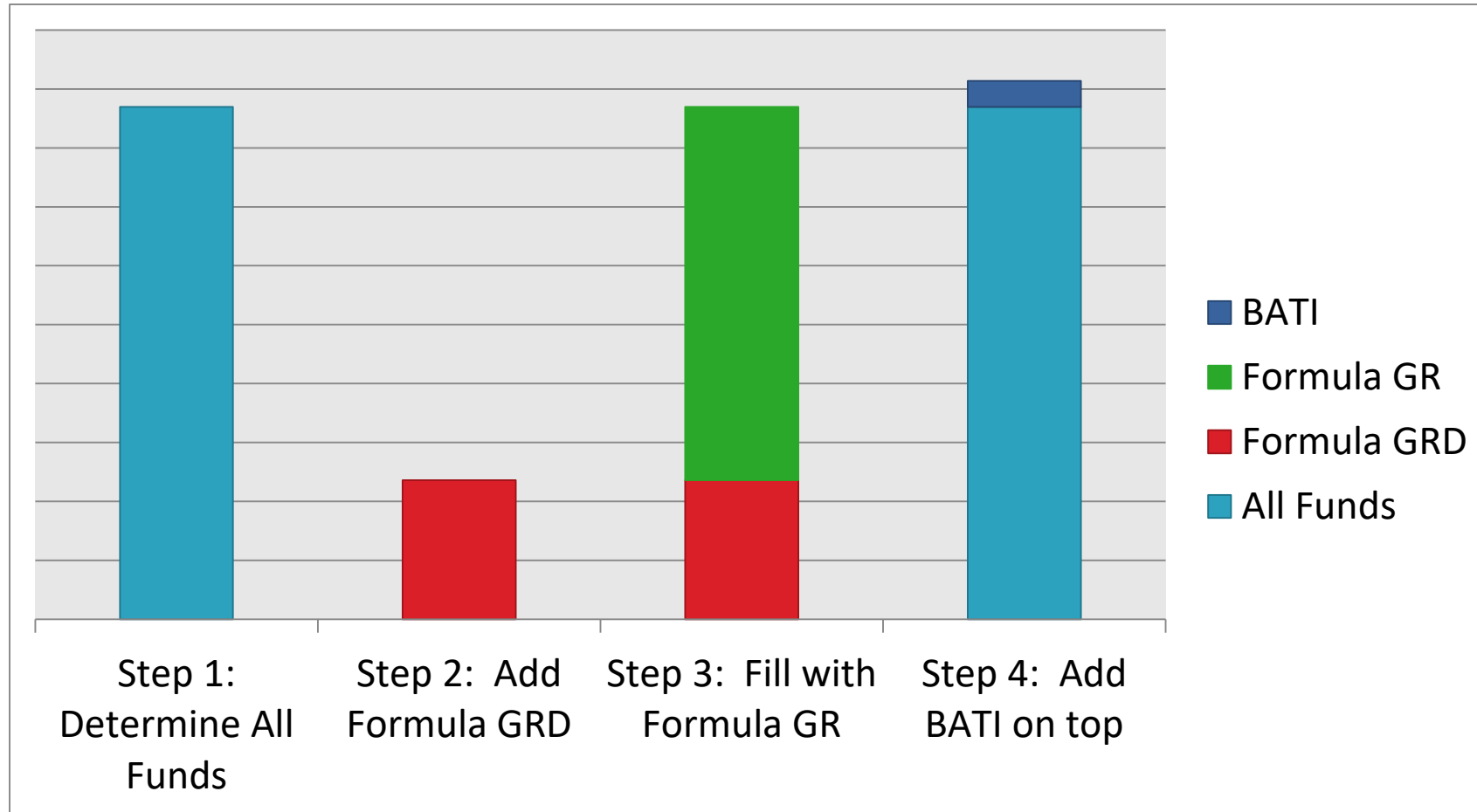
Amount of Formula E&G impacts the Formula GR

All Funds Methodology

- 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 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 low or high, 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
- Work with LBB during interim to continue to improve and stabilize methodology.

Formula Funding Rates

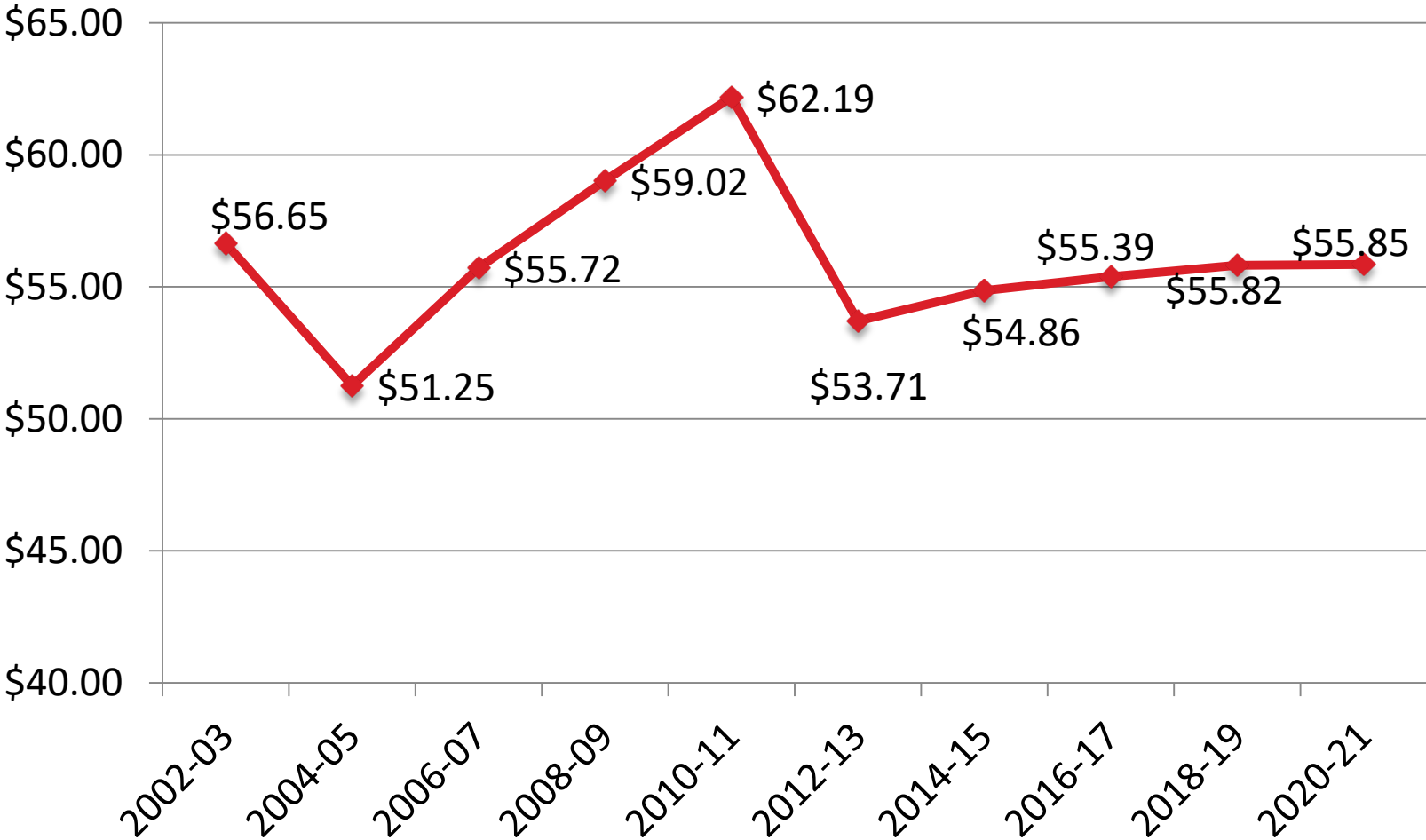
All Funds Methodology

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.

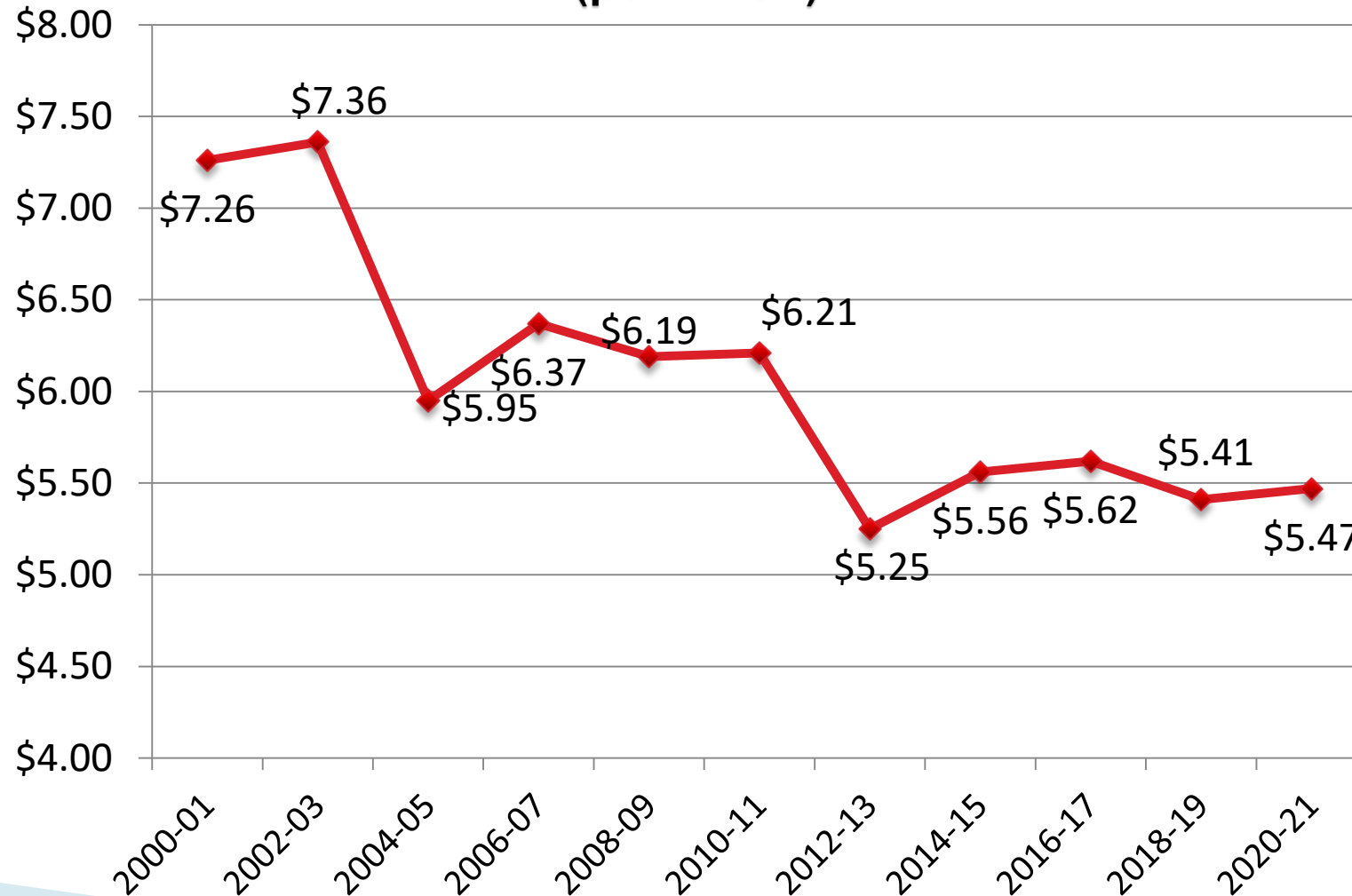
- Historically Legislature has provided funding for enrollment increases, but it is not guaranteed.
- Increases in Other E&G income reduces the amount of GR needed.
- Decreases in Other E&G income increases the amount of GR needed.

General Academics Instruction and Operations Rates (per WSCH)



General Academics Infrastructure Formula Rates

(per NASF)



Example – A&M Central Texas

All Funds Methodology

48,268 SCHs* x Weights from Matrix = 108,087 WSCHs

x

\$55.85 Funding Rate set by Legislature =

\$6,036,840 / year

for Instruction and Operations Formula Funding

+

Board Authorized Tuition \$206,220 =

A.1.1. Strategy: Operations Support **\$6,243,060**

** Summer 18, Fall 18, and Spring 19 SCHs in base period.*

All Funds Methodology

34,566 WSCHs

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

X

10% = 3,457 WSCHs

X

\$55.85 Funding Rate set by Legislature =

\$193,054 / year for Teaching Supplement

All Funds Methodology

	<u>Statewide</u>	<u>A&M - CT</u>
Operations and Maintenance(O&M)	\$3.10	\$3.10
Utilities	+ 2.37	+ \$1.58
Infrastructure Rate	\$5.47	\$4.68

Student Headcount – Fewer than 5,000 headcount. Received full \$2.6 million/biennium for the Small Institution Supplement.

All Funds Methodology

A&M – Central Texas	Predicted Sq. Ft. (PSF)	Actual
Teaching Space	61,989	41,659
Library Space	40,203	31,662
Research Space	4,557	3,423
Office Space	63,371	48,656
Support Space	<u>15,311</u>	<u>2,694</u>
Total	185,431	128,094

Space Surplus/(**Deficit**) **(57,337)**sq. ft.

All Funds Methodology

$$\begin{array}{rcl} \mathbf{185,431} \text{ PSF} & \times & \mathbf{\$3.10} = \mathbf{\$574,621} \\ \text{(Per CB's space model)} & & \text{(O\&M Rate)} \end{array}$$

+

$$\begin{array}{rcl} \mathbf{185,431} \text{ PSF} & \times & \mathbf{\$1.58} = \mathbf{\$292,486} \\ \text{(Per CB's space model)} & & \text{(Utility Rate)} \end{array}$$

$$\begin{array}{r} \mathbf{X 0.9743} \\ \text{(Adjustment)} \end{array}$$

$$= \mathbf{\$844,804 / year for Infrastructure Support}$$

A&M – CT: Formula Breakdown

FY 2020	Actual (base) Formula Amts.	% of Total	Net E&G Income Allocation	+	GR Allocation	+	Board Auth. Tuition Allocation
Operations Support	6,036,840	85.3%	1,422,856		4,613,984		206,220
Teaching Supplement	193,054	2.7%	34,738		158,316		0
Infrastructure Support	<u>844,804</u>	<u>11.9%</u>	<u>273,251</u>		<u>571,553</u>		<u>0</u>
TOTAL	<u>7,074,698</u>	<u>100.0%</u>	<u>1,730,845</u>		<u>5,343,853</u>		<u>206,220</u>

Total, Estimated E&G Income (from appropriations bill)

2,279,073

Less:

TPEG (382,071)

Organized Activities (0)

Staff GIP (166,157)

NET E&G Income

(Amount allocated to the Formula totals)

1,730,845

	FY 2020 TOTAL
Operations	<u>6,243,060</u>
Teaching	<u>193,054</u>
Infrastructure**	<u>844,804</u>
TOTAL	7,280,918

AMOUNTS AS THEY APPEAR IN THE APPROPRIATIONS BILL.

**Excludes \$1,316,566 Small School Supplement

Est. Board Auth Tuition Increase (BATI)



(per appropriation bill)

206,220

A&M – CT: Formula Breakdown


A. Goal: INSTRUCTION/OPERATIONS

Provide Instructional and Operations Support.

	A.1.1. Strategy: OPERATIONS SUPPORT	\$ 6,243,060	\$ 6,243,060
	A.1.2. Strategy: TEACHING EXPERIENCE SUPPLEMENT	\$ 193,054	\$ 193,054
	A.1.3. Strategy: STAFF GROUP INSURANCE PREMIUMS	\$ 166,157	\$ 166,157
	A.1.4. Strategy: WORKERS' COMPENSATION INSURANCE	\$ 7,350	\$ 7,350
	A.1.5. Strategy: UNEMPLOYMENT COMPENSATION INSURANCE	\$ 6,458	\$ 6,458
	A.1.6. Strategy: TEXAS PUBLIC EDUCATION GRANTS	<u>\$ 382,071</u>	<u>\$ 383,441</u>
	Total, Goal A: INSTRUCTION/OPERATIONS	<u>\$ 6,998,150</u>	<u>\$ 6,999,520</u>

B. Goal: INFRASTRUCTURE SUPPORT

Provide Infrastructure Support.

	B.1.1. Strategy: E&G SPACE SUPPORT	\$ 844,804	\$ 844,804
	Educational and General Space Support.		
	B.1.2. Strategy: TUITION REVENUE BOND RETIREMENT	\$ 4,542,990	\$ 4,539,061
	B.1.3. Strategy: SMALL INSTITUTION SUPPLEMENT	<u>\$ 1,316,566</u>	<u>\$ 1,316,566</u>
	Total, Goal B: INFRASTRUCTURE SUPPORT	<u>\$ 6,704,360</u>	<u>\$ 6,700,431</u>

Bottom Line

The formulas and the tuition income estimates are the mechanics of how each institution's 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. So it is key that our LAR reporting is consistent.

We have very limited ability to change how the inputs are mechanically used but will work with LBB to improve the methodologies.