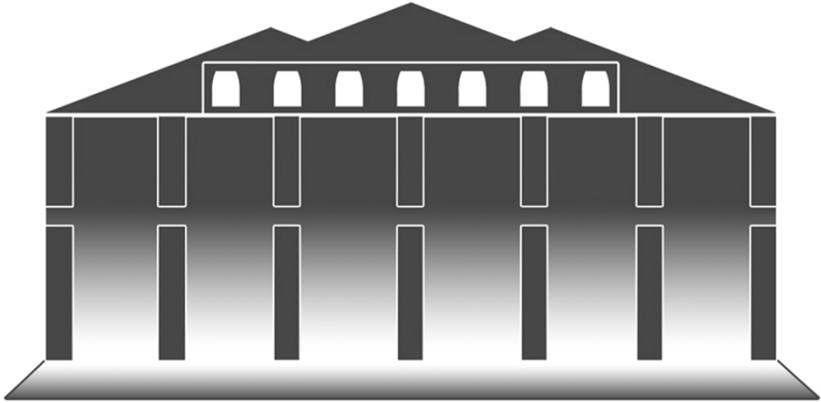





Joint Legislative Program Evaluation Oversight Committee
November 17, 2010



PROGRAM EVALUATION DIVISION
NORTH CAROLINA GENERAL ASSEMBLY


Program Evaluation Division  North Carolina General Assembly 1

**UNC Enrollment Change
Funding Formula Needs
Documentation and a
Performance Component**

A presentation to the Joint Legislative
Program Evaluation Oversight Committee

November 17, 2010

Michelle Beck

Program Evaluation Division  North Carolina General Assembly 2

Handouts

- The Report
- Presentation Slides
- SCH Enrollment Change Formula
- Summary of Recommendations



Category	Number of Recommendations
Overall	10
Documentation	5
Performance Compromise	5

Evaluation Team

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Overview

- UNC System funding is based on inaccurate projections which generates inaccurate funding with minimal consequences
- The formula's complexity contributes to projection errors
- There is little documentation or justification for processes
- The current formula lacks accountability for campus performance

Overview

- Modify the existing enrollment change funding formula and standardize the enrollment projection process
- Develop policies for enrollment change funding decisions
- Submit annual performance reports
- Implement performance-based funding

Data Sources

- 2003-04 through 2008-09 enrollment data, expenditures, and appropriation requests
- Administrative queries and interviews with campuses and General Administration
- Literature review and interviews with experts

Report p. 2

Funding Formulas

- 38 states use funding formulas, 26 are enrollment-based including NC
- Require reliable projections

Pro: Provide predictability, stability, and objectivity

Con: May not account for quality or change in needs and may reinforce inequities

Report pp 3-4

UNC System Enrollment Funding

- 1978 - First full-time equivalency (FTE) funding formula
- 1998-99 - appropriation request from the UNC Board of Governors was based on student credit hours (SCH)
- Semester Credit Hour formula is more granular and calculates faculty positions needed for enrollment change

Report p. 3



Funding Formula Calculations

A. Enrollment Projections



B. Positions Required

Report pp 5-7



Funding Formula Calculations



C. Instructional Salary Amount



D. Total Academic Requirements

Funding Formula Calculations

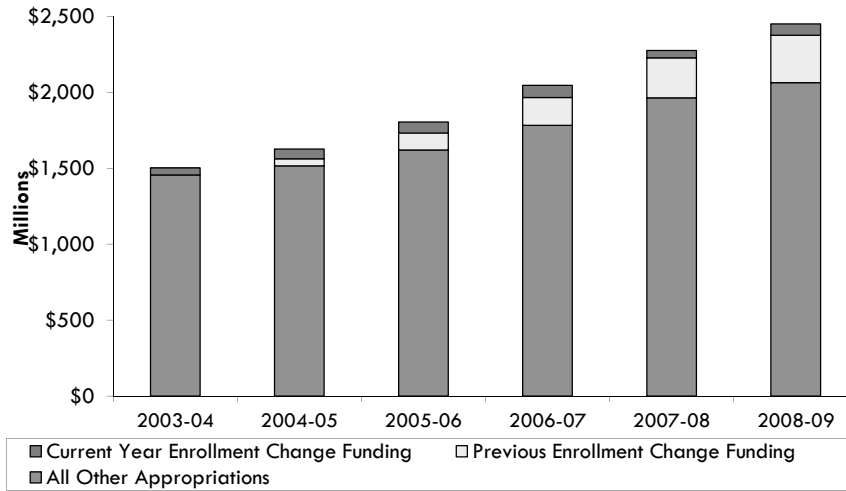


E. Total Requirements



F. Enrollment Change Funding
Request

Cumulative Enrollment Funding from 2003-04 through 2008-09



Findings



Finding 1.
**Funding requests generated by the
formula are based on inaccurate
growth estimates**

3 Levels of Projection Accuracy



THE UNIVERSITY OF NORTH CAROLINA



Projection Accuracy for UNC System

Within 2% of enrollment

BUT:

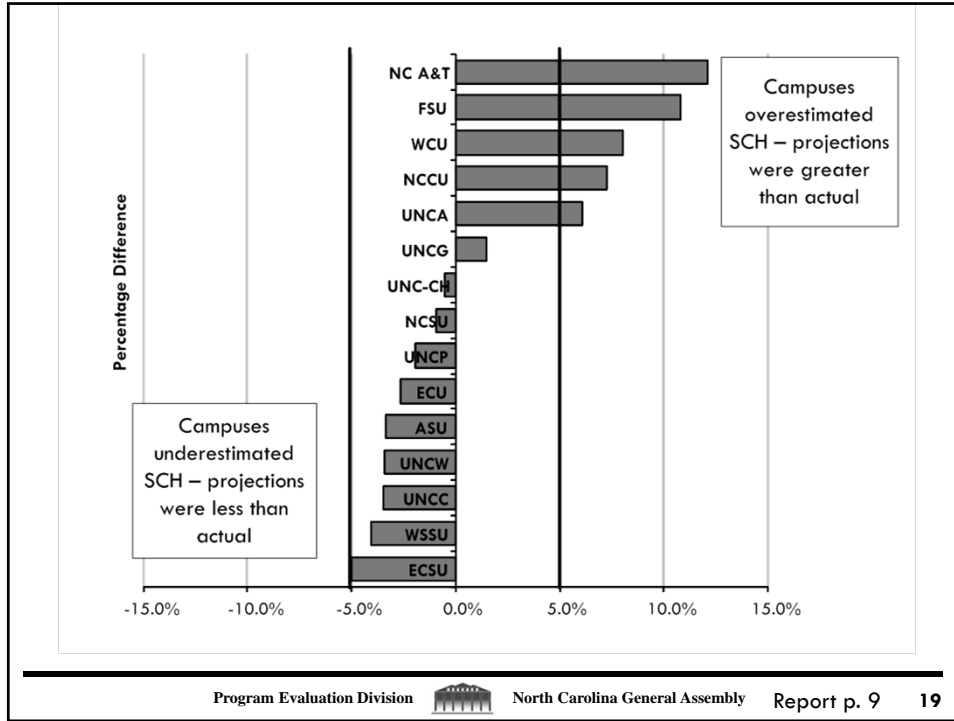
Funding is determined by
projections developed at
each campus

Report p. 10

Projection Accuracy at Campuses

- Overall campus projections range from 5% under to 12% over actual SCH enrollment
 - 8 campuses were within 5% each year of the 6-year study period
 - 2 campuses were off more than 5% 1 year
 - 5 campuses were off more than 5% for 2 or more years

Report pp 10-11



Campuses Project in 12-Cell Matrix

Program Category	Undergraduate	Master's	Doctorate
Category I	4,515	729	-
Category II	6,030	484	8
Category III	2,118	288	-
Category IV	-	-	-

Projections Not Accurate Within Formula Cells

- Every campus had large errors in at least one cell
- In 2008-09 5 campuses made errors of 100% or more in 6 of the 12 cells

Report p. 10-11



Finding 2. Inaccurate estimates generate inaccurate funding with minimal consequences for poor enrollment change projections



Total Funding Requirement for Lowest Cost Campus

Program Category	Undergraduate	Master's	Doctorate
Category I	\$ 217	\$ 907	\$ 1,330
Category II	\$ 287	\$ 506	\$ 1,395
Category III	\$ 378	\$ 825	\$ 1,399
Category IV	\$ 662	\$ 1,705	\$ 1,900

Report p. 12



Potential Error in Total Requirements for SCH Change

- 2 hypothetical examples of 5,000 SCH over-projected at campus with lowest cost SCH
 - = \$266,000 with largest error in one undergraduate category
 - = \$6,000,000 with largest error in master's category

Report pp. 13-14



No Guidelines/Consequences for Overprojection Errors

- Hold Harmless allows campuses that overestimate SCH to retain the unrealized enrollment funding
- Funding for anticipated but unrealized growth is added to subsequent base budgets
- NC A&T has been held harmless since 2007-08 (thru 2010-11)

Report p. 14-15



Finding 3.

**The formula's complexity
contributes to projection errors, and
there is little justification to support
formula elements**



Complexity Begins with Projection Process

- The iterative projection process is time consuming, but still results in error
- Lack of documentation and standardized procedures undermine the empirical basis of the formula

Report pp 16-18

Formula Elements Not Justified

- UNC Assumption: Undergraduate cost factors increase equity

Evidence: Created in 1995 with
“no science” to arrive at
percentages

Report pp 17-18

Formula Elements Not Justified

- UNC Assumption: Basis for calculating other academic support, libraries, and general institutional support is sound

Evidence: Funds are not tracked and expenditures are not in line with the formula

Report p. 19

Finding 4.

Lack of oversight makes it difficult to evaluate enrollment formula funding

Challenges to Formula Assumptions

- UNC Assumption: Formula provides appropriate funding for enrollment increases

Evidence: No data analysis to compare actual expenditures to factors in the formula

Report p. 21

Challenges to Formula Assumptions

- UNC Assumption: Enrollment growth funding allows campuses to hire faculty

Evidence: Campuses have discretion for expenditures and no reporting requirements for hiring of faculty to accommodate growth

Report p. 21

Challenges to Formula Assumptions

- UNC Assumption: SCH formula provides more accurate funding than the FTE formula

Evidence: No data analysis to compare the more granular SCH formula to the straightforward FTE formula

Report p. 21

Finding 5.

The current formula emphasizes growth and has no component for assuring accountability for campus performance

Balancing Performance with Access

- UNC student outcome data is available but not utilized
- National trend of increased accountability
 - 11 states tie performance to funding

Report p. 22



Performance Funding Not a New Idea

- 1995 statute directed study of incentive funding
- 2007 UNC report cites need for accountability and performance measures
- UNC Board of Governors intends to include student retention and graduation rates for 2011-13

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Recommendations



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Recommendation 1.
Require the UNC Board of Governors
to modify the existing enrollment
funding formula and standardize the
enrollment projection process

Recommendation 1.

- Modify the funding formula to retain the granularity but eliminate the large errors
- Simplify and standardize the enrollment projection process
- Re-examine and justify funding formula elements

Report pp 26-30



Recommendation 1 (cont.)

- Implement the new model for enrollment change funding beginning with the 2011-13 biennium
- Analyze accuracy of projections and adjust funding to correct errors

Report pp 26-30



Recommendation 2.
Require the UNC Board of Governors
to develop written policies for
enrollment change funding decisions

Recommendation 2

- Establish procedures for
 - developing campus enrollment projections
 - calculating tuition offset, and
 - calculating funding formula elements and cost factors
- Develop criteria for hold harmless status
- Produce a policy and procedures manual by January 1, 2012

Report pp 31-32

Recommendation 3.
Require the UNC Board of Governors
to provide annual reports with
performance

Recommendation 3

- Determine appropriate campus indicators
- Explain sizeable projection errors
- Report campus indicators annually to the General Assembly beginning no later than June 30, 2012

Recommendation 4.
Begin implementation of
performance-based funding by
linking enrollment growth
funding to outcomes

Recommendation 4

- Develop appropriate campus-level performance goals and indicators
- Require each campus to meet target outcomes in order to receive enrollment growth funding beginning with 2011-12
- Consider future incentive funding to encourage focus on performance

Summary of Findings

- UNC system funding is based on inaccurate projections which generate inaccurate funding with minimal consequences
- The formula's complexity contributes to projection errors
- There is little documentation or justification for processes and error
- The current formula lacks accountability for campus performance

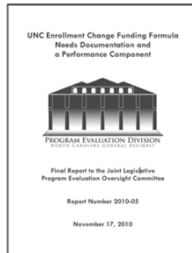
Summary of Recommendations

- Modify the existing enrollment change funding formula and standardize the enrollment projection process
- Develop policies for enrollment change funding decisions
- Submit annual performance reports
- Implement performance-based funding



**Joint Legislative Program Evaluation Oversight Committee
November 17, 2010**

**Report available online at
www.ncleg.net/PED/Reports/reports.html**



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