UNC ENROLLMENT FUNDING

Agenda

1. Task Force
2. UNC Revenue and Enrollment Funding
3. Current Composition of UNC Student Enrollment
4. Linking Enrollment to Cost
5. Current UNC Funding Model
6. Strengths and Weaknesses of the Current Model

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TASK FORCE

Charge, Membership, and Timeline

Task Force: Charge

- Evaluate existing UNC funding formula and identify opportunities to improve model

- Examine trends in higher education finance and funding models in other states

- Develop and recommend funding model reforms to the UNC Board of Governors

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Task Force Membership

Scott Lampe – CFO, Hendrick Motorsports (Chair)

Kellie Blue – UNC BOG

Anna Nelson – UNC BOG

Bob Rucho – UNC BOG

Harry Smith – UNC BOG

Kennon Briggs – BOT, UNCA

Stan Kelly – BOT, NCSU

Harold Martin – Chancellor, NC A&T

Jose Sartarelli – Chancellor, UNCW

Doug Shackelford – Dean, UNC Kenan-Flagler School of Business, UNC-CH

Andy Willis – Chief of Staff, UNC School of Medicine and UNC Health Care

Lee Roberts – Managing Director, SharpVue Capital

Margaret Spellings – President, UNC (Ex Officio)

Lou Bissette – Chairman, UNC BOG (Ex Officio)

John Fraley – House of Representative Member (Ex Officio)

Chad Barefoot – Senate Member (Ex Officio)

Task Force Technical Experts

Charlie Maimone – CFO, UNCG

Dwayne Pinkney – CFO, UNC-CH

Melissa Wargo – Chief of Staff, WCU

Jon Young – Provost, FSU

Warwick Arden – Provost, NCSU

Sherrie High – Budget Officer, UNCC

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Timeline and Work Plan

May 2017 – Task Force named by President and UNC BOG

June 2017 – Task Force holds inaugural meeting

August 2017 – Task Force examines funding strategies and best practices from other states

October 2017 – Task Force will explore potential changes to funding formula and associated regulations

December 2017 – Task Force will discuss, revise, and approve draft recommendations

January/February 2018 – Task Force will solicit feedback from relevant stakeholders

March 2018 – Task Force will hold its final meeting to approve revised recommendations and discuss timeline for implementation

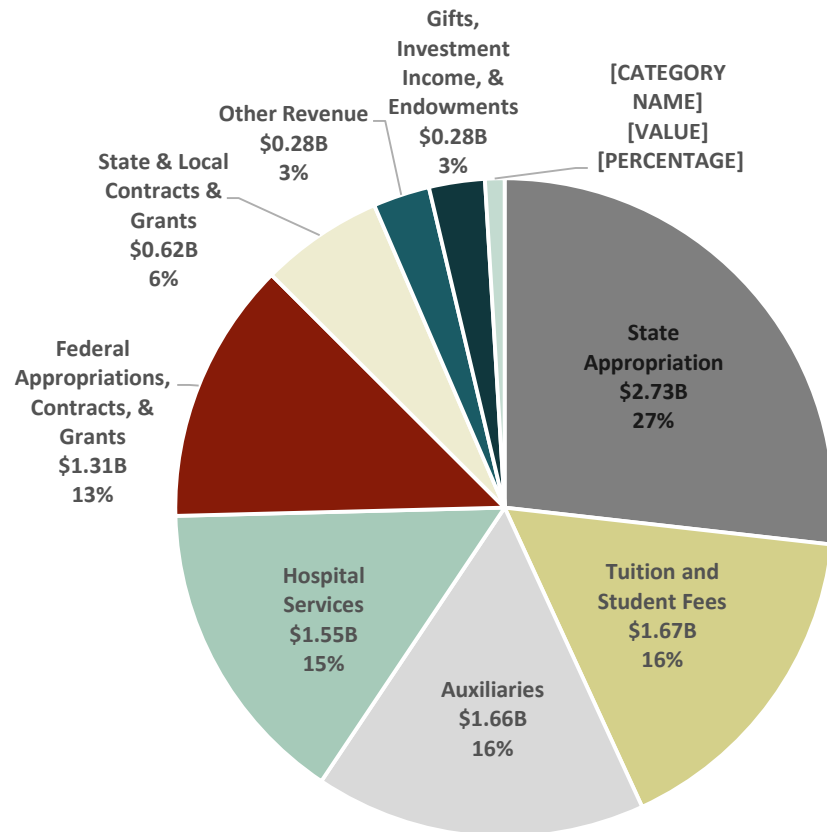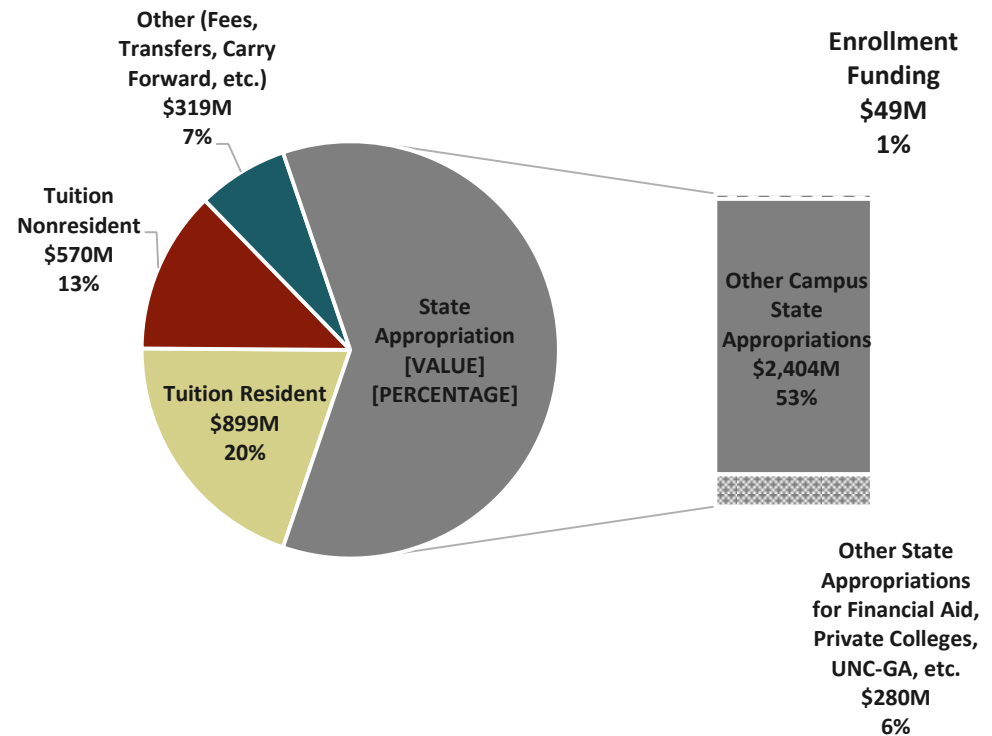April 2018 – Task Force will submit formal recommendations to the UNC BOG

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UNC REVENUE AND ENROLLMENT FUNDING

What portion is enrollment funding?

Enrollment Funding as a Percentage of Revenue

## Total UNC Revenue FY 2015-16
$10.20 Billion

- Gifts, Investment Income, & Endowments $0.28B 3%
- Other Revenue $0.28B 3%
- State & Local Contracts & Grants $0.62B 6%
- Federal Appropriations, Contracts, & Grants $1.31B 13%
- [CATEGORY NAME] [VALUE] [PERCENTAGE]
- State Appropriation $2.73B 27%
- Tuition and Student Fees $1.67B 16%
- Auxiliaries $1.66B 16%
- Hospital Services $1.55B 15%

General Fund Revenue FY 2015-16
$4.52 Billion

- Other (Fees, Transfers, Carry Forward, etc.) $319M 7%
- Tuition Nonresident $570M 13%
- State Appropriation [VALUE] [PERCENTAGE]
- Tuition Resident $899M 20%
- Enrollment Funding $49M 1%
- Other Campus State Appropriations $2,404M 53%
- Other State Appropriations for Financial Aid, Private Colleges, UNC-GA, etc. $280M 6%

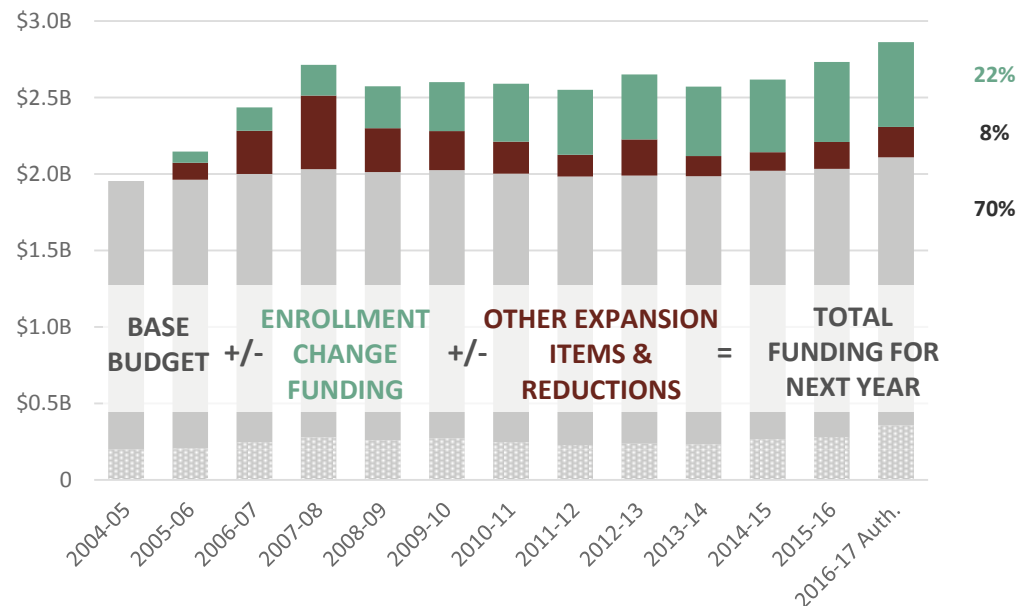# Enrollment Funding as a Percentage of Revenue

Enrollment is a small portion of total UNC appropriations, but a large piece of new state funding.

Annual Enrollment Funding as a Proportion of Total State Appropriations

1.2 % of Campus Approp.
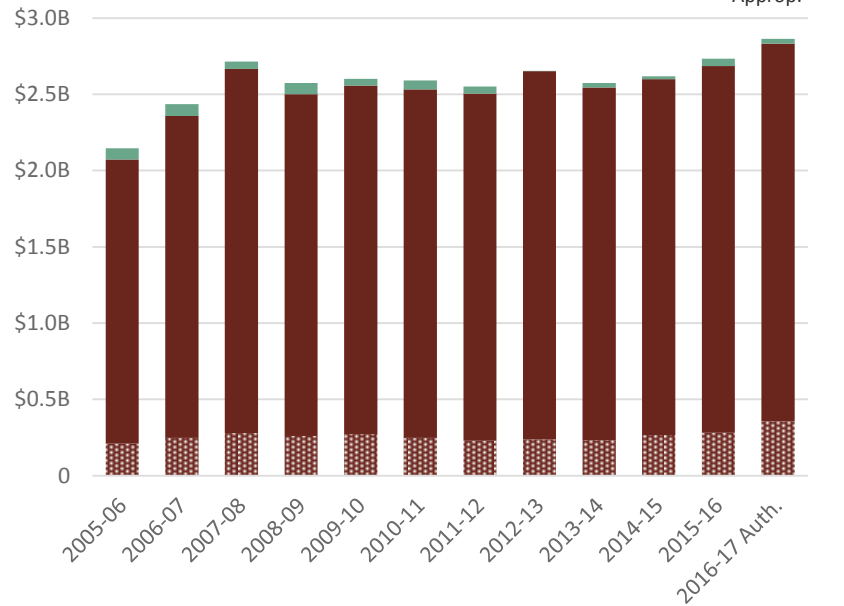
Legend:
- Enrollment Funding
- State Appropriations to Campuses
- Other State Appropriations for Financial Aid, Private Colleges, UNC-GA, etc.

Cumulative Enrollment Funding as a Proportion of Total State Appropriations

Percent of Campus Approp.

22%

8%

70%

BASE BUDGET +/- ENROLLMENT CHANGE FUNDING +/- OTHER EXPANSION ITEMS & REDUCTIONS = TOTAL FUNDING FOR NEXT YEAR

Legend:
- Cumulative Enrollment Funding since FY 2004-05
- Cumulative State Appropriations to Campuses since FY 2004-05
- FY 2004-05 State Appropriations to Campuses
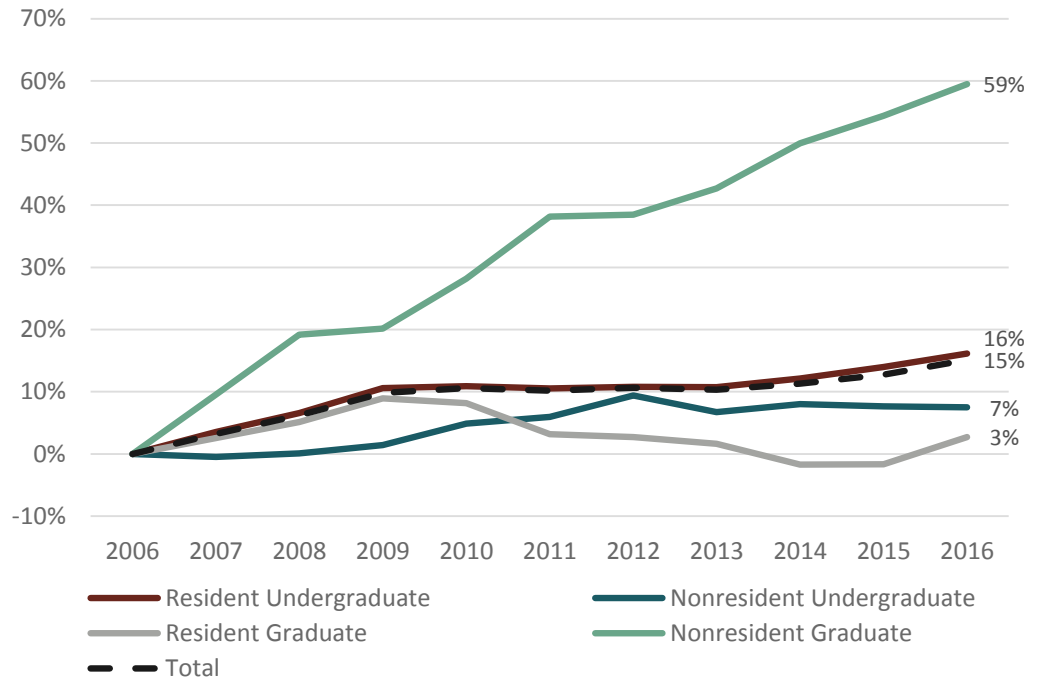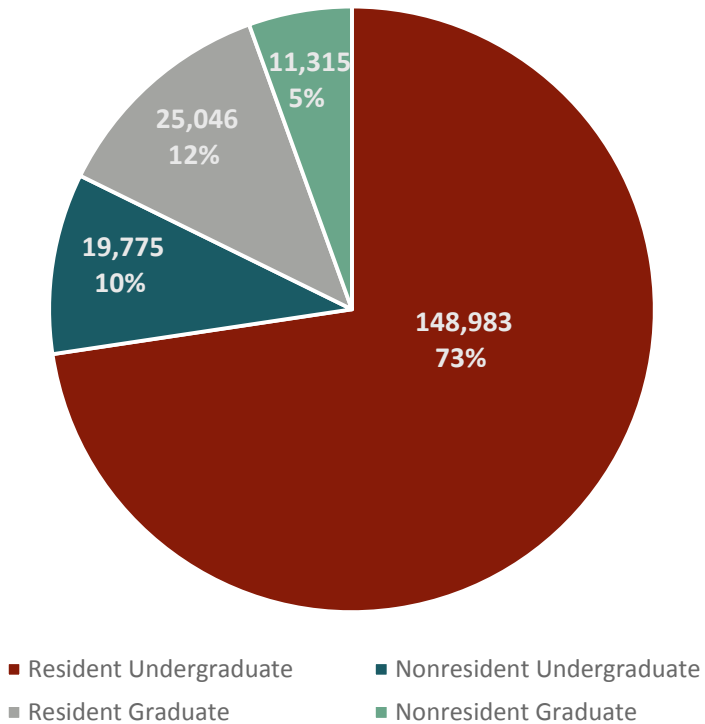- Cumulative Other State Appropriations since FY 2004-05

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CURRENT COMPOSITION OF UNC STUDENT ENROLLMENT

Student Type and Academic Discipline
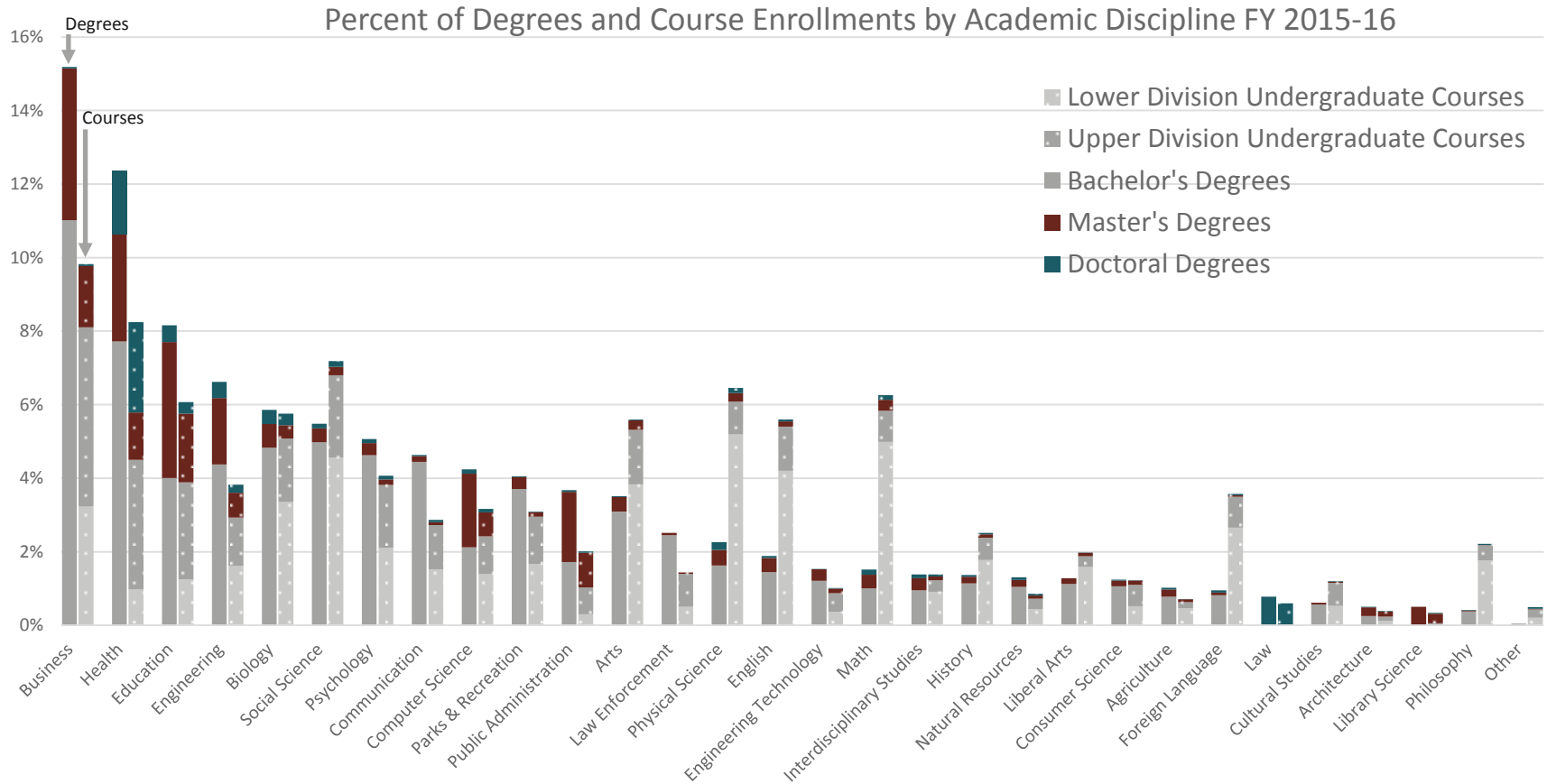
UNC Enrollment by Student Type

UNC fall 2015 enrollment was **205,119 FTE**, of which 73% was resident undergraduate.

Total UNC enrollment has increased by **15%** over the past 10 years. Nonresident graduate students are the fastest growing population.


Pie chart:
- 148,983 — 73% — Resident Undergraduate
- 19,775 — 10% — Nonresident Undergraduate
- 25,046 — 12% — Resident Graduate
- 11,315 — 5% — Nonresident Graduate

Line chart (2006–2016):
- 59% — Nonresident Graduate
- 16% — Resident Undergraduate
- 15% — Total
- 7% — Nonresident Undergraduate
- 3% — Resident Graduate

Legend:
- Resident Undergraduate
- Nonresident Undergraduate
- Resident Graduate
- Nonresident Graduate
- Total

UNC Enrollment by Discipline

The top five most popular fields of study at UNC schools are business, health, education, engineering, and biology. It is common for students to take foundational courses outside of their field of study.

Percent of Degrees and Course Enrollments by Academic Discipline FY 2015-16

Legend:
- Lower Division Undergraduate Courses
- Upper Division Undergraduate Courses
- Bachelor's Degrees
- Master's Degrees
- Doctoral Degrees

UNC Degrees by Discipline

The disciplines that have produced the largest increase in degrees are health, business, and engineering.

UNC Degrees for Top 20 Disciplines
FY 2015-16 Compared to FY 2005-06
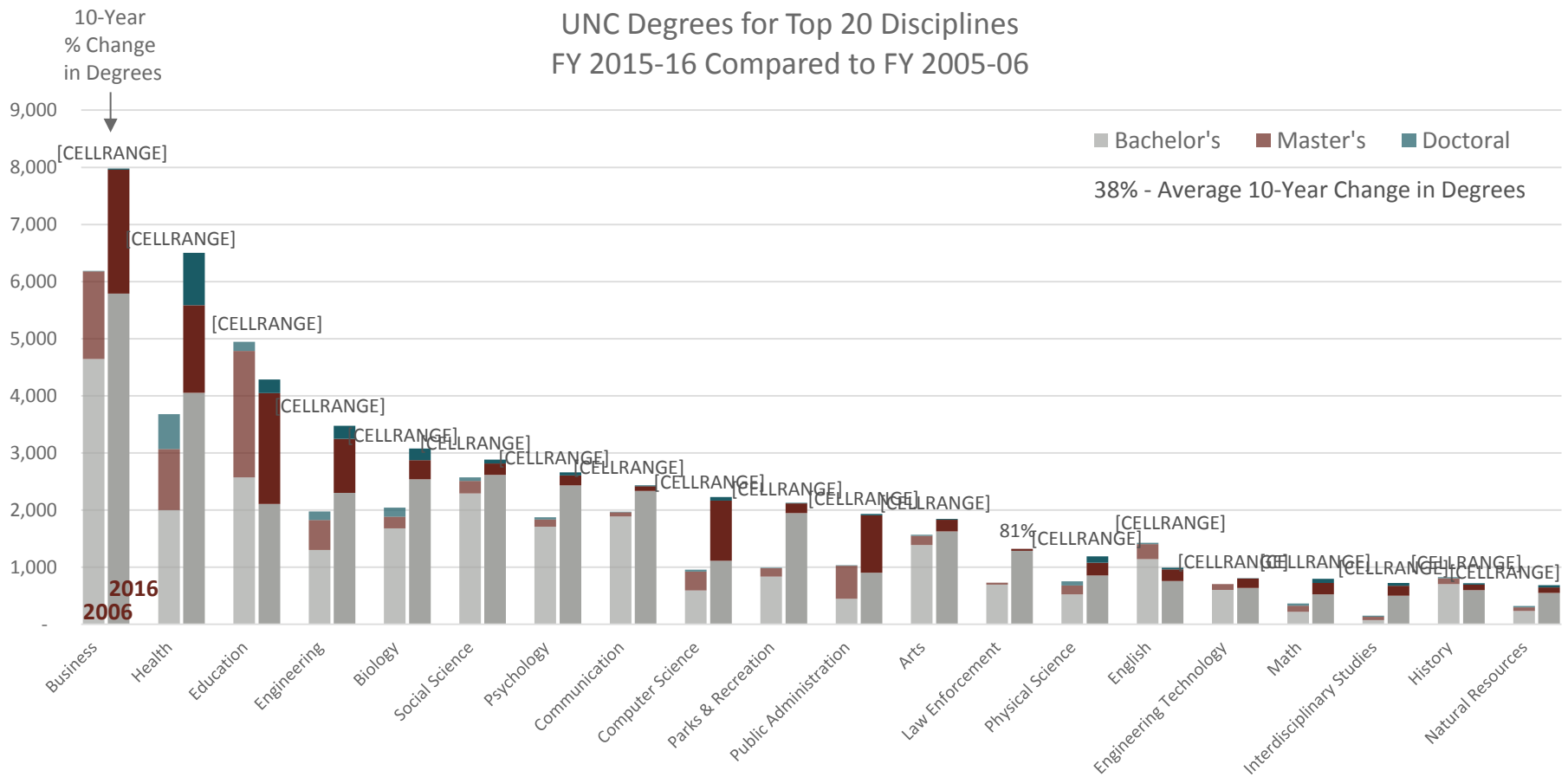
LINKING ENROLLMENT TO COST

A National Study of Instructional Cost
and Productivity

Delaware Cost Study – National Study of Instructional Cost and Productivity

- Began in 1992 and includes more than 700 institutions

- Provides national benchmarks by Carnegie class at the academic discipline level on:
  - Faculty teaching loads
  - Direct instructional cost

- Example: instructional expenditures per student credit hour in a math class at a research institution

Delaware Cost Study – Creating UNC-Specific Factors

- In FY 1997-98, UNC-GA sought to develop cost factors to reflect instructional costs of enrollments at UNC.

- Specific aspects addressed:

  - **Instructional areas** – determined by grouping disciplines in Delaware data into four categories by cost

  - **Cost by discipline** – instructional areas were weighted by number of UNC courses and Delaware data cost by discipline and Carnegie class

  - **Class size** – differences in UNC class size were used to separate four instructional areas into undergraduate, masters, and doctoral levels

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12 Cell Matrix – Categories of Instruction

UNC-specific instructional cost factors created based on the Delaware Cost Study

Number of Credit Hours per Faculty Member

Category	Undergrad	Masters	Doctoral
I	708.64	169.52	115.56
II	535.74	303.93	110.16
III	406.24	186.23	109.86
IV	232.25	90.17	80.91

Category I
Communications & Journalism
Psychology
Social Sciences
Mathematics & Statistics
English Language & Literature
Philosophy & Related Studies
Security & Protective Services
History
Other

Category II
Education (not Student Teaching)
Area, Ethnic, Cultural & Gender Studies
Multi/Interdisciplinary Studies
Business Management & Marketing
Liberal Arts & Sciences, Gen. Studies, & Humanities
Parks, Recr., Leisure & Fitness
Family & Consumer & Human Sciences
Foreign Languages & Literature

Category III
Agricultural Business & Production
Agricultural Science
Natural Resources & Conservation
Architecture and Related Programs
Public Admin. & Social Service
Physical Sciences
Biological & Biomedical Sciences
Visual & Performing Arts
Allied Health
Computer & Information Sciences
Library Science
Engineering – Related Technologies
Science Technologies
Student Teaching courses

Category IV
Engineering
Nursing

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CURRENT UNC FUNDING MODEL

Enrollment Funding Model – Current State

The current funding model is based around four primary elements:

Driver	Basis for Selection	Element of the Model
Primary Factor for Cost Calculation	Calculate cost using national data (Delaware data)	12-Cell Matrix
Measure of Enrollment	Interdisciplinary nature of degree programs	Student Credit Hours (SCH)
Timing of Funding	Align timing of funding and cost	Projected Enrollment
Budget Process	Reflect incremental change nature of State budget process	Incremental Enrollment Change

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Calculating Funding Request

Part 1

Enrollment Measure × Instructional Cost Factor = Estimated Instructors × Average Faculty Salary = Instructional Costs

change in projected student credit hours (SCH)

12 Cell Matrix (Delaware data)

average of budgeted salary expense/budgeted faculty FTE

Part 2

Instructional Costs × Weight Factors for Costs Associated with Student Enrollment = Total Cost (Requirements)

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

Part 3

Enrollment Measure × Tuition Rates By Campus = Tuition Revenue (Receipts)

enrollment measure used for tuition purposes – either change in projected SCH or change in projected FTE

Part 4

Total Cost (Requirements) − Tuition Revenue (Receipts) = Appropriation

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SCH Enrollment-Change Funding Request Example

Campus: **UNC-ABC**

Program Category	Student Credit Hours			SCH per Instructional Position			Instructional Positions Required		
	UG	**Masters**	**Doctoral**	**UG**	**Masters**	**Doctoral**	**UG**	**Masters**	**Doctoral**
Category I	3,700	729	0	708.64	169.52	115.56	5.221	4.300	0.000
Category II	6,030	484	8	535.74	303.93	110.16	11.255	1.592	0.073
Category III	2,118	288	0	406.24	186.23	109.86	5.214	1.546	0.000
Category IV	0	0	0	232.25	90.17	80.91	0.000	0.000	0.000
Total	**11,848**	**1,501**	**8**				**21.690**	**7.438**	**0.073**
	Total All SCHs		13,357				Subtotal Positions		29.201

% of Total   88.7%   11.2%   0.1%

Part 1 Instructional Costs

Total Positions Required	29.201
Instructional Salary Rate of Campus	$75,500
Instructional Salary Amount	$2,204,676

Part 2 Total Costs

Other Academic Costs	44.89%	$989,679
Total Academic Requirements		$3,194,354
Library Rate	11.48%	
Library Amount		$366,712
Gen'l Instit. Support Rate	54.05%	
Gen'l Instit. Support Amount		$1,726,549

Part 3 Tuition Revenue

Calculation of Appropriation Request

Requirements Generated by SCH Model $5,287,615

Tuition Revenue:	FTE	Rate	FTE x Rate
In-State U/G FTEs	300	3,000	900,000
Out-of-State U/G FTEs	91	14,300	1,301,300
Res per G.S. 116-143.6	9	3,000	27,000
In-State Grad FTEs	56	3,400	190,400
Out-of-State Grad FTEs	18	14,500	261,000
Total FTEs	474		
Total Expected Revenue			**2,679,700**

Part 4 Appropriation

Request Amount	**$2,607,915**

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FTE Enrollment-Change Funding Model

- There are a few campuses/programs with unique and specialized enrollment that have a separate FTE-based model:
  - UNC School of the Arts
  - NC School of Science and Mathematics
  - Medicine – ECU, UNC-CH
  - Law – NCCU, UNC-CH
  - Veterinary Medicine – NCSU
  - Dentistry – ECU, UNC-CH
  - Pharmacy – UNC-CH

- The FTE-based model takes the percent change in total FTE for these programs/campuses and multiplies that percent change by total cost (requirements) for that program/campus.

Timeline for Enrollment Projections

- **Year One**
  - Enrollment memo with instructions sent to campuses (early fall)
  - Campus projects enrollment for next two years
  - Initial campus submission (mid-October)
  - Analysis and review by internal GA team
  - Iterative process evaluating total SCHs with GA personnel to arrive at BOG recommendations
  - Final submission to OSBM and FRD (due December 15)
- **Year Two**
  - Year one process repeated to arrive at adjusted projections for second year of the biennium
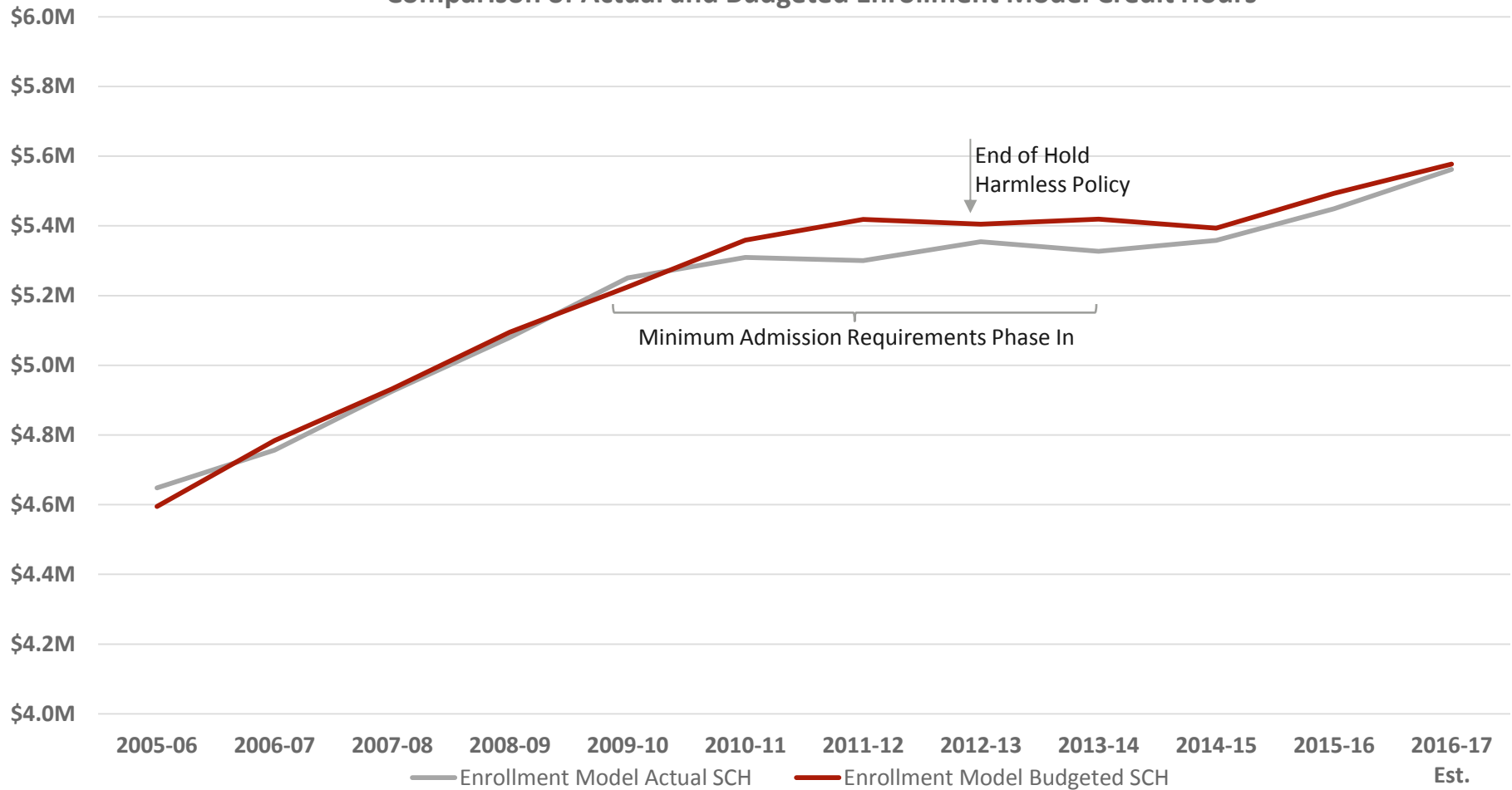
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Changes To The Funding Model Over Time

- **Summer School Funding** – Eliminated in FY 2005-06
- **Hold Harmless** – Eliminated in FY 2012-13
  - Policy that kept campuses with declining enrollment at the current budgeted level to lessen the impact of the loss of tuition dollars
- **Negative Adjustment Factor** – Eliminated in FY 2014-15
  - Factor that lowered a reduction in the General Institutional Support amount by half if enrollment was declining to account for fixed costs
- **Undergraduate Cost Factor** – Eliminated in FY 2015-16
  - Weight factors identified by the BOG to recognize performance and special circumstances that applied to undergraduate growth
  - Included service to disadvantaged students, diseconomies of scale, degree efficiency, and retention rates
- **Reconcile Projections to Actuals before Allocating Funding** – Enacted in FY 2017-19 State Budget

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Accuracy of the Model

Comparison of Actual and Budgeted Enrollment Model Credit Hours

End of Hold Harmless Policy

Minimum Admission Requirements Phase In

Enrollment Model Actual SCH — Enrollment Model Budgeted SCH

STRENGTHS & WEAKNESSES OF THE CURRENT MODEL

Strengths

- **Robust model that calculates costs at different levels**
  - Captures differences in course type – Engineering vs. English
  - Captures difference in student type – Undergraduate/Graduate and Resident/Nonresident

- **Provides incentive for access**

- **Longstanding process that has significant infrastructure**
  - Student Data Mart captures enrollment data based around 12 cells
  - Some campuses allocate funds internally based around 12 cells

- **Campuses receive funding concurrently with student enrollment**

Weaknesses

- **Complicated to explain and understand**
  - Creates difficulty for campuses when trying to accurately project
  - Creates mistrust of numbers generated
- **Metrics and factors are outdated**
  - 12 cells and weighting factors have not been updated
  - No metrics to address marginal cost rather than average cost
  - Outdated distinction between face-to-face and distance instruction
- **Limited incentives for student success, workforce needs, and other goals**
- **The model is the same for each campus type**
  - No distinction between research and baccalaureate institutions
  - Only variation is average faculty salary and tuition rate
- **Projecting enrollment is complicated and time consuming and will always contain a margin of error**

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THANK YOU

QUESTIONS?