NORTH CAROLINA ANNUAL ECONOMIC REPORT

A Year in Review 2018

Table of Contents

Page 2	Key Findings
Page 3	Overview of the North Carolina Economy
Page 4	Population Growth
Page 5	Gross Domestic Product
Page 6	Job Growth
Page 8	Labor Force Participation
Page 9	Unemployment
Page 10	Wages
Page 11	Labor Market Tightness
Page 11	Changing Skill Requirements of Occupations

Key Findings:

- North Carolina's 2018 year-over-year population growth rate was 1.1%, which was both higher than the U.S. and roughly in line with the state's recent annual growth rates.
- Mecklenburg and Wake Counties accounted for 33% of the state's net 2018 population growth.
- In 2018, net migration accounted for more than three of every four new residents to the state, while natural growth declined to the lowest level since 1970.
- In 2018, the 16% of North Carolina's total population was 65 or older projected to be 19% by 2028.
- North Carolina had the 11th largest economy by GDP in the U.S. in 2018 at nearly \$566 billion, increasing 2.9% from 2017 level with U.S. GDP growth and higher than NC's 2017 rate (2.2%).
- North Carolina added 81,000 net new jobs over the past year to reach an annual average of over 4.41 million jobs, an increase of 1.9%. The U.S. grew by 1.6%.
- Service-Providing industries contributed 77% of the net new jobs.
- In recent years, job growth in North Carolina's large metropolitan areas has outperformed other large metros around the country, while the state's mid-size cities and nonmetro areas have underperformed their national counterparts.
- North Carolina's largest sector by employment is Health Care and Social Assistance at nearly 620,000 jobs, followed by Retail Trade at over 500,000 jobs. Manufacturing is third at about 475,000 jobs.
- North Carolina's labor force participation rate fell from 61.5% in 2017 to 61.2% in 2018, while the nation's rate remained level over the past year at 62.9%.
- North Carolina's average annual unemployment rate fell by 0.6 percentage points (to 3.9%) in 2018, similar to the national decline of 0.5 percentage points (to 3.9%).
- North Carolina's average annual wage was \$50,756 in 2018, rising 1.3% from 2017 after adjusting for inflation. The U.S. average wage was \$57,266 in 2018, rising 0.9% from 2017.
- North Carolina has a tight labor market, meaning there are relatively few jobseekers per job opening. In 2018, NC had 1.9 jobseekers per job opening the tightest labor market since at least 2006.
- "Knowledge jobs" again increased their share of North Carolina's job market. In 2018, about 40% of the state's jobs fit into this category.

Overview of the North Carolina Economy

North Carolina has the 9th largest state population, encompasses an area of almost 54,000 square miles ranging from the Blue Ridge Mountains to the Atlantic Ocean, and had a GDP of nearly \$566 billion in 2018, making its economy slightly larger than that of Sweden.¹ Over the previous century, it has transformed from an agricultural state with a manufacturing base in tobacco, textiles, and furniture to an advanced economy with strengths in finance, biotechnology, advanced manufacturing, and the knowledge economy more broadly. Throughout this transformation, the North Carolina economy has in many ways become more like the U.S. economy, while maintaining some key distinctions.

North Carolina has benefitted from Sunbelt migration over the past several decades, particularly during the 1990's and 2000's, which helped develop large metro areas in Charlotte, Raleigh, and the Piedmont Triad, as well as the smaller but fast-growing metros of Asheville and Wilmington. This process involved adding people from other parts of the U.S. as well as through international immigration. Still, North Carolina has the second largest rural state population in the U.S. with 34% of the state's residents living in rural areas. However, the rural population has not benefitted to the same extent from the transformation of the state and its economy. Out-of-county commuting has increased, with only 14 out of 100 counties having more than 50% of their workers living and working in the same county as of 2017, down from 47 counties in 2002.³

Like the U.S. and other developed nations, North Carolina's population faces certain larger structural challenges including a slowing population growth rate, an aging workforce, and issues of inequality and regional disparities. Like the U.S., the state has become less homogenous, with prosperous urban areas (characterized by knowledge-intensive service industries) and less prosperous rural areas still reflective of manufacturing's legacies. In addition, North Carolina is also experiencing larger changes to the economy due to technological advancements, global trade and interdependence, and the slowing of economic growth, new firm formation and productivity. As we seek to understand recent changes in North Carolina's economic performance, it is important to highlight areas in which the state is reflective of general trends as well as areas in which it diverges from these trends.

Furthermore, North Carolina's economy, while expanding, must be viewed in the context of the Great Recession and the slow recovery that followed, which accelerated existing structural changes already underway. Following a peak in late 2007, North Carolina's number of jobs fell by 400,000 (almost 10%) and it took seven years to return to pre-recession levels.⁴ In 2017, as the state continued to move beyond the impacts of the Great Recession, North Carolina surpassed the national jobs recovery. By 2018, the state had 8.5% more jobs than during its 2007 peak, while the nation had 8.0% more.⁵

¹ U.S. Census Bureau, Bureau of Economic Analysis, International Monetary Fund.

² U.S. Census Bureau, 2010 Census.

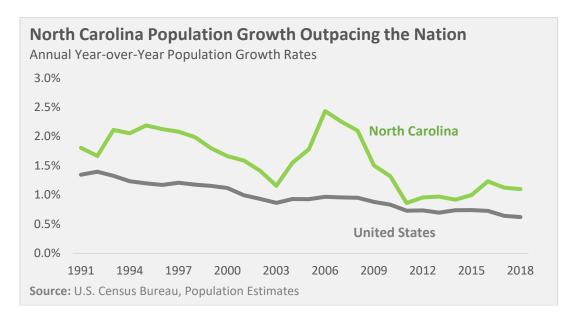
³ U.S. Census Bureau, Longitudinal-Employer Household Dynamics Program.

⁴ North Carolina Department of Commerce, QCEW.

⁵ Ibid.

Population Growth

Between 2017 and 2018, North Carolina's population grew 1.1%, adding about 113,000 people. The state grew faster than both the nation (0.6%) and the rest of the South (0.9%).⁶ Since 2010, the state's population growth has outperformed the nation, having grown 8.5% compared to the nation's 5.8%.



Looking back over the past several decades, the state's population growth has been consistently higher than national growth. North Carolina's annual growth rate peaked at 2.4% prior to the Great Recession, followed by slowing growth rates, which leveled out at about 1% from 2011 to 2015. The state has experienced a slight uptick in growth over the past three years, diverging from the mostly flat and declining U.S. annual rates.

From 2017 to 2018, the combined populations of Mecklenburg and Wake Counties grew by over 37,000 people, accounting for about 33% of the state's net population increase. The Charlotte, Raleigh, and Durham Metropolitan Statistical Areas (MSAs) accounted for 63% of the state's total growth between 2017 and 2018. Nevertheless, many North Carolinians still live in rural areas. As of 2010, 34% of the state's residents lived in rural Census tracts, giving North Carolina the second largest rural population in the country.⁷

The composition of the state's population growth has been changing over time. In 2018, net migration accounted for more than three of every four new residents to the state, while natural growth declined to the lowest level since 1970. In contrast, net migration accounted for 48% of the nation's new residents in 2018. The aging of the state's population as well as lower fertility rates have contributed to this gradual decline in natural increase. In 2010, 13% of the state's population was 65 or older. By 2018, the 65+ age group had increased to 16% of the total population, matching the U.S. proportion. This age group is projected to reach 19% of the state's population by 2028.

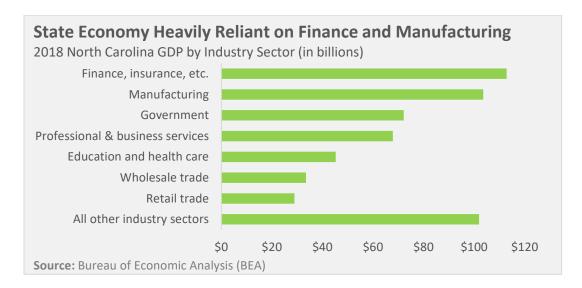
⁸ North Carolina Office of State Budget and Management.

⁶ Population data in this section from U.S. Census Bureau population estimates.

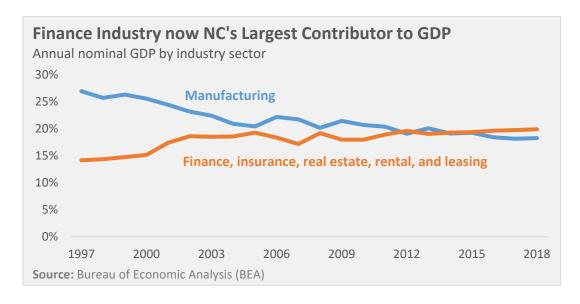
⁷ U.S. Census Bureau, 2010 Census.

Gross Domestic Product

In 2018, North Carolina had the 11th largest state economy by gross domestic product (GDP) in the U.S. at nearly \$566 billion. The state's real GDP increased 2.9% over the past year, matching the 2.9% growth at the national level. The Information industry sector experienced the fastest industry GDP growth in North Carolina over the past year (8.1%), while Manufacturing saw the largest level increase (\$4.0 billion chained 2012 dollars). Over the past five years, the state's real GDP grew 11.4%, while the U.S. economy grew 12.6%.



The two largest contributors to the state's GDP are 1) the Finance, insurance, real estate, rental, and leasing sector and 2) the Manufacturing sector. Combined, these two industry sectors accounted for 38% of the state's GDP in 2018. These industries have dominated North Carolina's economy since the 1990s, but the gap between them has narrowed and reversed in recent years. Since 2014, the Finance sector has consistently been the largest contributor to North Carolina's economy.

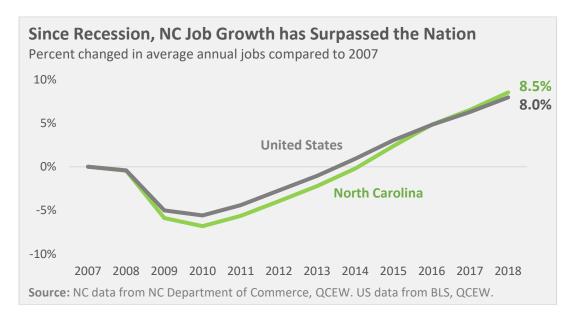


⁹ All GDP data from Bureau of Economic Analysis.

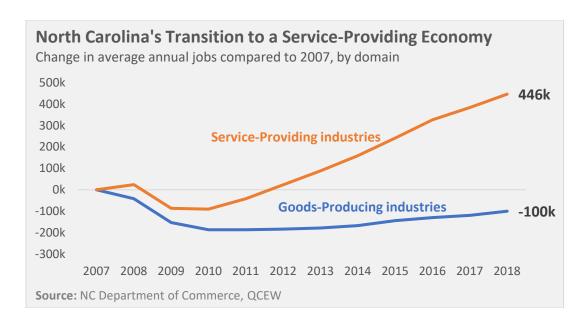
Job Growth

Between 2017 to 2018, North Carolina added about 81,000 net new jobs to the state, reaching an annual average employment of over 4.41 million jobs, an increase of 1.9%. The U.S. grew by 1.6% during the same period. More than three-quarters of the state's job growth was in Service-Providing industries (62,000 jobs), with Goods-Producing industries adding only 19,000 jobs.

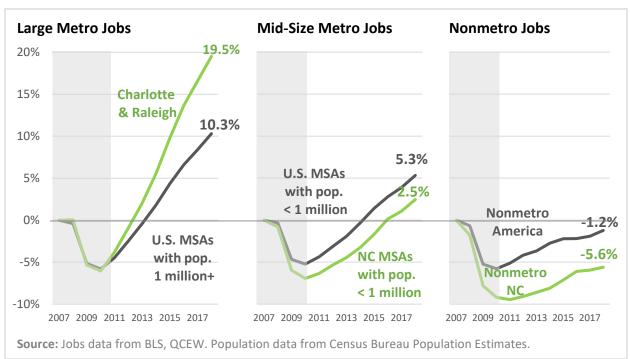
Since the pre-recession peak in 2007, North Carolina's industry employment has grown by 8.5% while the U.S. had grown by 8.0%. During the recession, job losses in the state were greater (as a percentage) than the U.S., and the state's job recovery lagged the U.S. for most of the decade that followed. However, North Carolina 's job recovery has surpassed the nation since 2017.



However, the recovery in jobs has varied by industry. North Carolina's economy, like the U.S., has been transitioning from a Goods-Producing to a Service-Providing economy over the past several decades. Since 2007, Service-Providing industries have grown, while Goods-Producing industries have not recovered to their pre-recession levels. From 2017 to 2018, Service-Providers made up 77% of the state's net new jobs.



In addition, certain geographies have largely defined the state's job growth since the end of the Great Recession. Job growth in North Carolina's large metro areas (the Raleigh and Charlotte MSAs) is far outpacing that of our nonmetro areas. But the success of our state's large MSAs is perhaps better understood when comparing them to other large MSAs (MSAs with over 1 million in population) around the country. Nationally, jobs have grown most rapidly in large cities, having increased about 10% in aggregate compared to 2007. In North Carolina, our large MSAs have grown by nearly 20%. On the other hand, our state's mid-size MSAs (MSAs with less 1 million in population) and our nonmetro areas have underperformed their national counterparts in job growth. In stark contrast to our state's large metro areas, nonmetro areas in North Carolina had 5.6% fewer jobs in 2018 than in 2007.

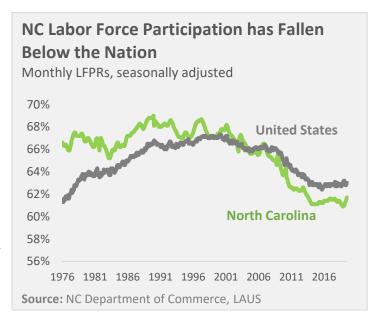


In 2018, the largest sector by employment was Health Care and Social Assistance, followed by Retail Trade, Manufacturing, Accommodation and Food Services, and Educational Services. The fastest-growing large industries over the year include Professional, Scientific and Technical Services (6.4%), Construction (5.9%), and Transportation and Warehousing (4.5%).

	2018	% of 2018	Change
Industry	NC Jobs	NC Jobs	from 2017
Health Care and Social Assistance	619,127	14.0%	2.0%
Retail Trade	506,707	11.5%	0.3%
Manufacturing	474,811	10.8%	1.6%
Accommodation and Food Services	430,616	9.8%	1.7%
Educational Services	383,059	8.7%	0.5%
Admin. and Support & Waste Mgmt	299,167	6.8%	1.0%
Professional, Scientific, & Tech. Services	258,419	5.9%	6.4%
Public Administration	245,575	5.6%	1.1%
Construction	220,972	5.0%	5.9%
Wholesale Trade	182,441	4.1%	-1.5%
Finance and Insurance	173,699	3.9%	3.1%
Transportation and Warehousing	156,538	3.5%	4.5%
Other Services (except Public Admin)	111,442	2.5%	2.4%
Mgmt of Companies & Enterprises	83,289	1.9%	0.6%
Information	81,080	1.8%	1.4%
Arts, Entertainment, and Recreation	77,524	1.8%	2.4%
Real Estate and Rental and Leasing	60,167	1.4%	2.7%
Agriculture, Forestry, Fishing & Hunting	27,160	0.6%	-3.1%
Utilities	16,351	0.4%	7.7%
Mining	3,117	0.1%	8.1%

Labor Force Participation

While the state's population has rapidly increased in recent years, labor force participation has fallen. Both in North Carolina and nationally, labor force participation rates (LFPR) have been on a downward trend for the past two decades. Defined by the Bureau of Labor Statistics, LFPR is portion of the civilian, noninstitutionalized population aged 16 or above that is either employed or actively seeking employment. North Carolina's LFPR was only slightly below that of the nation prior to the Great Recession, but the state's rate has fallen farther than that of the U.S. since that time. Compared to 2007. North Carolina's annual LFPR was 4.4 percentage points lower in 2018, while the



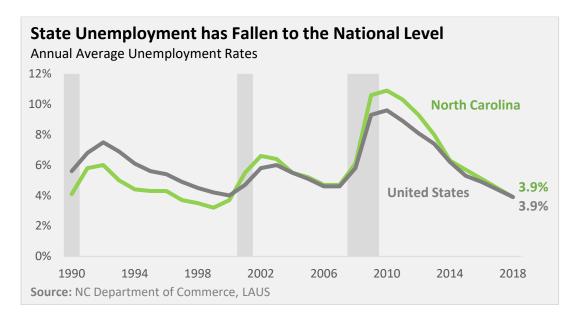
U.S. LFPR was 3.1 percentage points lower.¹⁰ After several years of modest upward momentum, the state's annual LFPR declined from 61.5% in 2017 to 61.2% in 2018. The national LFPR remained level over the past year at 62.9%.

North Carolina, like the nation, has an aging population, which has pulled down the LFPR. In addition to this longer-term structural trend, changes in the business cycle and increased higher education enrollment can lower LFPRs. Previous research by LEAD has estimated that about half the decline in the state's LFPR from 2000 to 2016 is attributable to an aging population. ¹¹ This analysis suggested that, absent an aging population, North Carolina's LFPR would have been 3.3 percentage points higher in 2016.

Unemployment

In 2018, North Carolina had an annual unemployment rate of 3.9%, matching the national rate. From 2017 to 2018, the state's annual average unemployment rate fell by 0.6 percentage points, while the nation declined by 0.5 percentage points. Within the state, however, large differences in unemployment rates exist between counties, regions, and among metropolitan areas. For instance, metro unemployment rates ranged from 3.1% in Asheville to 5.6% in Rocky Mount.

Historically, North Carolina's unemployment rate has trended below the U.S. level. However, since the turn of the century, North Carolina's rate has exceeded that of the nation, particularly during the two most recent recessions. North Carolina's unemployment rate reached 10.9% in 2010, far surpassing the previous highs recorded during the early 1980s. Since 2013, the state's unemployment rate has more closely tracked the U.S. rate, though mostly remaining at a slightly elevated level.



¹⁰ NC Department of Commerce, LAUS

¹¹ Why Are Fewer North Carolinians Participating in the Labor Force?, NC Department of Commerce, LEAD Feed, https://www.nccommerce.com/blog/2016/11/03/why-are-fewer-north-carolinians-participating-labor-force

¹² All unemployment data from Local Area Unemployment Statistics, North Carolina Department of Commerce and Current Population Survey, Bureau of Labor Statistics.

The population of long-term unemployed is of interest to the workforce development system and policymakers. The share of unemployed without work for 27 or more weeks reached 49% in the aftermath of the Great Recession in 2010, nearly double the highs seen in the early 1980s, and remained higher than pre-recession levels through 2018. Research carried out by LEAD has shown that long-term unemployment during the Great Recession was a widespread phenomenon that affected workers in all industries, demographic groups, and regions of North Carolina, despite the concentrated impact that the recession had on sectors of the state's economy. The long-term unemployed tended to be older than the short-term unemployed, although other differences in composition between the two groups were generally small. Workers from Goods-Producing sectors were as prevalent among the short-term unemployed as among the long-term. The aggregate increase in long-term unemployment in North Carolina can be explained by prolonged jobless durations within all demographic groups, rather than by a compositional shift in the unemployed population.

Wages

North Carolina's average wage for all industries was \$50,756 in 2018, rising 1.3% from 2017 after adjusting for inflation. The U.S. average wage was \$57,266 in 2018, rising 0.9% from 2017. Since wages bottomed out in 2008 during the Great Recession, North Carolina's real average annual wage has grown 9.5%, while U.S. wages have grown 7.8%.

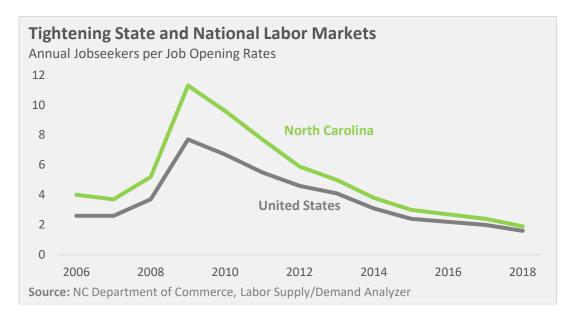


North Carolina's average wage has remained around 88% of the U.S. average since 2001. Per the Bureau of Economic Analysis, North Carolina's regional price parity was 91.3% of the U.S. in 2017, meaning North Carolina's average wage was still about 3% below the U.S. after adjusting for the state's relatively low cost-of-living.

¹³ All wage data from Quarterly Census of Employment and Wages, Bureau of Labor Statistics. Inflation adjusted using CPI-U. North Carolina Department of Commerce | Labor and Economic Analysis Division 4329 Mail Service Center | Raleigh, NC 27699-4329

Labor Market Tightness

The North Carolina Labor Supply/ Demand Analyzer provides estimates of the number of jobseekers (labor supply) and job openings (labor demand) in North Carolina and its regions. ¹⁴ Researchers can use these data to track the tightness of our state's labor market.



North Carolina has a tight labor market, creating opportunities for jobseekers but challenging employers looking to hire. A "tight" labor market means that the state has relatively few jobseekers per job opening. In other words, there is relatively little labor supply compared to the amount of labor demand. On average, there were about 365,000 jobseekers and nearly 200,000 job openings in 2018—a "supply/demand rate" of 1.9 jobseekers per job opening. This rate represents the tightest labor market since at least 2006 (the first year for which this data is available). For context, at its post-Great Recession peak, there were 11.3 jobseekers per job opening in North Carolina in 2009.

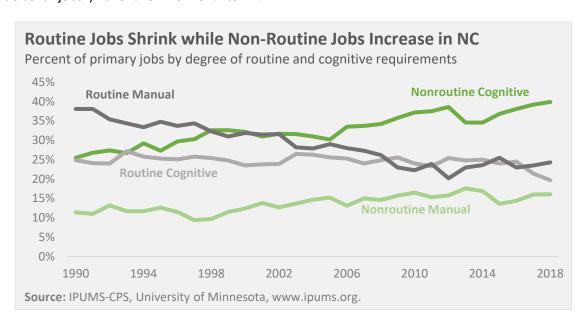
Since 2009, all eight of Prosperity Zones in the state have experienced tightening labor markets, but the degree of that tightness differs. In 2018, regional supply/demand rates ranged from 1.4 in the Southwest to 3.7 in the Southeast. With that said, each of the eight regions experienced its tightest labor market since 2006.

Changing Skill Requirements of Occupations

One way to capture the changing nature of jobs is to divide existing occupations into whether they involve primarily manual or cognitive activities, and whether those activities are primarily routine or non-routine. Since the late 1990s, nonroutine jobs have been growing as a portion of total jobs, while the share of routine jobs has fallen. In particular, nonroutine cognitive jobs (sometimes thought of as

¹⁴ NC Department of Commerce, Labor Supply/Demand Analyzer, https://nccareers.org/s-d/. Job posting data comes from the Conference Board/Help Wanted Online.

"knowledge jobs") have increased from 30% of jobs in 1997 to 40% in 2018, while routine manual jobs ("blue collar jobs") have fallen from 34% to 24%. ¹⁵



From 2017 to 2018, nonroutine cognitive ("knowledge") and nonroutine manual ("service") jobs increased by 6.6% and 5.2% respectively. Routine cognitive ("office and sales") jobs decreased by 4.4%, though routine manual ("blue collar") jobs grew 8.4%. Based on employment projections through 2026, nonroutine jobs are expected to continue their growth as a portion of the job market.

¹⁵ Occupational data from IPUMS-CPS and North Carolina Department of Commerce calculations.