Base Adequacy and Other Funding Models in Virginia

Resource and Planning Committee

May 17, 2021

STATE COUNCIL OF HIGHER EDUCATION FOR VIRGINIA

Overview

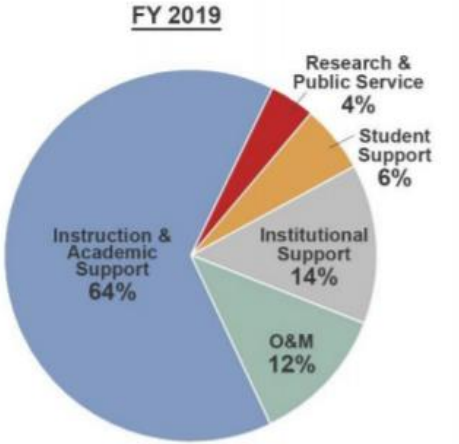
- Base Adequacy
- Funding goal areas:
  - Faculty salary goal (60th percentile)
  - Cost share goal (67% of in-state base adequacy cost funded by the state)
- Other funding models in VA

Base Adequacy Background

Objective: Create a yardstick that could be applied to Virginia's diverse colleges and universities consistently and recognize variation in mission

Instructional costs account for about two-thirds of an institution's total operating cost.

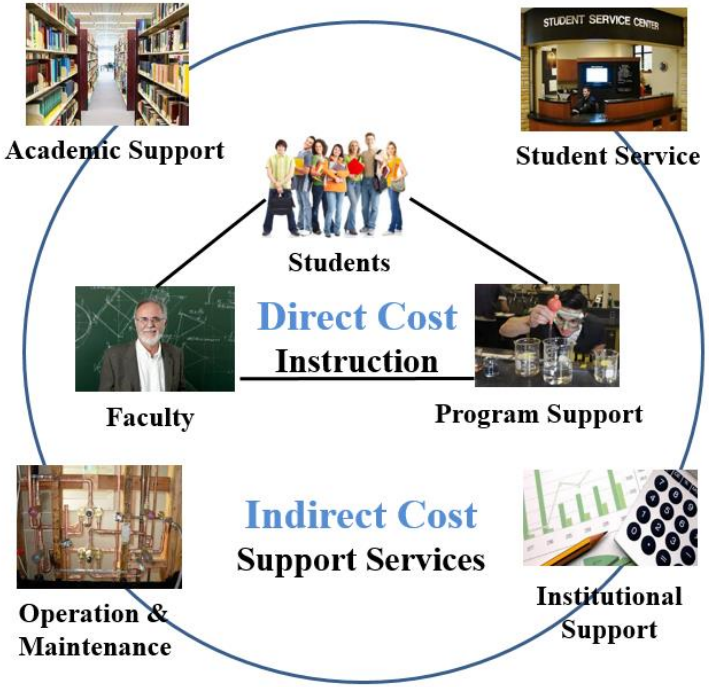
Education and General (E&G) Expenditures at Public Institutions



Base Adequacy Formula

- Direct costs
  - Drivers of these instructional costs are students and faculty.
  - Use students (FTE) to determine the number of faculty needed (student/faculty ratio) by:
    - Types of programs offered (social sciences, engineering, health professions, etc.).
    - Level of instruction (undergraduate, master's, doctoral).
- Indirect costs: Use direct costs and apply ratios and adjustments for different types of Virginia institutions. These ratios and adjustments represent the support services at an institution (O&M, institution support, student services, academic support)

Base Adequacy



Total E&G Cost = Direct Cost + Indirect Cost

Calculation of Direct Cost

Direct Cost:

Total faculty need (student-faculty ratio by discipline*student FTE)

X faculty salary

+ 40% non-faculty instructional cost

+ fringe benefits

+budgets for research and public services

Base Adequacy: Student - Faculty Ratio

Group	Discipline	Lower Division	Upper Division	Master's	Doctoral
1	Area Studies, Business & Management Interdisciplinary Studies, Library Science Military Science, Public Affairs, Social Sciences, Study Abroad	24	18	11	9
2	Communications, Education, Home Economics, Letters, Mathematics Psychology	20	14	10	8
3a	Agric. & Natural Resources, Arch. & Env. Design, Computer /Info. Sci., Fine and Applied Arts, Foreign Languages, Bus. & Com. Tech., Data Processing Tech., Public Serv. Tech., Remedial Education	18	11	9	7
3b	Biological Sciences, Engineering Physical Sciences	18	11	8	6
4	Health Professions	12	10	7	5

Note: excludes ratios of law, medicine, dentistry, vet-med, pharmacy, health & paramed. tech, mech. & eng. tech, natural sci. tech.

Base Adequacy: Faculty Need Example

Group	Discipline	Lower Division	Upper Division	Master's	Doctoral
1	Area Studies, Business & Management Interdisciplinary Studies, Library Science Military Science, Public Affairs, Social Sciences, Study Abroad	24	18	11	9
	FTE	100	100	100	100
	Faculty ratio (Faculty/FTE)	100/24	100/18	100/11	100/9
	Number of faculty needed	4.2	5.5	9.1	11.1
	Total faculty needed	4.2+5.5+9.1+11.1=30			

Note: excludes ratios of law, medicine, dentistry, vet-med, pharmacy, health & paramed. tech, mech. & eng. tech, natural sci. tech.

Example: Direct Cost Calculation

	Amount
Faculty needed	30
x Blended salary rate (includes full-time, adjunct, graduate assistant)	$70,000
Subtotal faculty salary costs	**$2,100,000**
+ non faculty instructional cost (40%)	$1,234,800
Subtotal salary costs	**$3,334,800**
+ Fringe rate (26%)	$867,048
Total	**$4,201,848**

Base Adequacy: Calculation Steps

Indirect Cost:

- Direct cost x
- various indirect cost ratios
- + adjustments by type of institution

- Funding Need = Direct Cost + Indirect Cost

Base Adequacy: Support Service Ratio

Institution Type	Academic Support	Student Services	Institutional Support	Operation and Maint. of Physical Plant
Research				
Rate	17.8%	$349	6.1%	10.8%
Adjustment Factor	$5,043,900	$5,900,900	$9,492,700	$3,007,500
Doctoral				
Rate	25.0%	$394	11.7%	9.8%
Adjustment Factor	($1,746,000)	$2,674,500	$1,399,100	$2,740,000
Comprehensive				
Rate	19.6%	$463	14.4%	11.5%
Adjustment Factor	$481,700	$982,100	$791,600	$1,372,000
Baccalaureate				
Rate	21.8%	$337	14.8%	16.4%
Adjustment Factor	($16,300)	$757,100	$82,900	$169,500
Two-Year				
Rate	15.2%	$278	20.2%	15.3%
Adjustment Factor	$243,500	$354,100	($40,700)	$137,400

Note: Student service amount is on a headcount basis

Base Adequacy Compared to Actual Resources

Institution	Base Adequacy Calculation	Available Resources	Available Resources as % of Base Adequacy
CNU	$71,084,072	$82,280,041	116%
GMU	$544,321,960	$621,311,391	114%
JMU	$303,347,513	$340,270,238	112%
LU	$68,990,446	$75,661,429	110%
NSU	$65,446,492	$84,615,316	129%
ODU	$316,916,510	$321,263,188	101%
RU	$126,449,714	$134,646,000	106%
UMW	$66,891,277	$80,939,320	121%
UVA	$622,348,901	$767,047,099	123%
UVAW	$24,814,699	$30,551,307	123%
VCU	$608,673,136	$674,156,709	111%
VMI	$32,988,820	$35,199,202	107%
VSU	$59,205,287	$70,647,750	119%
VT	$727,671,952	$817,928,951	112%
WM	$175,641,572	$226,300,685	129%
RBC	$13,542,379	$14,352,333	106%
VCCS	$847,876,878	$910,403,225	107%
Total	$4,676,211,609	$5,287,574,184	113%

Note:
Base adequacy calculation uses FTE average 2017-19 (3-years).
Available resources are General Fund and Nongeneral Fund Appropriations in FY 2020

Base Adequacy: Advantages/Disadvantages

Advantages	Disadvantages
• Provides state officials with a basis for determining financial needs of higher education • Reflects core operations • Relatively simple formula-driven approach • Shows basic needs to operate (keep base operations continuing)	• Represents base costs versus aspirational cost • Does not recognize different funding needs based on types of students • Is not outcomes-focused • Is not aligned to state goals • Institutions have met 100% of costs • Has not been updated and needs may have changed overtime

Funding goals: Cost Share Policy

- In 2004, the state developed a cost share policy of 67/33 between the state and in-state students for the E&G cost in the base adequacy model (not total resources).
- The Higher Education Opportunity Act of 2011 requires:

  "State general funds shall be allocated and appropriated to public institutions of higher education in a fair and equitable manner such that, to the extent practicable, the percentage of the cost of education for Virginia students enrolled at an institution to be funded from state general funds is the same for each institution." (§23.1-303.C)

- Cost share is used to determine the state share of faculty salary increases, fringe benefits and O&M for new facilities coming on-line.
- The final cost share of an institution varies due to the percent of out-of-state enrollment and other nongeneral fund activities (i.e. community education, research and public service).

Funding Goal: Calculated vs. Actual General Fund

Inst.	Calc. GF by 67% share	Actual Available GF	Difference (Actual – Calc.
CNU	$42,517,107	$33,248,951	($9,268,156)
GMU	$271,643,885	$156,315,949	($115,327,936)
JMU	$150,438,115	$96,710,352	($53,727,763)
LU	$42,653,175	$31,498,893	($11,154,282)
NSU	$32,902,800	$42,100,505	
ODU	$176,941,408	$133,948,380	($42,993,028)
RU	$77,176,944	$56,715,984	($20,460,960)
UMW	$40,208,363	$29,789,352	($10,419,011)
UVA	$200,092,191	$141,573,125	($58,519,066)
UVAW	$14,831,450	$18,887,822	
VCU	$303,389,929	$197,978,042	($105,411,887)
VMI	$13,467,318	$10,148,778	($3,318,540)
VSU	$27,846,609	$30,652,697	
VT	$277,047,695	$180,293,109	($96,754,586)
WM	$67,771,693	$49,738,886	($18,032,807)
RBC	$8,608,604	$8,474,588	($134,016)
VCCS	$531,402,806	$392,782,287	($138,620,519)
Total	$2,278,940,091	$1,610,857,700	($684,142,558)

Note: While the state has not supported all institutions at the goal amount, all institutions have met their total funding need through non general funds (tuition and fees) as shown on slide 11.

Funding goals: Faculty Salaries

Institution	Virginia Appropriated Faculty Salary	60th Percentile Peer Group Goal	Virginia Percentile Ranking to Peers
CNU	$79,453	$87,835	38
GMU	$92,168	$115,830	4
JMU	$84,394	$94,344	38
LU	$78,079	$80,891	48
NSU	$74,734	$75,711	56
ODU	$84,397	$96,560	27
RU	$77,183	$89,323	27
UMW	$85,251	$92,859	35
UVA	$115,018	$129,341	33
UVAW	$81,102	$74,607	84
VCU	$95,684	$106,850	30
VMI	$82,149	$95,129	32
VSU	$73,196	$79,993	36
VT	$103,263	$119,668	21
WM	$110,012	$126,282	25
4-yr Average			36
RBC	$66,487	$61,855	73
VCCS	$69,418	$76,168	47

Goals: Advantages/Disadvantages

	Advantages	Disadvantages
Cost Share	Provides a goal for the state to meet	Since institutions have met the total cost using the base adequacy model, difficult for the state to determine actual need
Faculty Salaries	Provides a benchmark for comparison to similar institutions	Concerns with selection of peers

Other Funding and Models in Virginia

Outcomes focused models:

- VCCS: 20% of the funding allocation is based on outcomes
- WCG: $13.5 million for noncredit workforce training (pay for performance)
- Tech Talent: $31.8 million annually in order to increase 25,000 degrees in technology fields by 2039
- Institutional Performance Standards: biennial assessment of institutional performances to receive interest earnings and credit card rebates
- STEM-H funding: $28.4 million to increase STEM-H degrees