North Carolina State of Technology 2026 Industry Report

INTRODUCTION

North Carolina's State of the Technology Industry Report is now in its twelfth year. First produced in January 2015, the report tracks and highlights trends in one of North Carolina's most important and growing industries. It identifies results that provide cause for celebration for NC TECH members, as well as issues that affect the state's competitiveness and should gain the attention of North Carolina's state and local policymakers. NC TECH has committed to conducting this research annually.
This 2026 report presents final statistics for the tech sector in 2024, including facts, trends, and insights into North Carolina's technology industry. Tech's performance in the state is benchmarked against other states and national trends. The report provides information for companies considering headquarters relocation, operations establishment, or expansion. It also serves as a resource for policymakers, innovation-sector organizations, the economic development community, and the media.
First and foremost, the report highlights the vibrancy and significant economic impact of North Carolina's technology sector.

NC TECH was founded more than thirty years ago, in 1993, with a mission to advance North Carolina's technology sector. Today, NC TECH has more than 700 members, including the state's leading technology companies, organizations, and institutions. The organization brings its members together around the business of technology through peer interaction, educational programming, information sharing, relationship building, and networking. NC TECH is the go-to organization for policymakers on issues affecting the tech sector and supports the development of world-class, well-educated students and workers to help make North Carolina a favored home for globally competitive companies.

North Carolina Technology Industry Summary Statistics, 2024

Indicator	Technology Industry	State Total	State Total Percentage
Employees	328,414	4,901,212	6.7%
Establishments	35,173	376,577	9.3%
Wages (millions)	$44,842	$371,791	12.1%
Sales (millions)	$136,092	$1,194,760	11.4%

Source: EL estimates based on Lightcast 2025.4

NC TECH contracted with Economic Leadership, a North Carolina–based firm, to once again create and build the State of the Technology Industry Report. For this report, the technology industry is broken down into four subcategories:

(1) Information Technology, Telecom, Hardware, and Software
(2) Energy Technology
(3) Environmental Technology, and
(4) Life Sciences.

This methodology was established for the inaugural report based on several definitions of the tech industry—primarily the TechAmerica Foundation's Technology Industry Classification—and has remained consistent

each year for all State of the Technology Industry reports. A full accounting of the categories is provided in the appendix. Keeping the methodology consistent and transparent over twelve years allows for meaningful trend analysis over time.

The technology sector, long a driver of national economic expansion and global competitiveness, enters 2026 navigating a more complicated landscape. Geopolitical and regulatory uncertainties continue to shape business decisions. Even so, fields such as artificial intelligence, agricultural technology, and quantum computing continue to generate a steady stream of new products and research breakthroughs. Despite these challenges, the tech industry in North Carolina continued to grow from 2023 to 2024 across all four subcategory groups.

North Carolina's Technology Industry by Sub-Categories, 2024

Technology Categories	Employment, 2024	Employment Change, 2023-2024	Employment Change, 2019-2024	Establishments, 2024	Sales, 2024 (millions)	National Location Quotient
Energy Tech	14,756	0.4%	10.7%	697	$13,494	0.46
Environmental Tech	24,879	6.7%	-4.7%	2,140	$6,056	0.94
Life Sciences	112,690	2.2%	25.3%	7,883	$49,723	1.13
IT	176,089	0.7%	20.5%	24,453	$66,818	1.03
TOTAL TECH	**328,414**	**1.6%**	**19.2%**	**35,173**	**$136,092**	**1.00**

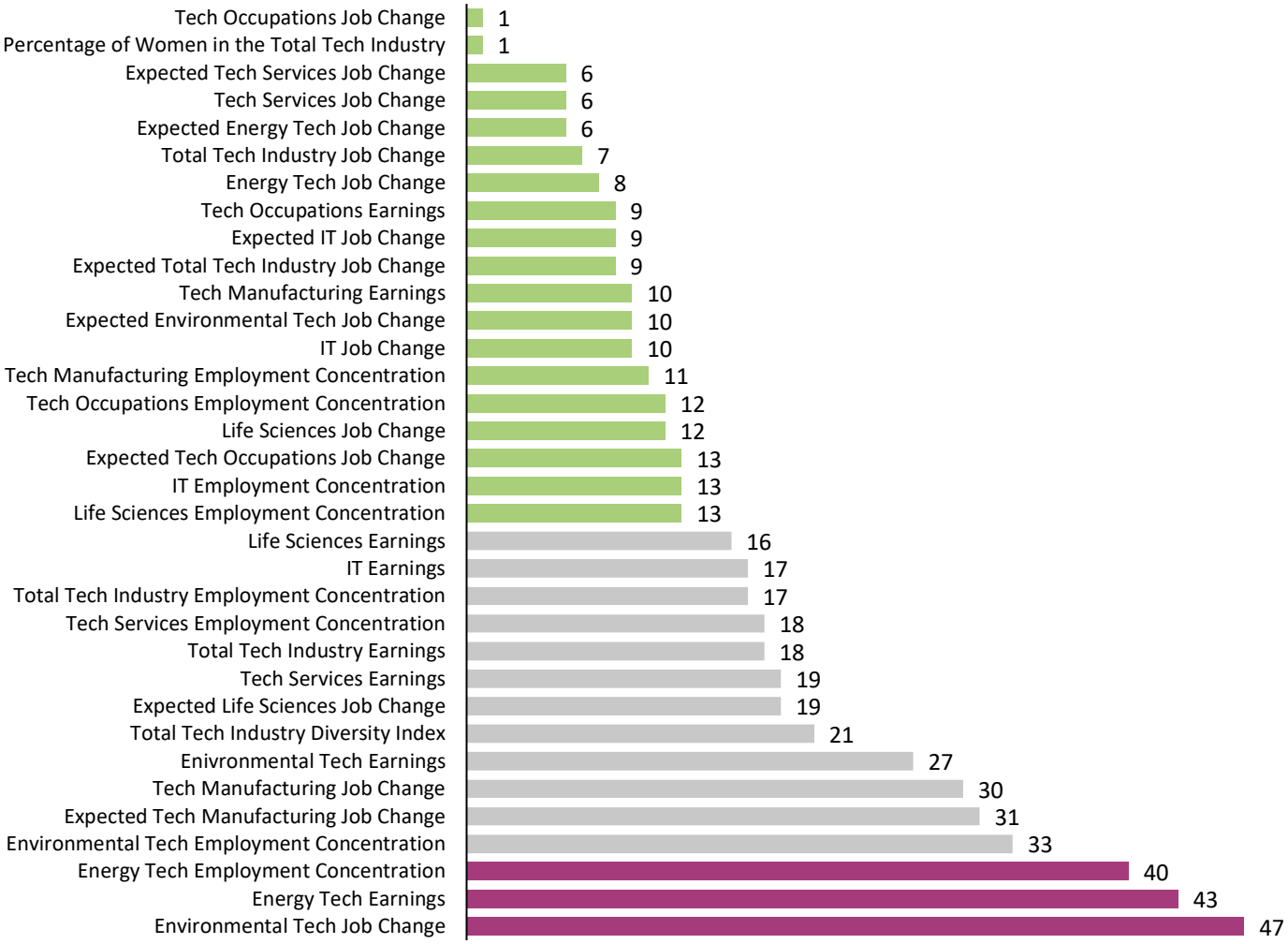
Source: EL estimates based on Lightcast 2025.4
Note: Some values may not add to the exact total due to rounding.

This report looks beyond the companies classified within the tech industry; it also analyzes data on tech occupations employed across all industries. In addition, North Carolina is compared with other states on metrics that evaluate the broader tech ecosystem, such as venture capital funding and research and development spending.

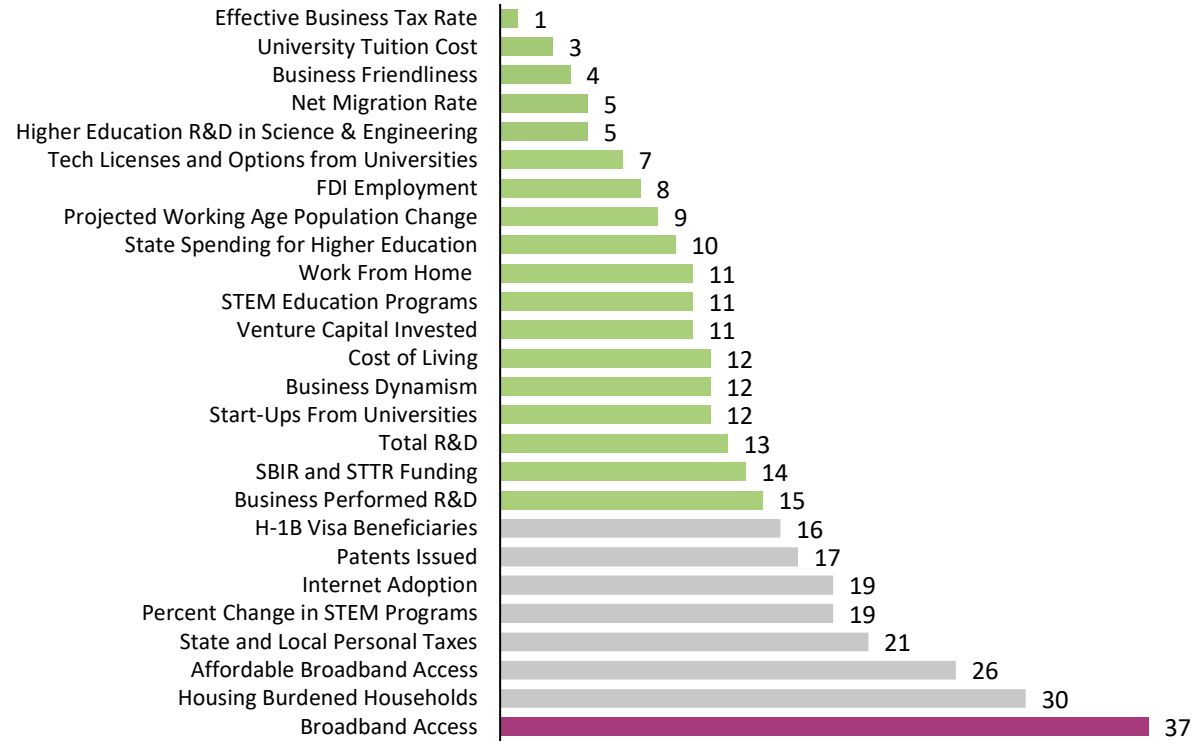
HIGHLIGHTS:

- One job created in the tech industry supports an additional 2.24 jobs throughout the state economy. This level of impact is higher than nearly all other industries in the state.
- North Carolina remained the #1 state for the percentage of women in the technology industry, with women accounting for more than 37 percent of the workforce.
- North Carolina was the #1 state in tech occupations growth from 2019–2024.
- The state ranked 1st in effective business tax rates and 4th in overall business climate.
- North Carolina ranked 11th in venture capital funding per gross state product.
- The state had the 5th highest level of research and development (R&D) at universities in science and technology fields.
- North Carolina's tech economy is benefiting from strong levels of migration, foreign direct investment, new business starts, and technology transfer from universities. The state ranks in the top 15 states for each of these metrics.

North Carolina State Rankings for Tech Industries and Occupations

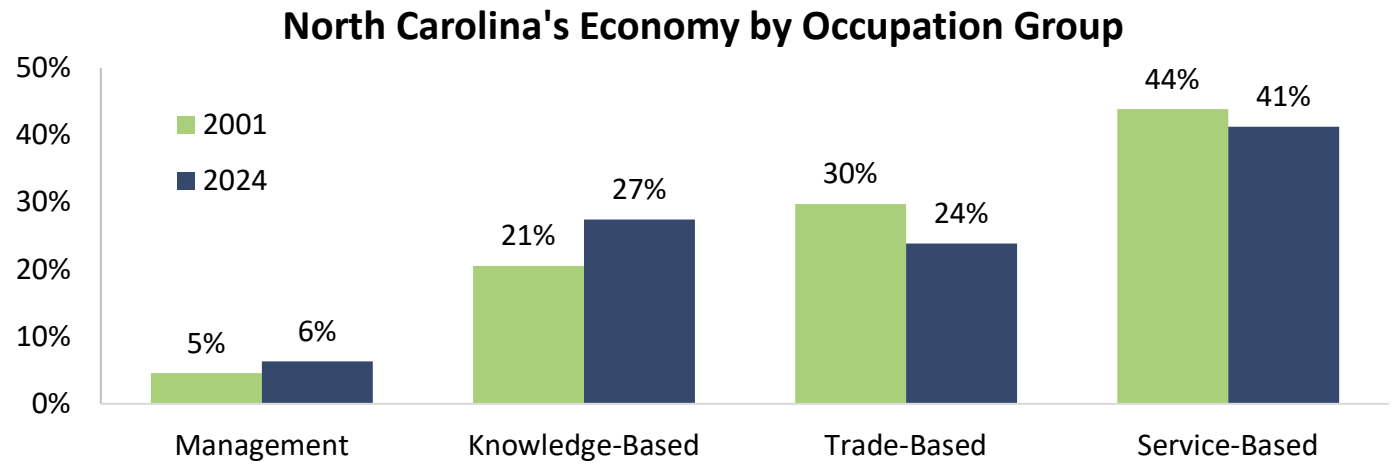


North Carolina State Rankings for Tech Infrastructure Indicators



SECTION 1. STATE OF THE INDUSTRY & REGIONAL TRENDS

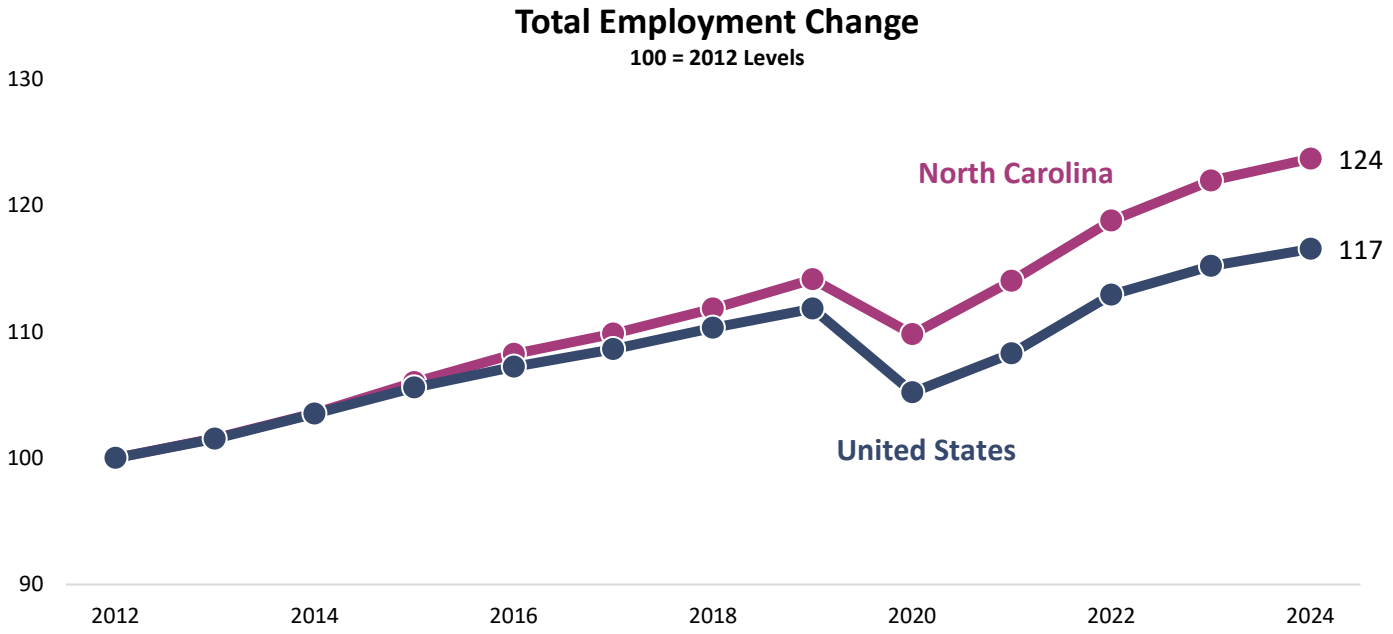
The technology industry has been one of the driving forces in North Carolina's evolving economy. Over the last two decades, the state has shifted increasingly toward a knowledge-based economic structure. Occupations that were once traditional leaders in North Carolina, such as trade-based jobs, now account for a smaller share of the workforce. Meanwhile, growth in management and knowledge-based occupations has expanded their role in the state's economic landscape.



Source: EL calculations based on Lightcast 2025.4

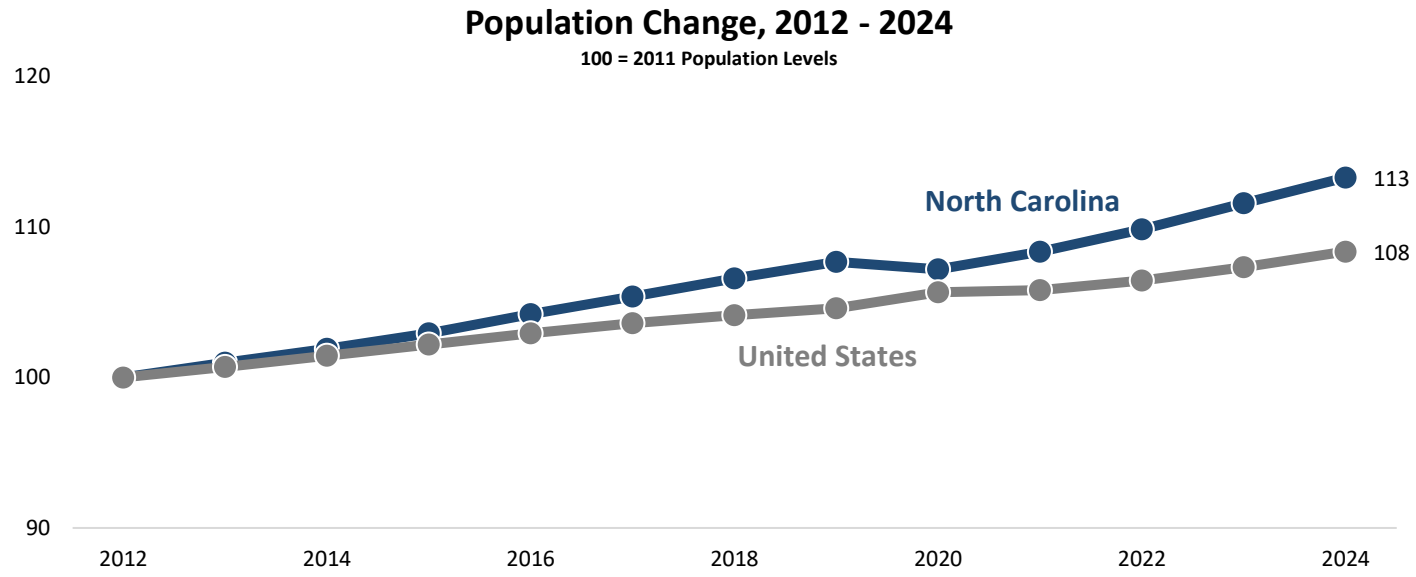
North Carolina's Economic Performance

Overall, North Carolina's economy has performed well over the last decade. Since 2015, total employment has grown at higher rates than the national average. Over the past five years, growth has been even stronger than the national average.



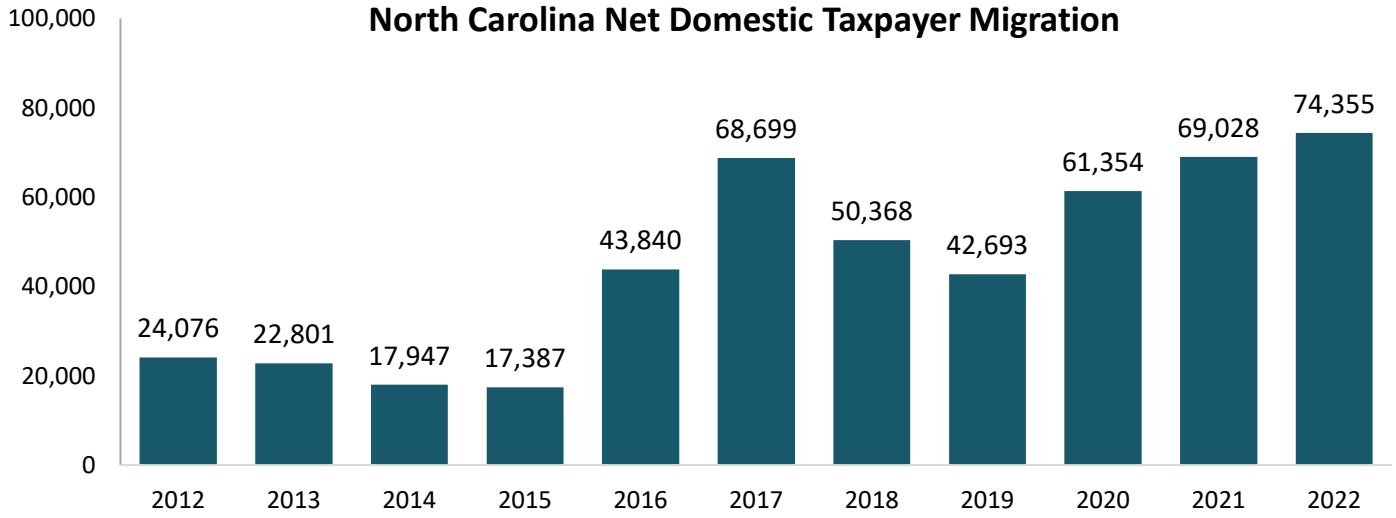
Source: EL calculations based on Lightcast 2025.4

A significant contributor to job growth in the state has been population growth, most of which has come from in-migration. Over the last ten years, North Carolina added about 321,390 people ages 25 to 44. This surge of young, working-age residents has accelerated the state's economy and expanded its pool of workers. There has also been an increase in residents age 65 and older, as more people choose to retire in the state. This can add wealth to the state and spur further economic activity.



Source: EL calculations based on Lightcast 2025.4

Data from IRS tax records demonstrate the sharp increase in domestic migration in recent years. From 2020 to 2022, the state saw net migration reach some of its highest levels in the past decade. Other research supports the notion that North Carolina was one of the states people chose to relocate to during the COVID-19 pandemic and the proliferation of remote work. In 2022, the state not only attracted people from other Southern states, but also from New York and California. The net effect of this influx has brought more wealth to North Carolina. When domestic taxpayers leave the state, they tend to head to other states in the South.



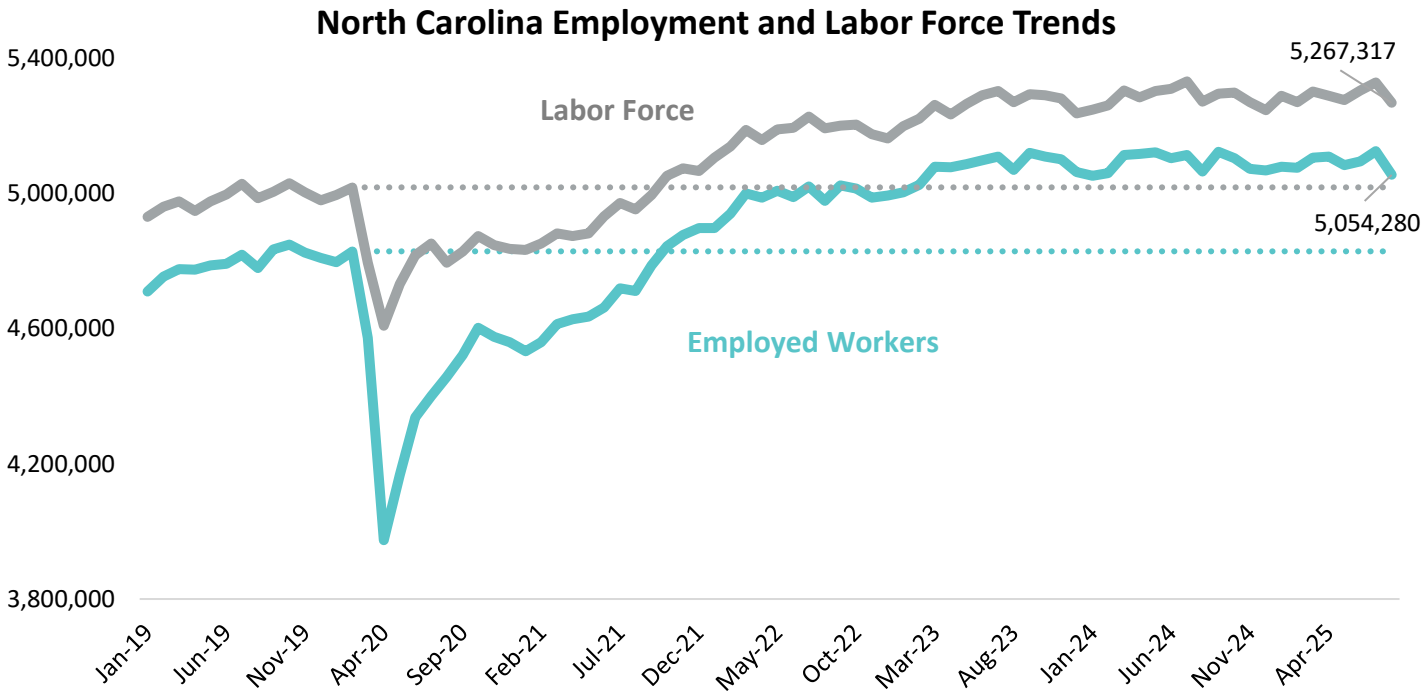
Source: Lightcast 2025.4
Note: Based on IRS data on individuals who file federal taxes.

Top In-Bound and Out-Bound Migration States, 2022

Top Five In-Bound States		Top Five Outbound States	
Florida	+29,960	South Carolina	-29,606
Virginia	+24,994	Florida	-24,485
New York	+24,018	Virginia	-19,747
South Carolina	+22,585	Texas	-14,424
California	+19,782	Georgia	-13,629

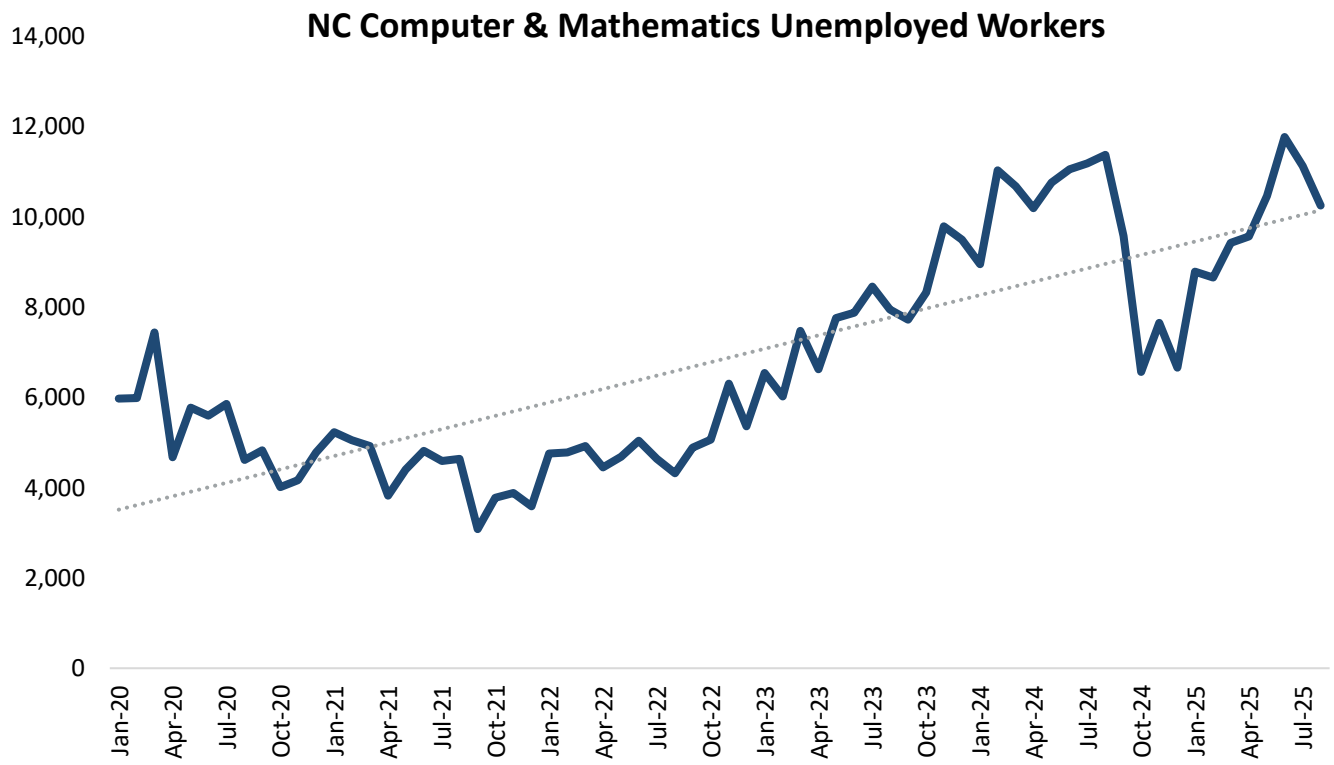
Source: EL calculations based Lightcast 2025.4
Note: Based on IRS data from individuals who file taxes.

This migration trend has helped North Carolina's economy return to pre-pandemic labor force and employment levels. The state reached its pre-COVID employment benchmark by the middle of 2021 and continued to see steady gains in the following months. Hiring levels then generally softened across the United States as the economy cooled following interest rate hikes by the Federal Reserve. In the fall of 2025, there were two additional rate cuts by the Federal Reserve that could help spur investment and growth. These expansionary measures could help generate future growth in the state.



Source: BLS (2025)

While the overall economy has been trending slowly upward, the tech sector has been moving in the opposite direction. Nationally, large tech companies continue to announce layoffs, and workers are struggling to find new positions. This pattern is evident in North Carolina, where the number of unemployed computer and math workers has risen over the past two years to levels higher than before the pandemic. Initially, some of this downsizing was viewed as a stabilization following the post-pandemic hiring surge, but after many months the trend has sustained rather than improved. Gains in tech industry productivity are likely one contributor.



Source: Lightcast 2025.4

Even as overall growth decelerates and the general economic outlook remains uncertain, this report reveals that North Carolina is well positioned to continue being a top performer in the nation.

SECTION 2. METHODOLOGY

In this report, North Carolina's technology industry is reviewed and compared with those of other states. The tech industry is defined as firms that operate in the technology space but may employ workers in non-tech roles (e.g., an accountant at Red Hat). Later in the report, tech occupations are measured separately. Tech occupations refer to workers whose roles are tech-related and who may be employed at either tech-focused or non-tech-focused companies (e.g., the Chief Technology Officer at Wells Fargo). Throughout this report, the term "tech sector" is used to encompass both tech industries and tech occupations.

In this report, North Carolina is also ranked on factors that influence the technology sector, such as research and development funding and talent availability. These metrics are collectively defined as the "tech infrastructure." Reviewing these indicators provides policymakers with an understanding of the industry's current landscape, as well as takeaways that may help guide actions to support future growth.

Economic Leadership identified 86 separate six-digit NAICS code industries to characterize the "Total Technology Industry" for North Carolina and for comparison with other U.S. states. A full list of these industries is available in the appendix. These categories are based on several established definitions of the technology industry. The primary source was the TechAmerica Foundation's Technology Industry Classification. Other state and city tech industry reports were also evaluated, and this report maintains a definition that is comparable with those sources.

The Total Technology Industry (hereafter referred to as the "tech industry") was further broken down into four subcategories:

- Energy Technology
- Environmental Technology
- Life Sciences
- IT, Telecom, Hardware, and Software (Tech Core)

To calculate metrics and trends in the tech sector for employment, wages, and establishments, Economic Leadership LLC used data developed by Lightcast, which is largely based on the Bureau of Labor Statistics (BLS) Quarterly Census of Employment and Wages. Lightcast data fills gaps created by the BLS non-disclosure policy by amalgamating several economic data sources to provide the best estimates for the years 2001–2035. This allows for a more granular analysis of the tech sector.

The data presented in this report are based on Lightcast calculations for the year 2024, the most recent full year of data available. The federal government revises data several times each year, and these revisions can be significant. Final 2025 estimates will not be available until mid-2026. Most trend data in this report cover the five-year period from 2019 to 2024. This approach allows for the most accurate assessment of the tech industry because it incorporates finalized figures from public sources. Some data, such as unemployment and job postings, provide more real-time insight and are presented throughout the report.

To measure the total number of workers in tech occupations in North Carolina across all industries, we reviewed 85 separate five-digit SOC codes across computer and engineering occupations. The definitions remain consistent with the previous eleven State of Technology reports but are updated to reflect the new NAICS classifications. There was an update to the SOC classification system in 2021 and to the NAICS system in 2022.

Data for the tech infrastructure state comparisons come directly from publicly available resources such as the National Science Foundation, the Bureau of Economic Analysis, and the U.S. Census Bureau. This ensures consistent and comparable data across all states.

SECTION 3. THE NORTH CAROLINA TECH INDUSTRY

The review of North Carolina's technology industry found that in 2024 the industry employed 328,414 people, and workers earned about $45 billion in income. The tech industry accounted directly for almost seven percent of the total jobs in the state, but 12 percent of the state's total earnings and more than 11 percent of sales. In 2024, there were over 35,170 technology establishments operating in North Carolina.

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Source: EL estimates based on Lightcast 2025.4

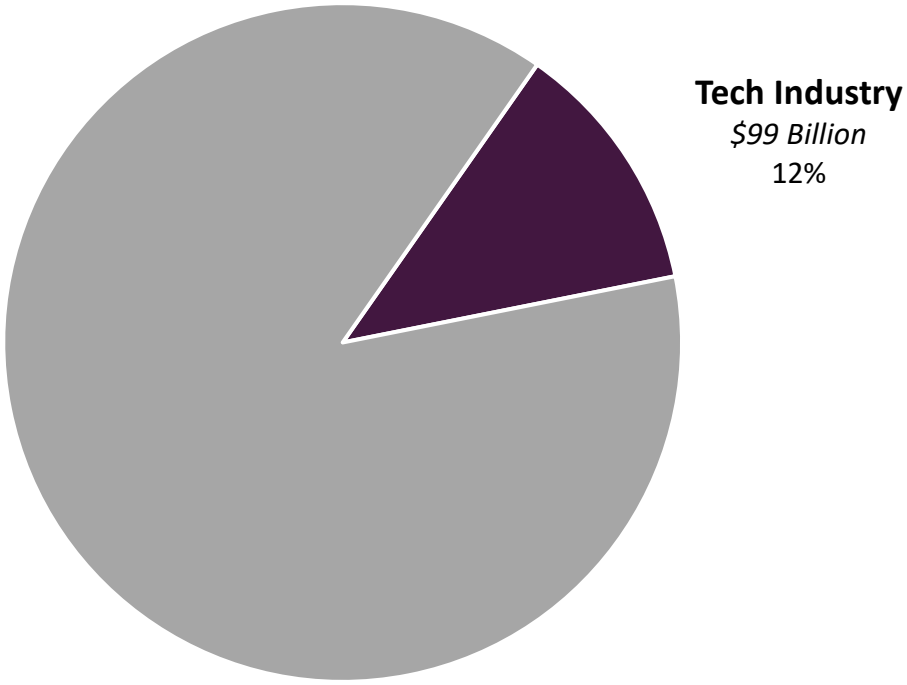
The industry also contributes heavily to North Carolina's tax revenue, exports, and gross domestic product (GDP). The tech industry accounts for about ten percent of taxes paid within the state. In 2024, the tech industry contributed more than 12 percent—$99 billion—to GDP.

North Carolina Technology Industry Economic Contributions, 2024

Indicator	Technology Industry	State Total	State Total Percentage
Taxes Paid (millions)	$4,471	$46,996	9.5%
Exports (millions)	$55,601	$732,540	7.6%
GSP (millions)	$98,515	$811,099	12.1%

Source: EL estimates based on Lightcast 2025.4

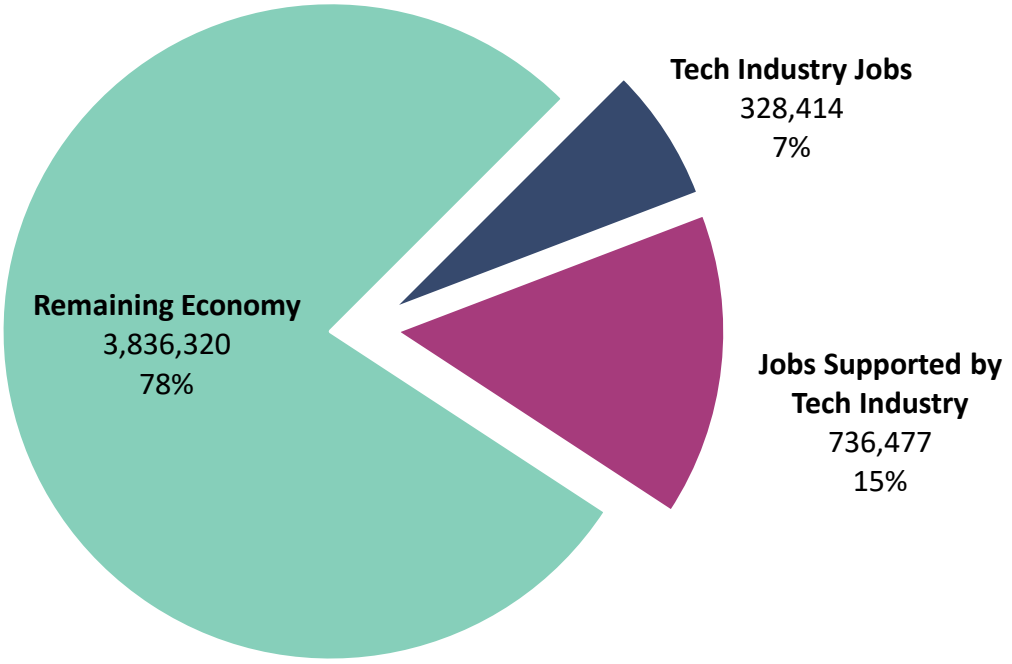
Technology Industry Contribution to North Carolina's GDP, 2024



Source: EL calculations based on Lightcast 2025.4

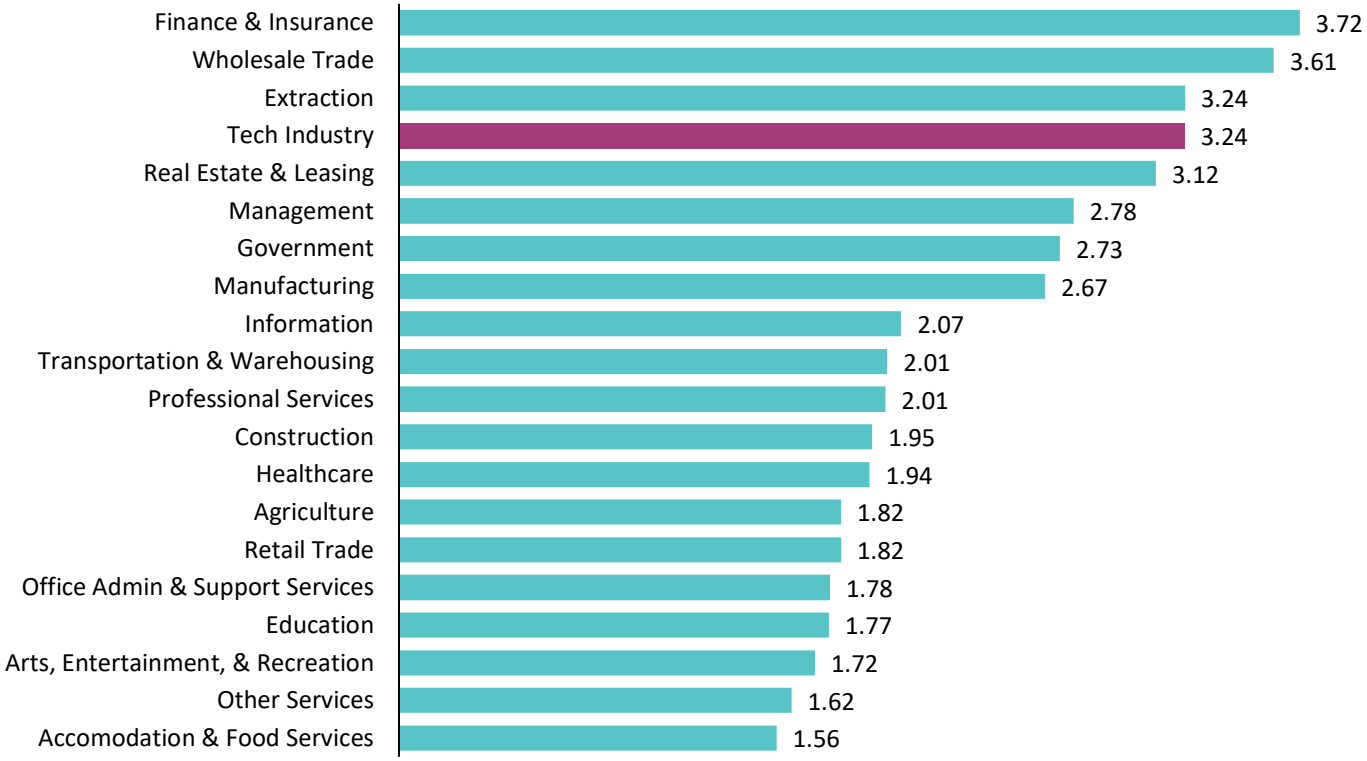
The presence of the tech industry also helps generate activity in other sectors of the economy. In 2024, North Carolina's tech sector had a job multiplier of 3.24, meaning that for every job created in the tech sector, more than two additional jobs were created or supported elsewhere in the economy. This was the fourth-highest job multiplier in North Carolina. Accounting for these multiplier effects increases the tech sector's overall employment impact from seven percent to 22 percent. In 2024, an estimated 736,480 workers in North Carolina were directly or indirectly supported by the tech industry.

Tech Industry Contribution to North Carolina's Economy, 2024



Source: EL calculations based on Lightcast 2025.4

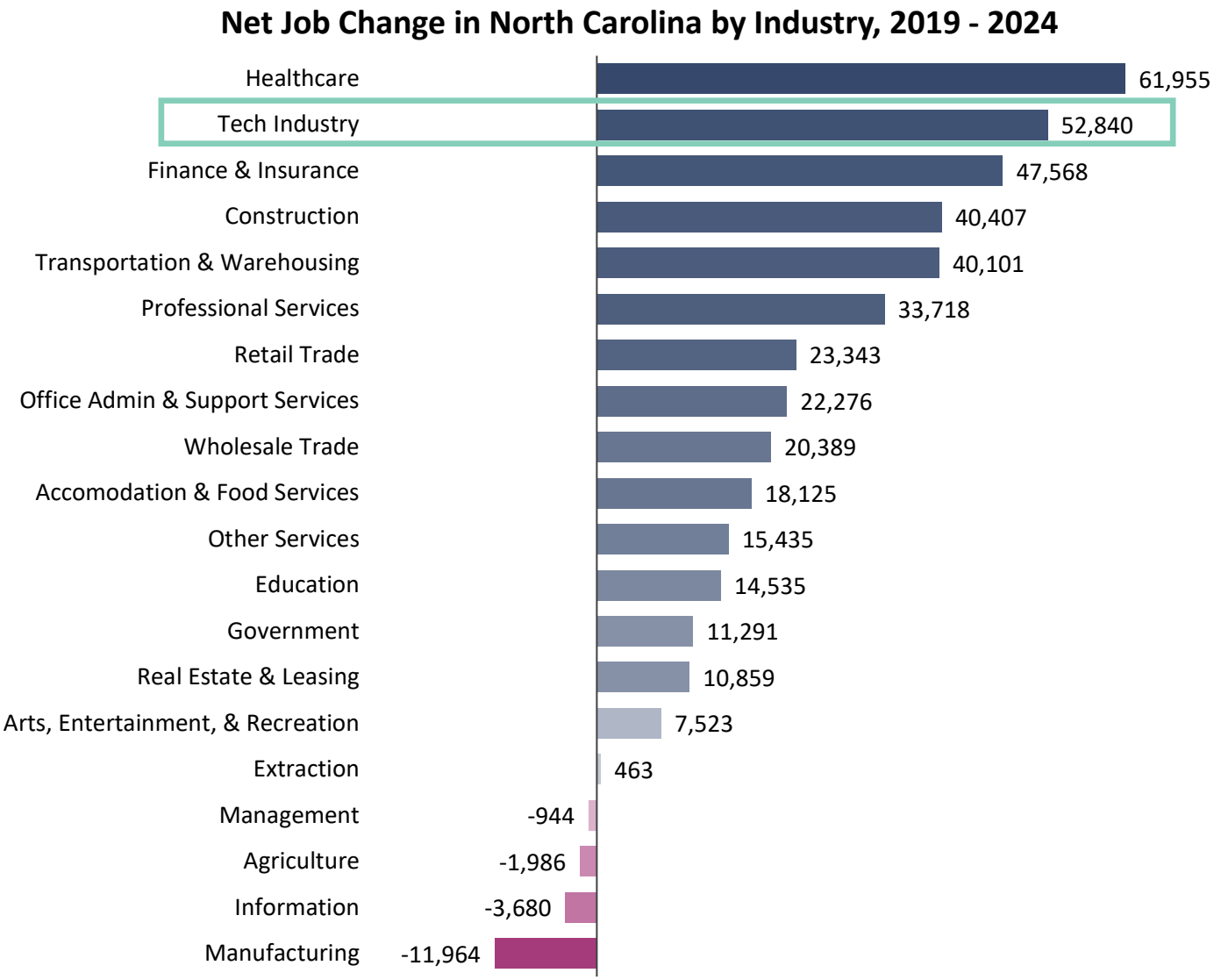
North Carolina Job Multiplier by Industry, 2024



Source: EL calculations based on Lightcast 2025.4

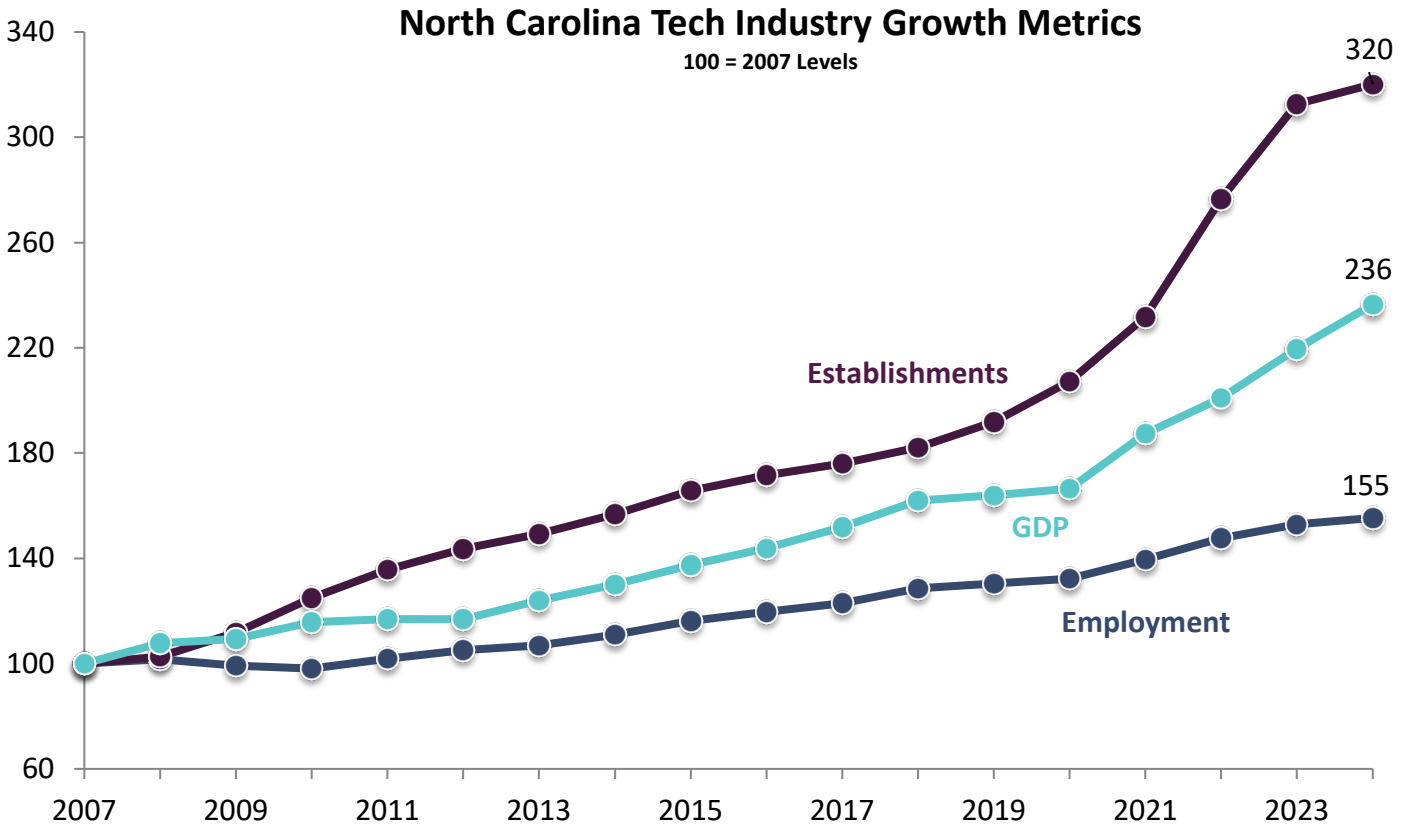
TECH INDUSTRY JOB GROWTH

Tech was the second-fastest growing industry group in the state over the last five years. This level of growth outpaced finance, manufacturing, transportation and warehousing, and construction. The only industry that grew faster during this time was healthcare. These industries generally pay wages at or below the state average, making the presence of a high-wage sector like tech especially valuable for North Carolina's economic competitiveness.

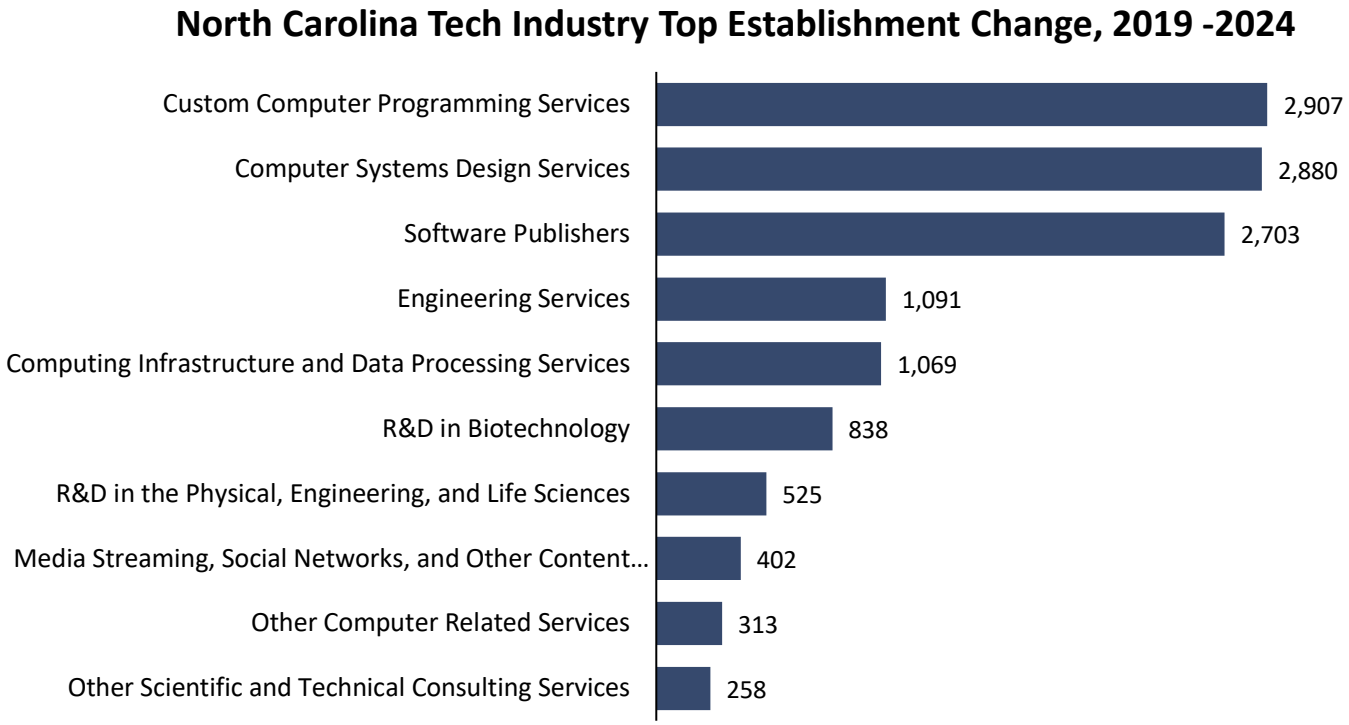


Source: EL calculations based on Lightcast 2025.4 Note: Other industries do not include tech industries in their job counts. For example, Manufacturing represents the non-tech manufacturing job change.

Not only is the tech industry growing in terms of jobs and GDP, but in recent years the number of tech establishments has risen dramatically. An establishment is defined as any company location with a payroll, and one company can have multiple establishments within a region. There were more than three times as many tech establishments in North Carolina in 2024 as there were in 2007. Nationally, entrepreneurship has also increased. Tech services is one of the easiest segments of the industry to operate remotely and generally has low capital barriers. From 2023 to 2024, however, the pace of establishment growth slowed after years of rapid expansion. The growth in establishments since the pandemic has been primarily in computer systems, programming, and software service companies.

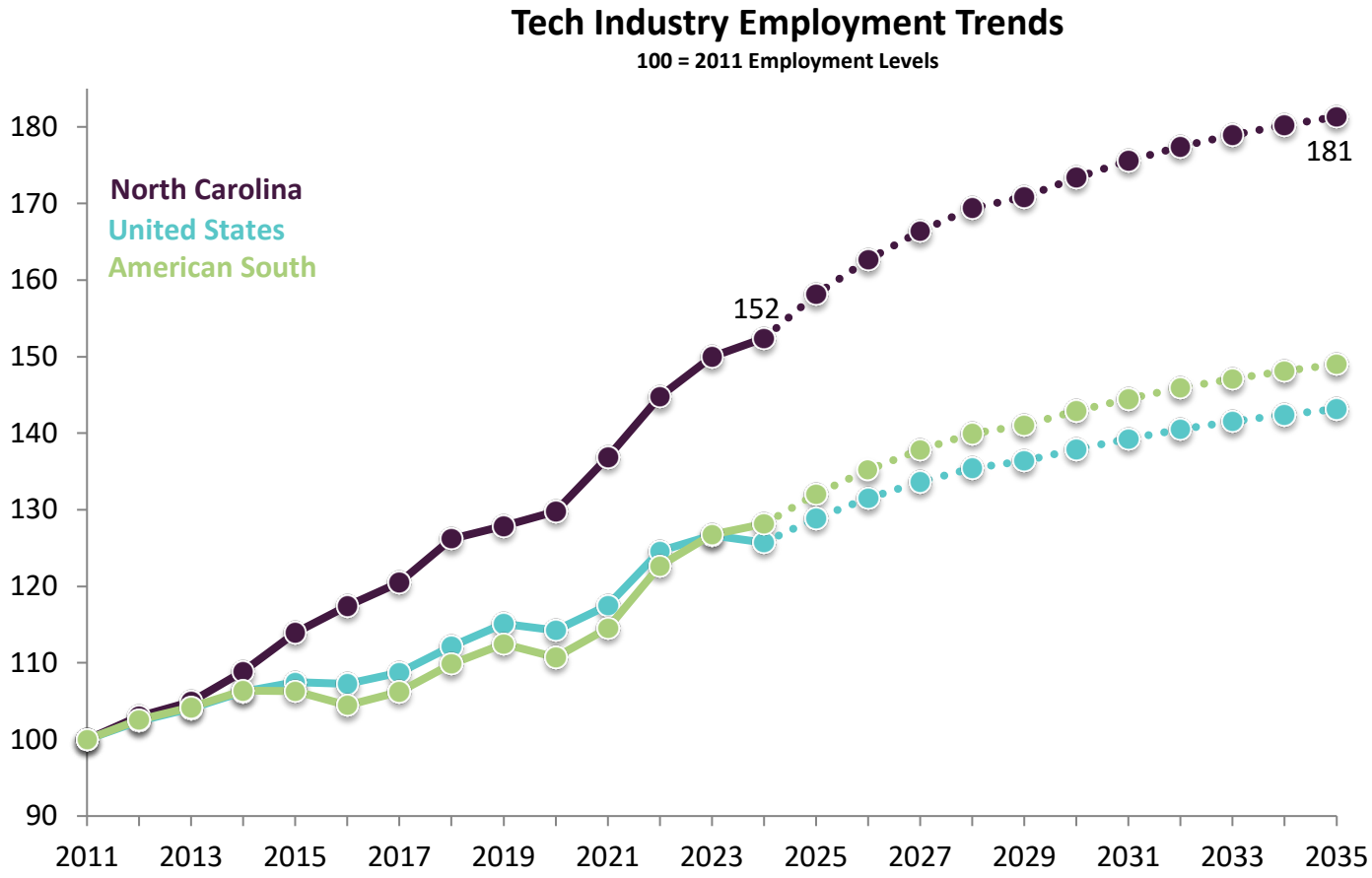


Source: EL calculations based on Lightcast 2025.4

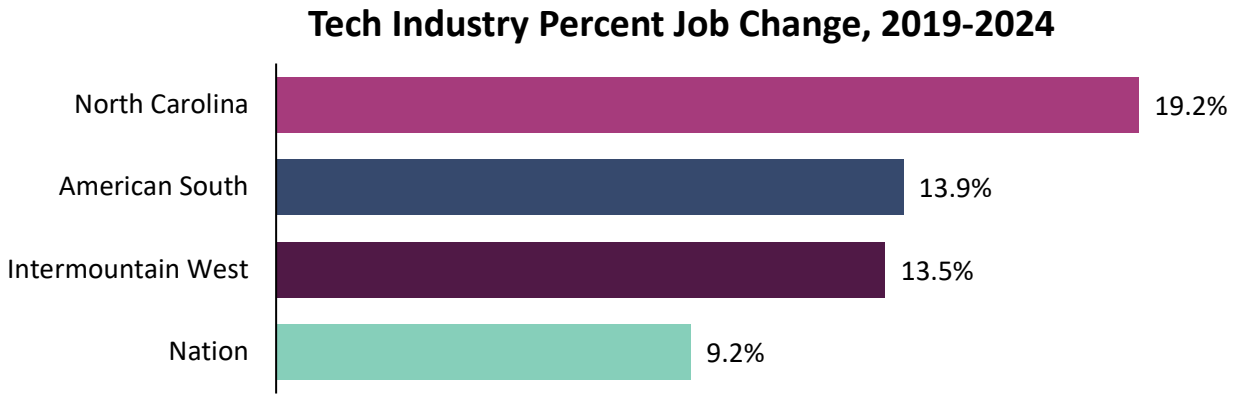


Source: EL calculations based on Lightcast 2025.4

Growth in the tech sector was one of the key drivers that helped pull the national economy out of the Great Recession. During this period, job growth in North Carolina's tech industry outpaced the national average. The state's growth rate since 2019 is much higher than the national and regional averages. North Carolina's growth is also outpacing the average for Intermountain West states, which are among the fastest-growing tech hubs. After years of expansion, the national industry began to flatten in 2023, and in 2024 the number of tech jobs declined. In North Carolina, jobs at tech industry companies continued to experience net growth. Later in this report, North Carolina's tech growth will be compared with that of all other states.



Source: EL calculations based on Lightcast 2025.4



Source: EL calculations based on Lightcast 2025.4

TECH SUB-CATEGORIES

The tech industry was further evaluated by breaking it down into four sub-categories:

- Energy Technology
- Environmental Technology
- Life Sciences
- IT, Telecom, Hardware, and Software (IT)

The Information Technology (IT) group includes industries related to hardware manufacturing, software services, social media, telecommunications, and other computer-related services. Energy Technology includes industries involved in fossil fuel and renewable power operations. Environmental Technology encompasses industries related to electrification, batteries, environmental consulting, and waste remediation services. Life Sciences includes industries engaged in pharmaceutical manufacturing and research and development in biotechnology.

North Carolina's Technology Industry by Sub-Categories, 2024

Technology Categories	Employment, 2024	Employment Change, 2023-2024	Employment Change, 2019-2024	Establishments, 2024	Sales, 2024 (millions)	National Location Quotient
Energy Tech	14,756	0.4%	10.7%	697	$13,494	0.46
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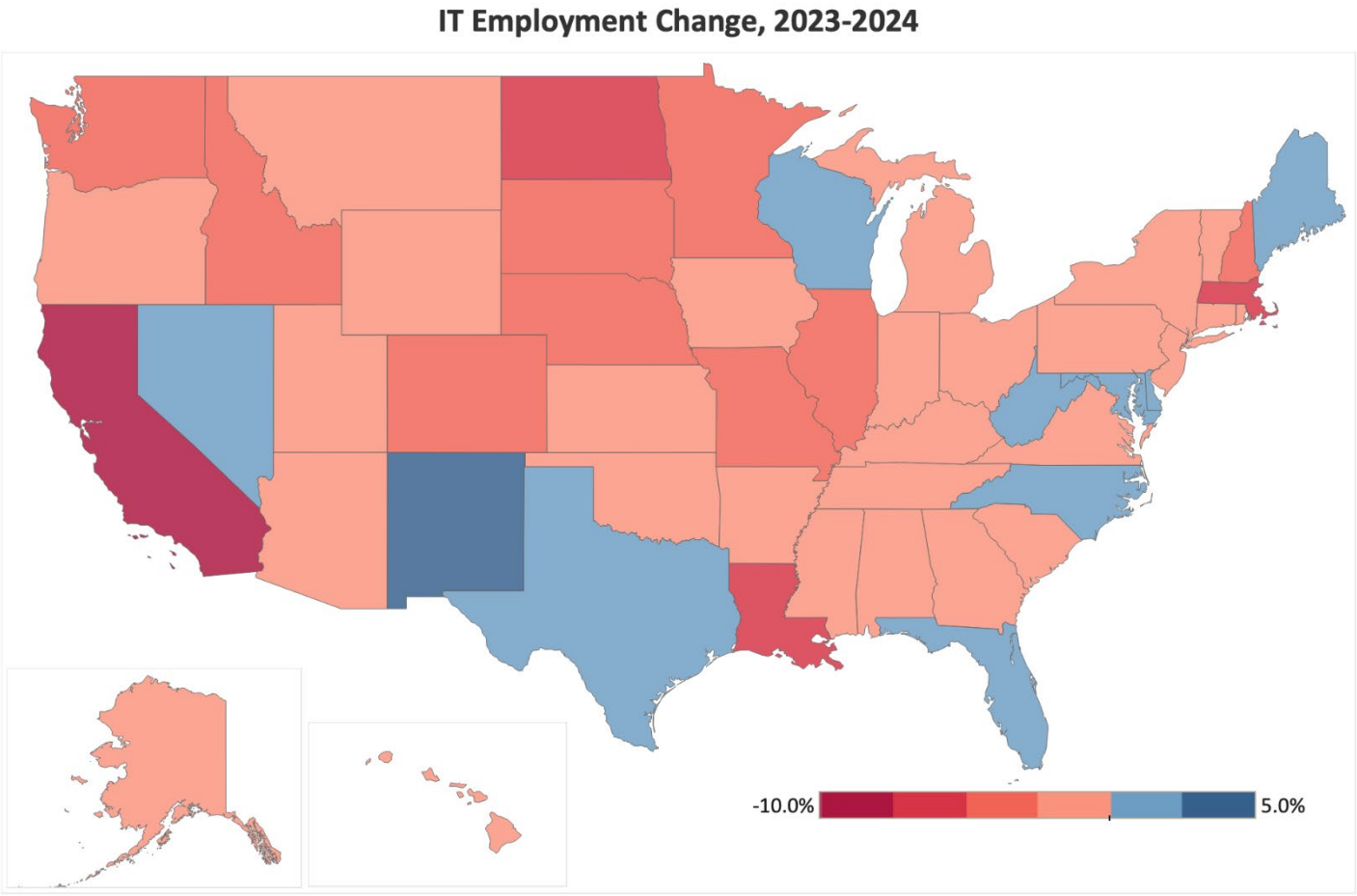
TOTAL TECH	**328,414**	**1.6%**	**19.2%**	**35,173**	**$136,092**	**1.00**

Source: EL estimates based on Lightcast 2025.4
Note: Some values may not add to the exact total due to rounding.

Employment concentration ratios help illustrate how strongly an industry is represented within a regional economy. Values greater than 1.00 indicate that the industry is more concentrated locally than the national average and represents a significant part of a state's economic base. Industries with high concentration often drive a region's exports and wealth creation. Overall, the share of workers in North Carolina's tech industry is comparable to the national average. In life sciences and IT, the state has higher concentrations.

The IT subcategory accounts for 54 percent of the jobs in the tech industry. Job growth has been strong in all subcategories except for environmental technology. The job decline in the environmental technology sector is heavily influenced by a reclassification of jobs rather than a true decline in workers. From 2021 to 2022, more than 4,900 jobs in Durham County from the *Instruments for Measuring, Displaying, and Controlling Industrial Processes* industry were reclassified to the corporate offices industry (outside of the tech industry). The BLS reclassifies companies often to ensure their code is most in line with the activity of the business. One-year growth in this subsector has since been strong, and overall, the tech industry has been adding jobs at high levels.

Compared with last year's report, the pace of growth has slowed. This is consistent with national trends, as venture funding and consumer demand weakened after the Federal Reserve began raising interest rates to combat inflation. This has hit the IT sector the hardest. From 2023 to 2024, the national average rate of change in employment was a decline of 2.6 percent. North Carolina was one of ten states that had net positive growth in the IT subcategory.



Source: EL calculations based on Lightcast 2025.4

The tech industry can also be evaluated by whether jobs and establishments are involved in tech services or in the production of tech goods. These categories are referred to as output groups. In North Carolina, most of the tech industry is involved in providing tech services. Tech manufacturing is highly concentrated in the state. Growth in tech manufacturing has not been as strong as growth in tech services, likely affected by the reclassification mentioned above. All forms of manufacturing jobs in North Carolina have been on the decline in recent years.

North Carolina's Tech Industry by Output Categories, 2024

Technology Output Categories	Employment, 2024	Employment Change, 2023-2024	Employment Change, 2019-2024	Establishments, 2024	Sales, 2024 (millions)	Concentration
Tech Services	262,269	2.0%	25.3%	34,307	$98,464	0.96
Tech Manufacturing	66,145	0.0%	-0.1%	866	$37,628	1.20
TOTAL TECH	**328,414**	**1.6%**	**19.2%**	**35,173**	**$136,092**	**1.00**

Source: EL estimates based on Lightcast 2025.4

TECH INDUSTRY EARNINGS

Employees within technology companies in North Carolina earn high incomes, on average. The average earnings per worker in the tech industry were $148,100 in 2024. The average earnings for workers across all industries in the state are about $82,100. On average, a tech industry worker earns roughly 1.8 times more than most workers in the state. This metric of earnings includes all wages, salaries, and supplements received by a worker. Supplements, including employee benefits, accounted for about $21,990 of a tech industry worker's earnings in North Carolina.

North Carolina's tech earnings remain below the national average. This is both a positive and a negative competitive factor: lower wages can attract businesses relocating from higher-cost regions, but they can also make it more difficult to recruit talent to move to the state. When purchasing power is accounted for, North Carolina's wages are more comparable with the national average. The highest tech industry wages are found in IT. The average earnings for tech services and tech manufacturing were nearly identical.

Average Annual Earnings per Worker by Sub-Industry, 2024

Technology Categories	North Carolina	North Carolina (Purchasing Power)	National Average
Energy Tech	$154,400	$164,000	$184,700
Environmental Tech	$91,400	$97,100	$101,700
Life Sciences	$142,800	$151,700	$161,900
IT	$159,000	$168,900	$205,000
All Categories	**North Carolina**	**North Carolina (Purchasing Power)**	**National Average**
Tech Services	$148,100	$157,400	$183,900
Tech Manufacturing	$148,100	$157,300	$169,900
TOTAL TECH INDUSTRY	**$148,100**	**$157,400**	**$181,600**

Source: EL estimates based on Lightcast 2025.4 and BEA (2025)

SUPER SUB-INDUSTRIES

Tech industries were divided into more detailed groupings called super sub-industries. This breakdown shows that software services remain a significant driver of tech industry growth in the state, employing more than 106,200 workers. Jobs in this group have grown by 37 percent from 2019 to 2024. R&D and testing and life sciences also show strong growth across almost all categories. Electronics hardware manufacturing was the only group to have a net job decline during this time.

North Carolina's Tech Industry by Super Sub-Industries, 2024

Subsectors	2024 Employment	Employment Change (2019-2024)	National Location Quotient
Software	106,228	37%	1.09
Engineering, Environmental, & Clean Tech	46,795	14%	0.99
Internet, Social Media, & Telecom	44,188	4%	0.94
R&D and Testing	42,323	30%	1.07
Life Sciences Manufacturing	34,510	14%	1.48
Electronics Hardware	25,674	-3%	0.97
Remediation and Waste Management	13,941	14%	0.86

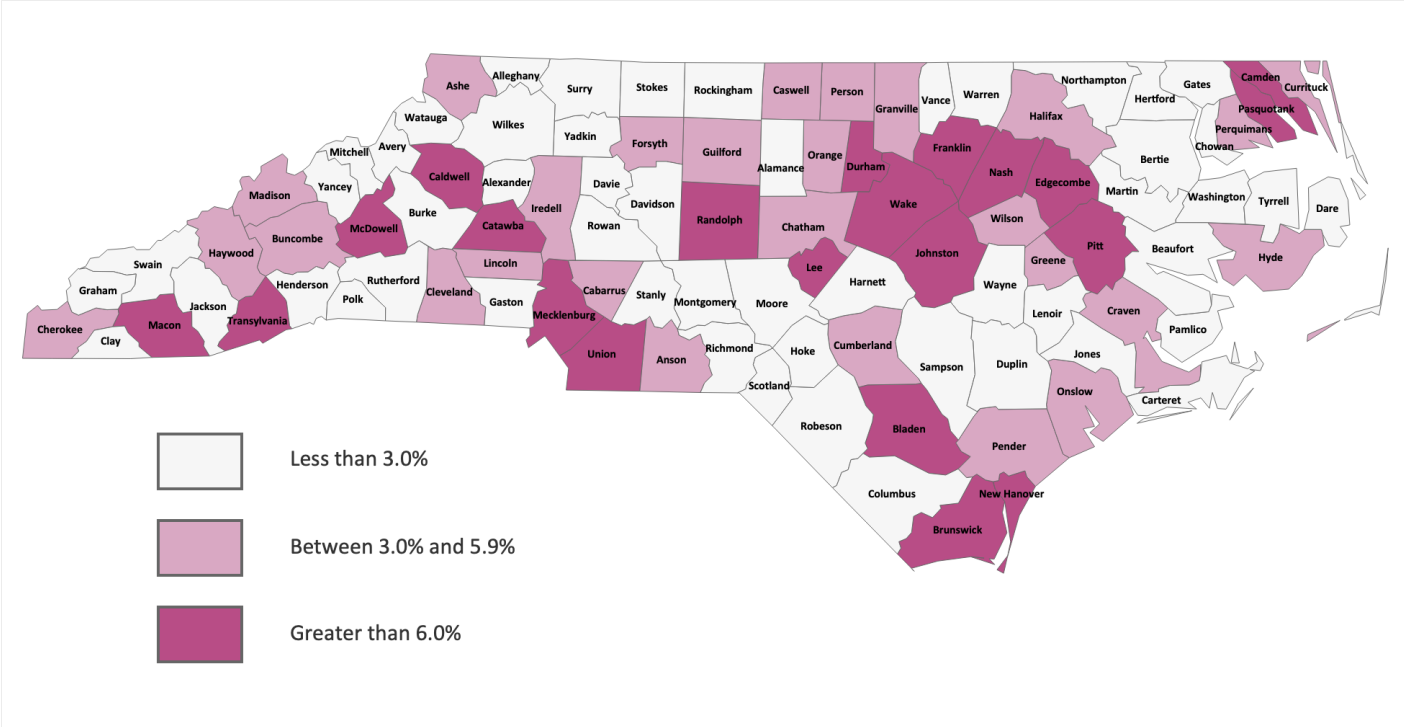
Other Energy and Power Generation	13,750	7%	0.44
Renewable Energy	1,006	87%	0.87
TOTAL TECH SECTOR	**328,414**	**19%**	**1.00**

Source: EL estimates based on Lightcast 2025.4

TECH INDUSTRY LOCATION

Across the state, major metro areas have been leading tech industry growth. Mecklenburg, Wake, and Durham counties account for about 54 percent of the tech industry in North Carolina. While tech industry jobs remain very strong in the state's urban centers, jobs have spread to many other areas of North Carolina. Tech industry jobs now account for more than six percent of all jobs in counties as geographically diverse as Macon, Brunswick, Transylvania, Catawba, and Randolph. Forty-four of the state's 100 counties have more than three percent of their total jobs in the tech industry. This is an increase from 40 counties in last year's report.

Tech Industry Jobs as a Percentage of Total Jobs, 2024



Source: EL calculations based on Lightcast 2025.4

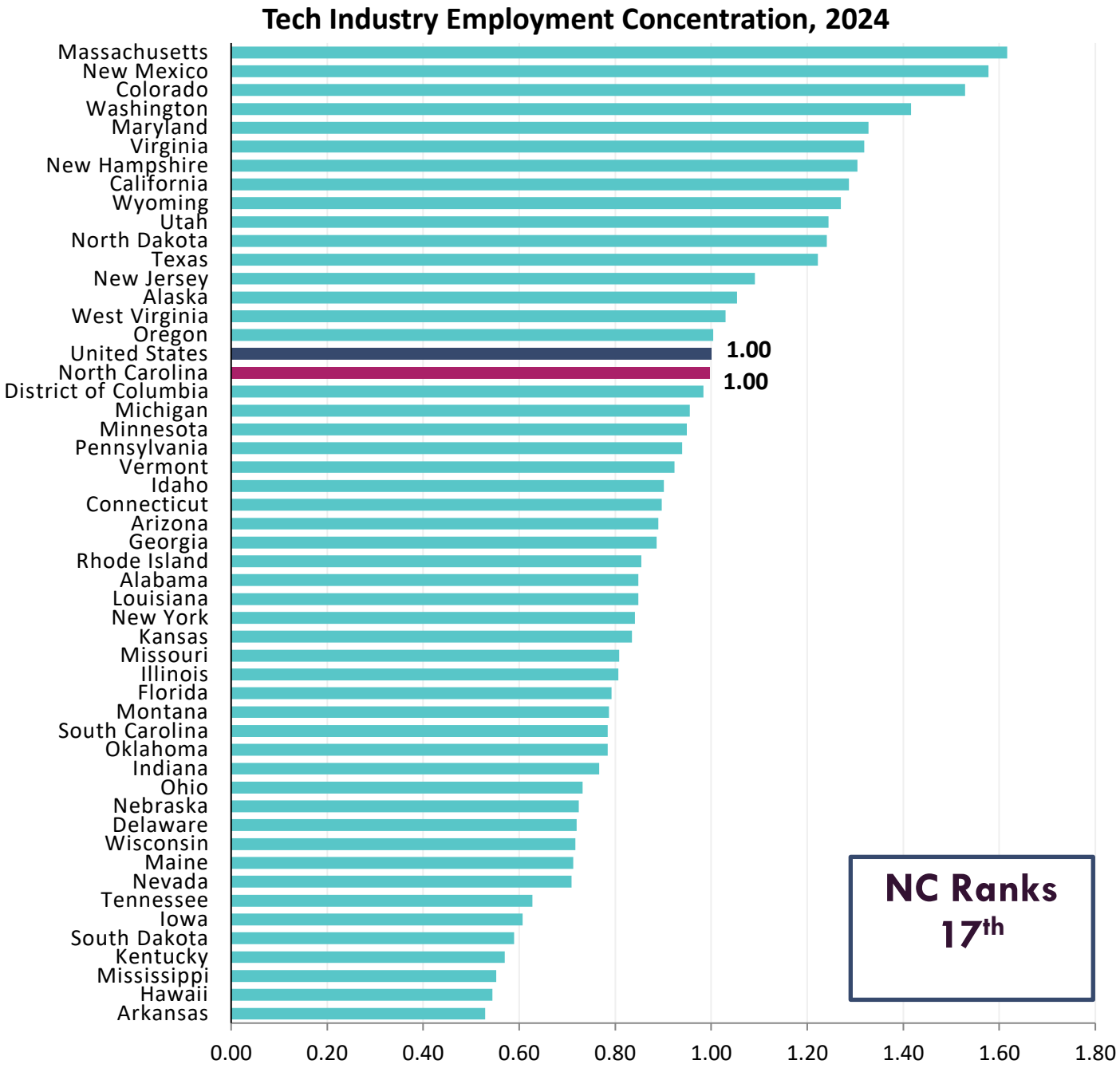
SECTION 4. STATE COMPARISONS OF TECH INDUSTRY METRICS

Using the same methods applied to North Carolina's tech industry, comparable metrics were calculated for the remaining states and the District of Columbia to assess how North Carolina's tech trends compare nationally. The District of Columbia is included in the charts but excluded from the state rankings.

This section of the report evaluates many of the metrics presented in Section 3, comparing North Carolina's performance with national values and with other states. It first examines metrics for the total tech industry and then presents state comparisons for the subcategories and output groups. Tech occupation data is addressed in a later section.

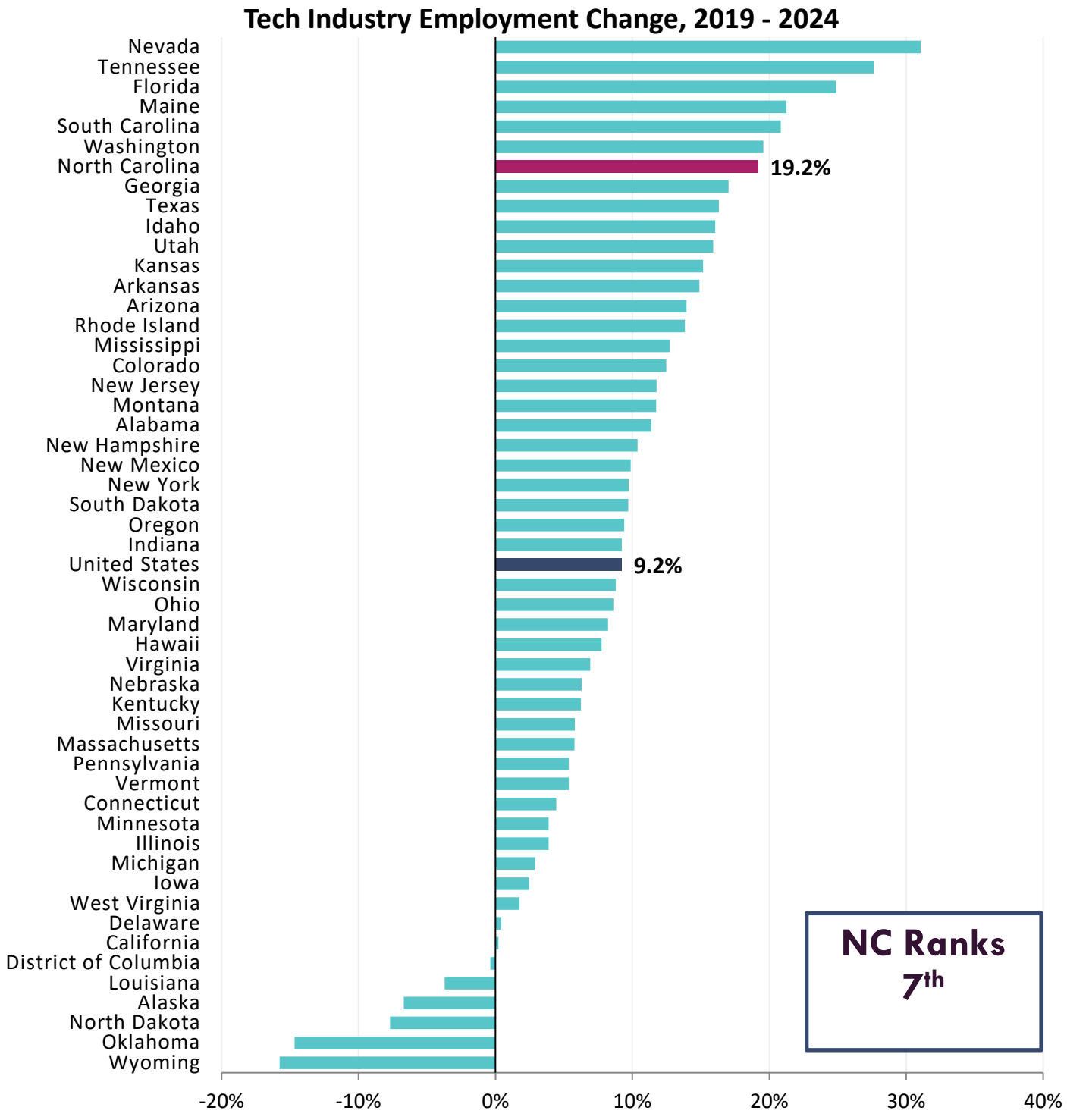
When comparing the tech industry to the makeup of a state's entire economy, states like California, Massachusetts, and Washington—internationally known for their tech industries—have much higher shares of the tech industry in their overall economies. However, an average concentration is not necessarily a negative trait, as it can indicate a diverse economy that is not overly reliant on any one industry.

In the first State of the Technology Sector report in 2013, the tech industry accounted for 5.5 percent of North Carolina's employment. The value for 2024 was 6.7 percent. This increase in share has moved the state's concentration ratio up from 0.87 to 1.00—now even with the national average. The state remained ranked as having the 17th most concentrated tech industry in this year's report.



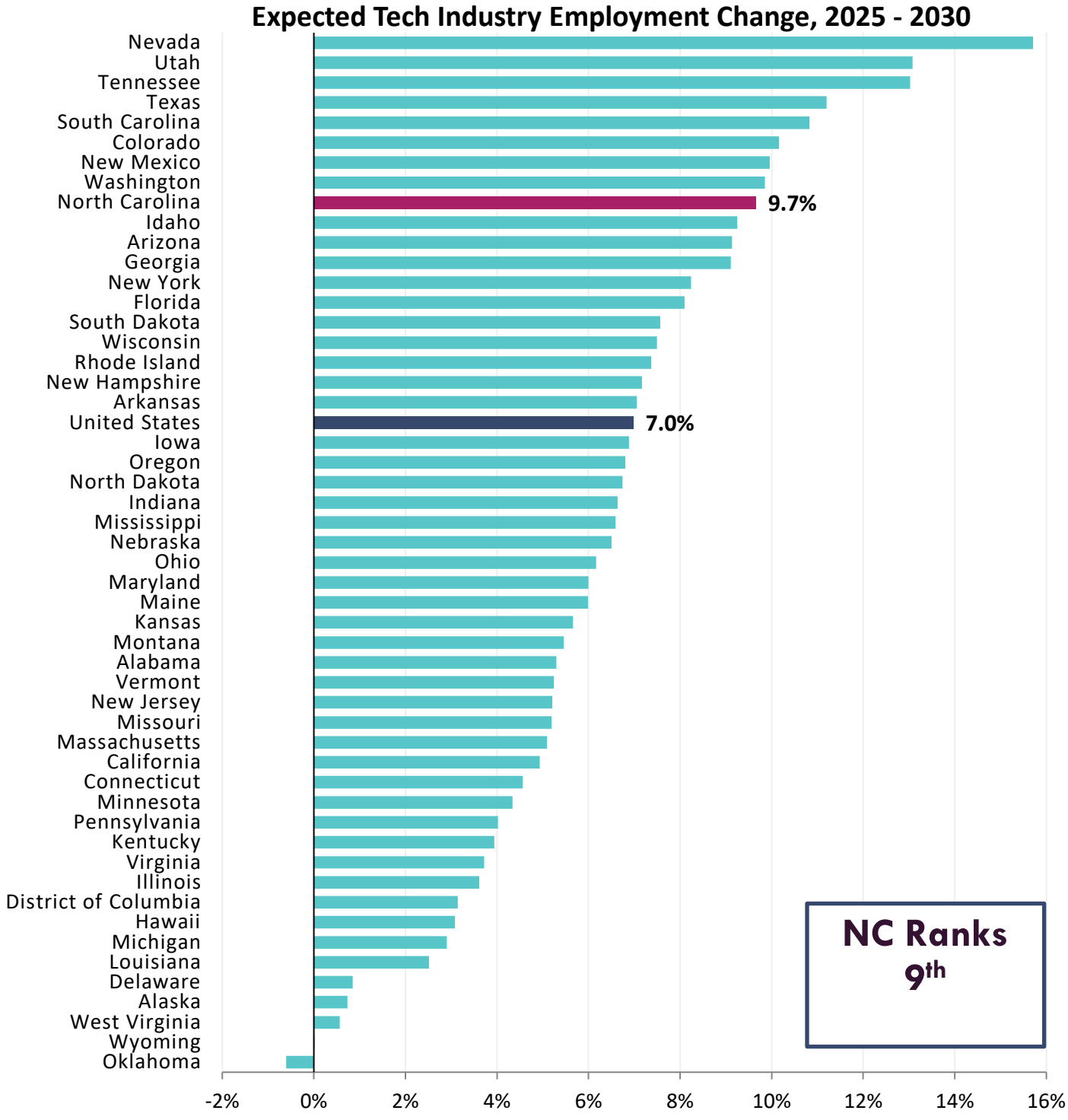
Source: EL calculations based on Lightcast 2025.4

One of the strongest performance indicators for the state's tech industry is its recent growth and future growth potential. From 2019 to 2024, jobs in this industry grew by more than 19 percent in the state. That is the 7th-highest growth rate in the country and nearly six percentage points higher than the national average. This ranking is an improvement from 10th two years ago and 8th last year. The number one state, Nevada, is growing at a high rate due to rapid expansion at the Tesla Gigafactory in Reno. The top-growing states tend to be in the Southeast or the Intermountain West.



Source: EL calculations based on Lightcast 2025.4

Based on Lightcast models that use historical five-year, ten-year, and fifteen-year growth trends to predict future performance, the expected growth of the tech industry for all 50 states and the District of Columbia was calculated for the next five years. North Carolina is projected to grow its tech industry employment by almost ten percent from now to 2030. The state dropped one spot in the rankings this year to 9th among all states and remains higher than the national average. As tech growth slowed in 2023 and then declined in 2024 across much of the country, future growth projections shifted downward in this year's analysis.

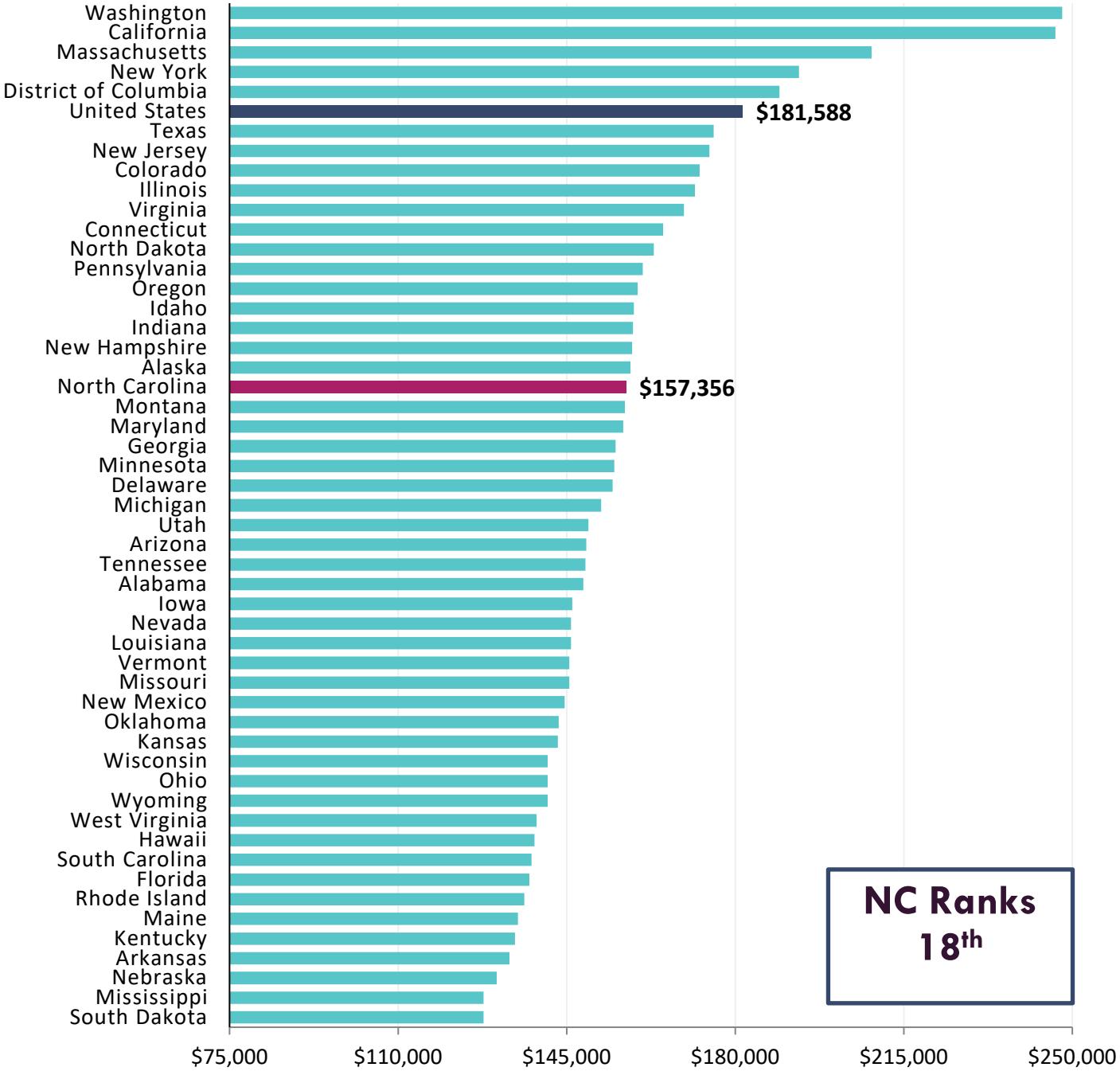


Source: EL calculations based on Lightcast 2025.4

Earnings are a key tool for recruiting talent. Workers must weigh compensation against the cost of living when comparing locations. A worker in the tech industry in California may earn a higher salary than a tech industry worker in North Carolina, but the wages may be comparable due to North Carolina's lower cost of living.

When tech industry wages are normalized for purchasing power, which accounts for North Carolina's lower cost of living, the state ranks 18th in the country. The state's ranking fell three spots from last year's position of 15th. The cost of living in the state has risen in recent years and may be affecting competitiveness.

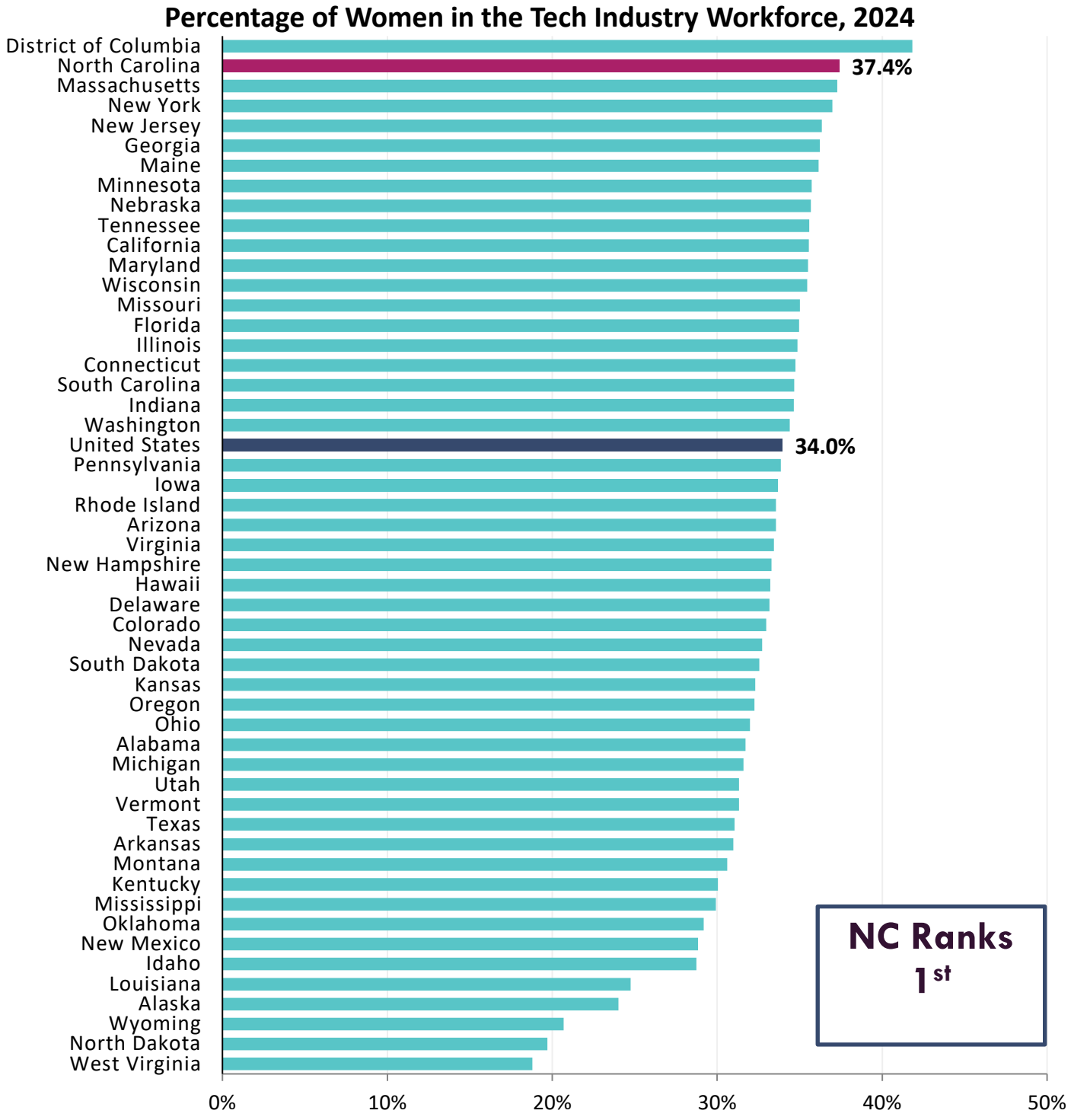
Average Annual Earnings for Tech Industry Employees with Purchasing Power, 2024



Source: EL calculations based on Lightcast 2025.4

The gender makeup of the tech industry across all 50 states was evaluated. The tech industry has traditionally been, and continues to be, male-dominated. Many states are working to encourage women to pursue STEM

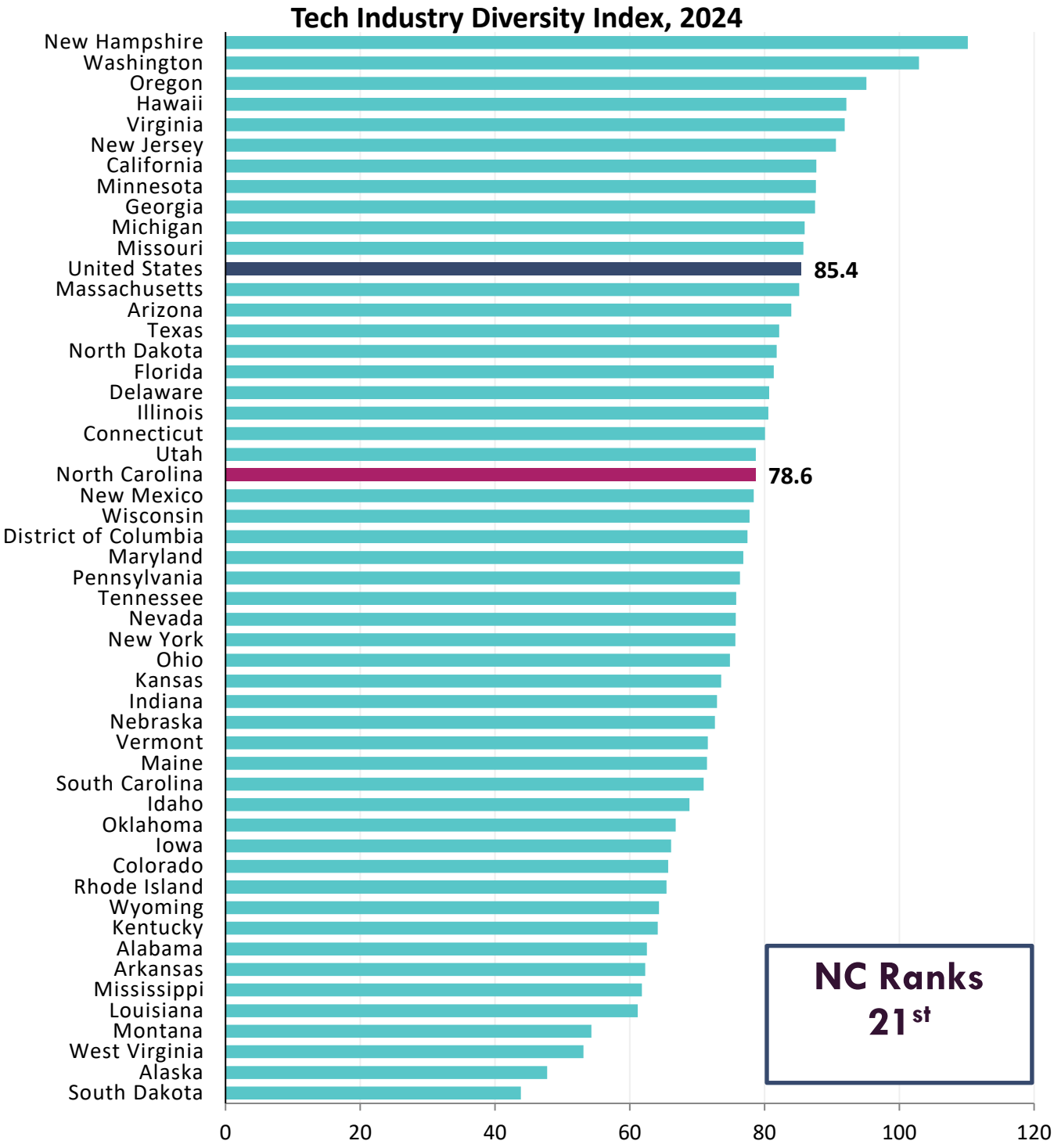
education and careers. While almost every state remains far from achieving equal representation, North Carolina again remains a top state. North Carolina has retained the top ranking for this metric for 10 of the 12 years of this report.



Source: EL calculations based on Lightcast 2025.4

The tech industry diversity index is calculated by dividing the percentage of tech industry workers who identify as people of color or as Hispanic by the share of those groups in the overall population. A diversity index below 100 indicates that a state's tech industry is less diverse than its population, while a value of 100 would

mean the industry is fully representative. Only two states had a diversity index above 100. North Carolina had a diversity index of 78.6 in 2024—a decline from 80.4 in 2023—indicating that people of color are underrepresented in the tech industry. North Carolina ranked 21st for this metric.



Source: EL calculations based on Lightcast 2025.4

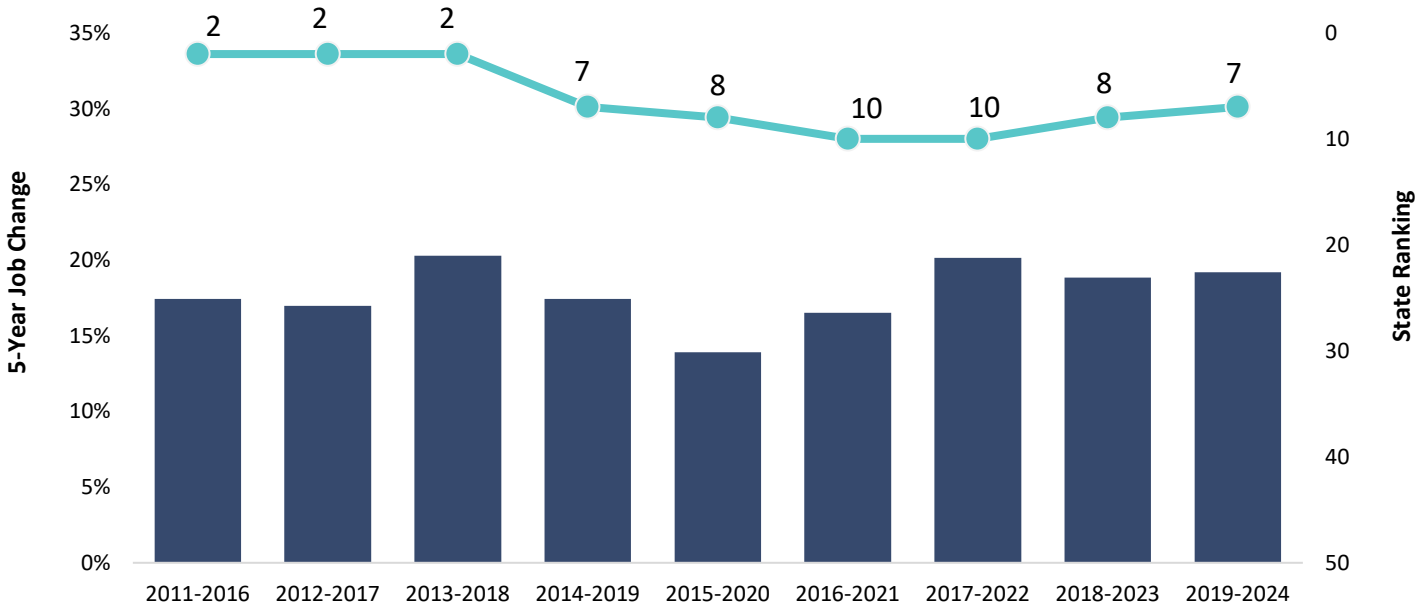
Comparing North Carolina with other states helps place the state's performance in context by identifying both strengths and areas that may need additional attention. The following charts list all metrics measured for North Carolina's tech sector and the state's corresponding ranking among the states.

	Indicates a state ranking of 15th or higher
	Indicates a state ranking between 16th and 35th
	Indicates a state ranking of 35th or greater

North Carolina ranks in the top 15 states for three of the six indicators evaluated for the total tech sector. The ranking for cost-of-living-adjusted earnings slipped out of the top 15 in this year's report. North Carolina's five-year job change rate has remained strong for many years; the state ranked 7th for past job growth. North Carolina has continued to rank in the top 15 states for this metric. Projected future growth is also strong and ranks as the 9th highest in the country. The state continues to lead in the percentage of women in the tech industry.

Total Tech Industry		
Metric	**Value**	**Rank**
Technology Sector Employment Concentration (2024)	1.00	17
Technology Sector Employment Growth (2019-2024)	19.2%	**7**
Expected Technology Sector Employment Growth (2025-2030)	9.7%	**9**
Average Annual Wage for Technology Sector Employees with Purchasing Power (2024)	$157,356	18
Percentage of Women in the Technology Workforce (2024)	37.4%	**1**
Tech Industry Diversity Index (2024)	78.6	21

Total Tech 5-Year Job Change by Percentage and State Ranking

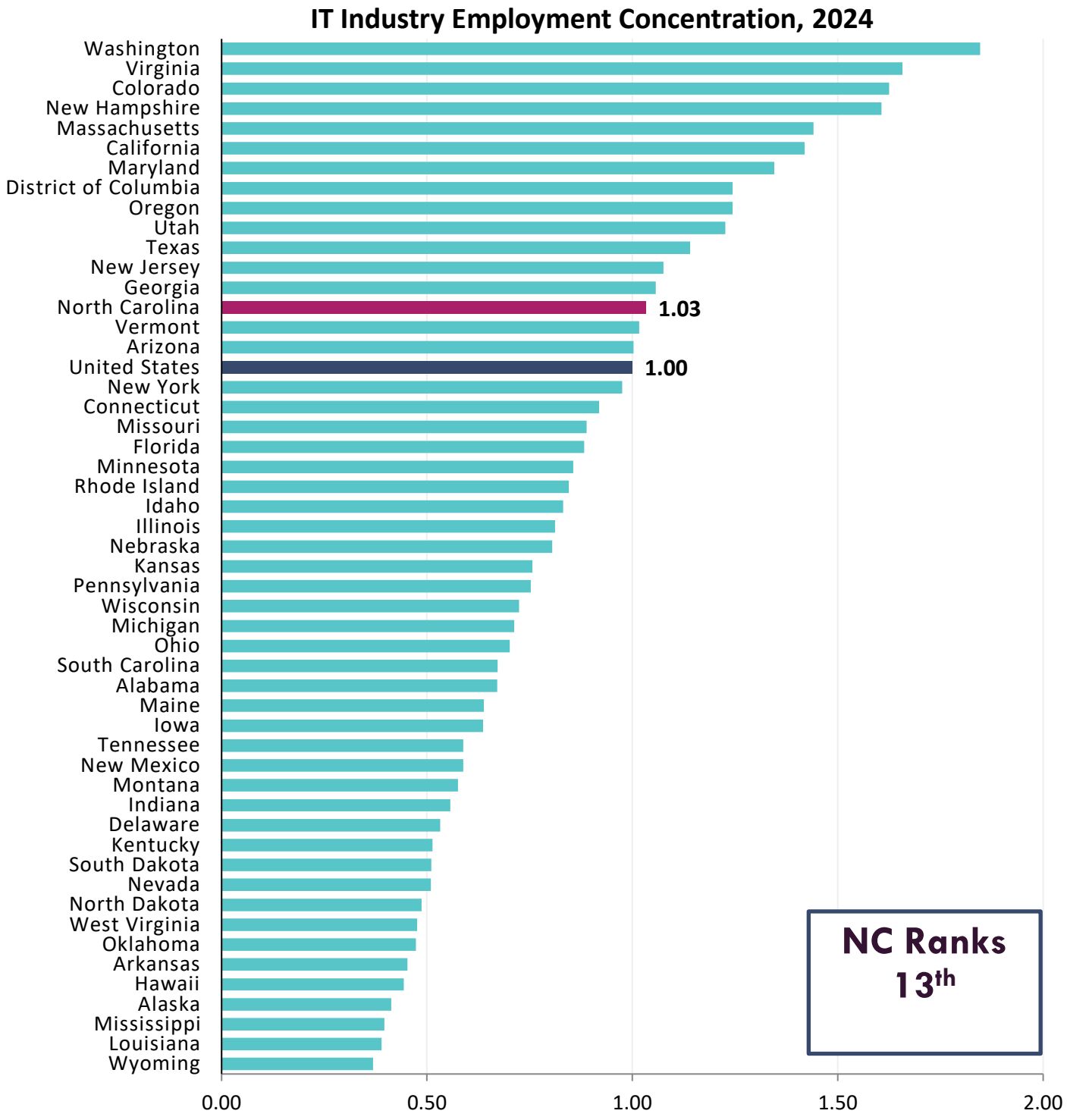


Source: EL calculations based on Lightcast 2025.4

IT INDUSTRY SUBCATEGORY

Next, the IT subcategory was compared with those of other states. This group of industries represents the high-tech core, including hardware manufacturing, internet services, data storage, telecommunications, and

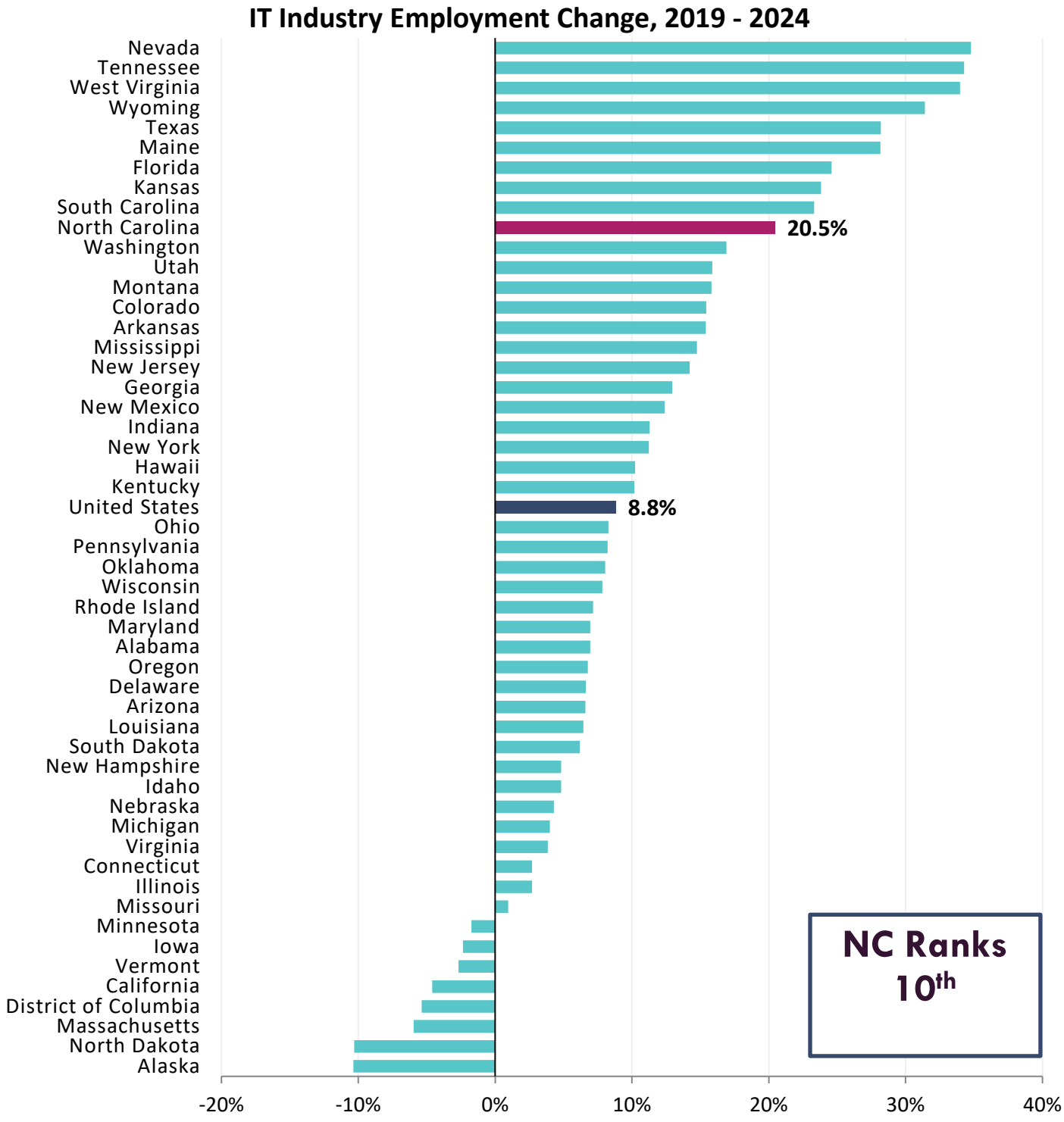
software companies. In 2024, North Carolina's IT subcategory was three percent more concentrated than the national average. The state has consistently moved up the rankings for this metric and now ranks 13th.



Source: EL calculations based on Lightcast 2025.4

The employment growth rate in IT from 2019 to 2024 was 20.5 percent in North Carolina. This was the 10th-fastest growth rate across all 50 states. The state improved compared with the data from 2018 to 2023, which

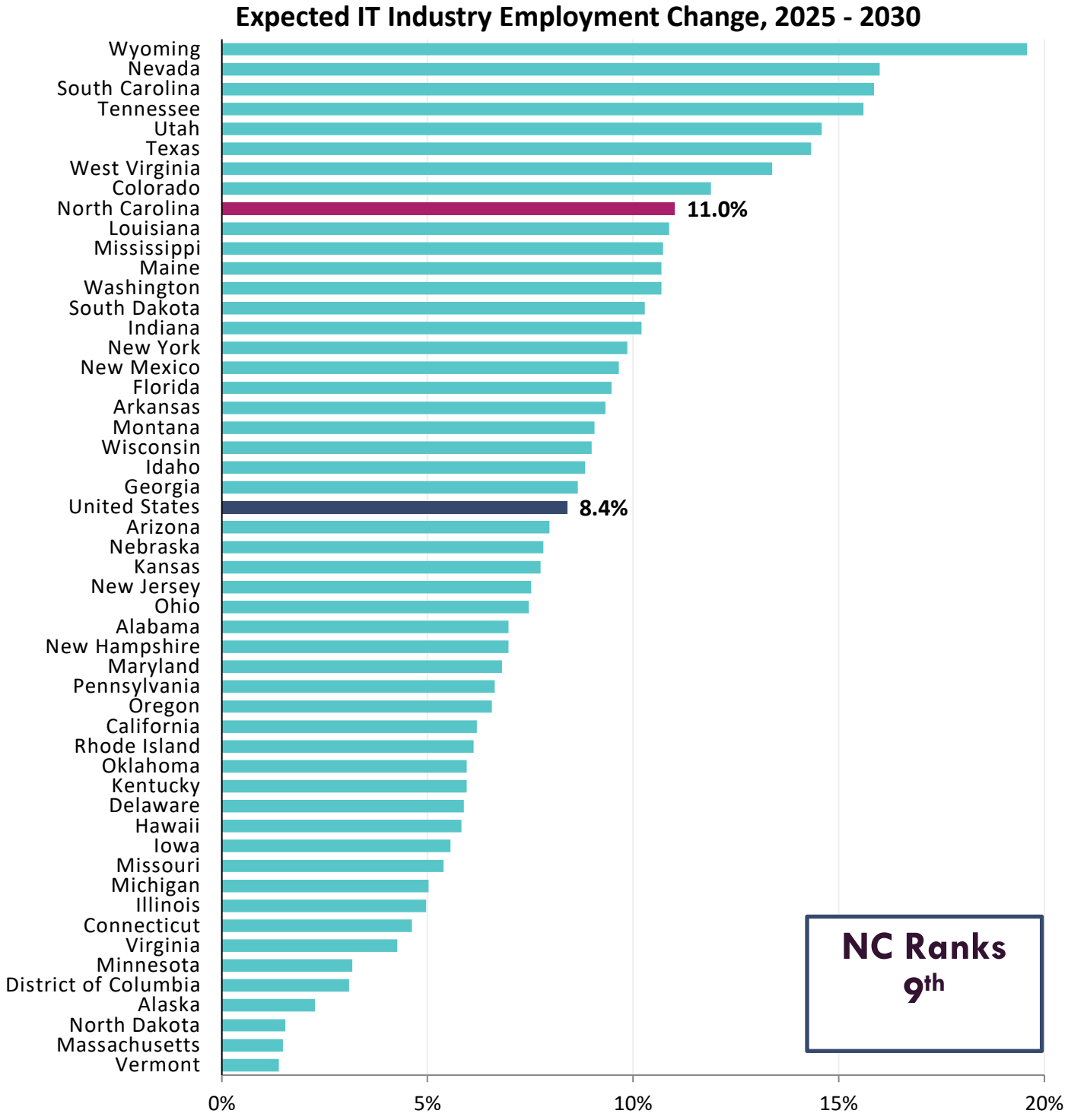
showed growth of 19.2 percent and a ranking of 12th place. The state has consistently ranked in the top 15 for this metric.



Source: EL calculations based on Lightcast 2025.4

North Carolina's IT industry is projected to grow by 11 percent in the next five years. Growth projections for the IT sector nationally have shifted downward overall due to job losses in most states in 2024. The rate for

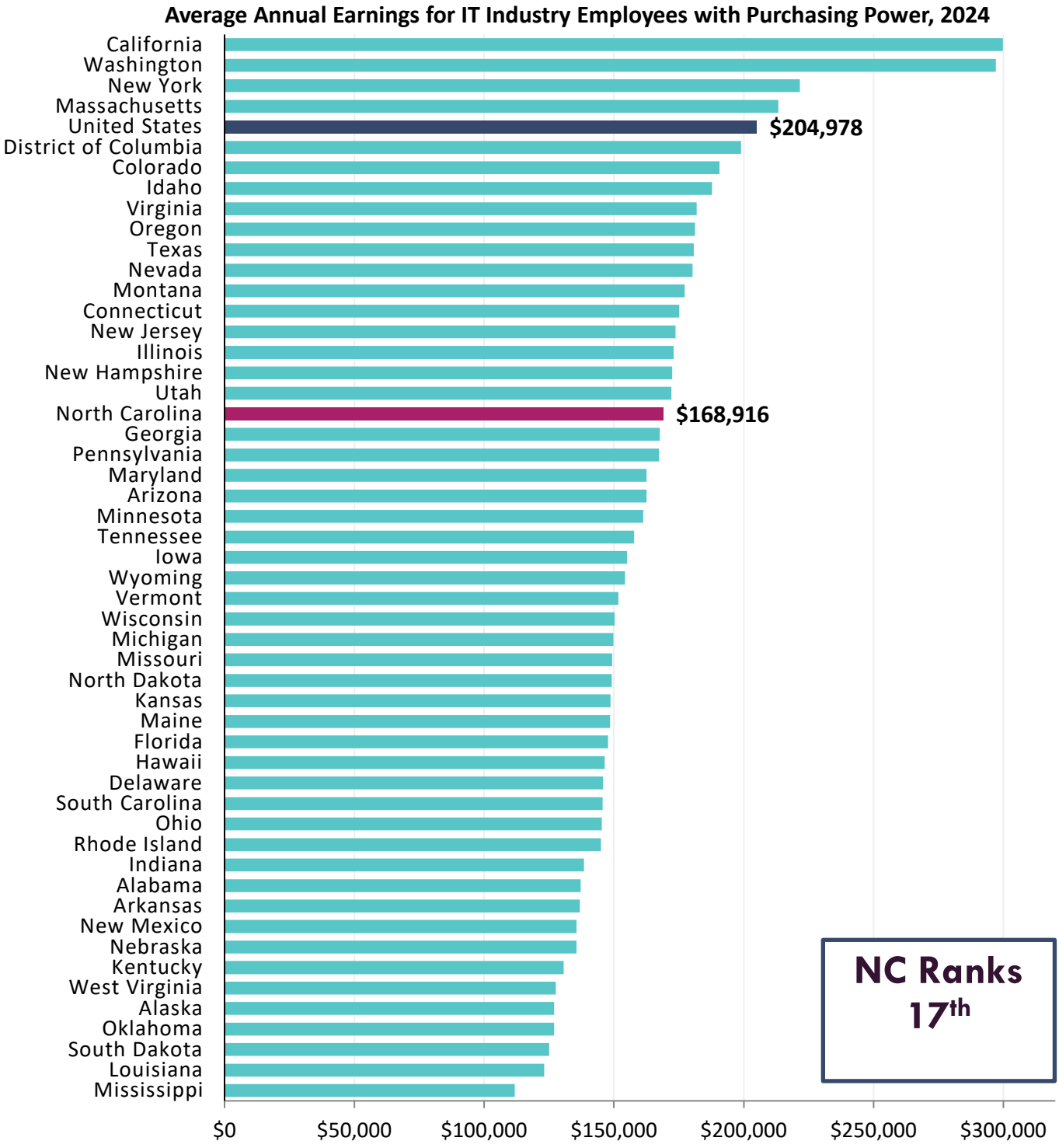
North Carolina in last year's report was 12.3 percent. Despite the small downward shift, the state remains ranked above the national average and moved up in the rankings from 14th to 9th this year. The state's ranking on this metric is up to 14th from 25th two years ago. States in the Southeast and Intermountain West are expected to continue posting the fastest IT growth.



Source: EL calculations based on Lightcast 2025.4

Like the total tech industry, IT industry wages in North Carolina are lower than the national average. When adjusted for purchasing power, North Carolina remained ranked 17th among the states for average IT industry

wages. The state's relatively low cost of living can make it attractive to tech firms seeking lower operating costs. Within the state, IT wages are almost double the average wages across all industries.

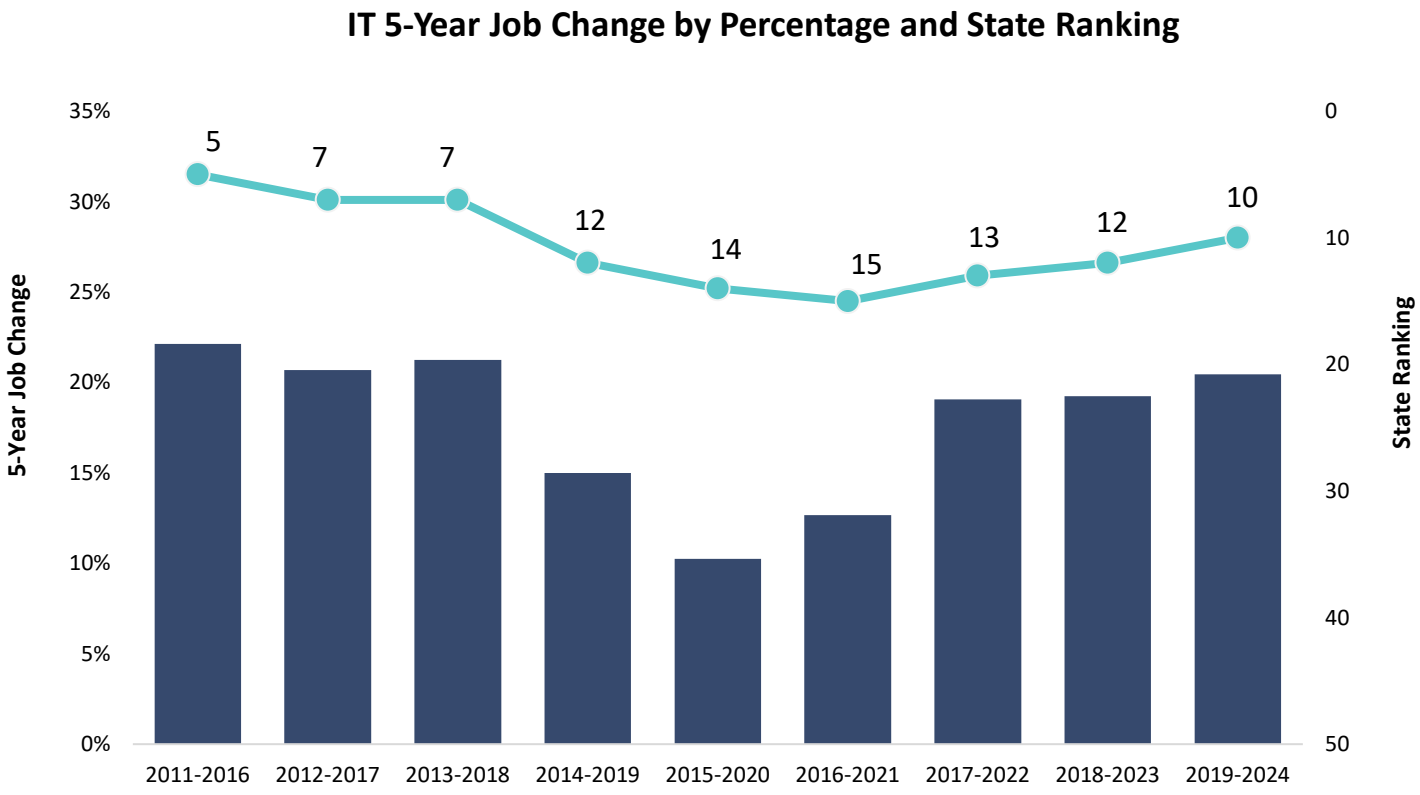


Source: EL calculations based on Lightcast 2025.4

North Carolina ranked in the top 15 for three out of the four metrics evaluated for the IT subsector. Average earnings for employees ranked just outside the top 15 at 17th place. For historical five-year growth rates,

North Carolina has remained one of the fastest-growing states for IT jobs. The state moved back into the top ten this year.

IT Industry		
Metric	**Value**	**Rank**
IT Sector Employment Concentration (2024)	1.03	**13**
IT (Tech Core) Employment Growth (2019-2024)	20.5%	**10**
Expected IT Sector Employment Growth (2025-2030)	11.0%	**9**
Average Annual Wage for IT Sector Employees with Purchasing Power (2024)	$168,916	17



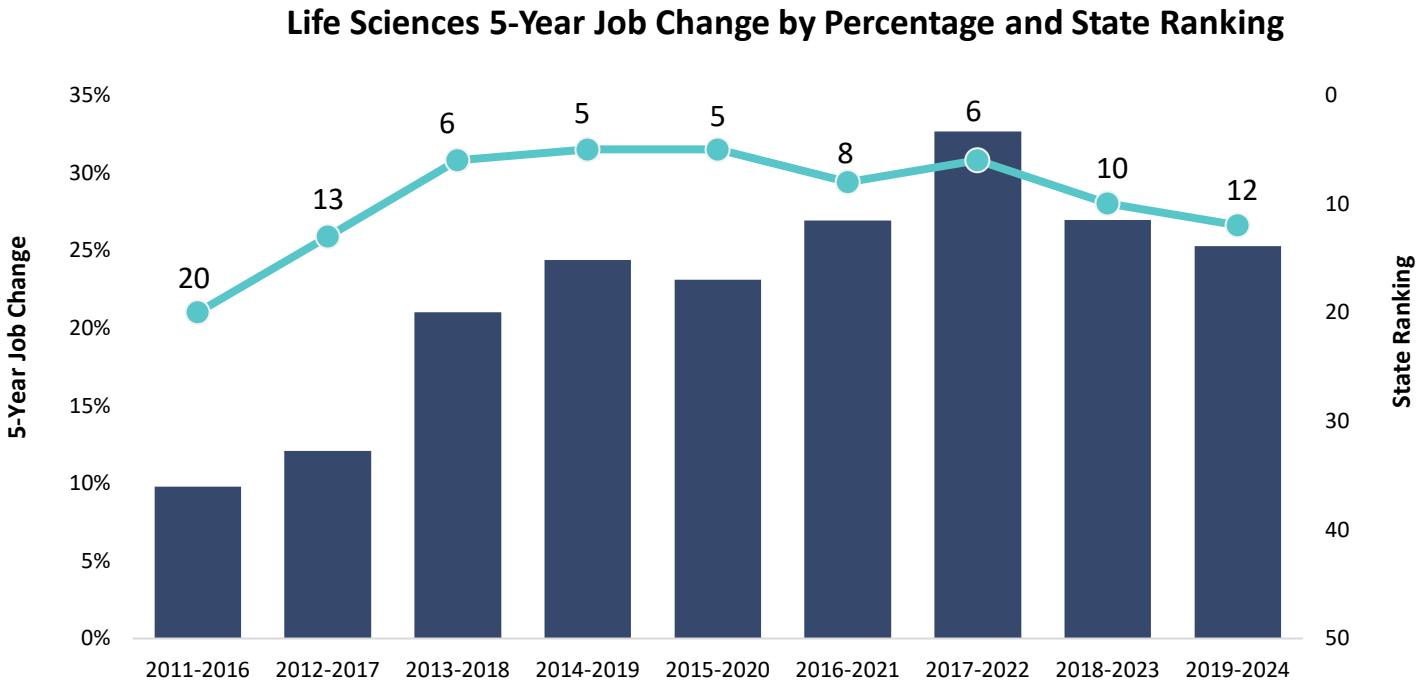
Source: EL calculations based on Lightcast 2025.4

LIFE SCIENCES INDUSTRY SUBCATEGORY

Life Sciences was the fastest-growing tech subcategory in the state from 2019 to 2024. In 2024, North Carolina had an employment concentration in Life Sciences of 1.12. This was the 13th most concentrated Life Sciences economy in the nation. The subcategory has expanded jobs at a rate of 25 percent over the last five years. That growth ranked 12th in the nation—an impressive feat considering Life Sciences jobs were already concentrated in the state. Job growth in this sector has primarily been in the research and development industries, which have added about 8,280 net new jobs in the last five years.

Life Sciences Industry		
Metric	**Value**	**Rank**

Life Sciences Employment Concentration (2024)	1.13	**13**
Life Sciences Job Change (2019-2024)	25.3%	**12**
Expected Life Sciences Job Change (2025-2030)	7.7%	19
Average Earnings for Life Sciences Employees with Purchasing Power (2024)	$151,732	16

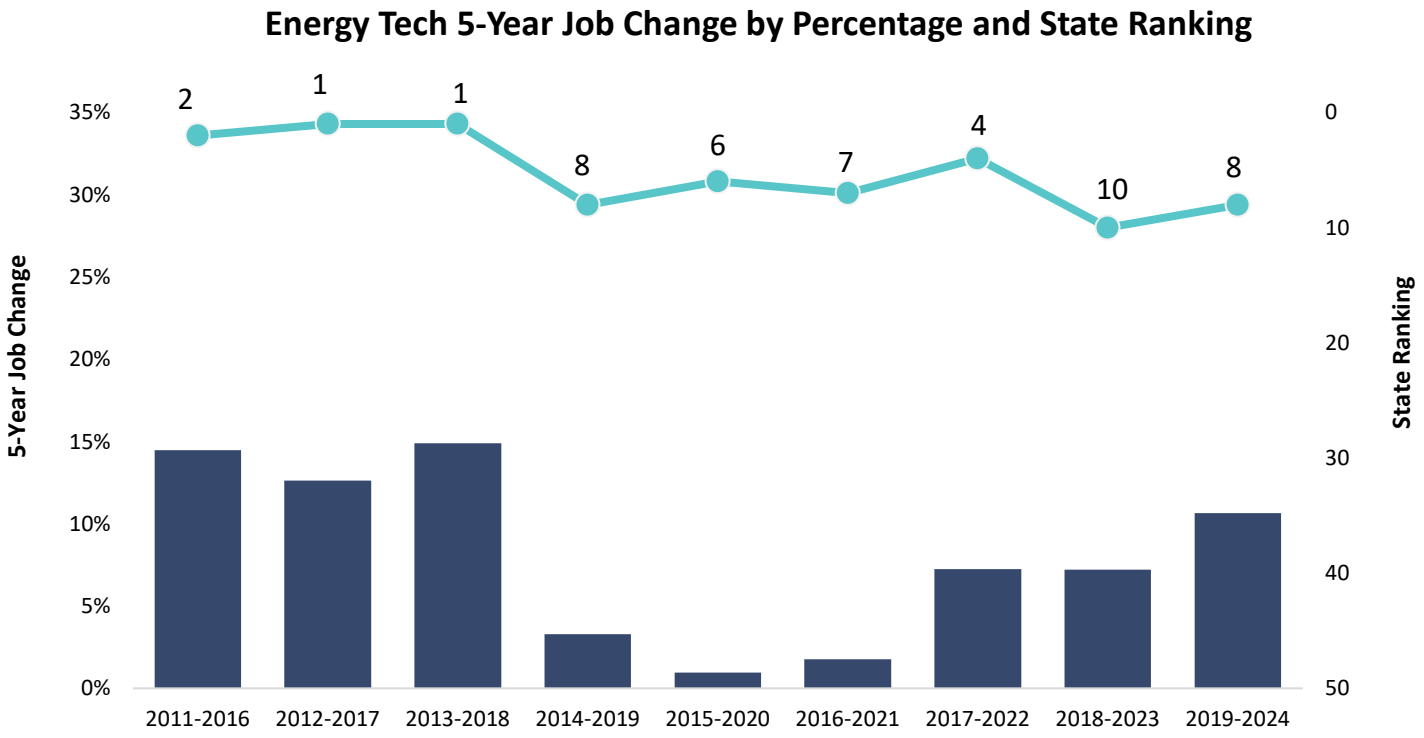


Source: EL calculations based on Lightcast 2025.4

ENERGY TECH INDUSTRY SUBCATEGORY

The Energy Tech subcategory represents a small portion of North Carolina's economy and is 54 percent less concentrated than the national average in terms of employment. However, as the nation's energy mix shifts to cleaner technologies, states like North Carolina are positioned for growth in wind, solar, nuclear, and carbon capture. Renewable energy jobs grew by 87 percent in the last five years. This included the addition of about 390 jobs in solar and 400 jobs in the nuclear power generation industries. The state has remained a top growth state for energy tech and is projected to add jobs in this industry group at the 6th-highest rate over the next five years.

Energy Tech Industry		
Metric	**Value**	**Rank**
Energy Tech Employment Concentration (2024)	0.46	40
Energy Tech Job Change (2019-2024)	10.7%	**8**
Expected Energy Tech Job Change (2025-2030)	10.3%	**6**
Average Annual Wage for Energy Tech Employees with Purchasing Power (2024)	$164,022	43

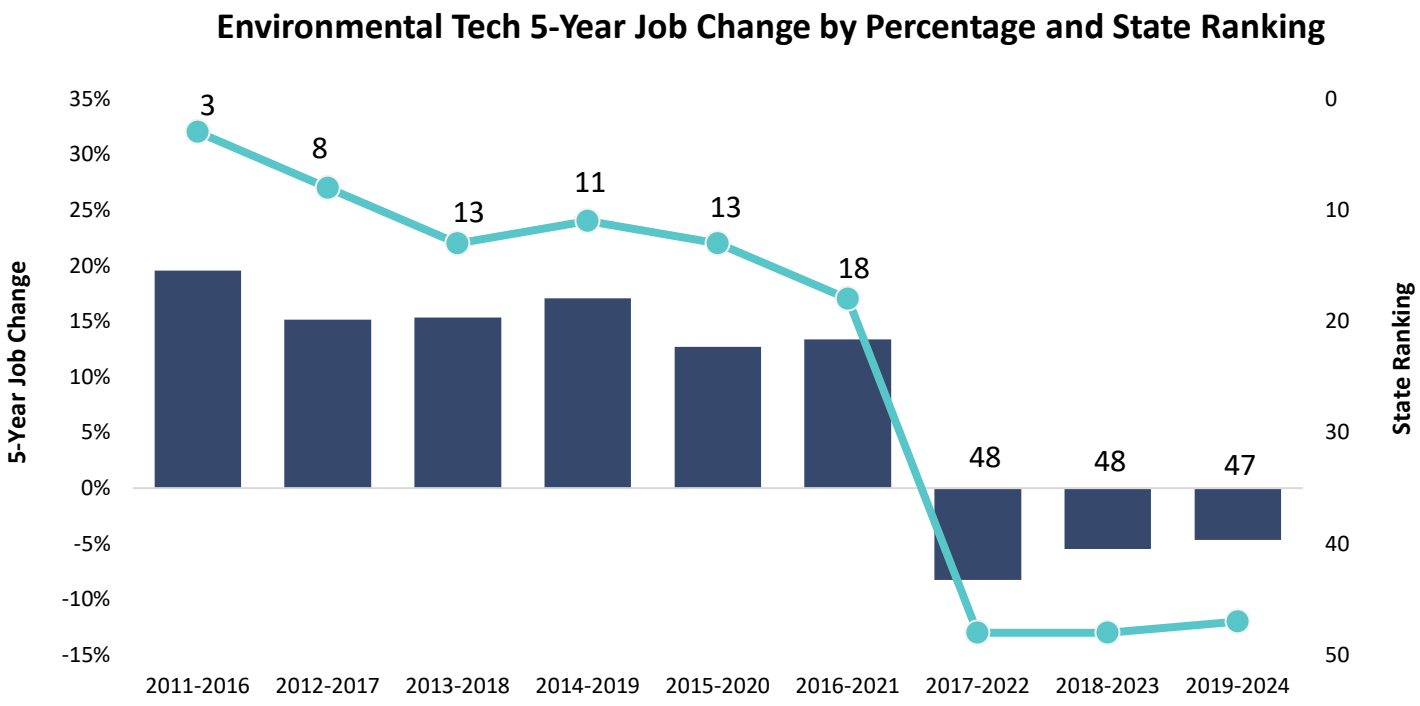


Source: EL calculations based on Lightcast 2025.4

ENVIRONMENTAL TECH INDUSTRY SUBCATEGORY

The historical data for environmental tech in North Carolina showed poor performance, but this is largely driven by the reclassification of 4,900 jobs in Durham County from environmental tech to corporate office jobs in 2022. The job growth rate from 2023 to 2024 was seven percent. This recent growth is being driven by the battery manufacturing and environmental consulting services industries. This subsector has received federal investment through the Inflation Reduction Act and the CHIPS Act. There were nine major battery and EV manufacturing announcements in North Carolina with an associated investment of about $21 billion. Since changes to the federal administration and challenging economic conditions, some of these companies have paused, canceled, or slowed their plans.

Environmental Tech Industry		
Metric	**Value**	**Rank**
Environmental Tech Employment Concentration (2024)	0.94	33
Environmental Tech Job Change (2019-2024)	-4.7%	47
Expected Environmental Tech Job Change (2025-2030)	8.6%	**10**
Average Annual Wage for Environmental Tech Employees with Purchasing Power (2024)	$97,051	27

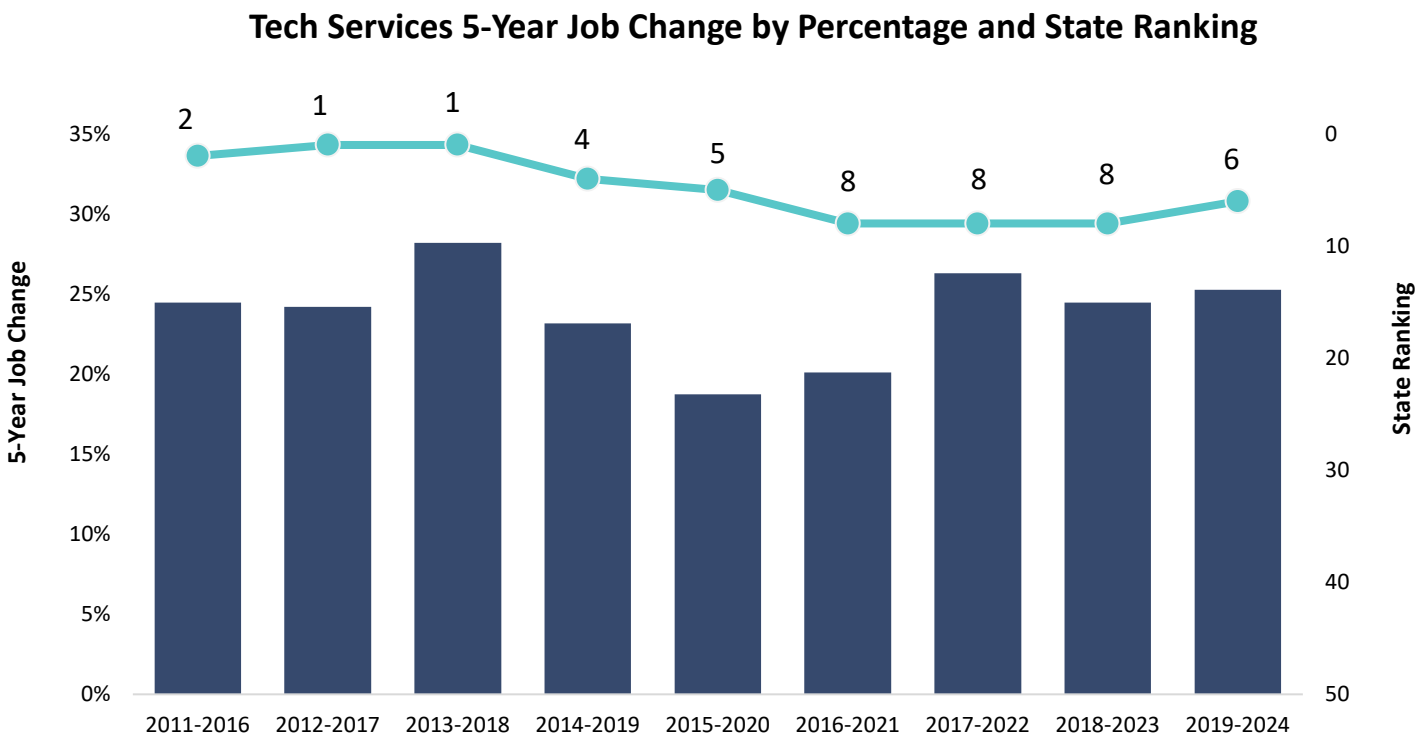


Source: EL calculations based on Lightcast 2025.4
Note: From 2021 to 2022, there was a reclassification of 4,990 jobs from an enviromental tech industry to the corporate offices industry.

TECH SERVICES OUTPUT GROUP

Next, tech groupings based on output type were evaluated. Tech services represent the high-tech core services such as social media, data storage, telecommunications, and software companies. North Carolina had the 18th most concentrated tech services employment, with a concentration ratio of 0.96. Growth in tech services has historically placed North Carolina among the top ten states in the country. The state dropped from the top 15 in adjusted earnings to 19th place.

Tech Services		
Metric	**Value**	**Rank**
Tech Services Employment Concentration (2024)	0.96	18
Tech Services Job Change (2019-2024)	25.3%	**6**
Expected Tech Services Job Change (2025-2030)	10.7%	**6**
Avg Annual Earnings for Tech Services Employees Adjusted for Purchasing Power (2024)	$157,364	19

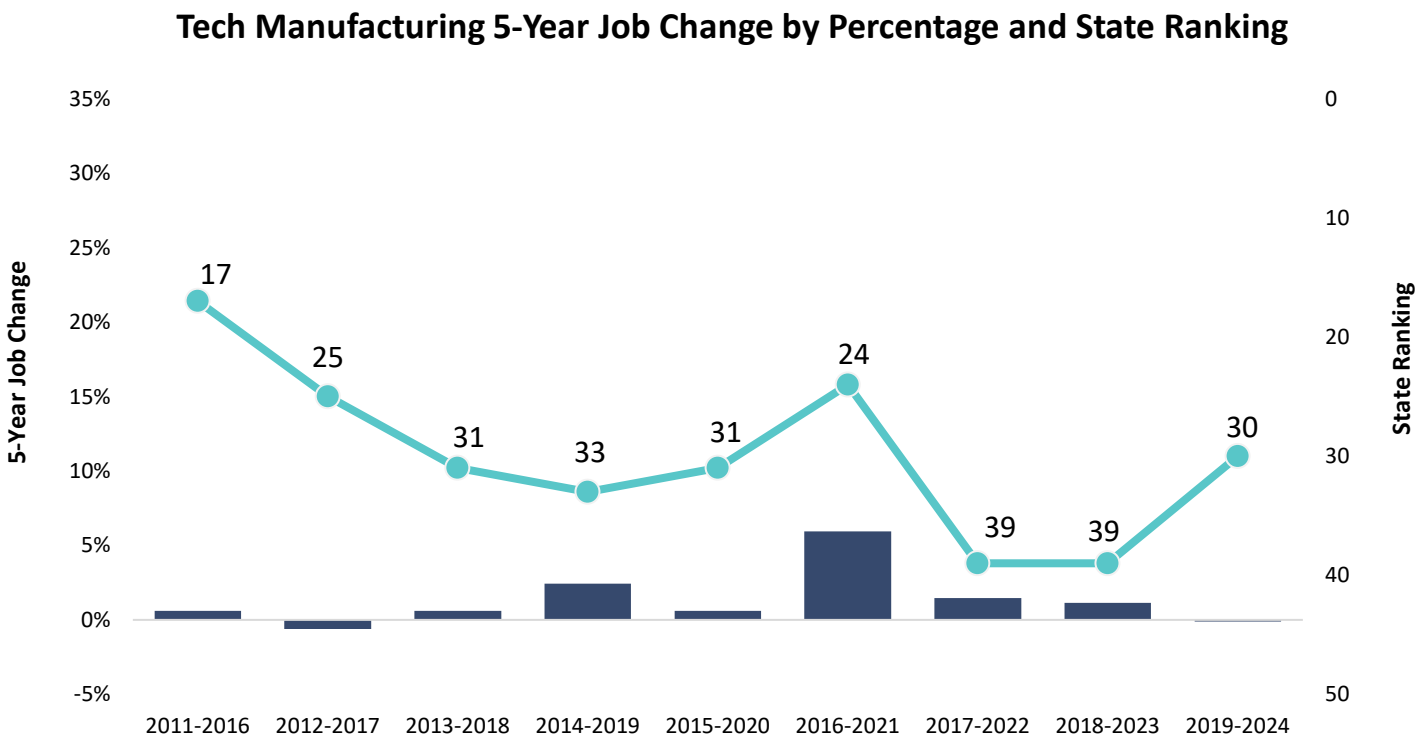


Source: EL calculations based on Lightcast 2025.4

TECH MANUFACTURING OUTPUT GROUP

Tech manufacturing is highly concentrated and well compensated in North Carolina. Growth rates for the group have not been among the highest nationally. In the most recent five years, the state lost jobs. This grouping has been impacted by the NAICS code reclassification in Durham County. This impact should continue to smooth out in future years. The group saw a small drop of about 70 net jobs from 2023 to 2024. Manufacturing jobs of all types have declined in the state in recent years, with many of these losses occurring in legacy industries such as furniture, textiles, and tobacco. Jobs in many tech manufacturing industries—such as pharmaceutical production, battery manufacturing, and semiconductors—are adding workers at high rates.

Tech Manufacturing		
Metric	**Value**	**Rank**
Tech Manufacturing Employment Concentration (2024)	1.20	**11**
Tech Manufacturing Job Change (2019-2024)	-0.1%	30
Expected Tech Manufacturing Job Change (2025-2030)	5.3%	31
Average Annual Earnings for Tech Manufacturing Employees Adjusted for Purchasing Power (2024)	$157,322	**10**



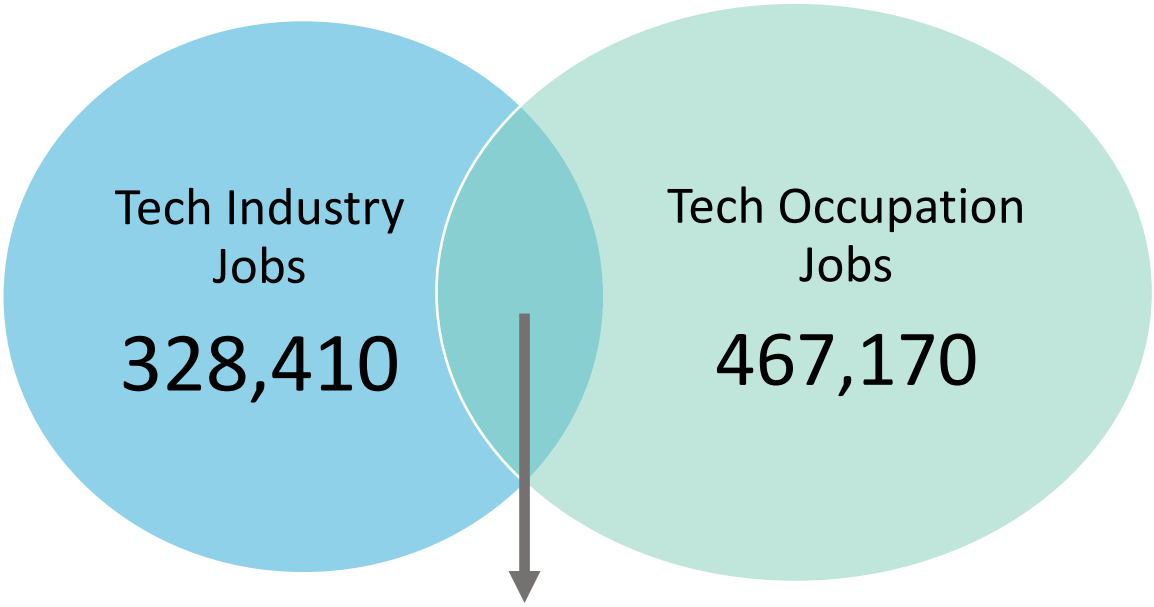
Source: EL calculations based on Lightcast 2025.4
Note: From 2021 to 2022, there was a reclassification of 4,990 jobs from an enviromental tech industry to the corporate offices industry.

SECTION 5. TECH OCCUPATIONS

Technology workers today are present in virtually every industry. As technology has permeated most businesses and become increasingly important to company competitiveness, industries such as banking, media, and health care now employ larger numbers of tech workers. To estimate the number of tech occupations that exist across all industries, 85 separate five-digit Standard Occupational Classification (SOC) codes were reviewed, focusing primarily on STEM-driven roles. A complete list is included in the appendix.

Using this methodology, the data show that 467,170 workers in North Carolina are employed in tech occupations. This number is higher than the 328,410 workers employed directly by the tech industry, indicating that a significant share of tech occupations exists outside traditional technology companies. About 34 percent of tech occupation jobs are located within the tech industry, a share that has been trending downward since the initial report. The remaining tech workers are employed across other industries, from manufacturing to finance.

Staffing Patterns of Tech Industries and Tech Occupations, 2024



34% of tech occupation jobs are employed in tech industries.

Source: EL estimates based on Lightcast 2025.4

Software developers are the largest occupation within the tech workforce, accounting for over 12 percent of tech workers. Each year, an average of 59,760 tech jobs must be filled in North Carolina to accommodate growth and retirements. The median annual wage for tech workers is $97,300.

Top Tech Occupations in North Carolina, 2024

Description	2024 Occupations	Change in Employment, 2019-2024	Median Annual Wage	Annual Openings
Software Developers	57,540	+49%	$131,000	6,840
Market Research Analysts	29,980	+60%	$77,360	4,380
Computer Systems Analysts	24,680	-6%	$104,940	1,940
Computer and Information Systems Managers	24,020	+79%	$167,540	3,320
Management Analysts	21,840	+18%	$98,700	2,500
Computer User Support Specialists	21,260	-2%	$58,660	1,840
Computer Occupations, All Other	13,570	+113%	$106,250	2,010
Network and Computer Systems Administrators	12,570	+22%	$97,590	1,210
Industrial Engineers	11,440	+26%	$97,160	1,210
Financial and Investment Analysts	10,380	+17%	$102,210	1,050
Data Scientists	9,970	+213%	$115,380	1,660
Logisticians	7,360	+49%	$77,040	1,030
Computer Network Architects	7,280	+29%	$126,000	830
Software Quality Assurance Analysts and Testers	7,060	+4%	$102,670	700
Information Security Analysts	6,670	+29%	$121,080	720
All Tech Occupations	**467,170**	**+33%**	**$97,300**	**59,760**

Source: EL estimates based on Lightcast 2025.4

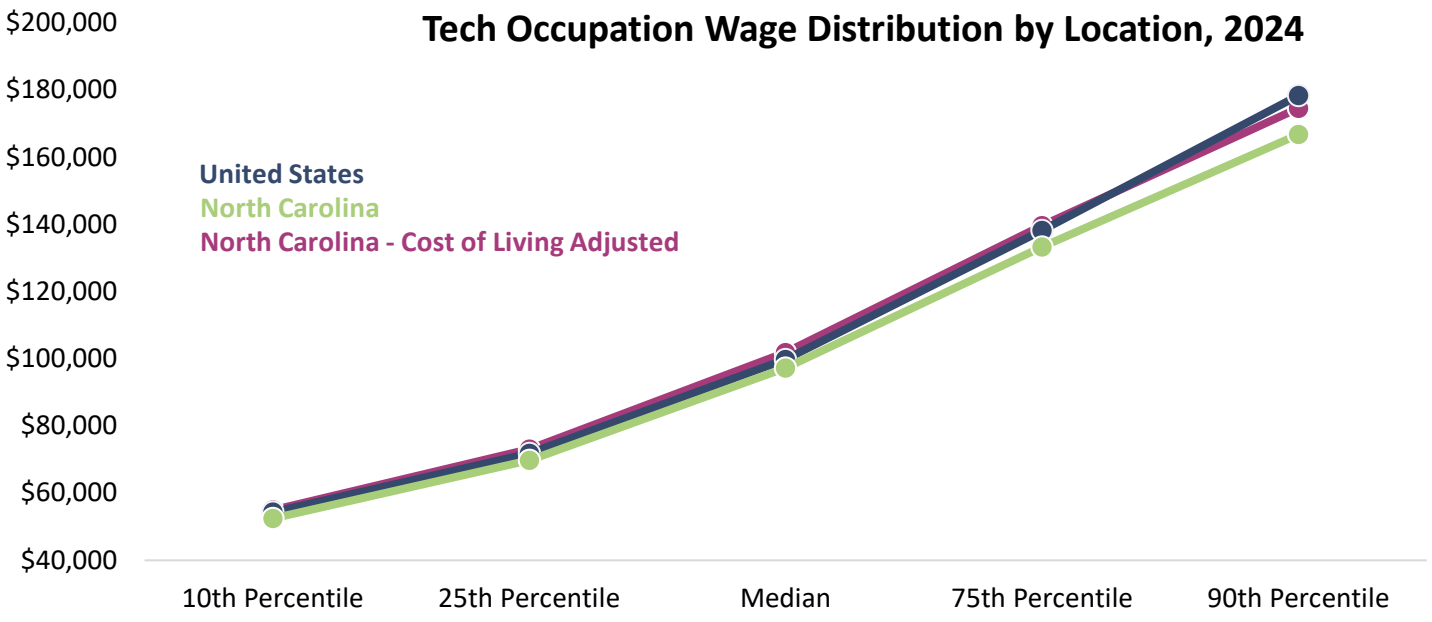
Tech jobs in the state have grown by 33 percent over the past five years. Looking at growth rates over this period, analysts and data scientists are in high demand. The increasing use of big data has created demand for workers who can help process and interpret that information. Later in the report, we discuss the potential impacts that generative AI technologies may have on these types of positions in the future.

Top 5 Tech Occupations in Growth

Top Five in Net Job Growth		Top Five in Growth Percentage	
Software Developers	+18,870	Life Scientists	+266%
Market Research Analysts	+11,300	Data Scientists	+213%
Computer and Information Systems Managers	+10,570	Computer Research Scientists	+179%
Data Scientists	+6,780	Database Architects	+155%
Management Analysts	+3,350	Materials Scientists	+104%

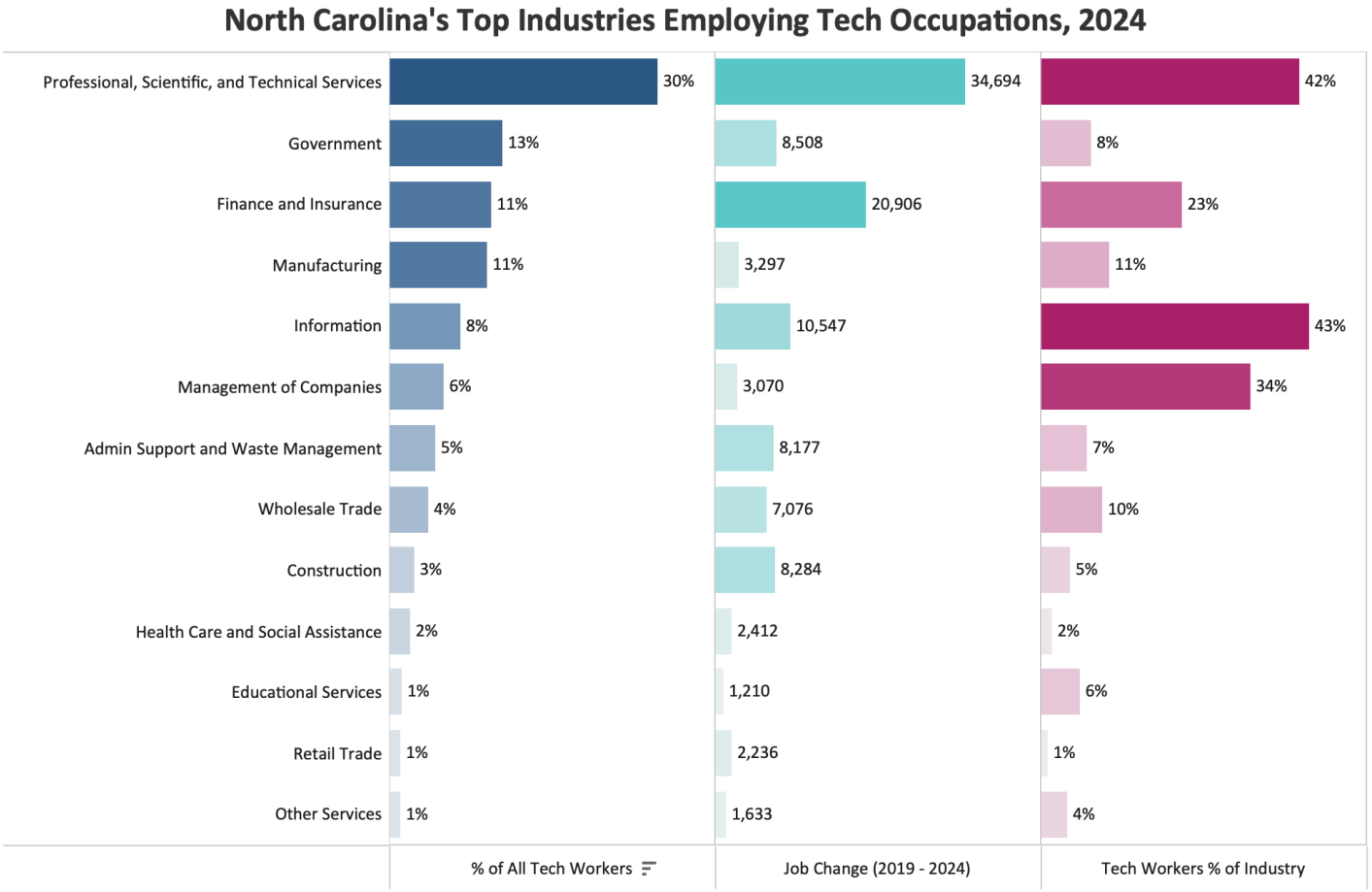
Source: EL estimates based on Lightcast 2025.4

While the median earnings for a tech occupation are around $97,300, actual earnings can vary widely based on industry and experience. The lowest percentile earns about $52,480, and the highest can earn about $166,810 a year. North Carolina's wages are competitive with the national average—particularly when accounting for cost of living. The cost-of-living-adjusted wage is higher than the national average up through the 90th percentile.



Source: EL calculations based on Lightcast 2025.4

As noted earlier, tech occupations exist across many different industries. The chart below shows which two-digit industries employ tech workers in North Carolina. Beyond the expected Professional Services and Information industries, tech workers are also present—and growing strongly—in finance, government, and all types of manufacturing. In the Finance and Insurance sectors, about 23 percent of all jobs are tech occupations, and the sector added over 20,900 tech workers from 2019 to 2024. Tech workers now account for 11 percent of the manufacturing industry as production has become more automated and integrated.



Source: EL calculations based on Lightcast 2025.4

DEMOGRAPHIC BREAKOUT

To understand the demographic distribution within tech occupations, the percentage of workers in each group was compared with that group's share of North Carolina's overall population. This produces an index value in which 100 indicates equal representation in tech occupations relative to the state population. Index values below 100 indicate underrepresentation, while values above 100 indicate overrepresentation. Looking first at gender demographics, women account for about 37 percent of tech occupations while representing one-half of the state's population. While North Carolina has higher rates of women working in the tech industry compared with most other states, women are still significantly underrepresented in tech occupations. Gender parity did not improve from last year's report, unlike in previous years.

Gender Distribution of Tech Occupations in North Carolina, 2024

Demographic	Tech Occupations	NC Population	Index
Women	37%	51%	72.2
Men	63%	49%	129.1

Source: EL calculations based on Lightcast 2025.4

In North Carolina, 67 percent of tech workers are white, which is an overrepresentation in tech occupations when compared with the state's population. Workers who are Asian are also overrepresented in the tech workforce. Other groups of color do not have such high rates. Black people account for 16 percent of tech

occupations but make up 21 percent of the state's total population. The representation rates for Latino and Native communities in the tech workforce are very low in North Carolina. As the tech market continues to grow in the state, it is important that all parts of the population benefit. Broadening the labor pool with technology skills is a benefit to North Carolina businesses and can be a powerful competitive advantage.

Race/Ethnicity Distribution of Tech Occupations in North Carolina, 2024

Demographic	Tech Occupations	NC Population	Index
White	67%	60%	111.2
Black or African American	16%	21%	75.0
Asian	10%	4%	271.1
Hispanic or Latino	5%	12%	38.8
Two or More Races	2%	2%	96.6
American Indian or Alaska Native	0.3%	1.0%	34.4
Native Hawaiian or Other Pacific Islander	0.1%	0.1%	72.8

Source: EL calculations based on Lightcast 2025.4

The age distribution of the tech workforce was also compared with that of the overall workforce. Tech occupations tend not to rely on the very young but have higher concentrations of young and middle-aged workers. Compared with the statewide workforce, tech occupations employ fewer older workers. This group still represents about 20 percent of tech jobs in North Carolina and is at risk of retiring in the coming years. Companies and workforce stakeholders will need to plan for replacing these workers' skill sets in the future.

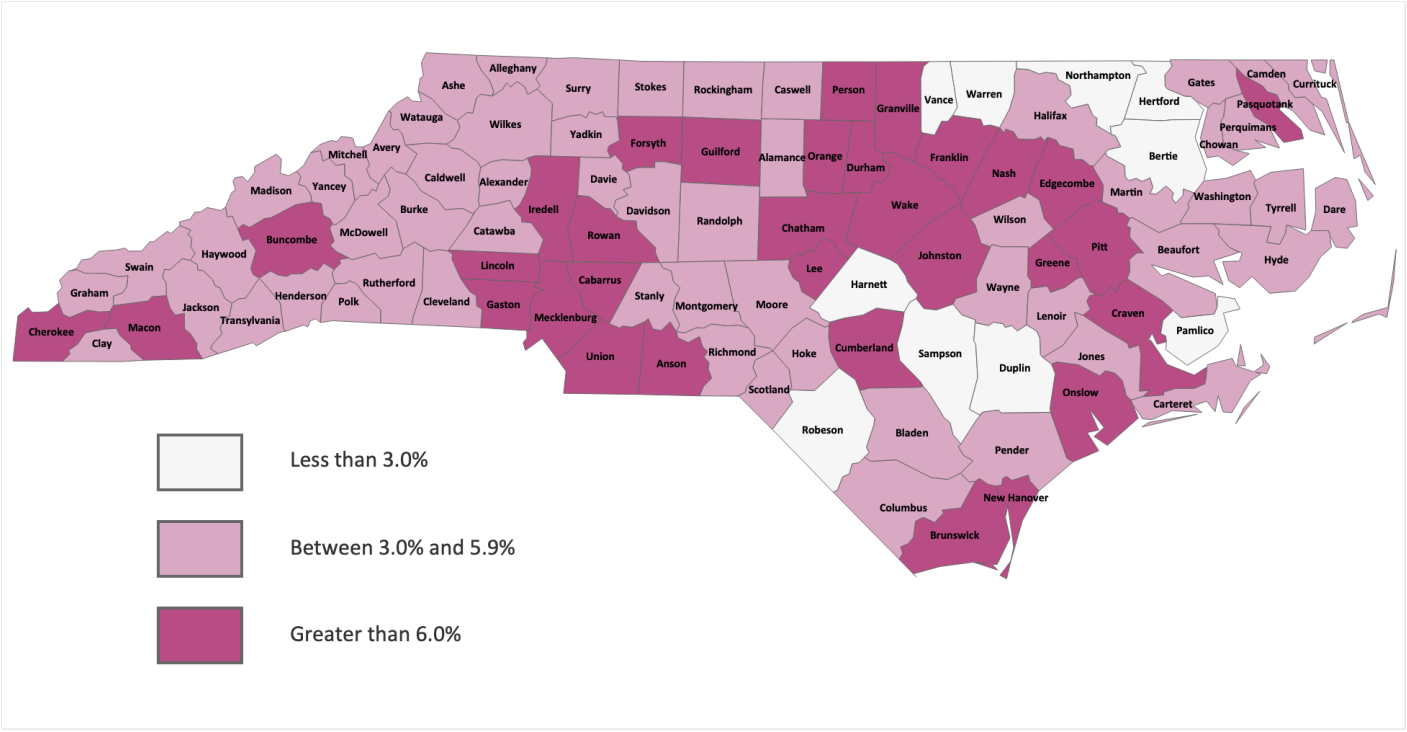
Age Distribution of Tech Occupations in North Carolina, 2024

Demographic	Tech Occupations	NC Workforce	Index
Age 24 and Younger	6%	13%	42.2
Age 25 to 34	26%	21%	119.7
Age 35 to 44	26%	21%	124.3
Age 45 to 54	23%	21%	109.4
Age 55 and Older	20%	23%	85.0

Source: EL calculations based on Lightcast 2025.4

Like tech industry jobs, tech occupations tend to be strongly concentrated in the more urban counties. The top counties with tech occupations also tend to follow the "Piedmont Crescent" I-40/I-85 corridor and the newer "Carolina Core" counties stretching from the Piedmont Triad to Fayetteville. Tech occupations are more widespread throughout the state compared with tech industry jobs. Tech occupations make up less than three percent of the local economy in only ten of North Carolina's 100 counties. Twenty-seven counties in the state have more than six percent of their workers in tech jobs, up from 20 counties in last year's report.

Tech Occupations as a Percentage of Total Jobs, 2024



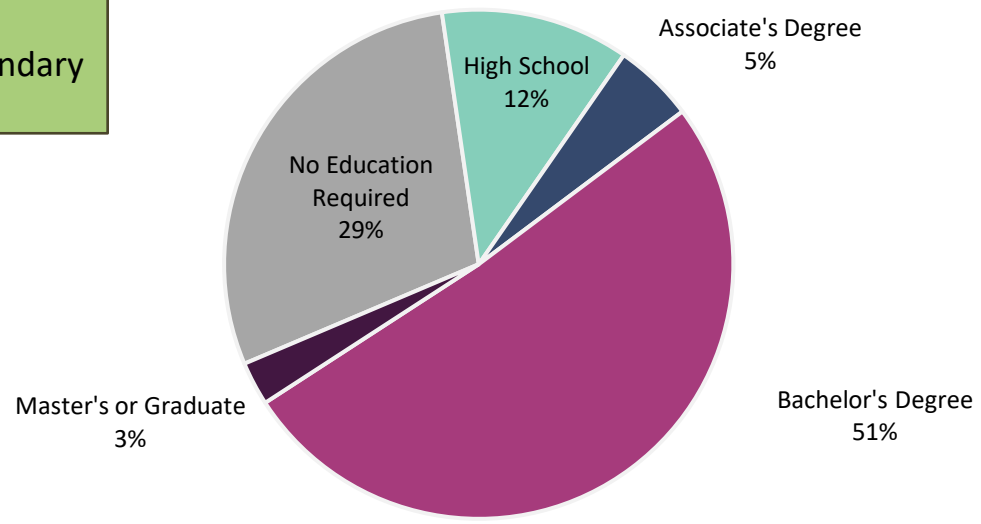
Source: EL calculations based on Lightcast 2025.4

WORKFORCE DEMAND AND SUPPLY

Despite the consistent demand, a review of job postings shows that companies still prefer tech workers with some level of postsecondary training. In the last year, about 59 percent of postings for tech jobs required some form of postsecondary education. This reflects an increase of four percentage points from the level reported in last year's report and indicates that companies continue to value traditional education pipelines when hiring tech workers.

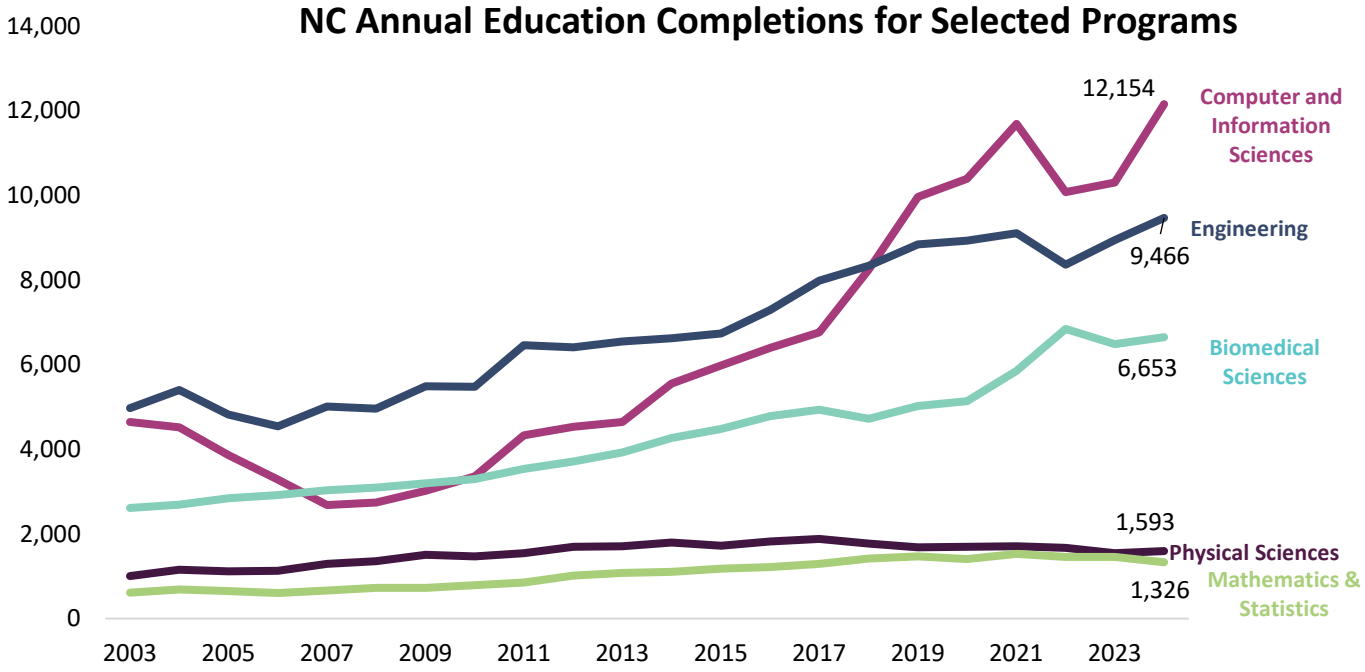
Minimum Education Level Required in NC for Tech Job Postings
November 2024 - November 2025

59%
Some Postsecondary



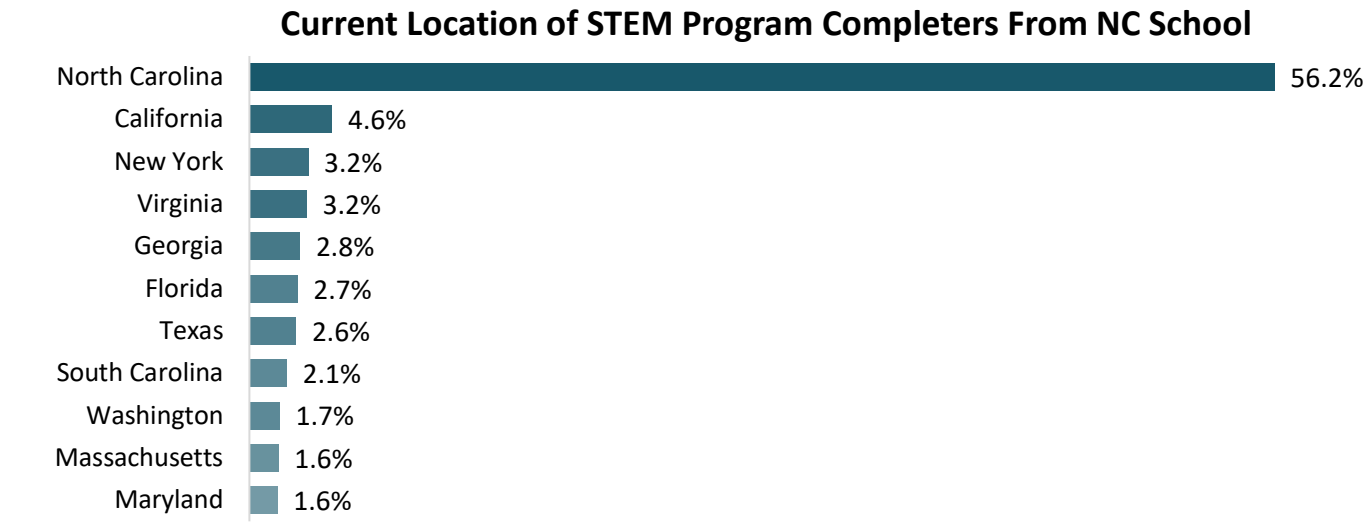
Source: EL calculations based on Lightcast 2025.4

When reviewing data on educational completions (which include degrees, certificates, and awards from postsecondary institutions), there has been an increase over time in most tech-related programs. The state produced over 12,150 education completions in computer and information sciences in 2024, which should help supply the talent needed for tech companies choosing to locate in the state. From 2023 to 2024, completions in computer sciences, engineering, and biomedical sciences grew, while completions in physical sciences and in mathematics and statistics declined.



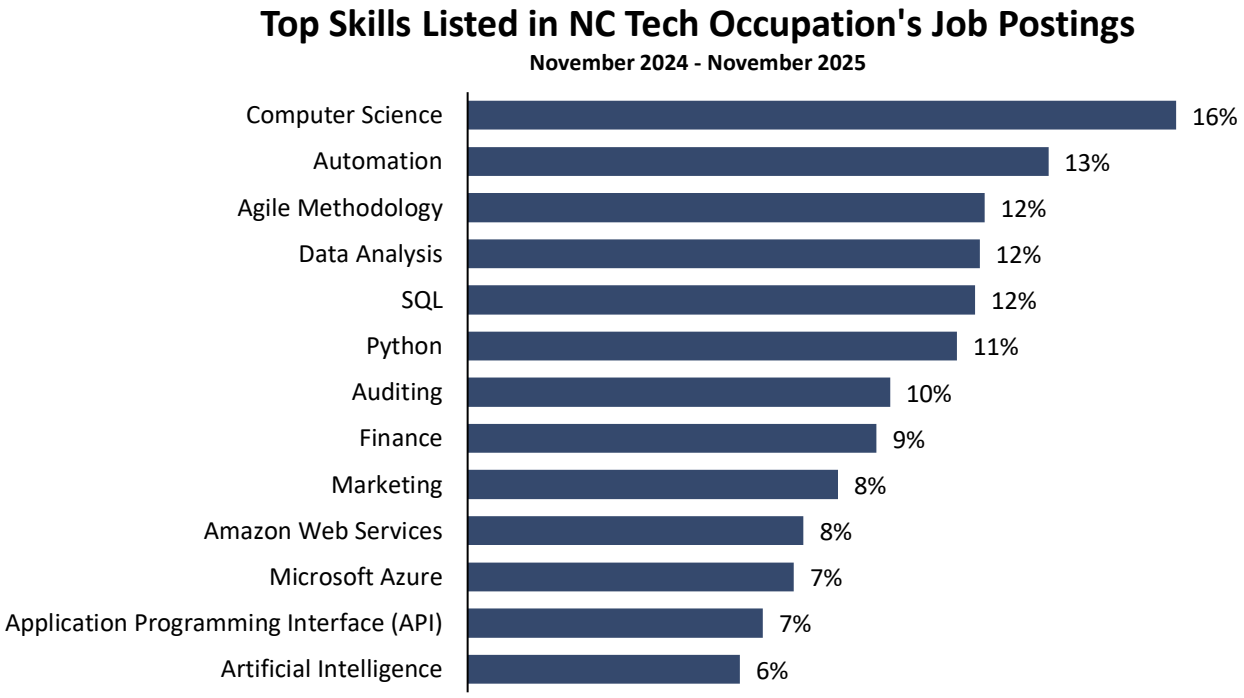
Source: EL calculations based on Lightcast 2025.4

North Carolina retains a large portion of the students educated in the state. Online job profiles for North Carolina STEM graduates indicate that about 56 percent stay in the area for work. This is an increase from 52 percent in last year's report. North Carolina will need to continue producing talent through the postsecondary system and continue finding ways to connect that talent to local tech jobs.



Source: Lightcast 2025.4
Note: This data comes from individuals who have updated their online profile since 2020.

Companies will likely need to perform more in-house training than they have in the past, as the tech skills needed are changing rapidly. While computer science education is still listed as a preference in many of North Carolina's tech job postings, specific software skills are requested just as often. Short-term training that focuses on programming languages such as SQL, Python, and API development could be helpful in filling talent gaps more quickly than four-year computer science degrees. Skills in AI became a top-requested skill in tech job postings in the last year.

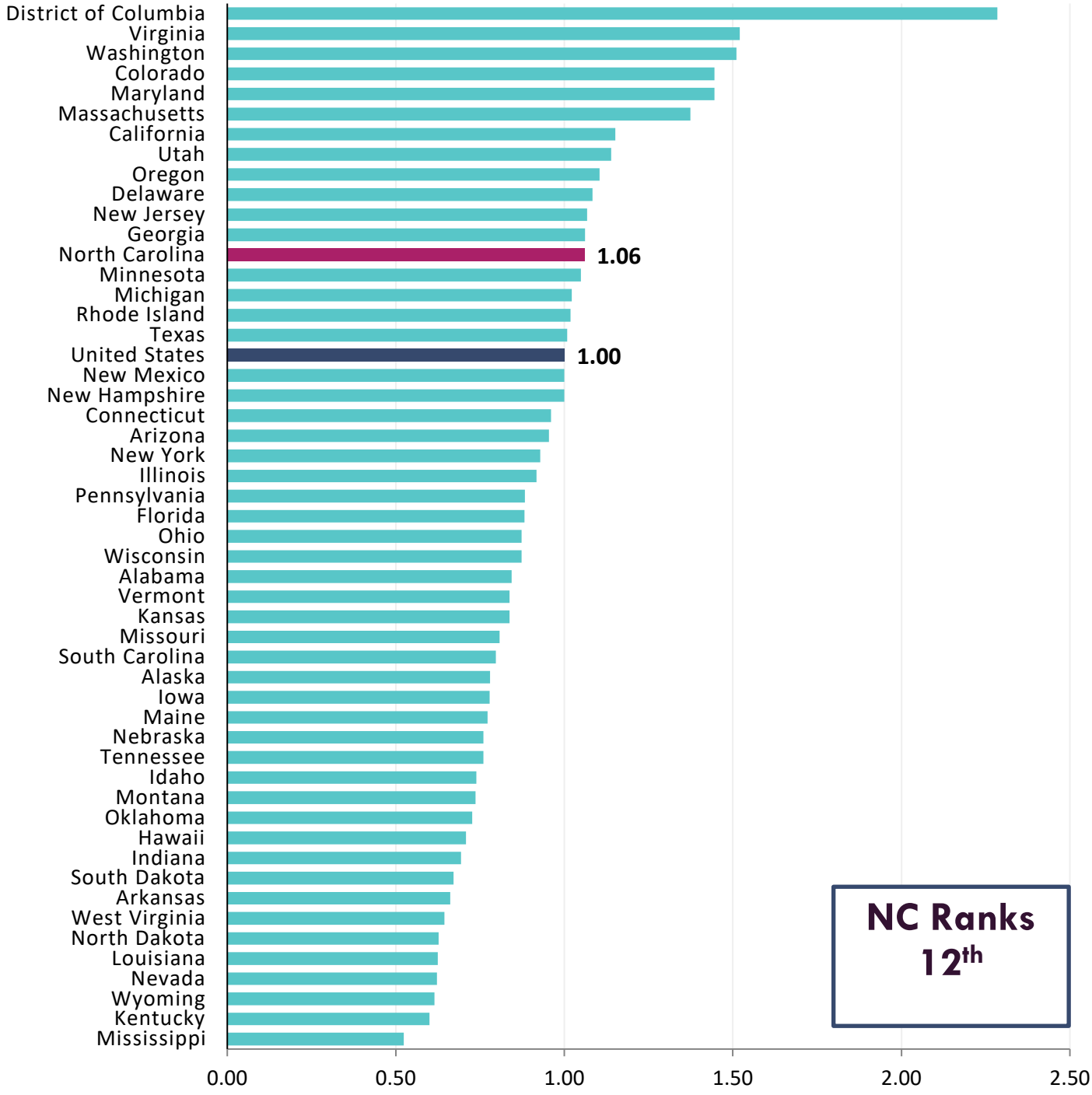


Source: EL calculations based on Lightcast 2025.4

TECH OCCUPATION STATE COMPARISONS

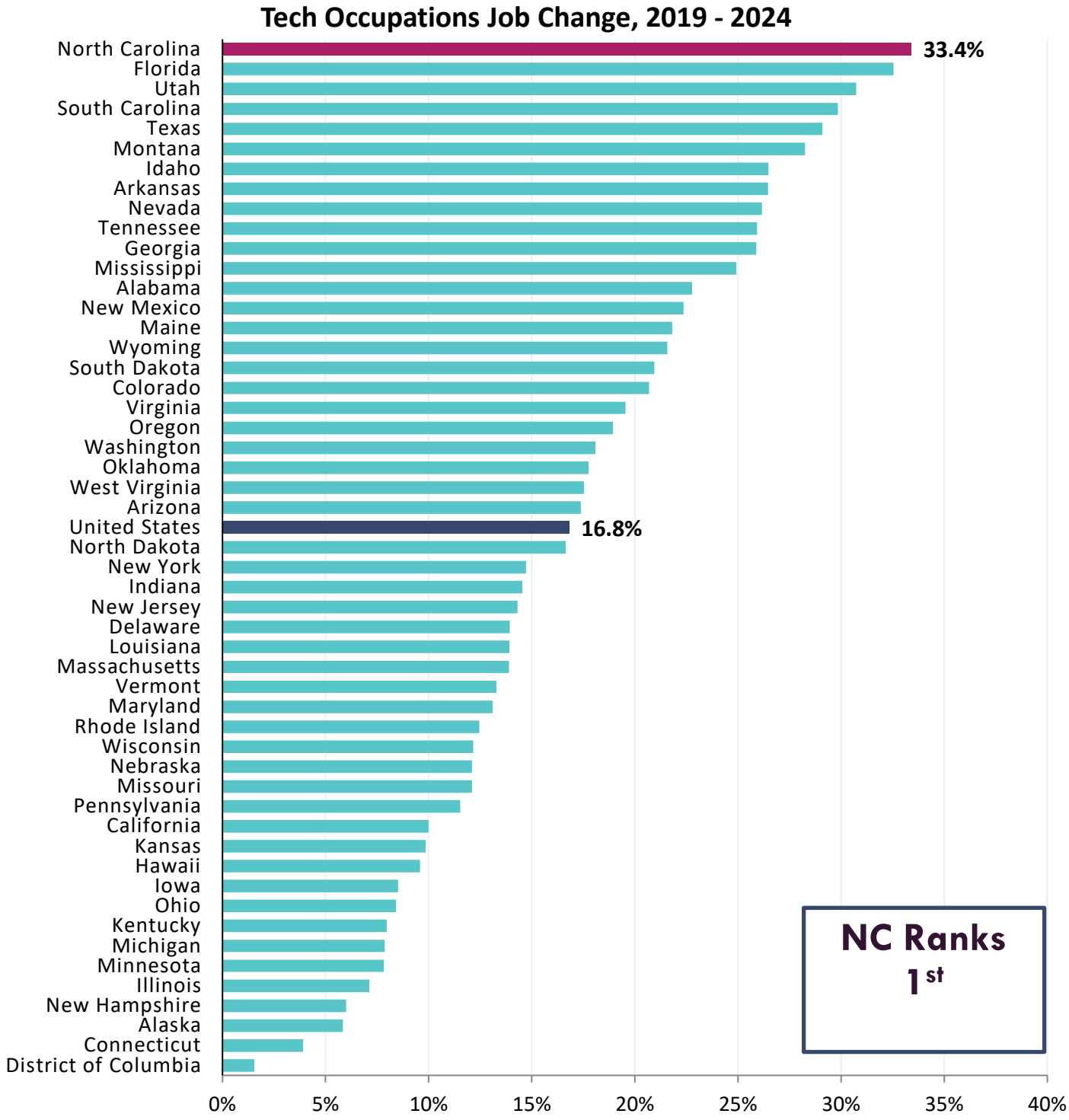
The next group of charts focuses on tech occupations. This category represents workers who perform tech roles regardless of the industry in which they are employed. When compared with the other states and the national average, North Carolina ranks 12th in tech occupations, with a location quotient of 1.06. Again, this indicates a diverse economy that includes—but is not intensively dependent on—tech workers.

Tech Occupations Employment Concentration, 2024



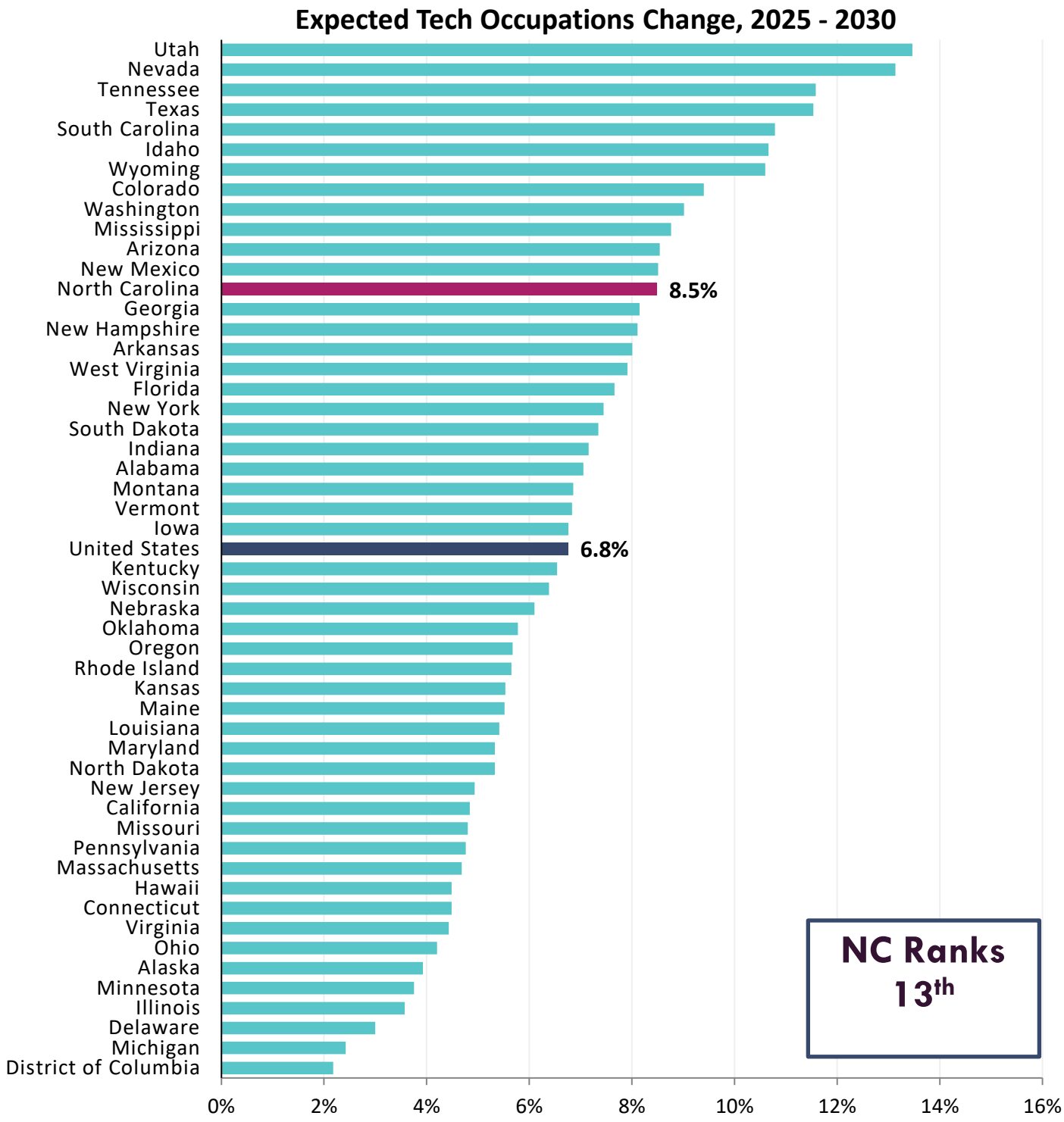
Source: EL calculations based on Lightcast 2025.4

Tech occupations grew by more than 33 percent, nearly double the national average. With this high growth, North Carolina has consistently ranked in the top 15 states for this metric in recent years and moved up to a 1st-place ranking in this year's analysis.



Source: EL calculations based on Lightcast 2025.4

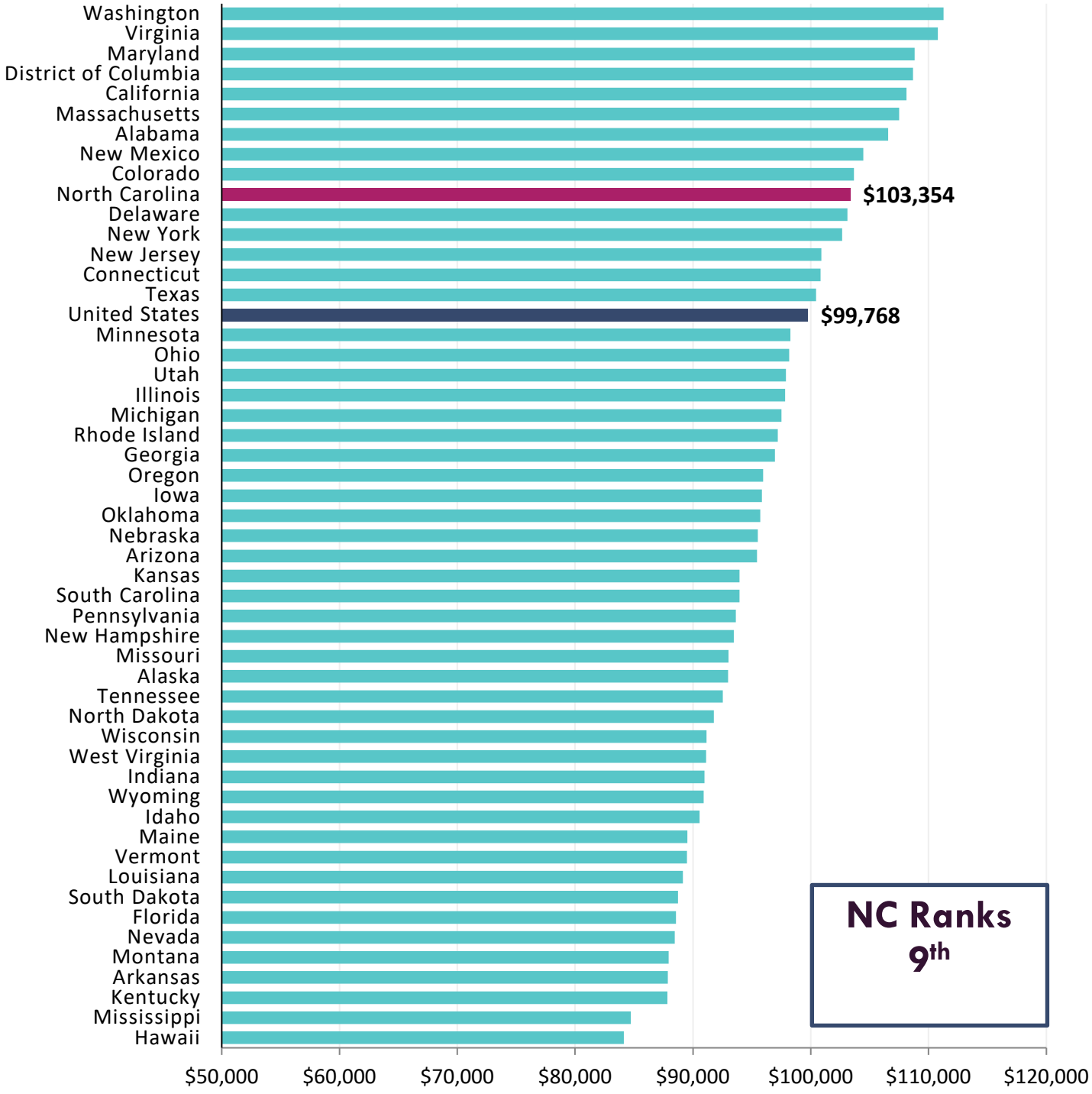
Using Lightcast's forecast models, North Carolina's tech occupations are expected to grow by 8.5 percent by 2030. This ranks the state 13th in predicted growth. Naturally, the growth potential becomes smaller as the overall size of the tech workforce increases. North Carolina's expected growth rate is above the national average.



Source: EL calculations based on Lightcast 2025.4

When evaluating tech occupations, median annual earnings data are available. In contrast, the tech industry analysis relies on average annual earnings, which can be skewed by outliers. The median estimate provides a clearer measure of typical wages, reflecting the midpoint of the earnings distribution. The typical tech worker in North Carolina earns around $103,350 a year when adjusted for state-level purchasing power. North Carolina continues to rank in the top 15 states for this metric but did drop one spot to 9th place.

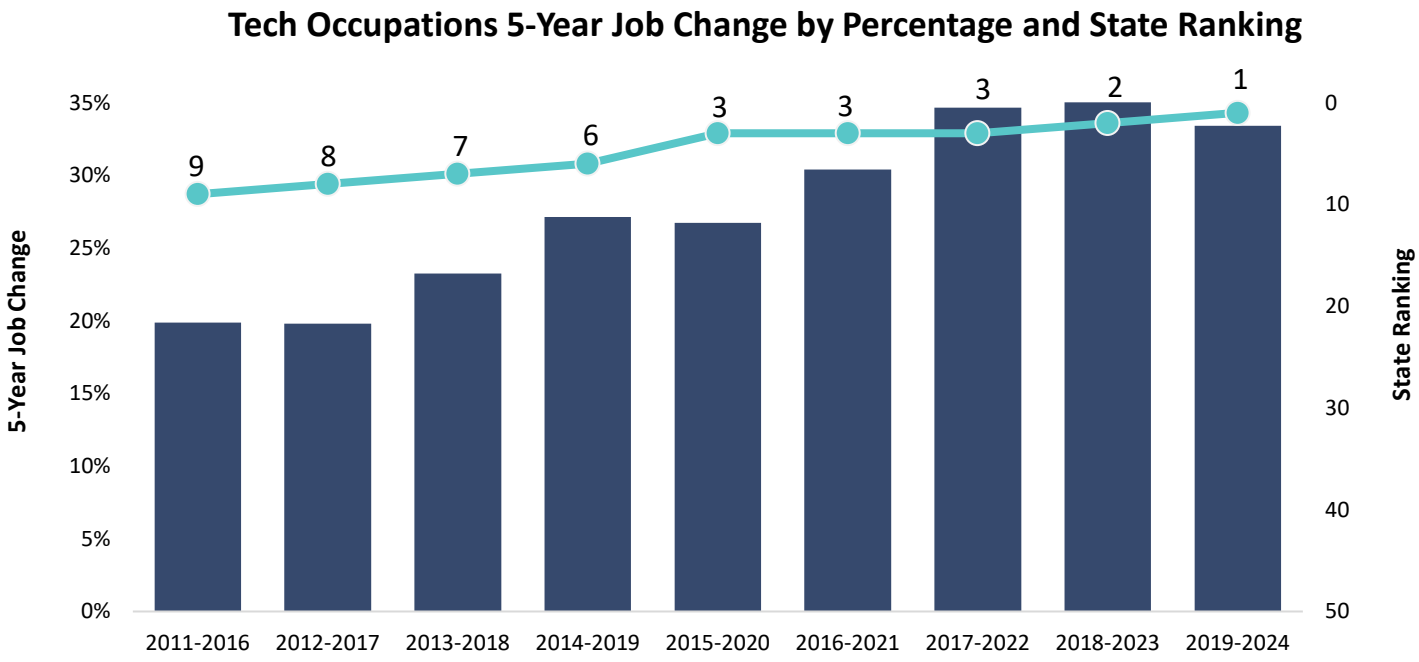
Median Annual Earnings for Tech Occupations Adjusted for Purchasing Power, 2024



Source: EL calculations based on Lightcast 2025.4

When compared with the rest of the nation, tech occupations are an area in which North Carolina leads. The state ranks in the top 15 for all four of the metrics studied. North Carolina has consistently ranked in the top 10 states for historical growth rates and moved into the top spot in this year's report.

Tech Occupations		
Metric	**Value**	**Rank**
Tech Occupations Employment Concentration (2024)	1.06	**12**
Tech Occupations Job Change (2019-2024)	33.4%	**1**
Expected Tech Occupations Job Change (2025-2030)	8.5%	**13**
Median Annual Earnings Adjusted for Purchasing Power (2024)	$103,354	**9**

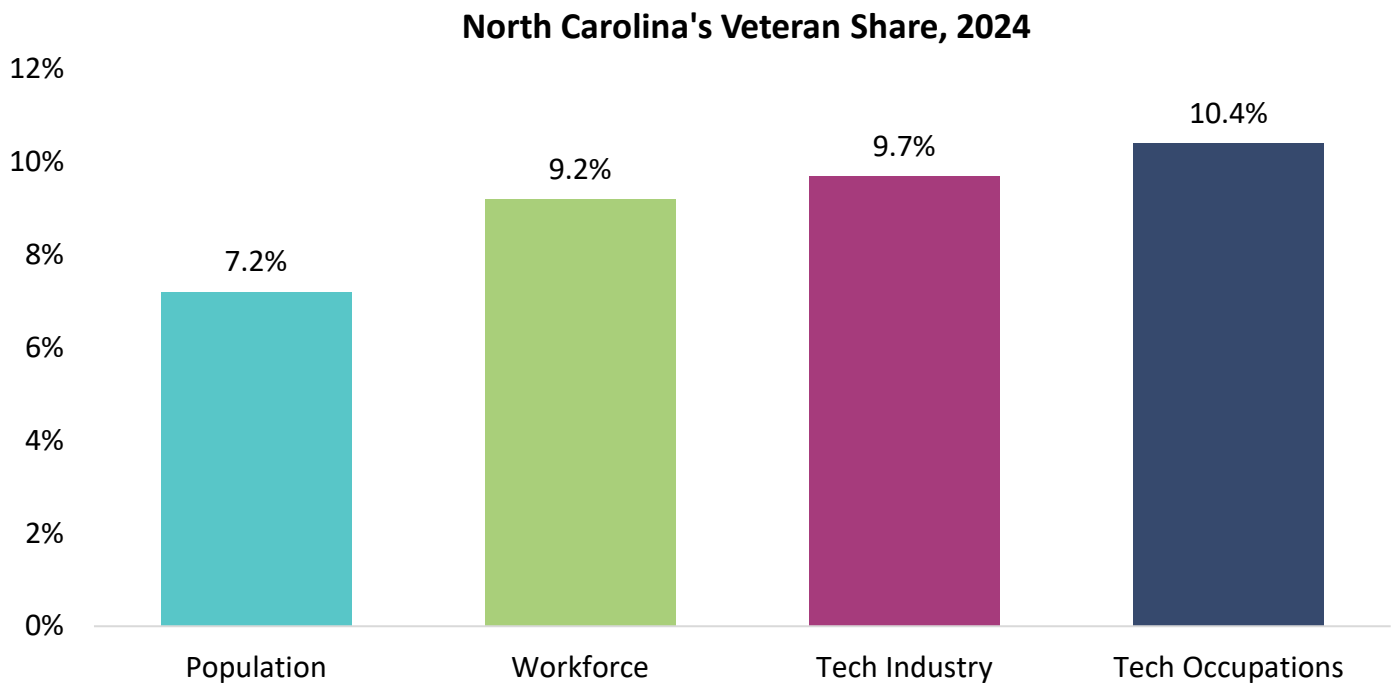


Source: EL calculations based on Lightcast 2025.4

SECTION 6. VETERANS IN THE TECH SECTOR

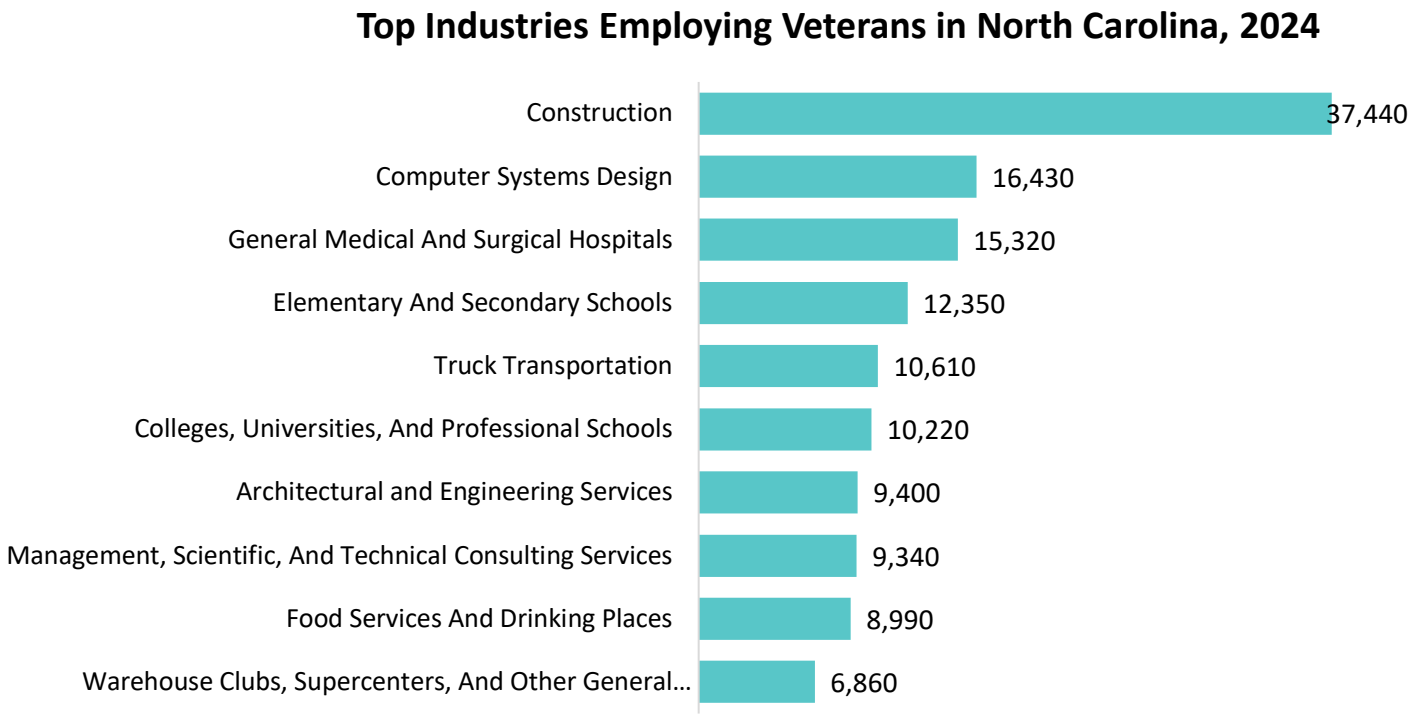
For this year's report, NC Tech was interested in understanding the role that veterans play in the tech sector. The military has a large presence in the state, with several major bases and operations located in North Carolina. Veterans make up 7.2 percent of the state's population, according to the U.S. Census Bureau. This group accounts for an even larger share of the state's total workforce at 9.2 percent.

By utilizing the Census's microdata, we were able to identify the number of veterans working in tech industry or tech occupation jobs. The industry and occupation groupings in the Census microdata mostly align with the NAICS and SOC codes used to create the groupings in this report, with some small exceptions. Using the best available matches, we determined that in 2024 veterans accounted for 9.7 percent and 10.4 percent of the tech industry and tech occupations workforce, respectively.



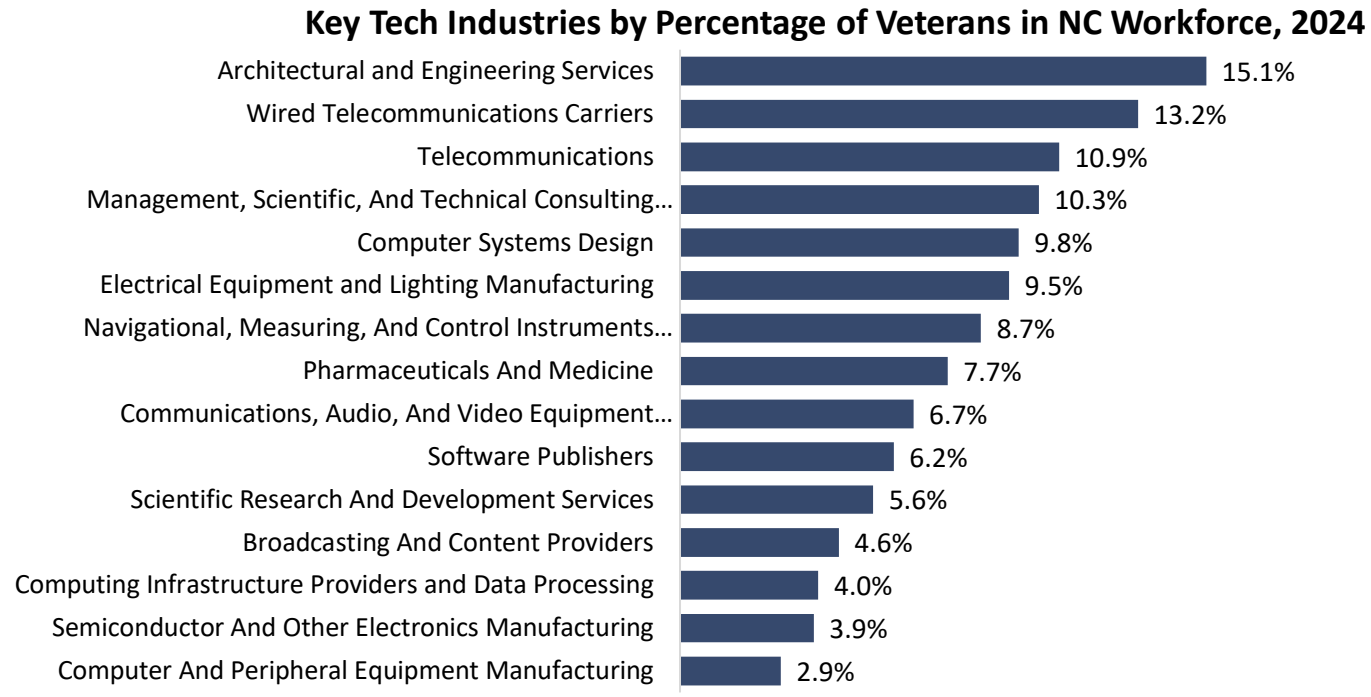
Source: EL calculations based on US Census Bureau microdata

When looking at the individual industries that employ the highest number of veterans across the state's economy, construction is the top employer. However, several tech industries rank in the top ten. The computer systems design industry is the second-largest employer of veterans in the state. There are also strong veteran employment levels in engineering and scientific consulting industries.



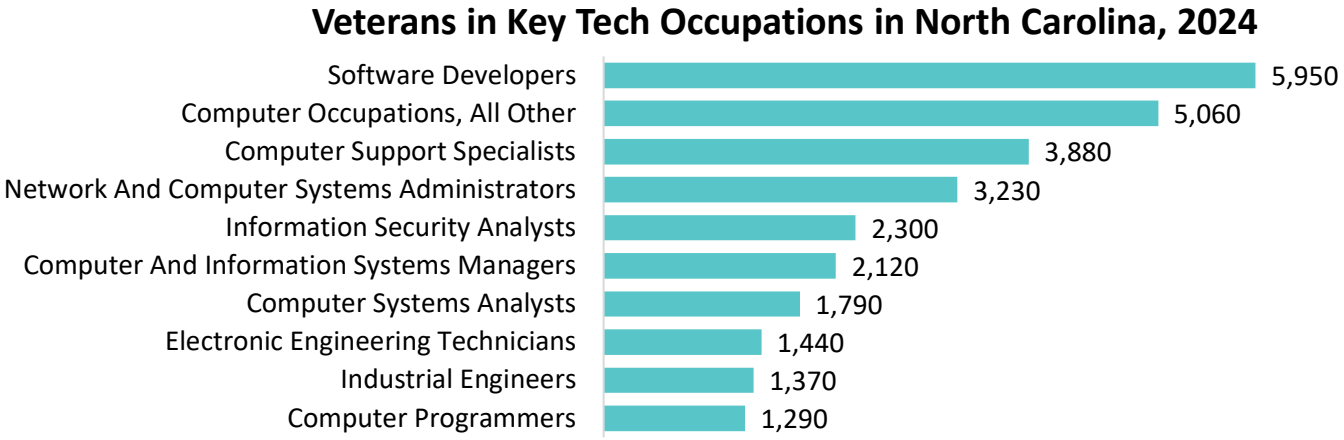
Source: EL calculations based on US Census Bureau microdata

Veterans account for about one-tenth or more of employment in six tech industries. Veterans tend to be more represented in the services-based segments of the tech industry compared with tech manufacturing industries.



Source: EL calculations based on US Census Bureau microdata

On the occupation side of the tech sector, the top tech job for veterans in 2024 was software developer. Information security analyst is also a top job for veterans. This occupation aligns well with many veterans' defense backgrounds and their ability to acquire a security clearance—often a requirement for these roles.



Source: EL calculations based on US Census Bureau microdata

The military also serves as an employer and trainer of tech talent in the state. In 2024, there were 8,870 workers in the military performing tech jobs, according to Lightcast. This was about 2 percent of all tech workers in North Carolina and about 7 percent of all military workers. The increase in automation and AI technology has grown the demand for tech workers in the armed forces. These workers can gain valuable tech skills during their service that can then be translated to the private tech sector.

SECTION 7. ARTIFICIAL INTELLIGENCE AND THE TECH WORKFORCE

Artificial intelligence (AI) has the potential to be a highly disruptive force within the existing tech workforce. AI enables machines to perform tasks that require human cognition, such as learning, decision-making, and problem-solving. The most prominent public-facing product, ChatGPT, launched in November 2022 and reached 100 million users within two months. By mid-2025, the platform had approximately 800 million active weekly users. A Pew Research Center survey found that about 34 percent of U.S. adults had used ChatGPT in 2025—roughly double the usage reported in a 2023 survey. ChatGPT and other large language models (LLMs) have become some of the most rapidly adopted technological advancements of our time.

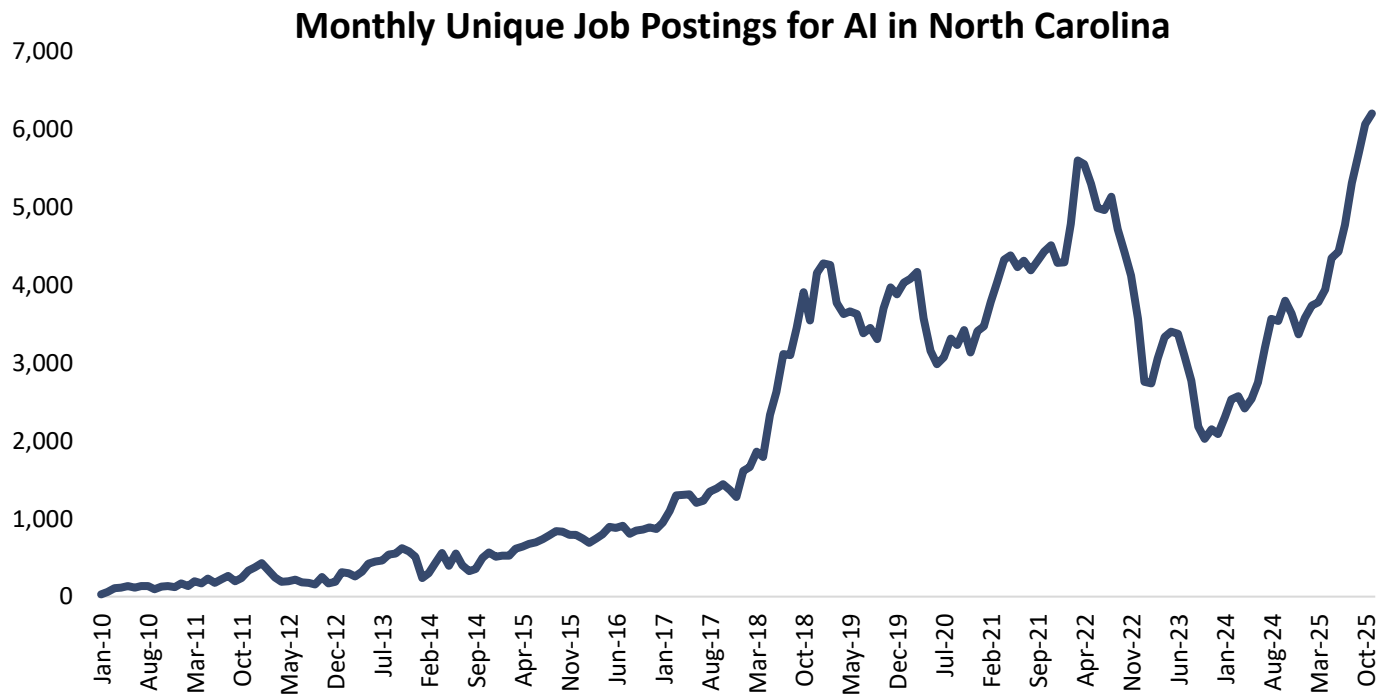
AI extends far beyond ChatGPT, encompassing transformative applications across a wide range of industries. In healthcare, AI systems such as IBM Watson Health analyze vast datasets to support personalized treatment planning and disease prediction. In manufacturing, AI-powered robotics optimize production efficiency and quality control. In finance, AI drives fraud detection systems and algorithmic trading platforms, enhancing both security and operational performance.

The rapid diffusion of AI has led to its widespread adoption across the workforce. According to data from Anthropic (the company that developed the LLM Claude), computer and mathematics workers in North Carolina use Claude for approximately 18 percent of their tasks. Unlike previous efficiency technologies, LLMs automate tasks performed by knowledge workers, including writing, editing, and problem-solving. Despite the state's higher concentration of knowledge work, North Carolina had a lower-than-predicted usage score and ranked only 21st in usage across all states.

The debate over whether new AI tools will automate tasks and replace workers, or merely augment tasks to increase efficiency, is ongoing among researchers. Some studies warn that AI could replace substantial portions of the workforce, while others suggest that AI may generate productivity gains with little to no impact on overall employment. This section reviews the research and presents a range of tech jobs in North Carolina that could be exposed to AI.

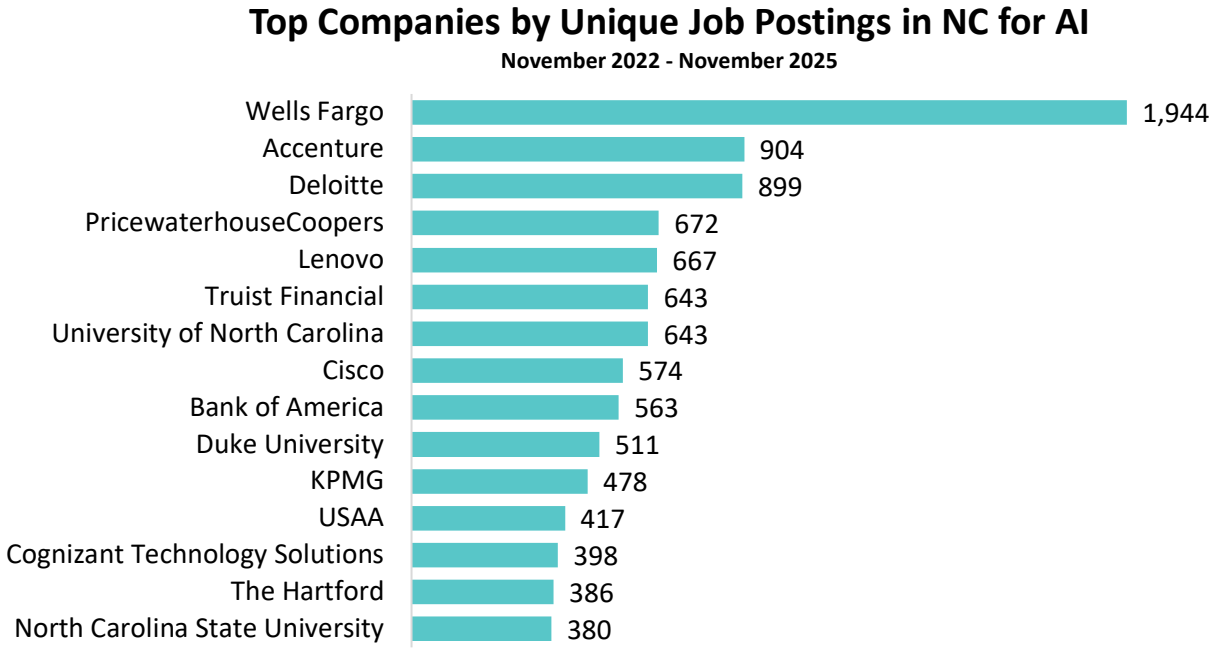
First and foremost, AI is a core technology that is expanding the potential offerings of traditional tech companies. This expansion can create new opportunities for these firms and generate additional demand. Harvard economist Jason Furman recently reported that almost all U.S. GDP growth in the first half of 2025 was driven by AI-related investments, including spending on the data centers required to power current and future AI products. Without this investment, GDP growth during this period could have been as low as 0.1 percent compared with the previous year. AI investment is currently carrying the U.S. economy and could be a crucial driver of future growth.

The need for highly specialized talent to develop and maintain AI tools is growing. In November 2025, there were 6,200 unique job postings in North Carolina that mentioned AI in the job description. This was the highest monthly demand since online job posting data began in 2010. The time series of postings suggests that demand has recovered from the economic slowdown in 2022, when Federal Reserve interest rate increases slowed venture capital investment.



Source: EL calculations based on Lightcast 2025.4

From November 2022 (the public launch of ChatGPT) to October 2025, there were 56,820 unique job postings for AI talent in North Carolina. About 5,940 different employers were competing for AI-skilled workers in the state. Some of the top employers seeking this talent operate in manufacturing, finance, consulting, and technology. Universities in North Carolina are also seeking individuals with AI expertise for research and teaching roles. In November 2025, the average advertised salary for AI-related postings in North Carolina was $132,000. These types of jobs can offer tremendous economic security for those who have the necessary skills.



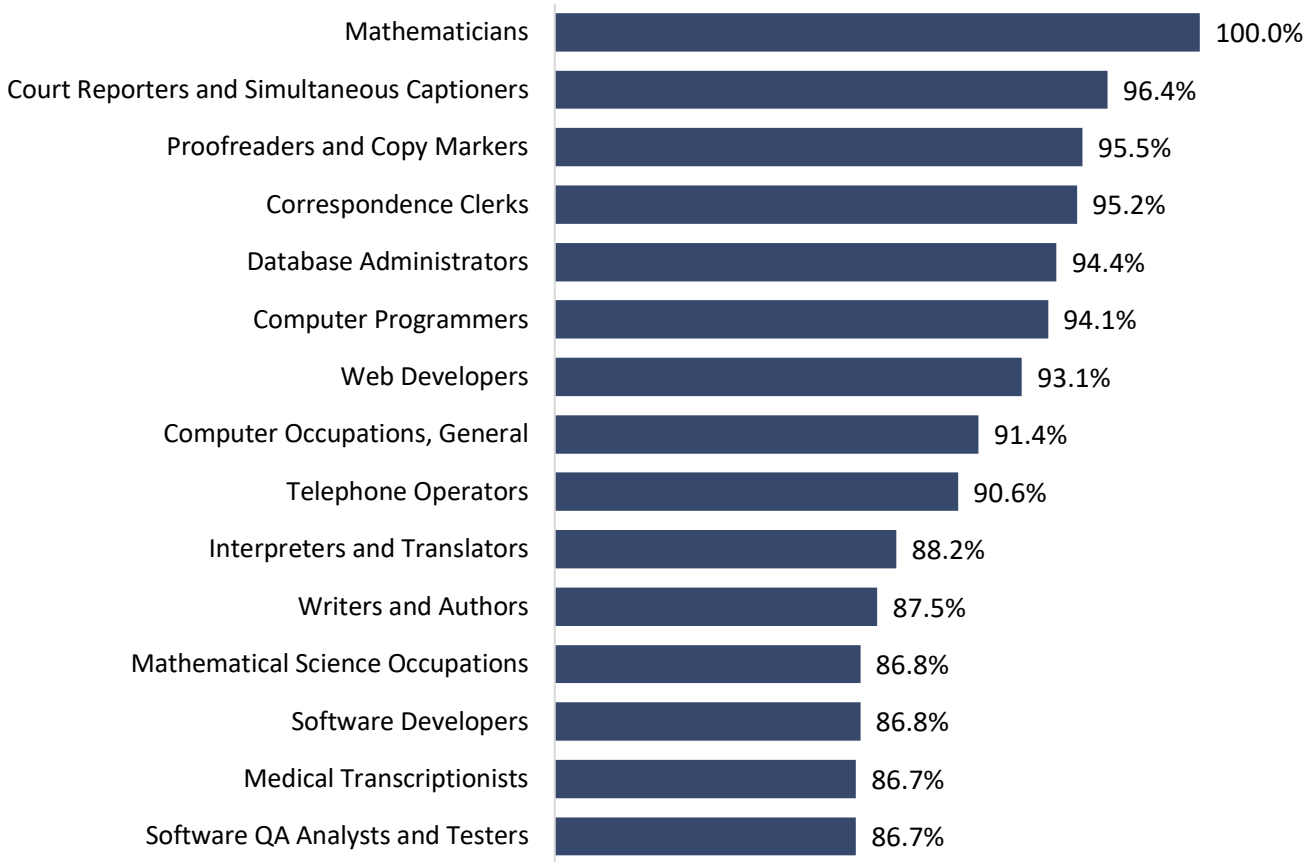
Source: EL calculations based on Lightcast 2025.4

The other side of the AI discussion concerns how this technology could affect job demand and employment. EL reviewed recent research papers that assess which occupations may be most at risk. Most of these studies examined the skill requirements of each occupation and compared them with the types of skills that LLMs and similar forms of AI can augment or automate. Many papers described this dynamic using the term "exposure," a measure intended to capture the potential impact of the technology rather than predict whether j0obs will be replaced by these tools.

One paper emerged as the gold standard and was referenced in most subsequent studies. In the seminal "GPTs are GPTs" study, Eloundou et al. (2024) estimated the percentage of tasks performed by each occupation that are exposed to LLM software. Exposure was defined as a 50 percent reduction in the time required to complete a task (the GPT Beta Score). This report provided EL with a framework for assessing exposure for each occupation in the economy, which could then be applied to North Carolina's tech workforce to better understand potential AI impacts.

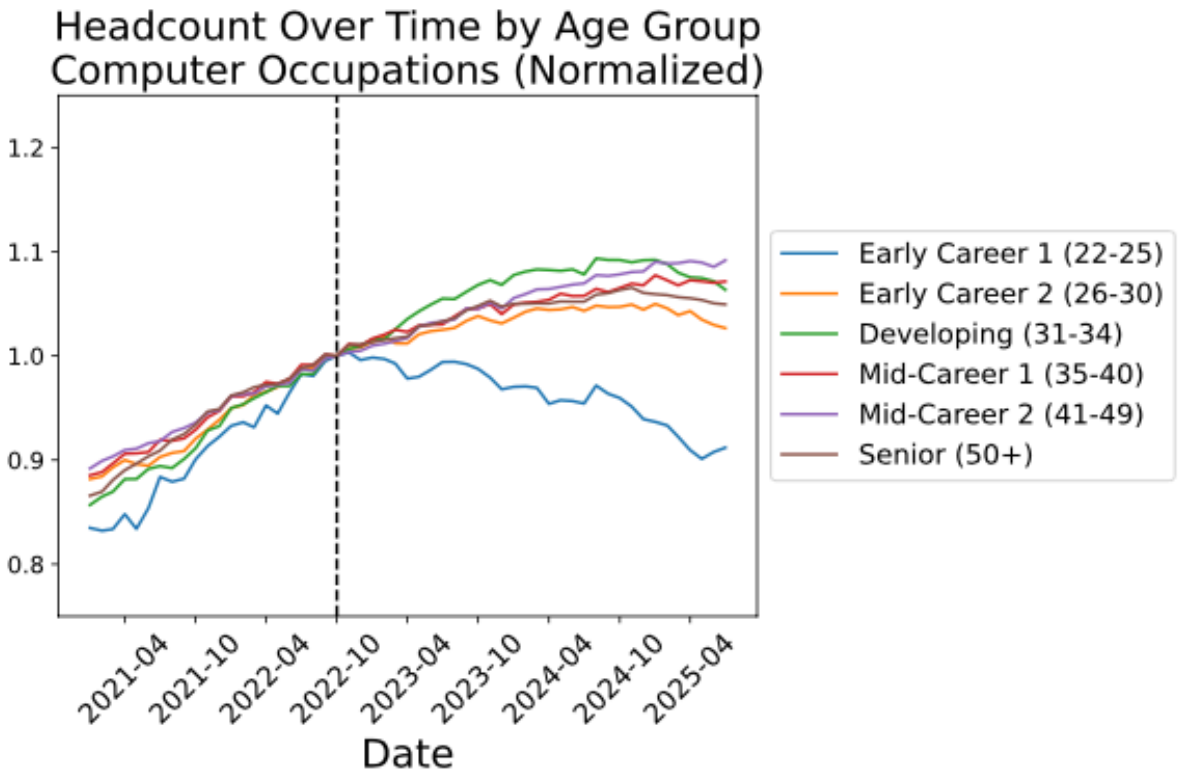
The exposure scores highlight the types of jobs with the highest potential for task augmentation or automation from AI. Tech occupations such as computer programmers, web developers, mathematicians, and software developers are among the most exposed. Other positions involving clerical or writing work also have high exposure levels. This means that non-tech workers within tech companies—not just tech-specific roles—could also be affected.

Occupations with the Highest AI Expsoure Scores



Source: Eloundou et al. (2024)

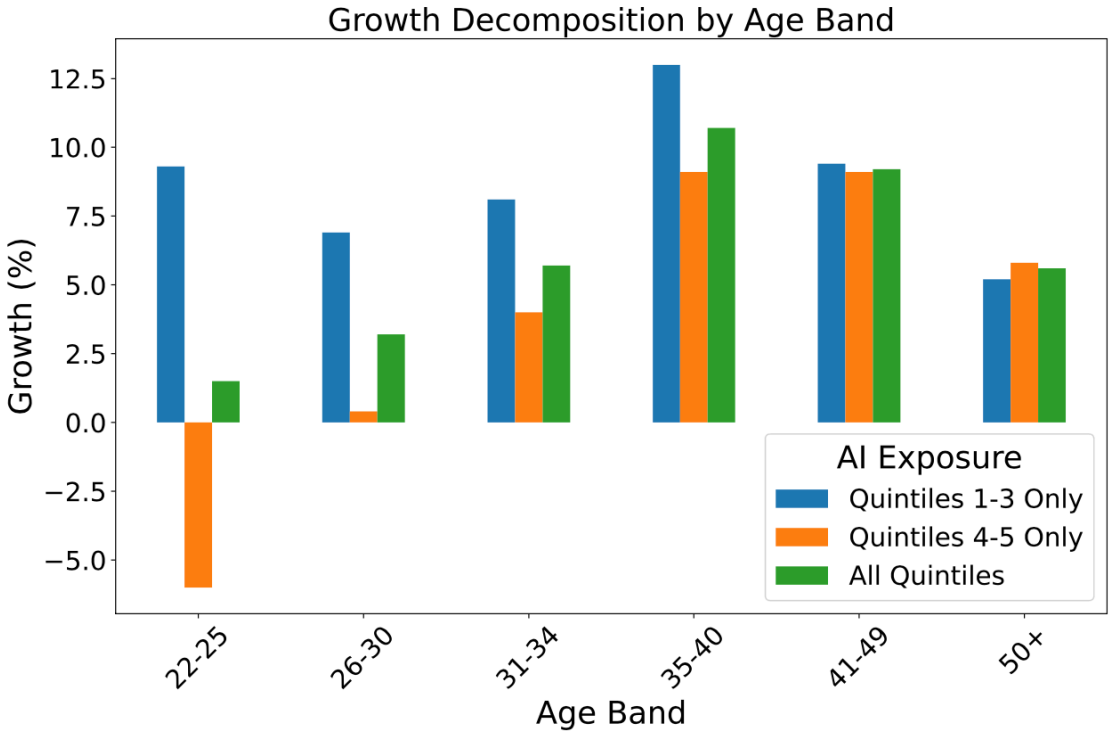
While the long-term impacts of AI on highly exposed jobs remain uncertain, recent data suggest that early-career workers may already be experiencing reduced opportunities. In the paper "Canaries in the Coal Mine: Six Facts about the Recent Employment Effects of Artificial Intelligence," Stanford researchers found evidence that employment levels for younger workers have declined since the introduction of LLMs.



Source: Brynjolfsson et al. (2025)

This report also uses the GPT Beta exposure score from the Eloundou et al. study. Exposure scores were compared with recent national payroll data from ADP. The research found that in the most highly exposed occupations, early-career headcounts have shifted downward since the emergence of ChatGPT and other LLM tools. These findings remained consistent even after researchers accounted for alternative explanations such as remote work trends, Federal Reserve interest rate hikes, and the impacts of the COVID-19 pandemic on higher education.

The reduction in early-career employment has been most pronounced in occupations with the highest AI exposure scores (quintiles 4–5). Meanwhile, employment levels continue to rise for older workers in these highly exposed occupations. The challenges recent graduates face in securing knowledge-based employment have also been highlighted anecdotally in several media reports.



Source: Brynjolfsson et al. (2025)

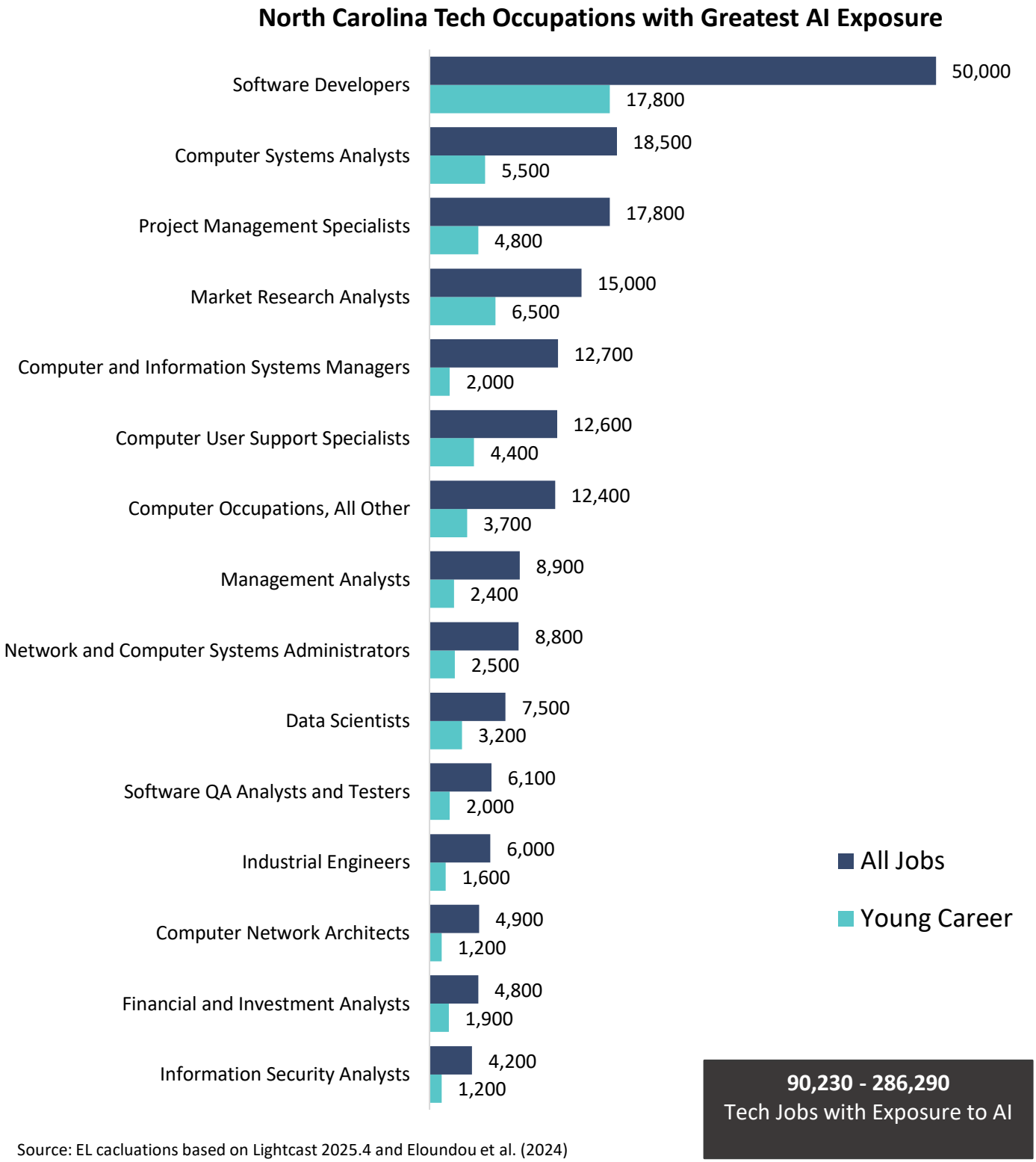
The exposure scores for AI technology were applied to North Carolina's 2024 labor market data to estimate the number of jobs that could heavily utilize AI. Because each exposure score represents the share of tasks affected, we applied these percentages to employment levels to estimate the number of jobs potentially exposed. Based on 2024 employment levels, approximately 286,290 tech jobs in North Carolina are predicted to be exposed to LLM technology. This represents about 61 percent of the state's current tech workforce.

While mathematicians have the highest exposure score, they represent a small share of North Carolina's workforce and therefore are not among the most impacted occupations. Exposed job estimates were rounded to the nearest hundred to emphasize that these figures are broad assessments rather than precise measurements. Among the top exposed occupations are software developers, research analysts, and data scientists. These are roles that have historically driven growth in the state's tech sector. If exposure leads to even modest levels of job replacement, it could significantly impact the state's employment figures.

Research from Brynjolfsson et al. suggests that only younger workers are currently experiencing job impacts related to AI. Based on this finding, a reasonable lower bound of exposure was estimated by applying AI exposure only to young workers. To produce this lower-bound estimate for North Carolina's tech jobs, occupation data were shifted from all ages to only those workers between ages 14 and 35. This age grouping was the closest approximation to the paper's age brackets that can be generated using labor market data. This creates a lower-impact scenario in which only early-career jobs would be affected by AI exposure. If AI ultimately augments or automates only early-career tasks, the potential exposure for North Carolina would be much smaller—about 90,230 tech jobs. This represents roughly 19 percent of all tech jobs in the state.

For years, tech jobs have offered stable, higher-paying career opportunities, and many young people have taken on college debt to train for positions in tech fields. If AI exposure in these occupations leads to fewer job opportunities, young workers may face significant challenges in repositioning their careers and achieving

economic security. North Carolina will need to be prepared to train the next generation of AI experts to support its local companies, while also identifying ways to retrain workers whose jobs may be displaced .



Source: EL cacluations based on Lightcast 2025.4 and Eloundou et al. (2024)

SECTION 8. STATE COMPARISON OF TECHNOLOGY INFRASTRUCTURE METRICS

Similar to other parts of the economy, the technology sector needs a solid infrastructure to flourish. Logistics firms must have good highways to conduct their business, agriculture firms need strong ports for export, and many manufacturers require robust water systems. A strong technology infrastructure can be essential to a "knowledge-based economy." The World Bank defines strong knowledge-based economies on four pillars:

- Entrepreneurship incentives
- Skilled and educated labor force
- Physical infrastructure access for technology and communications
- Innovation ecosystem that fosters collaboration between academia, private sector, and government

Using this framework, the technology infrastructure of North Carolina was evaluated by comparing factors such as funding access, patents, STEM education, and university technology transfer. This section compares indicators that reflect a state's technology infrastructure and assesses North Carolina's position among other states. Additional state competitiveness factors, such as working-age population change and business tax rates, were also considered.

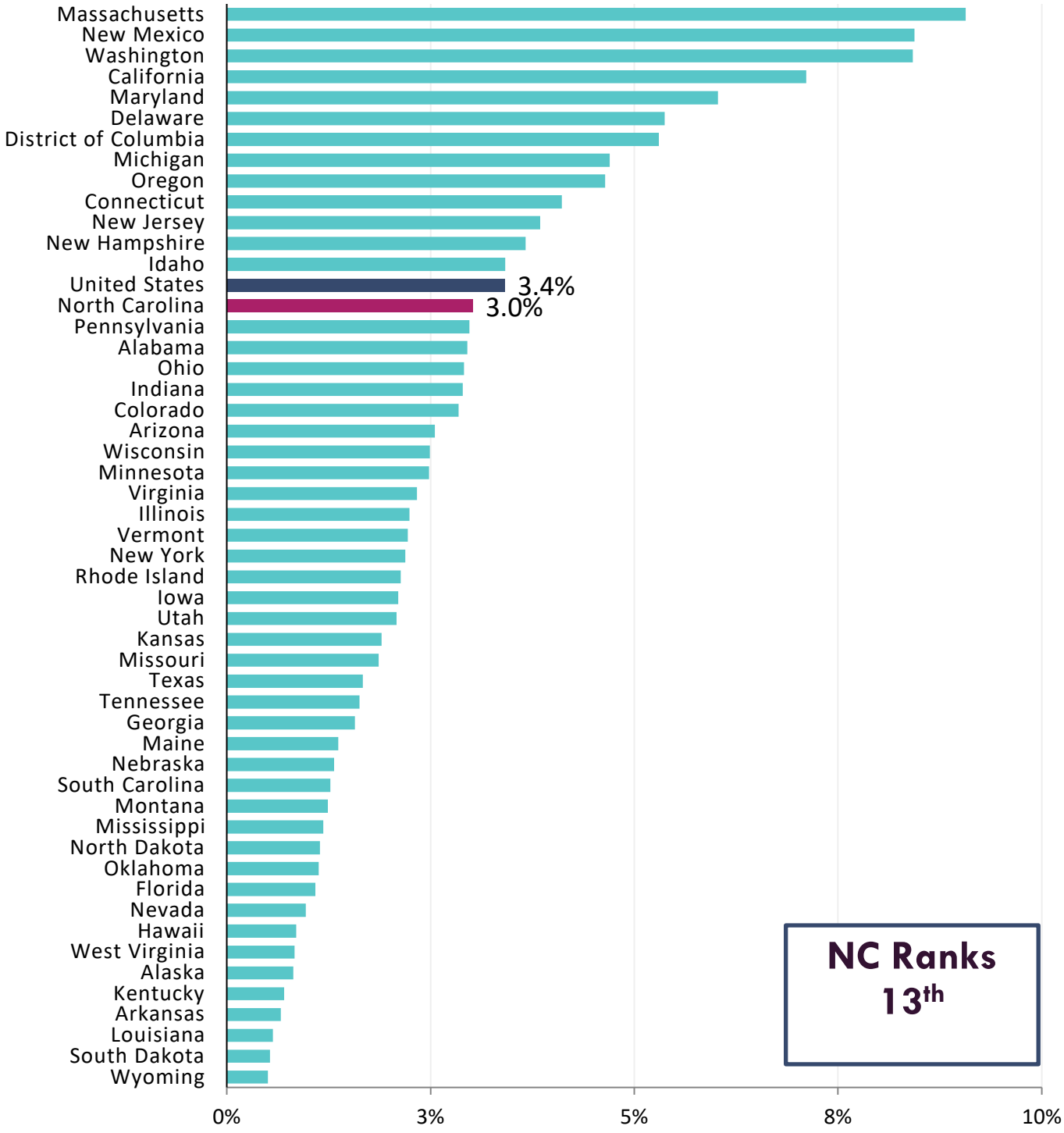
Funding Source	NC Ranking
Federal	31st
Business	15th
Academic	6th
Nonprofit	8th
State	16th
TOTAL R&D	**13th**

Research and development (R&D) funding is a major component of a technology sector's infrastructure. R&D funding helps companies and universities develop new technologies that can be commercialized and spur tech growth. When total obligations (including federal, state, and private funding sources) are evaluated across all states, North Carolina invested about $22 billion in R&D during 2022. When this level of funding is standardized by the size of each state's economy, North Carolina ranks 13th. This is an improvement from a ranking of 14th in last year's report. However, the level of R&D as a percentage of GDP fell from 3.1 to 3.0 percent.

Another indicator of a strong technology development environment is the amount of private R&D spending as a percentage of the state's private output. This demonstrates R&D driven by companies themselves for profit-oriented innovation. Business-performed R&D made up 1.8 percent of North Carolina's private GDP in 2022, a decline from 2.8 percent in 2021. As a result, the state's ranking fell from 10th last year to 15th place. Despite this, remaining in the top 15 states is a positive story, considering that in the first State of the Technology Sector report, North Carolina ranked 37th.

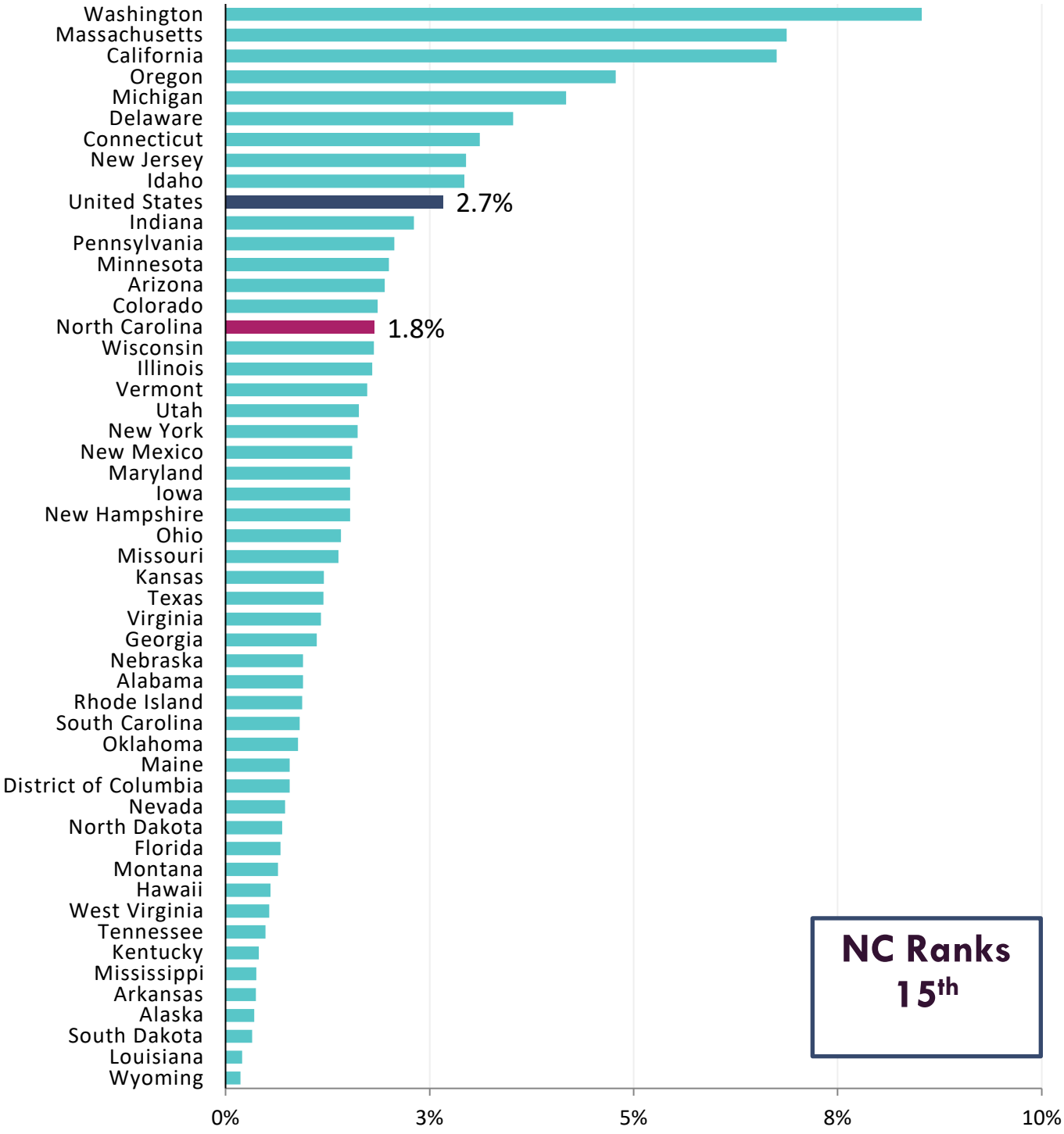
North Carolina's highest research and development ranking comes from the academic sector. Academic R&D can be further broken down into science and engineering funding within higher education. The technologies emerging from this research can lead to new companies in fields relevant to the tech sector. North Carolina ranked 5th among all states in 2023, retaining its spot in the top five for the last several years.

Total R&D as a Percentage of GDP (2022)



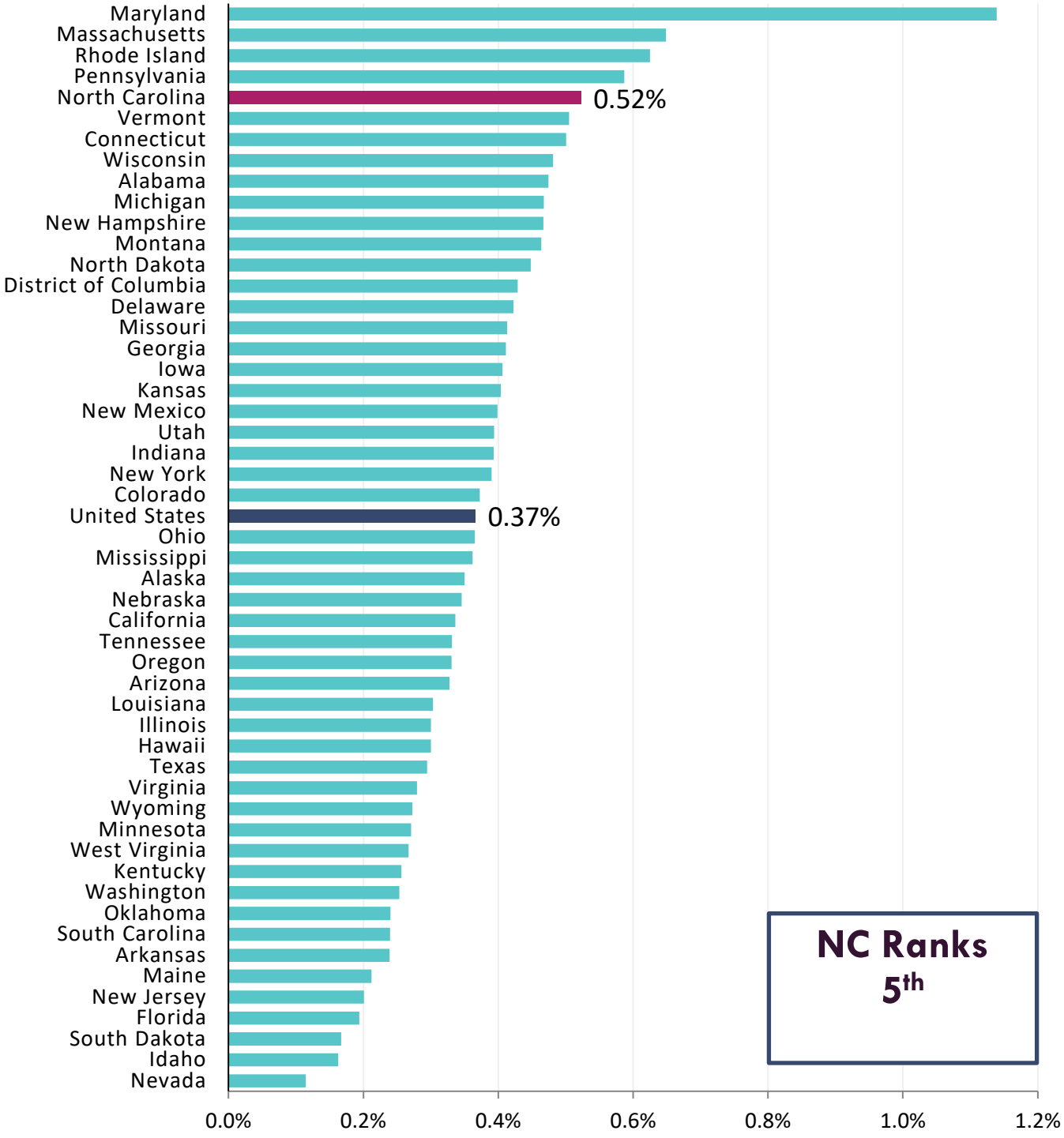
Source: National Science Foundation (2025)

Business Performed R&D as a Percentage of Private Industry Output (2022)



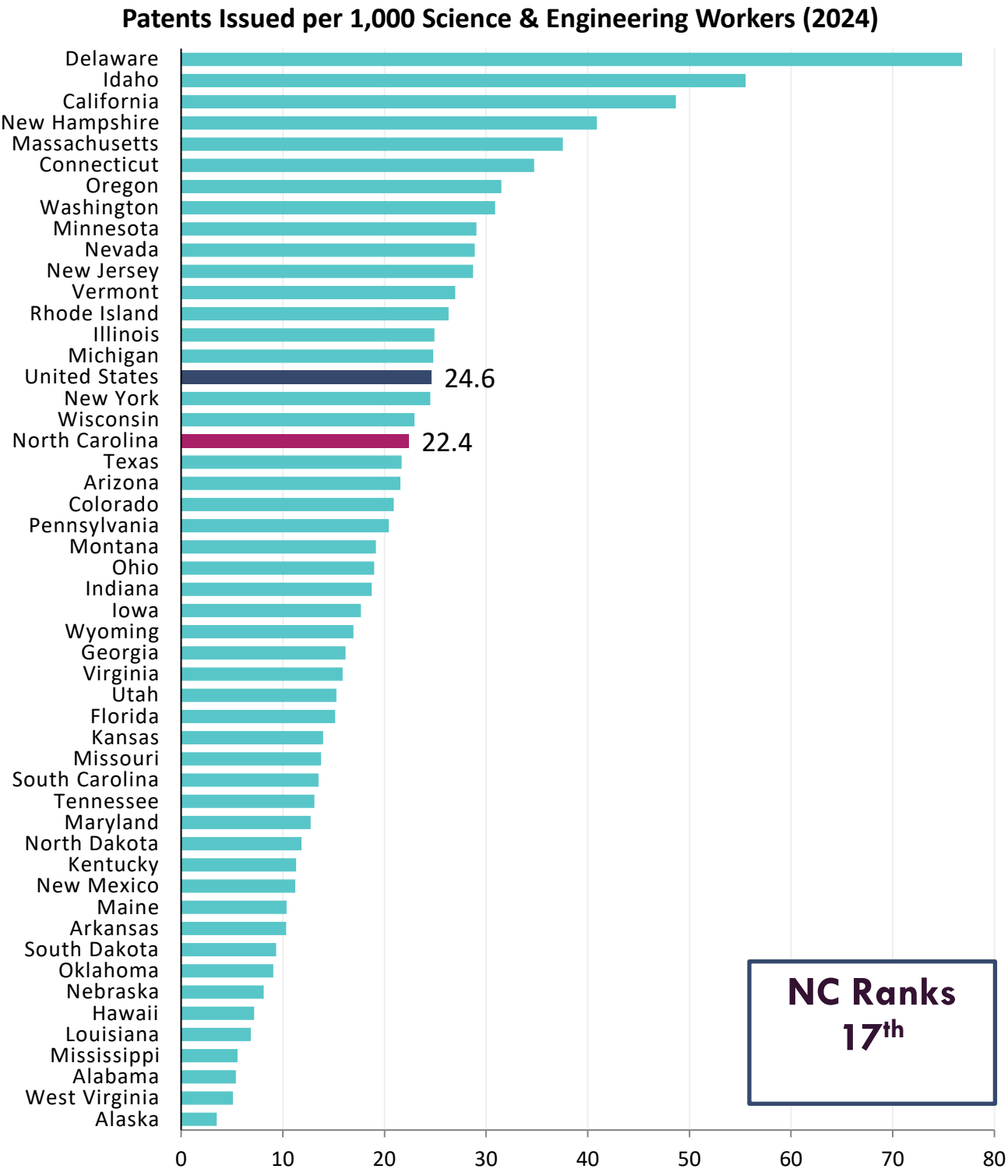
Source: National Science Foundation (2025)

Higher Education R&D in S&E Fields as a Percentage of GDP (2023)



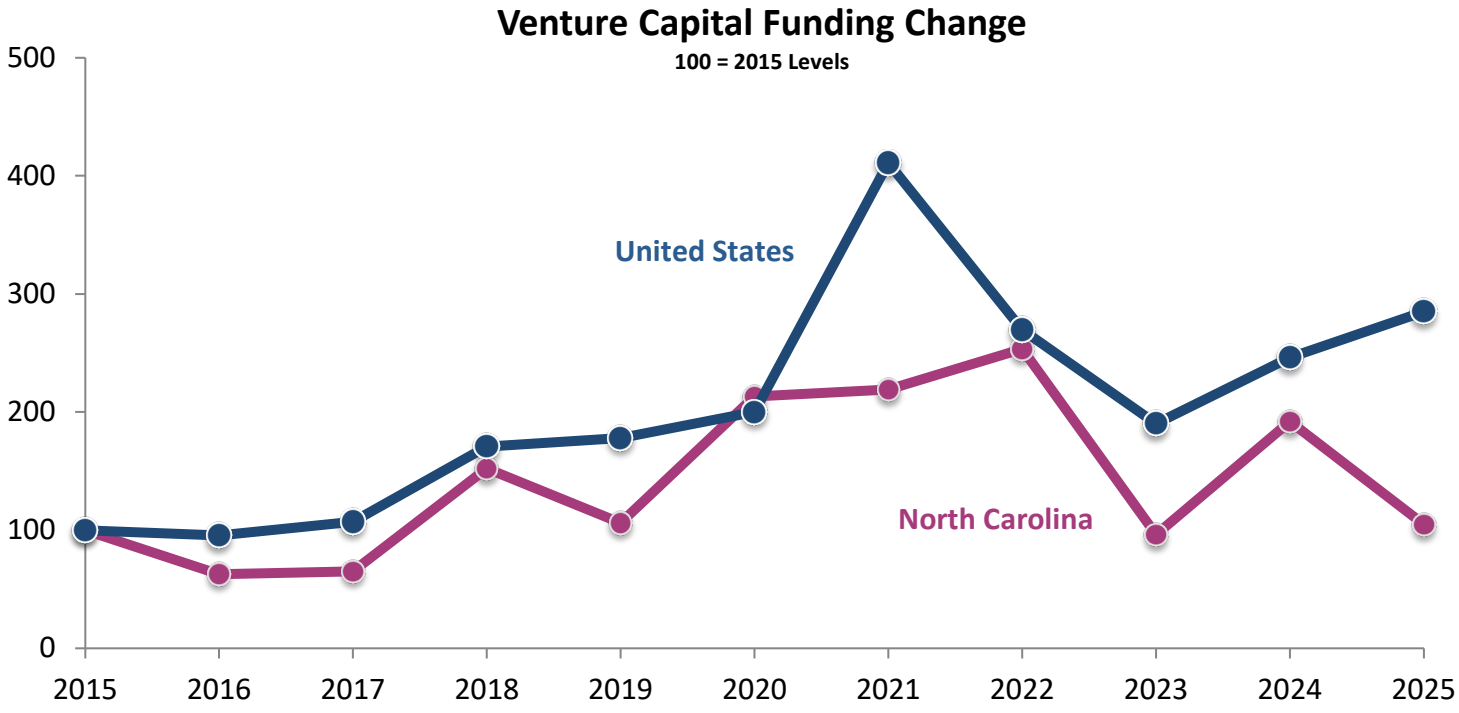
Source: National Science Foundation (2025)

Patents are another indicator of the level of innovation occurring in a region. Patents often spur growth, particularly in high-cost industries such as pharmaceuticals. For this metric, patents are standardized by the number of science and engineering workers. North Carolina averaged about 22.4 patents per 1,000 science and engineering workers in 2024. The state's ranking remained at 17th, despite the level being lower than in 2023, when it measured 24.1 patents per 1,000 workers.



Source: EL calculations based on USPTO (2025) and Lightcast 2025.4

Venture capital is often an essential tool for start-up companies to grow into tech leaders and bring products to market quickly. Looking at growth rates for venture capital, North Carolina's growth has kept pace with the national average in recent years, but venture capital funding data through the third quarter of 2025 is below investment levels in previous years.



Source: EL calculations based on NVCA (2025)
Note: 2025 data is as of Q3 2025

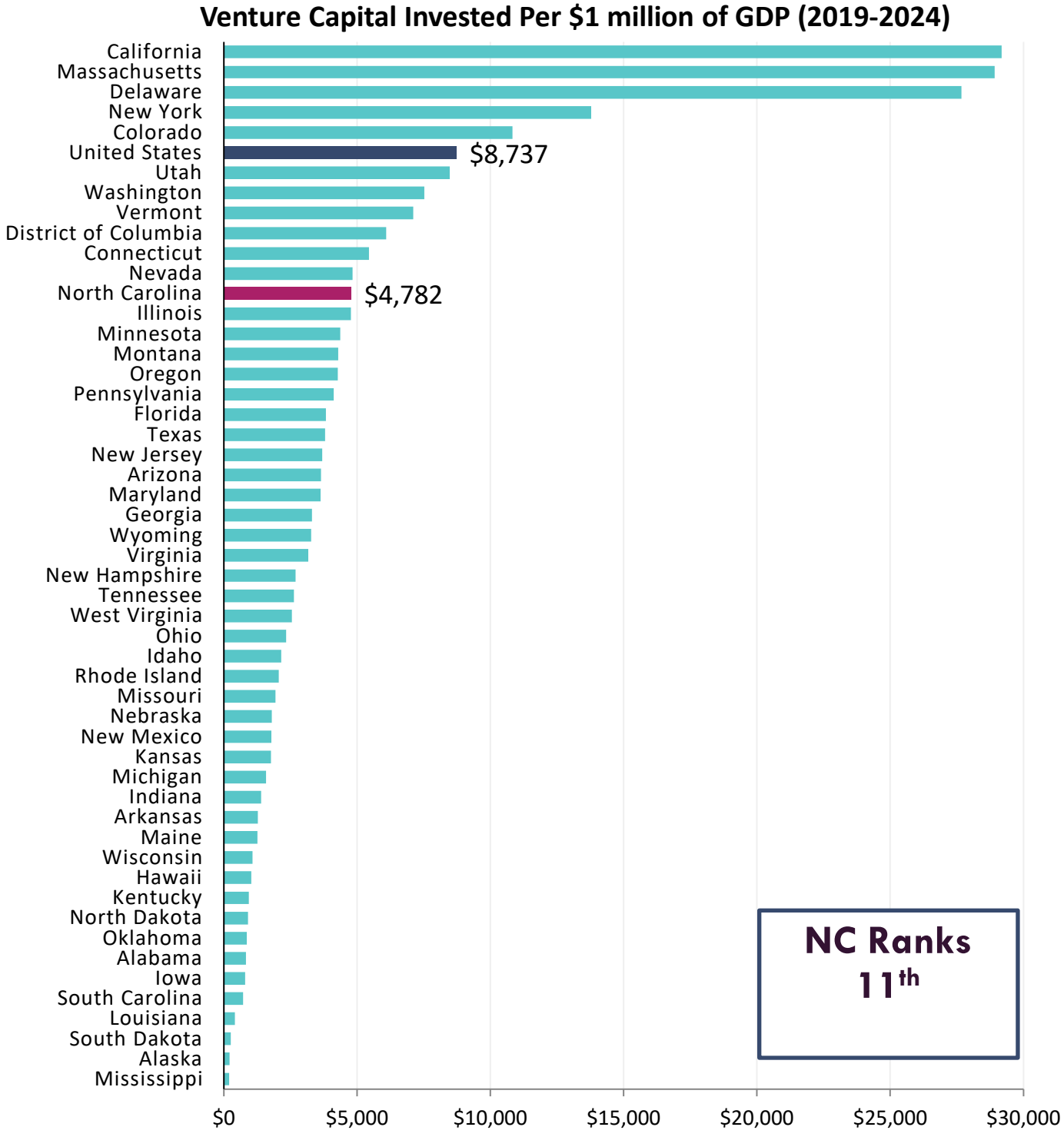
North Carolina Equity Funding (in millions)

Company Type	2024 Funding	2023 Funding
Tech Companies	$2,500	$926
Life Sciences	$544	$555
Advanced Manufacturing	$15	$45
Cleantech	$92	$90
Makers	$11	$19
All NC Entrepreneurs	**$3,200**	**$1,635**

Source: Council for Entrepreneurial Development (2025)

The data from the last full year, 2024, showed an increase from 2023 levels. While the total number of deals declined slightly (209 vs. 214 in 2023), the average deal size more than doubled to $18.4M from $7.7M, driven by a concentration of capital in larger transactions. However, the median deal size declined to $1.7M from $2.1M, indicating a funding landscape in which big deals grew bigger while smaller investments remained active. Sixty exits occurred, all through M&A or buyouts, with no IPOs or SPACs. High interest rates and cautious market conditions led to fewer liquidity events. The number of institutional investors declined slightly (273 vs. 317 in 2023), particularly from the West Coast, while international investors from 19 countries maintained a strong presence.

Traditional tech economies such as California, Massachusetts, and New York continue to attract much of the nation's venture capital. This year, the state dropped one spot in the ranking to 13th place, as the overall value of venture capital funding per GDP increased slightly compared with the previous five-year average.

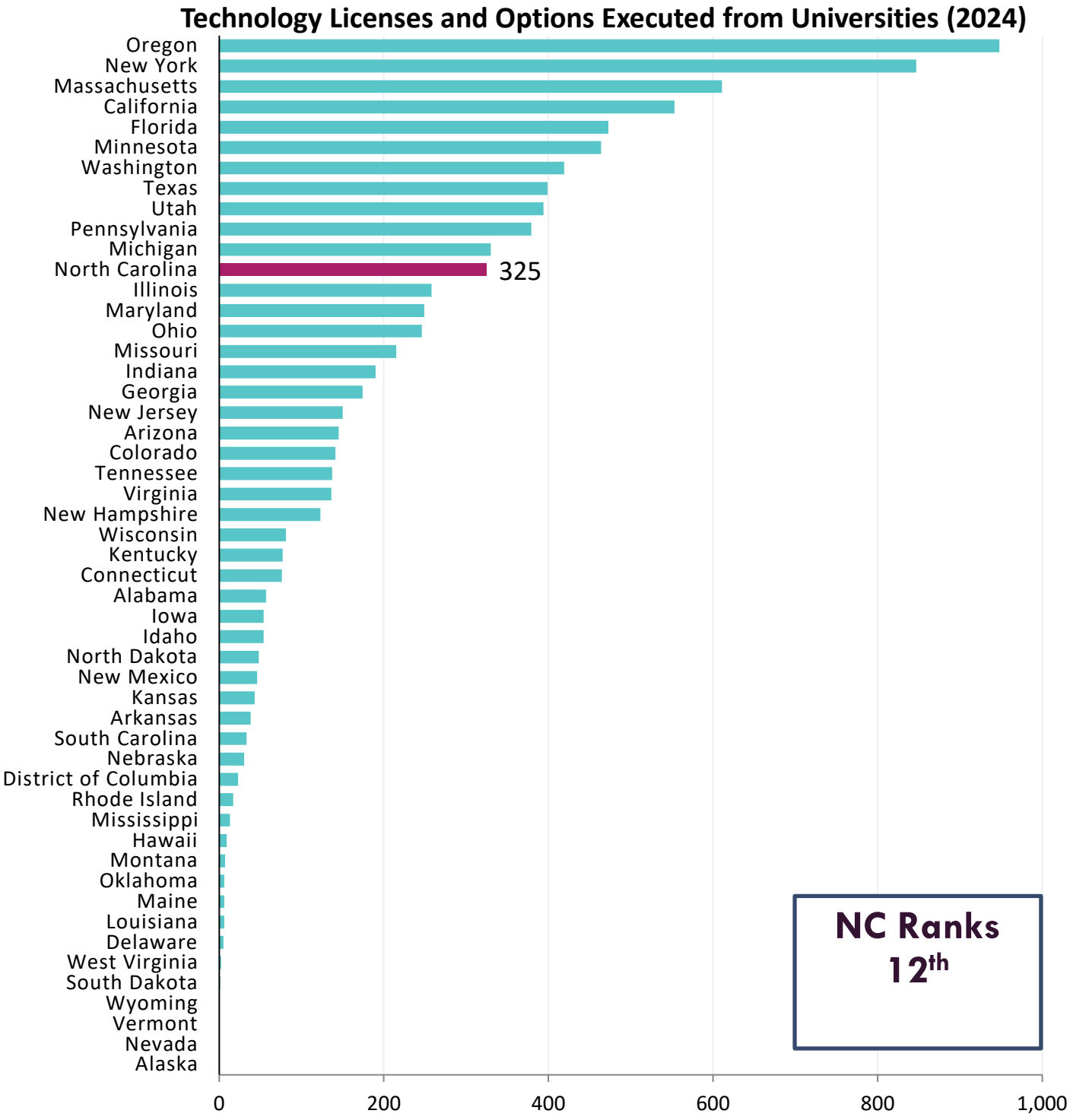


Source: EL calculations based on NVCA (2025) and BEA (2025)

One of North Carolina's major strengths in its tech infrastructure is the high quality of research universities across the state. North Carolina rates strongly in the indicators that measure technology transfers from universities. Technology transfer leverages the innovation assets at universities and turns them into commercialized opportunities. A state's ability to capitalize on its research capabilities and convert them into

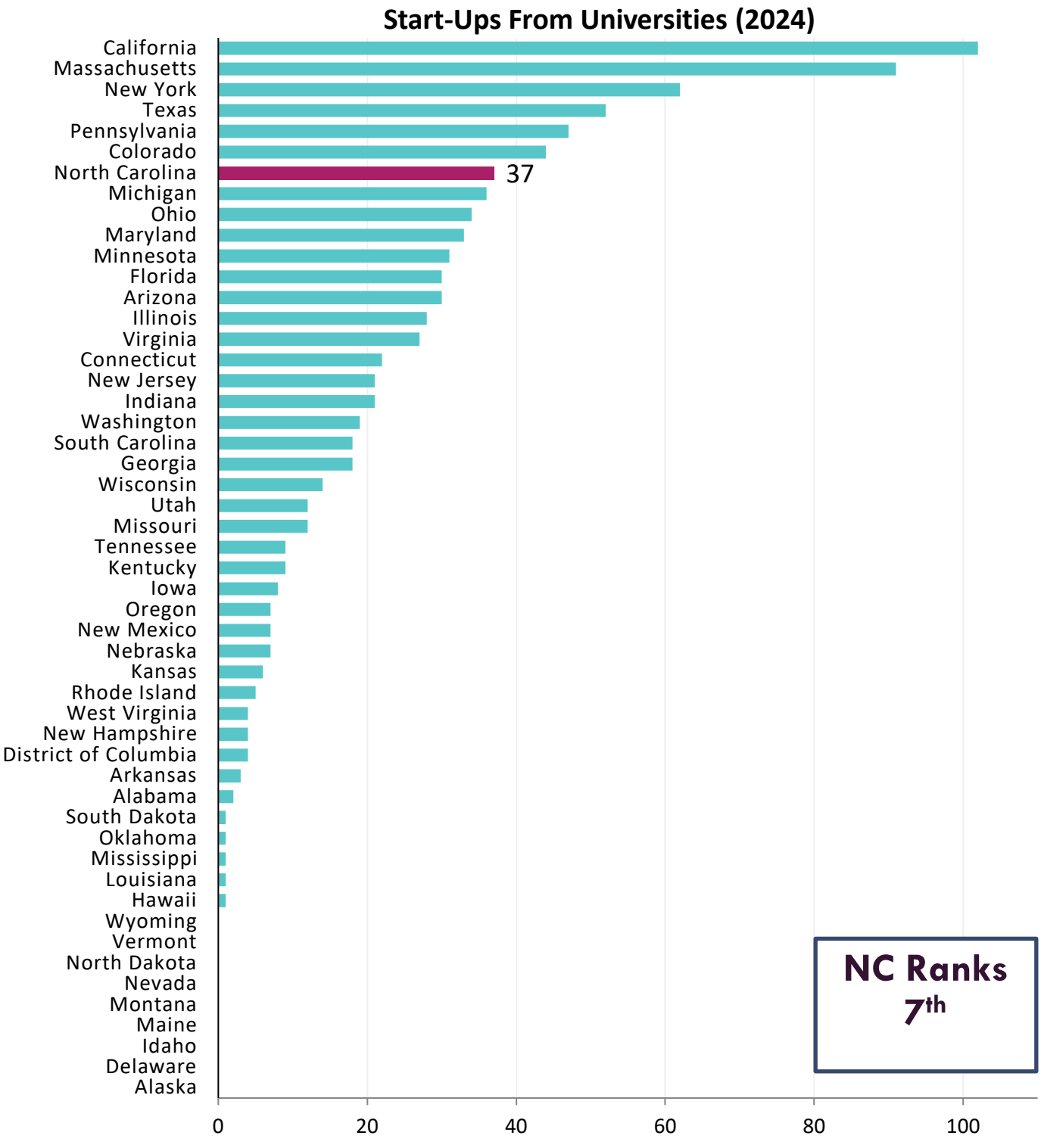
marketable concepts results in more tech start-ups and jobs. This level of tech transfer can be measured by the number of options and licenses of university IP that are executed with the private sector. The Association of University Technology Managers (AUTM) catalogs tech-transfer activity from more than 190 universities.

In 2024, North Carolina universities executed 325 options and licenses. The state remained ranked 12th for this metric.



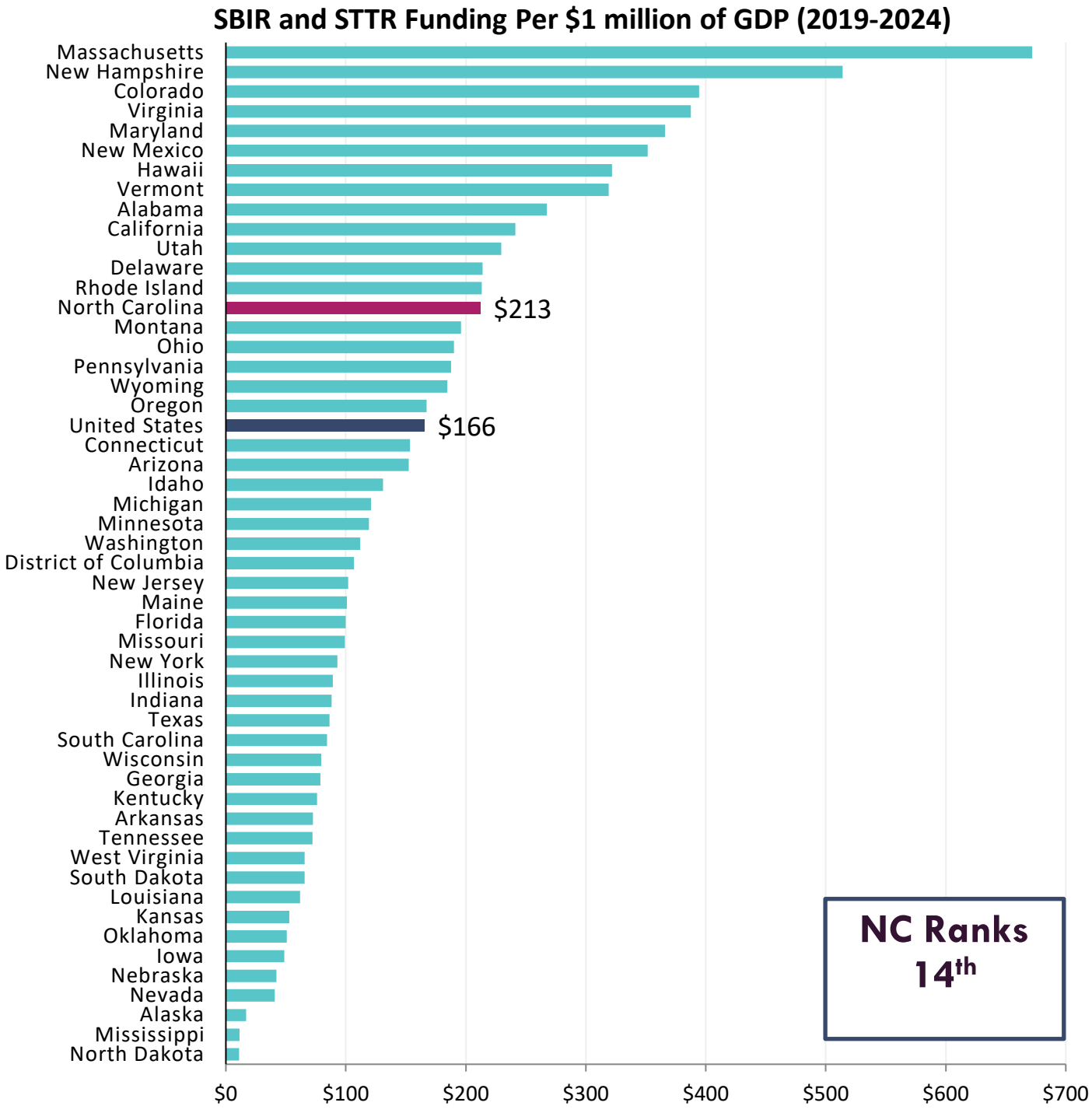
Source: AUTM (2025)

Another measure of technology transfer is the number of start-ups created from university research. This metric indicates both the level of entrepreneurial activity within a state's universities and its ability to convert research assets and public funding into economic opportunities. North Carolina had the 7th-highest number of start-ups spun off from its universities in 2024, with 37 new companies established.



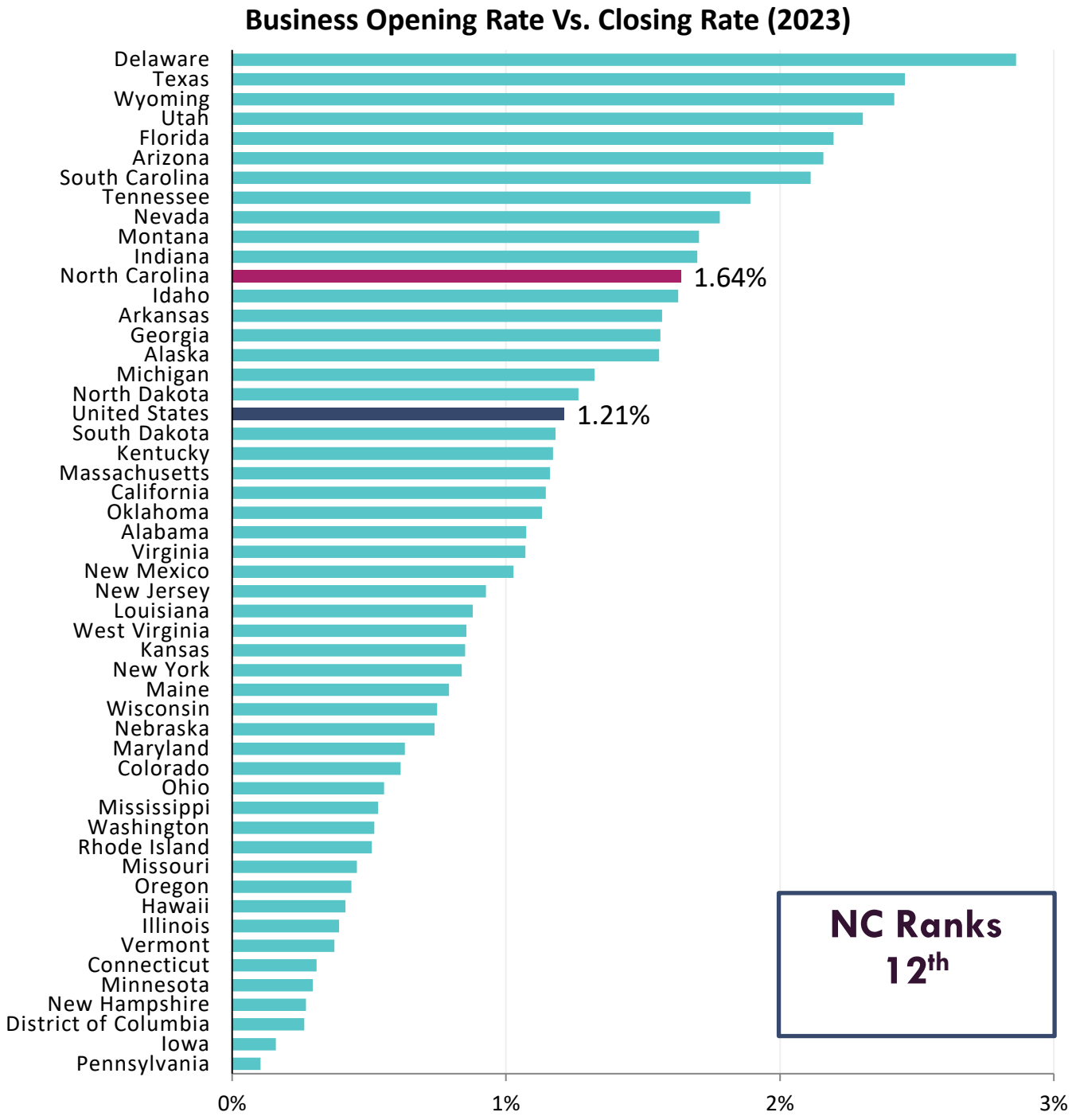
Source: AUTM (2025)

One option for new companies seeking funding for high-tech R&D is the federal Small Business Innovation Research (SBIR) and Small Business Technology Transfer (STTR) programs. These initiatives support and encourage American innovation by investing in small businesses during their concept and prototype development phases, with the goal of reaching commercialization. SBIR/STTR awards can provide critical early-stage funding for high-reward concepts, and helping local start-ups apply for and secure these funds can be especially impactful. North Carolina's SBIR/STTR funding per $1 million in GDP was above the national average and ranked 14th among the states.



Source: EL calculations based on SBIR (2025) and BEA (2025)

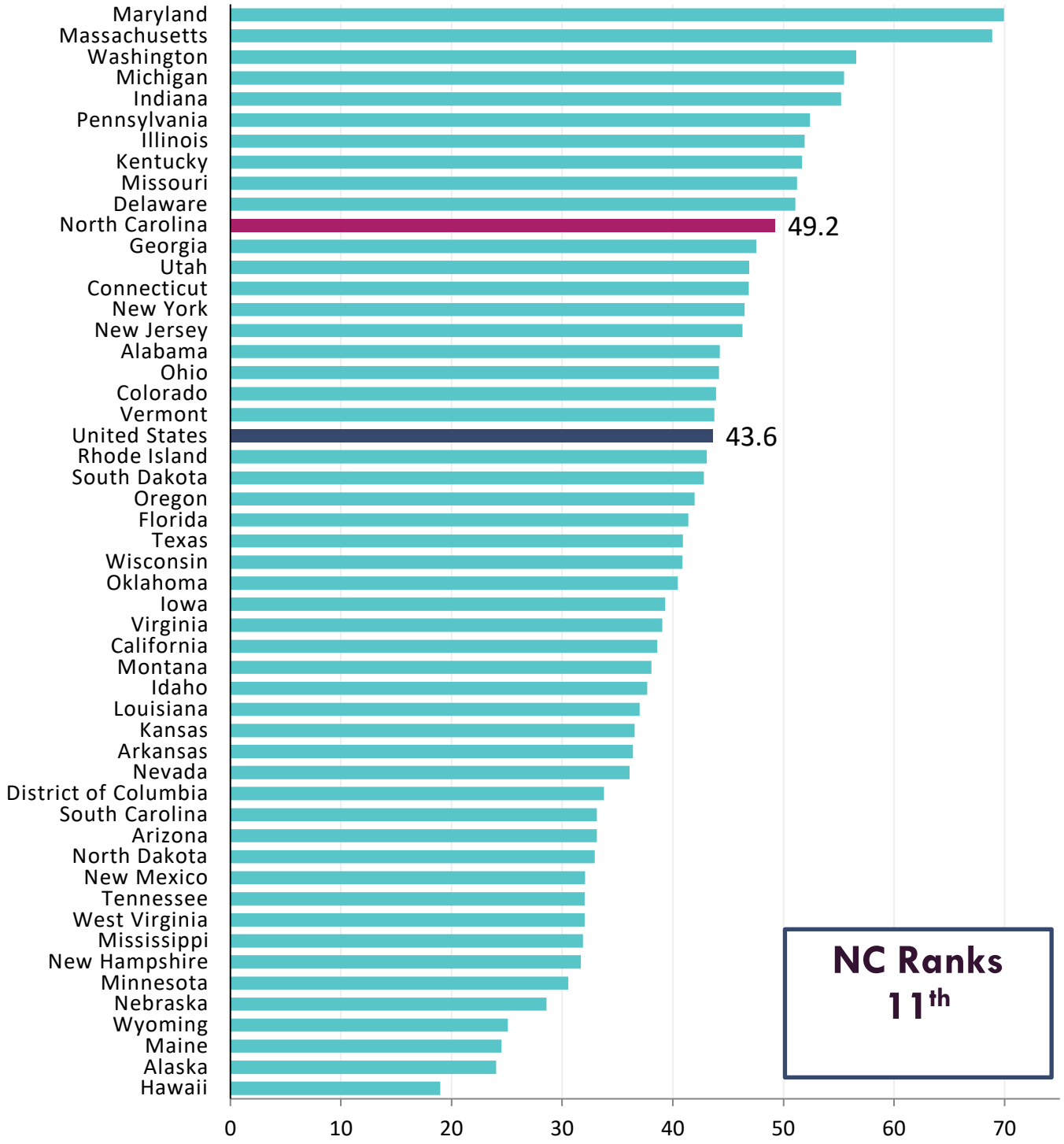
Entrepreneurs are the lifeblood of a knowledge-based economy. Each year, the economy is replenished and reenergized by entrepreneurial activity. Businesses that originate in one location often look to grow and establish their roots in that same region. The U.S. Census Bureau tracks the number of companies entering and exiting the market, with the most recent data available for 2023. Comparing entrance and exit rates provides a measure of business dynamism. High dynamism fosters greater competition, increases economic mobility, and drives innovation. Most job growth in an economy comes from new businesses. Dynamism rates were down in 2023 compared with the previous year due to a slowing of the overall economy. North Carolina's rate declined from 2.4 percent to 1.6 percent. Despite the decline, the state moved up one spot in the rankings to 12th place and remained higher than the national average.



Source: EL calculations based on US Census Bureau (2025)

One of the essential components of infrastructure for a knowledge-based economy is a skilled labor force. Tech occupations often require STEM degrees for entry-level positions. In 2024, North Carolina students completed 26,975 STEM-focused education programs. This value is standardized by the number of enrolled postsecondary students in each state, and North Carolina averaged about 49 completed STEM programs per one thousand students. This rate is higher than the national average, and the state ranks 11th—an improvement of one spot in this year's report.

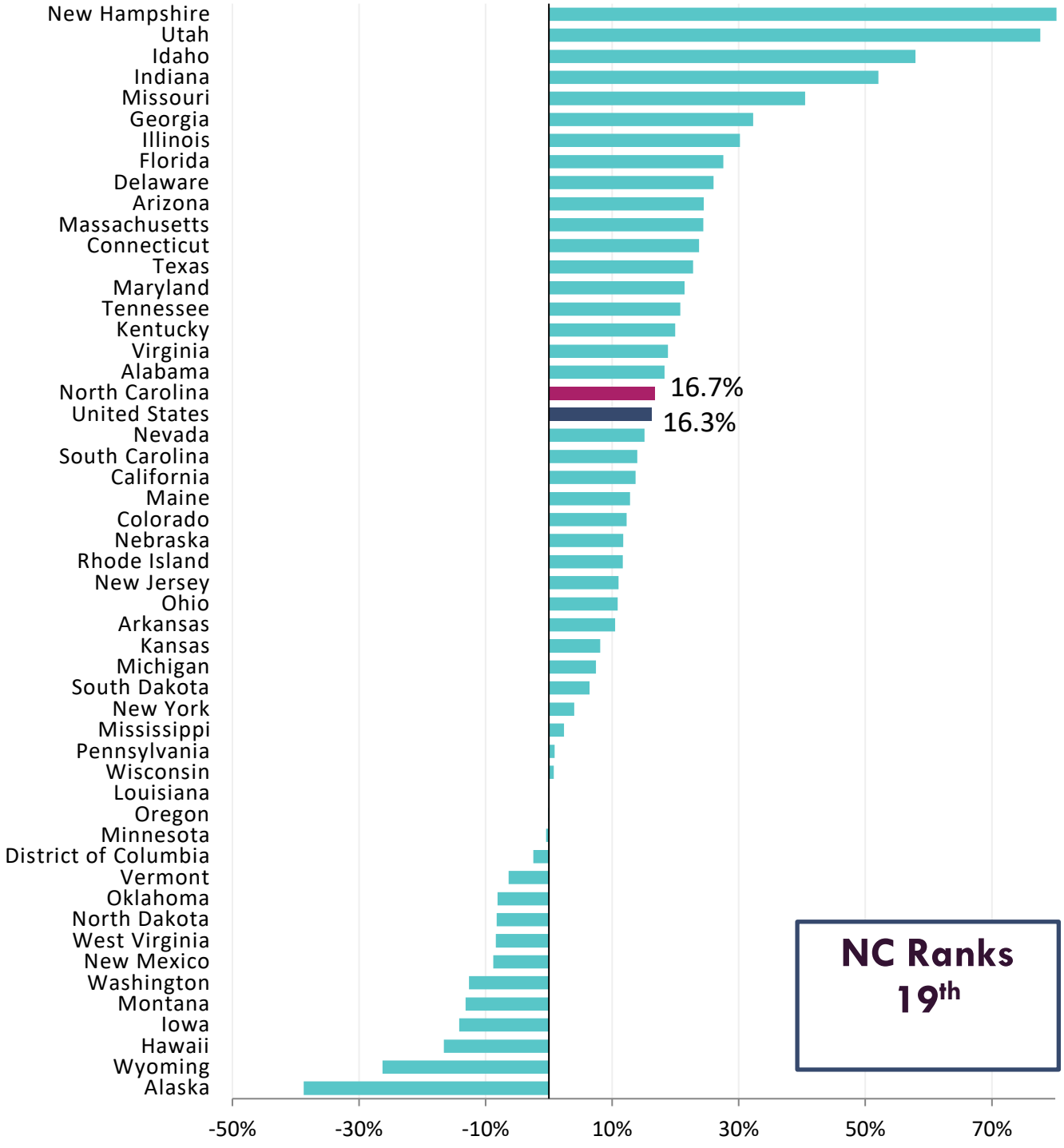
Completed STEM Education Programs Per 1,000 Enrolled Students (2024)



Source: EL calculations based on Lightcast 2025.4 and National Center for Education Statistics (2024)

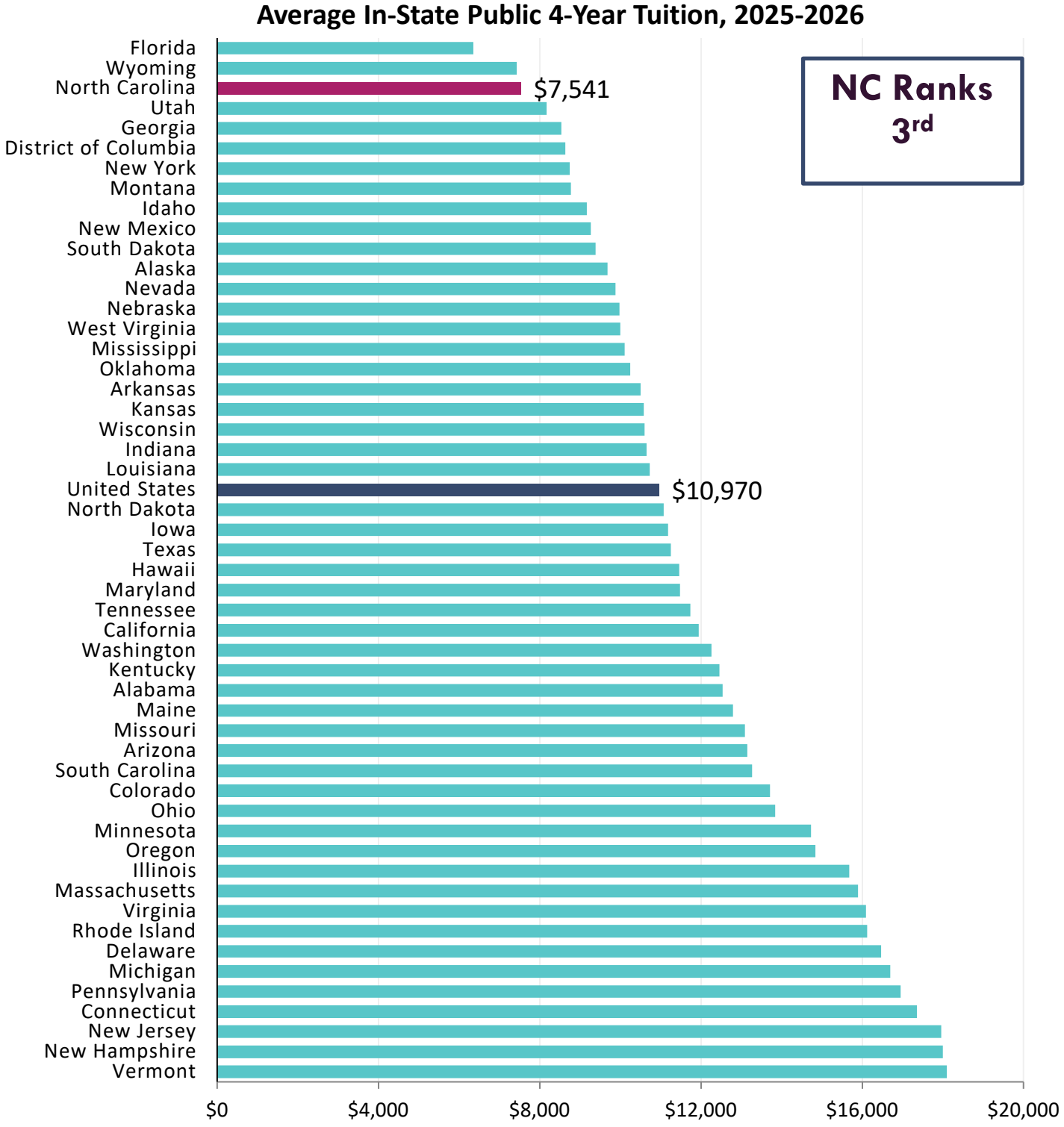
Over the past few years, many states have focused on increasing the number of STEM students in their educational systems. The change in STEM program completions from 2019 to 2024 shows that North Carolina experienced an increase of 17 percent. After several years of continued improvement in this ranking, North Carolina dropped several places—from 3rd, 5th, and 13th in the last three reports—to a 19th-place ranking in this year's report. The state's rate of STEM program increases remains above the national average.

Percent Change in STEM Education Program Completions (2019-2024)



Source: EL calculations based Lightcast 2025.4

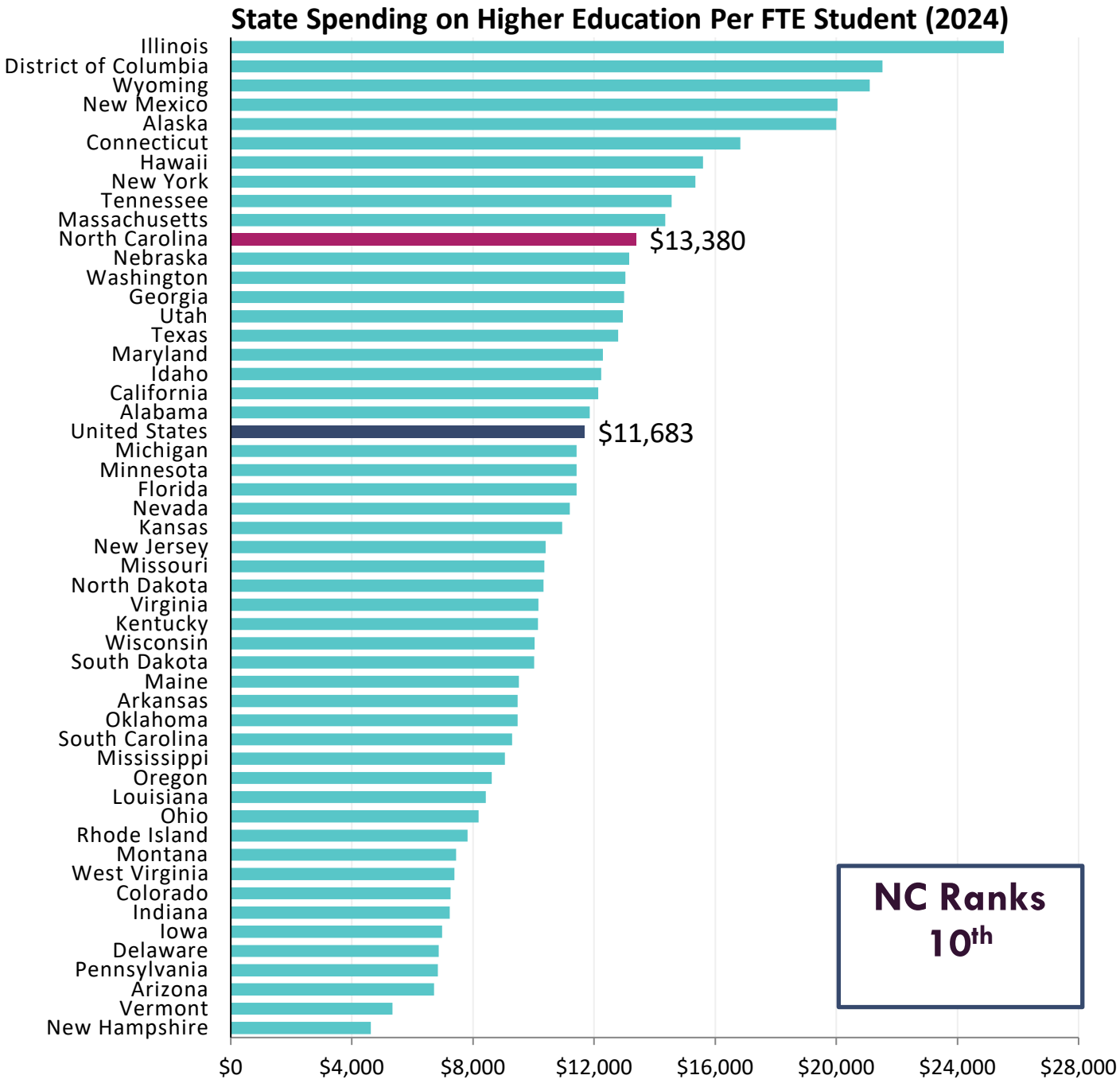
Students today are increasingly seeking education options that minimize debt burden. North Carolina ranks highly for offering low-cost, high-quality higher education. Despite national tuition increases in recent years, the average cost of one year of in-state tuition for the 2025–2026 school year is $7,541 in North Carolina. The state has consistently ranked in the top ten for this metric throughout the history of this report and retained its 3rd-place ranking from the previous year.



Source: College Board (2025)

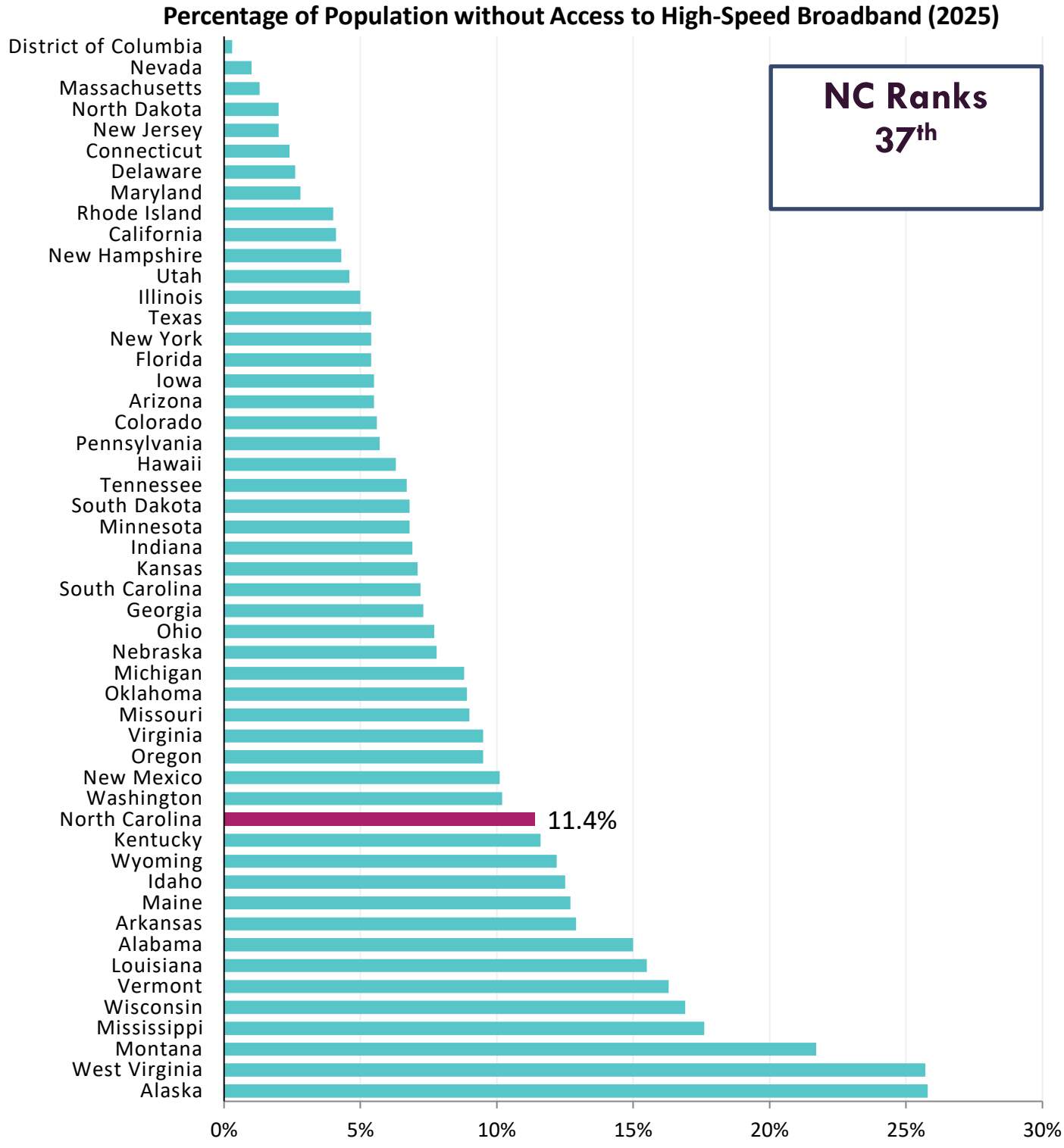
Public tuition levels are closely tied to state funding. After the Great Recession, state revenues declined nationwide, leading to reduced higher education funding and annual tuition increases of roughly 9 percent from 2007–08 to 2011–12. In the post-pandemic period, enrollment declines and rising affordability concerns have continued to shape tuition trends. Nationally, the annual rate of increase in public tuition has averaged about 2 percent in recent years.

In 2024, North Carolina provided approximately $1,700 more in state funding per full-time student than the national average. The state has frequently ranked within the top 15 for this metric and placed 10th in this year's report.



Source: State Higher Education Executiver Officers [SHEEO] (2025)

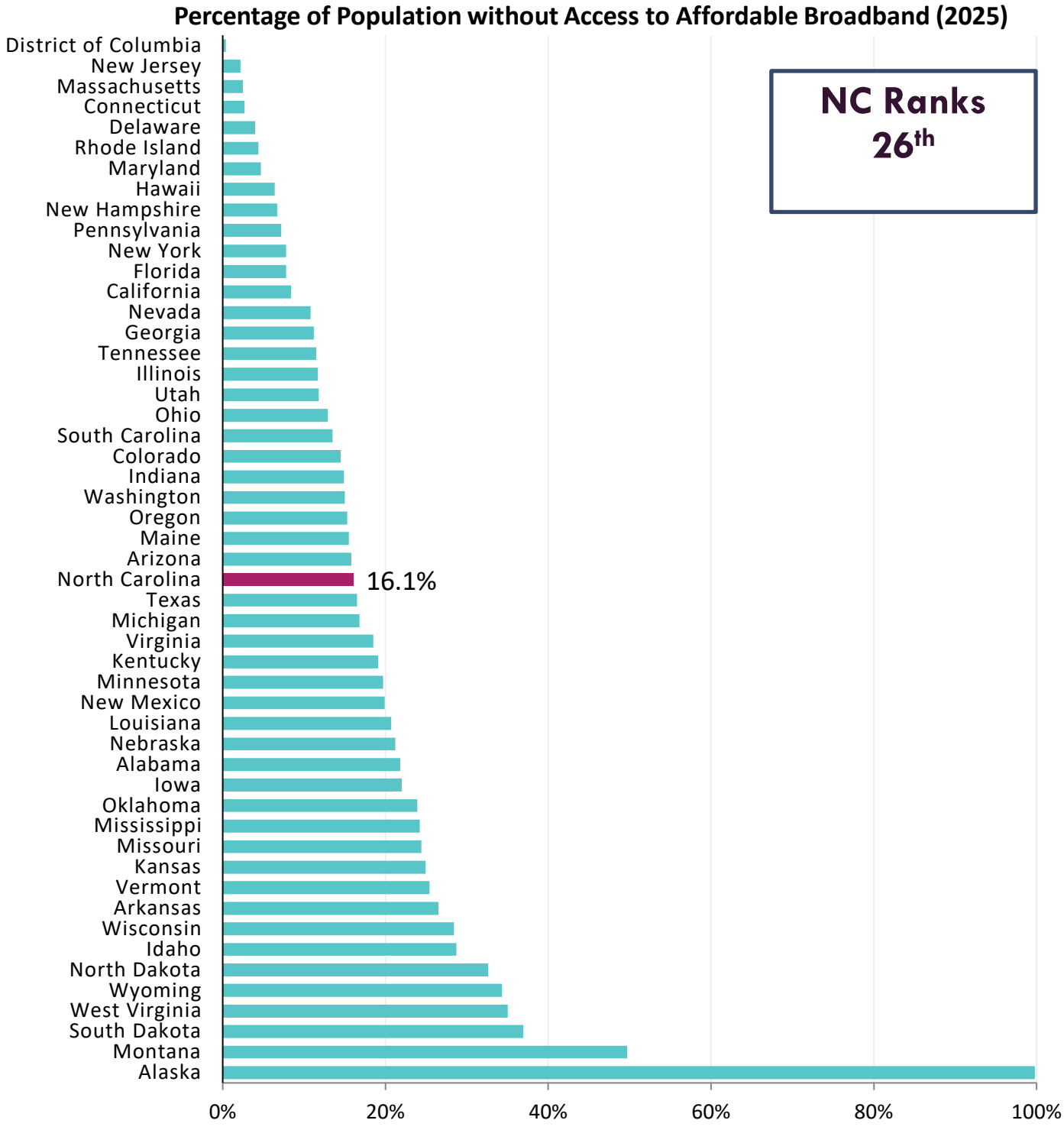
High-speed broadband is a foundational requirement for a knowledge-based economy and a key indicator of statewide connectivity. Access is the first step to ensuring that residents can fully participate in the information economy. According to BroadbandNOW Research, 11.4 percent of North Carolina's population lacked access to high-speed broadband in 2025, placing the state 37th in the nation.



Source: BroadbandNOW Research (2025)

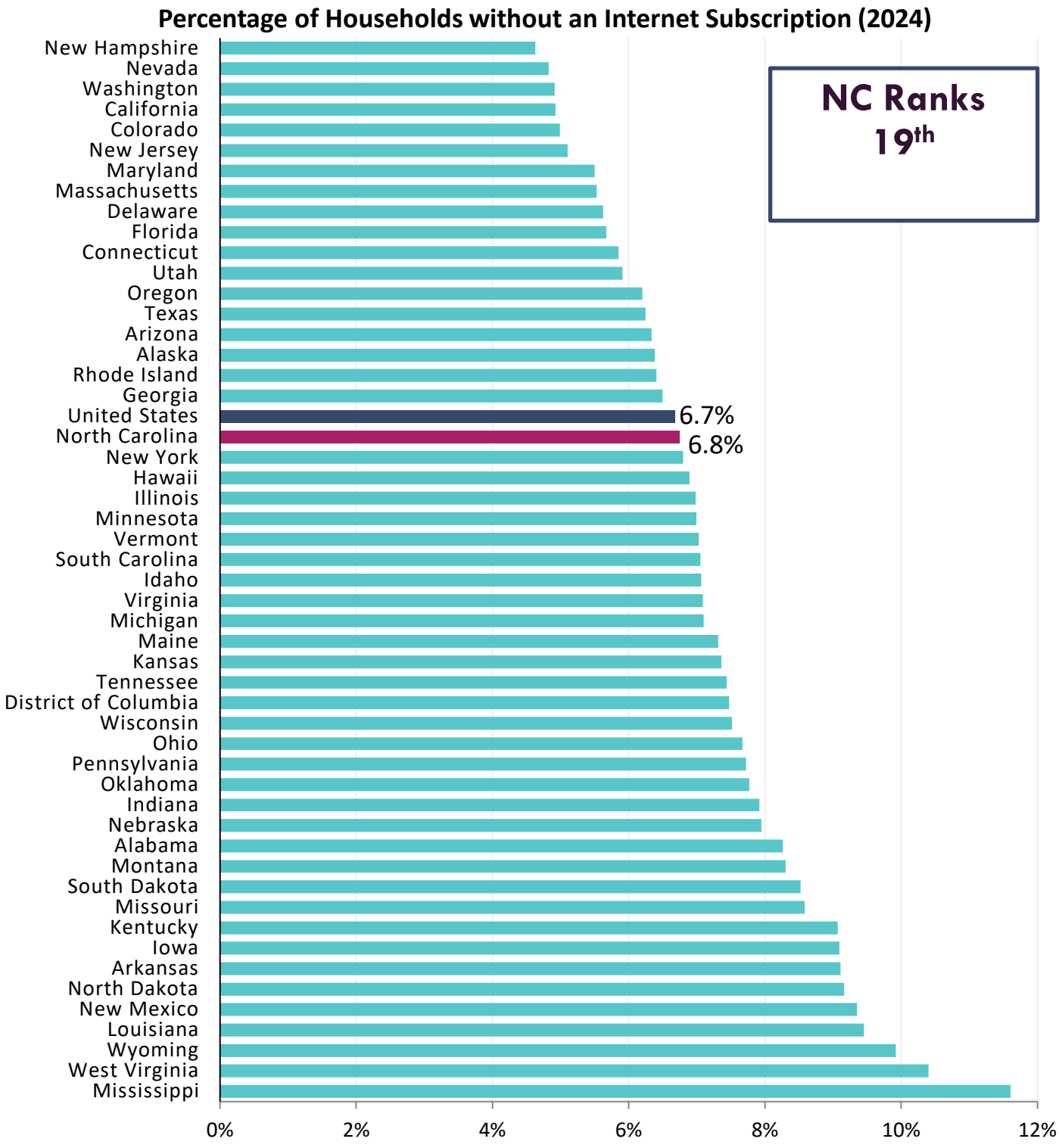
The availability of broadband must be paired with adoption to ensure that all households are connected. Research has shown that adoption is more closely tied to economic benefit than availability alone, and the

central factor influencing adoption is affordability. In 2025, affordable plans were defined as those costing under $60 per month. About 16 percent of North Carolinians do not have access to high-speed broadband at this price point. When affordability is assessed, North Carolina ranks 26th—higher than its ranking for overall broadband access. This suggests that broadband pricing is helping support adoption across the state.



Source: BroadbandNOW Research (2025)

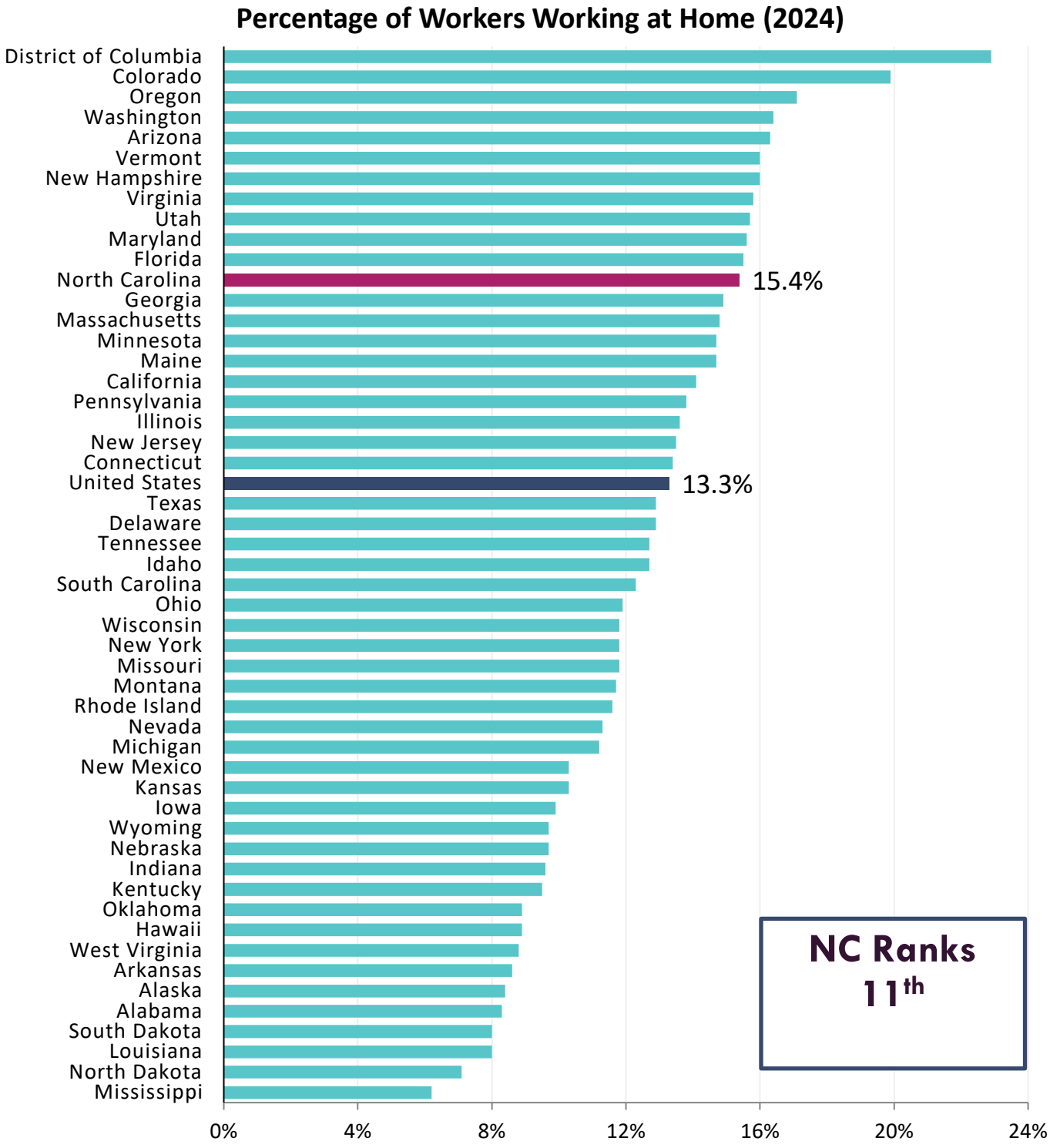
Another measure of adoption comes from Census Bureau surveys that track the number of households with internet subscription services. In North Carolina, an estimated 6.8 percent of the population lacks an internet subscription—a significant improvement from 8.3 percent in the previous year. This progress moved North Carolina from 32nd to 19th in the national rankings.



Source: US Census Bureau (2025)

High-speed broadband can help connect rural workers and others to the knowledge-based economy. When reliable broadband is available, more workers are able to work from home, allowing the tech workforce to expand. Individuals who might not otherwise have been able to participate in the workforce—such as people with disabilities—can now access jobs through remote work. In 2024, the share of workers working from

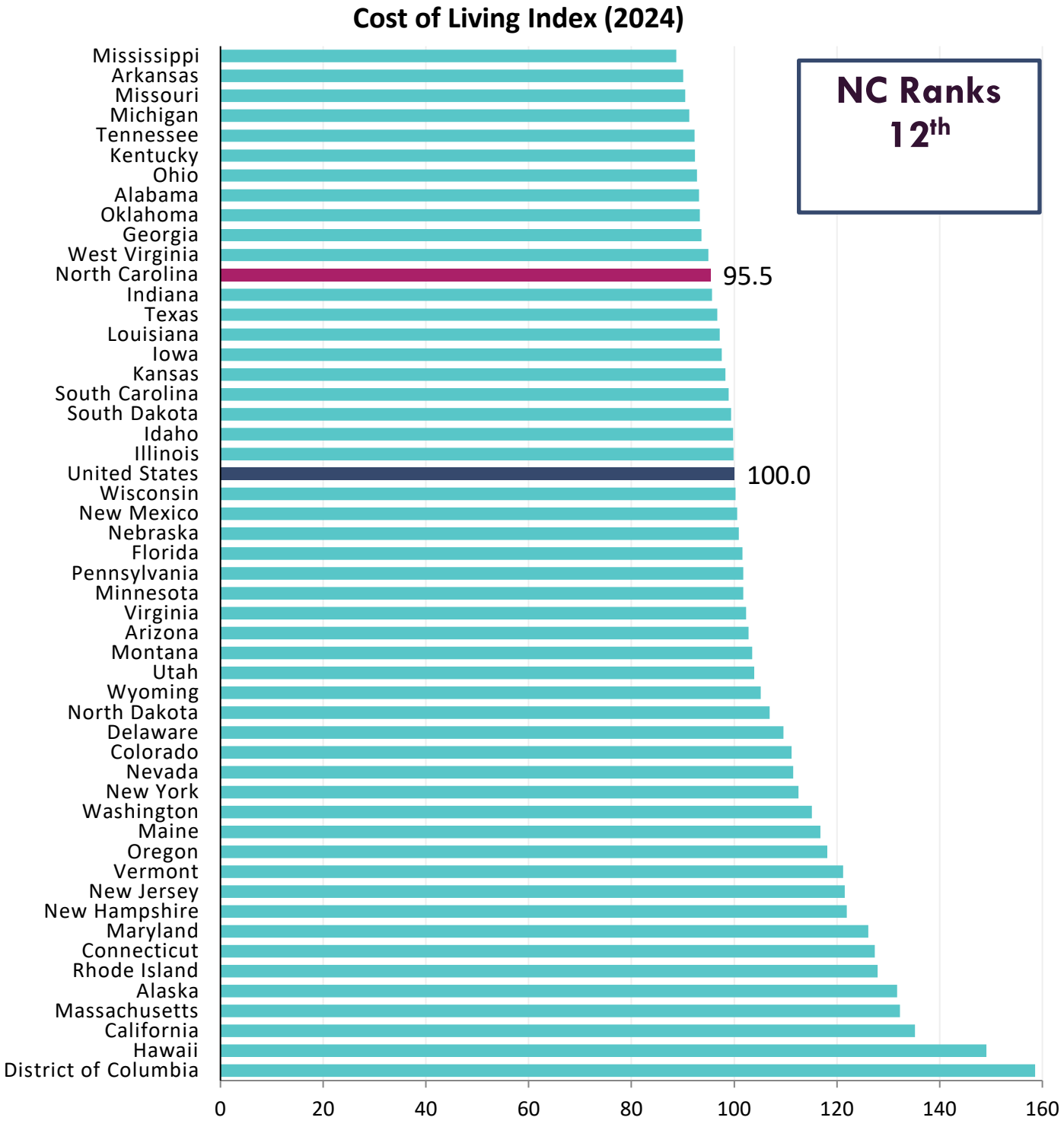
home declined slightly from the previous year but still accounted for about 15 percent of the workforce. This was the 11th highest rate among states and about two percentage points higher than the national average.



Source: US Census Bureau (2025)

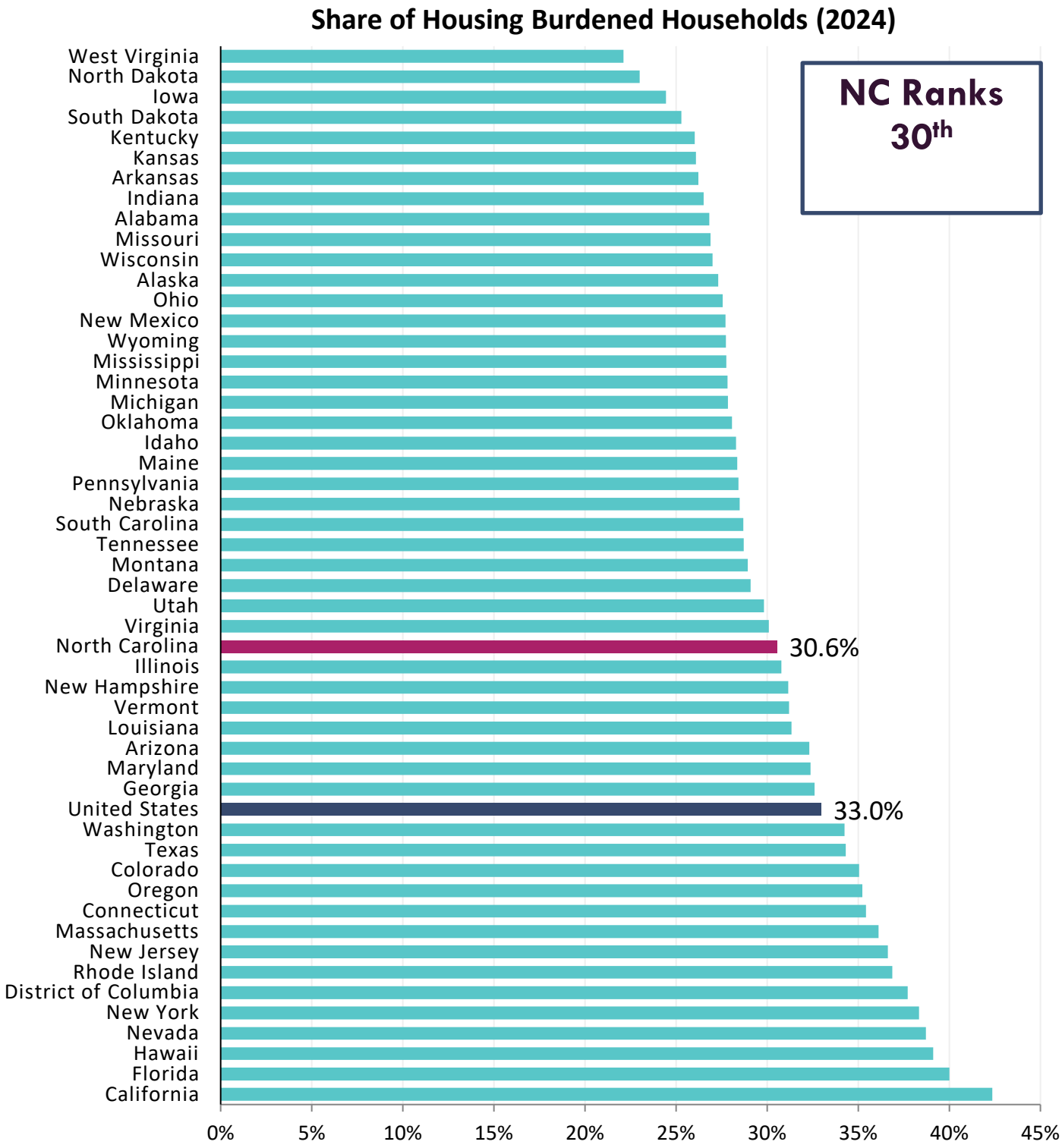
North Carolina has attracted many new residents in recent years. One downside of this growth is its impact on the cost of living. Housing prices have risen sharply, putting increasing pressure on affordability. Despite these rising costs, the state still retains a cost-of-living advantage compared to many of the highest-cost states in the Northeast and the West. North Carolina had the 12th lowest cost of living in the nation, slipping one place in

the rankings compared to last year—highlighting the importance of managing growth while preserving affordability.



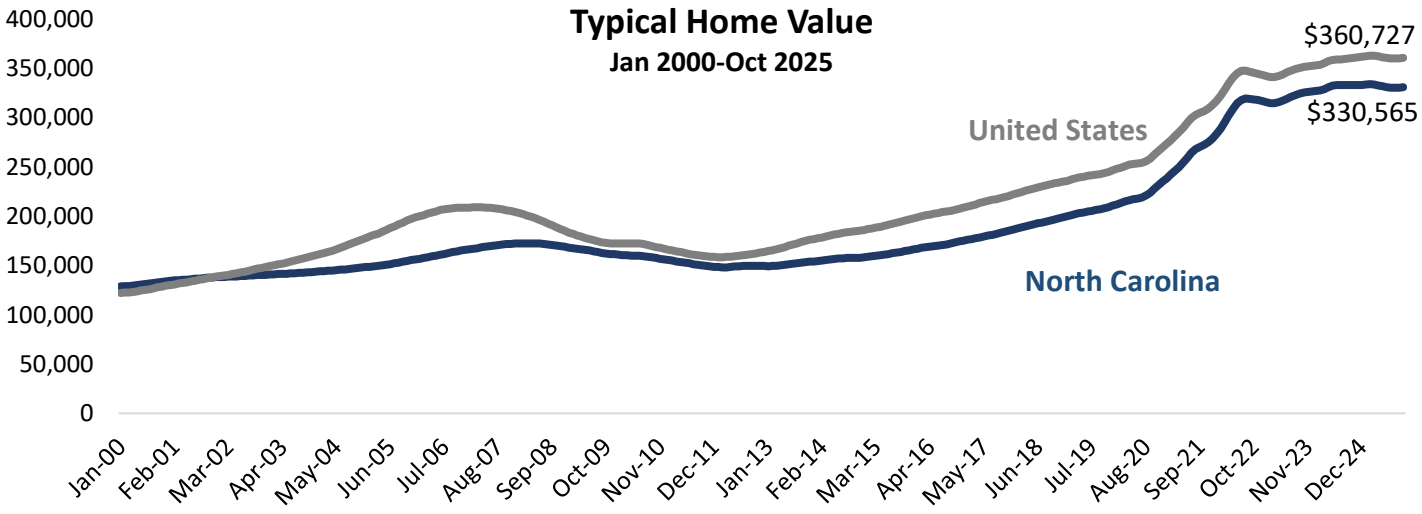
Source: Lightcast 2025.4

In 2024, about 31 percent of households were considered housing burdened—defined as paying more than 30 percent of household income on housing. In 2022, this rate was 28 percent. As the housing burden has increased for North Carolina residents, the state dropped in the rankings from 25th to 30th this year. However, the state remains in a better position than the national average and many other high-cost states.



Source: US Census Bureau (2025)

North Carolina home prices had been rising at a rate similar to the national average before the pandemic. After the pandemic, this trend became even more pronounced. Once the Federal Reserve began fighting inflation with interest rate increases, the real estate market stabilized. Since that time, home values have remained steady. North Carolina's average home price still remains below the national average.

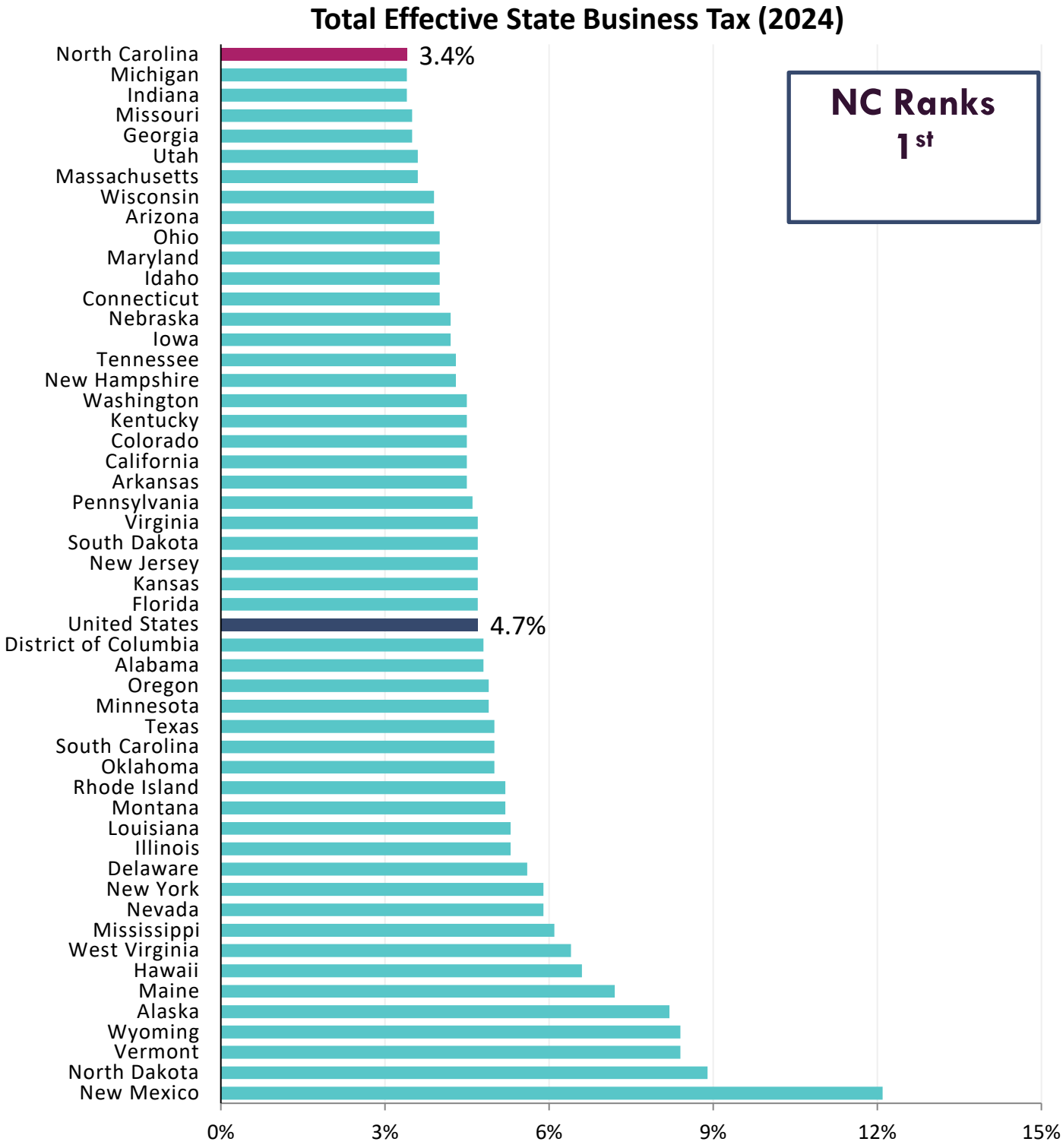


Source: Zillow (2025)

Several business climate and workforce metrics were added to the tech infrastructure section in last year's report. A supportive business climate is crucial in states where the tech sector is prominent, as strong policies and incentives can attract high-growth firms, skilled talent, and venture capital. By fostering a competitive regulatory and tax environment, North Carolina can continue to strengthen its appeal as a hub for innovation.

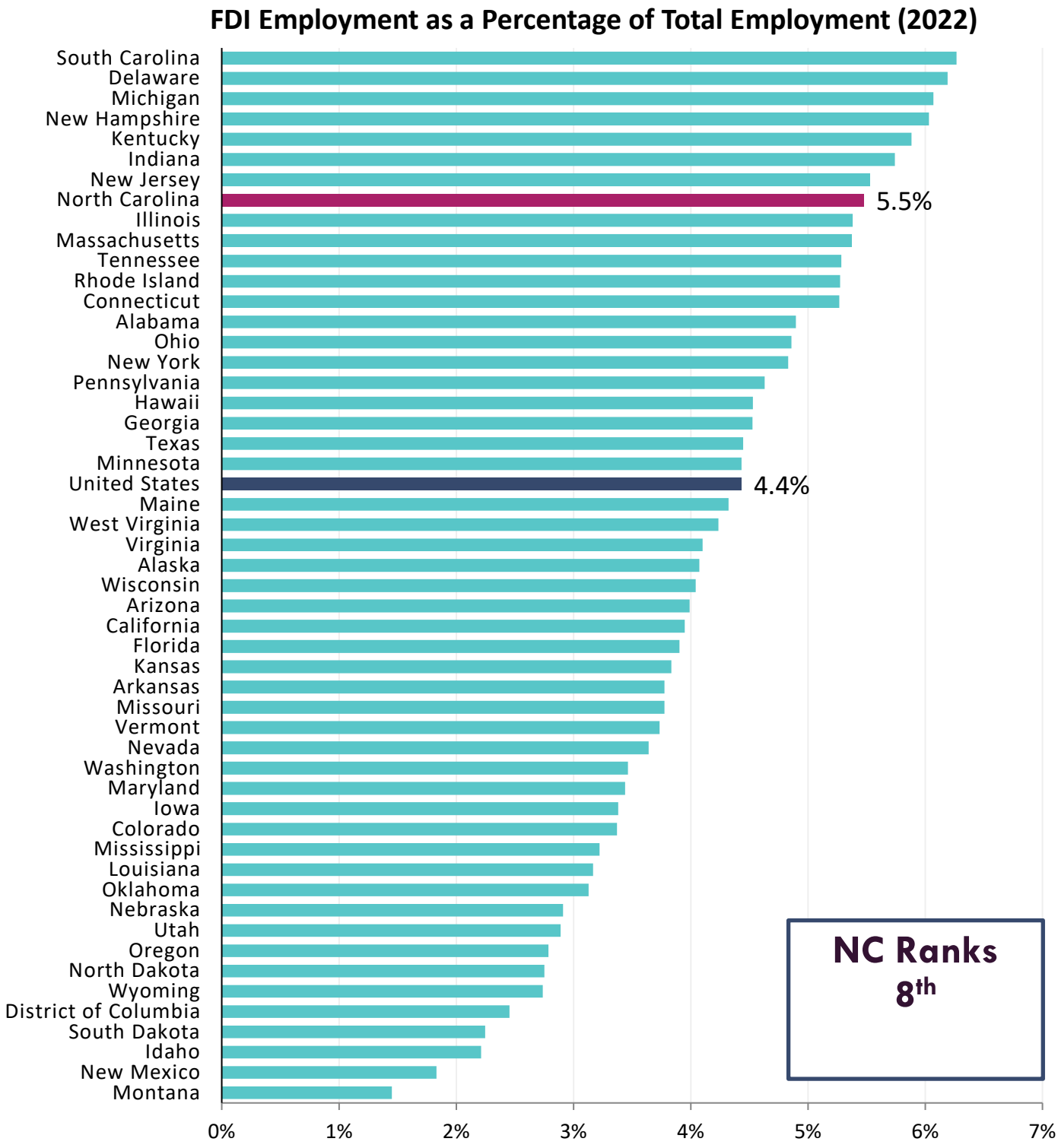
Source: CNBC *America's Top States for Business 2025*

North Carolina scores well on business friendliness as ranked by CNBC. The state is also tied for the lowest effective business tax rate in the nation. Competitive tax rates can help recruit new businesses and retain existing companies.



Source: Council on State Taxation (2024)

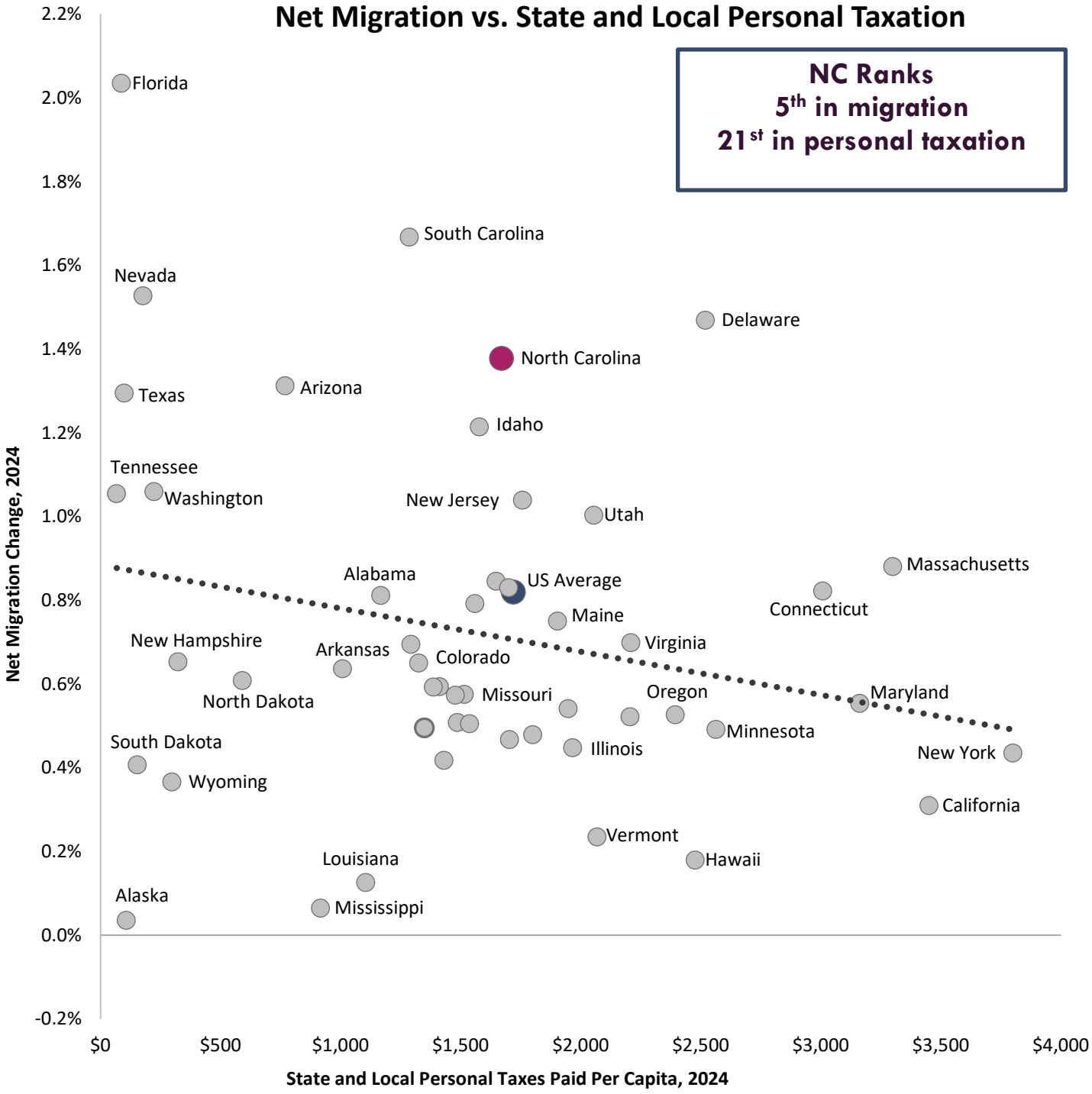
Foreign direct investment (FDI) was measured to understand the state's global competitiveness. FDI can bring capital, new technologies, and expand the region's tech ecosystem. The most recent data, from 2022, show that 5.5 percent of all employment in North Carolina was attributable to foreign-based companies—an increase from 5.3 percent the previous year. The state also moved up in the rankings from 9th to 8th.



Source: EL calculations based on BEA (2025)

As workforce remains a key challenge in the tech sector, specific data influencing the size of the state's talent pool were evaluated. Migration into the state can help expand the workforce. As noted earlier in this report, North Carolina's migration has increased in recent years. The state's net migration rate in 2024 was 1.38 percent, the 4th highest in the country. Recent migration patterns have generally followed state tax trends, though with some exceptions. States with the lowest income taxes tended to attract the highest rates of new

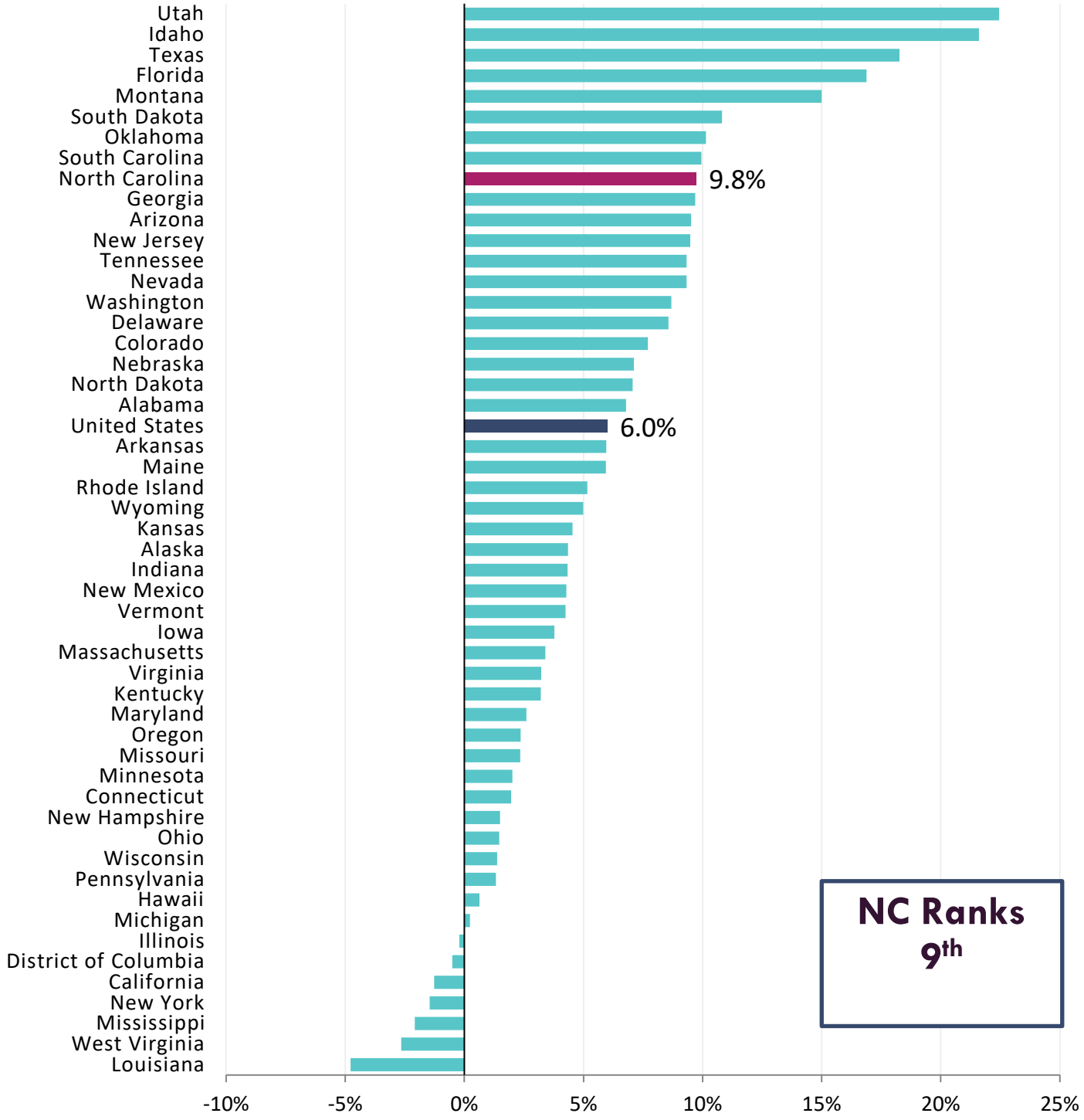
residents, but low personal taxes did not guarantee strong in-migration. North Carolina's average personal taxes per person during this period were just below the national average, ranking 21st across all states.



Source: EL calculations based on US Census Bureau (2025) and BEA (2025)
Note: The tax per capita value includes state and local taxes on income, personal property, motor vehicle licenses, and other taxes on personal licenses by US residents. The figure does not include federal taxes or sales, residential property, or production activity taxes.

Migration is only one component of overall workforce size. North Carolina's working-age population is projected to grow by 9.8 percent over the next ten years, the 9th highest rate in the nation. Several states are expected to see declines in their working-age population during this period. As companies tend to locate where they can find workers, these trends help North Carolina remain competitive in today's talent wars.

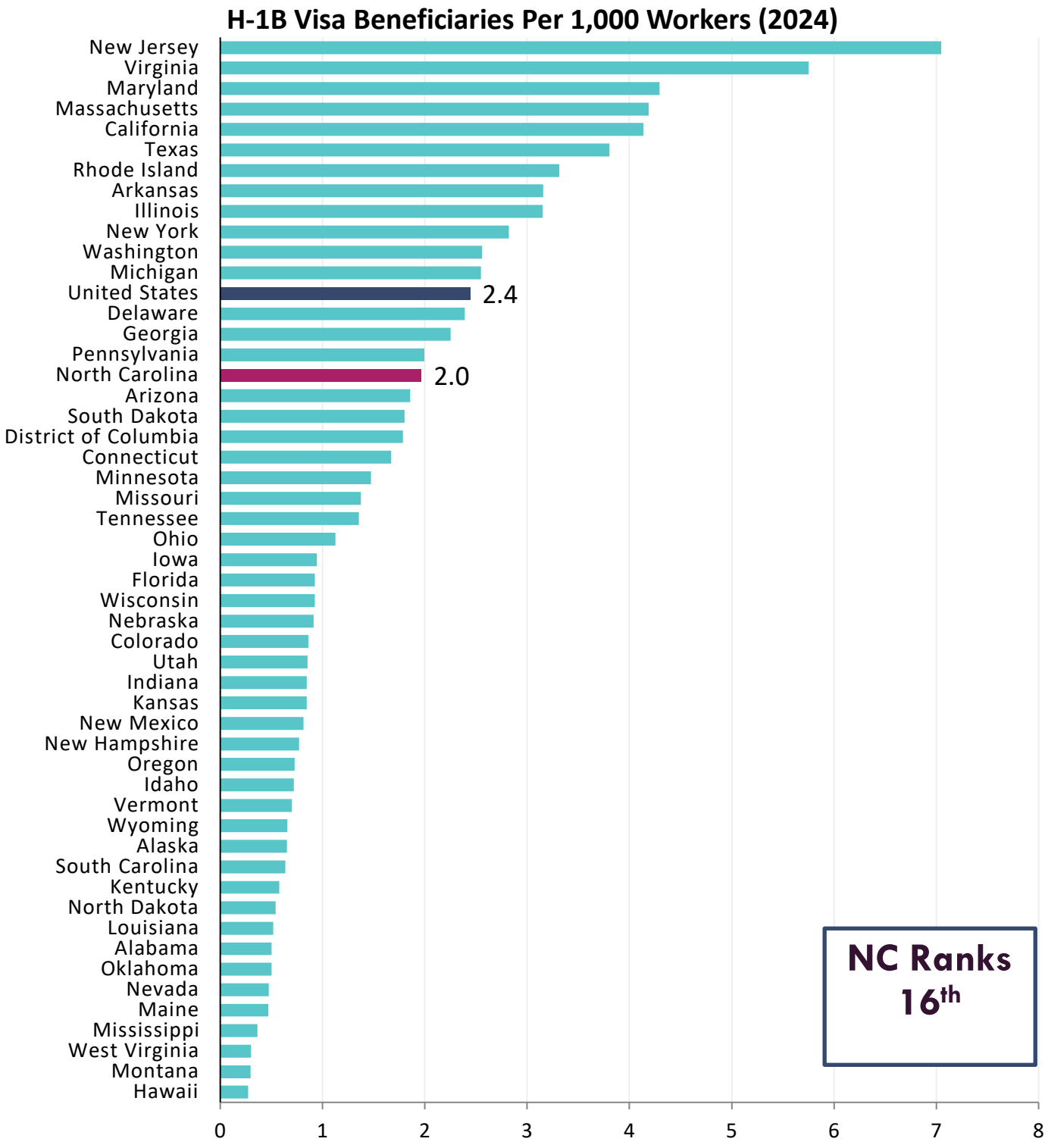
Projected Working Age (25 to 64) Population Change (2025-2035)



Source: EL calculations based on Lightcast 2025.4

Another way to expand the labor pool in North Carolina is through immigration. The tech sector has often utilized H-1B visas, which allow firms to bring high-skilled international talent to the U.S. By supporting the influx of specialized workers, these visas help address domestic skill shortages and enhance productivity. In 2024, North Carolina used H-1B visas at a lower rate than the national average. The state ranked in the middle

of the pack at 16th.



Source: EL calculations based on US Citizenship and Immigration Services (2025) and Lightcast 2025.4

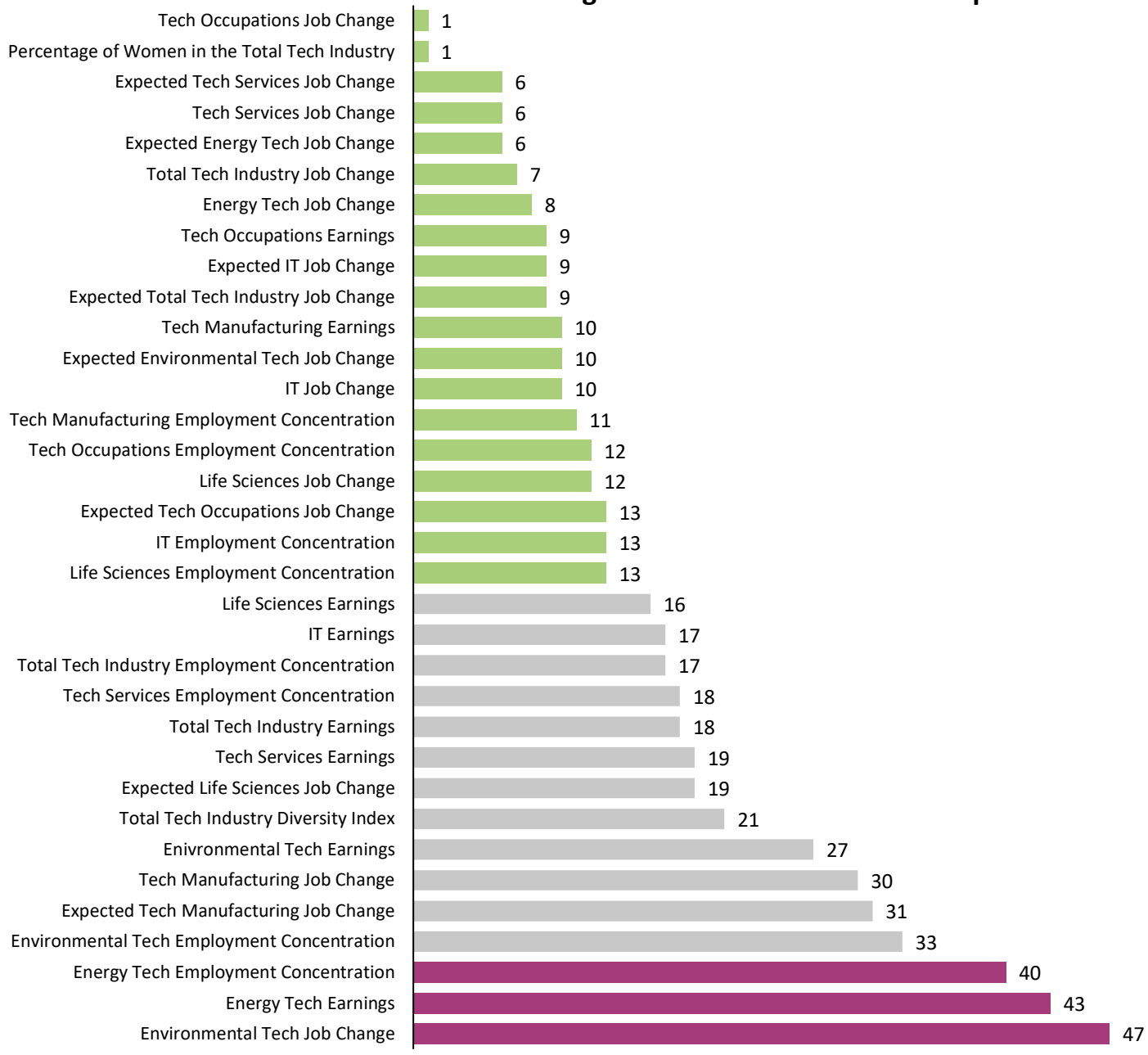
SECTION 9. KEY TAKEAWAYS FOR TECH SECTOR

The following chart lists all the metrics measured for North Carolina's tech sector and its corresponding ranking among the other states and the District of Columbia. North Carolina ranks in the best 15 states for 19

out of the 34 tech industry and occupation metrics evaluated. The state ranked in the bottom 15 for just three indicators—an improvement from five indicators in last year's report.

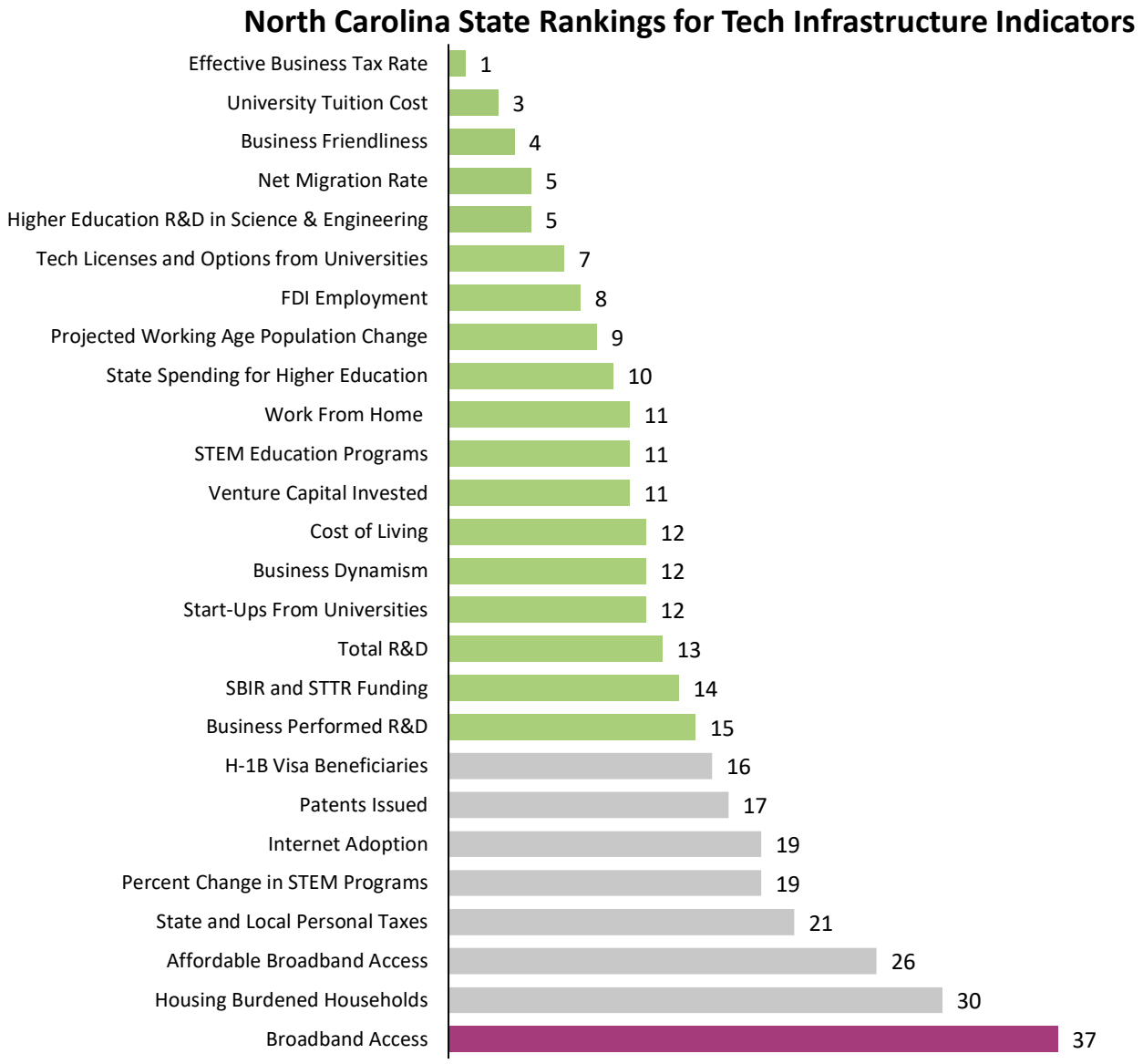
	Indicates a state ranking of 15th or higher
	Indicates a state ranking between 16th and 35th
	Indicates a state ranking of 35th or greater

North Carolina State Rankings for Tech Industries and Occupations



North Carolina ranks in the best 15 of all states for 18 out of the 26 tech infrastructure metrics that were measured. The state ranked in the bottom 15 for just one of these indicators. Across the twelve years of this research, North Carolina has shown significant improvement in metrics such as venture capital funding and business R&D funding. Looking back to the 2016 State of the Technology Sector Report, North Carolina ranked

36th and 23rd in private business R&D and venture capital funding, respectively. The state has many strengths that support tech sector competitiveness, including a deep pool of talent, outstanding quality of life, an affordable and competitive business climate, and the presence of world-class research universities.

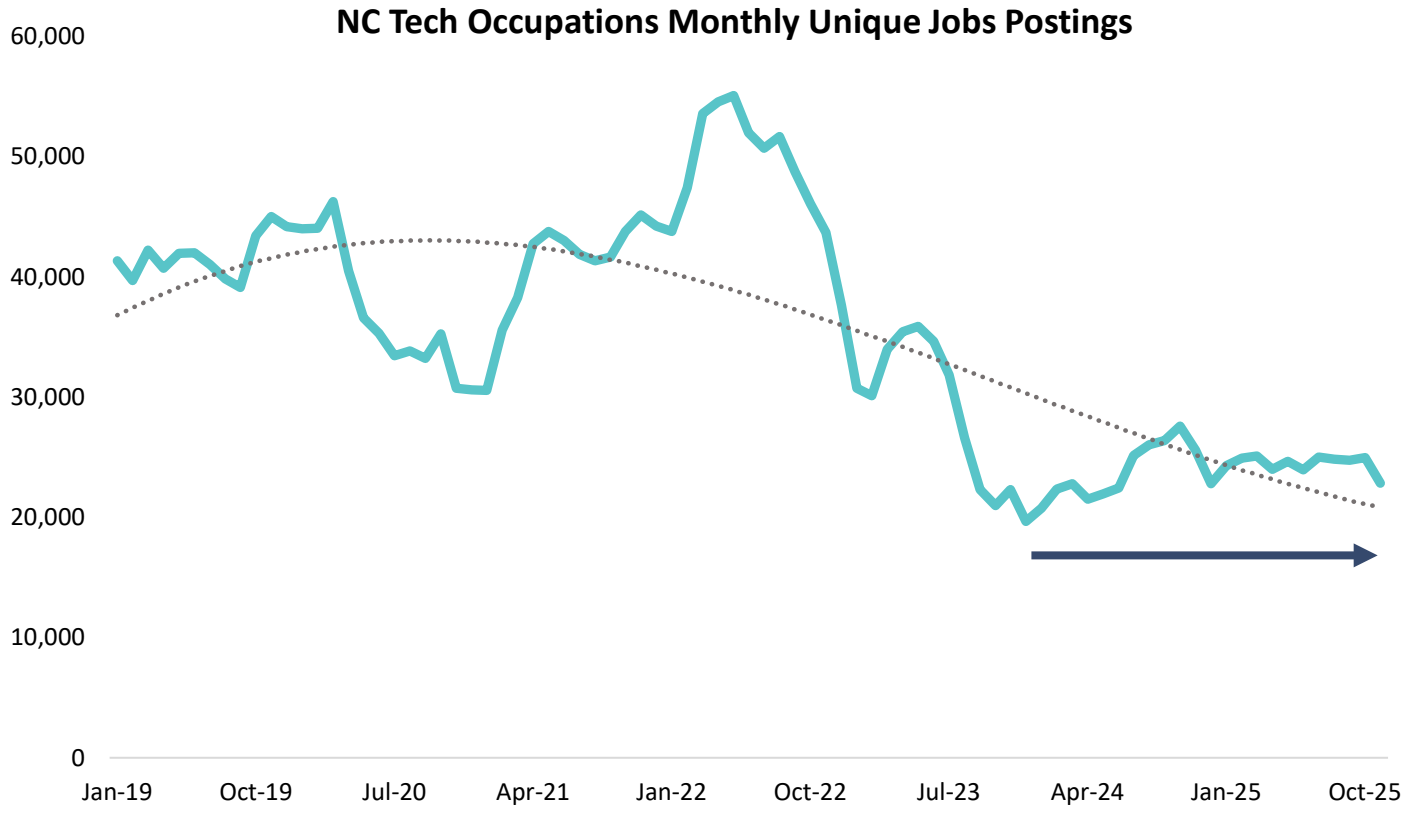


In this year's report, the tech numbers continued to improve, even as many states experienced job losses during this period. North Carolina continues to strengthen its position and national reputation as a major player in technology. Going forward, job growth in tech is no longer a foregone conclusion, particularly with the advancement of AI, which can automate and augment many knowledge-based jobs. AI presents both an opportunity and a challenge for business as usual—not only within the tech sector, but across the entire state economy. North Carolina will need to be prepared to ensure responsible deployment and develop strategies to prepare the future workforce. In addition, the state should be ready for increased energy demands on the grid as AI-related investments grow.

Some opportunities still exist for improvement and support of the tech sector. Based on the rankings above, North Carolina's lowest scores were in metrics related to broadband access, diversity in the tech workforce, housing affordability, and patent rates. The slide in rankings for housing-burdened households, cost of living,

and adjusted tech sector earnings in this year's report reveals that the state will need to continue balancing affordability with growth. Continuing efforts to spread tech benefits and job growth to rural areas will also be crucial for maintaining a favorable view of the sector across the state.

As of the writing of this report in December 2025, demand for tech workers has remained relatively flat over the past year. This could impact next year's metrics and rankings. However, North Carolina is not alone in experiencing a slowdown in the tech economy. Migration data shows that talent continues to choose the state, which should help North Carolina remain competitive as the market continues to tighten.



Source: EL calculations based on Lightcast 2025.4

The report was written by Skylar Elliott Casey and Ted Abernathy of Economic Leadership LLC in December 2025.

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APPENDIX

Total Technology Industry 6-digit NAICS Code Breakdown

NAICS	Industry	Super Sub-Category	Sub-Category	Manufacturing or Services
325411	Medicinal and Botanical Manufacturing	Life Sciences Manufacturing	Life Sciences	Manufacturing
325412	Pharmaceutical Preparation Manufacturing	Life Sciences Manufacturing	Life Sciences	Manufacturing
325413	In-Vitro Diagnostic Substance Manufacturing	Life Sciences Manufacturing	Life Sciences	Manufacturing
325414	Biological Product (except Diagnostic) Manufacturing	Life Sciences Manufacturing	Life Sciences	Manufacturing
334510	Electromedical and Electrotherapeutic Apparatus Manufacturing	Life Sciences Manufacturing	Life Sciences	Manufacturing
334516	Analytical Laboratory Instrument Manufacturing	Life Sciences Manufacturing	Life Sciences	Manufacturing
334517	Irradiation Apparatus Manufacturing	Life Sciences Manufacturing	Life Sciences	Manufacturing
339112	Surgical and Medical Instrument Manufacturing	Life Sciences Manufacturing	Life Sciences	Manufacturing
339113	Surgical Appliance and Supplies Manufacturing	Life Sciences Manufacturing	Life Sciences	Manufacturing
339114	Dental Equipment and Supplies Manufacturing	Life Sciences Manufacturing	Life Sciences	Manufacturing
541330	Engineering Services	Engineering, Environmental, & Clean Tech	Life Sciences	Services
541380	Testing Laboratories	R&D and Testing	Life Sciences	Services
541690	Other Scientific and Technical Consulting Services	R&D and Testing	Life Sciences	Services
541713	Research and Development in Nanotechnology	R&D and Testing	Life Sciences	Services
541714	Research and Development in Biotechnology (except Nanobiotechnology)	R&D and Testing	Life Sciences	Services
541715	Research and Development in the Physical, Engineering, and Life Sciences (except Nanotechnology and Biotechnology)	R&D and Testing	Life Sciences	Services
333242	Semiconductor Machinery Manufacturing	Electronics Hardware	IT	Manufacturing
334111	Electronic Computer Manufacturing	Electronics Hardware	IT	Manufacturing
334112	Computer Storage Device Manufacturing	Electronics Hardware	IT	Manufacturing
334118	Computer Terminal and Other Computer Peripheral Equipment Manufacturing	Electronics Hardware	IT	Manufacturing
334210	Telephone Apparatus Manufacturing	Electronics Hardware	IT	Manufacturing
334220	Radio and Television Broadcasting and Wireless Communications Equipment Manufacturing	Electronics Hardware	IT	Manufacturing
334290	Other Communications Equipment Manufacturing	Electronics Hardware	IT	Manufacturing
334310	Audio and Video Equipment Manufacturing	Electronics Hardware	IT	Manufacturing
334412	Bare Printed Circuit Board Manufacturing	Electronics Hardware	IT	Manufacturing

334413	Semiconductor and Related Device Manufacturing	Electronics Hardware	IT	Manufacturing
334416	Capacitor, Resistor, Coil, Transformer, and Other Inductor Manufacturing	Electronics Hardware	IT	Manufacturing
334417	Electronic Connector Manufacturing	Electronics Hardware	IT	Manufacturing
334418	Printed Circuit Assembly (Electronic Assembly) Manufacturing	Electronics Hardware	IT	Manufacturing
334419	Other Electronic Component Manufacturing	Electronics Hardware	IT	Manufacturing
334511	Search, Detection, Navigation, Guidance, Aeronautical, and Nautical System and Instrument Manufacturing	Electronics Hardware	IT	Manufacturing
334519	Other Measuring and Controlling Device Manufacturing	Electronics Hardware	IT	Manufacturing
335921	Fiber Optic Cable Manufacturing	Electronics Hardware	IT	Manufacturing
335999	All Other Miscellaneous Electrical Equipment and Component Manufacturing	Electronics Hardware	IT	Manufacturing
513210	Software Publishers	Software	IT	Services
516210	Media Streaming Distribution Services, Social Networks, and Other Media Networks and Content Providers	Internet, Social Media, & Telecom	IT	Services
517111	Wired Telecommunications Carriers	Internet, Social Media, & Telecom	IT	Services
517112	Wireless Telecommunications Carriers (except Satellite)	Internet, Social Media, & Telecom	IT	Services
517121	Telecommunications Resellers	Internet, Social Media, & Telecom	IT	Services
517410	Satellite Telecommunications	Internet, Social Media, & Telecom	IT	Services
517810	All Other Telecommunications	Internet, Social Media, & Telecom	IT	Services
518210	Data Processing, Hosting, and Related Services	Internet, Social Media, & Telecom	IT	Services
519290	Web Search Portals and All Other Information Services	Internet, Social Media, & Telecom	IT	Services
541511	Custom Computer Programming Services	Software	IT	Services
541512	Computer Systems Design Services	Software	IT	Services
541513	Computer Facilities Management Services	Software	IT	Services
541519	Other Computer Related Services	Software	IT	Services
221310	Water Supply and Irrigation Systems	Engineering, Environmental, & Clean Tech	Environmental Technology	Services
221320	Sewage Treatment Facilities	Remediation and Waste Management	Environmental Technology	Services
221330	Steam and Air-Conditioning Supply	Engineering, Environmental, & Clean Tech	Environmental Technology	Services

334512	Automatic Environmental Control Manufacturing for Residential, Commercial, and Appliance Use	Engineering, Environmental, & Clean Tech	Environmental Technology	Manufacturing
334513	Instruments and Related Products Manufacturing for Measuring, Displaying, and Controlling Industrial Process Variables	Engineering, Environmental, & Clean Tech	Environmental Technology	Manufacturing
334514	Totalizing Fluid Meter and Counting Device Manufacturing	Engineering, Environmental, & Clean Tech	Environmental Technology	Manufacturing
334515	Instrument Manufacturing for Measuring and Testing Electricity and Electrical Signals	Engineering, Environmental, & Clean Tech	Environmental Technology	Manufacturing
335910	Battery Manufacturing	Engineering, Environmental, & Clean Tech	Environmental Technology	Manufacturing
541620	Environmental Consulting Services	Engineering, Environmental, & Clean Tech	Environmental Technology	Services
562111	Solid Waste Collection	Remediation and Waste Management	Environmental Technology	Services
562112	Hazardous Waste Collection	Remediation and Waste Management	Environmental Technology	Services
562119	Other Waste Collection	Remediation and Waste Management	Environmental Technology	Services
562211	Hazardous Waste Treatment and Disposal	Remediation and Waste Management	Environmental Technology	Services
562212	Solid Waste Landfill	Remediation and Waste Management	Environmental Technology	Services
562213	Solid Waste Combustors and Incinerators	Remediation and Waste Management	Environmental Technology	Services
562219	Other Nonhazardous Waste Treatment and Disposal	Remediation and Waste Management	Environmental Technology	Services
562910	Remediation Services	Remediation and Waste Management	Environmental Technology	Services
562920	Materials Recovery Facilities	Remediation and Waste Management	Environmental Technology	Services
562991	Septic Tank and Related Services	Remediation and Waste Management	Environmental Technology	Services
562998	All Other Miscellaneous Waste Management Services	Remediation and Waste Management	Environmental Technology	Services
211120	Crude Petroleum Extraction	Other Energy and Power Generation	Energy Technology	Services
211130	Natural Gas Extraction	Other Energy and Power Generation	Energy Technology	Services
212112	Underground Coal Mining	Other Energy and Power Generation	Energy Technology	Services
212114	Surface Coal Mining	Other Energy and Power Generation	Energy Technology	Services
213111	Drilling Oil and Gas Wells	Other Energy and Power Generation	Energy Technology	Services
213112	Support Activities for Oil and Gas Operations	Other Energy and Power Generation	Energy Technology	Services

213113	Support Activities for Coal Mining	Other Energy and Power Generation	Energy Technology	Services
221111	Hydroelectric Power Generation	Other Energy and Power Generation	Energy Technology	Services
221112	Fossil Fuel Electric Power Generation	Other Energy and Power Generation	Energy Technology	Services
221113	Nuclear Electric Power Generation	Other Energy and Power Generation	Energy Technology	Services
221114	Solar Electric Power Generation	Renewable Energy	Energy Technology	Services
221115	Wind Electric Power Generation	Renewable Energy	Energy Technology	Services
221116	Geothermal Electric Power Generation	Renewable Energy	Energy Technology	Services
221117	Biomass Electric Power Generation	Renewable Energy	Energy Technology	Services
221118	Other Electric Power Generation	Renewable Energy	Energy Technology	Services
221121	Electric Bulk Power Transmission and Control	Other Energy and Power Generation	Energy Technology	Services
221122	Electric Power Distribution	Other Energy and Power Generation	Energy Technology	Services
221210	Natural Gas Distribution	Other Energy and Power Generation	Energy Technology	Services
324110	Petroleum Refineries	Other Energy and Power Generation	Energy Technology	Services

Tech Occupations SOC Code Breakdown

SOC Code	Occupation Description
11-3021	Computer and Information Systems Managers
11-9041	Architectural and Engineering Managers
13-1081	Logisticians
13-1082	Project Management Specialists
13-1111	Management Analysts
13-1141	Compensation, Benefits, and Job Analysis Specialists
13-1161	Market Research Analysts and Marketing Specialists
13-1199	Business Operations Specialists, All Other
13-2031	Budget Analysts
13-2041	Credit Analysts
13-2051	Financial and Investment Analysts
13-2054	Financial Risk Specialists
13-2099	Financial Specialists, All Other
15-1211	Computer Systems Analysts
15-1212	Information Security Analysts
15-1221	Computer and Information Research Scientists
15-1231	Computer Network Support Specialists
15-1232	Computer User Support Specialists
15-1241	Computer Network Architects
15-1242	Database Administrators
15-1243	Database Architects
15-1244	Network and Computer Systems Administrators
15-1251	Computer Programmers
15-1252	Software Developers
15-1253	Software Quality Assurance Analysts and Testers
15-1254	Web Developers
15-1255	Web and Digital Interface Designers
15-1299	Computer Occupations, All Other
15-2011	Actuaries
15-2021	Mathematicians
15-2031	Operations Research Analysts
15-2041	Statisticians
15-2051	Data Scientists
15-2099	Mathematical Science Occupations, All Other
17-1021	Cartographers and Photogrammetrists
17-2011	Aerospace Engineers
17-2021	Agricultural Engineers
17-2031	Bioengineers and Biomedical Engineers
17-2041	Chemical Engineers
17-2051	Civil Engineers
17-2061	Computer Hardware Engineers
17-2071	Electrical Engineers
17-2072	Electronics Engineers, Except Computer
17-2081	Environmental Engineers
17-2111	Health and Safety Engineers, Except Mining Safety Engineers and Inspectors

17-2112	Industrial Engineers
17-2121	Marine Engineers and Naval Architects
17-2131	Materials Engineers
17-2141	Mechanical Engineers
17-2151	Mining and Geological Engineers, Including Mining Safety Engineers
17-2161	Nuclear Engineers
17-2171	Petroleum Engineers
17-2199	Engineers, All Other
17-3021	Aerospace Engineering and Operations Technologists and Technicians
17-3022	Civil Engineering Technologists and Technicians
17-3023	Electrical and Electronic Engineering Technologists and Technicians
17-3024	Electro-Mechanical and Mechatronics Technologists and Technicians
17-3025	Environmental Engineering Technologists and Technicians
17-3026	Industrial Engineering Technologists and Technicians
17-3027	Mechanical Engineering Technologists and Technicians
17-3028	Calibration Technologists and Technicians
17-3029	Engineering Technologists and Technicians, Except Drafters, All Other
17-3031	Surveying and Mapping Technicians
19-1021	Biochemists and Biophysicists
19-1031	Conservation Scientists
19-1042	Medical Scientists, Except Epidemiologists
19-1099	Life Scientists, All Other
19-2021	Atmospheric and Space Scientists
19-2031	Chemists
19-2032	Materials Scientists
19-2041	Environmental Scientists and Specialists, Including Health
19-2042	Geoscientists, Except Hydrologists and Geographers
19-2043	Hydrologists
19-2099	Physical Scientists, All Other
19-4012	Agricultural Technicians
19-4013	Food Science Technicians
19-4021	Biological Technicians
19-4031	Chemical Technicians
19-4042	Environmental Science and Protection Technicians, Including Health
19-4043	Geological Technicians, Except Hydrologic Technicians
19-4044	Hydrologic Technicians
19-4051	Nuclear Technicians
43-9111	Statistical Assistants
49-2011	Computer, Automated Teller, and Office Machine Repairers
51-9141	Semiconductor Processing Technicians