Results from a National Survey on Approaches to Funding Base Operations

SHEEO Policy Conference

August 9, 2022

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Why a national survey on base funding?

- Pressures on states that suggest a need for reflecting on funding strategies
- NCHEMS' recent work in high-tuition states with challenging demographic futures
- Imbalance of documentation and studies on performance funding vs base funding
 - Existing research on allocation mechanisms for base funding levels lacks detail despite the fact that nearly all states allocate the majority of their direct funding of institutions to base support







InformEd States Research

- Source: statutes, budget documents, and audit reports
- Primary funding types: Base+. Enrollment, and Performance
- Many states had a hybrid system with at least two of the three funding mechanisms
- Considered institutional funding equity and research provisions

Туре	Two-Year Institutions	Four-Year Institutions
Base+ Only	4	13
Enrollment Only	8	7
Performance Only	2	-
Base+Enrollment	10	6
Base+Performance	8	13
Enrollment+Performance	6	3
Base+Enrollment+Performance	9	3
Research	-	10
Equity	13	14
No Formula	2	9







NCHEMS/SHEEO National Survey

- NCHEMS and SHEEO collaborated on survey development and received feedback from select finance officers and SCHEV staff
- Definitions of "base adequacy," factors affecting funding levels, cost sharing targets, and affordability goals.
- Focus on recurring operational funding not allocated based on institutional performance
- Received 48 responses from 46 states







Defining Base Adequacy

Only 4 states reported having a definition of "base adequacy"

Funding necessary to maintain current service levels



Appropriations necessary to maintain current service levels

- Definitions mentioned an expectation for objective information or data to be used
- Definitions were generally confined to cost drivers related to personnel or inflation
- Virginia's approach links base adequacy to student:faculty ratios







Cost-Sharing Targets & Affordability

- Few states reported explicit numerical targets
 - Virginia: 66%/33% state/student target
 - Minnesota: seeks to provide 2/3 of total educational revenue, operationalized in part through its state grant program
 - Tennessee: student payments should account for
 - 45% of total costs at public four-year institutions
 - 33.3% at community colleges
 - 20% at colleges of applied technology
 - Wyoming: tuition revenue falls within 23-28% of system-wide unrestricted revenue
 - Nebraska: no numerical target, but aims for "most" costs to be covered by the state, with variation based on institutional mission
- 29 states regularly measure or report on affordability, 10 with formalized requirements. Considerable variation exists in affordability measures.







Base Funding Approaches (as entered by respondent)

	Two-Year Sector		Four-Year Sector	
Category	Responses	States	Responses	States
Base+ Only	5	MN, MO, UT, VA, WV	15	AZ, CA, FL, IL, IA, KS, MN, MO, MT, NE, NM, NY, UT, VA, WV
Formula Only	mula Only 6 IL, KS, NJ, OH, PA, TN 3		KY, OH, TN	
History/Institutional Requests Only	4	CT, DE, IN, ME	10	AK, CT, DE, IN, ME, MS, PA, SC, SD, WA
Other Only	5	AZ, MD, MS, SC, VT	4	MD, MI, NH, VT
Base+ & Formula	4	ID, MT, NE, OR	4	ID, NJ, NC, OR
Base+ & Other	4	AR, NY, OK, WI	3	AR, OK, WI
Base+ & History/Inst. Requests	3	AL, HI, IA	3	AL, HI, WY
Base+, Formula, & Other 2		CO, WA	1	СО
Formula & Other	5	CA, KY, LA, SD, WY	1	LA

Definitions of Base Funding Approaches

- **Base Plus:** Institutions' funding is relatively consistent from one year to the next, increasing/decreasing off of the institutions base at similar rates or based on legislative funding priorities in the current year.
- Input-Based Formula: Appropriations are distributed to institutions by a formula not based on performance (including formulas that are based on cost models).
- **Institutional Requests:** Annual base budgets are determined by the legislature based on historical patterns and/or institution-by-institution requests.







Base Funding Approaches (recategorized)

	Two-Year Sector		Four-Year Sector		
Category	Responses	States	Responses	States	
Base+	12 (30%)	AR, MD, MN, MO, NC, NH, NM, NY, OK, UT, VA, WI, WV	20 (45%)	AR, AZ, CA, FL, IA, IL, KS, MD, MN, MO, MT, NE, NH, NM, NY, OK, UT, VA, WI, WV	
Input Formula	9 (23%)	IL, KS, <i>KY</i> , NJ, OH, PA, TN, <i>WY</i>	3 (7%)	KY, OH, TN	
Institutional Requests	6 (15%)	CT, DE, IN, ME, MS, SC	10 (23%)	AK, CT, DE, IN, ME, MS, PA, SC, SD, WA	
Other	0		1 (2%)	MI	
Base+ & Input Formula	8 (20%)	CO, ID, LA, MT, NE, OR, SD, VT, WA	7 (16%)	CO, ID, LA, NC, NJ, OR, VT	
Base+ & Other	0		0		
Base+ & Institutional Requests	3 (8%)	AL, HI, IA	3 (7%)	AL, HI, WY	
Input Formula & Other	2 (5%)	AZ, CA	0		

Discussion – Moving Beyond Classification

- What are some benefits and risks to each funding approach?
 - Institutional requests have the potential to privilege the most politicallyconnected institutions
 - Base funding may be slower to respond to changes in state priorities. Flat or proportional cuts disproportionately harm state-reliant institutions.
 - Formula funding can more easily be realigned, but does this happen in practice, or are formulas created in a way that maintains existing institutional allocations?
 - Are funding formulas more or less stable in a time of sudden enrollment shifts?
- What approach(es) are ideal? If you had a magic wand, what approach would you use for base funding in your state?







Next Steps

- For the states/sectors we recategorized, we will reach out with some questions to confirm that our classification is correct.
- The SHEEO and NCHEMS report on base funding approaches will be released in September.
- SHEEO is revising the survey and will include it in our regular rotation of finance surveys to collect updated data every four years.
- Thank you again to those of you who reviewed an early draft of the survey and/or provided data for your state!







Discussion of Cost and Funding Needs Study

- SCHEV Council Meeting
- Resources and Planning Committee
- July 19, 2022
- Tom Allison & Wendy Kang



In 2021, the General Assembly directed SCHEV to study higher education costs and funding needs of the Commonwealth's public institutions.

- Methods to determine appropriate costs (including peer institutions).
- Measures of efficiency and effectiveness.
- Provisions for any new reporting requirements.
- Strategies to allocate limited public resources based on outcomes that align with state needs.
- Impact of funding on underrepresented student populations; and
- a timeline for implementation.

- *U. 1.* Out of this appropriation, \$300,000 the second year from the general fund is designated to support related costs of undertaking a review of higher education costs, funding needs, appropriations and efficiencies.
- 2. The State Council of Higher Education, in consultation with representatives from House Appropriations Committee, Senate Finance and Appropriations Committee, Department of Planning and Budget, Secretary of Finance, and Secretary of Education, as well as representatives of public higher education institutions, shall review methodologies to determine higher education costs, funding needs, and appropriations in Virginia. The review shall identify and recommend: (1) methods to determine appropriate costs, including a detailed cost analysis of Virginia institutions and peer institutions; (2) measures of efficiency and effectiveness, including identifying opportunities for mitigating costs, increasing financial efficiencies, and incorporating current best practices employed by Virginia institutions and other institutions, nationwide; (3) provisions for any new reporting requirements, including a possible periodic review of cost data and strategies employed to implement efficient and effective operational practices; (4) strategies to allocate limited public resources based on outcomes that align with state needs related to affordability, access, completion, and workforce alignment, and the impact on tuition and pricing; (5) the impact of funding on underrepresented student populations; and (6) a timeline for implementation.
- 3. The review shall build on existing efforts including the assessment of base adequacy, recommendations provided through the Strategic Finance Plan, and peer institution comparisons to determine if existing funding models should be updated or replaced. It shall also build on promising practices and include input from Virginia's institutions, policy makers, and other education experts. Any such review and assessment shall consider the mix of programs, mission, enrollment level, and other characteristics of Virginia's public institutions of higher education.
- 4. The Council shall submit a proposed workplan to the Joint Subcommittee on the Future Competitiveness of Higher Education in Virginia by August 15, 2021. The Council shall submit a preliminary report and any related recommendations to the Governor and the Chairs of the House Appropriations and Senate Finance and Appropriations Committees by December 1, 2021 with a final report by July 1, 2022.

- Inside Scope of Study
- Education and General (E&G) operating
- Education
- Research
- Public Service
- Academic Support
- Student Services
- Institutional Support
- Operation & Maintenance of Plant

- Outside Scope of Study
- Auxiliaries (e.g., housing, bookstore operations, athletics)
- Capital Budgets
- Financial Aid
- Endowments

- SCHEV, in consultation with the Op-Six staff members issued a Request for Proposals (RFP) in May 2021 and subsequently awarded the contract to the National Center for Higher Education Management Systems (NCHEMS), a private, non-profit 501(c)(3) organization headquartered in Boulder, Colorado, with extensive experience in state postsecondary finance policy.
- SCHEV formed working groups to inform project. The Op-Six workgroup and selected institutional finance officers contributed the most feedback and guidance.
- Maintained a webpage with relevant materials for public review.
 - www.schev.edu/coststudy

Four Deliverables

- 1. Review of funding policies
- 2. Efficiency & effectiveness Review
- 3. Trends in costs
- 4. Recommendation for a new funding model

Deliverable 1: Review of Funding Policies

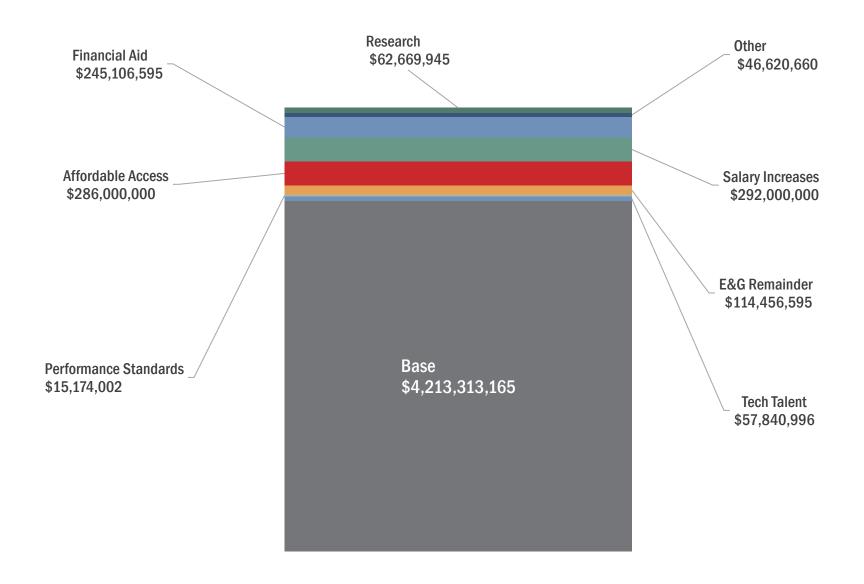
- Conducted 50-state survey of how other states fund their systems.
- Most states, including Virginia, use a "Base Plus" approach where new spending is added to previous year's funding.
- Formulas are a better basis for rational and strategic funding approaches.
- Virginia's current base funding formula no longer serves as a strategic and rational mechanism for resource allocation.

FIGURE 31. NCHEMS/SHEEO Survey of Categories of State Funding Approaches

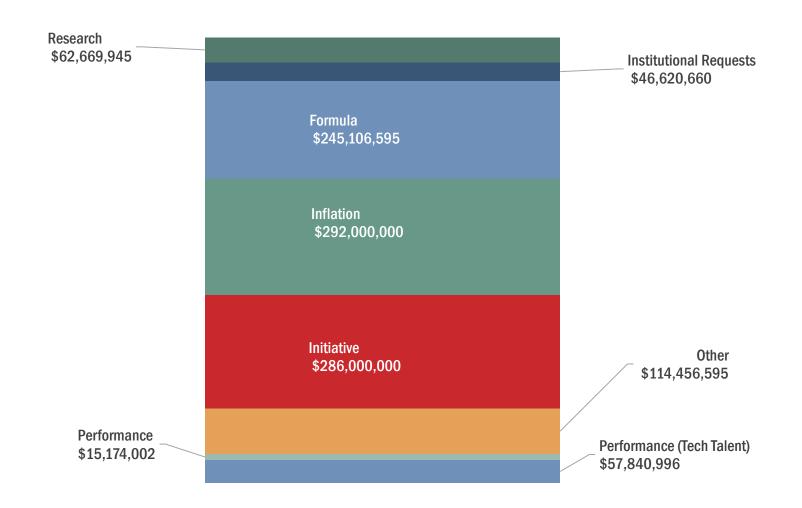
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Source: NCHEMS/SHEEO Survey

New General Fund Added in FY 2023-24



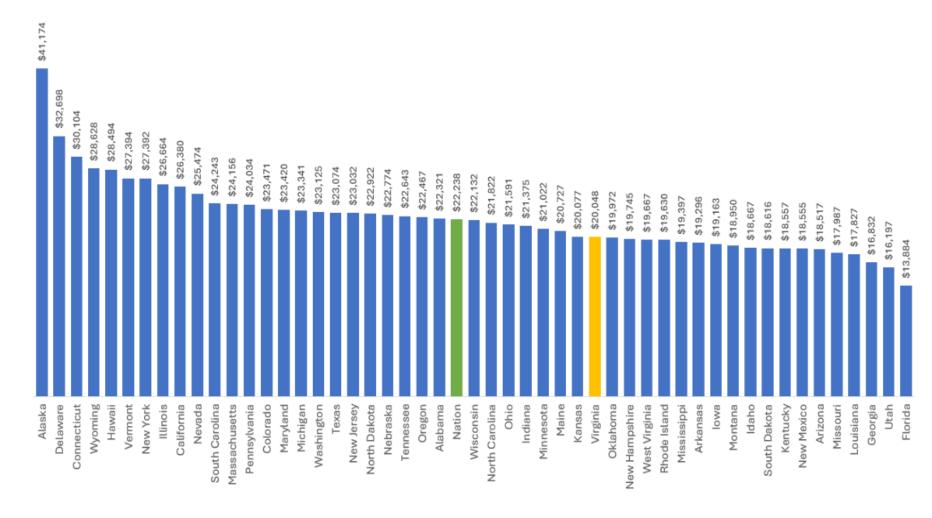
New General Fund Added in FY 2023-24



Deliverable 2: Efficiency & Effectiveness

- Fielded survey to public institutions on efforts to improve efficiency and effectiveness and their impact.
- Virginia institutions are active in seeking efficiencies.
 - Concentrated in internal strategies (org structure, program realignment, purchasing contracts, energy etc.)
 - Efforts between institutions are more rare.
- Need to establish metrics and routinize them.
 - Revenue per degree
 - Degrees per FTE
 - Expenditures per FTE

FIGURE 6. Education & Related Expenditures per Degree Year, 2010-2019 (10-Year Average)

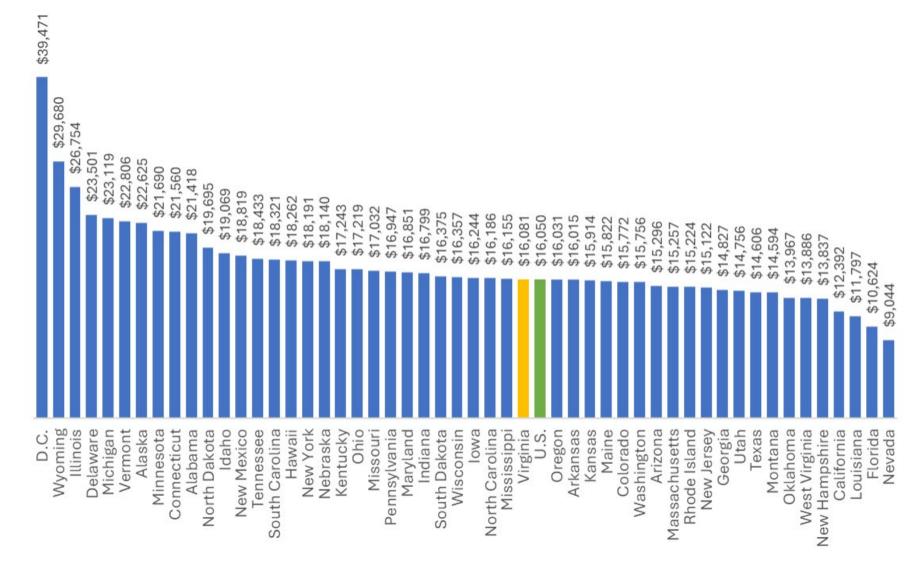


Source: SCHEV-provided data from original source of NCES, IPEDS Finance & Completion files, SCHEV/HCM Strategists Weighted Awards.

Deliverable 3: Trends in costs and funding

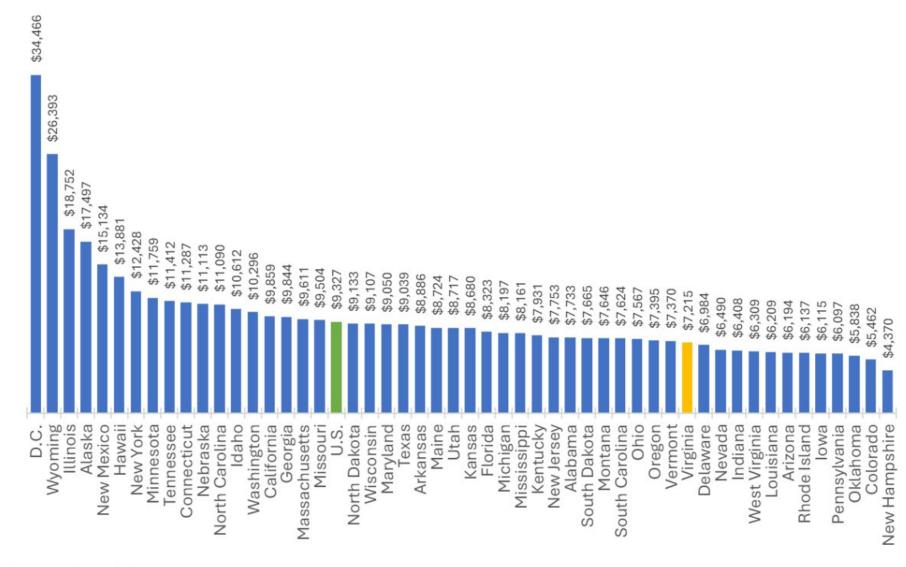
- Virginia's total education revenue per student nearly identical to the national median.
 - State appropriations per student: 38th
 - Tuition revenue per student: 18th
- State funding volatile since recession
 - Two-year sector has recovered.
 - Four-year sector still down 16% since FY 2019.
- NCHEMS selected Peer groups based on programs offered, size, and mission.
 - VA intuitions spend more per student than peer average (less on E&G, and more on auxiliaries).
 - More work necessary on peer selections and applications.

FIGURE 8. Total Educational Revenue per FTE, FY2021



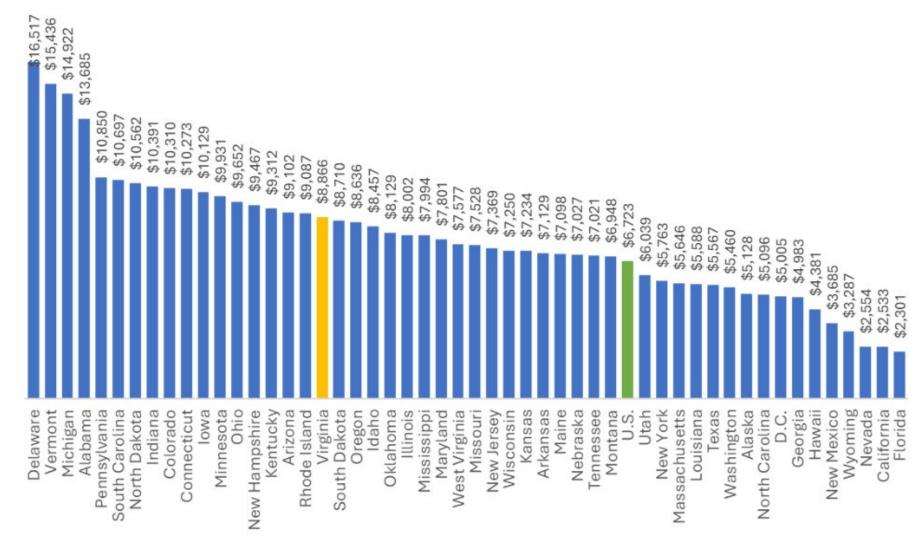
Source: SHEEO SHEF

FIGURE 9. General Fund Educational Appropriations per FTE, FY2021



Source: SHEEO SHEF

FIGURE 10. Net Tuition Revenue per FTE, FY2021



Source: SHEEO SHEF

FIGURE 15. E&G General Fund Appropriations per In-State FTE, FY2009-20



Note: Adjusted for inflation using CPI-U and expressed in 2020 dollars.

Source: SCHEV

FIGURE 18. Total E&G (GF & NGF) Appropriations per FTE, FY2020

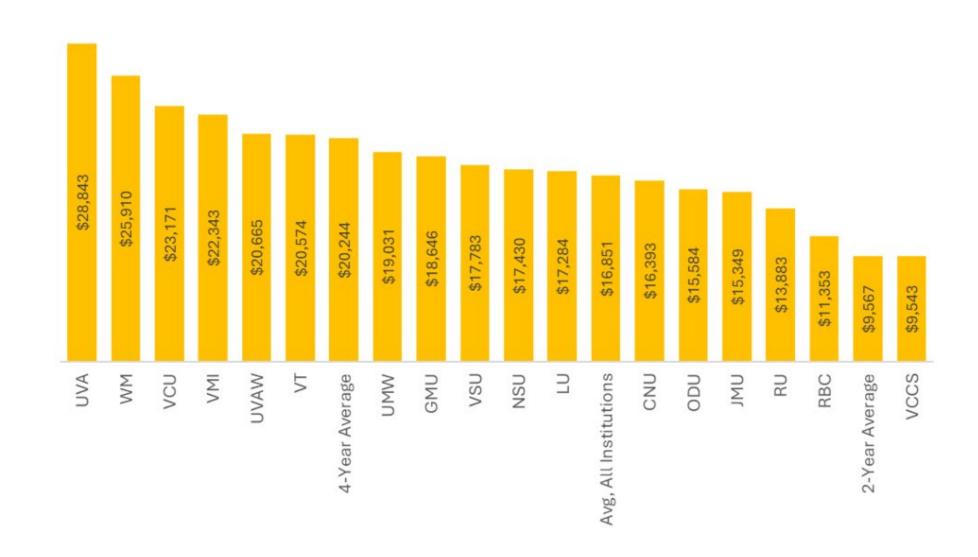


FIGURE 16. E&G General Fund Appropriations per In-State FTE, FY2020

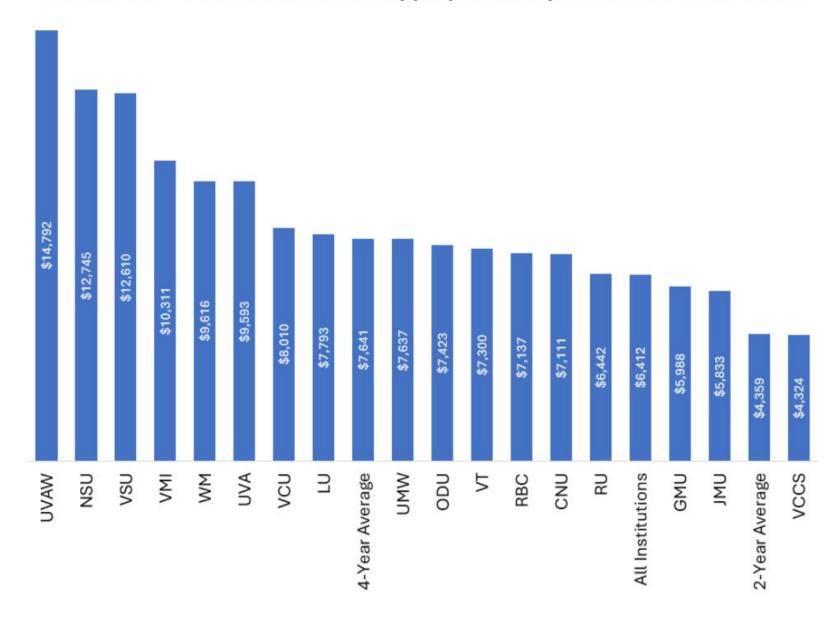


FIGURE 17. E&G Non-General Fund Appropriations per FTE, FY2020

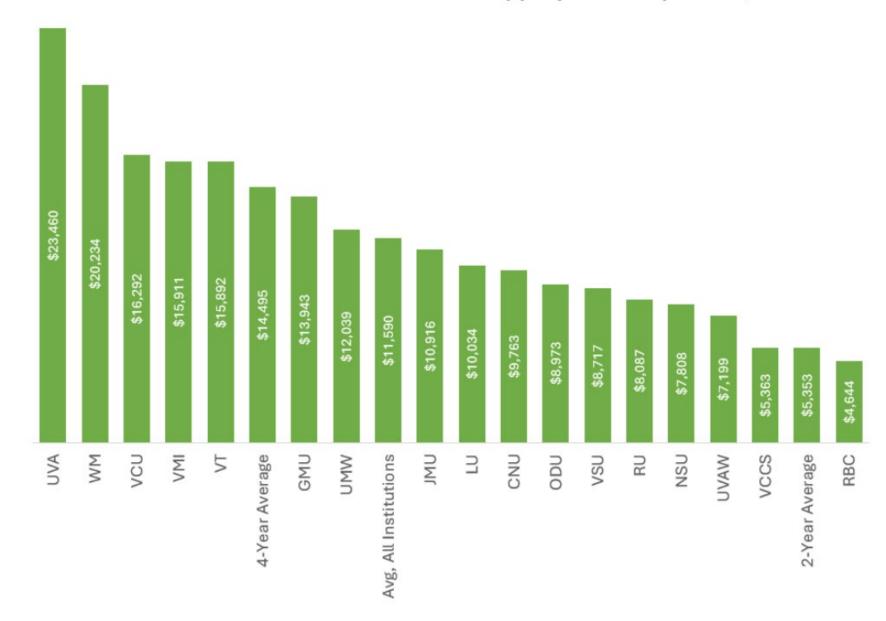
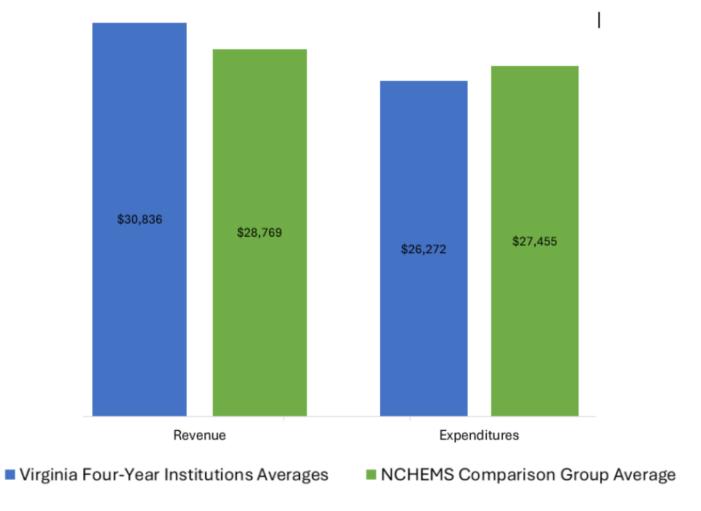


FIGURE 23. E&G Revenue and Expenditures per Student, FY2019



Notes: Revenue is calculated as total revenue minus revenue from hospital operations, independent operations, and auxiliaries. Expenditures exclude spending on hospital, independent operations, and auxiliaries. Data for the comparison group is the average of the average for each group.

FIGURE 24. Revenue per FTE by Source, FY2019

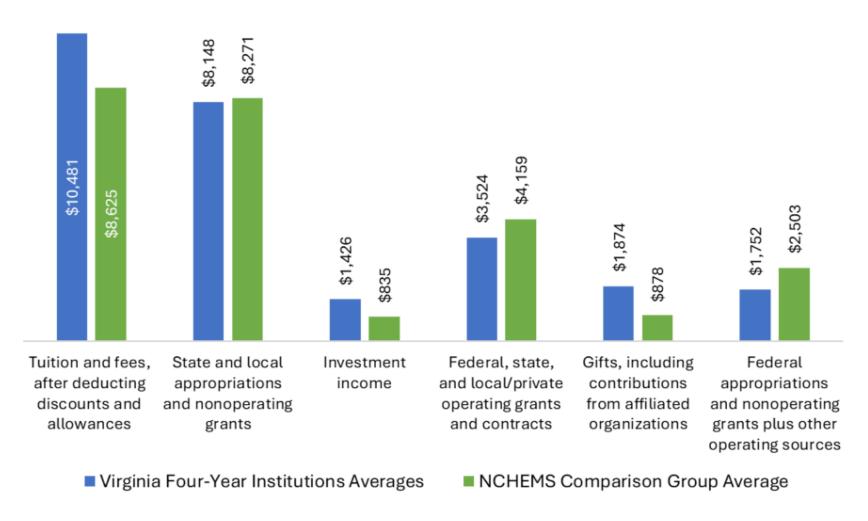


FIGURE 24. Revenue per FTE by Source, FY2019

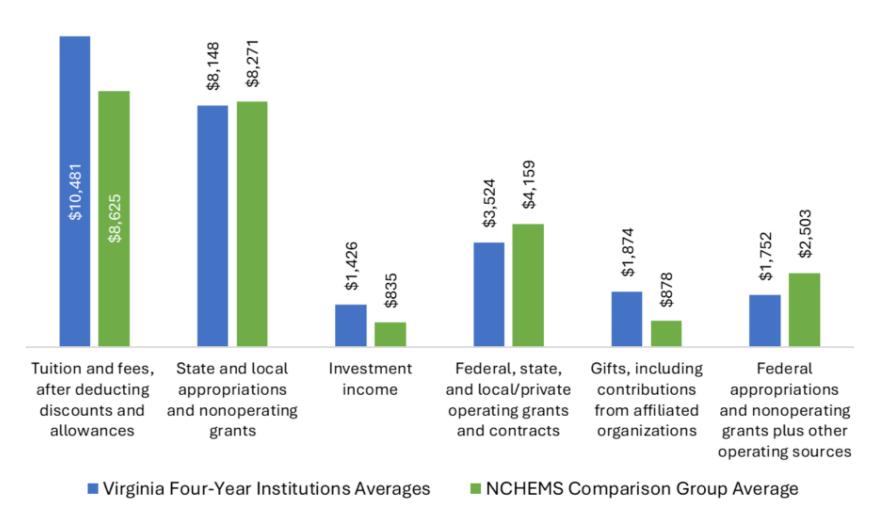
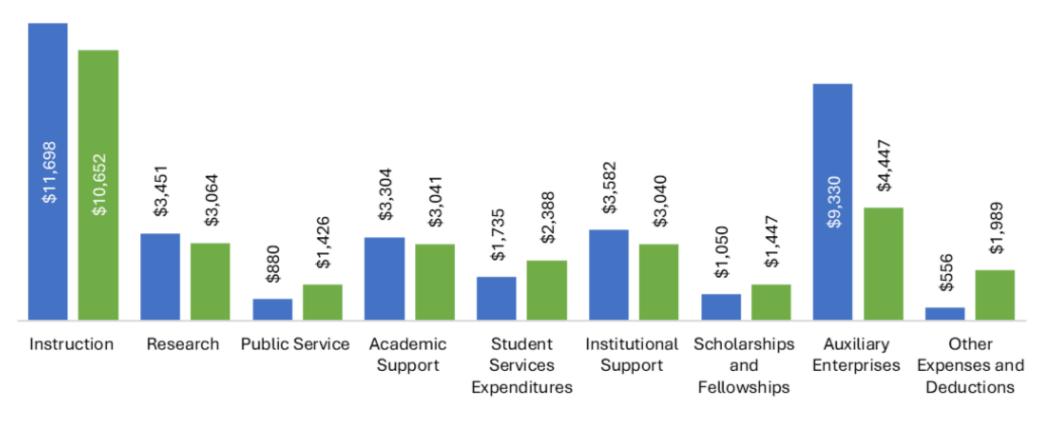


FIGURE 25. Expenditures per FTE by Functional Category, FY2019



■ Virginia Four-Year Institutions Averages

■ NCHEMS Comparison Group Average

Deliverable 4: New funding model

- Principles of Design & Implementation
- Conceptual framework establishes components of costs.
 - "Frugal" foundational funding
 - Presentative maintenance
 - Scale & Scope
 - Audience
 - Performance / Incentives
 - Capacity Building
 - State purchase of "good and services" (state research, noncredit offerings, community service etc.)
- More work necessary to define and operationalize these components.

Taxonomy of Institutional Costs

Other
Externally Funded Research and Public Service
Purchase of Goods and Services
Capacity Building
Performance / Incentives
Audience
Scale & Scope
Preventative maintenance as applied to facilities, technology, and personnel
"Frugal" foundational funding

Institutional Funding Adequacy Framework

			Category	Function and Roles	Funding Responsibility
			Other	Advancement, auxilaries, athletics, etc.	Institution
			Externally Funded Research and Public Service	Grants management, community engagement, museums, arts, extension services	External Funders
	Incentive Funding Tied to State Goals & to Six-Year Plans		Purchase of Goods and Services	Funding for specific purposes, e.g., research on tobacco usage in Southwest Virginia, incentives to seed and support shared academic program delivery, noncredit offerings	Mix (State & External Funders)
			Capacity Building	Funding needed to start new programs or fund initiatives prioritized by the General Assembly, the Governor's office, or through the 6-year plan process	Mix (State, External Funders, & Tuition)
			Performance / Incentives	Factors in the model that recognize: activities related to strategic plan, closing equity gaps, economic development	Mix (State & Tuition)
del		Variable Costs	Audience	Semester credit hours (SCH) weighted by student characteristic(s) or added weights applied to headcount	Mix (State & Tuition)
Funding Model	Cost Model	Variab	Scale & Scope	Semester credit hours (SCH) weighted by level and discipline	Mix (State & Tuition)
		Costs	Preventative maintenance as applied to facilities, technology, and personnel	Shares of facilities replacement value of facilities, technology value, payroll (for professional development)	State
		Fixed Costs	"Frugal" foundational funding	Benchmarked against similar institutions with relatively low spending on administrative expenses	State

Recommendations (abridged)

- Adopt conceptual framework.
- Adopt differential cost-sharing targets.
- Implement an incentives and performance component of the conceptual framework that rewards institutions for making progress toward state goals.
- Implementation Plan for finalizing model.
 - Operationalize model by defining components
 - Refine selection and use of peer groups.
 - Establish metrics of efficiency & effectiveness.

Proposed Implementation Plan

July 1: Report published

July: SCHEV distributes' peer analysis packet.

August: Reach working compromise w/ Op-Six workgroup on model parameters.

Septembe: SCHEV recreates NCHEMS' model w/ updated data. Spring 2023: Institutional technical workgroups review model.





















July: SCHEV develops implementat ion plan August: Recurring meetings with Op-Six workgroup. August: 1-on-1 meetings with institutions to discuss selection and use of peers.

September: Revisions and additions to peer groups. July 2023: Finalize model parameters for use in 2025-26 budget cycle.

Thank you!



Questions?



