AGENDA

A-1. Call to Order..............................................................................................................James L. Holmes, Jr.

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

A-3. Committee Discussion ..............................................................................................James 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
  o The Concept: Change in Performance-Weighted SCHs
  o Performance Weighting
  o Appropriation per Credit Hour
  o Transition Year Considerations
## Current Funding Model

<table>
<thead>
<tr>
<th>Part</th>
<th>Formula</th>
</tr>
</thead>
</table>
| 1 | \[
\text{Enrollment Measure} \div \text{Instructional Cost Factor} = \text{Estimated Instructors} \times \text{Average Faculty Salary} = \text{Instructional Costs}
\]

- **Enrollment Measure** represents the change in completed student credit hours (SCH) calculated from a 12 Cell Matrix (Delaware data).
- **Instructional Cost Factor** is the average of budgeted salary expense/budgeted faculty FTE.

<table>
<thead>
<tr>
<th>Part</th>
<th>Formula</th>
</tr>
</thead>
</table>
| 2 | \[
\text{Instructional Costs} \times \text{Weight Factors for Non-Instructional Costs} = \text{Total Cost (Requirements)}
\]

- **Weight Factors for Non-Instructional Costs** are based on the historic relationship between budgeted instructional costs and other associated costs.

<table>
<thead>
<tr>
<th>Part</th>
<th>Formula</th>
</tr>
</thead>
</table>
| 3 | \[
\text{Enrollment Measure} \times \text{Tuition Rates By Campus} = \text{Tuition Revenue (Receipts)}
\]

- **Enrollment Measure** is calculated as the change in completed student credit hours (SCH).

<table>
<thead>
<tr>
<th>Part</th>
<th>Formula</th>
</tr>
</thead>
</table>
| 4 | \[
\text{Total Cost (Requirements)} - \text{Tuition Revenue (Receipts)} = \text{Appropriation}
\]
Current Model Funding by Student Type

Average Funding per Resident Student Credit Hour

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
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.

**Step 1**
Change in Performance-Weighted Student Credit Hours

*Completed Resident SCHs only (all terms)*

**Step 2**
Appropriation per Credit Hour

*based on % of national avg (Delaware study data)*

\[ \text{Completed Resident SCHs only (all terms)} \times \text{Appropriation per Credit Hour} = \text{Appropriation} \]
**Calculates State Appropriation**

**Step 1**
Change in Performance-Weighted Student Credit Hours
*Completed Resident SCHs only (all terms)*

**Step 2**
Appropriation per Credit Hour
*based on % of national avg (Delaware study data)*

\[ \text{Appropriation} = \text{Step 1} \times \text{Step 2} \]

- 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**
Change in Performance-Weighted Student Credit Hours

- Completed Resident SCHs only (all terms)

**Step 2**

\[ \text{Appropriation per Credit Hour} \times \text{Completed Resident SCHs only (all terms)} = \text{Appropriation} \]

based on % of national avg (Delaware study data)

- 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:
  
  o Funds **year-over-year change** in completed, resident credit hours for all terms (Spring, Summer, Fall).
  
  o Students would pay the **regular per credit hour tuition rate** for summer courses.
**Connects Funding to Performance**

**Step 1**

Change in Performance-Weighted Student Credit Hours

*Completed Resident SCHs only (all terms)*

**Step 2**

Appropriation per Credit Hour

*based on % of national avg (Delaware study data)*

\[
\text{Change in Performance-Weighted Student Credit Hours} \times \text{Appropriation per Credit Hour} = \text{Appropriation}
\]

- 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

Step 1
Change in Performance-Weighted Student Credit Hours
Completed Resident SCHs only (all terms)

Step 2
X Appropriation per Credit Hour
based on % of national avg (Delaware study data)

= Appropriation

• 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
  o If performance improves over baseline, all resident SCHs receive a performance weight > 1 up to the maximum for meeting the stretch goal
  o If performance remains at baseline, all resident SCHs receive a weight = 1
  o 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

### Simplified Illustrative Examples

<table>
<thead>
<tr>
<th>Enrollment</th>
<th>Performance</th>
<th>Prior Year SCH</th>
<th>Current Year SCH</th>
<th>SCH Change (Before Weighting)</th>
<th>Performance Weight</th>
<th>Current Year Weighted SCH</th>
<th>SCH Change (After Weighting)</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>Flat</td>
<td>Improves</td>
<td>100,000</td>
<td>100,000</td>
<td>0</td>
<td>1.02</td>
<td>102,000</td>
</tr>
<tr>
<td>B</td>
<td>Grows</td>
<td>Flat</td>
<td>100,000</td>
<td>102,000</td>
<td>2,000</td>
<td>1.00</td>
<td>102,000</td>
</tr>
<tr>
<td>C</td>
<td>Grows</td>
<td>Declines</td>
<td>100,000</td>
<td>102,000</td>
<td>2,000</td>
<td>.99</td>
<td>100,980</td>
</tr>
<tr>
<td>D</td>
<td>Declines</td>
<td>Improves</td>
<td>100,000</td>
<td>99,000</td>
<td>-1,000</td>
<td>1.02</td>
<td>100,980</td>
</tr>
</tbody>
</table>
**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.

<table>
<thead>
<tr>
<th>State Subsidy</th>
<th>80%</th>
<th>Instruction</th>
<th>Overhead</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>National average cost per credit hour based on academic discipline and Carnegie classification</td>
<td>System average expenditure per credit hour for institutional, academic, and student support</td>
</tr>
</tbody>
</table>

= Appropriation per Resident SCH
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

### Appropriation per Credit Hour

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

*See appendices for more information
Overhead Component

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

<table>
<thead>
<tr>
<th>Cost Category</th>
<th>Total FY 2021 General Fund Expenditures</th>
<th>2021 Total Completed Student Credit Hours</th>
<th>Average Cost Per Credit Hour</th>
</tr>
</thead>
<tbody>
<tr>
<td>Student Services</td>
<td>$136,766,856</td>
<td></td>
<td>$21.38</td>
</tr>
<tr>
<td>Academic Support (including Libraries)</td>
<td>$393,388,719</td>
<td>6,396,175</td>
<td>$61.50</td>
</tr>
<tr>
<td>Institutional Support</td>
<td>$541,465,095</td>
<td></td>
<td>$84.65</td>
</tr>
<tr>
<td>Total</td>
<td>$167,54</td>
<td></td>
<td>------------------------------</td>
</tr>
</tbody>
</table>
### Programs Currently Funded through FTE model

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

• To smooth the transition, the FY23 funding request would include:
  o All SCHs have an initial performance weight of 1.
  o Funding for instructional costs (without overhead) for “base” summer SCHs.
  o 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