

# UNC System ROI Study: North Carolina Agricultural and Technical State University Summary

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- **IMPORTANT:** Groupings are not aligned by NC A&T departments, colleges, or schools but instead by CIP Code
  - > 13 Education - includes programs from the College of Education and the College of Agriculture and Environmental Sciences
  - > 14 Engineering - includes programs from the College of Engineering, College of Agricultural and Environmental Sciences, and Joint School of Nanoscience and Nanoengineering
- State ROI Dashboard includes both graduate and undergraduate programs versus Student ROI Dashboard disaggregates graduate and undergraduate program
  - > On the State ROI Dashboard Mathematics and Statistics has a negative ROI for 2019-20
  - > On the Student ROI Dashboard Mathematics and Statistics has positive ROI for those completing an undergraduate degree and no information available for graduate students (most likely due to small n)
- Salary information comes from workforce data from the NC Department of Commerce (NC Tower data) and does not include out-of-State earnings, self-employed earnings, and federal government wages.
- Return on investment conversations often focuses education as a private good and the public good aspect of it is forgotten. The burden of the public good (i.e., for those who want to study in the Visual and Performing Arts) should not always be placed on the individual.

“The System and its institutions might use this data to identify “bright spots” across programs – instances where a program at one institution offers a high return on investment when compared to its sister program at another institution. This would prompt a deeper examination of the context of the two data points:

- Are the two programs offering different aid packages to students (thus lowering the investment for one group)?
- Are career placement or industry partnership different among the two institutions, (thus offering different earning opportunities to students)?
- Do students from the two institutions come from different socio-economic backgrounds (thus bringing different external supports, or perhaps starting from a different economic mobility tier)?
- Do more students than average (across the System) leave the state to pursue careers (thus narrowing the dataset and perhaps missing the full picture of ROI)?

This dataset will offer the opportunity for institutions and the System to identify the programs and institutions where deeper examination may offer insight into changes that could benefit students and the state (Deloitte, 2023, p. 4)



- NC A&T has a positive incremental lifetime earnings (LTE) per incremental state dollar in 2020-21 (\$12.36).
- In 2020-21, for all institution in the UNC System the LTE per incremental state dollar is \$23.07.
- 5 disciplines at NC A&T have a greater than \$20 LTE per incremental state dollar.
  - > Multi/Interdisciplinary Studies (\$84.60)
  - > Education (\$79.95)
  - > Health Professions and Related Programs (\$32.89)
  - > Engineering/Engineering Related Technologies/Technicians (\$22.02)
  - > Public Administration and Social Service Professions (\$20.97)
- 4 disciplines at NC A&T have a less than \$5 LTE per incremental state dollar
  - > Mathematics and Statistics (-\$10.95)
  - > Natural Resources and Conservation (-\$4.47)
  - > Visual and Performing Arts (\$0.99)
  - > Social Sciences (\$1.90)
- NC A&T receives 3.4% of the total UNC System State Appropriations and 4.4% of the total UNC graduates (only UNC at Charlotte, UNC Wilmington, Appalachian State University, and UNC Greensboro has a larger gap) for 2020-21
- In 2019-20, 4 institutions (Elizabeth City State University, Fayetteville State University, Winston-Salem State University, and North Carolina Central University) served a higher percentage of students who were in the income bands below \$51,800 than NC A&T (55%).



Institution	Median Incremental Lifetime Earnings to the Students	Median Incremental Cost per Graduate to the State	Incremental LTE per Incremental State Dollar
UNC School of the Arts	\$ (324,332.00)	\$ 47,001.00	\$ (6.90)
UNC at Asheville	\$ 300,703.00	\$ 36,028.00	\$ 8.35
Elizabeth City State University	\$ 369,881.00	\$ 34,763.00	\$ 10.64
<b>North Carolina A&amp;T State University</b>	<b>\$ 485,340.00</b>	<b>\$ 39,261.00</b>	<b>\$ 12.36</b>
North Carolina Central University	\$ 509,616.00	\$ 27,919.00	\$ 18.25
Appalachian State University	\$ 667,620.00	\$ 34,338.00	\$ 19.44
UNC at Greensboro	\$ 607,707.00	\$ 30,121.00	\$ 20.18
Western Carolina University	\$ 609,323.00	\$ 27,532.00	\$ 22.13
Fayetteville State University	\$ 448,380.00	\$ 19,530.00	\$ 22.96
<b>All UNC System Institutions</b>	<b>\$ 809,616.00</b>	<b>\$ 35,088.00</b>	<b>\$ 23.07</b>
Winston -Salem State University	\$ 767,097.00	\$ 32,464.00	\$ 23.63
North Carolina State University	\$ 1,109,322.00	\$ 45,639.00	\$ 24.31
East Carolina University	\$ 884,891.00	\$ 35,849.00	\$ 24.68
UNC at Chapel Hill	\$ 1,083,005.00	\$ 42,185.00	\$ 25.67
UNC at Pembroke	\$ 589,553.00	\$ 20,931.00	\$ 28.17
UNC at Charlotte	\$ 847,440.00	\$ 30,033.00	\$ 28.22
UNC Wilmington	\$ 837,216.00	\$ 26,724.00	\$ 31.11



- **Incremental Lifetime Earnings (LTE) to the Student:** This metric outlines the incremental increase in lifetime earnings for the student due to the successful completion of the selected degree program.
- **Incremental Cost per Graduate to the State:** State cost per graduate is calculated utilizing Incremental State Appropriation per SCH amounts multiplied by the number of institutional credits completed for degree recipients. These rates are applied to 66% of an Undergraduate's credits at the rate aligned to their field of study and 33% to the weighted average rate across all fields of study, weighted by the credit distribution for the institution by field of study) to simulate general education course consumption. Graduate students are assessed with 100% of their credits aligned to their field of study.
- **Incremental LTE per Incremental State Dollar:** As a measure of return on the state investment, student incremental lifetime earnings are divided by the incremental state appropriation. This illustrates the expected increase in student lifetime earnings per dollar invested by the state. This additional spending power might equate to additional tax, welfare, and other gains for the state

*Questions?*