

NCTECH
Association

PRESENTING
SPONSOR



2025 OUTLOOK FOR TECH

2025 PREDICTIONS

STATE OF THE INDUSTRY

TECH TRENDS

2023-2025

UNIVERSITY HILTON
CHARLOTTE, NC

11th Year



About Economic Leadership

- Founded in 2013
- Working in 27 states for 60 Clients
- Statewide & Regional Competitiveness Strategies
- Locational Analysis
- Leadership + Communications
- Trendspotting & Strategy



Place-Based Competitiveness



Business Climate

Taxes
Regulatory Climate
Legal Climate
Politicians

Workforce

In-migration
Education
Productivity
Costs
Skills
QOL

Risk

Weather
Crime
Fiscal Stability
Political Stability
Out-migration
Geo-economics

Water
Transportation
Broadband
Power
Housing
Childcare

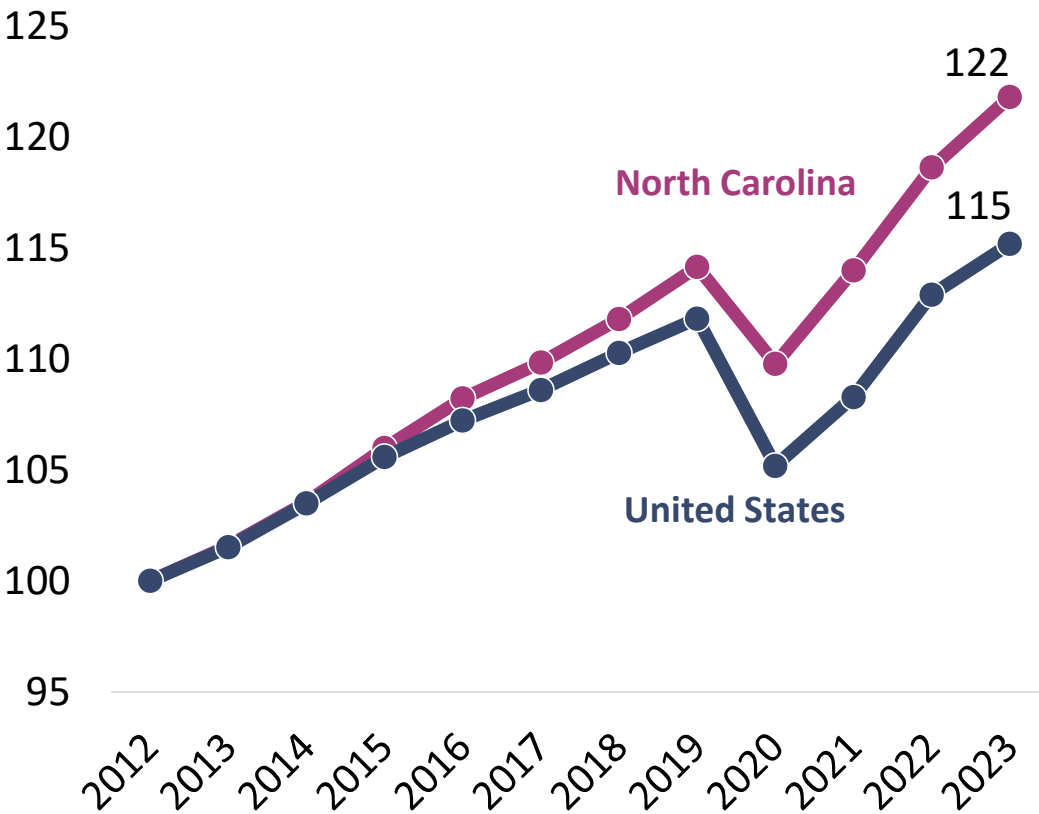
Infrastructure

R&D
Automation
Patents
Advanced Industries
Start-up Ecosystem

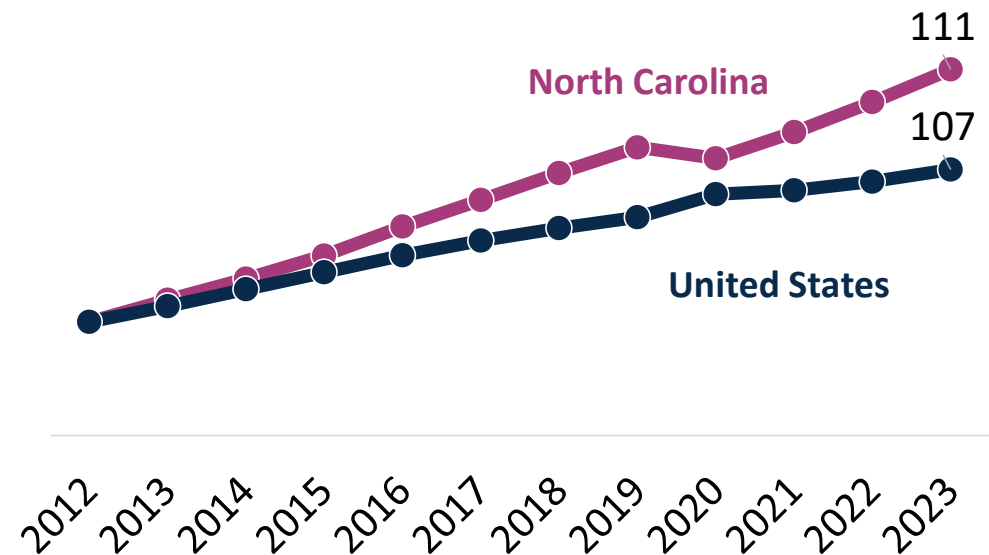
Innovation

North Carolina is growing faster than the nation...

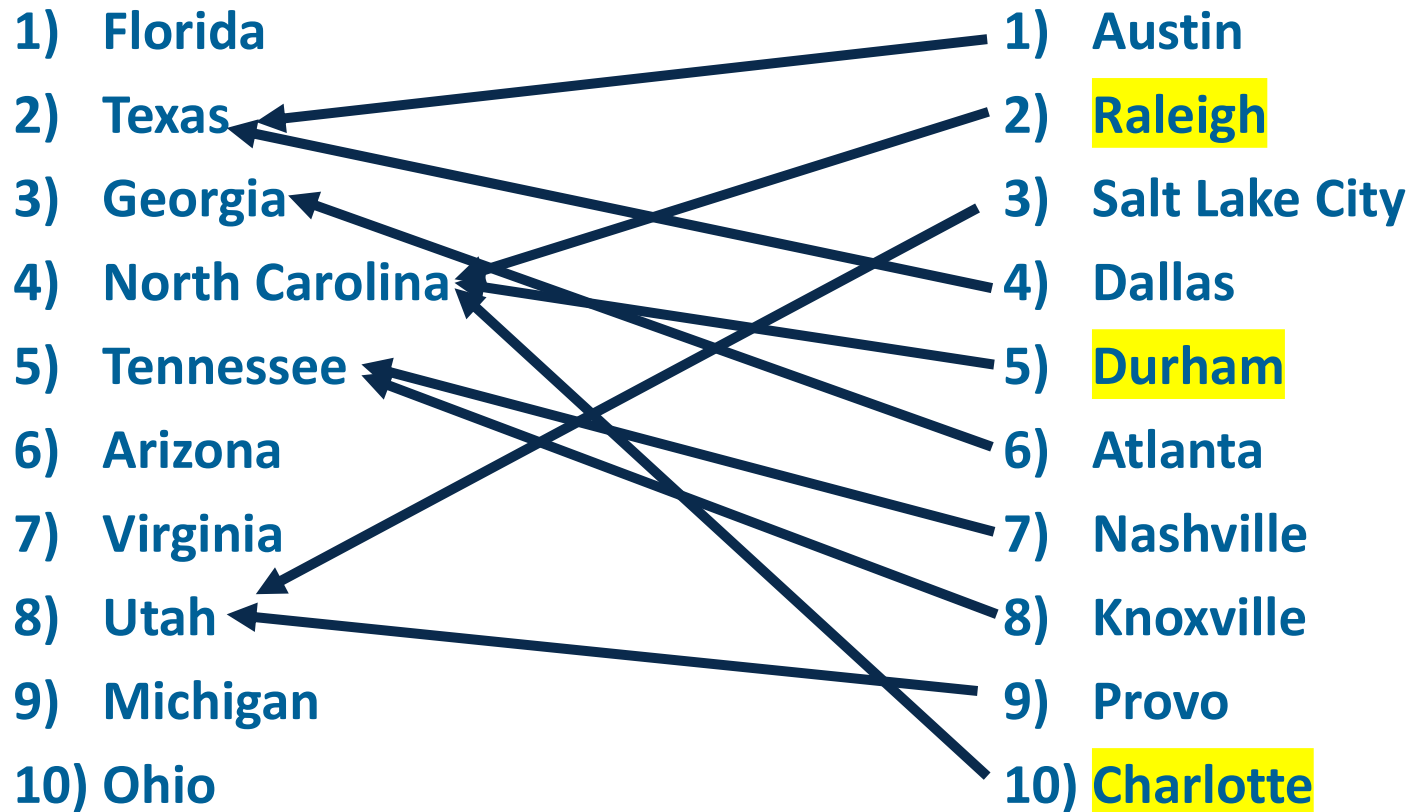
Total Employment Change



Population Change

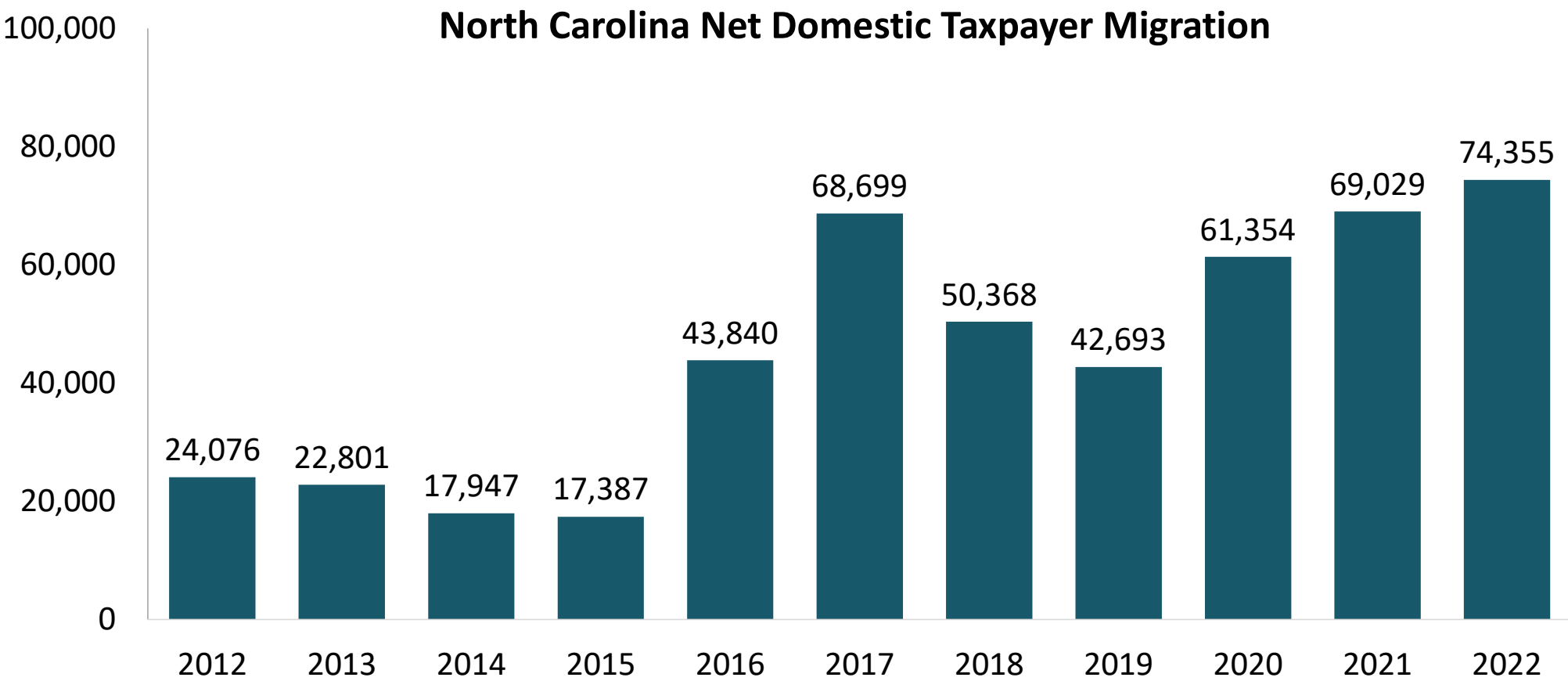


The Best Ranked States for Business and Best Metro Performance



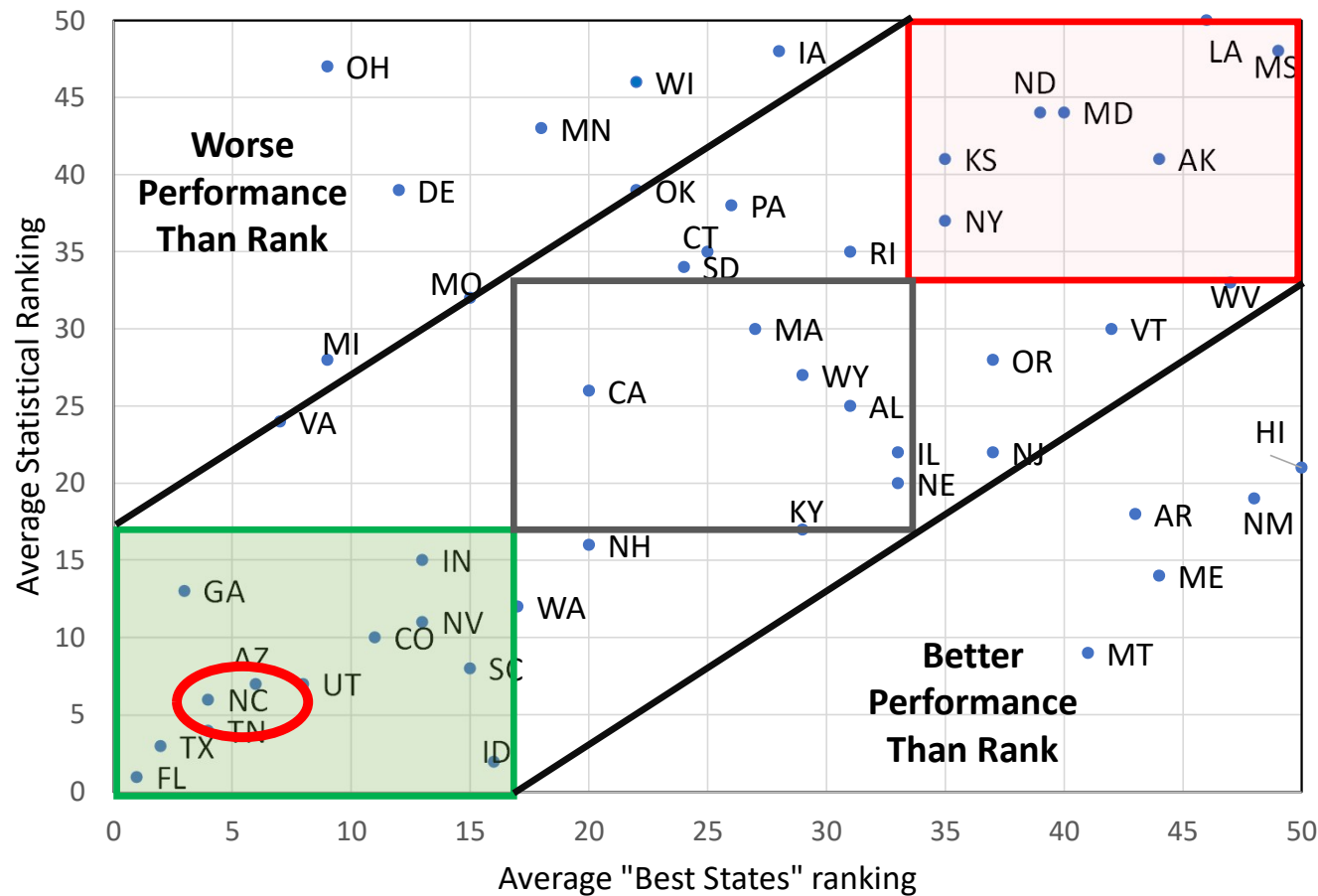
The most competitive metros are in the most competitive states

North Carolina continues to gain from state-to-state migration...



Source: EL calculations based on Lightcast 2024.4

Rankings and Performance



States By Average Ranks by US News, CNBC, and Chief Executive

US News Business Environment released 5/15/24; CNBC released 7/11/24; Chief Executive released 4/24/24

Plotted Against

Actual Performance for Job Growth, Wage Growth and Growth in GDP

3 years 2020-2023 Jobs & Wages: BLS QCEW annual; GDP: BEA

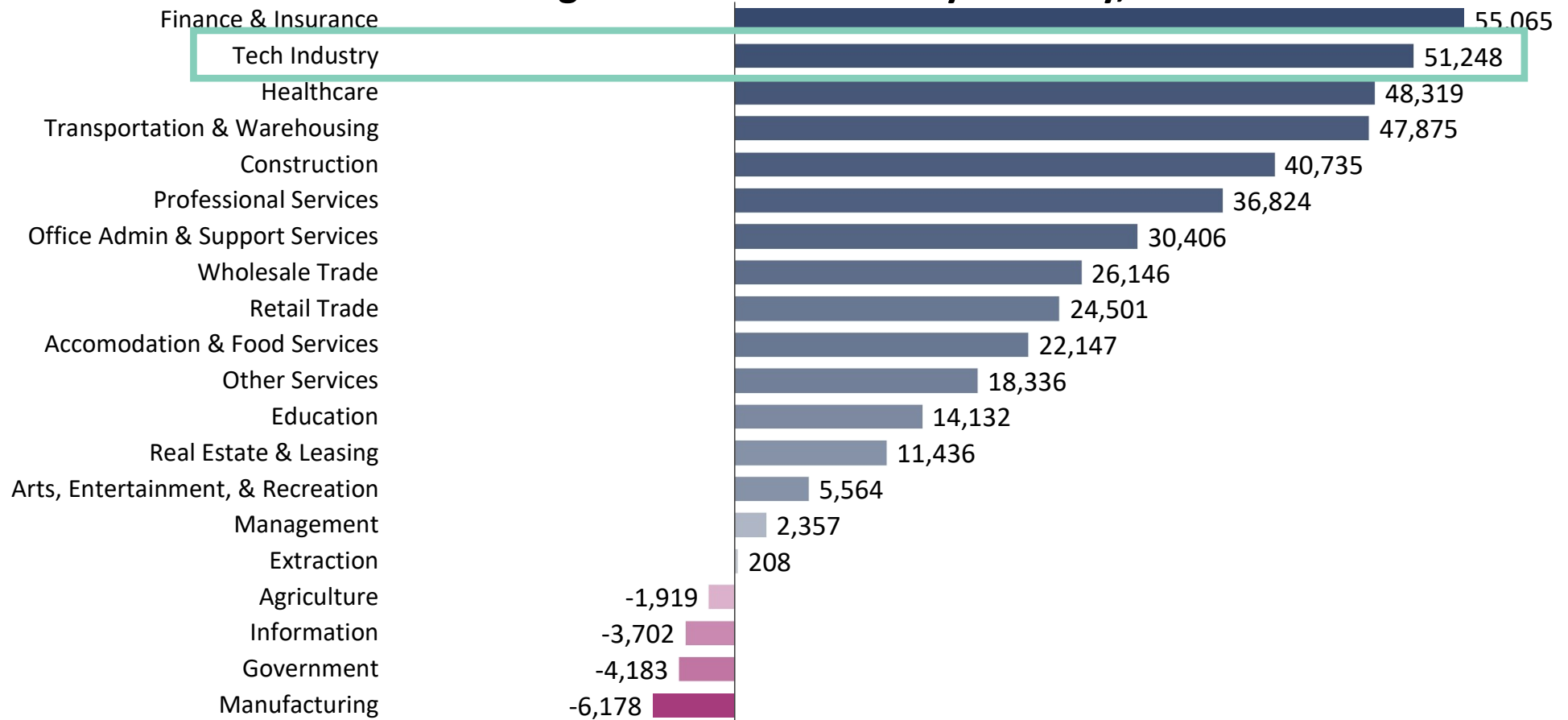


WWW.NCSTIR.COM



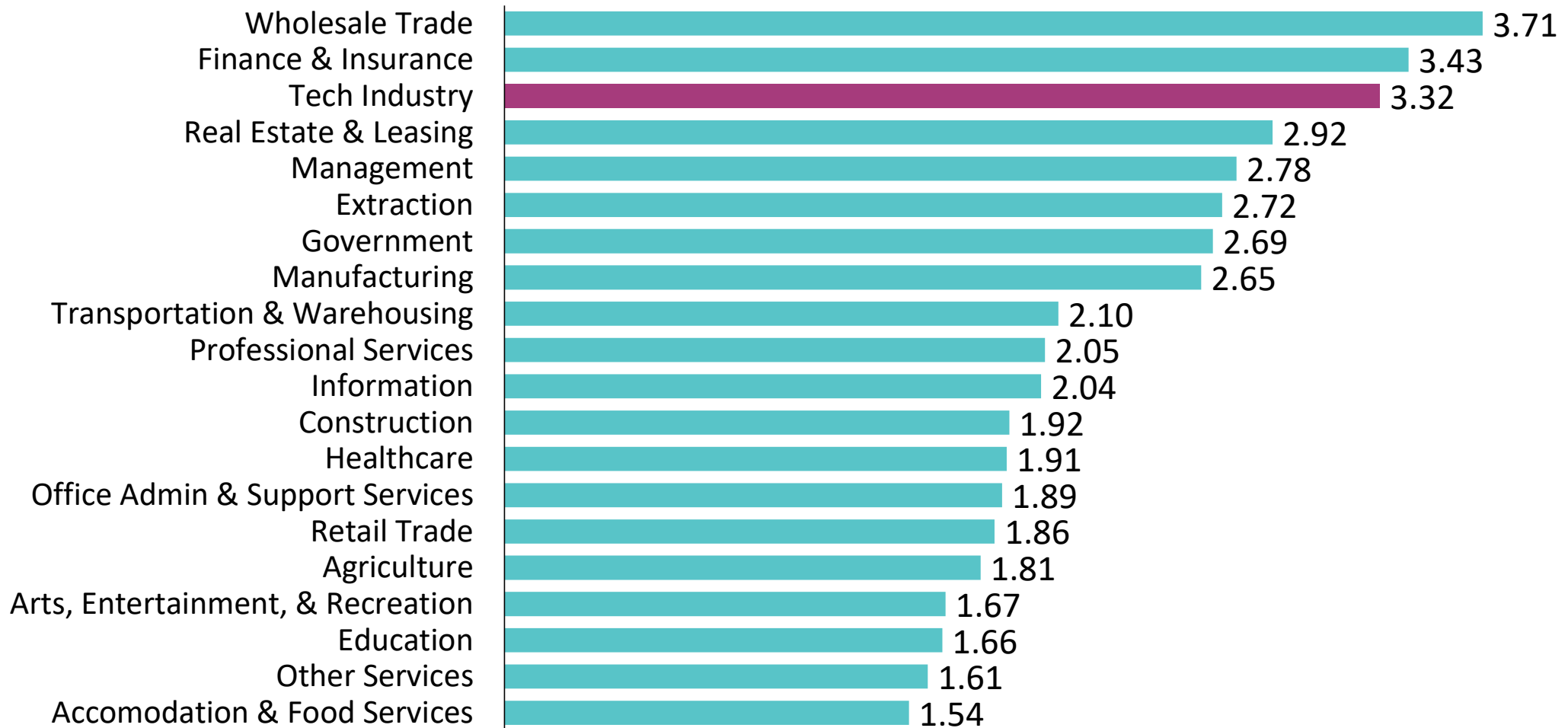
Tech industry has played important role in the state economy...

Net Job Change in North Carolina by Industry, 2018-2023



Source: EL calculations based on Lightcast 2024.4

North Carolina Job Multiplier by Industry, 2023



Source: EL calculations based on Lightcast 2024.4

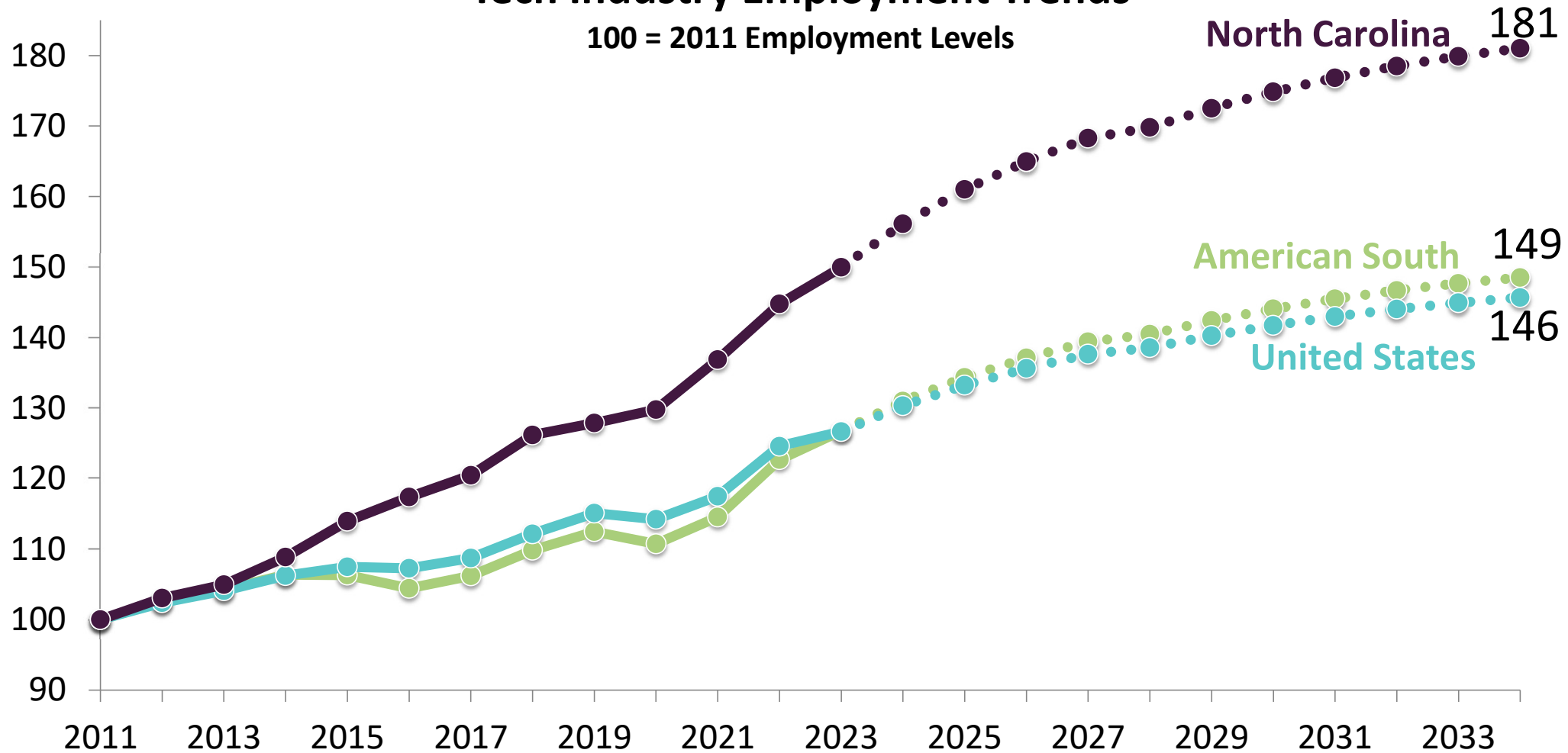
Measuring the Tech Sector Methodology

- Data from Lightcast, based on Bureau of Labor Statistics (BLS) Quarterly Census of Employment and Wages
- **86 separate 6-digit NAICS** code sectors to characterize the Total Technology Sector
- **Total Technology Sector further broken down into four sub-categories:**
 - Energy Technology
 - Environmental Technology
 - Life Sciences
 - IT, Telecomms, Hardware, and Software (Tech Core)
- **85 distinct 5-digit SOC** codes grouped to form Tech Occupations



Tech Industry Employment Trends

100 = 2011 Employment Levels



Source: EL calculations based on Lightcast 2024.4

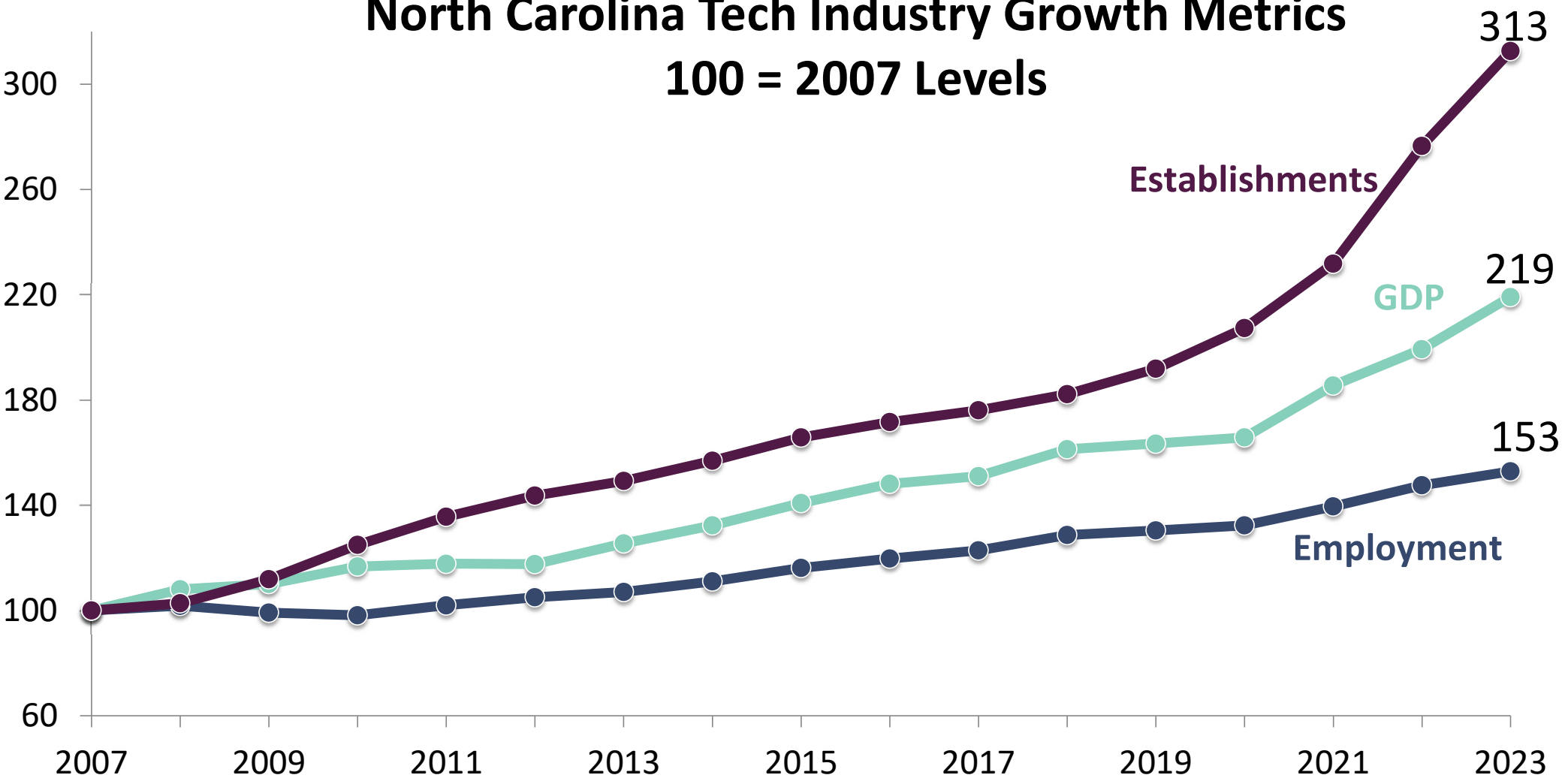
North Carolina Tech Industry Summary Statistics

Indicator	Technology Industry	State Total	State Total Percentage
Employees	323,199	4,830,118	6.7%
Establishments	34,342	374,302	9.2%
Wages (millions)	\$41,981	\$350,146	12.0%

11 Years Ago, There were 220,698 Tech Industry Workers

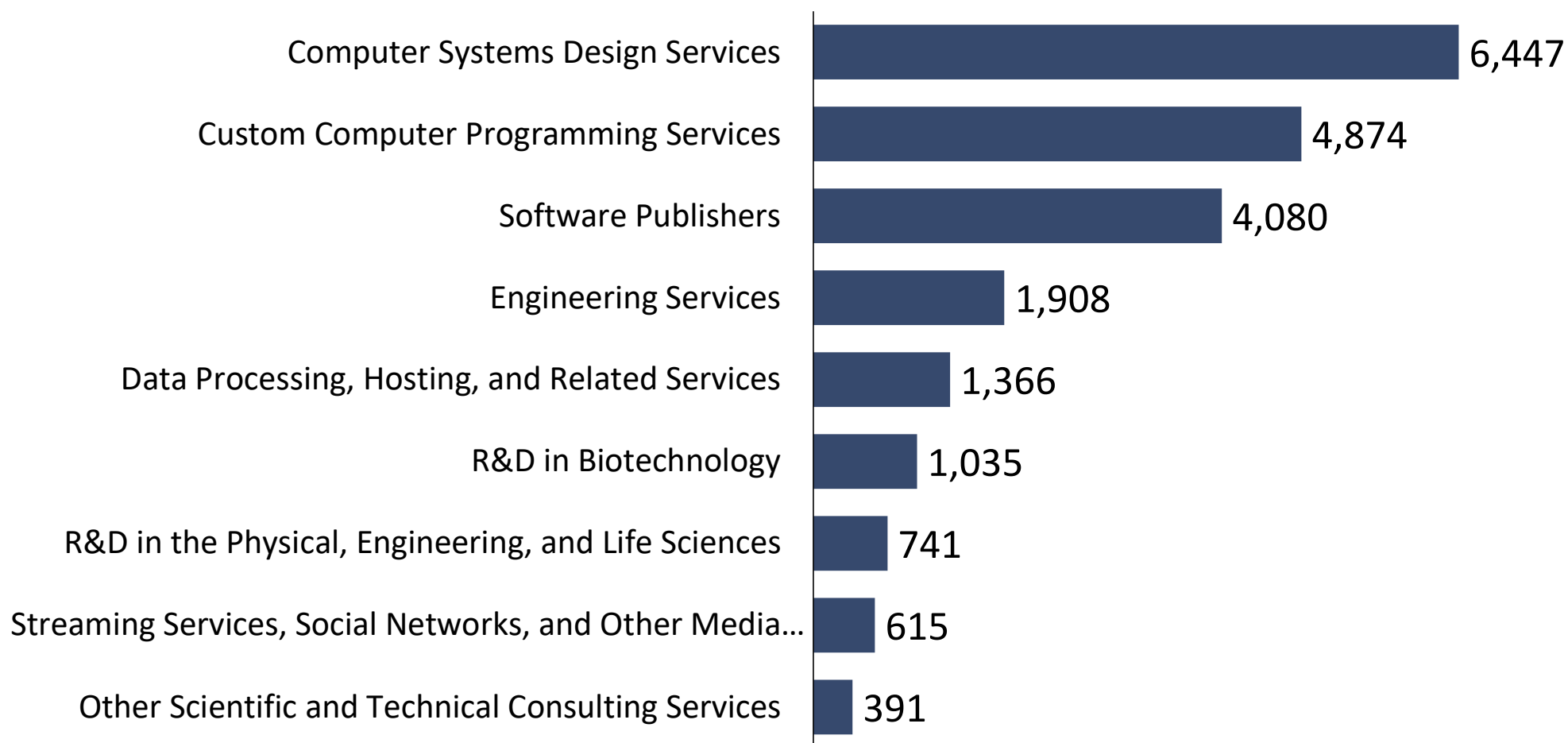
North Carolina Tech Industry Growth Metrics

100 = 2007 Levels

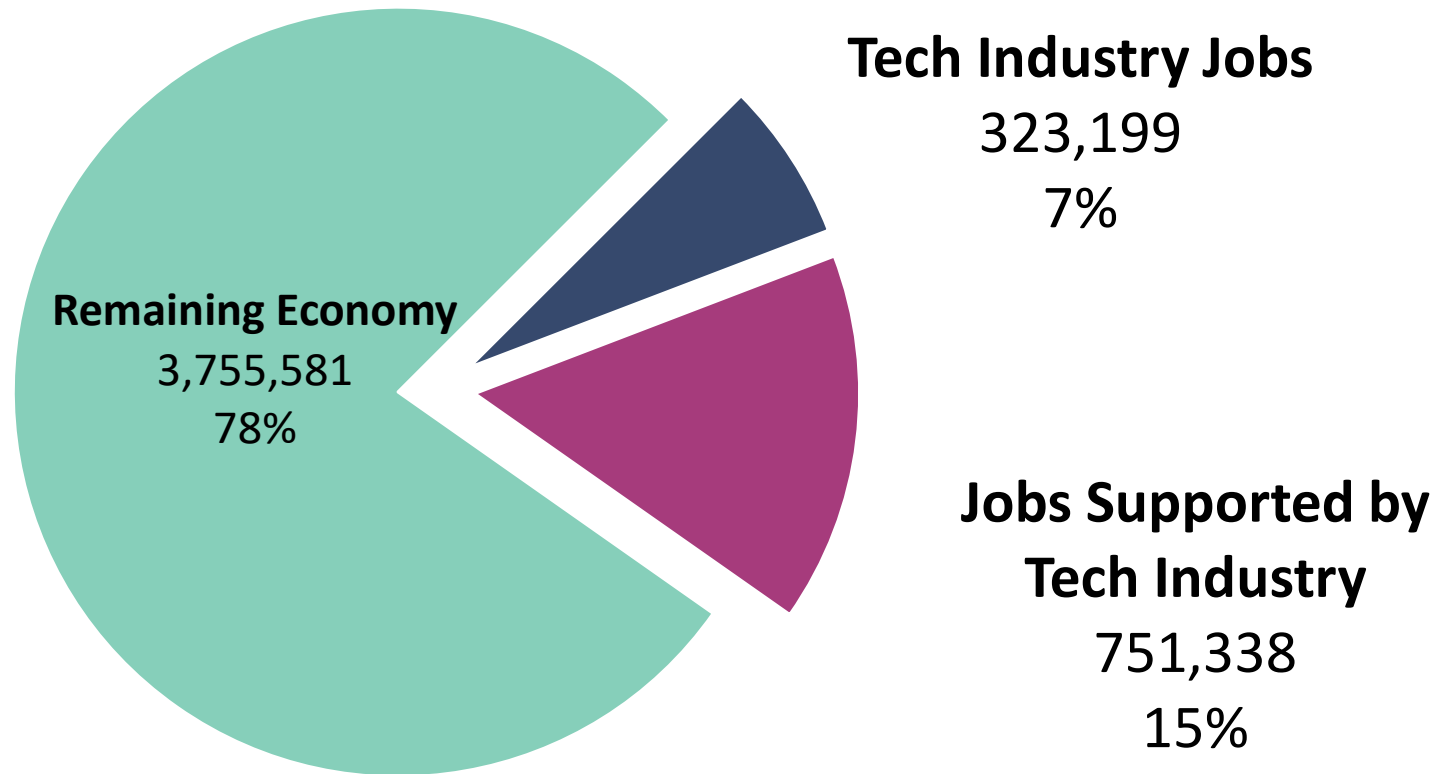


Source: EL calculations based on Lightcast 2024.4

North Carolina Tech Industry Top Establishment Change, 2007-2023



Tech's Contribution to North Carolina's Economy - 22%



11 Years Ago, Tech was 18%

North Carolina Tech Industry by Sub-Categories

Technology Categories	Employment, 2023	Employment Change, 2022-2023	Employment Change, 2018-2023
Energy Tech	14,705	3.8%	7.3%
Enviro Tech	23,254	6.2%	-5.8%
Life Sciences	110,356	3.4%	27.0%
IT	174,884	3.3%	19.2%
TOTAL TECH	323,199	3.6%	18.8%

Source: EL calculations based on Lightcast 2024.4

North Carolina Tech Industry by Output Groups

Output Group	Employment, 2023	Employment Change, 2022- 2023	Employment Change, 2018- 2023
Tech Services	257,021	4.1%	24.4%
Tech Manufacturing	66,178	1.6%	1.2%
TOTAL TECH	323,199	3.6%	18.8%

11 Years Ago, There were 64,585 Tech Manufacturing Workers

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North Carolina Average Annual Earnings by Subgroups

Sub-Categories	North Carolina	North Carolina (Purchasing Power)	National Average
Energy Tech	\$148,900	\$158,100	\$175,600
Environmental Tech	\$84,900	\$90,100	\$96,600
Life Sciences	\$138,200	\$146,700	\$153,500
IT	\$149,000	\$158,200	\$187,600
Output Group	North Carolina	North Carolina (Purchasing Power)	National Average
Tech Services	\$140,300	\$149,000	\$169,800
Tech Manufacturing	\$142,100	\$150,900	\$165,900
TOTAL TECH INDUSTRY	\$140,700	\$149,300	\$169,200

Source: EL calculations based on Lightcast 2024.4 and BEA (2024)

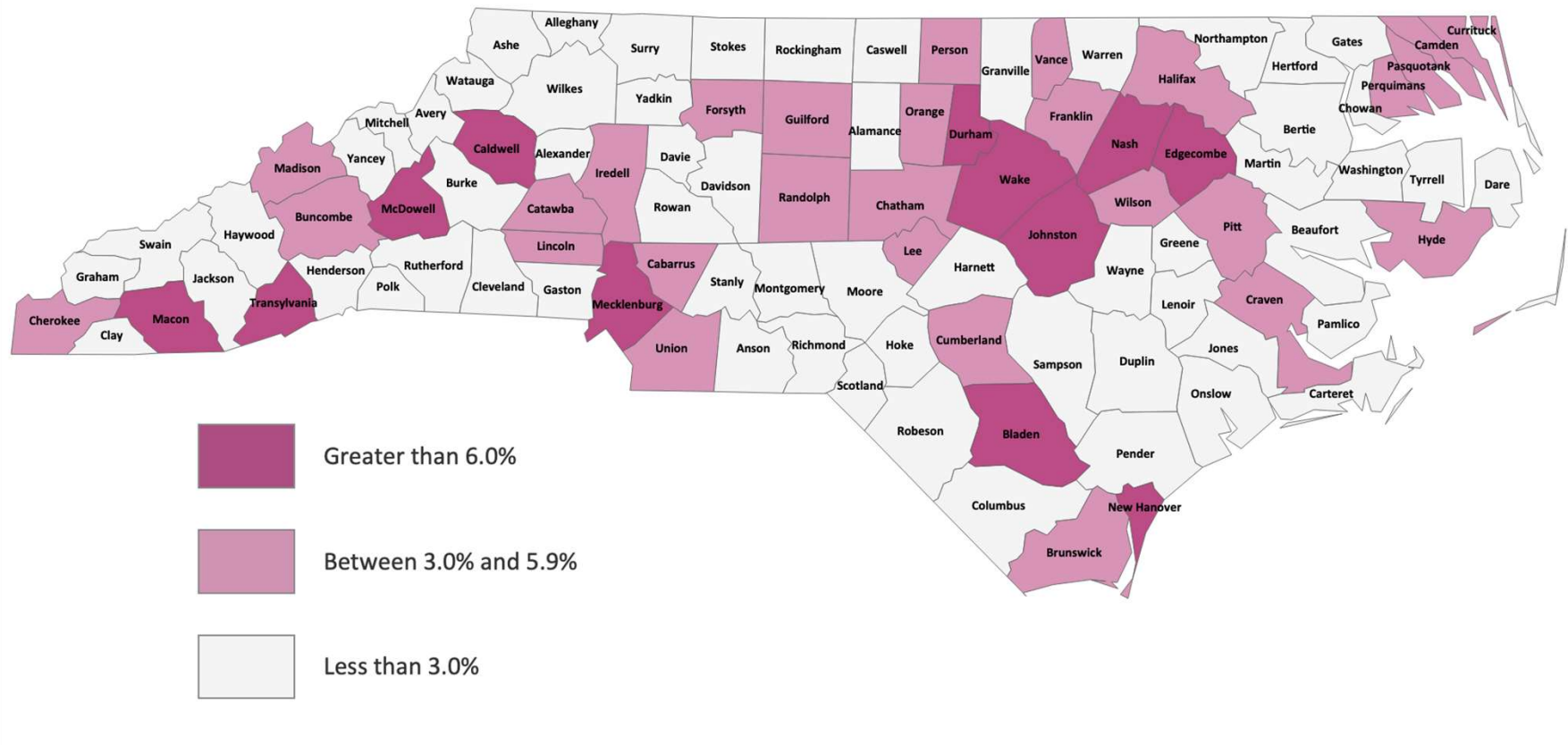


Tech Industry Super Sub-Industries

Sub-Industries	2023 Employment	Employment Change (2018-2023)	Concentration
Software	103,778	42%	1.06
Internet, Social Media, & Telecom	44,015	-8%	0.92
Engineering, Environmental, & Clean Tech	43,643	13%	0.95
R&D and Testing	42,068	35%	1.07
Life Sciences Manufacturing	34,230	13%	1.46
Electronics Hardware	27,091	5%	0.95
Other Energy and Power Generation	13,825	5%	0.45
Remediation and Waste Management	13,669	18%	0.86
Renewable Energy	880	78%	0.88
TOTAL TECH SECTOR	323,199	19%	0.98

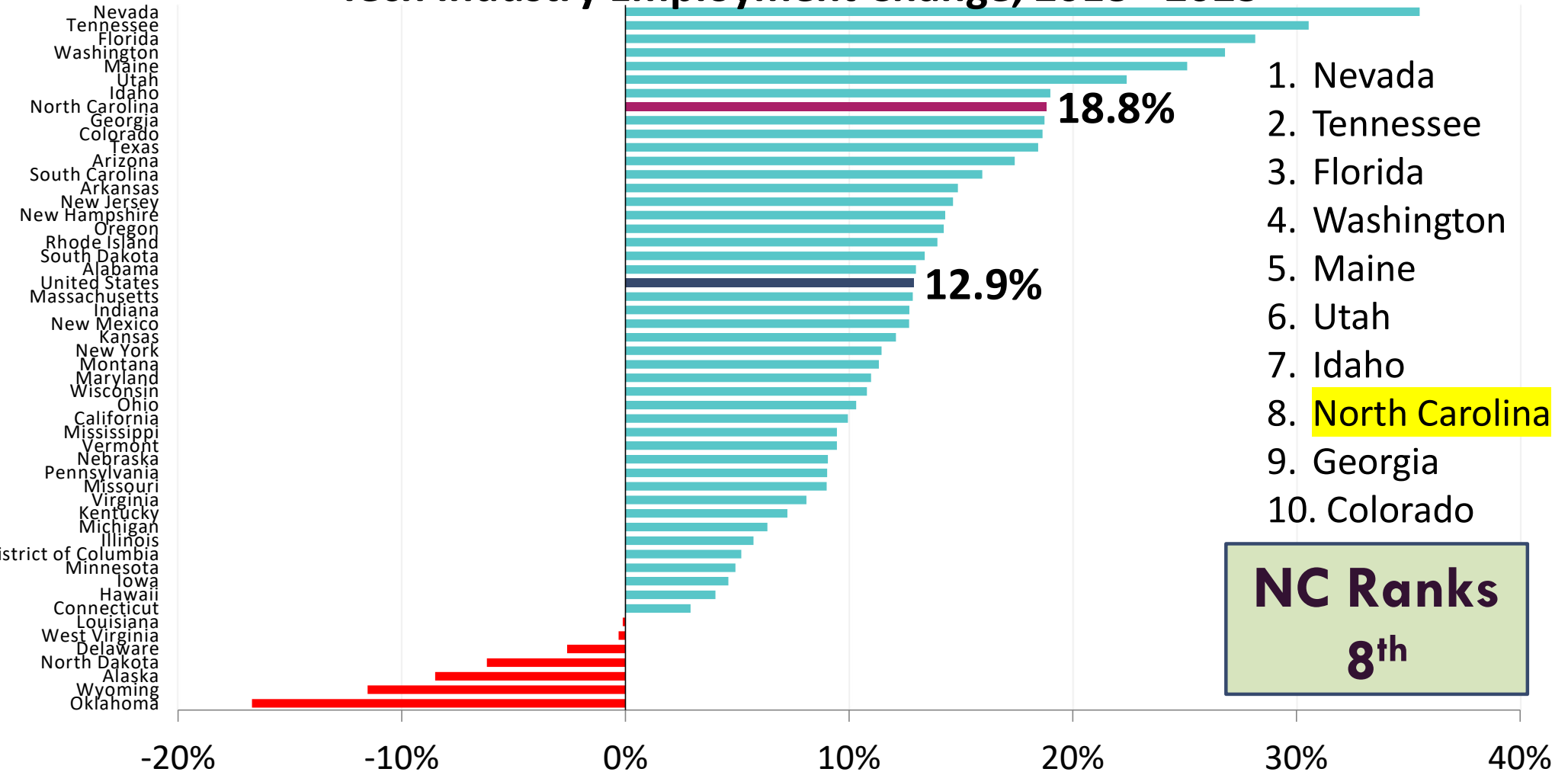
Source: EL calculations based on Lightcast 2024.4

Tech Industry Jobs as a Percentage of Total Jobs, 2023

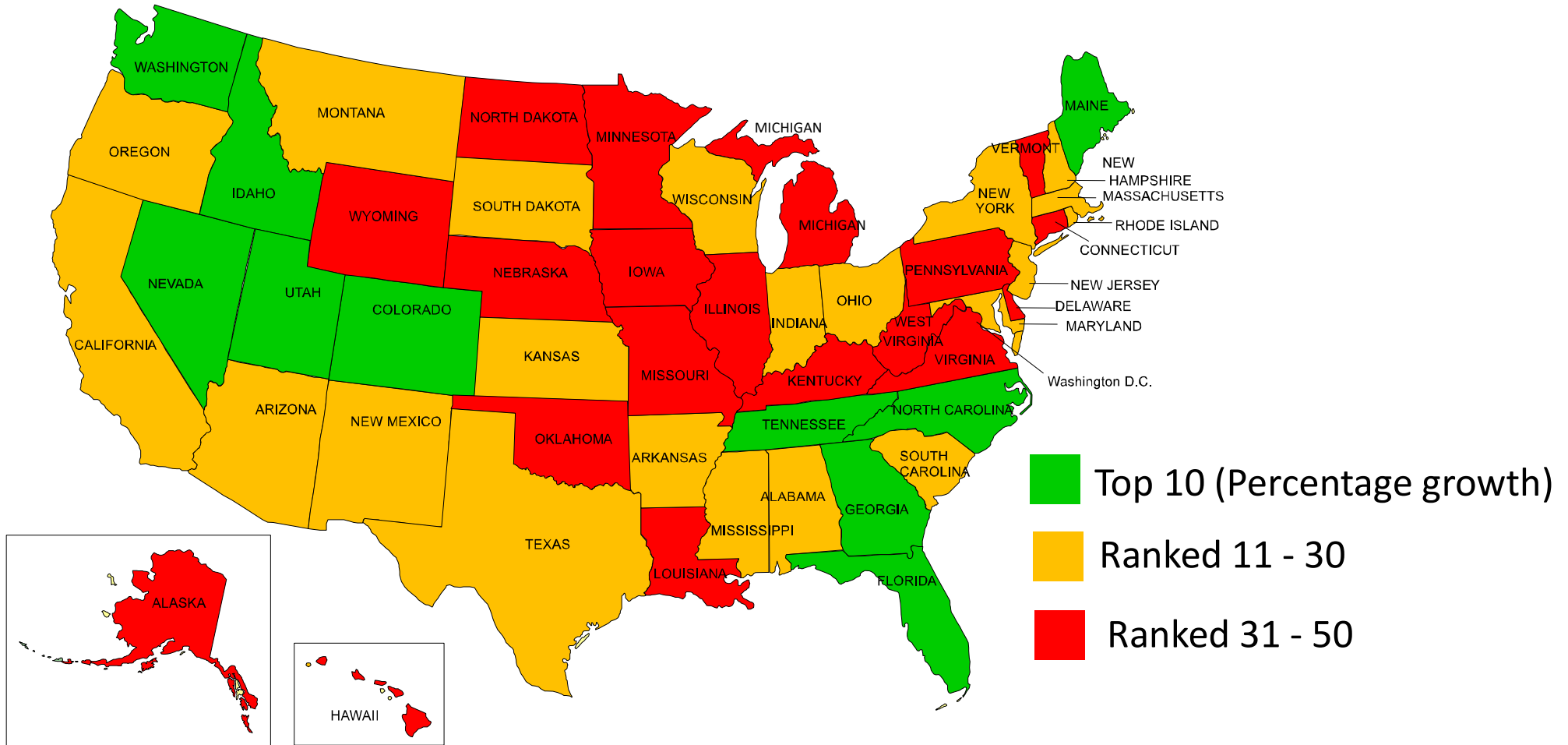


Source: EL calculations based on Lightcast 2024.4

Tech Industry Employment Change, 2018 - 2023

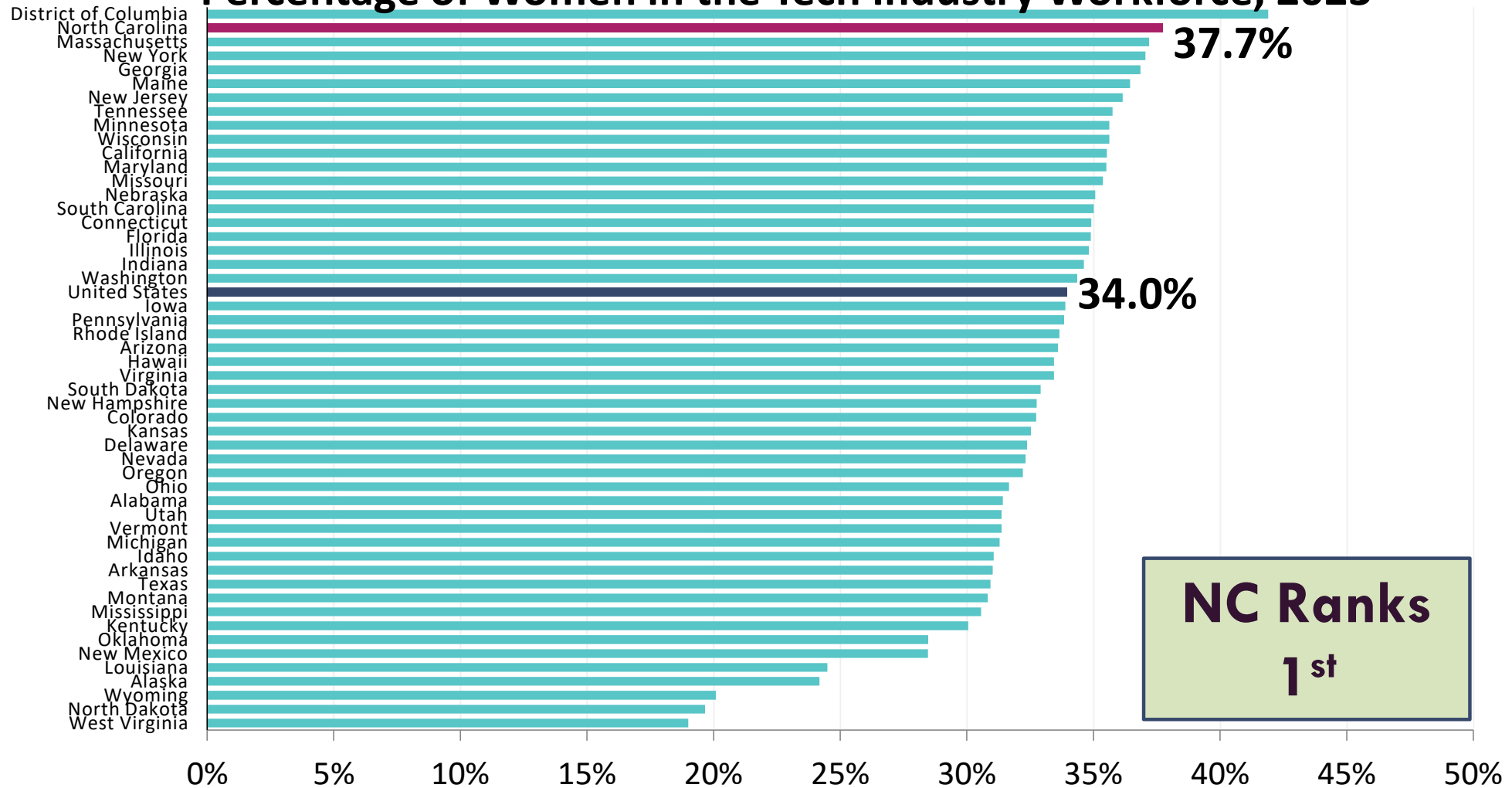


Tech Industry Employment Change, 2018 - 2023



Source: EL calculations based on Lightcast 2024.4

Percentage of Women in the Tech Industry Workforce, 2023



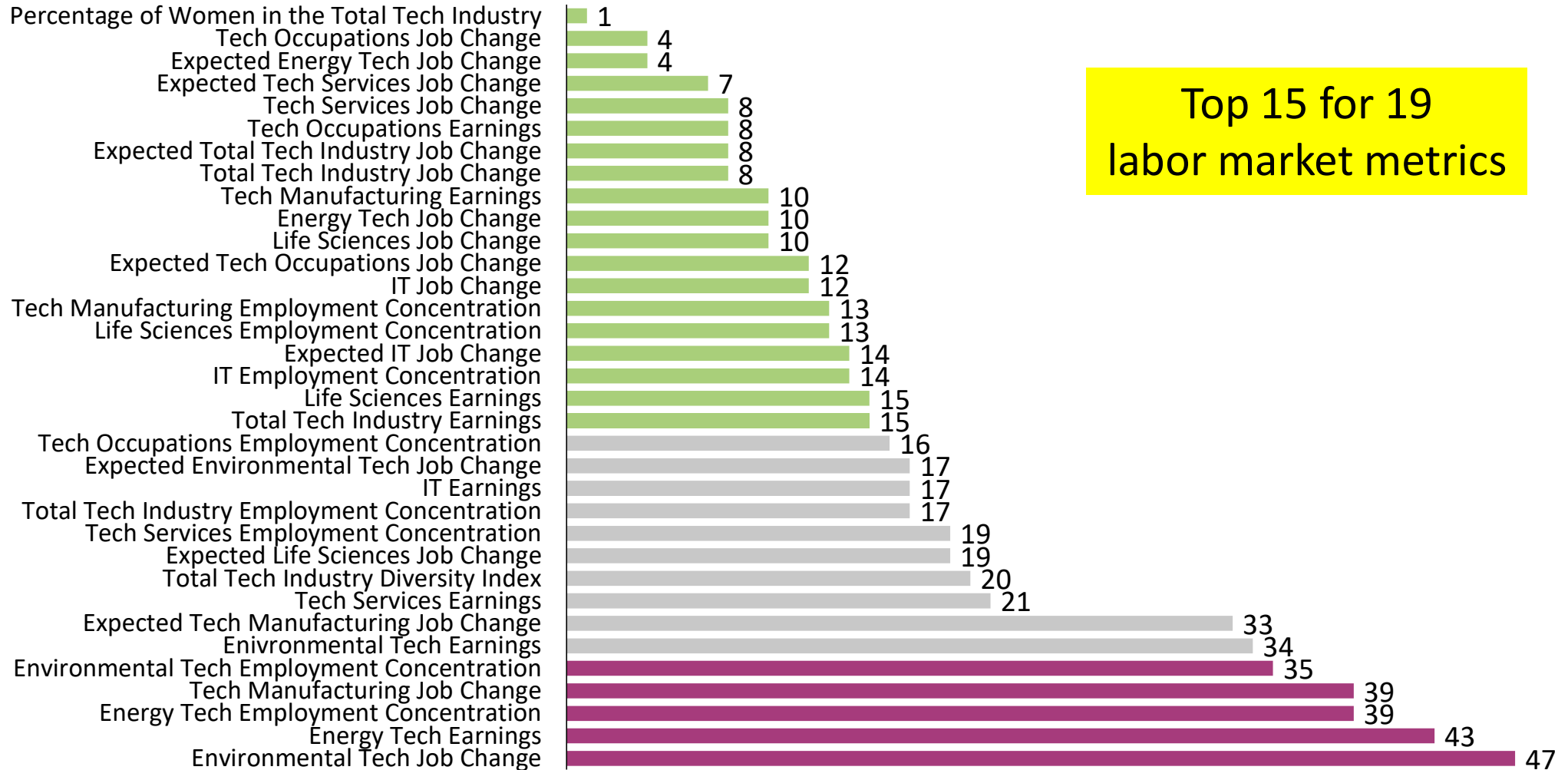
NC Ranks
1st

North Carolina Tech Industry State Rankings

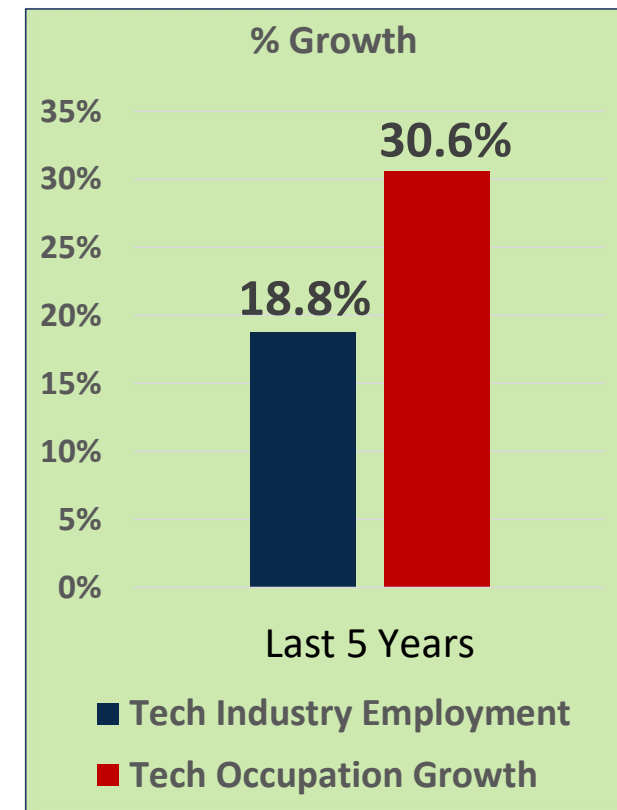
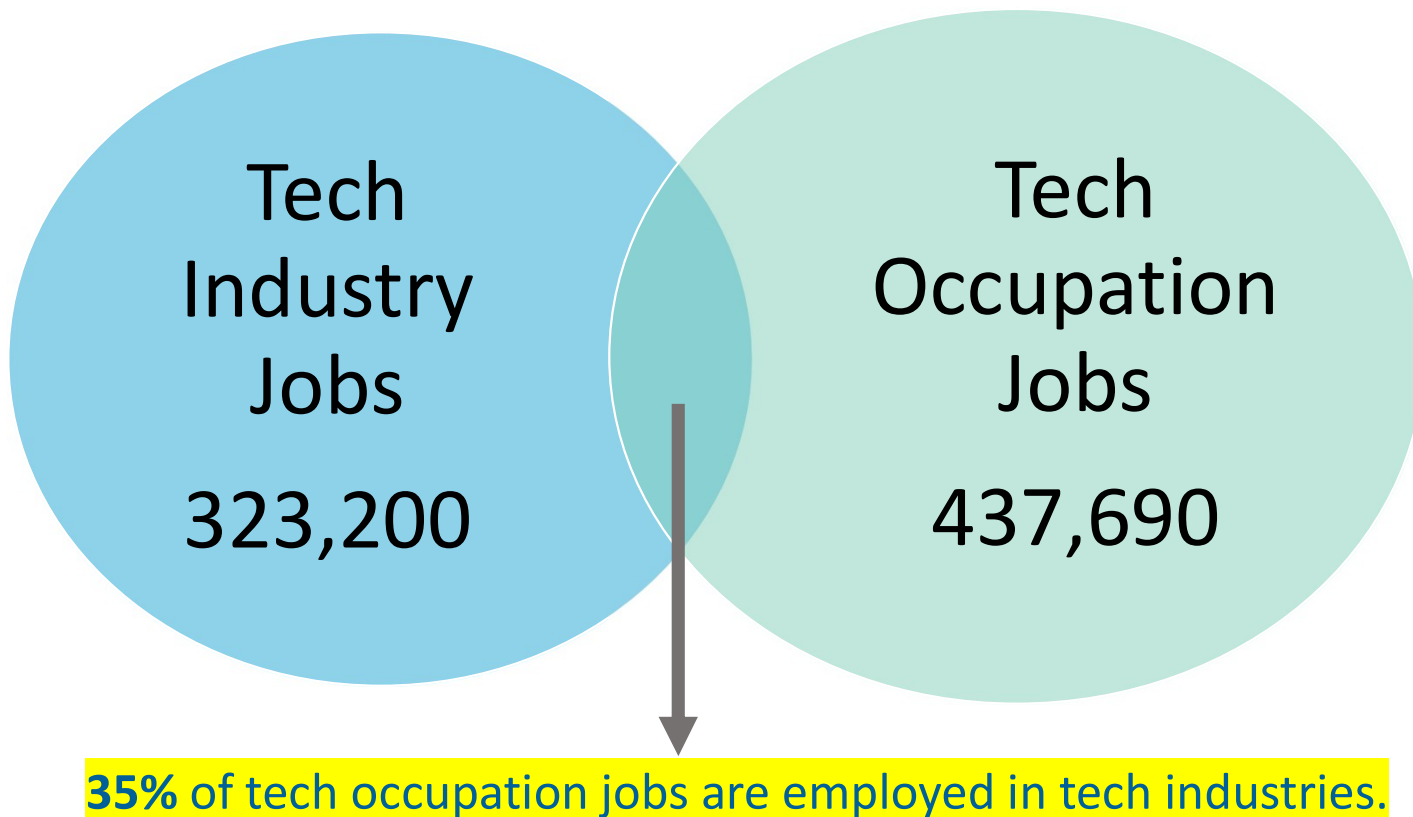
Metric	Value	Rank
Total Tech Industry Employment Concentration (2023)	0.98	17
Total Tech Industry Job Change (2018-2023)	18.8%	8
Expected Total Tech Industry Job Change (2024-2029)	10.5%	8
Avg Earnings for Total Tech Industry with Purchasing Power (2023)	\$149,346	15
Percentage of Women in the Total Tech Industry Workforce (2023)	37.7%	1
Total Tech Industry Diversity Index (2023)	80.4	20

North Carolina State Rankings for Tech Industries and Occupations

Top 15 for 19
labor market metrics

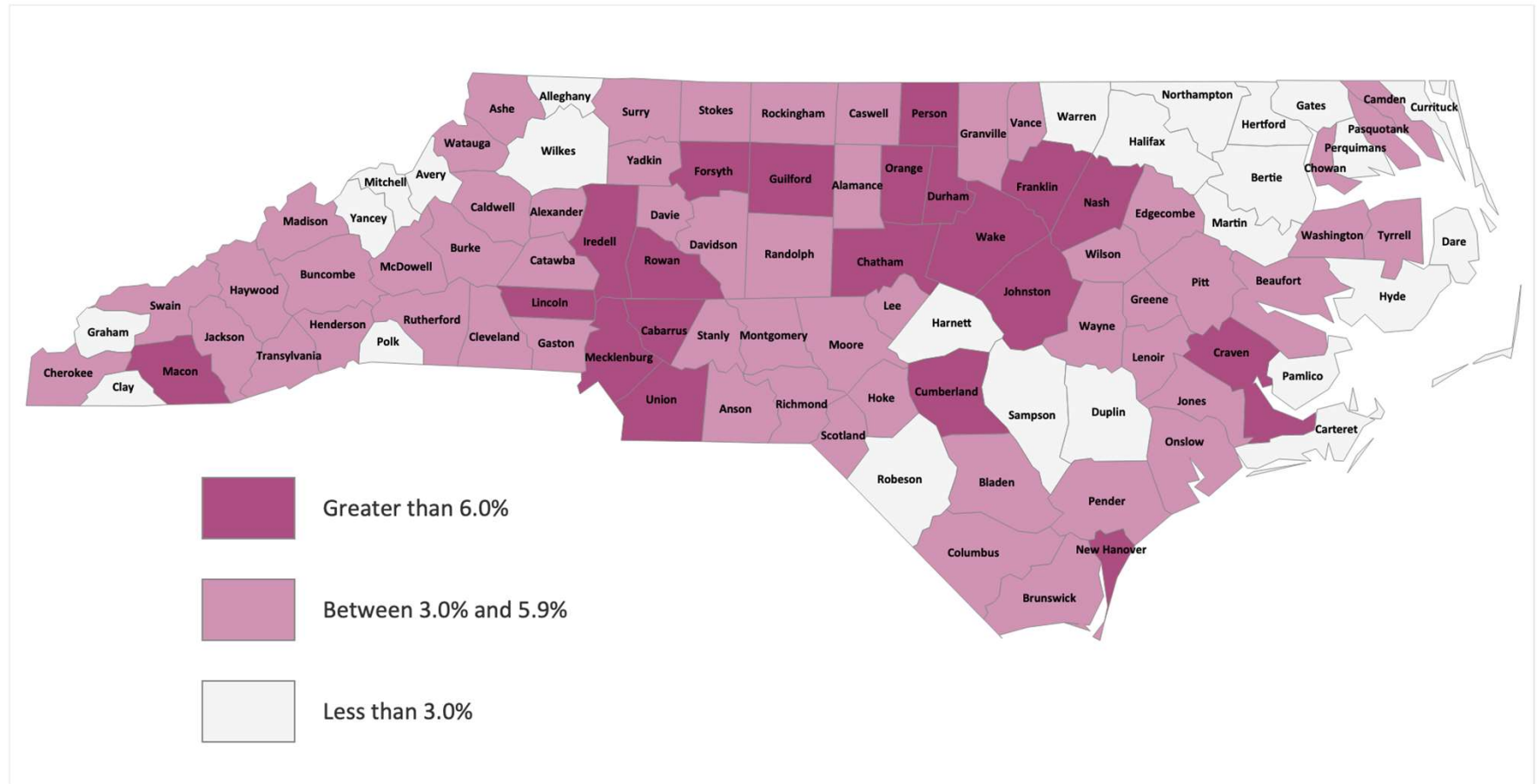


Staffing Patterns of Tech Industries and Tech Occupations



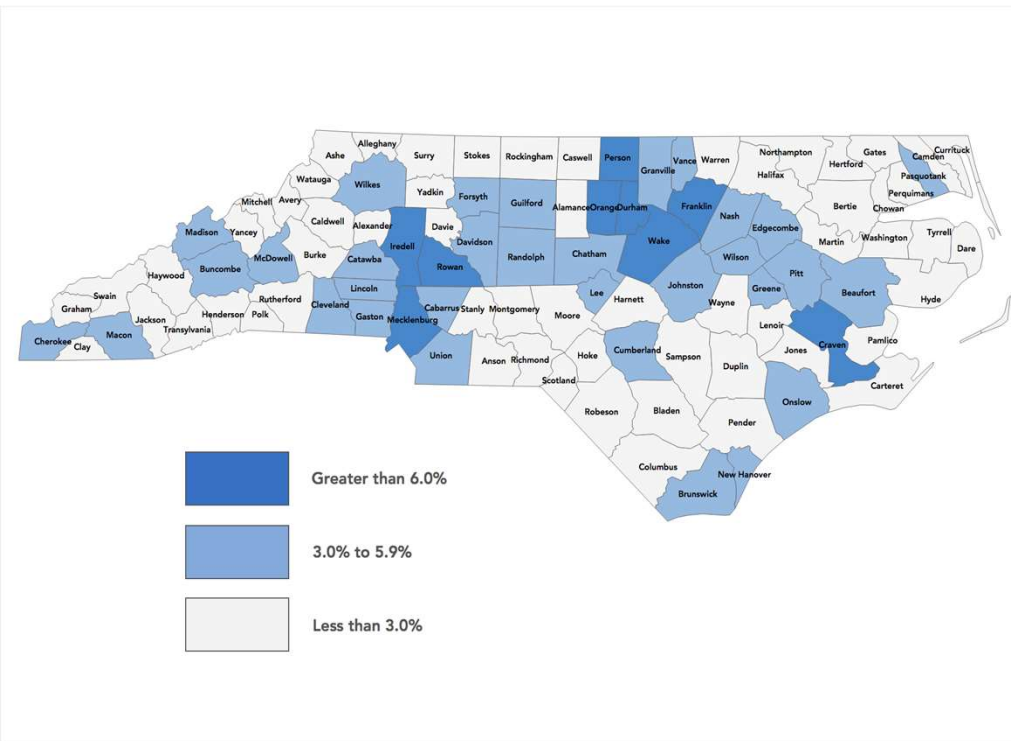
Source: EL calculations based on Lightcast 2024.4

Tech Occupations as a Percentage of Total Jobs, 2023



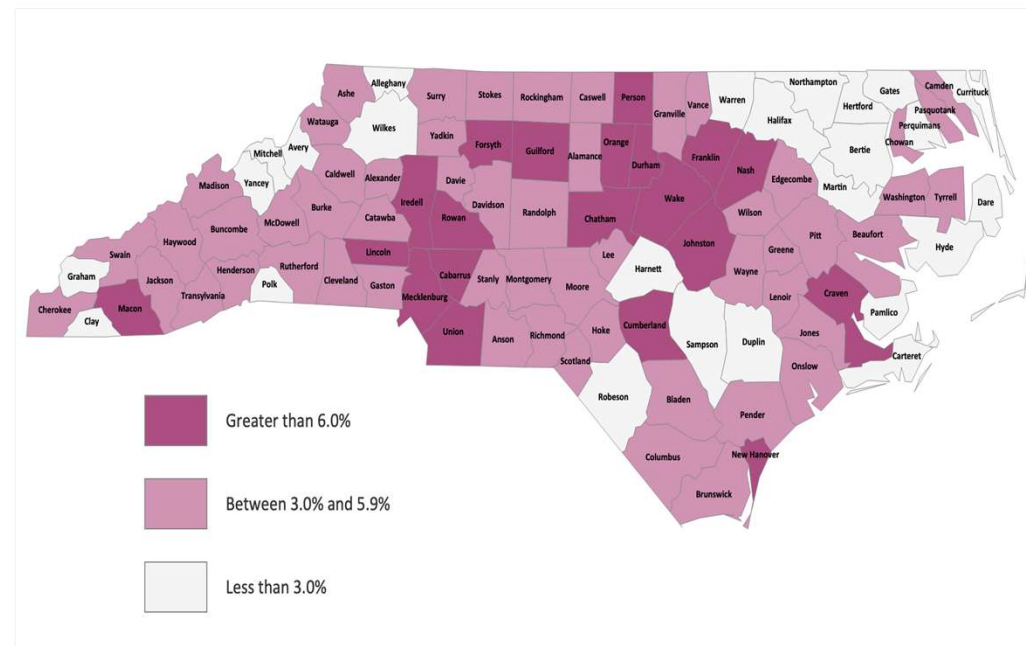
Source: EL calculations based on Lightcast 2024.4

2016



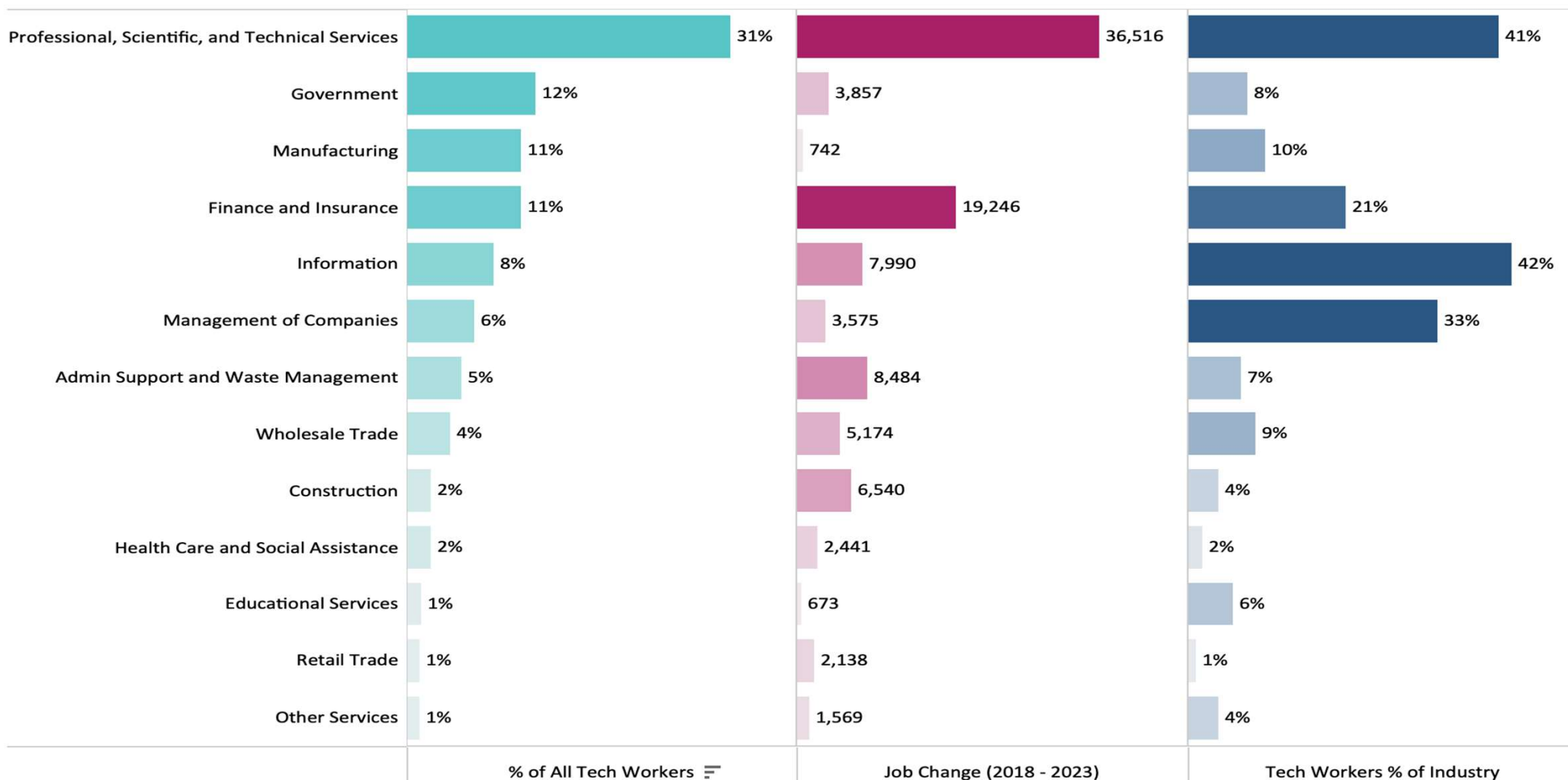
2023

Tech Occupations as a Percentage of Total Jobs, 2023



Source: EL calculations based on Lightcast 2024.4

North Carolina's Top Industries Employing Tech Occupations, 2023



Source: EL calculations based on Lightcast 2024.4

Top Tech Occupations

Occupation	2023 Employment	Employment Change (2018-2023)	Median Annual Wage
Software Developers	58,210	+70%	\$130,620
Market Research Analysts	27,920	+57%	\$74,900
Computer Systems Analysts	25,700	+1%	\$105,770
Computer User Support Specialists	22,280	+2%	\$56,990
Management Analysts	21,680	+18%	\$100,570
Computer and Information Systems Managers	21,455	+79%	\$164,220
Financial and Investment Analysts	10,530	+31%	\$99,990
Industrial Engineers	10,130	+12%	\$94,040
Network and Computer Systems Administrators	9,960	-11%	\$94,120
Computer Network Architects	8,170	+66%	\$120,660

Source: EL calculations based on Lightcast 2024.4

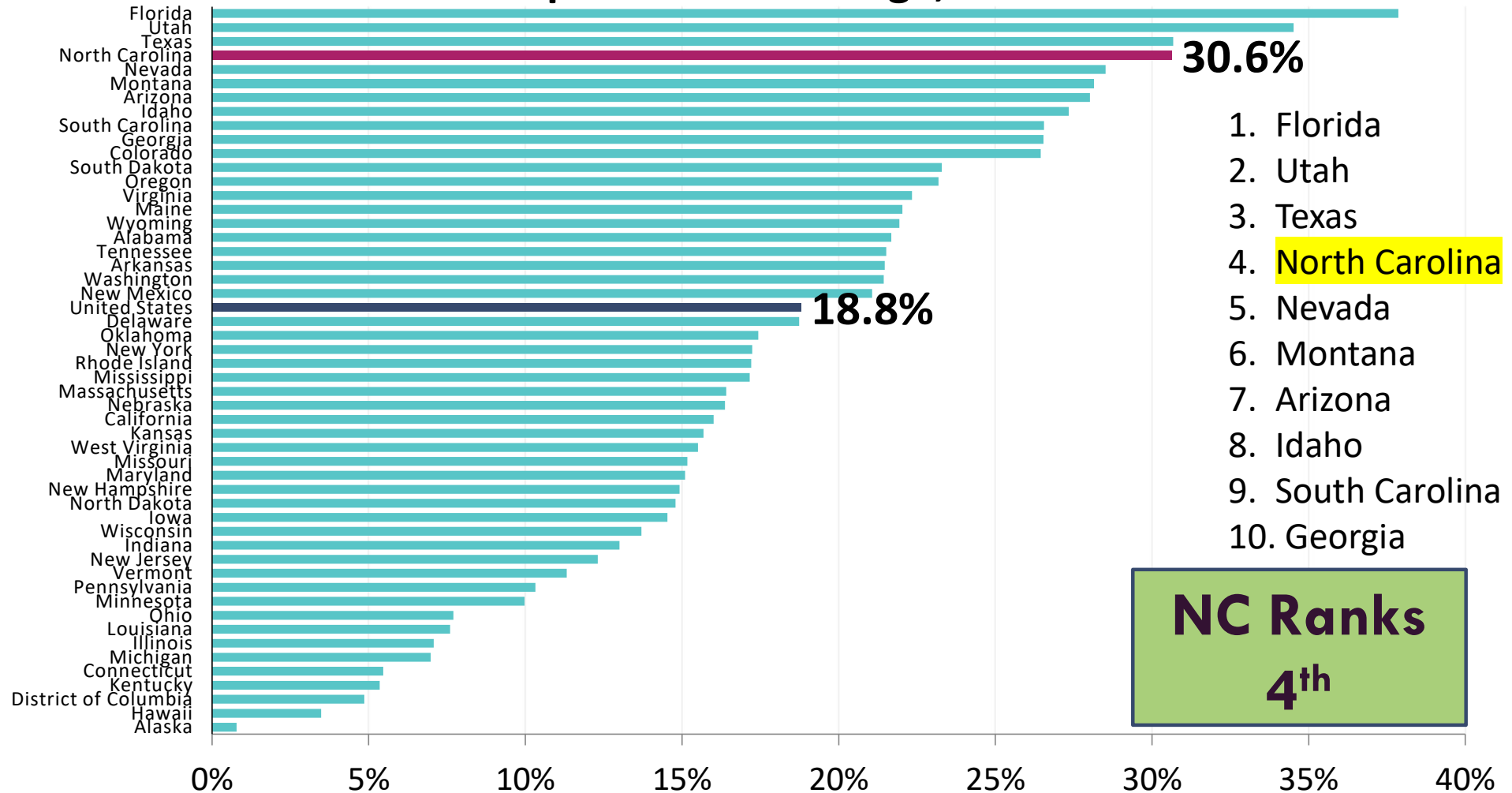
Top Top Occupations by Growth

Top Five in Net Job Growth		Top Five in Growth Percentage	
Software Developers	+23,910	Electro-Mechanical Technicians	+215%
Market Research Analysts	+10,110	Life Scientists	+184%
Computer and Information Systems Managers	+9,460	Database Architects	+151%
Data Scientists	+3,845	Data Scientists	+142%
Management Analysts	+3,290	Food Science Technicians	+107%

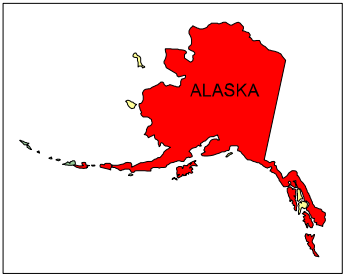
Demographic Representation in Tech Occupations

Demographic	Tech Occupations	NC Population	Index
Women	37%	51%	72.6
Men	63%	49%	128.7
Demographic	Tech Occupations	NC Population	Index
White	67%	61%	110.2
Black or African American	15%	21%	73.3
Asian	11%	4%	299.9
Hispanic or Latino	5%	11%	39.7
Two or More Races	2%	2%	93.7
American Indian or Alaska Native	0.3%	1.0%	33.7
Native Hawaiian or Other Pacific Islander	0.1%	0.1%	88.4

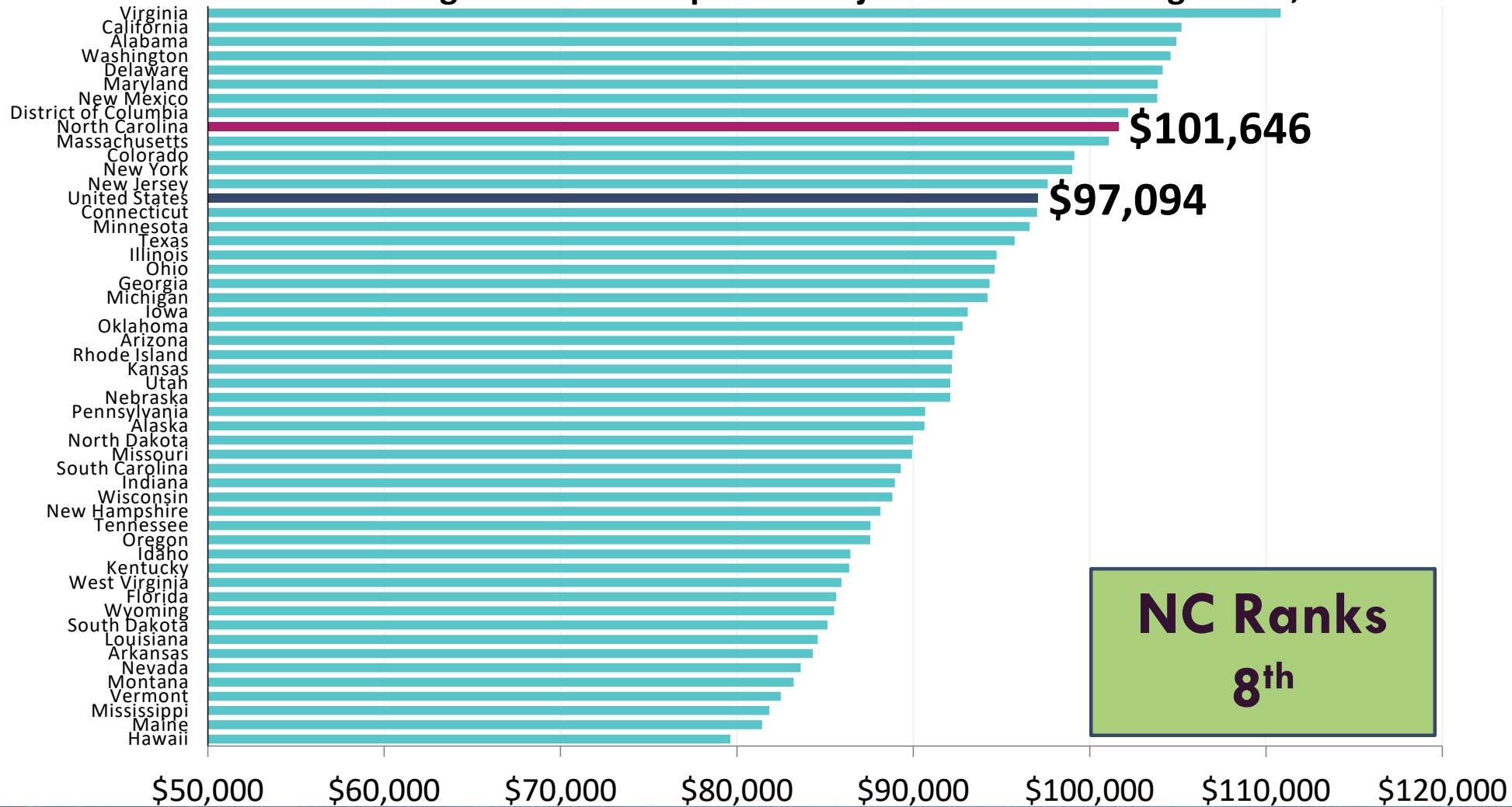
Tech Occupations Job Change, 2018-2023



Tech Occupations Employment Change, 2018 - 2023

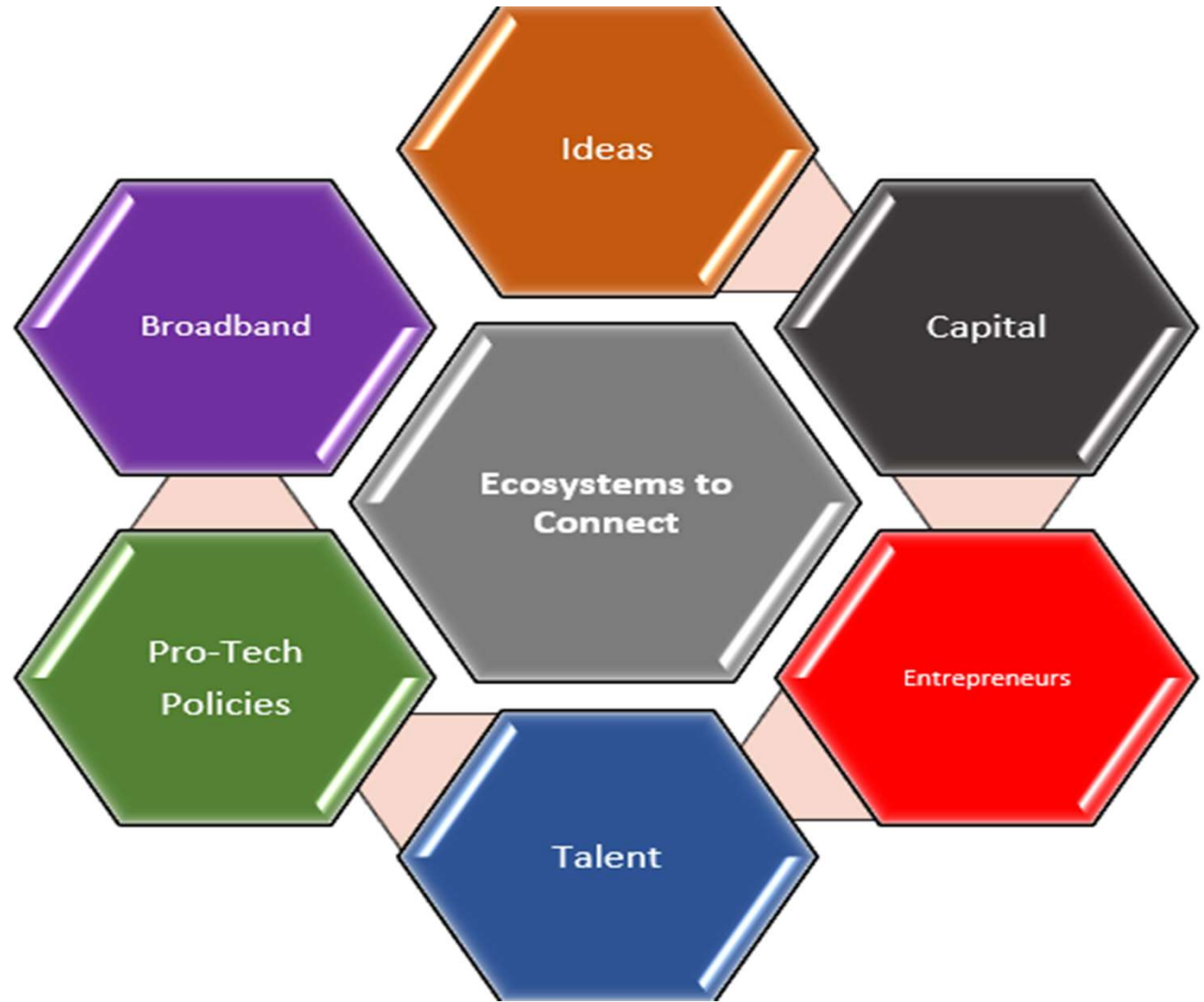


Median Annual Earnings for Tech Occupations Adjusted for Purchasing Power, 2023

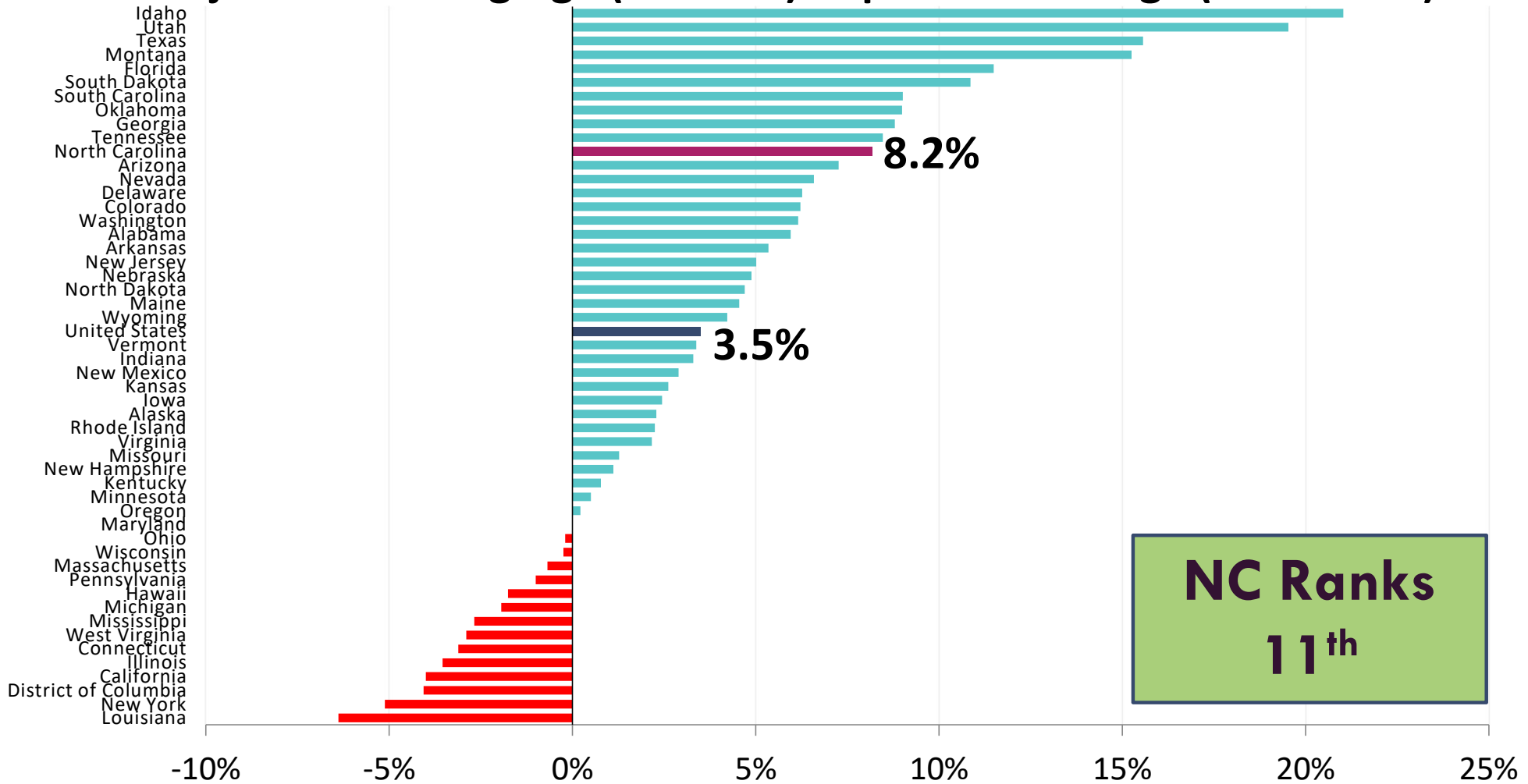


Source: EL calculations based on Lightcast 2024.4

Tech Infrastructure Metrics



Projected Working Age (25 to 64) Population Change (2024-2034)

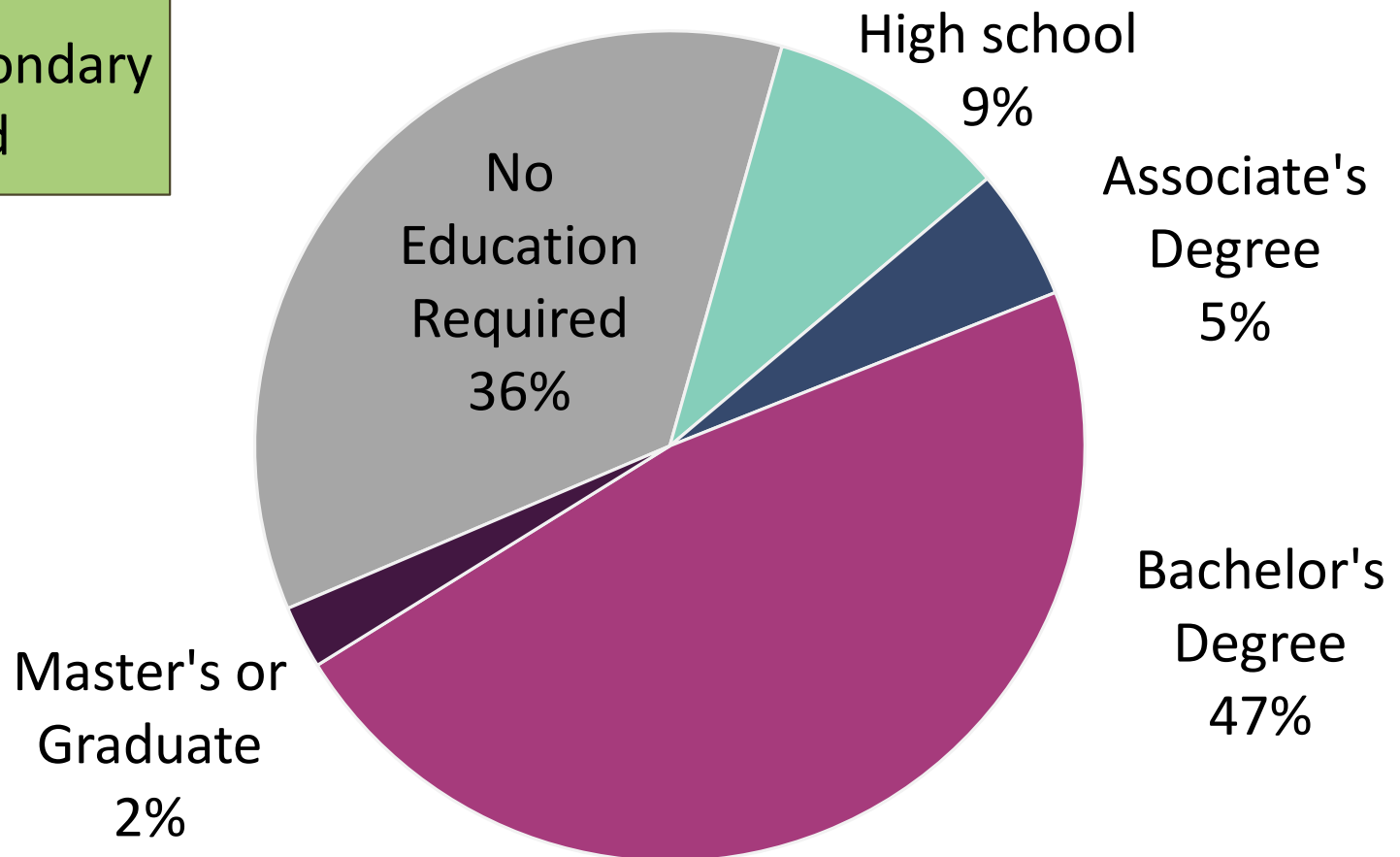


Minimum Education Level Required in NC for Tech Job Postings

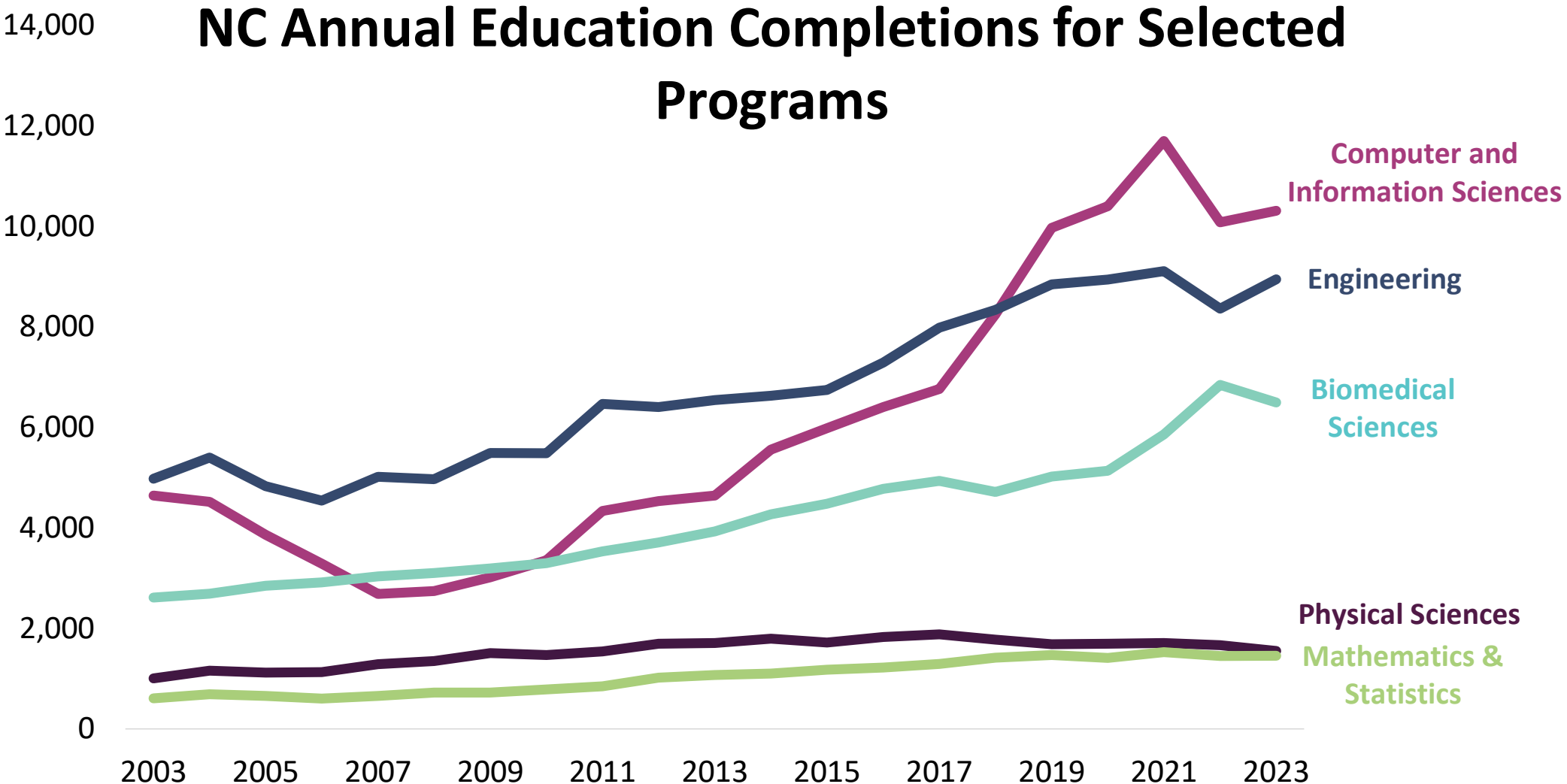
Oct 2022-Oct 2024

55%

Some Postsecondary
Required

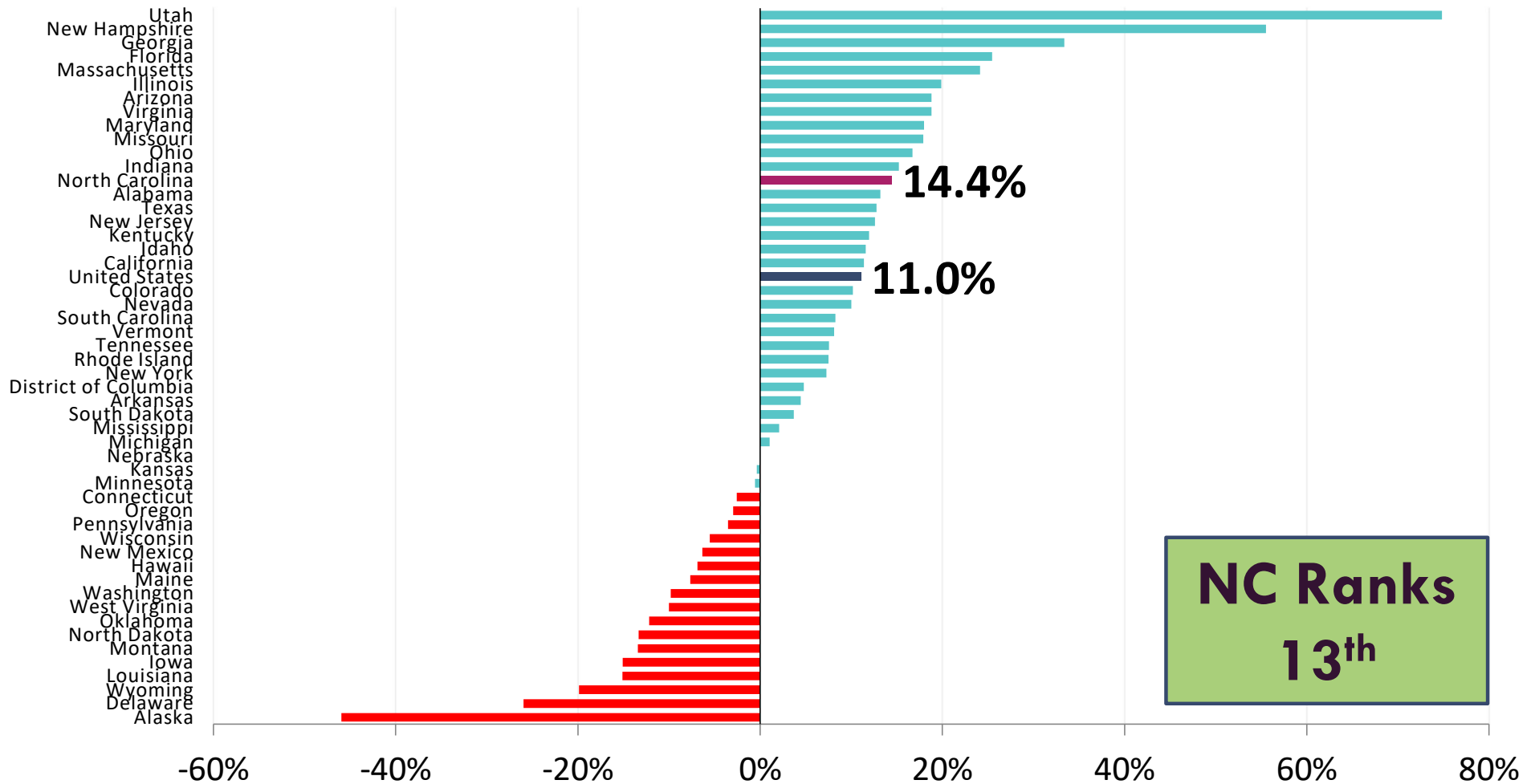


NC Annual Education Completions for Selected Programs

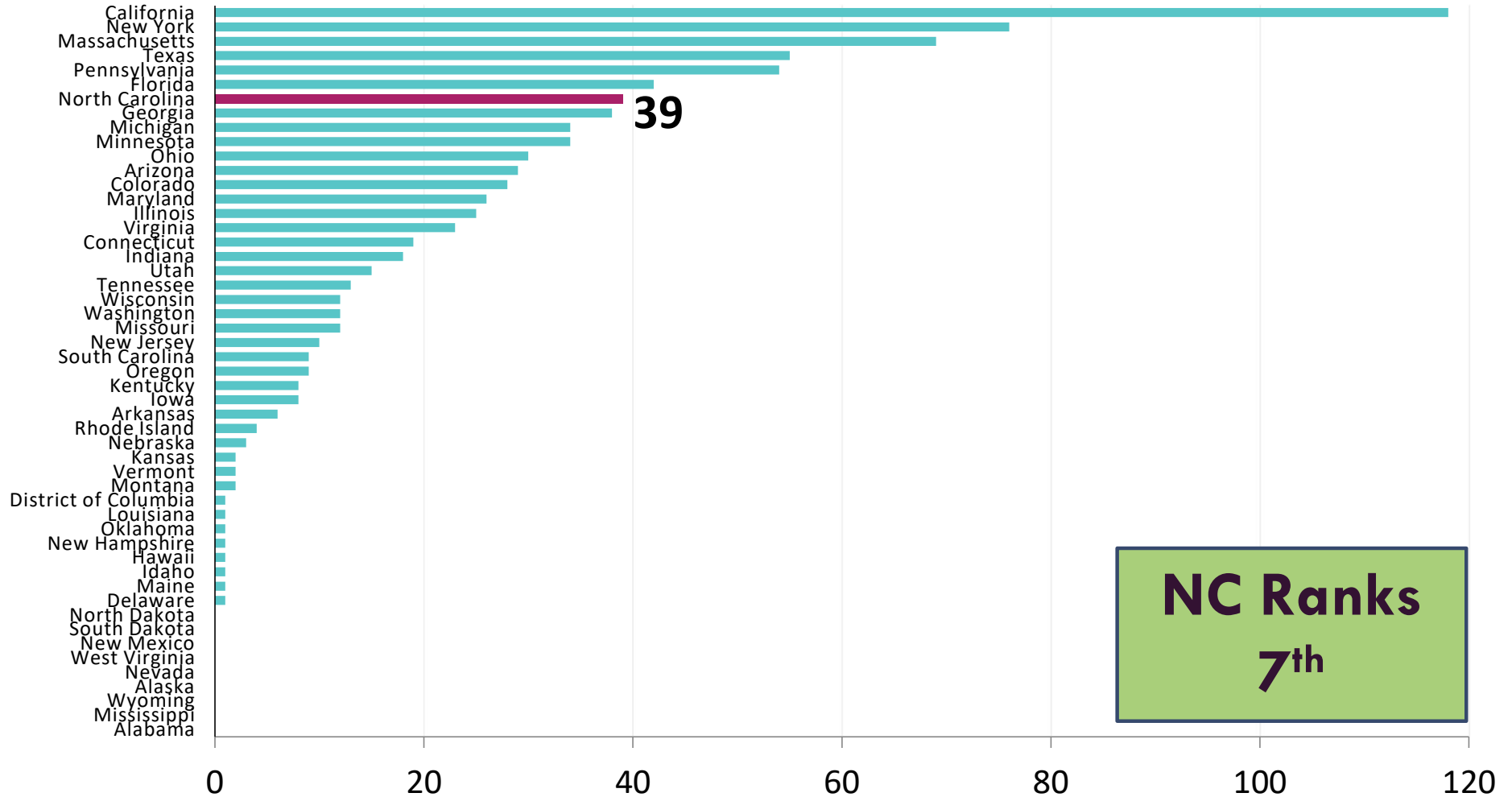


Source: EL calculations based on Lightcast 2024.4

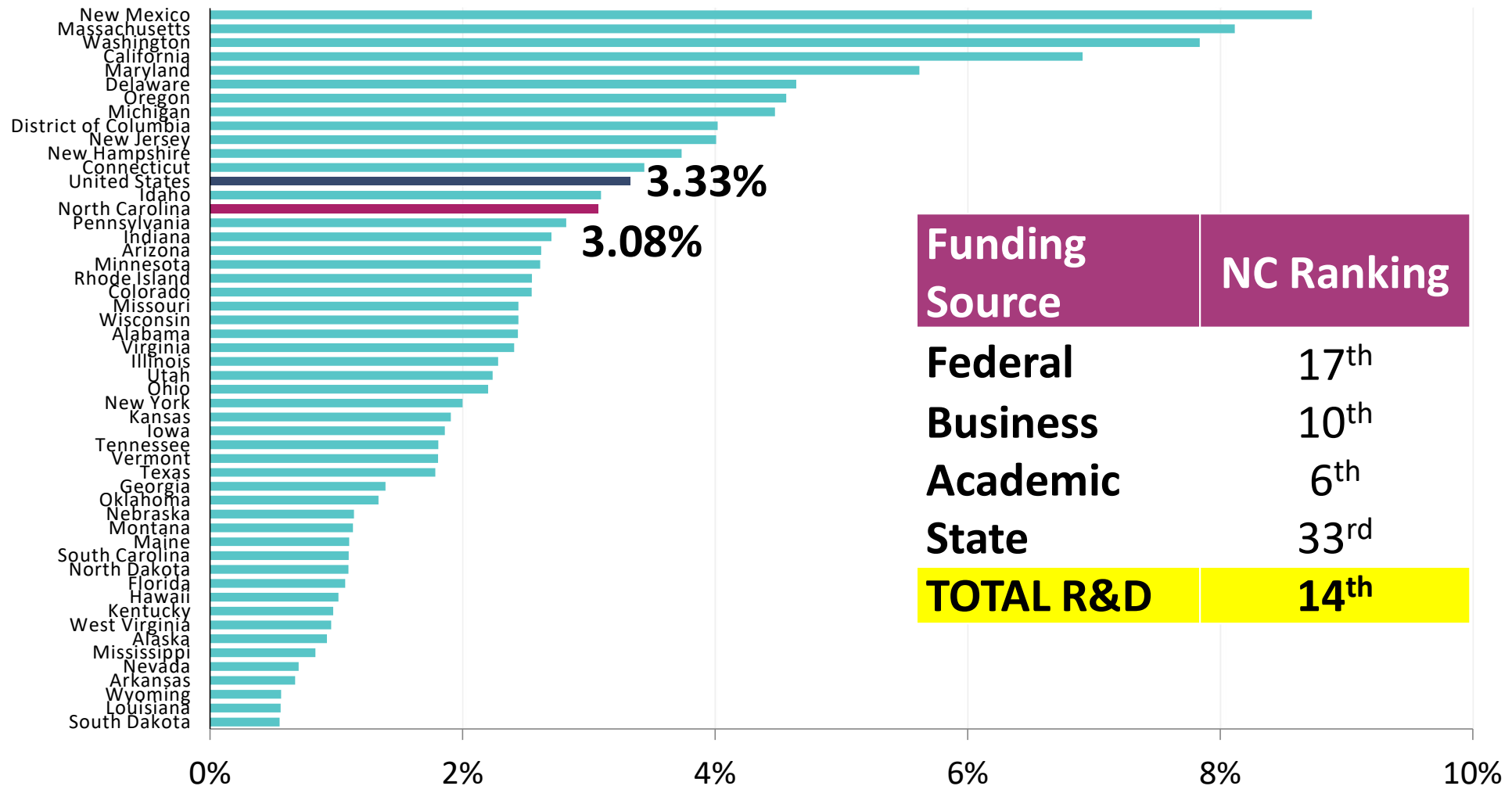
Percent Change in STEM Education Program Completions (2018-2023)



Start-Ups from Universities (2023)



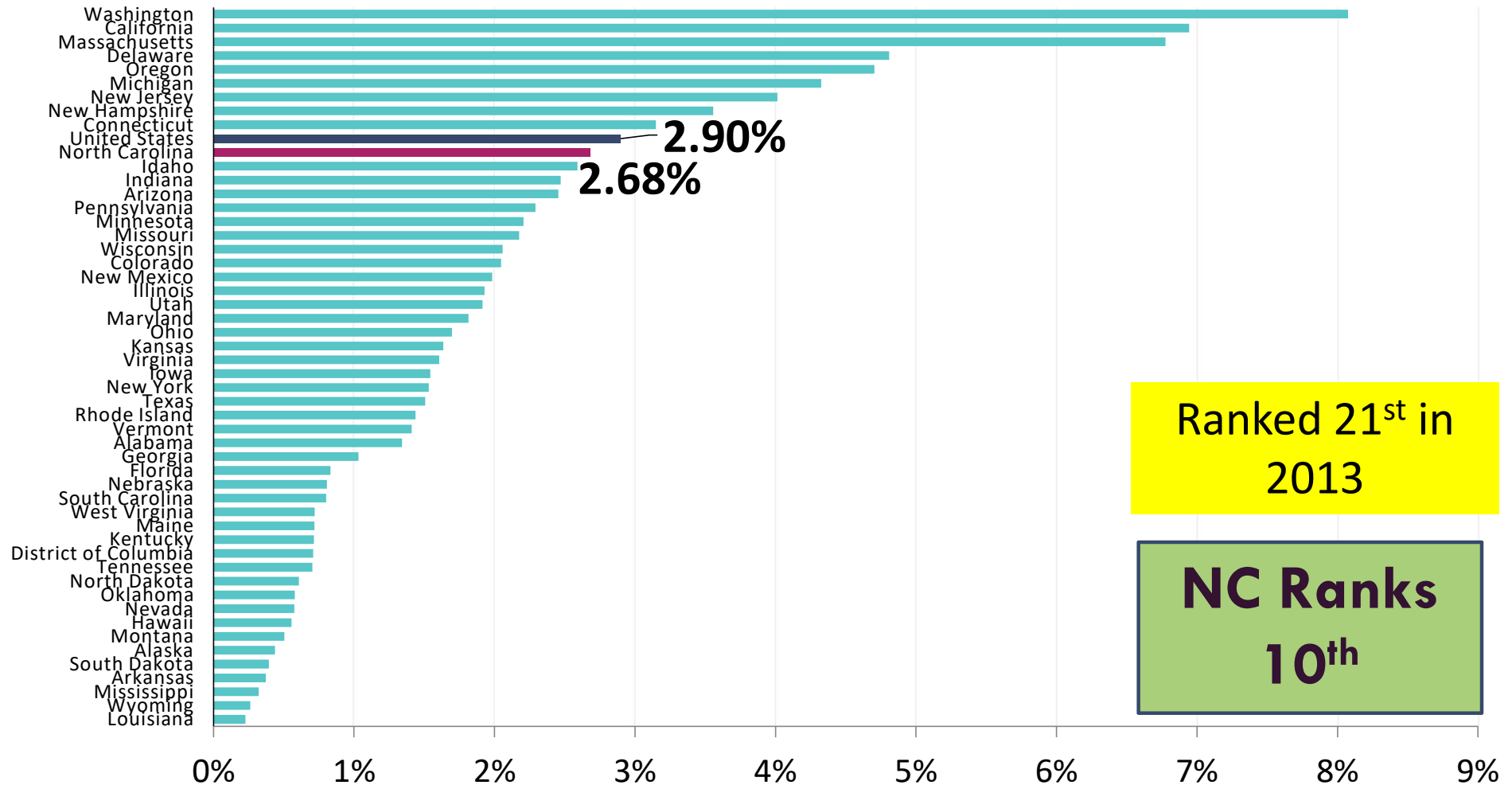
Total R&D as a Percentage of GDP (2021)



Funding Source	NC Ranking
Federal	17 th
Business	10 th
Academic	6 th
State	33 rd
TOTAL R&D	14th

Source: EL calculations based on NSF (2024)

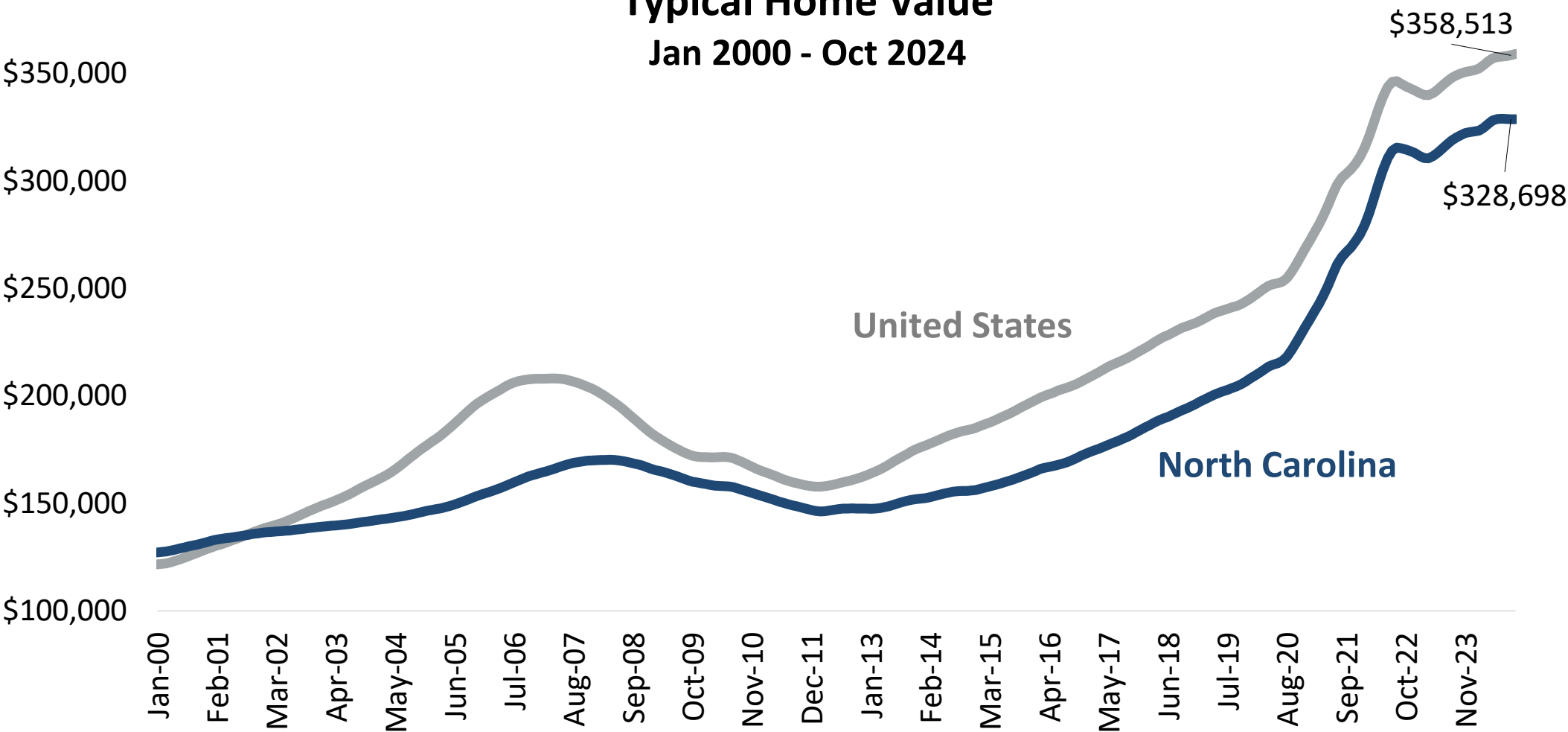
Business Performed R&D as a Percentage of Private Industry Output (2021)



Ranked 21st in
2013

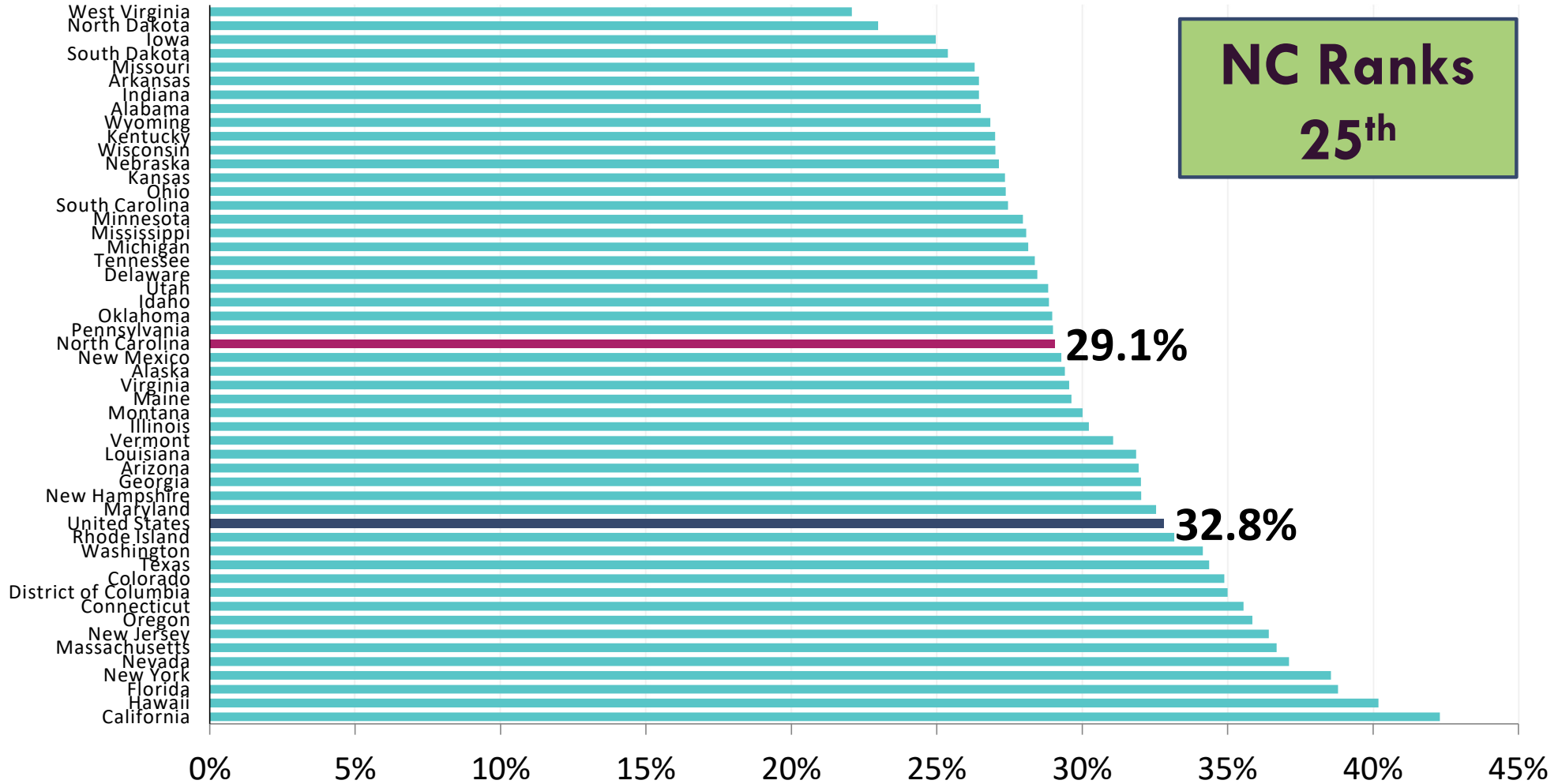
NC Ranks
10th

Typical Home Value Jan 2000 - Oct 2024



Source: Zillow (2024)

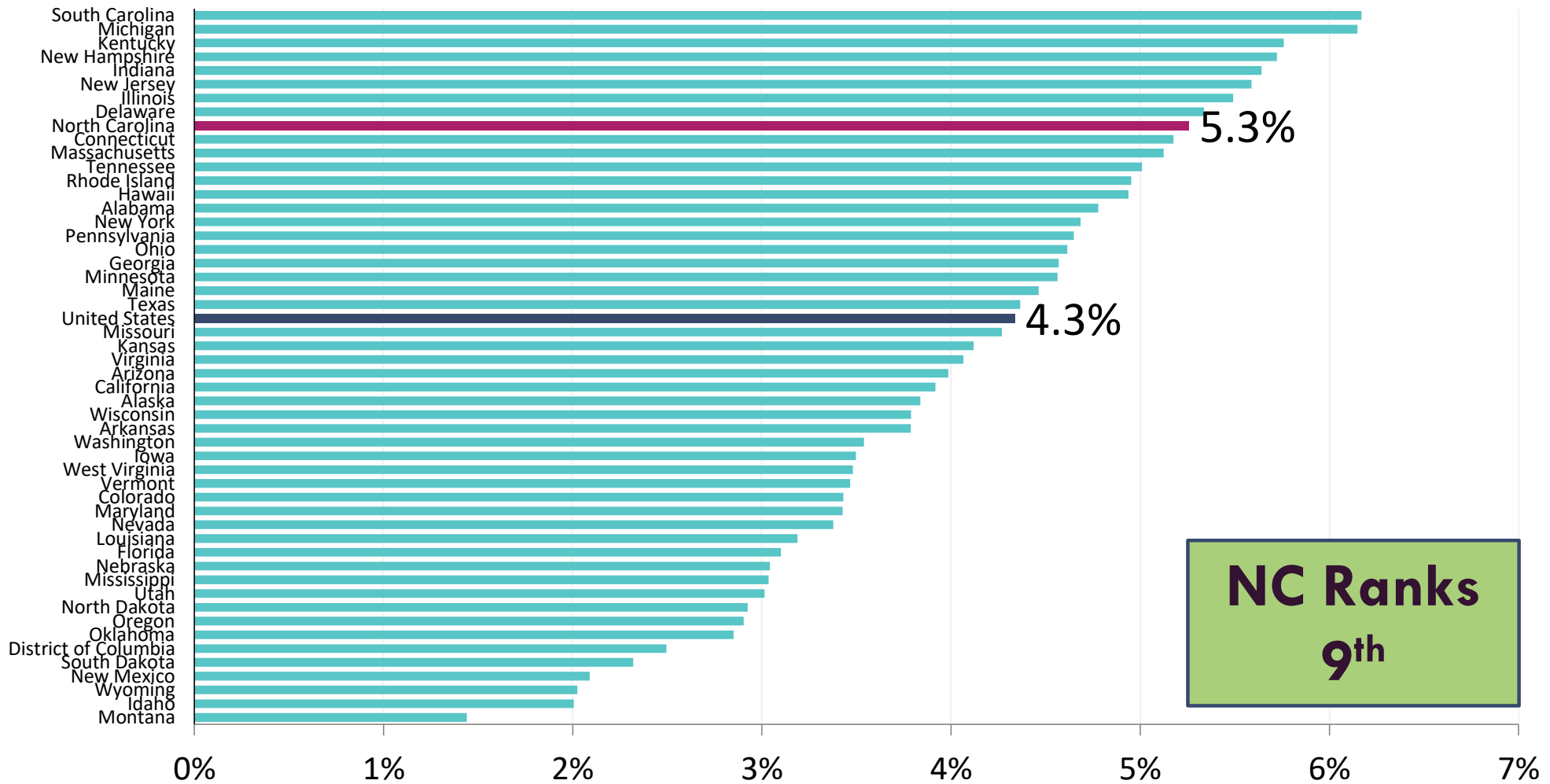
Share of Housing Burdened Households (2023)



Geoeconomics and
Geopolitics are
rapidly changing,
but also becoming
more important,
not less.

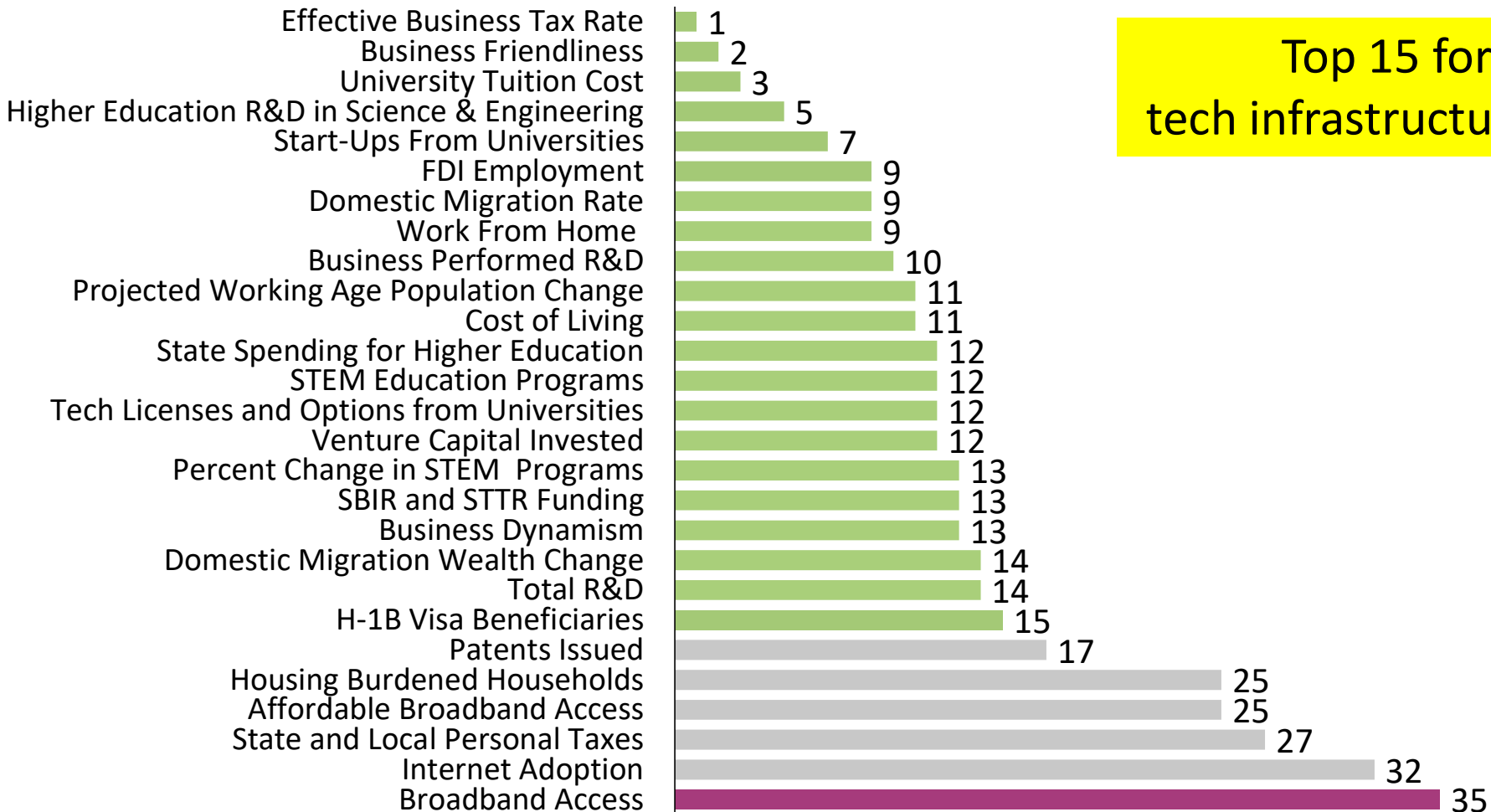


FDI Employment as a Percentage of Total Employment (2021)



Source: EL calculations based on BEA (2024)

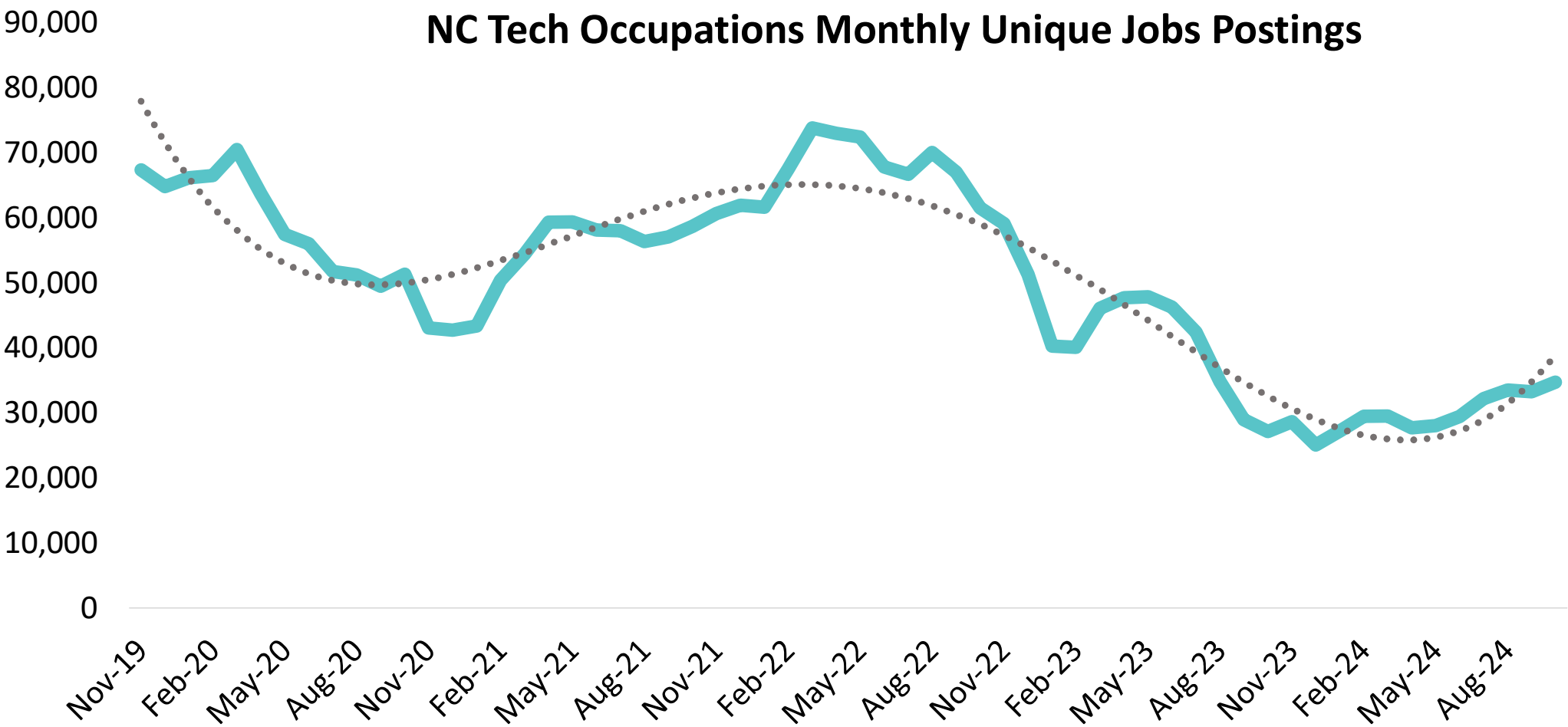
North Carolina State Rankings for Tech Infrastructure Indicators



Top 15 for 21
tech infrastructure metrics

The future...

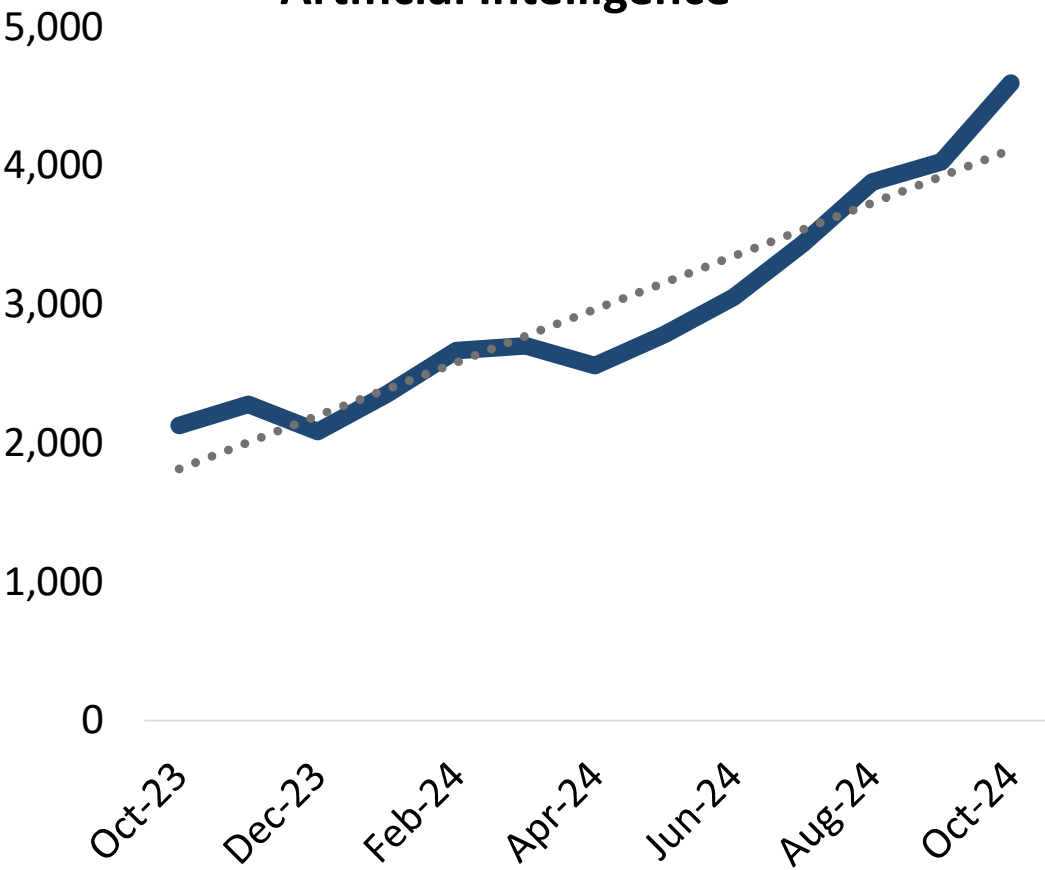
NC Tech Occupations Monthly Unique Jobs Postings



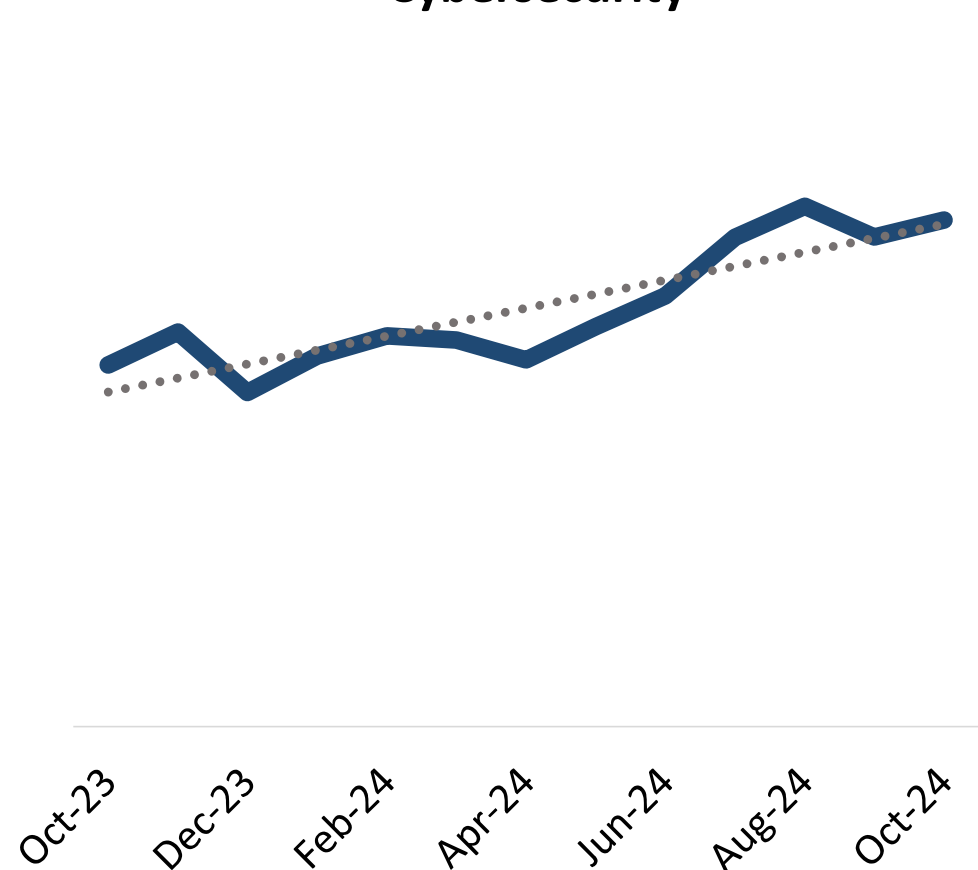
Source: EL calculations based on Lightcast 2024.4

NC Job Postings in Emerging Tech Markets

Artificial Intelligence

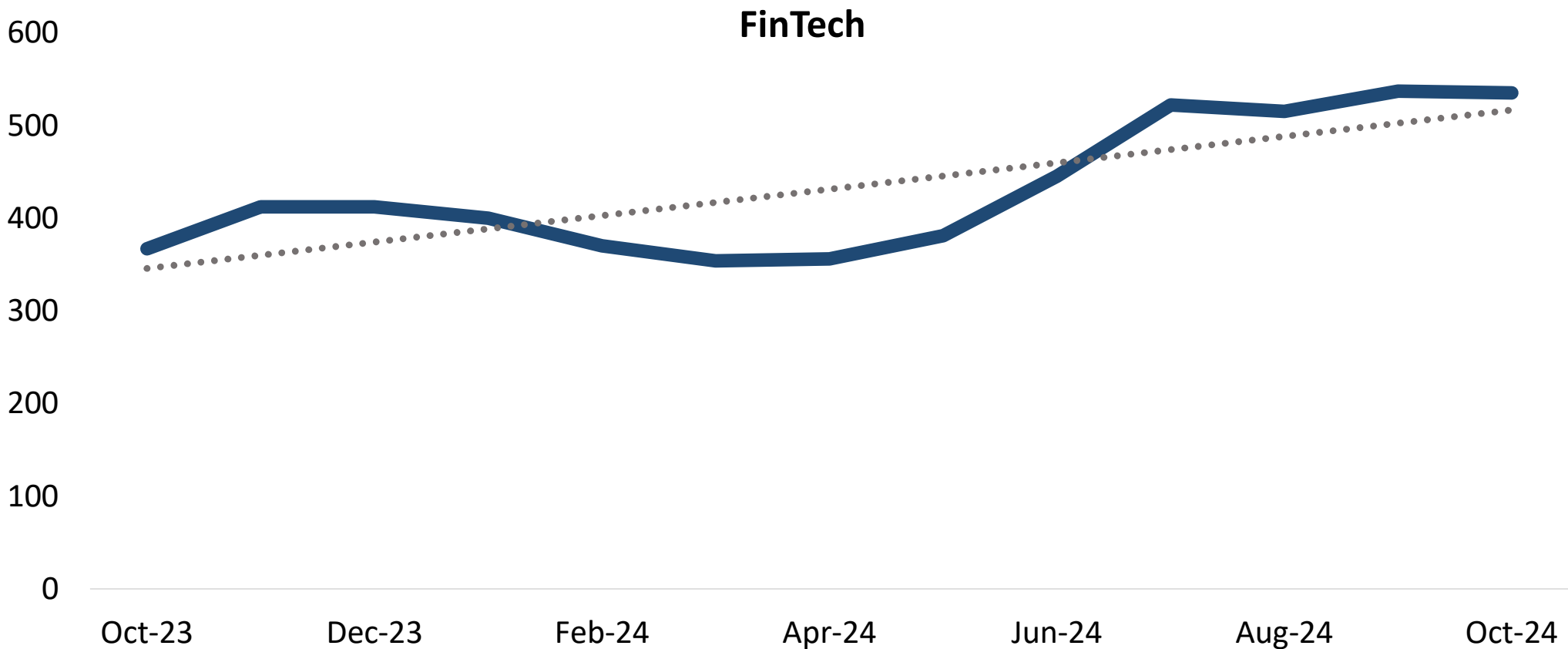


Cybersecurity



Source: EL calculations based on Lightcast 2024.4

NC Job Postings in Emerging Tech Markets



Source: EL calculations based on Lightcast 2024.4



Thank you!



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