

NORTH CAROLINA EMPLOYMENT PROJECTIONS 2021-2030

Every two years, in conjunction with the Bureau of Labor Statistics (BLS), the North Carolina Department of Commerce publishes long-term industry and occupational employment projections for statewide and sub-state areas.¹ The employment projections are an estimate of the future demand for workers based on historical employment data and various economic factors.² Policy-makers, jobseekers, students, educators, training providers, and businesses use projections data to make informed workforce decisions and help ensure that North Carolina's workforce is prepared for tomorrow's job opportunities and economic growth in the state.

This year, we enhanced the 2020-2030 projections for several reasons. The pandemic created a unique situation in our economy. The massive and immediate shock reduced employment substantially for a short period more than NC had ever seen. Conversely, 2021 saw significant growth, as much of the state's employment rebounded quicker than past recessions. So, our 2020-2030 projections included a lot of growth in industries and occupations that had already occurred by the time they were completed and released in 2022. Users were left to determine on their own how much of the projected growth already occurred and where industries and occupations were headed going forward. Therefore, we updated the projections to begin in 2021, but still project out to 2030. This means that we have an additional year of data to incorporate industry decline and growth from 2020 to 2021. There are still some industries and occupations that had not yet fully rebounded by 2021 and continued to produce strong growth in 2022. This produced higher long-term growth rates than we may otherwise expect such as for Arts, Entertainment, & Recreation, but these enhancements improve upon the 2020-2030 statewide employment projections completed in June 2022.

The following summary provides information on the state's projected employment growth by major industry and occupational groups.³

Key Highlights of the 2021-2030 Statewide Employment Projections:

- Industry Employment Projections:
 - North Carolina is projected to add more than 445,000 new jobs between 2021 and 2030.
 - The service-providing sector in North Carolina is projected to contribute about 88% of all net new jobs created.
 - Health Care & Social Assistance, the largest industry in North Carolina's economy, is projected to add the most jobs (76,000) and have the fifth highest percentage growth (12.7%).
 - Arts, Entertainment, & Recreation is projected to be the fastest growing industry with 25.3% growth. This industry had not rebounded by 2021, the projected level of employment in

¹ This report analyzes only statewide projections. Sub-state projection results will be available in Spring 2023.

² Projections assume full employment for the economy in the projected year.

³ Detailed employment projections for more than 100 individual industries and 700 detailed occupations can be found at: <https://www.nccommerce.com/lead/data-tools/industry/projections> and <https://www.nccommerce.com/lead/data-tools/occupations/projections>

this industry by 2030 (82,700) reflects an increase of only 3.8% above the level of employment in this industry in 2019 (79,700).

- Professional, Scientific, & Technical Services is projected to be the second fastest growing industry with 18.4% growth.
- Most industries are projected to grow, but 2 sectors are projected to lose jobs: Utilities (-1,200 or -8.1%) and Agriculture, Forestry, Fishing, & Hunting (-1,200 or -2.4%).
- Occupational Employment Projections:
 - Most occupations are projected to grow, but occupations related to declining industries are projected to decrease - such as Farming, Fishing, and Forestry occupations (-700 jobs or -2.1%) in the Agriculture, Forestry, Fishing, and Hunting industry. Office and Administrative Support occupations are also projected to decrease very modestly (-3,200 jobs or -0.6%).
 - Occupational groups paying more than the Median Annual Wage for all occupations (\$38,370) are generally projected to grow faster than the statewide annualized growth rate (0.97%). Groups paying less than the Median Annual Wage for all occupations are more likely to be projected to grow slower than the statewide annualized growth rate.
 - Most job openings are expected to come from the need to replace workers leaving their occupations rather than growth from new job creation.
 - Occupations requiring a high school education or less for entry are projected to account for most of the total annual openings, while occupations requiring more education are expected to see higher growth rates.

1. Total Employment

In total, North Carolina is projected to gain about 446,000 jobs through 2030, growing annually at an average rate of 0.97% - lower than its average annual growth rate of 1.62% over the prior 10 years (2011-2021). The lower projected growth rate is in line with larger trends of declining labor force participation and technology advances at work. While this growth rate is more modest than the recent past, it is still nearly twice as high as the national projected growth rate of 0.51%⁴.

2. Industry Employment

Projected employment growth will come mostly from the substantively larger service-providing industries, though the goods-producing industries are also projected to grow modestly. This mirrors national trends.

2.1 Service-Providing

Service-providing industries are projected to grow from 3,846,200 jobs to 4,238,500 jobs from 2021 to 2030. This accounts for an annualized growth rate of 1.08%, greater than the annualized growth rate of all industries and faster than the goods-producing industries (0.61%). (Table 1).

⁴ Bureau of Labor Statistics Employment Projections 2021-2031 for the United States can be found at: <https://www.bls.gov/emp/>.

Health Care and Social Assistance is the largest service industry projecting to add the most jobs (+76,000) by 2030. Its projected annualized growth rate of 1.33% (Table 1) is more than the overall industry total, and each of its detailed sectors is also projected to grow faster than the overall industry total. Over 40% of this growth will be within Ambulatory Health Care Services reflecting increased demand for health care services by a larger population, particularly for North Carolina's aging population.⁵ The Professional, Scientific, and Technical Services industry is projected to grow second fastest with an annualized growth rate of 1.90% and more than 53,000 projected new jobs by 2030. Health Care and Social Assistance and Professional, Scientific, Technical Services have been historically strong, and their importance to the state economy is amplified by the fact that while employing nearly one fifth of the total state labor force, they tend to pay relatively high wages.

Leisure and Hospitality sectors are projected to grow among the fastest by 2030 largely reflecting their slower recovery after 2020. The Arts, Entertainment, and Recreation industry is expected to be the fastest growing over the long-term with an annualized growth rate of 2.53% with a growth of almost 17,000 jobs – however, much of that will likely occur in the first few years as the industry fully rebounds to pre-Covid levels. The larger Accommodation and Food Services industry will also be an important contributor to the state's labor market with almost 67,000 additional jobs projected by 2030, largely in the Food Services and Drinking Places industry (Figure 1).

2.2 Goods-Producing

Goods-producing industries are not projected to grow as fast as service-providing industries and will gain about 42,200 jobs between 2021 and 2030. As seen in Figure 2, the growth is driven by both Manufacturing, projected to add over 22,000 jobs, and Construction, projected to add almost 21,000 jobs.

Manufacturing employment is projected to increase modestly, which is in contrast to the nation as a whole. In North Carolina, Manufacturing is projected to grow by about 22,200 jobs, or at an AGR of -0.52% compared to United States' AGR of -0.11%. The largest projected gains in jobs are in Food Manufacturing (+6,700), Chemical Manufacturing (+4,100), and Transportation Equipment Manufacturing (+3,600). Manufacturing sub-sectors projected to lose jobs include: Textile Mills (-1,800), Apparel Manufacturing (-1,500), and Printing and Related Support Activities (-1,000).

Employment for Agriculture, Forestry, Fishing and Hunting is expected to decrease slightly (-1,200), driven by a projected decline in Animal Production and Aquaculture (-1,800) and offset by a modest gain in Crop Production (+500).

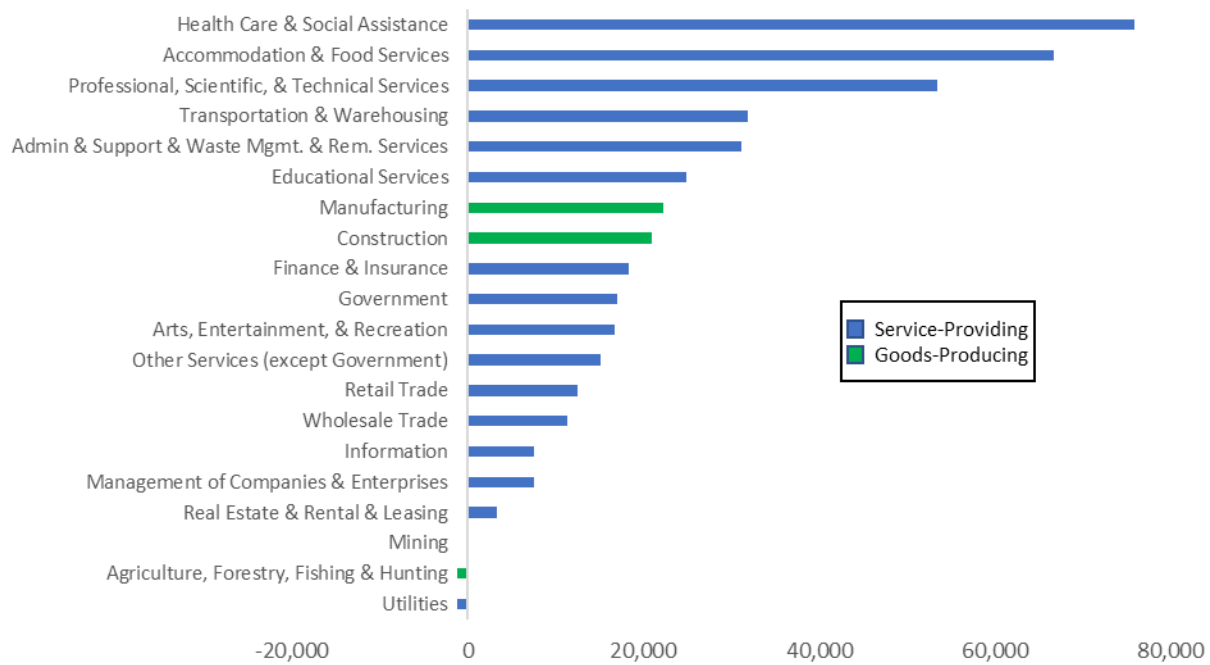
⁵ Based on the North Carolina Office of State Budget and Management projections (<https://www.osbm.nc.gov/demog/county-projections>), the share of population aged 55 and above is expected to increase from 30% to 32% between 2021 and 2030.

Table 1. North Carolina Industry Employment Projections, 2021-2030

Industry Sector	Employment Estimate 2021	Employment Estimate 2030	Net Change	Percent Change	Annualized Growth Rate
Total, All Industries	4,902,016	5,347,745	445,729	9.09%	0.97%
Goods-Producing	754,873	797,078	42,205	5.59%	0.61%
Manufacturing	464,071	486,317	22,246	4.79%	0.52%
Construction	238,485	259,482	20,997	8.80%	0.94%
Mining	3,133	3,259	126	4.02%	0.44%
Agriculture, Forestry, Fishing and Hunting	49,184	48,020	-1,164	-2.37%	-0.27%
Service-Providing	3,846,229	4,238,496	392,267	10.20%	1.08%
Health Care and Social Assistance	600,092	676,100	76,008	12.67%	1.33%
Accommodation and Food Services	395,334	462,052	66,718	16.88%	1.75%
Professional, Scientific, and Technical Services	289,885	343,361	53,476	18.45%	1.90%
Transportation and Warehousing	199,142	231,060	31,918	16.03%	1.67%
Administrative and Support and Waste Management and Remediation Services	311,380	342,584	31,204	10.02%	1.07%
Educational Services	368,400	393,280	24,880	6.75%	0.73%
Finance and Insurance	206,745	225,056	18,311	8.86%	0.95%
Government	295,583	312,582	16,999	5.75%	0.62%
Arts, Entertainment, and Recreation	66,007	82,691	16,684	25.28%	2.54%
Other Services (except Government)	181,047	196,118	15,071	8.32%	0.89%
Retail Trade	510,287	522,728	12,441	2.44%	0.27%
Wholesale Trade	190,523	201,907	11,384	5.98%	0.65%
Information	77,370	84,904	7,534	9.74%	1.04%
Management of Companies and Enterprises	76,605	84,121	7,516	9.81%	1.05%
Real Estate and Rental and Leasing	63,435	66,727	3,292	5.19%	0.56%
Utilities	14,394	13,225	-1,169	-8.12%	-0.94%
Self Employed and Unpaid Family Workers	300,914	312,171	11,257	3.74%	0.41%

Source: NC Department of Commerce: 2021-2030 Long Term Employment Projections

Figure 1. Industry Employment Projections by Net Growth 2021-2030



Source: NC Department of Commerce: 2021-2030 Long-Term Employment Projections

3. Occupational Employment

3.1 Growth

Table 2 shows occupational employment estimates for 2021-2030. The five largest occupational groups together are expected to account for almost half of the total employment in 2030: Office and Administrative Support Occupations; Sales and Related Occupations; Transportation and Material Moving Occupations; Food Preparation and Serving Related Occupations; and Management Occupations.

Among these five occupational groups, all but Office & Administrative Support (-3,200 jobs) are projected to grow. Food Preparation & Serving Related Occupations is projected to grow the fastest (1.65% Annualized Growth Rate) and gain the most jobs (60,900 jobs) of all occupational groups. Office & Administrative Support is expected to decline due to changes in the organization of work and automation.

Besides Food Preparation & Serving Related Occupations, other occupational groups expected to increase the most include Transportation & Material Moving (+56,700), Business & Financial Operations (+37,900), Management (+37,300), and Healthcare Practitioners & Technical (+35,200).

The fastest growing jobs in terms of Annualized Growth Rate span a variety of different types of jobs: some related to technology, others to service and support, and finally others to transportation and material moving. Table 2 is ranked by fastest growing occupational groups. Computer & Mathematical Occupations (Software Developers, Computer User Support Specialists, etc.) are projected to grow the

fastest, followed by Healthcare Support Occupations (Home Health and Personal Care Aides, Nursing Assistants, etc.), Personal Care & Service Occupations (Childcare Workers, Hairdressers, etc.), Food Preparation & Serving Related (Cooks, Waiters and Waitresses, etc.), and Transportation & Material Moving Occupations (Laborers and Freight, Stock, and Material Movers, Hand, and Stockers and Order Fillers) (Figure 2).

Occupations at both the lowest and highest ends of the wage scale will experience the fastest growth (Table 2). Occupational groups with median annual wages below the 25th percentile (\$28,910) are expected to increase from about 644,900 jobs in 2021 to about 734,800 jobs by 2030, a 14% increase. Occupational groups with median annual wages above the 75th percentile (\$61,340), are expected to grow from about 1.25 million to 1.41 million jobs by 2030, a 13% increase. Occupational groups paying median annual wages between the statewide 25th and 75th percentiles are only projected to increase by 6% (Table 2). While there's a stark difference in wages, many of the occupations in these high-growth groups have one thing in common – the dominance of non-routine tasks⁶ (which are difficult to automate) in their daily work.

Table 2. North Carolina Employment Projections by Major Occupational Group, 2021-2030

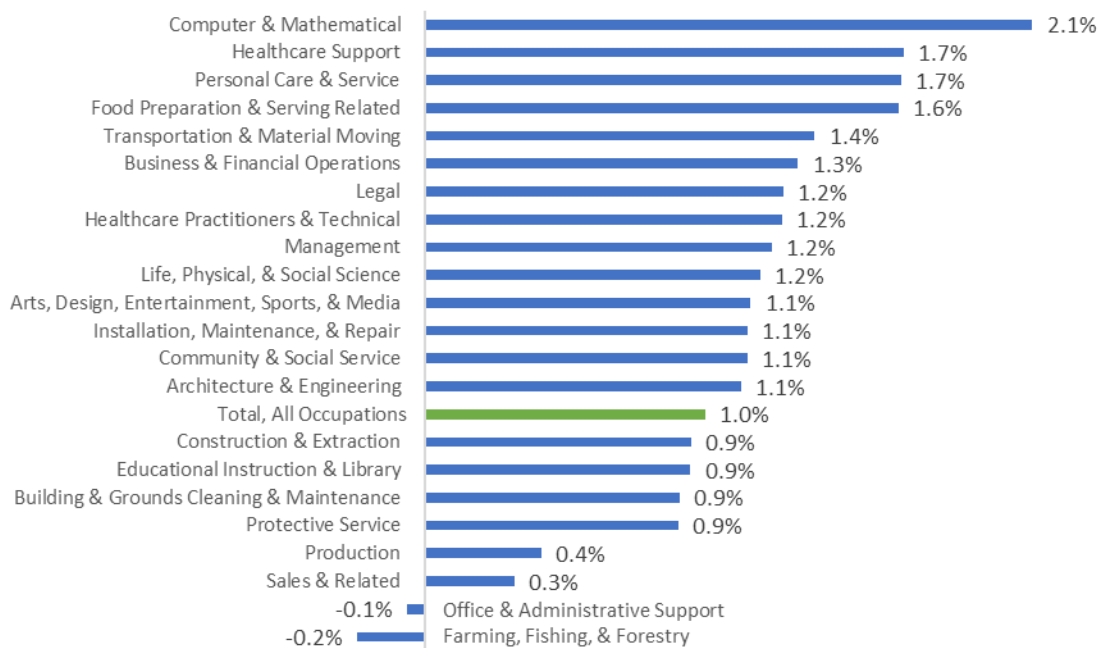
Occupational Group	Employment Estimate 2021	Employment Estimate 2030	Net Change	Percent Change	Annualized Growth Rate	2021 Annual Median Wage
Computer and Mathematical	167,424	202,024	34,600	20.67%	2.11%	\$98,530
Healthcare Support	177,757	206,184	28,427	15.99%	1.66%	\$29,120
Personal Care and Service	99,340	115,132	15,792	15.90%	1.65%	\$27,450
Food Preparation and Serving Related	385,124	446,033	60,909	15.82%	1.64%	\$22,860
Transportation and Material Moving	440,956	497,660	56,704	12.86%	1.35%	\$31,280
Business and Financial Operations	308,805	346,729	37,924	12.28%	1.30%	\$75,300
Legal	32,179	35,961	3,782	11.75%	1.24%	\$62,180
Healthcare Practitioners and Technical	300,530	335,774	35,244	11.73%	1.24%	\$61,790
Management	327,773	365,034	37,261	11.37%	1.20%	\$101,870
Life, Physical, and Social Science	43,535	48,341	4,806	11.04%	1.17%	\$64,130
Arts, Design, Entertainment, Sports, and Media	69,095	76,448	7,353	10.64%	1.13%	\$48,810
Installation, Maintenance, and Repair	203,024	224,409	21,385	10.53%	1.12%	\$47,380
Community and Social Service	85,652	94,669	9,017	10.53%	1.12%	\$47,530

⁶ <https://www.nccommerce.com/blog/2016/12/13/where-jobs-are-supply-and-demand-labor-north-carolina%E2%80%99s-regions>

Architecture and Engineering	70,647	77,937	7,290	10.32%	1.10%	\$77,560
Total, All Occupations	4,902,016	5,347,745	445,729	9.09%	0.97%	\$38,370
Construction and Extraction	207,390	225,266	17,876	8.62%	0.92%	\$43,700
Educational Instruction and Library	265,225	288,047	22,822	8.60%	0.92%	\$47,920
Building and Grounds Cleaning and Maintenance	160,424	173,628	13,204	8.23%	0.88%	\$28,820
Protective Service	105,024	113,615	8,591	8.18%	0.88%	\$39,010
Production	328,650	340,718	12,068	3.67%	0.40%	\$36,410
Sales and Related	515,901	530,478	14,577	2.83%	0.31%	\$29,390
Office and Administrative Support	572,641	569,472	-3,169	-0.55%	-0.06%	\$37,250
Farming, Fishing, and Forestry	34,920	34,186	-734	-2.10%	-0.24%	\$31,700

Source: NC Department of Commerce: 2021-2030 Long-Term Employment Projections and Occupational Employment & Wage Statistics

**Figure 2. Occupational Employment Projections by Major Occupational Groups
2021-2030, Annualized Growth Rate**



Source: NC Department of Commerce: 2021-2030 Long-Term Employment Projections

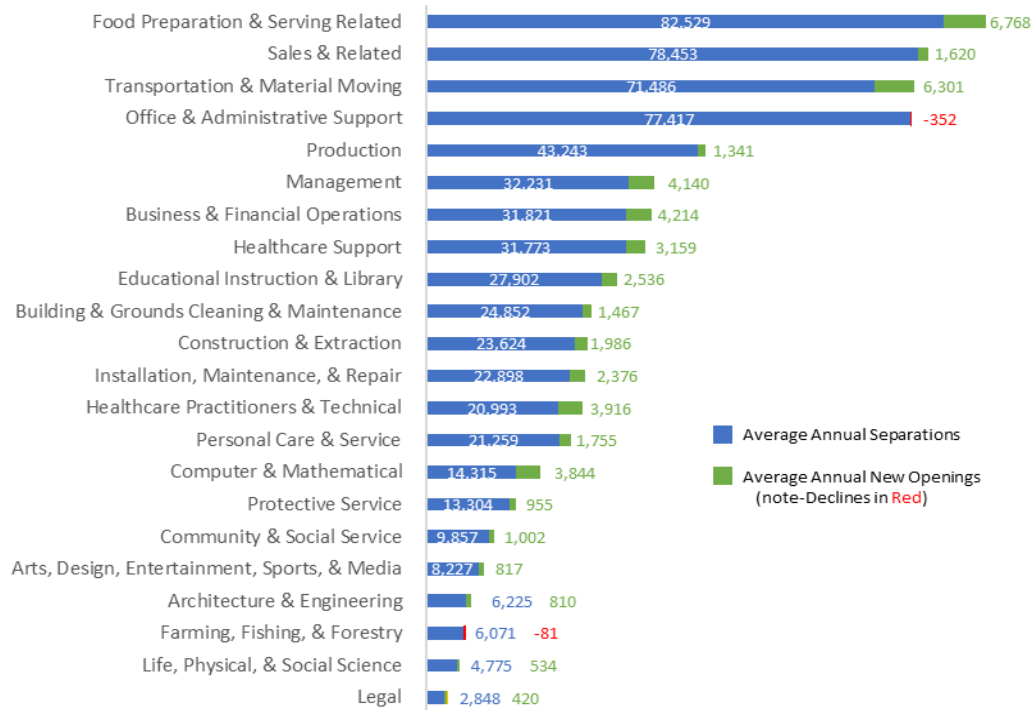
3.2 Openings

Employment growth reflects the number of new jobs created as a result of economic or demographic changes. However, if we want to see the full picture of job opportunities and employment demand, we need to also consider job openings available for entrants due to labor market turnover. Occupational employment projections estimate such job openings when workers either exit the labor force or leave an occupation to enter a different occupation and need to be replaced. For most occupations, these occupational separations provide significantly more job openings than employment growth does (Figure 3).⁷ For example, while the overall employment in Office & Administrative Support Occupations is expected to decline over the next decade (Table 2), this group will still be among the top five occupational groups supplying jobs each year (Figure 4) due to openings. Across all occupations, at the state level, the number of job openings available due to separations (5,905,000) is over 13 times higher than those from growth (445,700).

The largest number of total annual openings will occur in occupations with traditionally high turnover rates or those that do not require extensive skills or training: Food Preparation & Serving Related Occupations; Sales & Related Occupations; Transportation & Material Moving Occupations; Office & Administrative Support Occupations; and Production Occupations. All of these are also located on the lower end of the pay scale, with annual median wages ranging from \$22,860 for Food Preparation & Serving Related Occupations to \$37,250 for Office and Administrative Support Occupations, all below the State median wage for all occupations of \$38,370 (Table 2).

⁷ Starting with the 2016-2026 projections, BLS employed a new method to estimate the number of occupational separations, replacing previous methodology: <https://www.nccommerce.com/blog/2018/10/08/recent-changes-projections-methodology>

Figure 3. Projected Average Annual Openings by Major Occupational Groups, 2021-2030



Source: NC Department of Commerce: 2021-2030 Long-Term Employment Projections

3.3 Educational Attainment

In 2021, occupations requiring no formal education or only a high school diploma⁸ accounted for 60.6% of total employment; however, this is projected to decline to 59.7% by 2030. In contrast, the share of occupations requiring education beyond high school will expand moderately at each educational level. (Table 3). Through 2030, occupations that require more education are projected to have faster annual growth than occupations requiring less education for entry (Figure 4). For instance, jobs requiring a Master’s, Doctoral, or professional degree for entry are projected to have the fastest annual growth—slightly higher than those requiring a Bachelor’s degree. Over 145,000 jobs per year are projected to be available to those with at least a Bachelor’s degree.

Still, occupations that require a High School diploma or equivalent, or no formal education, will see more total annual job openings than all other occupations combined – more than 482,000 each year, largely due to high transfer and exit rates.

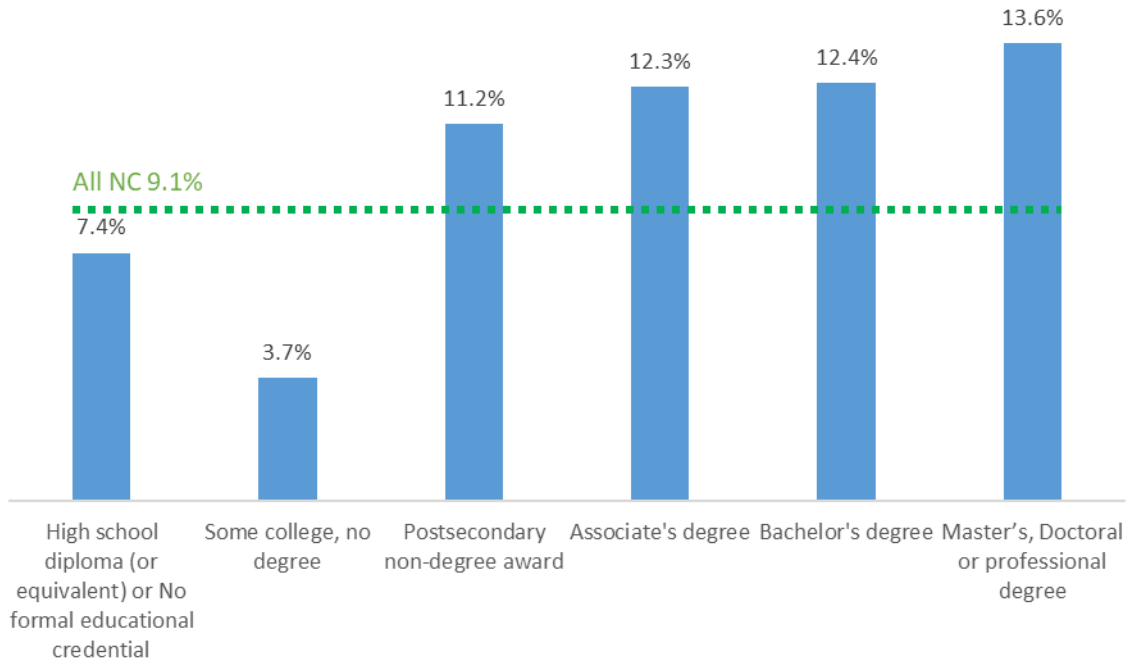
⁸ Based on the BLS entry-level education requirement scale: <https://www.bls.gov/emp/documentation/education/tech.htm>

Table 3. Projected Employment by BLS Minimum Education Required for Entry

Minimum Education Requirement	Empl. Estimate 2021	Empl. 2021, % of Total	Empl. Estimate 2030	Empl. 2030, % of Total	Percent Change	Annual Growth	Average Annual Openings
High school diploma (or equivalent) or No formal educational credential	2,972,681	60.6%	3,191,623	59.7%	7.4%	0.79%	482,667
Some college, no degree	120,252	2.5%	124,657	2.3%	3.7%	0.40%	15,760
Postsecondary non-degree award	329,573	6.7%	366,469	6.9%	11.2%	1.19%	48,510
Associate's degree	103,952	2.1%	116,721	2.2%	12.3%	1.30%	12,973
Bachelor's degree	1,181,540	24.1%	1,327,930	24.83%	12.4%	1.31%	128,324
Master's, Doctoral or professional degree	194,018	4.0%	220,345	4.12%	13.6%	1.42%	17,400

Source: NC Department of Commerce 2021-2030 Long Term Employment Projections

Figure 4. Projected growth rates in NC occupations by required minimum education, 2021-2030



Source: NC Department of Commerce: 2021-2030 Long-Term Employment Projections and US Bureau of Labor Statistics: Minimum Education Required for Entry into Occupations