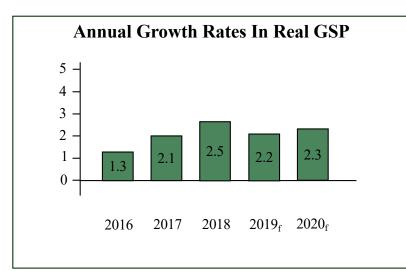
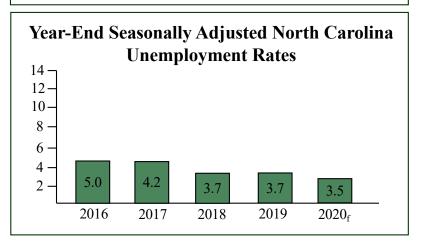
Barings/UNC Charlotte **Economic Forecast** March 11th, 2020 BARINGS **UNC CHARLOTTE** BELK COLLEGE of BUSINESS

The data used in this report comes from the websites for the U.S. Department of Commerce's Bureau of Economic Analysis (<u>www.bea.gov</u>) and the North Carolina Employment Security Commission (<u>www.ncesc.com</u>) as of February 19, 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 expected to increase by 2.2 percent over the 2018 level.
- Fourteen of the state's fifteen economic sectors are forecast to experience output increases during 2019. The sectors with the strongest expected growth are mining with a projected real increase of 14.5 percent; business and professional services with a projected real increase of 7.2 percent; retail trade with a projected real increase of 5.5 percent; other services with a projected real increase of 3.5 percent; and finance, insurance, and real estate (FIRE) with a projected real increase of 3.0 percent.

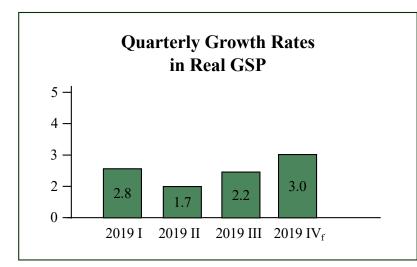
• For 2019, NORTH CAROLINA establishments added 93,900 net additional jobs, an increase of 2.1 percent.

• For 2020, NORTH CAROLINA real GSP is forecast to increase by 2.3 percent over the 2019 level.

• Fourteen of the state's fifteen economic sectors are forecast to experience output increases during 2020. The sectors with the strongest expected growth are agriculture with a projected real growth rate of 8.8 percent; information with a projected real growth rate of 5.6 percent; business and professional services with a projected real increase of 3.3 percent; other services with a projected real increase of 3.1 percent; transportation.

• For 2020, NORTH CAROLINA establishments are forecast to add 106,100 net additional jobs, an increase of 2.3 percent.

• By December of 2020, the North Carolina unemployment rate is expected to be around 3.5 percent.



2019 Highlights

Current Dollars	2019*	Percent Change
Total Gross Product	587,909.6	4.3
Constant (2012 Dollars)		
Total Gross Product	493,769.2	2.2
Agricultural	4,072.6	1.7
Mining	699.2	14.5
Construction	17,171.1	3.0
Manufacturing	90,432.2	-0.0
Durable Goods	43,314.6	1.7
Nondurable Goods	47,117.6	-2.8
TWU	19,366.0	1.0
Wholesale Trade	31,195.3	2.6
Retail Trade	29,470.7	5.5
Information	21,749.0	0.3
FIRE	92,579.9	3.0
B&P	51,579.5	7.2
E&H	42,254,7	2.8
H&L	17,912.9	1.6
Services	9,852.8	3.5
Government	63,953.2	0.4

* Millions of dollars

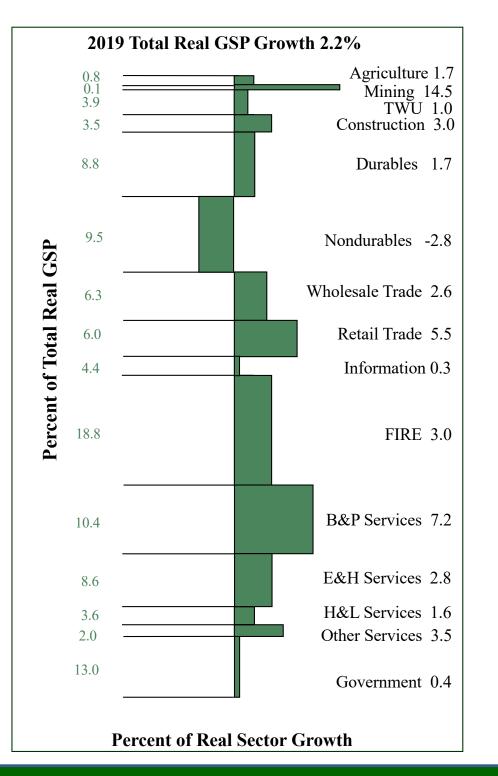
2019 GSP

Gross State Product (GSP) is forecast to reach a level of \$587,909.6 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 2.8 percent. During the second quarter, GSP increased by an annualized real rate of 1.7 percent. In the third quarter, GSP increased by an annualized real rate of 2.2 percent. In the fourth quarter of 2019, GSP is expected to increase by an annualized real rate of 3.0 percent.

While ten consecutive years of economic growth is impressive, the size of that economic growth has averaged less than 2.0 percent per year. The North Carolina growth rate over the ten year expansion has trailed the U.S. ten year average growth rate of 2.3 percent. During the first quarter of 2019 GSP growth of 2.8 percent was still benefiting from the tax cuts put in place in January of 2018. By the second quarter, it now appears that the bump from the tax cuts seems to be waning. In addition, the trade war with China is has been impacting U.S. and North Carolina economic growth during the second half of 2019. While the trade war is getting a lot of attention, the reduction in the volume of U.S. exports to China is not enough to spin the economy into recession. The likely impact of the trade dispute is to negate the benefit of the 2018 tax cut and return us to the 2.0 percent growth ceiling until the trade dispute is resolved.

Long term economic growth is dictated by two factors that are more influential than tax cuts or trade disruptions. The first is labor force growth and the second is productivity growth. Since 2010 the average annual U.S. labor force growth rate has been only 0.22 percent and the average annual productivity growth has only been 0.78 percent. While the U.S. productivity growth has been slow by historical standards, North Carolina's productivity growth has been even more sluggish over this expansion.



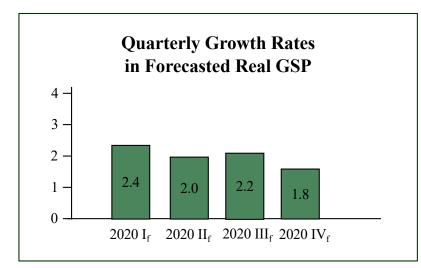
2019 GSP SECTOR ANALYSIS

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 forecast to experience output increases during 2019. The sectors with the strongest expected growth are mining with a projected real increase of 14.5 percent; business and professional services with a projected real increase of 7.2 percent; retail trade with a projected real increase of 5.5 percent; other services with a projected real increase of 3.5 percent; finance, insurance, and real estate (FIRE) with a projected real increase of 3.0 percent; construction with a projected real increase of 3.0 percent; and health services with a projected real increase of 2.8 percent; and wholesale trade with a projected real increase of 2.6 percent.

Six other sectors are expected to experience growth rates, however, at levels below the overall 2.2 percent GSP real growth rate. These sectors are durable goods manufacturing with a projected real increase of 1.7 percent; agriculture with a projected real growth rate of 1.7 percent; hospitality and leisure services with a projected real increase of 1.6 percent; transportation, warehousing; utilities (TWU) with a projected real increase of 0.4 percent; and information with a projected real increase of 0.3 percent.

Only nondurable goods manufacturing is expected to experience an output decline in 2019.



2020 Highlights

Current Dollars	2020 *	Percent Change
Total Gross Product	612,844.5	4.2
Constant (2012 Dollars)		
Total Gross Product	505,207.2	2.3
Agricultural	4,429.9	8.8
Mining	651.6	-6.8
Construction	17,505.6	1.9
Manufacturing	92,478.8	
Durable Goods	44,306.4	2.3
Nondurable Goods	48,172.4	2.2
TWU	19,952.5	3.0
Wholesale Trade	31,703.5	1.6
Retail Trade	30,388.4	3.1
Information	22,976.8	5.6
FIRE	94,671.0	2.3
B & P	53,259.6	3.3
Е&Н	43,046.1	1.9
H&L	17,912.9	3.0
Services	9,852.8	3.3
Government	64,067.3	0.2

* millions of dollars

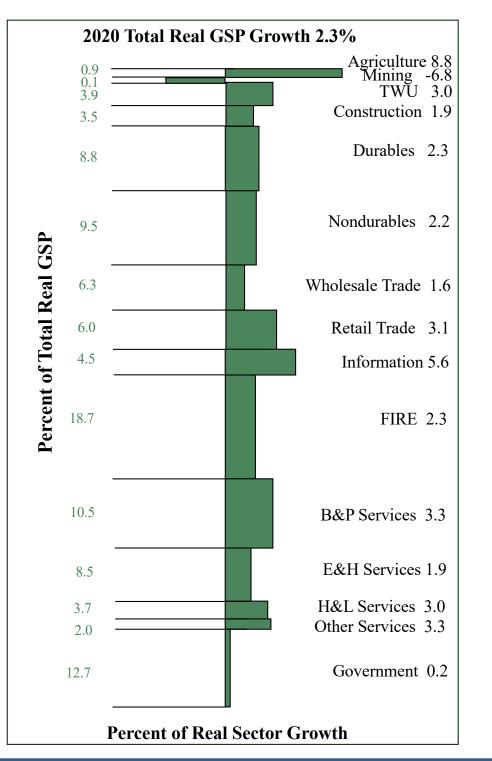
2020 GSP

Gross State Product (GSP) is expected to reach a level of \$612,844.5 million in 2020. Real (inflation-adjusted) GSP is expected to increase by 2.3 percent over the 2019 level. Positive economic growth in 2020 would represent the eleventh consecutive year of economic growth for the North Carolina economy since this expansion began in 2010.

For 2020, first quarter GSP is expected to increase by an annualized real rate of 2.4 percent. During the second quarter, GSP is expected to increase by an annualized real rate of 2.0 percent. In the third quarter, GSP is expected to increase by an annualized real rate of 2.2 percent. In the fourth quarter of 2020, GSP is expected to increase by an annualized real rate of 1.8 percent.

The North Carolina economy like the U.S. economy is settling into an extended period of sluggish, by historical standards, growth. The bump up to a 3.0 annual GSP growth rate that was promised as part of the 2018 tax cut appears to be over. The benefit that the January 2018 tax cuts provided are substantially offset by the ongoing trade dispute with China. At this time there does not seem to be a resolution to this dispute in the foreseeable future and the forecast for the remainder of 2019 and all of 2020 reflects this fact. In addition, the recent outbreak of Coronavirus in China and other nations is beginning to have a real impact on U.S. growth prospects during the first half of 2020.

Despite the projected slowing of both the U.S. and North Carolina economies in 2020, the prospect of a recession is still slight. Consumer Confidence remains high despite the politics in Washington. In January the index settled at 131.6 up considerably from the 125.5 in October. With the national unemployment rate consistently below 4.0 percent, more job openings than job seekers, and lower gasoline prices than last year at this time, consumers have the discretionary income to continue to spend.



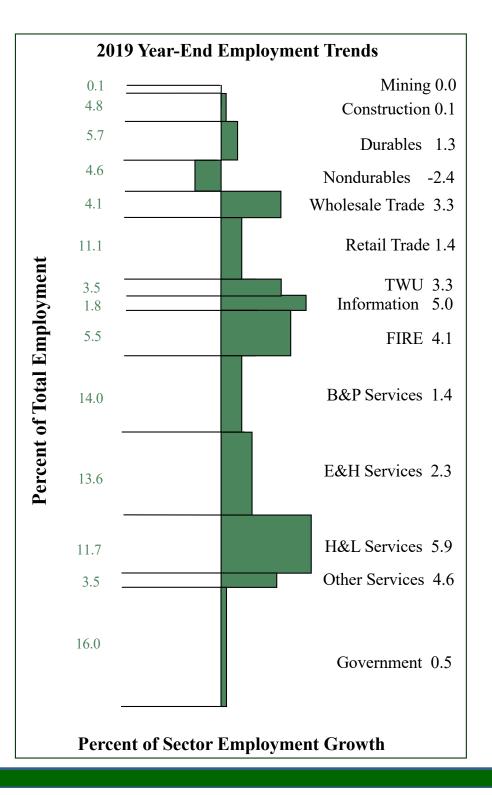
2020 GSP SECTOR ANALYSIS

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 increase by 2.3 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.

Fourteen of the state's fifteen economic sectors are forecast to experience output increases during 2020. The sectors with the strongest expected growth are agriculture with a projected real growth rate of 8.8 percent; information with a projected real growth rate of 5.6 percent; business and professional services with a projected real increase of 3.3 percent; other services with a projected real increase of 3.3 percent; retail trade with a projected real increase of 3.1 percent; transportation, warehousing; utilities (TWU) with a projected real increase of 3.0 percent; and hospitality and leisure services with a projected real increase of 3.0 percent.

Six other sectors are expected to experience growth rates, but at levels at or below the overall 2.3 percent GSP real growth rate. These sectors are finance, insurance, and real estate (FIRE) with a projected real increase of 2.3 percent; durable goods manufacturing with a projected real increase of 2.3 percent; nondurable goods manufacturing with a projected real growth rate of 2.2 percent; construction with a projected real increase of 1.9 percent; educational and health services with a projected real increase of 1.9 percent; wholesale trade with a projected real increase of 1.6 percent; and government with a projected real increase of 0.2 percent.

Only mining is expected to experience a decline in 2020.

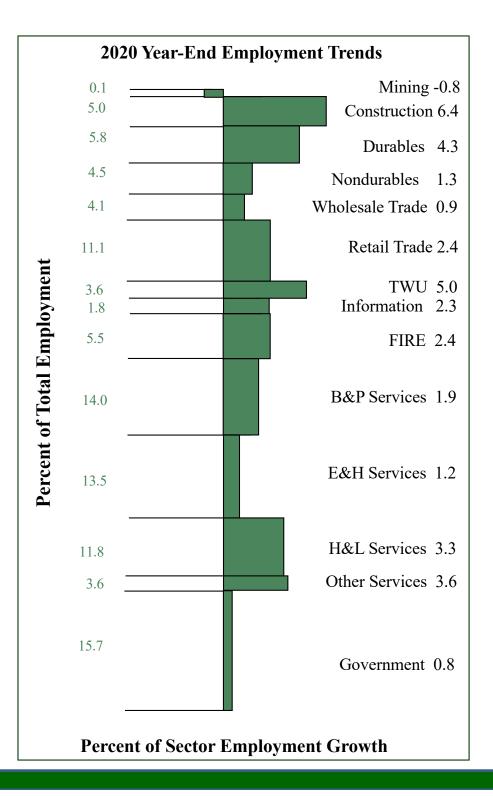


2019 EMPLOYMENT SECTOR ANALYSIS

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 4,593,600 persons by December 2019, an increase of 2.1 percent over the employment level in December 2018. The state added 93,900 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 hospitality and leisure services at 5.9 percent, and information at 5.0 percent.

Total Establishment	Year-End*	Percent Change
Employment	4,593.6	2.1
Mining	5.5	0.0
Construction	219.8	0.1
Manufacturing	472.3	-0.0
Durable Goods	261.9	1.3
Nondurable Goods	210.4	-2.4
Wholesale Trade	188.8	3.3
Retail Trade	509.1	1.4
TWU	159.7	3.3
Information	84.0	5.0
FIRE	251.6	4.1
B&P Services	643.9	1.4
E&H Services	625.9	2.3
H&L Services	538.1	5.9
Other Services	161.2	4.6
Government	733.7	0.5



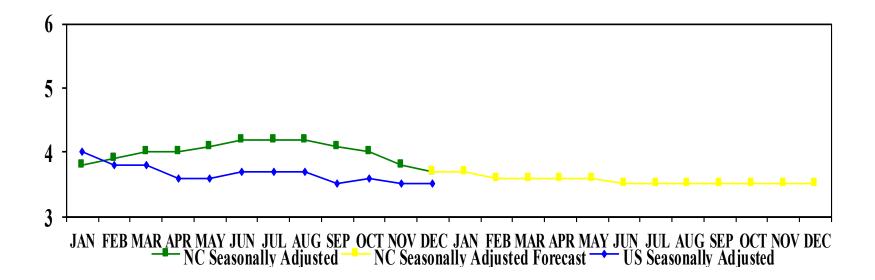
2020 EMPLOYMENT SECTOR ANALYSIS

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 4,699,700 persons by December 2020, an increase of 2.3 percent over the employment level in December 2019. The state is expected to gain 106,100 net jobs during the year.

Thirteen of the state's fourteen nonagricultural sectors of the economy are expected to experience employment increases during 2020. The sectors with the strongest expected employment increases in 2020 are construction at 6.4 percent, TWU at 5.0 percent, and durable goods manufacturing at 4.3 percent.

T. 4.1 F. 4.11, 1	Year-End*	Percent Change
Total Establishment	4 600 5	-
Employment	4,699.7	2.3
Mining	5.5	-0.8
Construction	233.8	6.4
Manufacturing	486.3	3.0
Durable Goods	273.1	4.3
Nondurable Goods	213.2	1.3
Wholesale Trade	190.5	0.9
Retail Trade	521.4	2.4
TWU	167.7	5.0
Information	85.9	2.3
FIRE	257.5	2.4
B&P Services	655.9	1.9
E&H Services	633.1	1.2
H&L Services	555.8	3.3
Other Services	167.0	3.6
Government	739.2	0.8

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 to 3.7 percent by July and decreased some more to 3.6 percent by December. North Carolina started the year with a 3.8 percent rate of unemployment, which increased to 4.2 percent by July and has fallen to 3.7 percent by December. The North Carolina unemployment rate is expected to decline slightly throughout 2020 to 3.5 percent by December.