



MEETING OF THE BOARD OF GOVERNORS
Committee on Budget and Finance

January 18, 2022 at 1:00 p.m.
Via Videoconference and PBS North Carolina Live Stream
University of North Carolina System Office
Center for School Leadership Development, Board Room
Chapel Hill, North Carolina

AGENDA

- A-1. Call to Order.....James L. Holmes, Jr.
- A-2. Proposed Funding Model Changes Lee Roberts and Jennifer Haygood
- A-3. Committee DiscussionJames L. Holmes. Jr.
- A-4. Adjourn

AGENDA ITEM

A-2. Proposed Funding Model Changes..... Lee Roberts and Jennifer Haygood

Situation: The UNC System uses a formula based on completed student credit hours to request and allocate enrollment funding to institutions on an annual basis. The current formula is complex and does not include a performance-based component.

Background: In 2017 and 2018 a task force was convened to review the UNC System enrollment funding model. The results of this work were presented to the Board in May of 2018 and included a number of recommendations for improvements to the model, including basing the funding on completed rather than projected credit hours. Simultaneously, the General Assembly required the 2017-19 enrollment funding be verified based on actual enrollment before it could be allocated. In response to the conclusions of the task force and the new requirement from the General Assembly, the UNC System enrollment funding model was updated to be based on actual credit hours completed in arrears.

However, other recommendations made by the task force in 2018, including incorporating some measure of performance funding, have not been integrated into the funding model. As such, concerns raised by the task force related to complexity, incentives, and variation by institution remain unaddressed.

Assessment: The current UNC System enrollment funding model is not aligned with strategic goals, is unnecessarily confusing and complex, and does not accommodate a diverse system. At its December 15, 2021 meeting, the committee discussed desired attributes of a revised funding model. At this meeting, the committee will hear an overview of proposed changes designed to address these concerns.

Action: This item is for discussion only.



PERFORMANCE-WEIGHTED ENROLLMENT FUNDING MODEL

A Concept for a Future UNC Funding Model

*Board of Governors
Committee on Budget and Finance
January 18, 2022*

Outline

- Current Funding Model
- Desired Attributes of a Revised Model
- Proposed Funding Model
 - The Concept: Change in Performance-Weighted SCHs
 - Performance Weighting
 - Appropriation per Credit Hour
 - Transition Year Considerations

Current Funding Model

Part 1

$$\text{Enrollment Measure} \div \text{Instructional Cost Factor} = \text{Estimated Instructors} \times \text{Average Faculty Salary} = \text{Instructional Costs}$$

change in completed student credit hours (SCH) *12 Cell Matrix (Delaware data)* *average of budgeted salary expense/budgeted faculty FTE*

Part 2

$$\text{Instructional Costs} \times \text{Weight Factors for Non-Instructional Costs} = \text{Total Cost (Requirements)}$$

based on historic relationship between budgeted instructional costs and other associated costs

Part 3

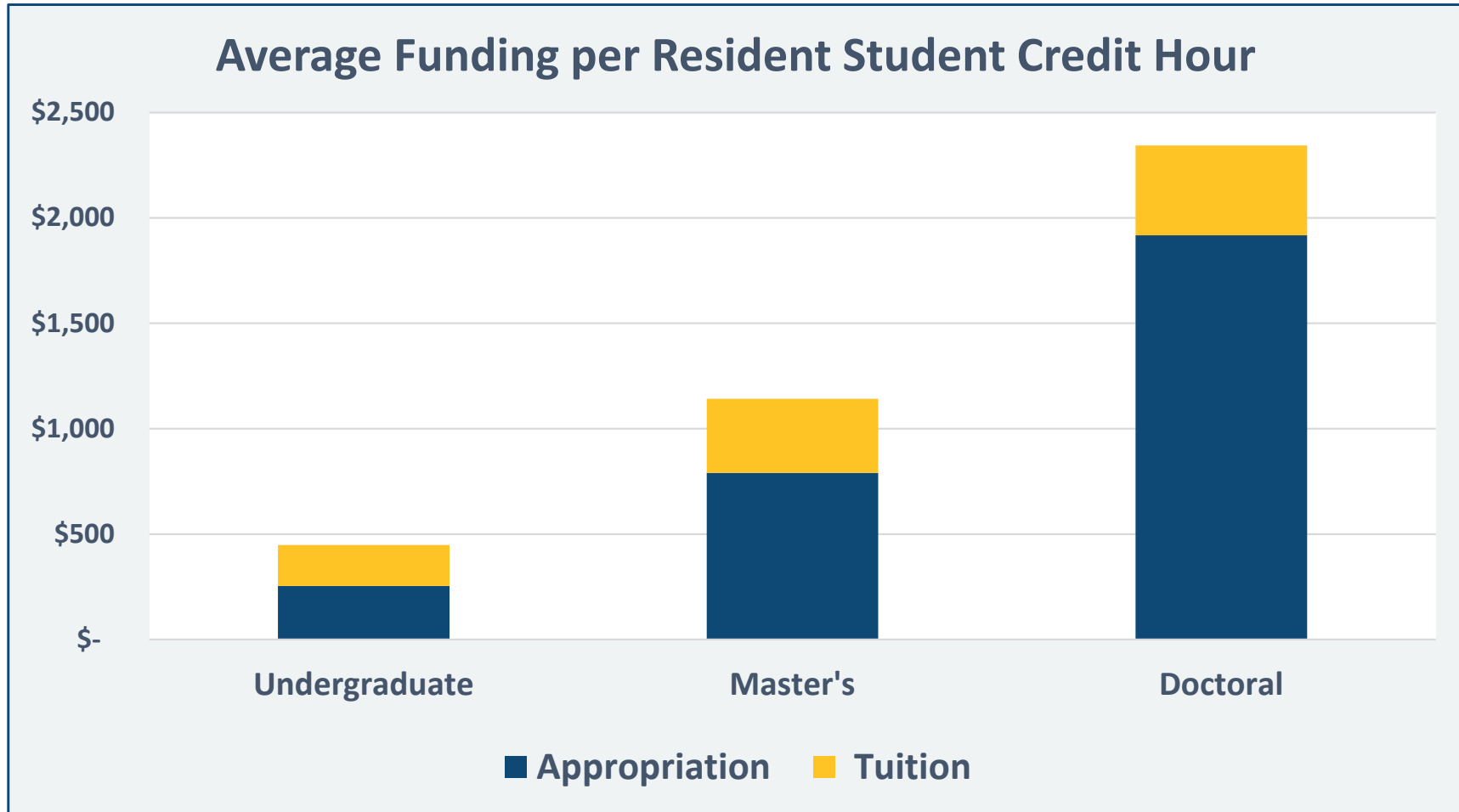
$$\text{Enrollment Measure} \times \text{Tuition Rates By Campus} = \text{Tuition Revenue (Receipts)}$$

change in completed student credit hours (SCH)

Part 4

$$\text{Total Cost (Requirements)} - \text{Tuition Revenue (Receipts)} = \text{Appropriation}$$

Current Model Funding by Student Type



Funding shown does not include differential tuition

Current Funding Model Observations

- The model does not reward institutions for student success
- Formula is complicated and lacks transparency
- Model does not make clear distinctions between institution type – the model is the same for research and baccalaureate institutions.
- Cost factors are outdated and increasingly being challenged
- Average faculty salary factor perpetuates funding inequities
- Level differentiation (U, M, D) may create pressure to focus on growing graduate education programs rather than undergraduate education
- Using tuition as a factor contributes to the lack of transparency and results in inconsistent State subsidy rates across institutions
- On-campus summer instruction is not funded by the model

Desired Attributes of Revised Model

A revised model should:

- Clearly connect funding to strategic goals
- Enable campuses to generate revenue by improving performance
- Be more intuitive and easier to understand
- Eliminate tuition as a factor in the model
- Recognize undergraduate instruction as an equal priority and reduce pressure to prioritize graduate instruction
- Incentivize campuses to keep actual costs at or below national averages
- Recognize differences in cost among academic disciplines
- Provide more equitable funding across campuses for similar instruction
- Support summer instruction as a key strategy to improve on-time completion

Proposed Funding Model: The Concept

An *incremental* funding model that provides a clearly defined State subsidy for the change in *performance-weighted, resident* SCHs.

$$\begin{array}{ccccc} \text{Step 1} & & \text{Step 2} & & \\ \text{Change in} & & \text{Appropriation per} & & \\ \text{Performance-Weighted} & \times & \text{Credit Hour} & = & \text{Appropriation} \\ \text{Student Credit Hours} & & & & \\ \text{Completed Resident SCHs only} & & \text{based on \% of national avg} & & \\ \text{(all terms)} & & \text{(Delaware study data)} & & \end{array}$$

Calculates State Appropriation

$$\begin{array}{l} \text{Step 1} \\ \text{Change in} \\ \text{Performance-Weighted} \\ \text{Student Credit Hours} \\ \text{Completed Resident SCHs only} \\ \text{(all terms)} \end{array} \times \begin{array}{l} \text{Step 2} \\ \text{Appropriation per} \\ \text{Credit Hour} \\ \text{based on \% of national avg} \\ \text{(Delaware study data)} \end{array} = \text{Appropriation}$$

- Designed to calculate the State subsidy (appropriation) based on State policy priorities
- Goal is to transparently link policy goals and State funding
- What is the highest and best use of limited State resources?
- Represents a fundamental shift in the purpose of the model

Includes All Completed Resident SCHs

Step 1		Step 2		
Change in				
Performance-Weighted	X	Appropriation per	=	Appropriation
Student Credit Hours		Credit Hour		
<i>Completed Resident SCHs only</i>		<i>based on % of national avg</i>		
<i>(all terms)</i>		<i>(Delaware study data)</i>		

- Funds ***completed*** SCHs, consistent with current model, for ***resident*** students
- Non-resident SCHs no longer included in the model
 - State subsidy should be provided only for resident students and nonresident tuition should fully cover costs.
- Funds year-over-year change in completed, resident credit hours for ***all terms*** (Spring, Summer, Fall)
 - The value of a completed credit hour does not vary by term.

Summer Term

- Current model does not fund summer on-campus SCHs, as this instruction has been supported historically by charging a self-supporting tuition rate.
- The proposed model:
 - Funds **year-over-year change** in completed, resident credit hours for all terms (Spring, Summer, Fall).
 - Students would pay the **regular per credit hour tuition rate** for summer courses.

Connects Funding to Performance

Step 1		Step 2		
Change in				
Performance-Weighted	X	Appropriation per	=	Appropriation
Student Credit Hours		Credit Hour		
<i>Completed Resident SCHs only</i>		<i>based on % of national avg</i>		
<i>(all terms)</i>		<i>(Delaware study data)</i>		

- Recognizes that credit hours are more valuable to the State if student outcomes are improving
- Provides a clear statement of policy priorities
- While **quantitative** research is still inconclusive on the link between performance funding and improved student outcomes, **qualitative** research indicates it does lead to institutional change.

Provides Transparent Appropriation

$$\begin{array}{ccccc} \text{Step 1} & & \text{Step 2} & & \\ \text{Change in} & & \text{Appropriation per} & & \\ \text{Performance-Weighted} & \times & \text{Credit Hour} & = & \text{Appropriation} \\ \text{Student Credit Hours} & & & & \\ \text{Completed Resident SCHs only} & & \text{based on \% of national avg} & & \\ \text{(all terms)} & & \text{(Delaware study data)} & & \end{array}$$

- Provides a clear and easily understood amount of funding per SCH.
- Tuition no longer factors in the funding model, but would continue to be a General Fund revenue that supports the institution's core educational enterprise.

Step 1: Calculate Change in Performance-Weighted SCHs

Why performance weighting?

- Embedding performance in the formula reinforces that its core, not an “add on” or after thought
- Unlike counts or rates, weighting allows for use of existing measures *AND* provides opportunity to fully offset enrollment declines with performance improvements.

Why does performance-weighting matter?

- If performance ***improves***, all resident SCHs are worth more
- If performance ***stays the same***, all resident SCHs are worth the same
- If performance ***declines***, all resident SCHs are worth less

Even with flat enrollment, campuses can increase funding if performance improves.

How would performance-weighting work?

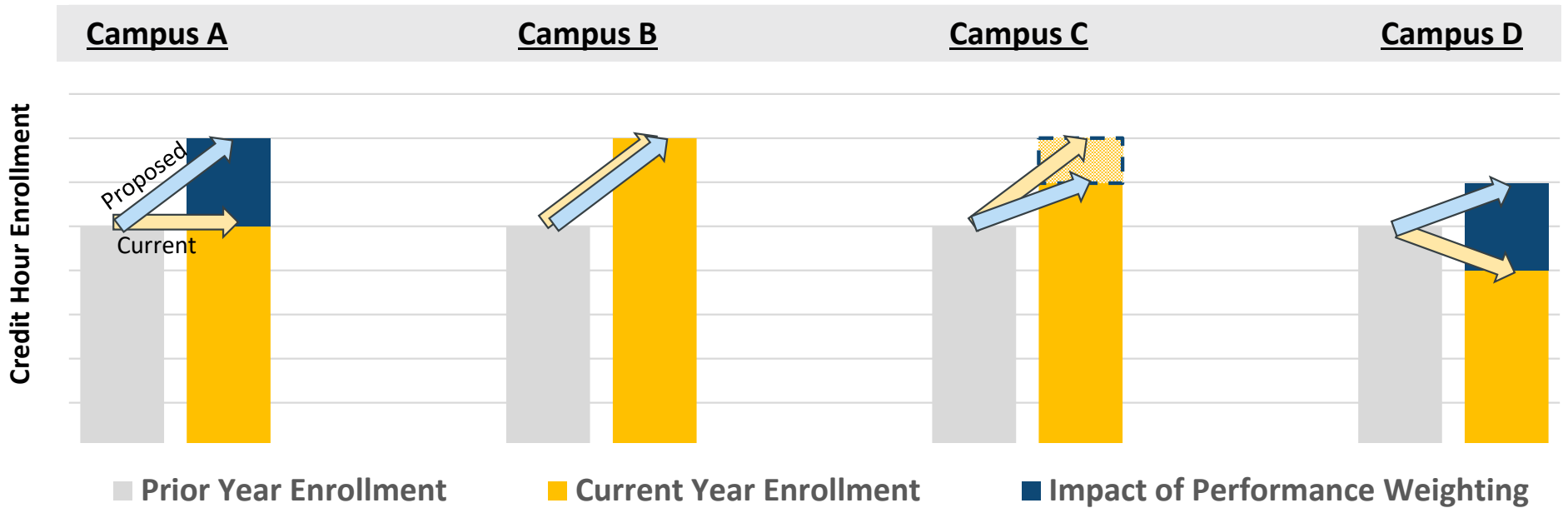
- Annually, all resident SCHs would be weighted using each campus' performance as measured on BOG-defined metrics
- BOG-defined metrics = chancellor incentive compensation goals + one strategic plan metric chosen by the campus
- Weighting would be based on how campus performance compares to its baseline and stretch goals
 - If performance **improves** over baseline, all resident SCHs receive a performance weight > 1 up to the maximum for meeting the stretch goal
 - If performance **remains** at baseline, all resident SCHs receive a weight $= 1$
 - If performance **declines** from baseline, all resident SCHs receive a weight < 1 , but no less than the minimum

Min = $1 - Y\%$
*Below baseline
performance*

Performance Weighting Range

Max = $1 + X\%$
*Meet or exceed
stretch goal*

Simplified Illustrative Examples



	Enrollment	Performance	Prior Year SCH	Current Year SCH	SCH Change (Before Weighting)	Performance Weight	Current Year Weighted SCH	SCH Change (After Weighting)
A	Flat	Improves	100,000	100,000	0	1.02	102,000	2,000
B	Grows	Flat	100,000	102,000	2,000	1.00	102,000	2,000
C	Grows	Declines	100,000	102,000	2,000	.99	100,980	980
D	Declines	Improves	100,000	99,000	-1,000	1.02	100,980	980

Step 2: Multiply by Appropriation per SCH

Benchmark appropriation per credit hour to national data from Delaware Cost Study for academic discipline and Carnegie classification

- Incentivizes campuses to keep actual costs at or below national averages
- Provides consistent State subsidy for instruction delivered by similar institutions
- Benchmark data would be updated biennially.

State Subsidy		
80%	Instruction National average cost per credit hour based on academic discipline and Carnegie classification	+
		Overhead System average expenditure per credit hour for institutional, academic, and student support
=	Appropriation per Resident SCH	

Instructional Component

Benchmark appropriation per credit hour to national data from Delaware Cost Study for academic discipline and Carnegie classification*

- Recognizes differences in institutional mission and costs by academic discipline
- Graduate credit hours are subsidized by the State at the same rate as undergraduate credit hours

Discipline	Appropriation per Credit Hour			
	R1	R2	Master's	Baccalaureate
Biology	\$554	\$371	\$319	\$372
Business	\$348	\$340	\$331	\$285
Communication	\$342	\$300	\$305	\$308
Computer Science	\$401	\$386	\$342	\$368
Education	\$524	\$417	\$401	\$403
Engineering	\$576	\$482	\$417	\$453
English	\$334	\$305	\$306	\$326
Foreign Language	\$371	\$337	\$321	\$359
Health Professions	\$521	\$426	\$388	\$368
History	\$367	\$321	\$284	\$312
Philosophy	\$340	\$301	\$274	\$458
Physical Sciences	\$437	\$395	\$344	\$382

Overhead Component

- Provide a flat appropriation per credit hour based on UNC System average expenditure per credit hour for institutional, academic, and student support

Cost Category	Total FY 2021 General Fund Expenditures	2021 Total Completed Student Credit Hours	Average Cost Per Credit Hour
Student Services	\$136,766,856	6,396,175	\$21.38
Academic Support (including Libraries)	\$393,388,719		\$61.50
Institutional Support	\$541,465,095		\$84.65
Total			\$167.54

Programs Currently Funded through FTE model

Program	Institutions	Proposal
Dental	ECU, UNC-CH	Exclude from model entirely (not self-supporting but required to make separate appropriation request for class size changes)
Medical	ECU, UNC-CH	
Pharmacy	UNC-CH	
Veterinary	NCSU	
Law	NCCU, UNC-CH	Include in proposed SCH model
UNC School of the Arts		Still under review due to “Special Focus” Carnegie Classification

Transition Year Considerations

- To smooth the transition, the FY23 funding request would include:
 - All SCHs have an initial performance weight of 1.
 - Funding for instructional costs (without overhead) for “base” summer SCHs.
 - Funding for each campus would be based on the ***higher of*** the amount generated by current or the proposed model.

QUESTIONS?
SUGGESTIONS?

What is the Delaware Cost Study?

- A national survey of nearly 700 four-year colleges and universities that has been collecting data since 1992.
- Provides national benchmarks by Carnegie Class at the academic discipline level on faculty teaching loads and ***direct instructional costs***.
- Only available source of nationally representative data on the costs of delivering credit hours in different disciplines at different types of institutions.

What is “Carnegie Classification”?

- Carnegie Classification is a national system for categorizing institutions of higher education based on their mission, programs, and research capacity.
- UNC System institutions are categorized as follows:
 - **R1 Doctoral:** NC State, UNC-Chapel Hill
 - **R2 Doctoral:** East Carolina, North Carolina A&T, UNC Charlotte, UNC Greensboro, UNC Wilmington
 - **Doctoral/Professional:** Western Carolina, Winston-Salem State University
 - **Master’s:** Appalachian State, North Carolina Central, UNC Pembroke, Fayetteville State
 - **Baccalaureate:** Elizabeth City State, UNC Asheville
 - **Special Focus:** UNC School of the Arts