

NORTH CAROLINA EMPLOYMENT PROJECTIONS 2018-2028¹

Every two years, in conjunction with the Bureau of Labor Statistics (BLS), the North Carolina Department of Commerce publishes 10-year industry and occupation employment projections for statewide and sub-state areas.² The employment projections are an estimate of the future demand for workers based on historical employment data and various economic factors.³ Policy makers, job seekers, education 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. The following summary provides information on the state's projected employment growth by major industry and occupational groups.⁴

Key Highlights of the 2018-2028 Statewide Employment Projections:

- Industry Employment Projections:
 - North Carolina is projected to add more than 302,000 new jobs between 2018 and 2028.
 - The service-providing sector in North Carolina is projected to contribute almost 89% 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 (81,000) and have the second highest percentage growth (13.7%).
 - The Professional, Scientific, & Technical Services industry is projected to be the fastest growing industry with 15.8% growth.
 - Most industries are projected to grow, but 3 sectors are projected to lose jobs: Manufacturing (-19,300 or -4.1%), Utilities (-400 or -2.7%), and Agriculture (-1,000 or -2.0%).
- Occupational Employment Projections:
 - Most occupations are projected to grow, but occupations related to declining industries such as Production Occupations in the Manufacturing industry are projected to decrease.
 - Occupational groups paying more than the Median Annual Wage for all occupations (\$35,750) are generally projected to grow more than the statewide annualized growth rate (0.61%) while occupational groups paying less than the Median Annual Wage for all occupations are generally projected to grow less than the statewide annualized growth rate.
 - Most job openings are expected to come from the need to replace people 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 Please reference <https://files.nc.gov/nccommerce/documents/LEAD/Projections/publishingnote1828.pdf> for consideration of Covid-19 for these employment projections.

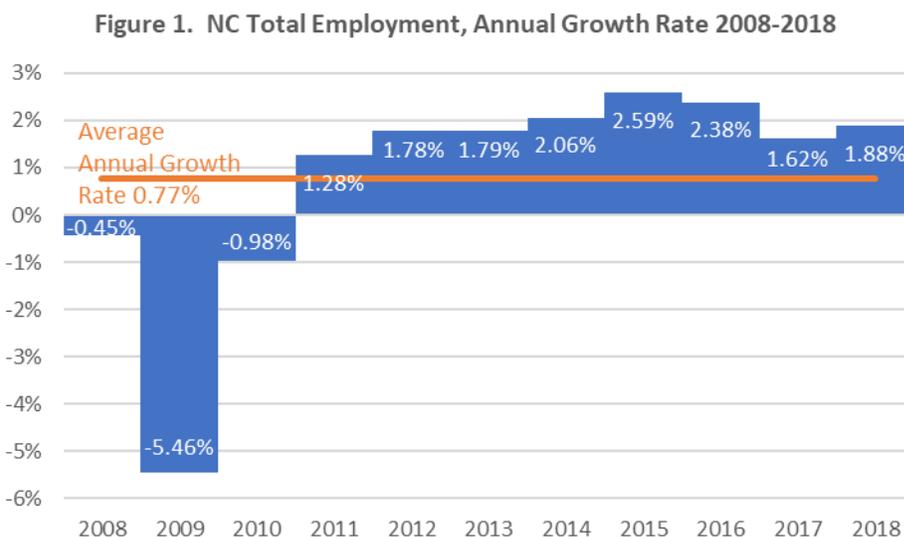
² This report analyzes only statewide projections. Sub-state projection results will be available in late 2020.

³ Projections assume full employment for the economy in the projected year.

⁴ 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>

1. Total Employment

In total, North Carolina is projected to gain about 302,000 jobs through 2028 growing annually at an average rate of 0.61% - slightly lower than its average annual growth rate of 0.77% over the prior 10 years (2008-2018). Looking at historical trends in Figure 1, the average annual rate for most of the years show annual growth larger than the projected 2018-2028 annualized growth rate (AGR). While this growth rate is more modest than the recent past, it is still higher than the national projected growth rate of 0.52%⁵.



Source: NC Department of Commerce: Quarterly Census of Employment and Wages

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 3,752,600 jobs to 4,021,500 jobs from 2018 to 2028. This accounts for an annualized growth rate of 0.69%, greater than the annualized growth rate of all industries and faster than the goods-producing industries (0.13%). (Table 1).

Health Care and Social Assistance is the largest service industry projecting to add the most jobs (+80,800) by 2028. Its projected annualized growth rate of 1.29% (Table 1) is over twice as much as the overall industry total, and each of its detailed sectors is also projected to grow faster than the overall

⁵ Bureau of Labor Statistics Employment Projections 2018-2028 for the United States can be found at: <https://www.bls.gov/emp/>.

industry total. About half 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.⁶ The Professional, Scientific, and Technical Services industry is expected to be the fastest-growing, with an annualized growth rate of 1.48% and more than 40,000 projected new jobs over 10 years. These two industries 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.

The Accommodation and Food Services industry will also be an important contributor to the state’s labor market with more than 46,000 jobs projected by 2028, largely in the Food Services and Drinking Places industry (Figure 2).

Table 1. North Carolina Industry Employment Projections, 2018-2028

Industry Sector	Employment Estimate 2018	Employment Estimate 2028	Net Change	Percent Change	Annualized Growth Rate
Total All Industries	4,791,820	5,094,159	302,339	6.3%	0.61%
Goods-Producing	749,367	759,163	9,796	1.3%	0.13%
Construction	221,048	250,996	29,948	13.6%	1.28%
Mining	3,123	3,237	114	3.7%	0.36%
Agriculture, Forestry, Fishing and Hunting	50,183	49,190	-993	-2.0%	-0.20%
Manufacturing	475,013	455,740	-19,273	-4.1%	-0.41%
Service-Providing	3,752,624	4,021,453	268,829	7.2%	0.69%
Health Care and Social Assistance	589,919	670,722	80,803	13.7%	1.29%
Accommodation and Food Services	430,360	476,729	46,369	10.8%	1.03%
Professional, Scientific, and Technical Services	254,871	295,088	40,217	15.8%	1.48%
Administrative and Support and Waste Management and Remediation Services	296,963	316,564	19,601	6.6%	0.64%
Finance and Insurance	173,423	191,880	18,457	10.6%	1.02%
Educational Services	381,773	396,173	14,400	3.8%	0.37%
Management of Companies and Enterprises	83,296	93,319	10,023	12.0%	1.14%
Government	298,616	308,527	9,911	3.3%	0.33%
Other Services (except Government)	173,555	182,634	9,079	5.2%	0.51%
Transportation and Warehousing	156,033	163,558	7,525	4.8%	0.47%
Arts, Entertainment, and Recreation	75,927	81,887	5,960	7.9%	0.76%
Real Estate and Rental and Leasing	60,122	64,022	3,900	6.5%	0.63%
Information	80,027	81,322	1,295	1.6%	0.16%
Retail Trade	500,182	501,368	1,186	0.2%	0.02%
Wholesale Trade	182,510	183,019	509	0.3%	0.03%
Utilities	15,047	14,641	-406	-2.7%	-0.27%
Self Employed and Unpaid Family Workers	289,829	313,543	23,714	8.2%	0.79%

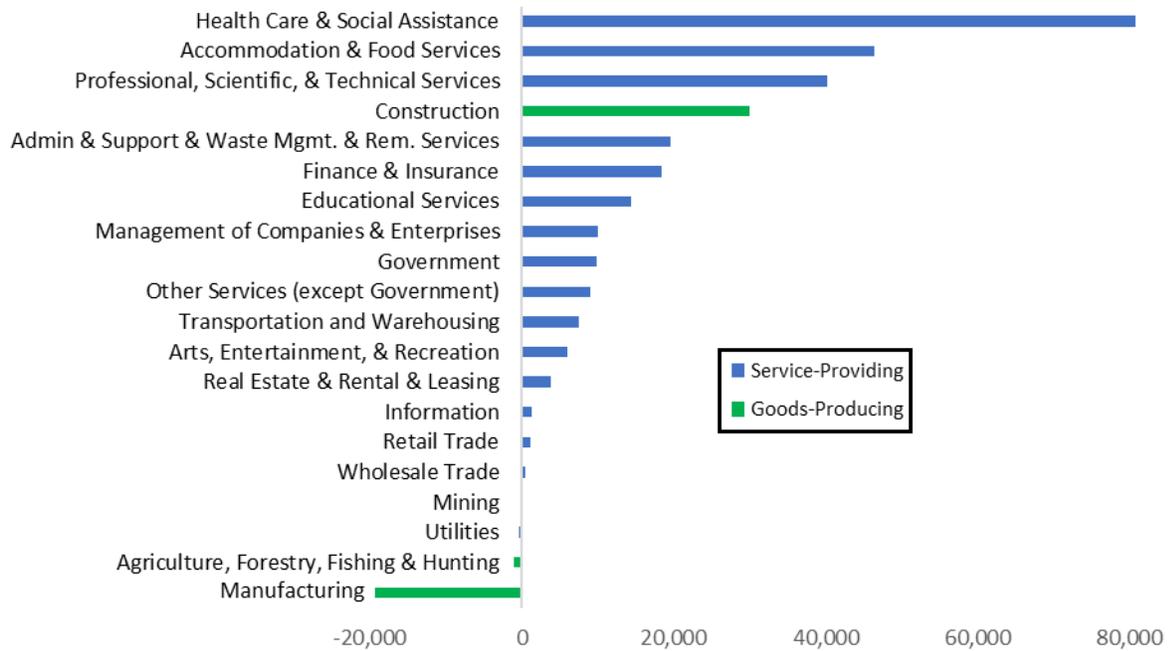
Source: NC Department of Commerce: 2018-2028 Long Term Employment Projections

⁶ 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 29% to 32% between 2018 and 2028.

2.2 Goods-Producing

Goods-producing industries are not projected to grow as fast as service-providing industries, and will gain about 9,800 jobs between 2018 and 2028. As seen in Figure 2, the growth is driven by Construction, projecting to add almost 30,000 jobs. While Construction is projected to be the fourth largest growing industry, the projected employment of 251,000 in 2028 will still be below the employment of 255,000 in 2007.

Figure 2. Industry Employment Projections by Net Growth 2018-2028



Source: NC Department of Commerce: 2018-2028 Long Term Employment Projections

Manufacturing employment is projected to decline modestly, but not as much as the nation as a whole. In North Carolina, Manufacturing is projected to decline by about 19,300 jobs, or at an AGR of -0.41% compared to United States' AGR of -0.52%. The largest projected employment loss in the state's manufacturing industries are: Textile Mills (-6,600), Computer and Electronic Product Manufacturing (-3,000), and Apparel Manufacturing (-2,300). These projected job losses will partially be offset by the projected job increases in manufacturing industries including Food Manufacturing (+1,100), Transportation Equipment Manufacturing (+800), and Machinery Manufacturing (+100).

Employment for Agriculture, Forestry, Fishing and Hunting is expected to decrease slightly, with projected declines in most industries, except Support Activities for Agriculture and Forestry.

3. Occupational Employment

3.1 Growth

Table 2 shows occupational employment estimates for 2018-2028. The five largest occupational groups together are expected to account for almost half of the total employment in 2028: Office and Administrative Support Occupations; Sales and Related Occupations; Food Preparation and Serving Related Occupations; Transportation and Material Moving Occupations; and Production Occupations.

Among these five occupational groups, Sales & Related, Food Preparation & Serving Related, and Transportation & Material Moving are projected to grow. Food Preparation & Serving Related Occupations is projected to grow the fastest and gain the most jobs (51,400 jobs) of all occupational groups, a 12% increase over the 10-year period. The other two occupational groups are projected to decline: Office & Administrative Support (-700 jobs) and Production Occupations, mostly found in the declining Manufacturing industry (-13,400 jobs).

Besides Food Preparation & Serving Related Occupations, other occupational groups expected to increase the most include Healthcare Practitioners & Technical (+34,000), Business & Financial Operations (+26,100), Construction & Extraction (+24,300), and Management Occupations (+24,100).

Jobs related to Healthcare and Personal Care are projected to grow. While Computer & Mathematical Occupations are projected to grow the fastest, Healthcare Support Occupations (healthcare assistants and aides, etc.), Personal Care & Service Occupations (attendants, care workers, hairdressers, etc.), Construction & Extraction Occupations (construction laborers, carpenters, etc.), Food Preparation & Serving Related (waiters and waitresses, cooks, etc.) and Healthcare Practitioners & Technical Occupations (doctors, nurses, technicians, etc.) are all among the top fastest expanding groups (Figure 3).

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 (\$23,830) are expected to increase from about 588,400 jobs in 2018 to about 661,500 jobs by 2028, a 12% increase. Occupational groups with median annual wages above the 75th percentile (\$56,100), are expected to grow from about 1.07 million to 1.19 million jobs by 2028, an 11% increase. Occupational groups paying median annual wages between the statewide 25th and 75th percentiles are only projected to increase by 4% (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 tasks⁷ (which are difficult to automate) in their daily work. The occupational groups that are projected to decline have a high degree of regular, routine work, and could see declines partly due to automation.

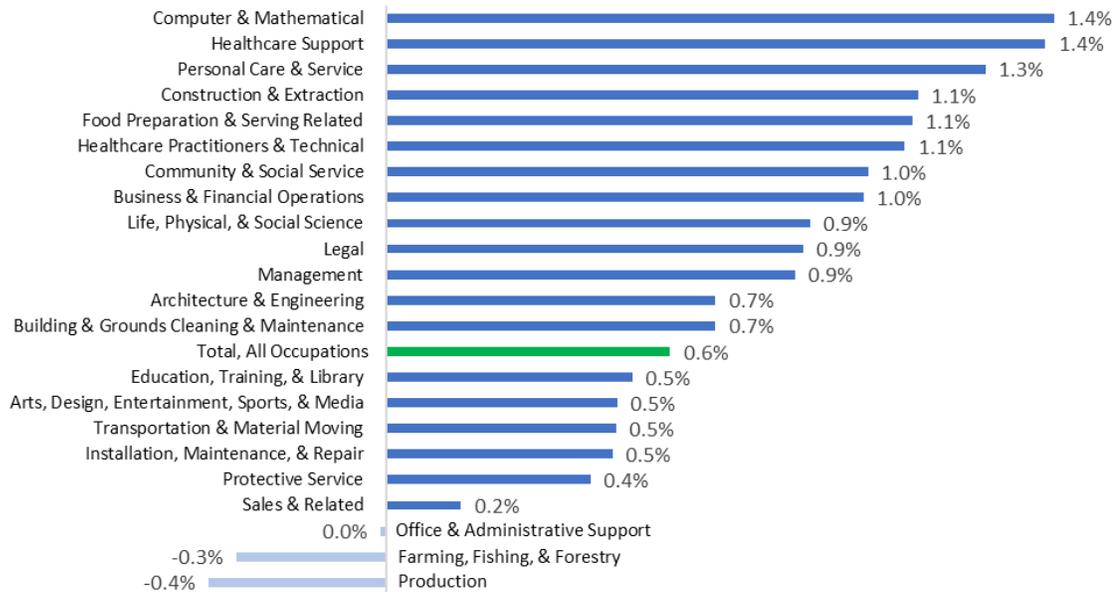
⁷ <https://www.nccommerce.com/blog/2016/12/13/where-jobs-are-supply-and-demand-labor-north-carolina%E2%80%99s-regions>

Table 2. North Carolina Employment Projections by Major Occupational Group, 2018-2028

Occupational Group	Employment Estimate 2018	Employment Estimate 2028	Net Change	Percent Change	Annualized Growth Rate	2018 Annual Median Wage
Management	262,538	286,674	24,136	9.2%	0.9%	\$106,060
Computer & Mathematical	142,376	164,297	21,921	15.4%	1.4%	\$84,680
Architecture & Engineering	67,693	72,666	4,973	7.4%	0.7%	\$72,930
Business & Financial Operations	241,702	267,809	26,107	10.8%	1.0%	\$65,820
Life, Physical, & Social Science	37,919	41,538	3,619	9.5%	0.9%	\$61,660
Legal	28,781	31,481	2,700	9.4%	0.9%	\$60,970
Healthcare Practitioners & Technical	288,829	322,864	34,035	11.8%	1.1%	\$60,790
Arts, Design, Entertainment, Sports, & Media	61,342	64,473	3,131	5.1%	0.5%	\$45,280
Community & Social Service	81,592	90,493	8,901	10.9%	1.0%	\$44,300
Education, Training, & Library	271,124	285,891	14,767	5.5%	0.5%	\$43,650
Installation, Maintenance, & Repair	202,632	212,767	10,135	5.0%	0.5%	\$43,620
Construction & Extraction	201,178	225,522	24,344	12.1%	1.1%	\$37,850
Protective Service	101,178	105,740	4,562	4.5%	0.4%	\$36,840
Total, All Occupations	4,791,820	5,094,159	302,339	6.3%	0.6%	\$35,750
Office & Administrative Support	650,774	650,044	-730	-0.1%	0.0%	\$34,300
Production	354,836	341,483	-13,353	-3.8%	-0.4%	\$31,700
Transportation & Material Moving	340,088	357,338	17,250	5.1%	0.5%	\$29,690
Farming, Fishing, & Forestry	35,183	34,066	-1,117	-3.2%	-0.3%	\$28,370
Healthcare Support	152,578	175,738	23,160	15.2%	1.4%	\$26,670
Sales & Related	514,255	522,635	8,380	1.6%	0.2%	\$25,790
Building & Grounds Cleaning & Maintenance	166,852	179,096	12,244	7.3%	0.7%	\$24,190
Personal Care & Service	159,001	180,811	21,810	13.7%	1.3%	\$22,050
Food Preparation & Serving Related	429,369	480,733	51,364	12.0%	1.1%	\$19,840

Source: NC Department of Commerce 2018-2028 Long Term Employment Projections and Occupational Employment Statistics

Figure 3. Occupational Employment Projections by Major Occupational Groups 2018-2028, Annualized Growth Rate



Source: NC Department of Commerce: 2018-2028 Long Term Employment Projections

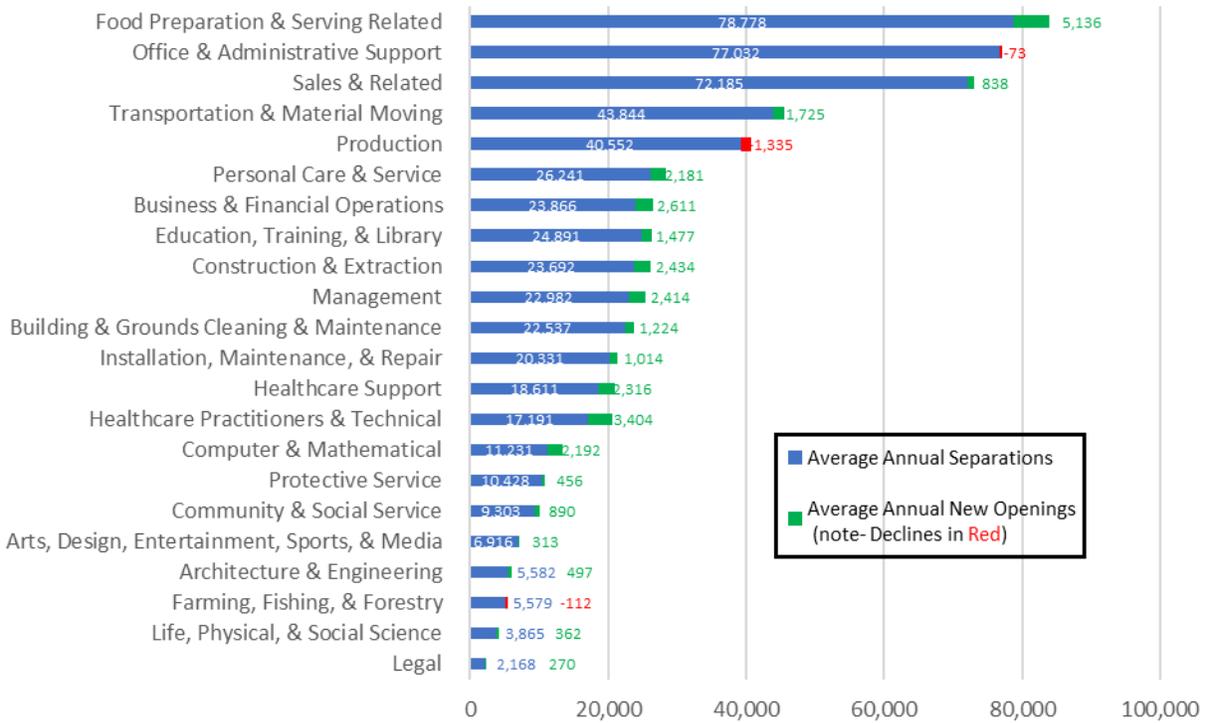
3.2 Openings

Net employment change is an important indicator of the growth in occupations, which reflects the number of new jobs created as a result of economic or demographic changes. However, job openings might also be 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 4).⁸ For example, while the overall employment in various Production Occupations is expected to decline over the next decade (Table 2), these occupations 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 (5,678,000) is 18.8 times higher than those from growth (302,300).

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; Office & Administrative Support Occupations; Sales & Related Occupations; Transportation & Material Moving Occupations; and Production Occupations. All of these are also located on the lower end of the pay scale, with annual median wages ranging from \$19,840 for Food Preparation & Serving Related Occupations to \$34,300 for Office and Administrative Support Occupations, all below the State median wage for all occupations of \$35,750 (Table 2).

⁸ 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 4. Projected Average Annual Openings by Major Occupational Groups, 2018-2028



Source: NC Department of Commerce: 2018-2028 Long Term Employment Projections

3.3 Educational Attainment

In 2018, occupations requiring no formal education or only a high school diploma⁹ accounted for 63.7% of total employment; however, this is projected to decline to 62.6% by 2028. In contrast, the share of occupations requiring education beyond high school will expand moderately at each educational level. (Table 3). Through 2028, occupations that require a Master’s, Doctoral, or professional degree are projected to have the fastest annual growth- slightly higher than those requiring a Bachelor’s degree. Almost 114,000 job 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 423,000 each year, largely due to high transfer and exit rates.

⁹ 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 2018	Empl. 2018, % of Total	Empl. Estimate 2028	Empl. 2028, % of Total	Percent Change	Annual Growth	Average Annual Openings
High school diploma (or equivalent) or No formal educational credential	3,052,017	63.7%	3,187,773	62.6%	4.45%	0.44%	423,404
Associate's degree, Postsecondary non-degree award or Some college	539,221	11.3%	582,696	11.4%	8.06%	0.78%	60,678
Bachelor's degree	1,011,022	21.1%	1,112,549	21.8%	10.04%	0.96%	98,640
Master's, Doctoral or professional degree	189,560	4.0%	211,141	4.1%	11.38%	1.08%	15,318

Source: NC Department of Commerce 2018-2028 Long Term Employment Projections