

Barings/UNC Charlotte Economic Forecast September 12th, 2019



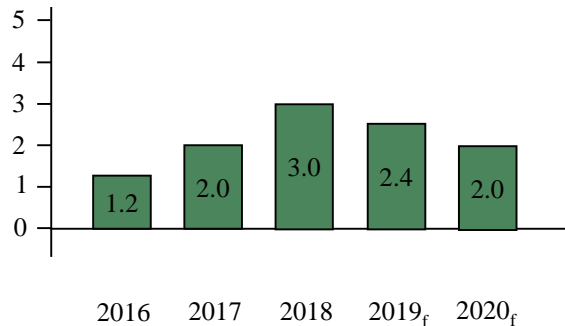
BARINGS

The word "BARINGS" is written in a large, blue, serif font. A horizontal line, colored green and blue, runs underneath the text.

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 August 26, 2019. 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.

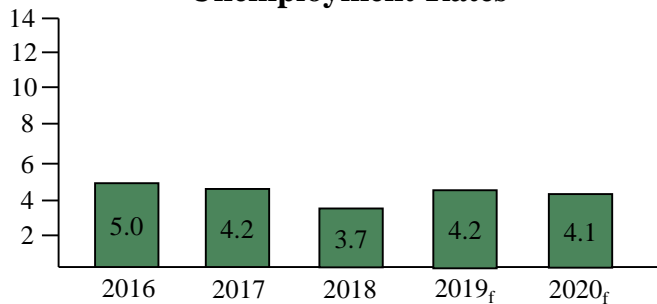
FORECAST HIGHLIGHTS

Annual Growth Rates In Real GSP



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).

Year-End Seasonally Adjusted North Carolina Unemployment Rates



- For 2019, NORTH CAROLINA real GSP is expected to increase by 2.4 percent over the 2018 level.

- Thirteen 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 7.6 percent; information with a projected real increase of 5.8 percent; business and professional services with a projected real increase of 3.7 percent; retail trade with a projected real increase of 3.5 percent; and nondurable goods manufacturing with a projected real increase of 3.2 percent.

- For 2019, NORTH CAROLINA establishments are expected to add 113,500 net additional jobs, an increase of 2.5 percent.

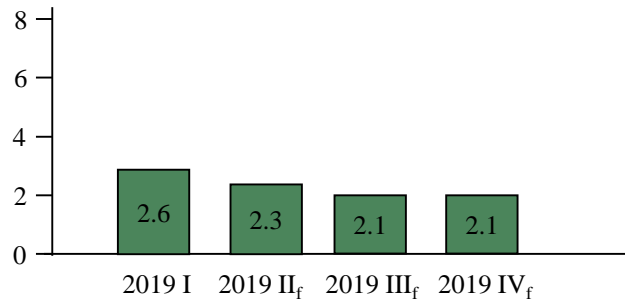
- For 2020, NORTH CAROLINA real GSP is forecast to increase by 2.0 percent over the 2019 level.

- Thirteen of the state's fifteen economic sectors are forecast to experience output increases during 2020. The sectors with the strongest expected growth are transportation, warehousing; utilities (TWU) with a projected real increase of 3.8 percent; construction with a projected real increase of 3.2 percent; business and professional services with a projected real increase of 3.1 percent; and durable goods manufacturing with a projected real increase of 3.0 percent.

- For 2020, NORTH CAROLINA establishments are forecast to add 102,100 net additional jobs, an increase of 2.2 percent.

- By December of 2019, the North Carolina unemployment rate is expected to be around 4.2 percent.

Quarterly Growth Rates in Real GDP



2019 Highlights

	2019*	Percent Change
Current Dollars		
Total Gross Product	589,443.0	4.2
Constant (2012 Dollars)		
Total Gross Product	510137.8	2.4
Agricultural	4,724.4	-7.1
Mining	576.6	7.6
Construction	16,653.2	2.2
Manufacturing	94,087.1	2.9
Durable Goods	42,325.5	2.4
Nondurable Goods	51,761.6	3.2
TWU	19,329.3	2.6
Wholesale Trade	31,974.7	2.5
Retail Trade	29,119.7	3.5
Information	23,787.7	5.8
FIRE	91,237.5	2.4
B & P	65,657.2	3.7
E & H	42,369.8	3.4
H & L	17,237.1	2.7
Services	9,573.0	0.6
Government	62,332	-0.5

* Millions of dollars

2019 GSP

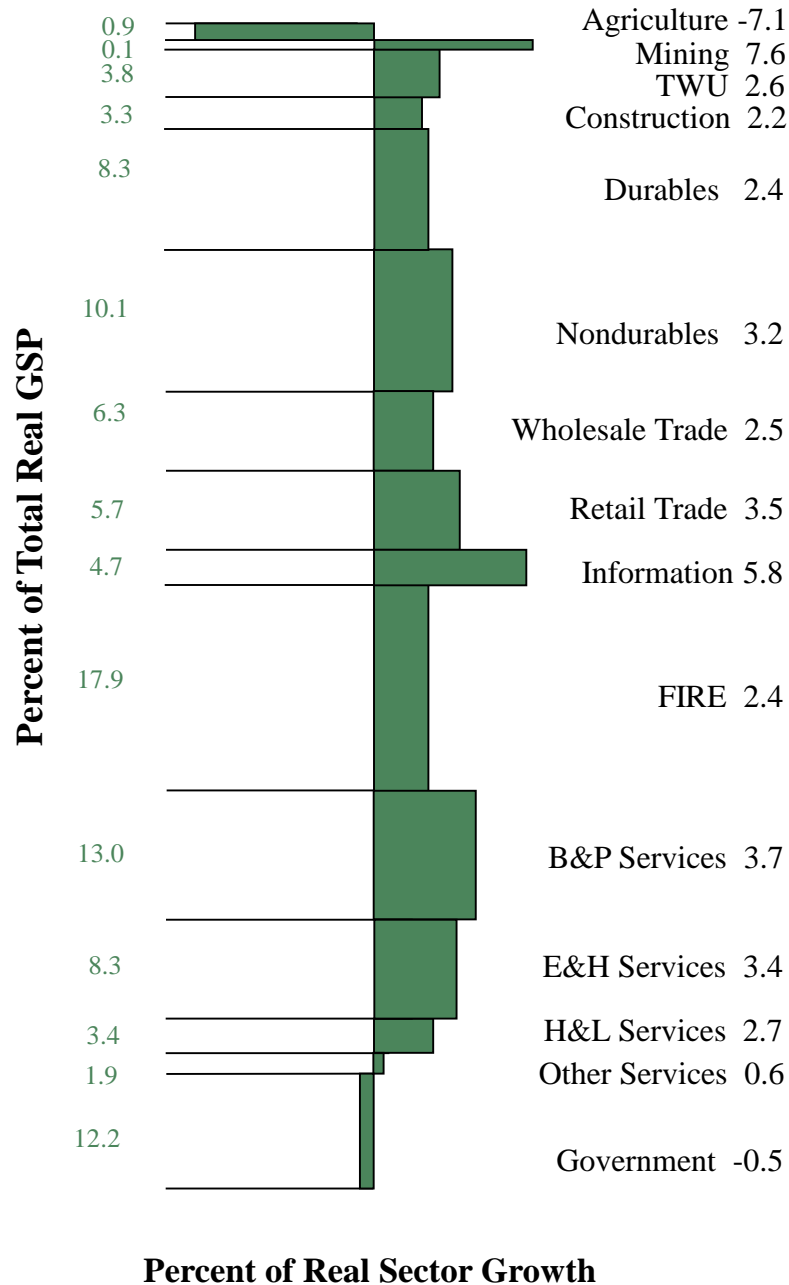
Gross State Product (GSP) is forecast to reach a level of \$589,443.0 million in 2019. Real (inflation-adjusted) GSP is expected to increase by 2.4 percent over the 2018 level. This growth in 2019 represents the tenth consecutive year of growth since this expansion began in 2010.

For 2019, first quarter GSP increased by an annualized real rate of 2.6 percent. During the second quarter, GSP is expected to increase by an annualized real rate of 2.3 percent. In the third quarter, GSP is expected to increase by an annualized real rate of 2.1 percent. In the fourth quarter of 2019, GSP is expected to increase by an annualized real rate of 2.1 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. During the first quarter of 2019 GSP growth of 2.6 percent was still benefiting from the tax cuts put in place in January of 2018. It now appears that the bump from the tax cuts seems to be waning. In addition, the trade war with China is beginning to impact U.S. economic growth. While the trade war is getting a lot of attention, the reduction in 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. It appears that the trade dispute and the tax cuts are now offsetting influences on the economy.

Going forward, the long term growth question 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. If these labor force and productivity average annual growth rates continue, the economy will be hard pressed to continue a 2.0 percent annual GDP growth rate.

2019 Total Real GSP Growth 2.4%



2019 GSP SECTOR ANALYSIS

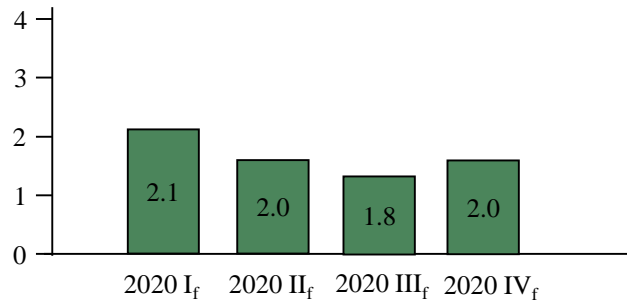
The chart to the left presents the projected contributions of each major economic sector to North Carolina's Gross State Product (GSP). The real (inflation-adjusted) growth rate for 2019 is forecast to increase by 2.4 percent. Projected real growth rates for each sector (displayed in black type) are 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 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.

Thirteen 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 7.6 percent; information with a projected real increase of 5.8 percent; business and professional services with a projected real increase of 3.7 percent; retail trade with a projected real increase of 3.5 percent; nondurable goods manufacturing with a projected real increase of 3.2 percent; educational and health services with a projected real increase of 2.7 percent; hospitality and leisure services with a projected real increase of 2.1 percent; transportation, warehousing; utilities (TWU) with a projected real increase of 2.7 percent; wholesale trade with a projected real increase of 2.5 percent; durable goods manufacturing with a projected real increase of 2.4 percent; and finance, insurance, and real estate (FIRE) with a projected real increase of 2.4 percent.

Two other sectors are expected to experience growth rates, but at levels below the overall 2.4 percent GSP real growth rate. These sectors are construction with a projected real increase of 2.2 percent, and other services with a projected real increase of 0.6 percent.

Only agriculture and government are expected to experience an output decline in 2019.

Quarterly Growth Rates in Forecasted Real GSP



2020 Highlights

	2020 *	Percent Change
Current Dollars		
Total Gross Product	611,841.8	3.8
Constant (2012 Dollars)		
Total Gross Product	520,532.0	2.0
Agricultural	4,4736.2	0.3
Mining	565.9	-1.9
Construction	17,498.5	3.2
Manufacturing	96,203.8	2.2
Durable Goods	43,582.9	3.0
Nondurable Goods	52,620.9	1.7
TWU	20,071.6	3.8
Wholesale Trade	32,560.9	1.8
Retail Trade	29,574.4	1.6
Information	24,236.6	1.9
FIRE	92,919.0	1.8
B & P	67,719.4	3.1
E & H	43,380.9	2.4
H & L	17,740.8	2.9
Services	9,784.0	2.2
Government	62,332.3	-0.0

* millions of dollars

2020 GSP

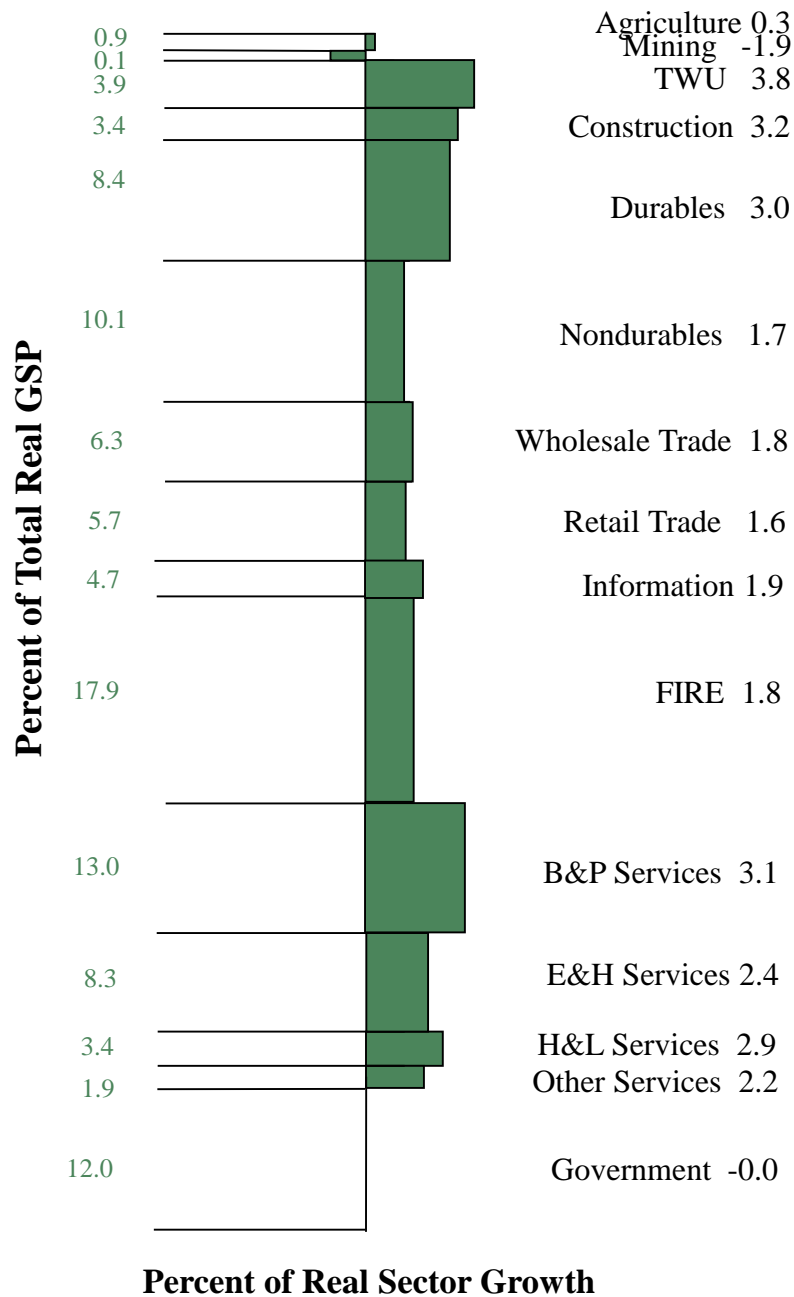
Gross State Product (GSP) is expected to reach a level of \$611,841.8 million in 2020. Real (inflation-adjusted) GSP is expected to increase by 2.0 percent over the 2019 level. Positive economic growth in 2020 would represent the eleventh consecutive year of economic growth for the North Carolina economy since this expansion began in 2010.

For 2020, first quarter GSP is expected to increase by an annualized real rate of 2.1 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 1.8 percent. In the fourth quarter of 2020, GSP is expected to increase by an annualized real rate of 2.0 percent.

The North Carolina economy is clearly beginning to slow compared to the growth experienced during 2018. The bump up to a 3.0 annual GSP growth rate 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 for all of 2020 reflects this fact. Should the trade dispute be resolved this year or early in 2020 there is a possibility that growth could rebound in the second half of 2020.

Despite the projected slowing of both the U.S. and North Carolina economies in 2020, the prospect for a recession is still slight. Consumer Confidence still remains high despite the politics in Washington. In August the index settled at 135.1 down just slightly from July's number of 135.8. 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. In addition the Fed appears to be ready to quickly counter any economic downward trend with lower interest rates.

2020 Total Real GSP Growth 2.0%



2020 GSP SECTOR ANALYSIS

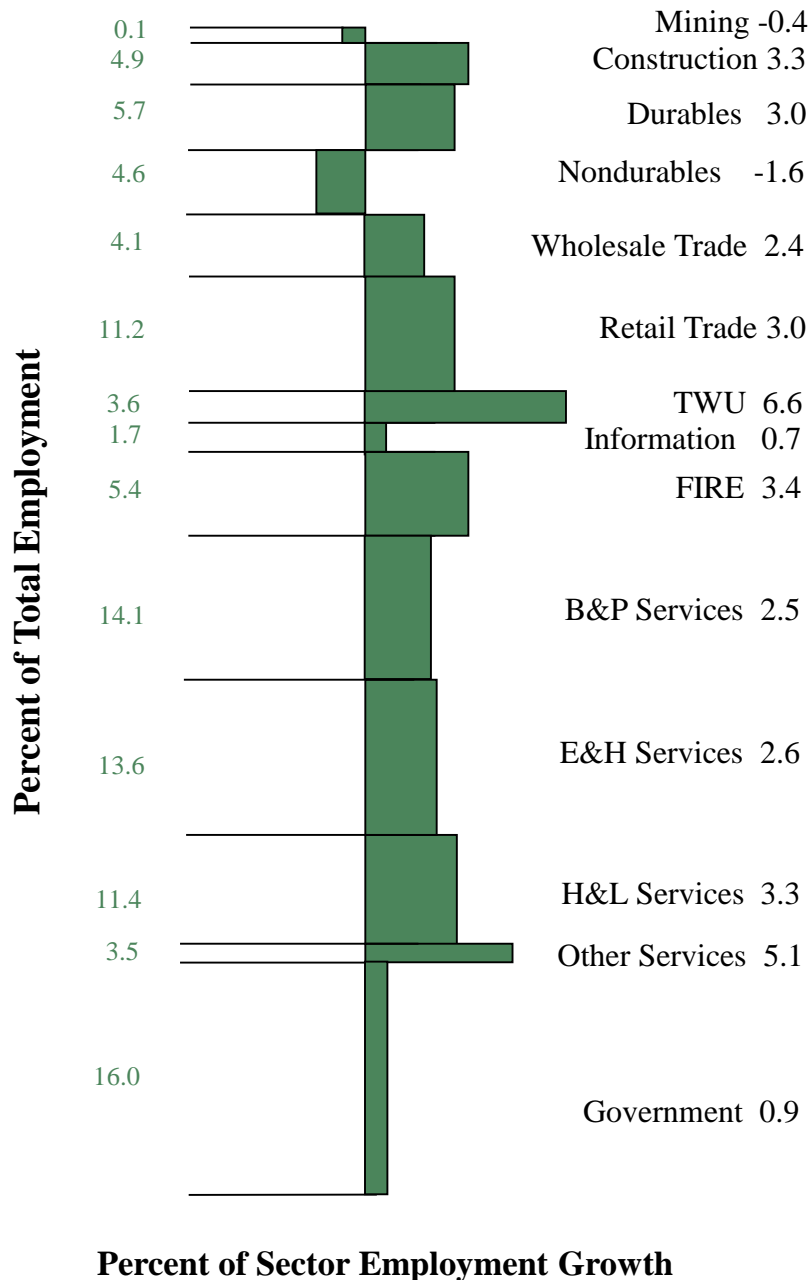
The chart to the left presents the projected contributions of each major economic sector to North Carolina's Gross State Product (GSP). The real (inflation-adjusted) growth rate for 2020 is forecast to increase by 2.0 percent. Projected real growth rates for each sector (displayed in black type) are 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.

Thirteen of the state's fifteen economic sectors are forecast to experience output increases during 2020. The sectors with the strongest expected growth are transportation, warehousing; utilities (TWU) with a projected real increase of 3.8 percent; construction with a projected real increase of 3.2 percent; business and professional services with a projected real increase of 3.1 percent; durable goods manufacturing with a projected real increase of 3.0 percent; hospitality and leisure services with a projected real increase of 2.9 percent; educational and health services with a projected real increase of 2.4 percent; and other services with a projected real increase of 2.2 percent.

Six other sectors are expected to experience growth rates, but at levels below the overall 2.0 percent GSP real growth rate. These sectors are information with a projected real increase of 1.9 percent; finance, insurance, and real estate (FIRE) with a projected real increase of 1.8 percent; wholesale trade with a projected real increase of 1.8 percent; nondurable goods manufacturing with a projected real increase of 1.7 percent; retail trade with a projected real increase of 1.6 percent; and Agriculture with a projected real increase of 0.3 percent.

Government is expected to flat in 2020 and only mining is expected to experience a decline.

2019 Year-End Employment Trends



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 is expected to reach 4,613,200 persons by December 2019, an increase of 2.5 percent over the employment level in December 2018. The state is expected to add 113,500 net jobs in 2019.

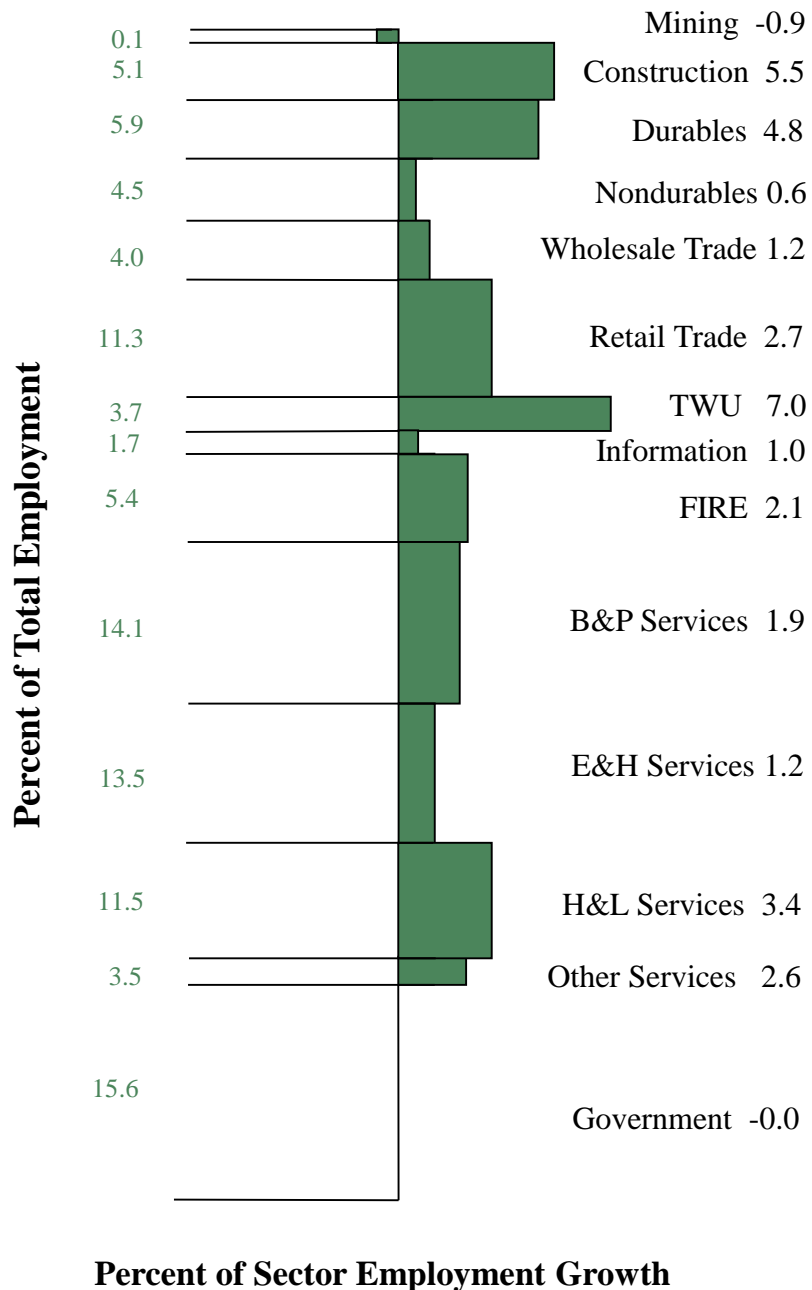
Twelve of the state's fourteen nonagricultural sectors of the economy are expected to experience employment increases during 2019. The sectors with the strongest employment increases in 2019 are TWU at 6.6 percent, other services at 5.1 percent and FIRE at 3.4 percent.

2019 Employment Highlights

	Year-End*	Percent Change
Total Establishment		
Employment	4,613.2	2.5
Mining	5.5	-0.4
Construction	226.8	3.3
Manufacturing	478.6	0.9
Durable Goods	266.3	3.0
Nondurable Goods	212.3	-1.6
Wholesale Trade	187.2	2.4
Retail Trade	517.1	3.0
TWU	164.8	6.6
Information	80.6	0.7
FIRE	250.0	3.4
B&P Services	650.9	2.5
E&H Services	628.1	2.6
H&L Services	524.6	3.3
Other Services	161.9	5.1
Government	737.1	0.9

*thousands of persons

2020 Year-End Employment Trends



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 4,715,300 persons by December 2020, an increase of 2.2 percent over the employment level in December 2019. The state is expected to gain 102,100 net jobs during the year.

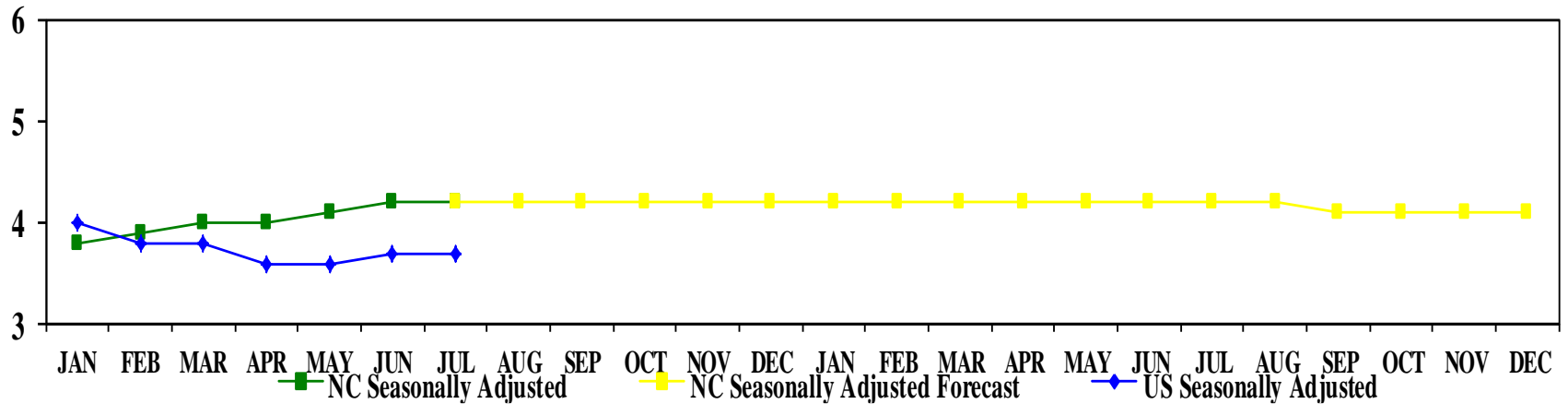
Twelve of the state's fourteen nonagricultural sectors of the economy are expected to experience employment increases during 2020. The sectors with the strongest expected employment increases in 2020 are TWU at 7.0 percent, construction at 5.5 percent, and durable goods manufacturing at 4.8 percent.

2020 Employment Highlights

	Year-End*	Percent Change
Total Establishment		
Employment	4715.3	2.2
Mining	5.4	-0.9
Construction	239.3	5.5
Manufacturing	492.7	2.9
Durable Goods	279.1	4.8
Nondurable Goods	213.6	0.6
Wholesale Trade	189.5	1.2
Retail Trade	531.0	2.7
TWU	176.2	7.0
Information	81.4	1.0
FIRE	255.4	2.1
B&P Services	663.4	1.9
E&H Services	635.7	1.2
H&L Services	542.2	3.4
Other Services	166.1	2.6
Government	737.0	-0.0

*thousands of persons

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 has declined to 3.7 percent by July. North Carolina started the year with a 3.8 percent rate of unemployment, which increased to 4.2 percent by July. The North Carolina unemployment rate is expected to remain at 4.2 percent by December 2019 and 4.1 percent by December of 2020.