



Program Productivity Metrics: Integrating PSEO data at a Public University System

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PSEO Showcase

Presenter Information



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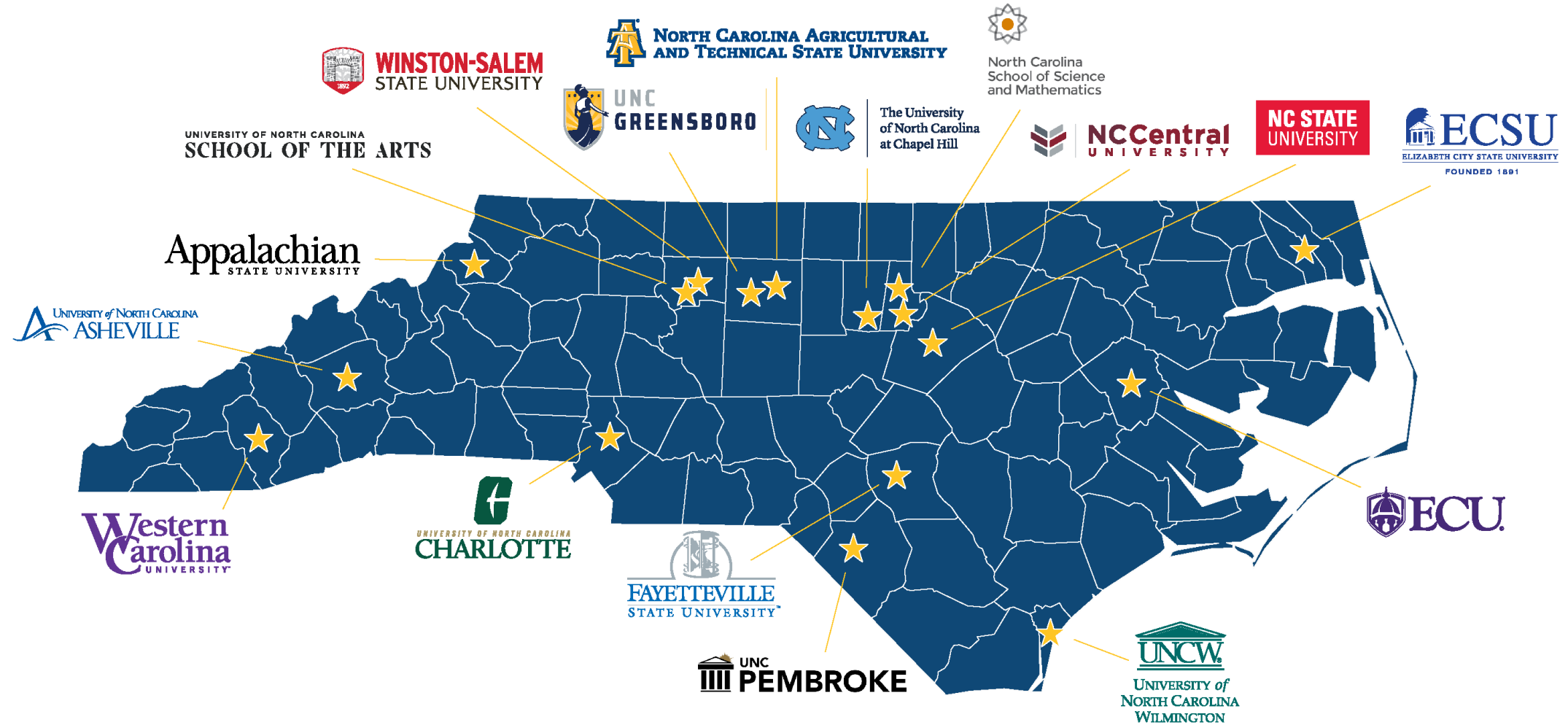


Learning Outcomes

- Grant Project Goals and Deliverables
 - Purpose of the grant
 - Research questions
 - Leveraging PSEO data
 - Major findings
- Future plans or next steps?



THE UNIVERSITY OF NORTH CAROLINA SYSTEM





PSEO Grant - Goals

- Integrating PSEO location and wage data into current new program proposal template and program productivity review metrics
 - Develop series of documents for further use
 - Provide key insights using the PSEO data
- Questions to be addressed with PSEO data:
 - Do graduates of this program earn more than people without this credential?
 - How do wage earners in NC compare to regional or national metrics?
 - Do graduates of this program stay in North Carolina? Has the percentage of graduates changed over time?
 - What is the student's return on investment?



PSEO Grant - Deliverables

- Executive Summary for Decision-Makers
- Best Practices and Limitations Guide
- Use-Case Framework for Institutions and Systems
- Applied Research Brief
- Reporting and Visualization Templates



Executive Summary

- Recommends incorporating PSEO data in current metrics and templates
- Highlights metrics of interest to UNC System leadership:
 - Employment rates for degree completers have increased over time
 - Median wages for degree completers have increased over time
 - Majority of degree completers work in-state, in-region



Best Practices and Limitations Guide

- Provides detailed notes by data fields and reporting recommendations
- Examples of notes:
 - Population Groups, Cohort groups are aggregated as all cohorts (2001-2021) or groups of 3- or 5-year cohorts (depending on degree level)
 - Multi-cohort aggregation helps mitigate small counts and smooths single-cohort anomalies
 - Not all disciplines have a large enough cohort size to have meaningful insights at the discipline level, particularly for cross-tabulated aggregation
 - Cohort groupings provide limited opportunity for trend analysis since data are already aggregated over time

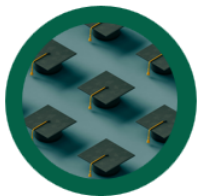
Use-Case Framework

- Academic Program Planning Metrics for System-wide Program Review
- UNC System Biennial Program Productivity Review



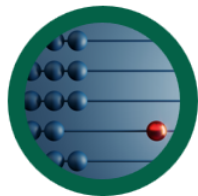
ORLANDO, FL
May 20-23, 2025
Pre-conference: May 19-20

Program Review Themes



Student-focused

Evaluation of a program
as a value to the student



Universal framework

Framework built on
transparency,
replicability, consistency



Data-driven

Data availability and
metric feasibility



Program Review Concepts

- Is there interest in or demand for this program?
- Is there a need for graduates of this program? - particularly is there a workforce need in NC?
- Do graduates of this program make more money than people without this credential?
- Do graduates of this program stay in North Carolina?
- Is it a good deal? Is it worth the time, money, and effort for a student?





Use-Case Framework

1. Start with PSEO data aggregated at the degree level and system-wide, aggregated across all cohorts and aggregated within specific cohort groups
2. Within each degree level, review data aggregated at the CIP Broad Subject Area and system-wide, aggregated across all cohorts and aggregated with specific cohort groups
3. Within each degree level, review data aggregated at the CIP Specialization Group and system-wide, aggregated across all cohorts and aggregated with specific cohort groups
4. Within CIP Broad Subject Areas of interest, review data aggregated at the CIP Specialization Group and system-wide, aggregated across all cohorts and aggregated with specific cohort groups
5. PSEO data aggregated at the degree level and institution, aggregated across all cohorts and aggregated within specific cohort groups
6. Within each degree level, review data aggregated at the CIP Broad Subject Area and institution, aggregated across all cohorts and aggregated with specific cohort groups
7. Within each degree level and institution, review data aggregated at the CIP Broad Subject Area and institution, aggregated across all cohorts and aggregated with specific cohort groups



Use-Case Framework

1. Start with PSEO data aggregated at the degree level and system-wide, aggregated across all cohorts and aggregated within specific cohort groups. (PSEO Aggregation Level = 26/32)
 - a. Provides summary data for all students that reflects the mix of programs across the system.
 - b. Provides a benchmark for assessing individual programs.
 - c. Provides a benchmark aggregated over time to compare against the most recent cohort.
 - d. Provides a benchmark for comparing trends over time.



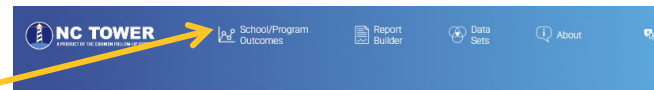
Use-Case Framework

1. Employment Rate at 1-year post-completion
2. Employment Rate at 5-year post-completion
3. Employment Rate at 10-year post-completion
4. Trends of Employment Rate
5. Earnings at 1-year post-completion
6. Earnings at 5-year post-completion
7. Earnings at 10-year post-completion
8. Trends of Earnings
9. Geographic location at 1-year post-completion
10. Geographic location at 5-year post-completion
11. Geographic location at 10-year post-completion
12. Trends of Geographic location
13. Trends among Institution/Degree Level/CIP Broad Subject Area/CIP Specialization Group
14. Return on Investment (ROI) – student-focused calculation

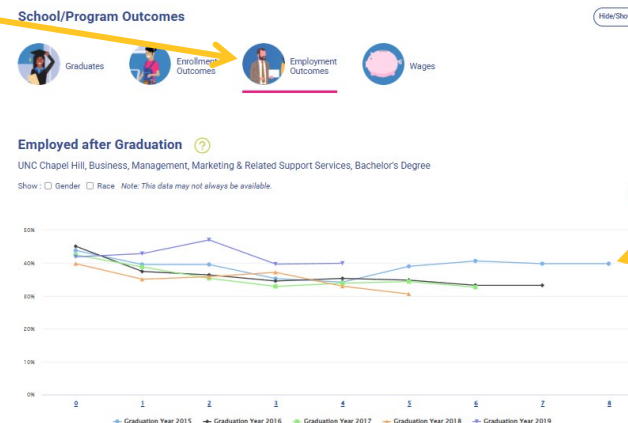
Use-Case Framework

1. Employment Rate (wage earners as a percentage of completers) at 1-year post-completion
 - a. What is the rate [nationally]?
 - b. How does this rate compare to the rate within North Carolina? (use data available via NC Department of Commerce)
 - c. What in-group comparisons are notable?
 - d. How does this rate compare to percentage of completers enrolled in additional credential programs? (use data available via National Student Clearinghouse)

School/Program Outcomes tool



Employment Outcomes data



Downloadable table format

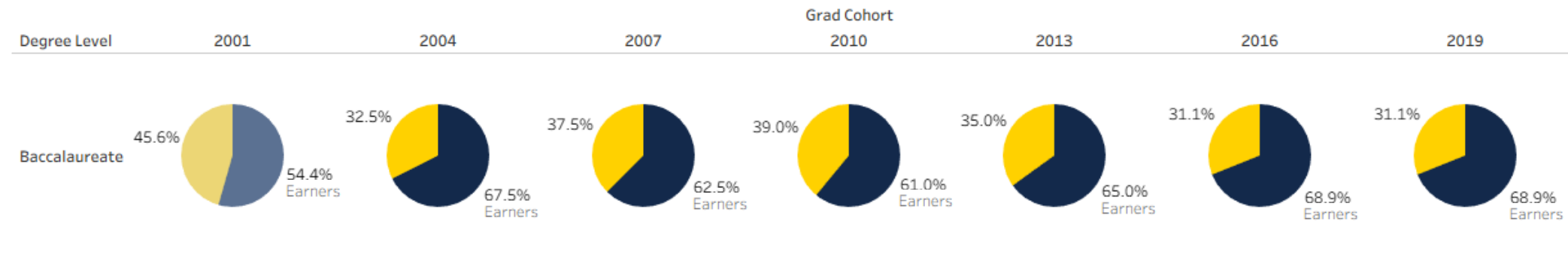
Outcomes by Cohort Year

Outcomes by Years Post-Completion

Applied Research Brief

- Key Findings:
 - 20% more degree completers over the last 20 years
 - Employment rate increased over time
 - Baccalaureate completers ~65% at 1-year post-completion
 - Doctoral-professional practice completers ~80% at 1-year post-completion
 - Lowest by discipline: Philosophy and Religious Studies, History
 - Highest by discipline: Computer and Info Sciences, Education, Engineering

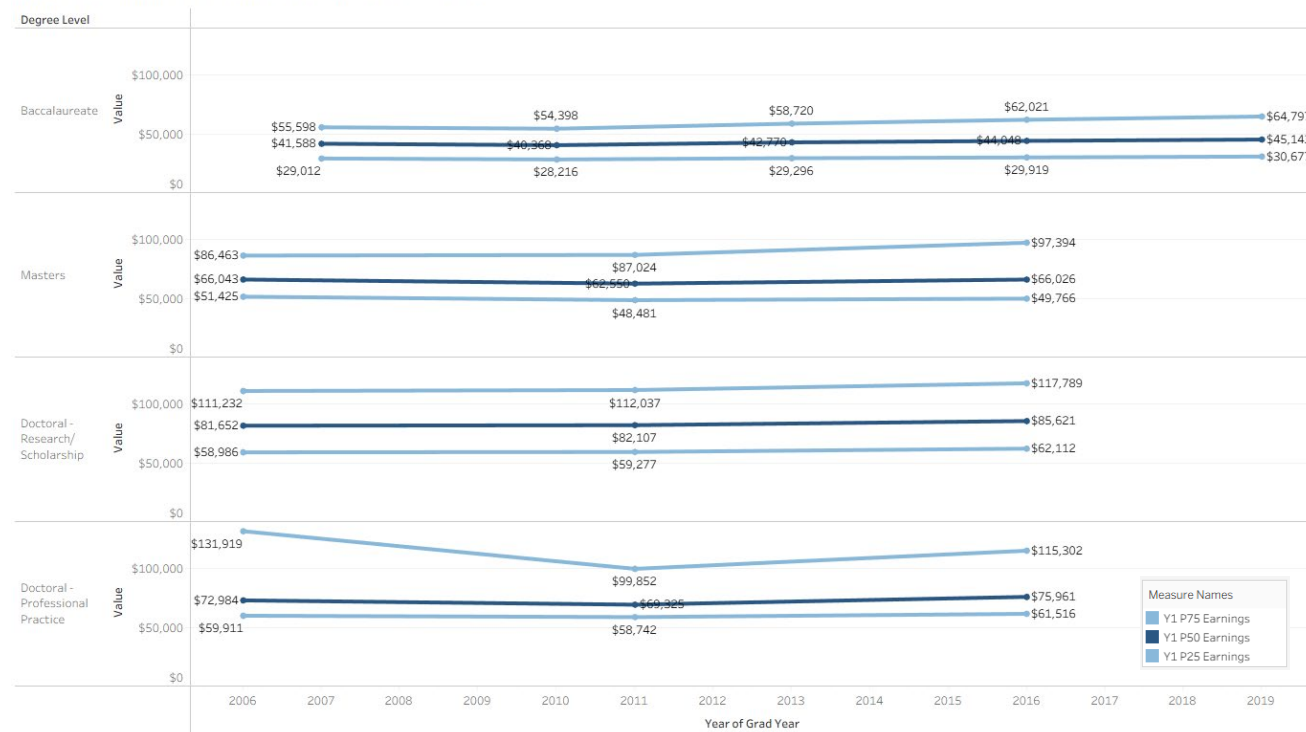
Completers Percentage in the Workforce by Cohort Group - Year 1



Applied Research Brief

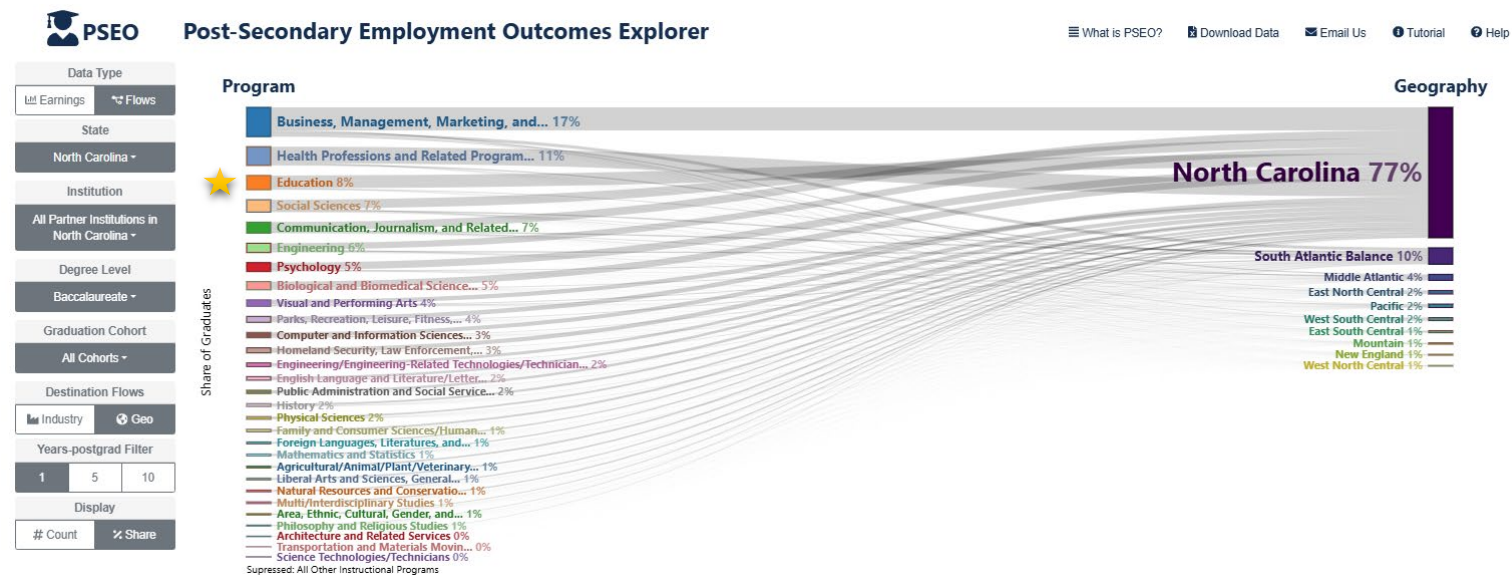
- Key Findings:
 - Median wages increased over time
 - Higher credential completers earned more than lower credential completers
 - \$45k for baccalaureate
 - \$62k for masters
 - \$86k for doctoral-res.
 - \$76k for doctoral-prof.

Range of Earnings by Cohort by Degree Level - Year 1



Applied Research Brief

- Key Findings:
 - Majority of wage earning completers work in South Atlantic Division, majority of those work in NC
 - Baccalaureate completers above 80%
 - Doctoral-research/scholarship ~60%





Next Steps

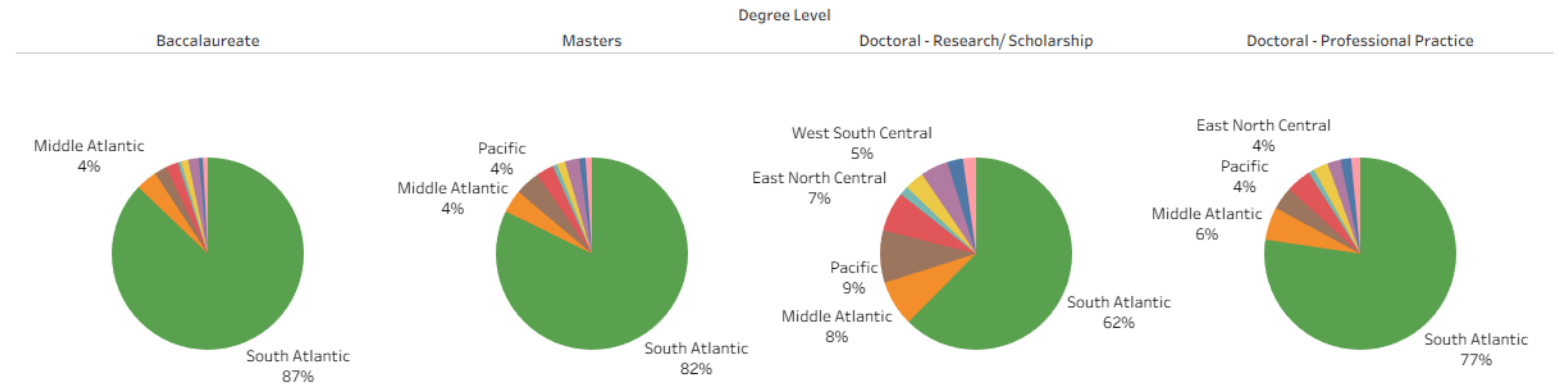
- Knowledge sharing
- Data Visualizations
- ROI calculations
- Academic Program Planning Template



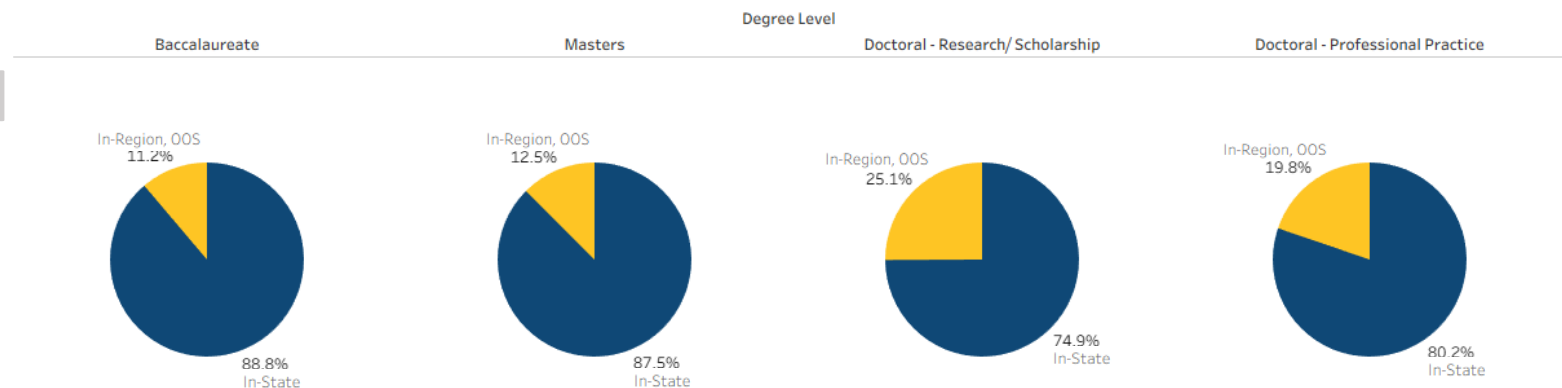
Next Steps

- Knowledge sharing
- Data Visualizations
- ROI calculations
- Academic Program PI

All Degree Completion Earners by Geographic Division - Year 1



In-State within South Atlantic Division - Year 1





Next Steps

- Knowledge sharing

- Data Visualizations

- ROI calculations

ROI = Median Wages : Cumulative Net Cost

- Net Cost = (Tuition + Fees) – (Grants, Scholarships, Tuition Remission, etc.)
- Median Wages = Completers NC wage data

- Academic Program Planning Template

Next Steps

- Knowledge sharing
- Data Visualizations
- ROI calculations
- Academic Program Planning Template



New Academic Degree Program Request for Planning Authorization

VII. Student Return-on-Investment (ROI) Analysis

Prepare and discuss ROI per the parameters defined below. *Maximum 500 words.*

a. Cost

- Provide the projected total [tuition and fees](#) for the program based on the anticipated time to degree.
 - Undergraduate
 - The program's tuition and fees, multiplied by the institution's average undergraduate time to degree.
 - Institutions may deviate from the average time to degree if a justification is included in the application materials.
 - Graduate
 - The institution's total projected cost for the program, based on approved tuition and fees, multiplied by a reasonable estimate of the time required for a student to complete the program.

b. Projected earnings are at the five-year post-completion mark.

- What is the range of earnings at the five-year mark for graduates of similar programs within the UNC System? Data must be collected from [NC Tower](#) and, when available, [Post-Secondary Educational Outcomes](#) (PSEO) for UNC System comparisons.
- What is the range of earnings at the five-year mark for graduates of similar programs at institutions on the institution's [peer list](#)? Data must be collected from [North Carolina Star Jobs](#) and, when available, PSEO for peer institutions comparisons.

QUESTIONS?

THANK YOU!