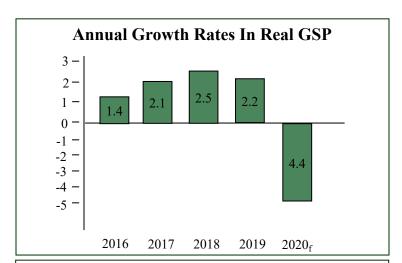
Barings/UNC Charlotte Economic Forecast May 28th, 2020

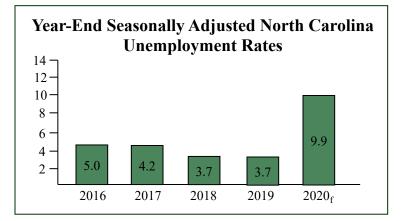




The data used in this report comes from the websites for the U.S. Department of Commerce's Bureau of Economic Analysis (www.bea.gov) and the North Carolina Employment Security Commission (www.ncesc.com) as of May 22, 2020. The opinions expressed in this Forecast by Professor Connaughton (the Barings Professor of Financial Economics at the Belk College of Business) and UNC Charlotte do not necessarily represent the views of Barings.

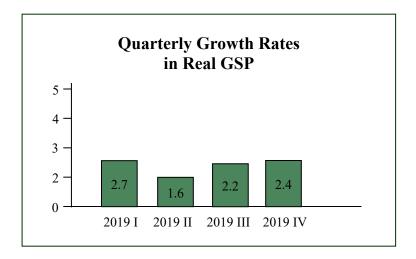


GSP/Gross State Product is a yardstick that measures the total output of a state's economy for a given year. It is analogous to the U.S. Gross Domestic Product (GDP).



FORECAST HIGHLIGHTS

- For 2019, NORTH CAROLINA real GSP is increased by 2.2 percent over the 2018 level.
- Fourteen of the state's fifteen economic sectors experienced output increases during 2019. The sectors with the strongest expected growth were mining with an annual real increase of 16.2 percent; business and professional services with a real increase of 7.5 percent; retail trade with a real increase of 5.8 percent; other services with real increase of 3.2 percent; and educational and health services with a real increase of 2.9 percent.
- For 2019, NORTH CAROLINA establishments added 73,300 net additional jobs, an increase of 1.7 percent.
- For 2020, NORTH CAROLINA real GSP is forecast to decrease by 4.4 percent over the 2019 level.
- Twelve of the state's fifteen economic sectors are forecast to experience output decreases during 2020. The sectors with the largest expected declines are hospitality and leisure services with a projected real decrease of 34.8 percent, other services with a projected real decrease of 13.4 percent, construction with a projected real decrease of 8.8 percent, and nondurable goods manufacturing with a projected real decrease of 7.5 percent.
- For 2020, NORTH CAROLINA establishments are forecast to lose 300,000 net jobs, a decrease of 6.5 percent.
- The North Carolina unemployment rate is expected to peak at 17.0 percent in May and by December of 2020, the state's unemployment rate is expected to be around 9.9 percent.



2019 Highlights

| Current Dollars | 2019* | Percent Change |
|-------------------------|-----------|-------------------|
| Total Gross Product | 587,711.0 | 4.3 |
| Constant (2012 Dollars) | | |
| Total Gross Product | 493,549.1 | 2.2 |
| Agricultural | 5,502.6 | 0.1 |
| Mining | 712.1 | 16.2 |
| Construction | 17,110.5 | 2.5 |
| Manufacturing | 90,432.2 | -0.8 |
| Durable Goods | 43,274.8 | 1.6 |
| Nondurable Goods | 47,049.5 | -3.0 |
| TWU | 19,413.50 | 1.1 |
| Wholesale Trade | 31,166.4 | 2.5 |
| Retail Trade | 29,470.7 | 5.8 |
| Information | 21,729.8 | 0.2 |
| FIRE | 92,411.2 | 2.8 |
| B & P | 51,586.1 | 7.3 |
| E & H | 42,278.1 | 2.9 |
| H & L | 17,887.3 | 1.5 |
| Services | 9,825.4 | 3.2 |
| Government | 64,030.3 | 0.5 |

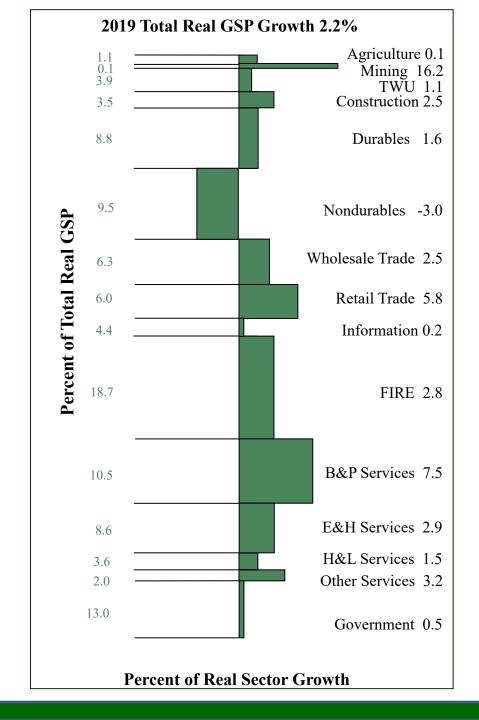
2019 GSP

Gross State Product (GSP) is forecast to reach a level of \$587,711.0 million in 2019. Real (inflation-adjusted) GSP is expected to increase by 2.2 percent over the 2018 level. This growth in 2019 represents the tenth consecutive year of growth since this expansion began in 2010.

For 2019, first quarter GSP increased by an annualized real rate of 2.7 percent. During the second quarter, GSP increased by an annualized real rate of 1.6 percent. In the third quarter, GSP increased by an annualized real rate of 2.2 percent. In the fourth quarter of 2019, GSP increased by an annualized real rate of 2.4 percent.

2019 represented the tenth and final year of the economic expansion following the "Great Recession." Looking back, this was the longest expansion of the 33 on record since 1854. It lasted from July of 2009 until February of 2020, 128 months. The previous longest expansion was between March of 1991 and March of 2001, which lasted 120 months. It is very likely that this expansion would have continued through at least 2020 and probably well into 2021. However, we will never know. We will look back on this ten-year expansion as a positive and interesting decade. Just three months ago, our major worries were whether a looming trade war with China was going to slow the economy down in 2020. To paraphrase former Secretary of Defense Donald Rumsfeld, it is the unknown unknowns that cause the most trouble.

Going forward the one takeaway from this ten-year expansion is that the North Carolina growth rate over the period has trailed the U.S. ten-year average growth rate of 2.3 percent. This is a consideration as we emerge from the COVID-19 shutdown. The big question is whether the North Carolina recovery will again be weaker than the U.S. recovery. 2020 and 2021 will be very interesting and very uncertain years.



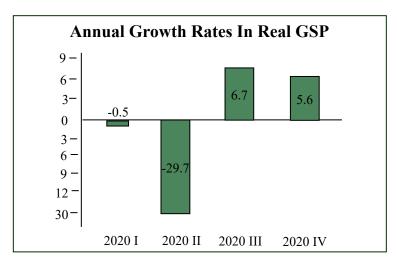
2019 GSP SECTOR ANALYSIS

The chart to the left presents the projected contributions of each major economic sector to North Carolina's Gross State Product (GSP). The real (inflation-adjusted) growth rate for 2019 is forecast to increase by 2.2 percent. Projected real growth rates for each sector (displayed in black type) are plotted on the horizontal axis. Projected percentages of GSP contributed by each sector (displayed in green type) are plotted on the vertical axis. The resulting rectangles show the expected weighted importance of each sector's growth during 2019. All of the sector information presented in the table to the left is based on the new North American Industry Classification System (NAICS) definitions.

Fourteen of the state's fifteen economic sectors are experienced output increases during 2019. The sectors with the strongest growth were mining with an annual real increase of 16.2 percent; business and professional services with a real increase of 7.5 percent; retail trade with a real increase of 5.8 percent; other services with a real increase of 3.2 percent; educational and health services with a real increase of 2.9 percent; finance, insurance, and real estate (FIRE) with a real increase of 2.8 percent; construction with a real increase of 2.5 percent; and wholesale trade with a real increase of 2.5 percent.

Six other sectors experienced growth rates, however, at levels below the overall 2.2 percent GSP real growth rate. These sectors were durable goods manufacturing with a real increase of 1.6 percent; hospitality and leisure services with a real increase of 1.5 percent; transportation, warehousing; utilities (TWU) with a real increase of 1.1 percent; government with a real increase of 0.5 percent; information with a real increase of 0.2 percent; and agriculture with a real growth rate of 0.1 percent.

Only nondurable goods manufacturing experienced an output decline in 2019.



2020 Highlights

| Current Dollars | | Percent Change |
|-------------------------|-----------|-------------------|
| Total Gross Product | 568,837.4 | -3.2 |
| Constant (2012 Dollars) | | |
| Total Gross Product | 472,021.0 | -4.4 |
| Agricultural | 5,727.9 | 3.9 |
| Mining | 730.8 | 2.1 |
| Construction | 15,627.9 | -8.8 |
| Manufacturing | 86,939.9 | -7.3 |
| Durable Goods | 40,240.7 | -7.0 |
| Nondurable Goods | 46,699.2 | -7.5 |
| TWU | 18,887.2 | -2.7 |
| Wholesale Trade | 29,265.6 | -6.1 |
| Retail Trade | 28,806.1 | -2.6 |
| Information | 21,240.6 | -2.2 |
| FIRE | 91,727.4 | -0.7 |
| B & P | 49,516.9 | -4.0 |
| E & H | 39,967.0 | -5.5 |
| H & L | 11,655.8 | -34.8 |
| Services | 8,512.8 | -13.4 |
| Government | 63,415.0 | -1.0 |

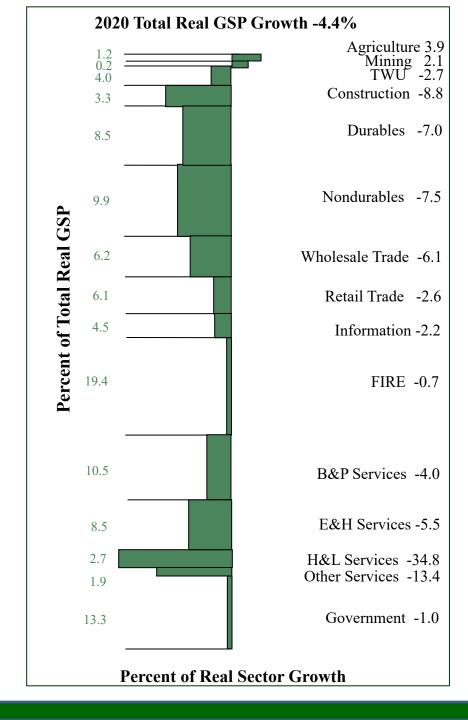
2020 GSP

Gross State Product (GSP) is expected to reach a level of \$568,837.4 million in 2020. Real (inflation-adjusted) GSP is expected to decrease by 4.4 percent over the 2019 level. The COVID-19 shutdown in early 2020 ended the ten plus year economic expansion that the North Carolina economy had experienced since 2010.

For 2020, first quarter GSP is expected to decrease by an annualized real rate of 0.5 percent as the COVID-19 response slowly kicked in. During the second quarter, GSP is expected to decrease by an annualized real rate of 29.4 percent during the U.S. economy was essentially shutdown by government action. In the third quarter, GSP is expected to increase by an annualized real rate of 6.7 percent as the recovery begins. In the fourth quarter of 2020, GSP is expected to increase by an annualized real rate of 5.6 percent.

The North Carolina economy like the U.S. economy experienced its biggest decline in GDP since the Great Depression of the 1930s. The decline was caused not by an economic disequilibrium, but by a designed action by the government to shutdown normal economic interaction to save lives in response to an unprecedented pandemic. Not since the Spanish Flu pandemic of 1918 have we seen anything approaching this year's health crisis. However, in 1918 scientists did not understand as much about viral spread as we do today, and shutting down the economy and social distancing were not considered. In fact, because of the weapons production associated with World War I the U.S. economy actually expanded during 1918.

Going forward from the middle of 2020 the number one question is how long before the economy gets back to its 2019 level and when does the unemployment rate again approach "full employment". Given the devastating hit the economy took during the second quarter of 2020 it is likely to take until mid-2022 before GDP reaches the 2019 quarter 4 high point. Unfortunately, the unemployment rate will take another 6 to 9 months before it drops below 5.0 percent.



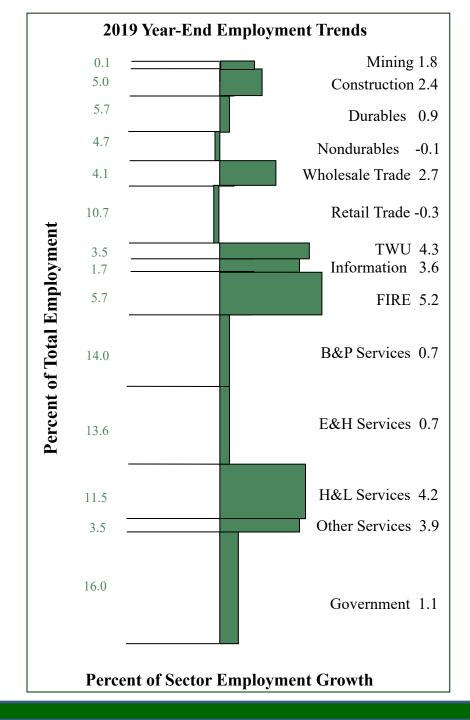
2020 GSP SECTOR ANALYSIS

The chart to the left presents the projected contributions of each major economic sector to North Carolina's Gross State Product (GSP). The real (inflation-adjusted) growth rate for 2020 is forecast to decrease by 4.4 percent. Projected real growth rates for each sector (displayed in black type) are plotted on the horizontal axis. Projected percentages of GSP contributed by each sector (displayed in green type) are plotted on the vertical axis. The resulting rectangles show the expected weighted importance of each sector's growth during 2020. All of the sector information presented in the table to the left is based on the new North American Industry Classification System (NAICS) definitions.

Twelve of the state's fifteen economic sectors are forecast to experience output decreases during 2020. The sectors with the largest expected declines are hospitality and leisure services with a projected real decrease of 34,8 percent, other services with a projected real decrease of 13.4 percent, construction with a projected real decrease of 8.8 percent, nondurable goods manufacturing with a projected real decrease of 7.5 percent, durable goods manufacturing with a projected real decrease of 7.0 percent, wholesale trade with a projected real decrease of 6.1 percent, and educational and health services with a projected real decrease of 5.5 percent.

Six other sectors are expected to experience GDP declines, but at levels less than the overall 4.4 percent GSP real decline. These sectors are business and professional services with a projected real decrease of 4.0 percent; transportation, warehousing; utilities (TWU) with a projected real decrease of 2.7 percent; retail trade with a projected real decrease of 2.6 percent; information with a projected real decrease of 2.2 percent; government with a projected real decrease of 1.0 percent; and finance, insurance, and real estate (FIRE) with a projected real decrease of 0.7 percent

Only agriculture and mining is expected to experience growth in 2020.

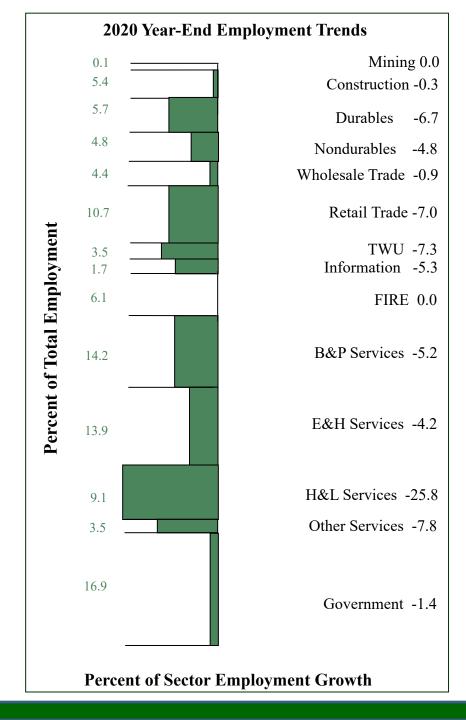


2019 EMPLOYMENT SECTOR ANALYSIS

The sector employment analysis presented on this page is based on the new North American Industrial Classification System (NAICS) and a major BLS benchmarking adjustment released in March of 2019. As a result, seasonally adjusted nonagricultural employment in North Carolina reached 4,593,900 persons by December 2019, an increase of 1.7 percent over the employment level in December 2018. The state added 73,300 net jobs in 2019.

Twelve of the state's fourteen nonagricultural sectors of the economy are experienced employment increases during 2019. The sectors with the strongest employment increases in 2019 were FIRE at 5.2, TWU at 4.3. and hospitality and leisure services at 4.2 percent.

| 2019 Employment Highlights | | |
|----------------------------|---------------|-------------------|
| Total Establishment | Year-End* | Percent Change |
| Employment | 4,593.9 | 1.7 |
| Mining | 5.6 | 1.8 |
| Construction | 231.5 | 2.4 |
| Manufacturing | 479.0 | 0.5 |
| Durable Goods | 262.3 | 0.9 |
| Nondurable Goods | 216.7 | -0.1 |
| Wholesale Trade | 189.0 | 2.7 |
| Retail Trade | 496.0 | -0.3 |
| TWU | 162.5 | 4.3 |
| Information | 77.9 | 3.6 |
| FIRE | 259.6 | 5.2 |
| B&P Services | 644.1 | 0.7 |
| E&H Services | 622.6 | 0.7 |
| H&L Services | 528.4 | 4.2 |
| Other Services | 162.6 | 3.9 |
| Government | 735.1 | 1.1 |
| *thousand | ls of persons | |



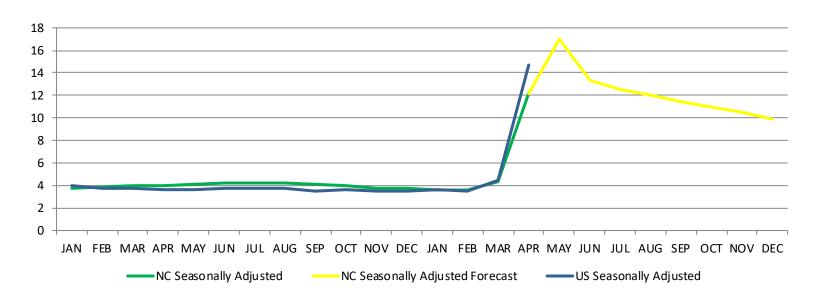
2020 EMPLOYMENT SECTOR ANALYSIS

The sector employment analysis presented on this page is based on the new North American Industrial Classification System (NAICS). Seasonally adjusted nonagricultural employment in North Carolina is expected to reach 4,293.900 persons by December 2020, a decrease of 6.5 percent over the employment level in December 2019. The state is expected to lose 300,000 net jobs during the year.

Twelve of the state's fourteen nonagricultural sectors of the economy are expected to experience employment decreases during 2020. The sectors with the largest expected employment decreases in 2020 are hospitality and leisure services at 25.8 percent, other services at 7.8 percent, and TWU at 7.3 percent.

| Total Establishment | Year-End* | Percent Change |
|---------------------|-----------|-------------------|
| Employment | 4,293.9 | -6.5 |
| Mining | 5.6 | -0.0 |
| Construction | 230.9 | -0.3 |
| Manufacturing | 451.1 | -6.0 |
| Durable Goods | 244.7 | -6.7 |
| Nondurable Goods | 206.4 | -4.8 |
| Wholesale Trade | 187.4 | -0.9 |
| Retail Trade | 461.3 | -7.0 |
| TWU | 150.6 | -7.3 |
| Information | 73.8 | -5.3 |
| FIRE | 259.6 | 0.0 |
| B&P Services | 610.4 | -5.2 |
| E&H Services | 596.4 | -4.2 |
| H&L Services | 392.3 | -25.8 |
| Other Services | 150.0 | -7.8 |
| Government | 724.5 | -1.4 |

2019-2020 NORTH CAROLINA UNEMPLOYMENT RATE



FORECAST reports historical seasonally adjusted monthly unemployment rates for North Carolina and the United States and forecasts the seasonally adjusted monthly unemployment rate for North Carolina. The seasonal adjustment accounts for variations in labor market conditions that cause regular fluctuations in the unemployment level each month.

The graph at the top of this page provides a summary of the monthly unemployment rates for 2019 and 2020. The solid green line represents the North Carolina seasonally adjusted historic unemployment rate. The seasonally adjusted unemployment rate for the United States is represented by the solid blue line. The North Carolina seasonally adjusted unemployment rate forecast is represented by the solid yellow line. The seasonally adjusted rates for the United States and North Carolina can be compared directly and provide more reliable estimates than the unadjusted rates.

The United States started 2019 with an unemployment rate of 4.0 percent, which had declined 3.6 percent by December. North Carolina started the year with a 3.8 percent rate of unemployment, had fallen to 3.7 percent by December. Both the U.S. and North Carolina unemployment rates jumped dramatically in April to 14.7 and 12.2 percent respectively. Based on the new initial unemployment claims in May the North Carolina rate is expected to jump again to 17.0 percent. The North Carolina rate should decline through the rest of the year and reach 9.9 percent by December 2020.