



NC DEPARTMENT
of COMMERCE
LABOR & ECONOMIC
ANALYSIS

LMI TUESDAYS!

Session 2022-17: Back to School: Education Statistics

September 6, 2022

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LEAD TEAMS

County Tier Designations,
ED Grant Report, County
Annual Wages (JDIG),
Star Jobs, NCcareers.org,
LMI Tools & Publications

Economic &
Policy
Analysis

Big Data Analysis,
Program Evaluation,
Analytic Dashboards,
Longitudinal Data System
(Common Follow-up System,
NCTOWER)

Data
Analytics &
Research

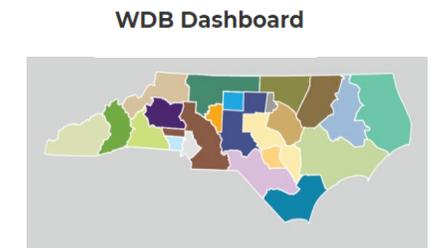
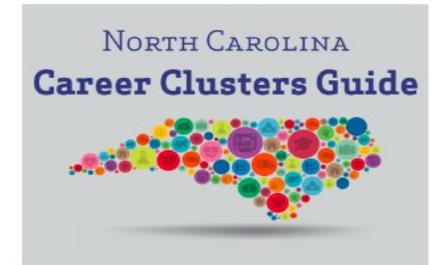
Data Collection & Production:
Monthly Unemployment Rates,
Industry Employment & Wages,

Employment
Statistics &
Analysis

Occupational Employment
& Wages,
Employment Projections



SAMPLE LIST OF PRODUCTS AND TOOLS



Session Today: Two Pieces

- Getting Information on Education Employment
- The Impact of Increased Job Openings on Community Colleges

Education Industry: Classification

- Industry Lookup: D4 (<https://d4.nccommerce.com/QCEWSelection.aspx>)

Select Geography:

[Reset All Geographies](#)
[Select All Geographies](#)

North Carolina

County

Workforce Development Area (WDB)

Metropolitan Statistical Area (2013 Def)

Prosperity Zones

Quarterly Census of Employment and Wages (QCEW) ?

Data by Industry Industry by Size Groups

NAICS Level:

Total (000000)

Supersector or Domain

Sector (2 digit)

Subsector (3 digit)

Industry Group (4 digit)

Industry (5 digit)

Industry (6 digit)

Industry:

562998 - Miscellaneous Waste Management S

61 - Educational Services

611 - Educational Services

6111 - Elementary and Secondary Schools

611110 - Elementary and Secondary Schools

6112 - Junior Colleges

Ownership:

Aggregate of all types

Private

Local Government

State Government

Federal Government

Year:

2021

2020

2019

2018

2017

Period:

Annual

Quarter 1

Quarter 2

Quarter 3

Quarter 4

Data:

Establishments

Average Employment

Month 1 Employment

Month 2 Employment

Month 3 Employment

Education Industry: Classification

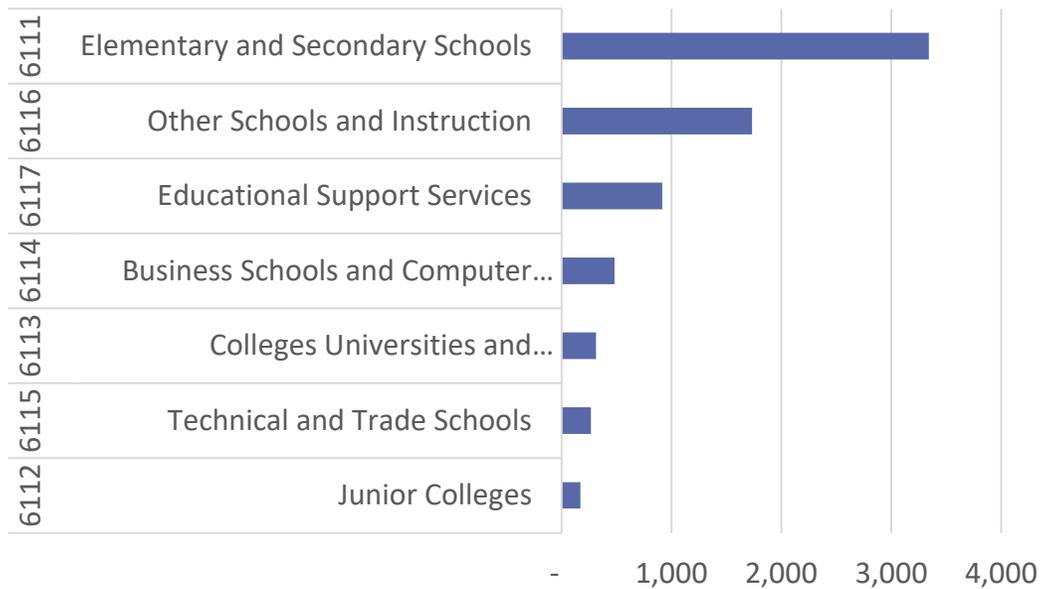
- Industry Lookup: D4
- NAICS 61: Educational Services
- NAICS 611: Educational Services
- NAICS 6111: Elementary and Secondary Schools
- NAICS 6112: Junior Colleges
- NAICS 6113: Colleges and Universities
- NAICS 6114: Business, Computer & Management Training
- NAICS 6115: Technical and Trade Schools
- NAICS 6116: Other Schools and Instruction
- NAICS 6117: Educational Support Services

Education Industry: Classification

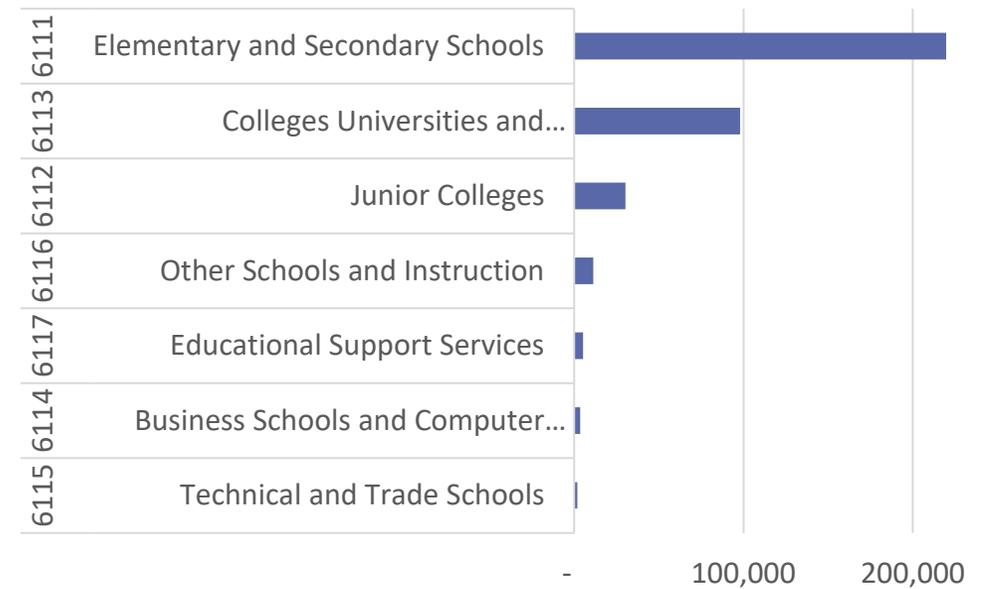
- Industry Lookup: D4 (more detail)
- NAICS 6114: Business, Computer & Management Training
 - 611410 Business and Secretarial Schools
 - 611420 Computer Training
 - 611430 Management Training
- NAICS 6115: Technical and Trade Schools
 - 611511 Cosmetology and Barber Schools
 - 611512 Flight Training
 - 611513 Apprenticeship Training
 - 611519 Other Technical and Trade Schools
- NAICS 6116: Other Schools and Instruction
 - 611610 Fine Arts Schools
 - 611620 Sports and Recreation Instruction
 - 611630 Language Schools
 - 611691 Exam Preparation and Tutoring
 - 611692 Automobile Driving Schools
 - 611699 Miscellaneous Schools and Instruction

Education Industry: Classification

Establishments



Employment



Education Industry: Ownership

- Public v. Private



Data available at: <https://d4.nccommerce.com/QCEWSelection.aspx>

Types of Occupations: Staffing Pattern

- https://tools.nccareers.org/staffingpatterns/staffing_patterns.html

The screenshot shows a web browser displaying the 'NC Staffing Patterns' website. The page is titled 'NC Staffing Patterns' and has navigation options 'By Industry' and 'By Occupation'. The current view is 'Staffing Patterns by 3-digit NAICS: 611 Educational Services'. There are buttons for 'Search' and 'Start Over'. Below the navigation are buttons for 'Excel' and 'CSV'. The main content is a table with the following columns: SOC, Occupation Title, Employment, Percent of Industry Employment, Median Annual Wage, and Mean Annual Wage. The table lists various occupations within the educational services sector, including Total Industry Employment, Elementary School Teachers, Teacher Assistants, Substitute Teachers, Middle School Teachers, Bus Drivers, Janitors and Cleaners, Secretaries and Administrative Assistants, Health Specialties Teachers, Combined Food Preparation and Serving Workers, Education, Training, and Library Workers, and Education Administrators.

| SOC | Occupation Title | Employment | Percent of Industry Employment | Median Annual Wage | Mean Annual Wage |
|----------------|---|----------------|--------------------------------|--------------------|------------------|
| 00-0000 | Total Industry Employment | 381,773 | 100.0% | \$43,250 | \$49,800 |
| 25-2021 | Elementary School Teachers, Except Special Education | 38,125 | 10.0% | \$45,870 | \$46,500 |
| 25-9041 | Teacher Assistants | 24,271 | 6.4% | \$23,530 | \$24,220 |
| 25-3098 | Substitute Teachers | 19,749 | 5.2% | \$23,070 | \$23,720 |
| 25-2022 | Middle School Teachers, Except Special and Career/Technical Education | 17,416 | 4.6% | \$46,290 | \$47,050 |
| 53-3022 | Bus Drivers, School or Special Client | 12,652 | 3.3% | \$27,830 | \$27,540 |
| 37-2011 | Janitors and Cleaners, Except Maids and Housekeeping Cleaners | 11,558 | 3.0% | \$26,400 | \$26,220 |
| 43-6014 | Secretaries and Administrative Assistants, Except Legal, Medical, and Executive | 10,126 | 2.6% | \$37,180 | \$37,300 |
| 25-1071 | Health Specialties Teachers, Postsecondary | 9,958 | 2.6% | \$105,800 | \$134,610 |
| 35-3021 | Combined Food Preparation and Serving Workers, Including Fast Food | 9,675 | 2.5% | \$22,980 | \$23,260 |
| 25-9099 | Education, Training, and Library Workers, All Other | 8,662 | 2.3% | \$54,370 | \$59,610 |
| 11-9032 | Education Administrators, Elementary and Secondary School | 7,765 | 2.0% | \$68,010 | \$71,660 |

Latest Occupation Data: D4

- <https://d4.nccommerce.com/OESSelection.aspx>

The screenshot shows the 'Demand Driven Data Delivery' (D4) website interface. The header includes the logo '4 DEMAND DRIVEN DATA DELIVERY' and navigation links for 'Data', 'Other tools', and 'Resources'. The main content area is titled 'Occupational Employment and Wages in North Carolina (OEWS)'. On the left, there is a 'Select Geography:' panel with options for 'North Carolina' (selected), 'Balance of State', and 'Metropolitan Statistical Area (2013 Def)'. Below this are three dropdown menus: 'Occupation:' (showing '00-0000 - Total All occupations'), 'Industry:' (showing '000000-Cross-industry, private, federal, state, & local government'), and 'Data:' (showing 'Employment'). At the bottom of the interface are four icons: a grid, a document with an 'X', a download arrow, and a red 'X'.

Latest Occupation Data: D4 (by Industry)

- <https://d4.nccommerce.com/OESSelection.aspx>

Select Geography:

[Reset All Geographies](#)
[Select All Geographies](#)

North Carolina
 Balance of State
 Metropolitan Statistical Area (2013 Def)

Occupational Employment and Wages in North Carolina (OEWS) ?

Occupation:

- 37-0000 - Building & Grounds Cleaning & Maintenance Occup.
- 39-0000 - Personal Care and Service Occupations
- 41-0000 - Sales and Related Occupations
- 43-0000 - Office and Administrative Support Occupations
- 45-0000 - Farming, Fishing, and Forestry Occupations
- 47-0000 - Construction and Extraction Occupations
- 49-0000 - Installation, Maintenance, and Repair Occupations
- 51-0000 - Production Occupations
- 53-0000 - Transportation and Material Moving Occupations

Industry:

- 56173 -Landscaping Services
- 5619 -Other Support Services
- 562 -Waste Management and Remediation Service
- 5621 -Waste Collection
- 5622 -Waste Treatment and Disposal
- 5629 -Remediation and Other Waste Services
- 61 -Educational Services
- 611 -Educational Services

Data:

- Employment
- Employment Relative Standard Error
- Response Rate(%)
- Hourly wage; mean
- Annual wage; mean
- Wage Relative Standard Error
- Hourly wage; 10th percentile
- Hourly wage; 25th percentile
- Hourly wage; median
- Hourly wage; 75th percentile
- Hourly wage; 90th percentile



| Area Name | Occupational Code | Occupation | NAICS Code | Industry | Year | Employment | Employment Relative Standard Error | Response Rate(%) | Hourly wage; mean | Annual wage; mean | Wage Relative Standard Error | Hourly wage; 10th percentile | Hourly wage; 25th percentile | Hourly wage; median | Hourly wage; 75th percentile | Hourly wage; 90th percentile |
|----------------|-------------------|--|------------|----------------------|------|------------|------------------------------------|------------------|-------------------|-------------------|------------------------------|------------------------------|------------------------------|---------------------|------------------------------|------------------------------|
| North Carolina | 00-0000 | Total, All Occupations | 61 | Educational Services | 2021 | 375,560 | 0.0 | 15.0 | \$25.92 | \$53,910.00 | 0.3 | \$11.53 | \$15.19 | \$23.05 | \$29.54 | |
| North Carolina | 25-0000 | Educational Instruction and Library Occupations | 61 | Educational Services | 2021 | 229,650 | 0.5 | 16.0 | \$26.49 | \$55,100.00 | 0.5 | \$11.47 | \$17.94 | \$23.22 | \$29.51 | |
| North Carolina | 25-2021 | Elementary School Teachers, Except Special Education | 61 | Educational Services | 2021 | 40,220 | 4.8 | 11.0 | * | \$50,540.00 | 0.7 | * | * | * | * | |

Latest Occupation Data: D4 (by Industry Continued)

- <https://d4.nccommerce.com/OESSelection.aspx>

| Area Name | Occupational Code | Occupation | NAICS Code | Industry | Year | Employment | Employment Relative Standard Error | Response Rate(%) | Hourly wage; mean | Annual wage; mean | Wage Relative Standard Error | Hourly wage; 10th percentile | Hourly wage; 25th percentile | Hourly wage; median | Hourly wage; 75th percentile |
|----------------|-------------------|--|------------|----------------------|------|------------|------------------------------------|------------------|-------------------|-------------------|------------------------------|------------------------------|------------------------------|---------------------|------------------------------|
| North Carolina | 43-0000 | Administrative Support Occupations | 61 | Educational Services | 2021 | 30,030 | 1.5 | 17.0 | \$18.74 | \$38,970.00 | 0.3 | \$11.70 | \$14.32 | \$18.05 | \$22.58 |
| North Carolina | 25-2031 | Secondary School Teachers, Except Special and Career/Technical Education | 61 | Educational Services | 2021 | 26,080 | 5.4 | 9.0 | * | \$52,280.00 | 1.0 | * | * | * | * |
| North Carolina | 25-9045 | Teaching Assistants, Except Postsecondary | 61 | Educational Services | 2021 | 22,950 | 2.7 | 15.0 | * | \$25,640.00 | 0.7 | * | * | * | * |
| North Carolina | 25-2022 | Middle School Teachers, Except Special and Career/Technical Education | 61 | Educational Services | 2021 | 20,060 | 10.5 | 7.0 | * | \$50,650.00 | 1.3 | * | * | * | * |
| North Carolina | 11-0000 | Management Occupations | 61 | Educational Services | 2021 | 19,580 | 1.7 | 19.0 | \$45.72 | \$95,100.00 | 0.5 | \$28.00 | \$29.86 | \$37.39 | \$48.92 |
| North Carolina | 25-3031 | Substitute Teachers, Short-Term | 61 | Educational Services | 2021 | 13,420 | 12.1 | 12.0 | \$12.54 | \$26,090.00 | 0.7 | \$10.65 | \$10.94 | \$11.61 | \$13.90 |
| North Carolina | 37-0000 | Building and Grounds Cleaning and Maintenance Occupations | 61 | Educational Services | 2021 | 13,420 | 1.7 | 18.0 | \$14.46 | \$30,080.00 | 0.5 | \$10.86 | \$11.75 | \$14.26 | \$14.80 |

Transition Takeaway

- Getting data is good
- Analyzing data is better
- The Impact of Increased Job Openings on Community Colleges

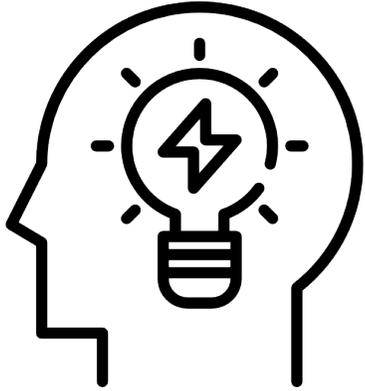
The Impact of Increased Job Openings on Community Colleges

Neil Harrington

Strategic Data Analyst

LEAD

Outline



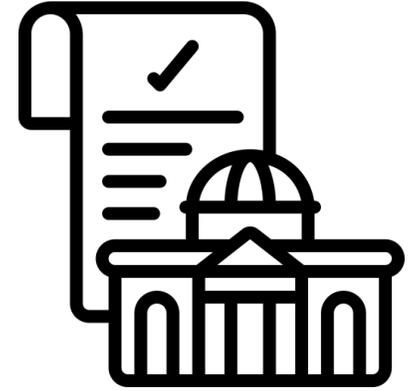
Motivation



NC Labor Market
Trends

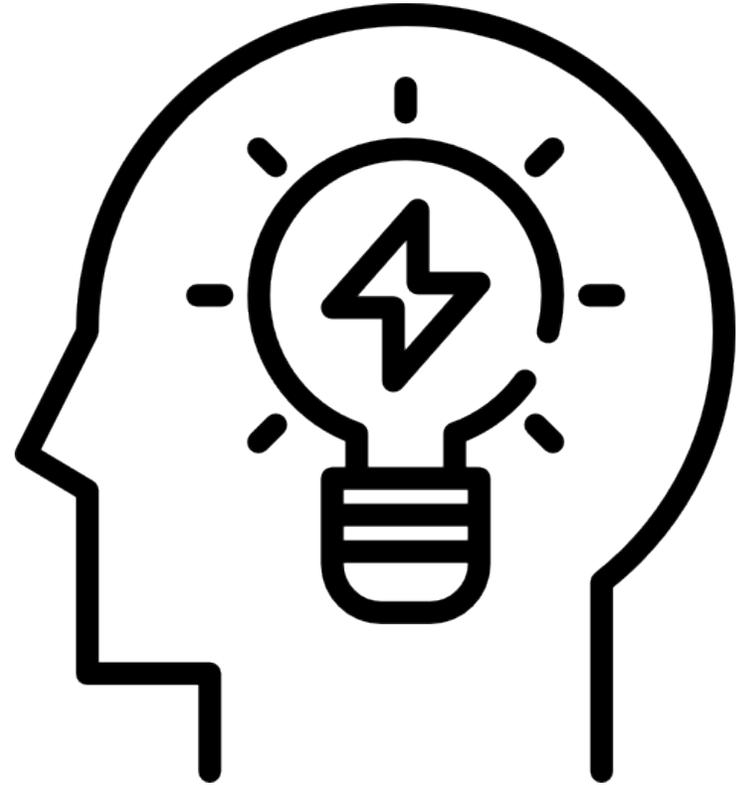


NCCCS Enrollment
Trends



Policy
Implications

Motivation



Community College Enrollment and Labor Market Strength

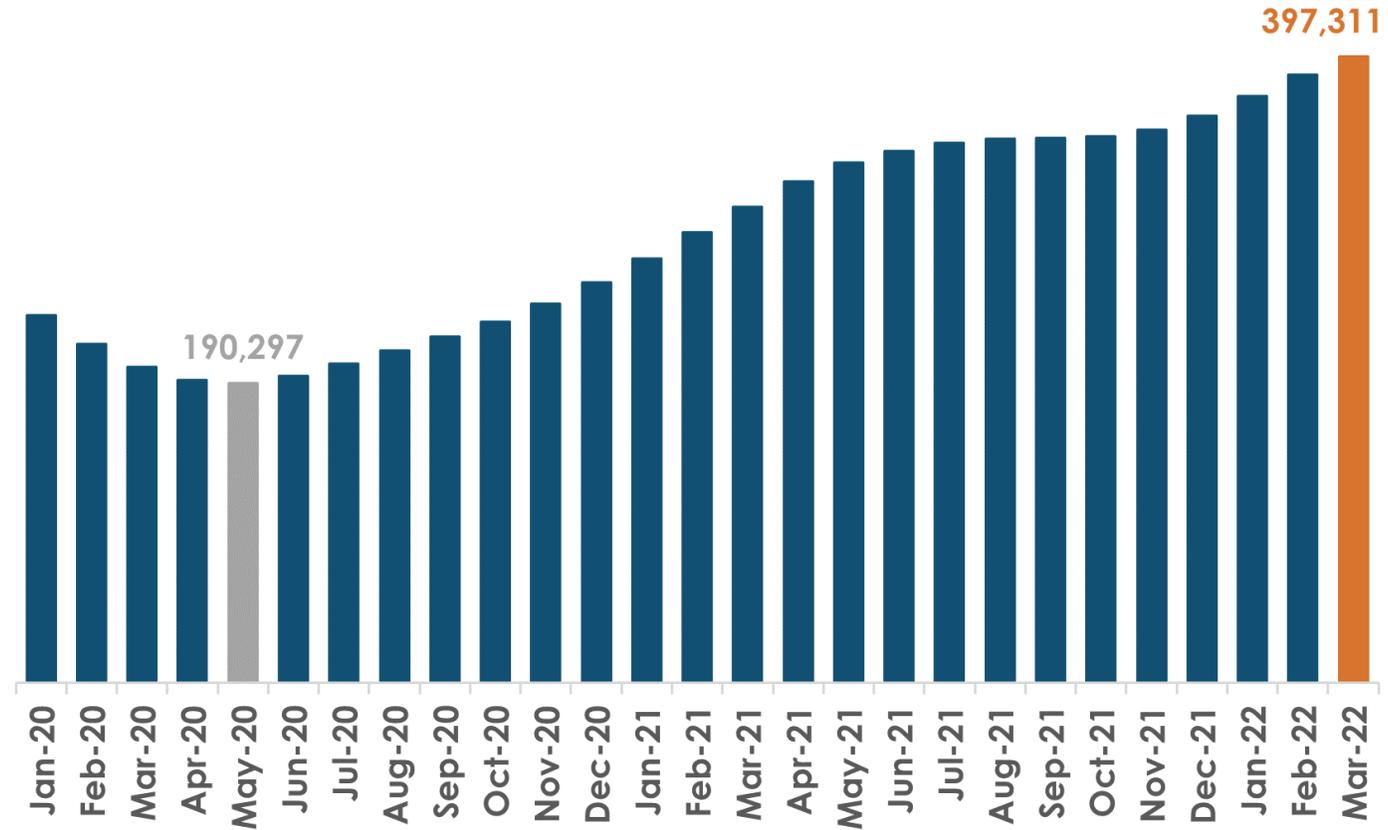
- What happens to enrollment at higher education institutions when labor markets are tight?
- Countercyclical relationship between enrollment and labor market strength
- Focus on **community colleges**



North Carolina Labor Market Trends

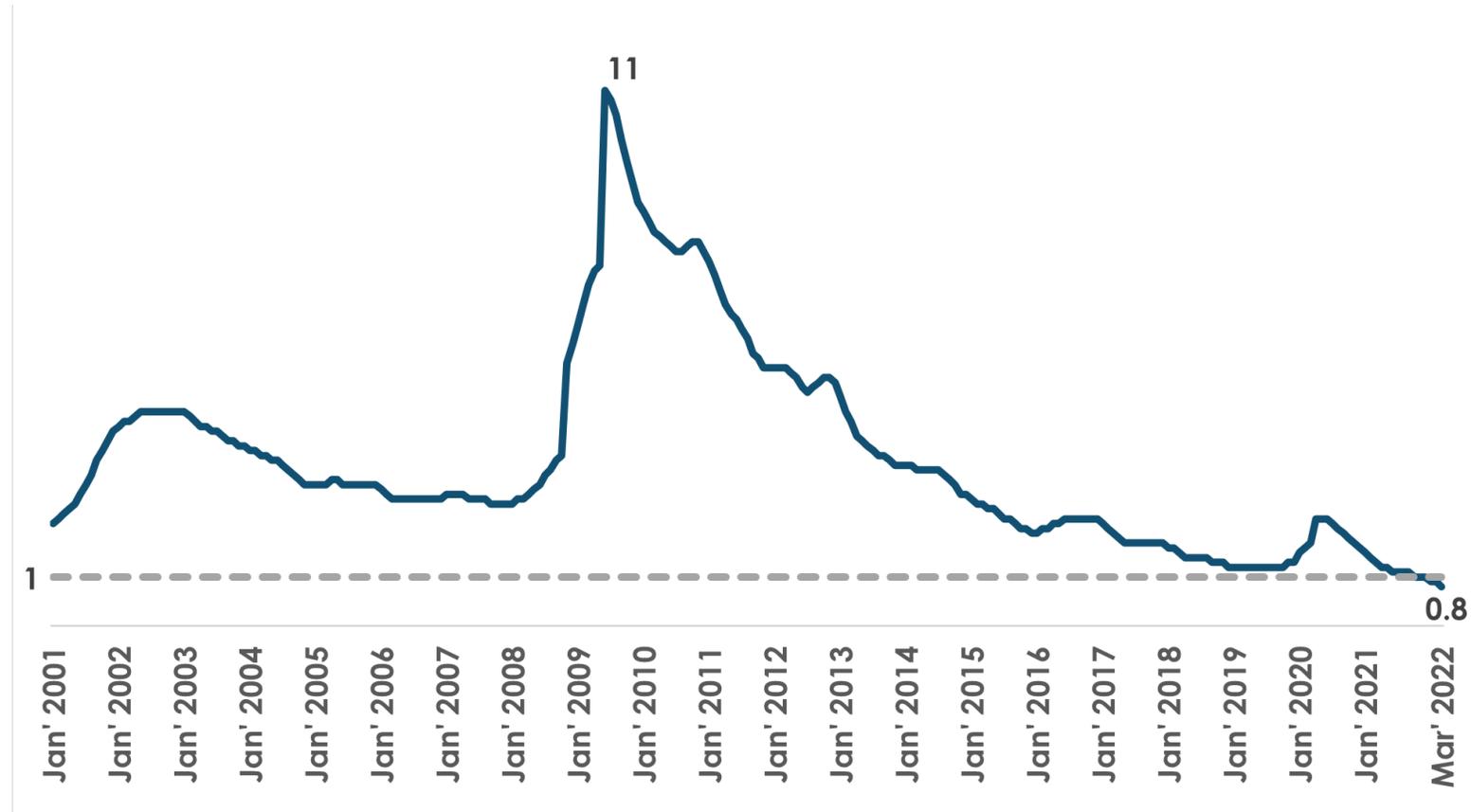
North Carolina's Strong Labor Market

Job openings in **March 2022** more than double the pandemic low point



North Carolina's Strong Labor Market

Job seekers per job opening in North Carolina at lowest point in 20 years

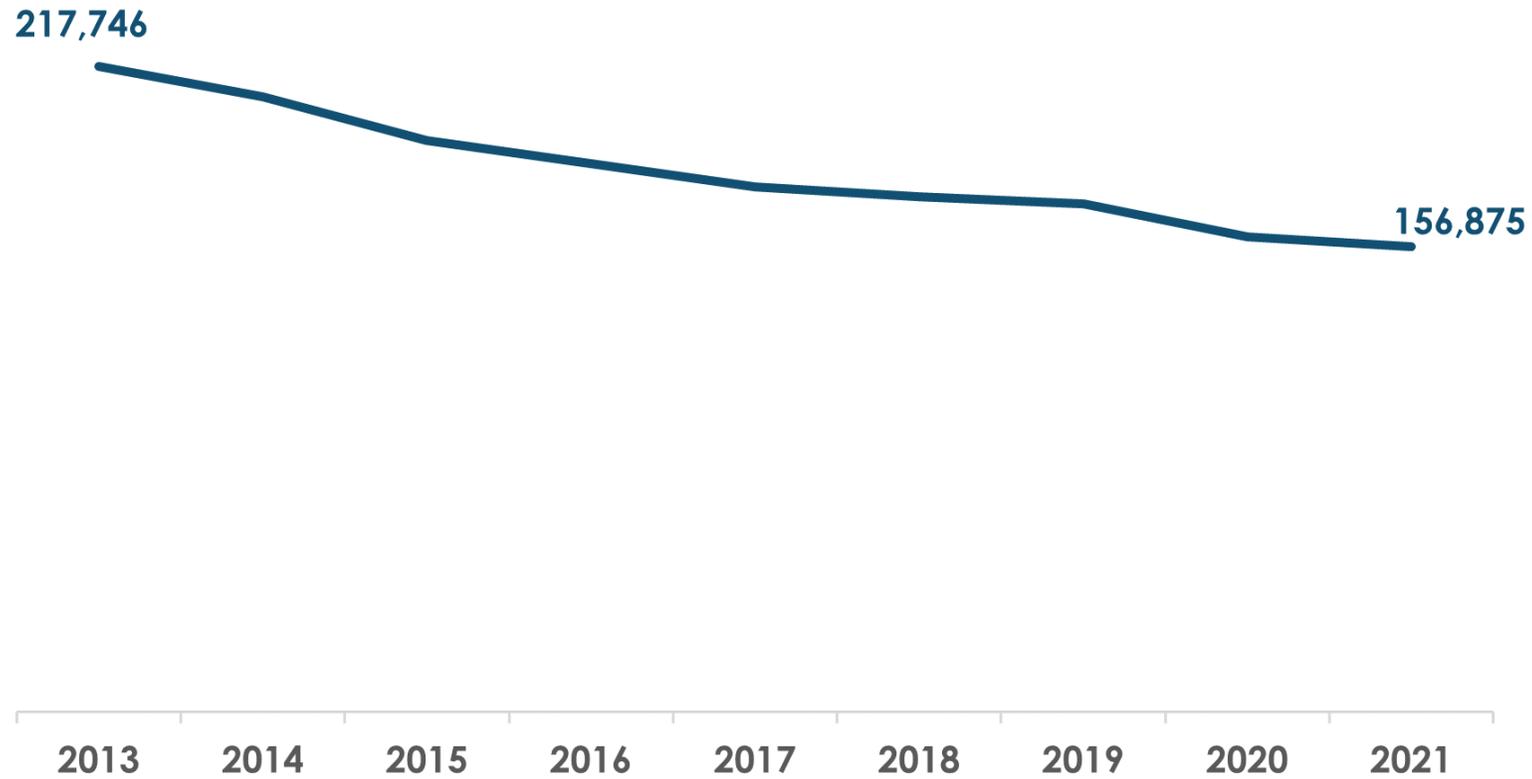


North Carolina Community College Enrollment Trends



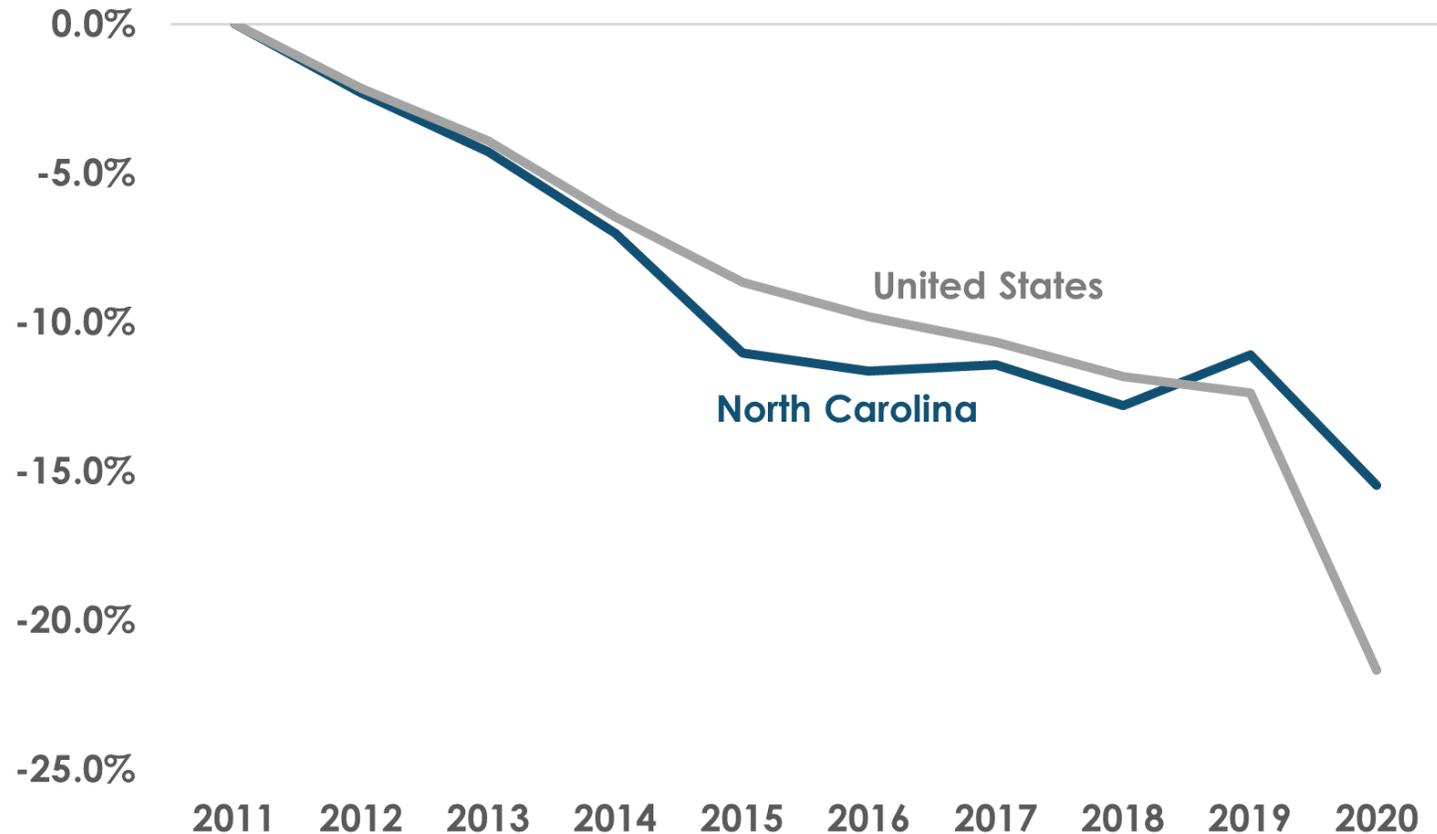
Community College Enrollment

Steady decreases in curriculum programs enrollment among not dually enrolled students



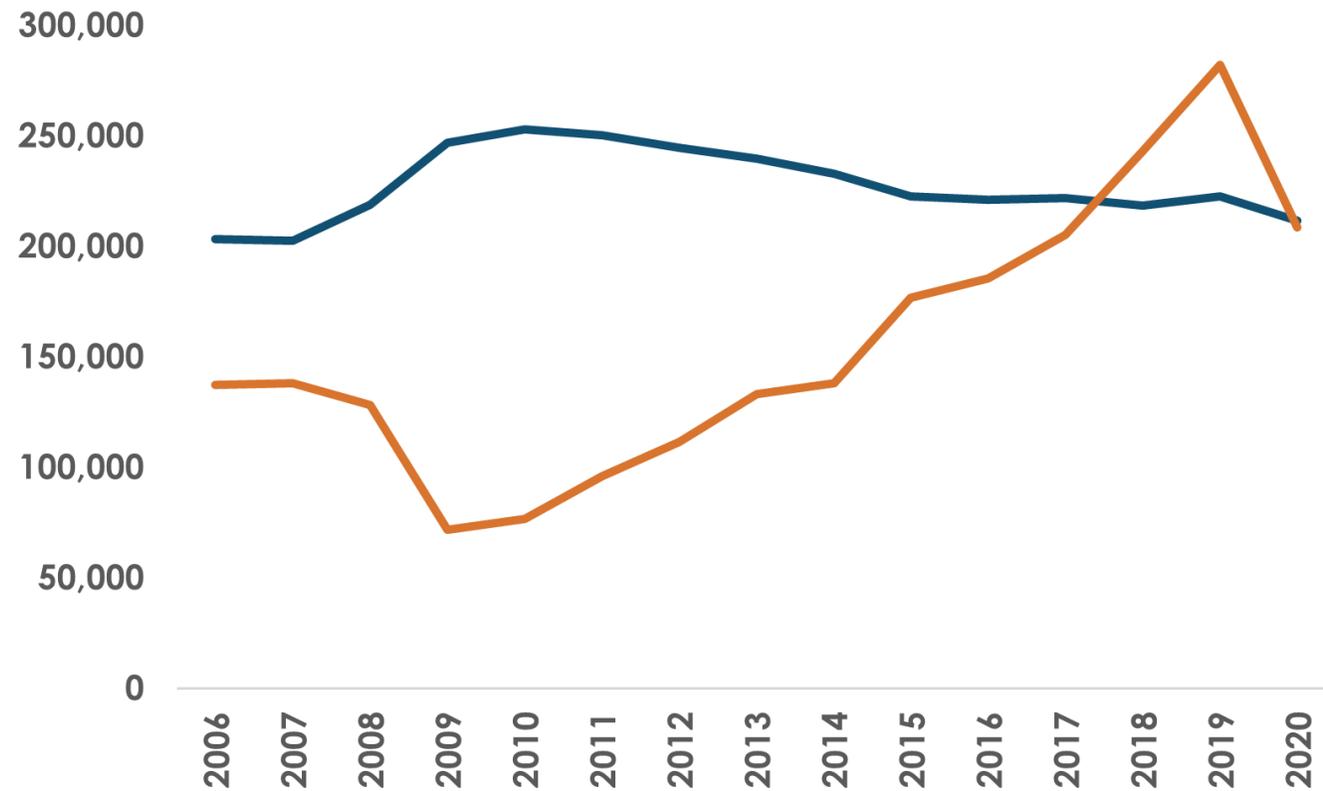
Community College Enrollment

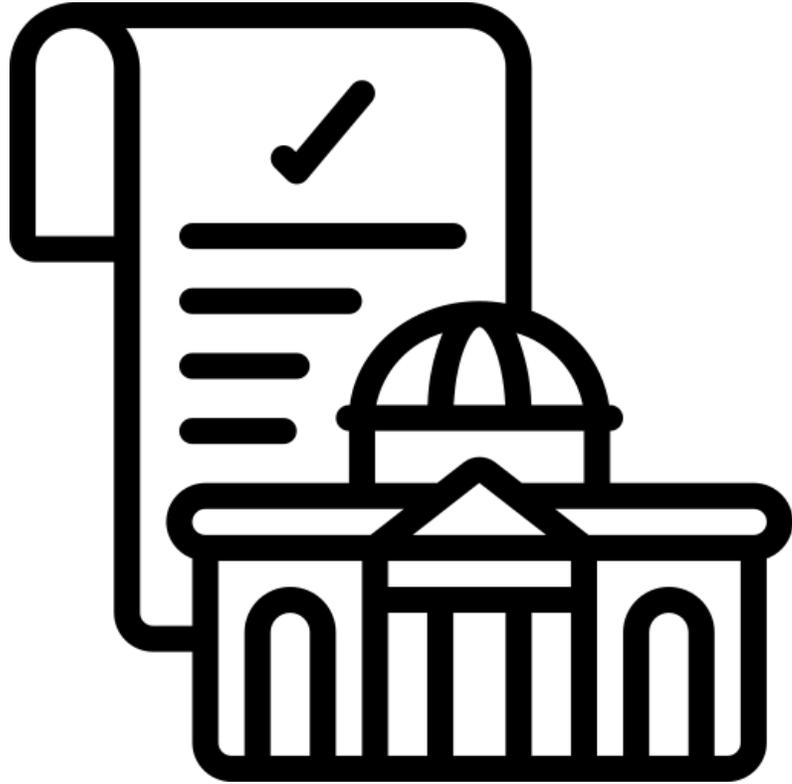
Declining enrollment at North Carolina community colleges not as sharp as national decreases



Past recessions show similar trends

NCCCS enrollment increased during the Great Recession before starting to decline as job openings recovered





Policy Implications

Why declining community college enrollment matters

- Less economically resilient workforce
- Higher unemployment rates during downturns for workers with fewer credentials
- Equity considerations: last hired, first fired

Combatting enrollment declines

- Expand earn & learn opportunities
- Promote the value of educational credentials
- Prepare for change in economic conditions

Thank you!

Neil Harrington

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