

Barings/UNC Charlotte Economic Forecast December 12th, 2018



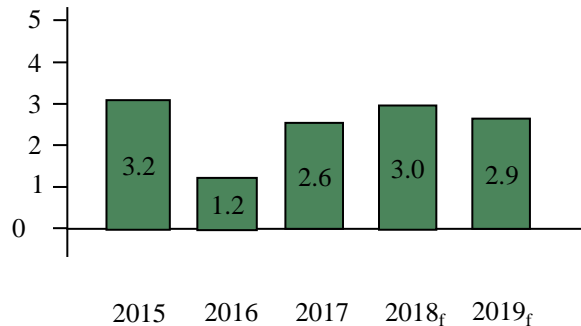
BARINGS

The word "BARINGS" is written in a large, blue, serif font. Below the text is a horizontal line with a green-to-blue gradient.

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 November 30, 2018. 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.

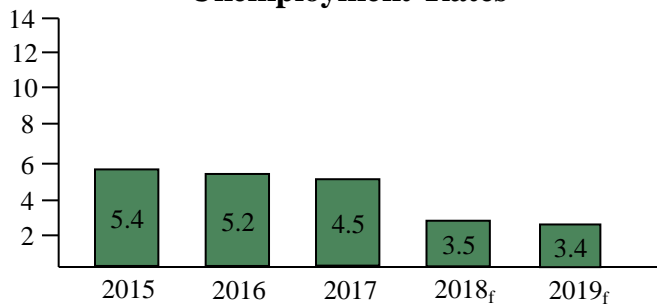
FORECAST HIGHLIGHTS

Annual Growth Rates In Real GDP



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 2018, NORTH CAROLINA real GDP is forecast to increase by 3.0 percent over the 2017 level.

- Fourteen of the state's fifteen economic sectors are forecast to experience output increases during 2018. The sectors with the strongest expected growth are transportation, warehousing; utilities (TWU) with a projected real increase of 7.0 percent; construction with a projected real increase of 5.4 percent; information with a projected real increase of 4.4 percent; other services with a projected real increase of 4.3 percent; nondurable goods manufacturing with a projected real increase of 3.7 percent; and durable goods manufacturing with a projected real increase of 3.7 percent.

- For 2018, NORTH CAROLINA establishments are expected to add 109,000 net additional jobs, an increase of 2.5 percent.

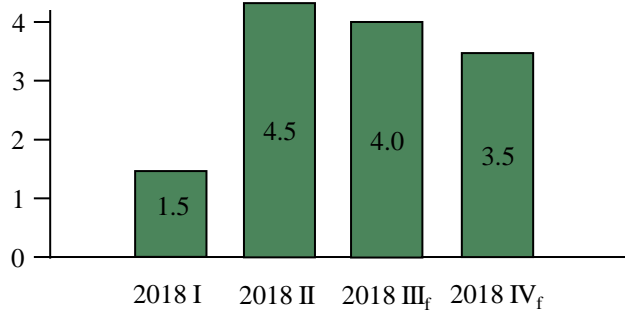
- For 2019, NORTH CAROLINA real GDP is forecast to increase by 2.9 percent over the 2018 level.

- Fourteen of the state's fifteen economic sectors are forecast to experience output increases during 2019. The sectors with the strongest expected growth are construction with a projected real increase of 5.7 percent; other services with a projected real increase of 4.9 percent; information with a projected real increase of 4.9 percent; and transportation, warehousing; utilities (TWU) with a projected real increase of 4.9 percent.

- For 2019, NORTH CAROLINA establishments are forecast to add 120,000 net additional jobs, an increase of 2.6 percent.

- By December of 2018, the North Carolina unemployment rate is expected to be around 3.5 percent.

Quarterly Growth Rates in Real GSP



2018 Highlights

	2018 *	Percent Change
Current Dollars		
Total Gross Product	568,734.6	5.2
Constant (2012 Dollars)		
Total Gross Product	500,539.6	3.0
Agricultural	6,344.6	3.1
Mining	506.4	0.5
Construction	16,799.6	5.4
Manufacturing	93,106.8	3.7
Durable Goods	40,525.3	3.7
Nondurable Goods	52,581.5	3.7
TWU	19,279.0	7.0
Wholesale Trade	31,029.3	1.1
Retail Trade	27,515.0	3.0
Information	21,738.9	4.4
FIRE	92,312.2	3.7
B & P	61,659.9	3.2
E & H	40,574.8	2.8
H & L	17,022.7	2.3
Services	9,775.1	4.3
Government	62,875.3	-0.6

* millions of dollars

2018 GSP

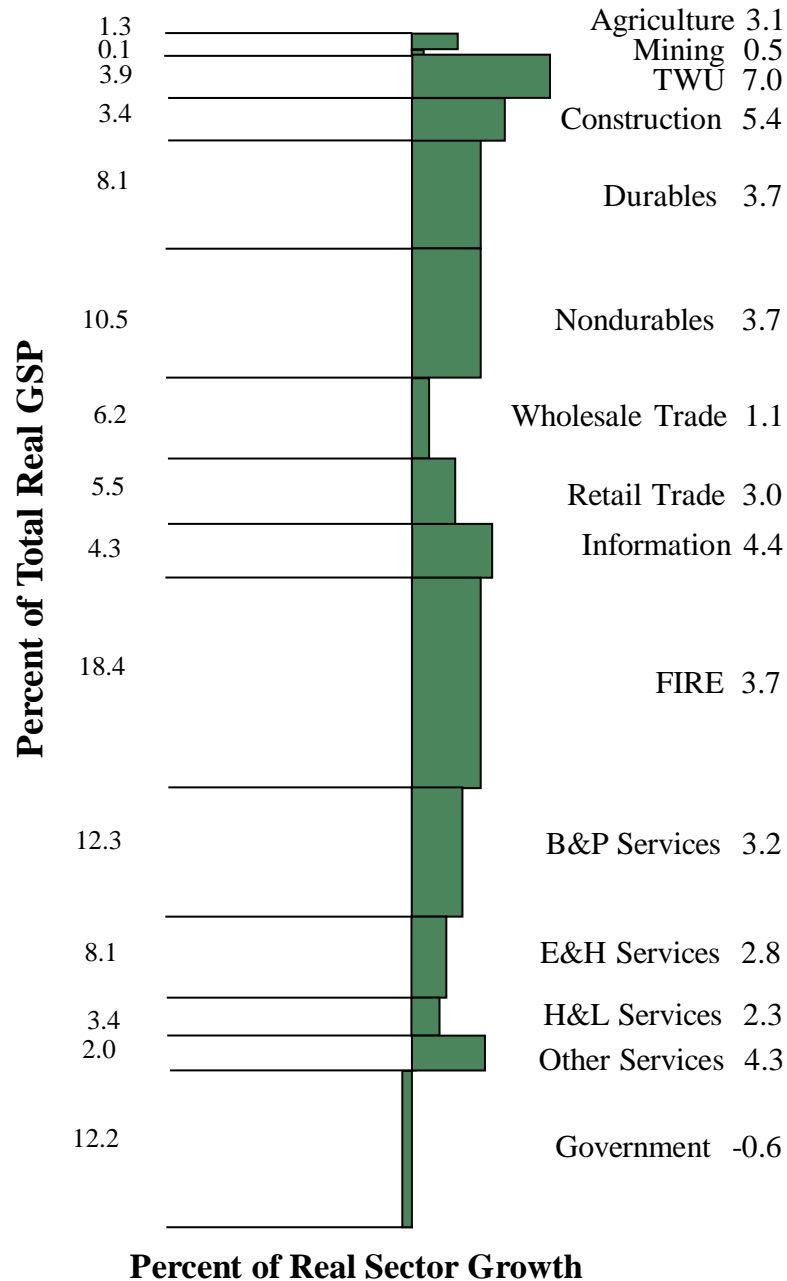
Gross State Product (GSP) is expected to reach a level of \$568,734.6 million in 2018. Real (inflation-adjusted) GSP is expected to increase by 3.0 percent over the 2017 level. This growth in 2018 would represent the strongest annual growth rate since this expansion began in 2010.

For 2018, first quarter GSP is increased by an annualized real rate of 1.5 percent. During the second quarter, GSP increased by an annualized real rate of 4.5 percent. In the third quarter, GSP is expected to increase by an annualized real rate of 4.0 percent. In the fourth quarter of 2018, GSP is expected to increase by an annualized real rate of 3.5 percent.

Positive economic growth in 2018 would represent the ninth consecutive year of economic growth for the North Carolina economy. While this is an impressive string of growth, the size of that economic growth until recently has been somewhat lacking. During the second and third quarters of the year, it appears that both the U.S. and North Carolina economies are beginning to feel the impact of the 2018 tax decrease. Since this recovery began back in 2009, both the U.S. and North Carolina economies have been unable to achieve an average 3.0 percent real GDP growth rate that had been fairly consistent since WW II.

What remains to be seen is whether this new found economic growth, resulting from the tax cut, can be sustained over the longer term. The long term growth question is facing a fundamental challenge. There are only two sources of potential GDP growth. 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 0.63 percent and the average annual productivity growth has only been 0.80 percent. If these labor force and productivity average annual growth rates continue, the economy will be hard pressed to continue a 3.0 percent annual GDP growth rate, despite the recent legislation to lower income tax rates.

2018 Total Real GSP Growth 3.0%



2018 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 2018 is forecast to increase by 3.0 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 2018. 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 2018. The sectors with the strongest expected growth are transportation, warehousing; utilities (TWU) with a projected real increase of 7.0 percent; construction with a projected real increase of 5.4 percent; information with a projected real increase of 4.4 percent; other services with a projected real increase of 4.3 percent; nondurable goods manufacturing with a projected real increase of 3.7 percent; durable goods manufacturing with a projected real increase of 3.7 percent; finance, insurance, and real estate (FIRE) with a projected real increase of 3.7 percent; business and professional services with a projected real increase of 3.2 percent; agriculture with a projected real increase of 3.1 percent; and retail trade with a projected real increase of 3.0 percent.

Four other sectors are expected to experience growth rates, but at levels at or below the overall 3.0 percent GSP real growth rate. These sectors are, educational and health services with a projected real increase of 2.8 percent, hospitality and leisure services with a projected real increase of 2.3 percent, wholesale trade with a projected real increase of 1.1 percent, and mining with a projected real increase of 0.5 percent.

Only the government sector is expected to experience an output decline in 2018.

2019 GSP

Gross State Product (GSP) is expected to reach a level of \$597,550.2 million in 2019. Real (inflation-adjusted) GSP is expected to increase by 2.9 percent over the 2018 level. Positive economic growth in 2019 would represent the tenth consecutive year of economic growth for the North Carolina economy since this expansion began in 2010.

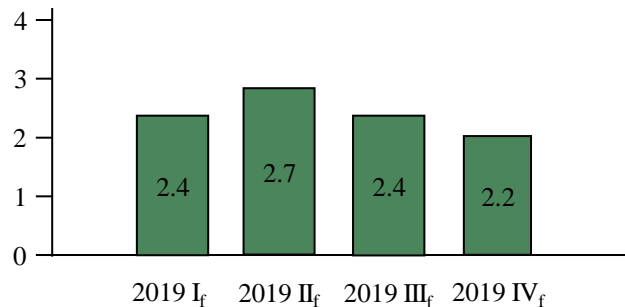
For 2019, first quarter GSP is expected to increase by an annualized real rate of 2.4 percent. During the second quarter, GSP is expected to increase by an annualized real rate of 2.7 percent. In the third quarter, GSP is expected to increase by an annualized real rate of 2.4 percent. In the fourth quarter of 2019, GSP is expected to increase by an annualized real rate of 2.2 percent.

The bump up in the state's GSP growth experienced during the second through fourth quarters of 2018, is very likely temporary and is expected to fall back to a more modest rate of growth by 2019. The 2018 bump up resulted from the fiscal policy tax rate decreases and an initial response to the rollback of government regulations on business. However, by 2019 the overriding longer term forces of stagnate labor force growth and modest productivity growth will dictate a slower potential GSP growth rate.

Despite what is likely to be the short lived spike in GSP growth during 2018, the longer term outlook, at a more modest rate of growth, is fairly optimistic. Consumer Confidence still remains high despite the political stalemate in Washington. In November the index reached 135.7, down slightly from the October index of 137.9. With the national unemployment rate consistently below 4.0 percent, more job openings than job seekers, modest interest rates (in a historical context), and continued consumer optimism, it will take a considerable negative event to slow the economy.

The recent trade agreement with Canada and Mexico as well as the moratorium on new import tariffs on Chinese goods suggest that the potential for a trade war is lessening. This suggests that the outlook for 2019 is quite favorable.

Quarterly Growth Rates in Forecasted Real GSP

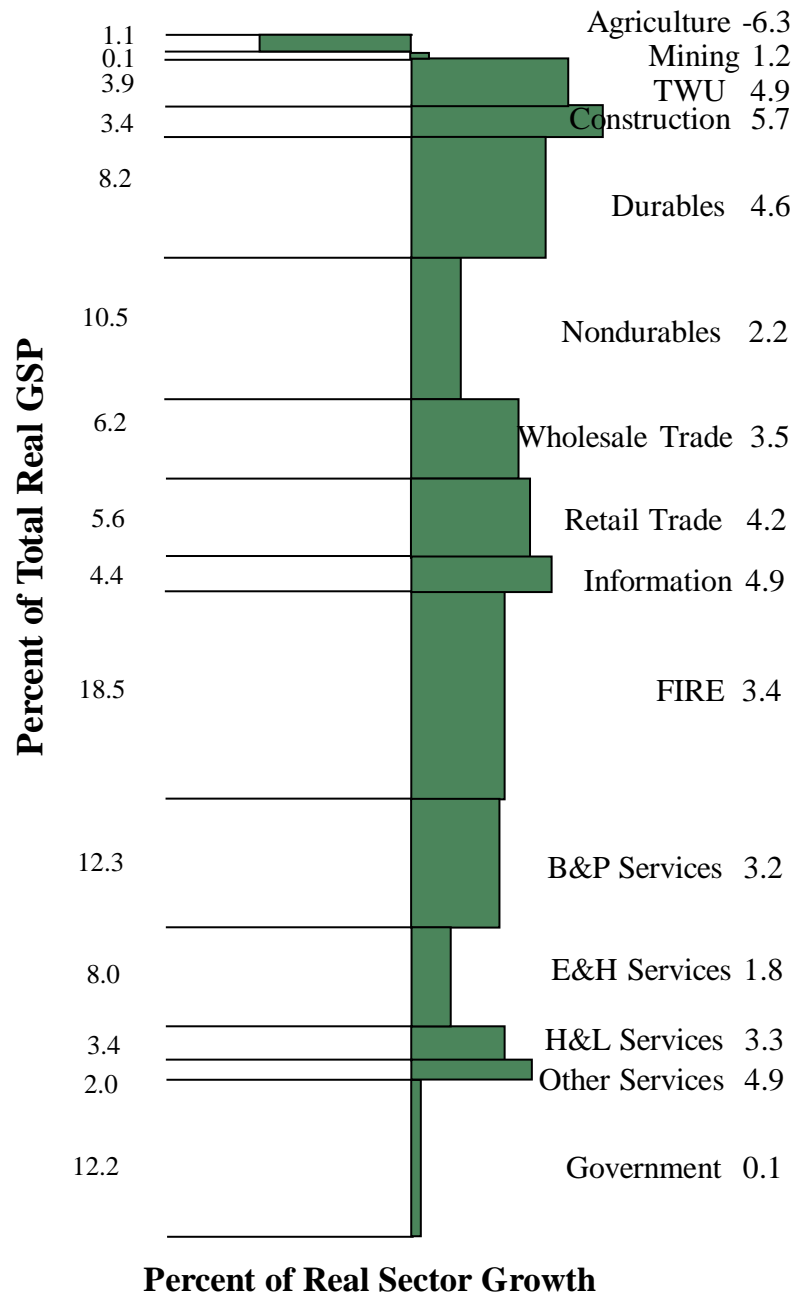


2019 Highlights

	2019 *	Percent Change
Current Dollars		
Total Gross Product	597,550.2	5.1
Constant (2012 Dollars)		
Total Gross Product	515,291.7	2.9
Agricultural	5,944.3	-6.3
Mining	512.4	1.2
Construction	17,756.4	5.7
Manufacturing	96,120.4	3.2
Durable Goods	42,404.1	4.6
Nondurable Goods	53,716.3	2.2
TWU	20,217.0	4.9
Wholesale Trade	32,119.7	3.5
Retail Trade	28,657.1	4.2
Information	22,814.5	4.9
FIRE	95,494.6	3.4
B & P	63,607.9	3.2
E & H	41,325.1	1.8
H & L	17,592.8	3.3
Services	10,253.8	4.9
Government	62,875.7	0.1

* millions of dollars

2019 Total Real GSP Growth 2.9%



2019 GSP SECTOR ANALYSIS

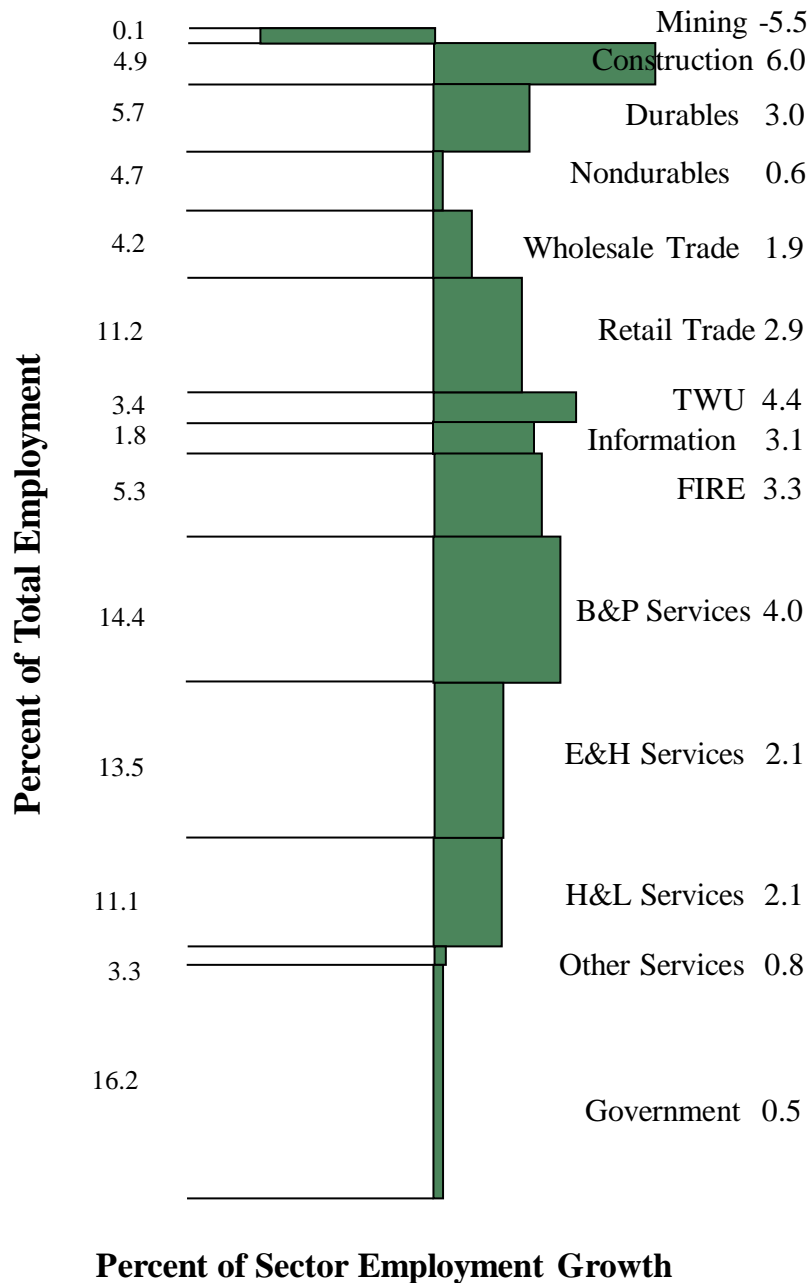
The chart to the left presents the projected contributions of each major economic sector to North Carolina's Gross State Product (GSP). The real (inflation-adjusted) growth rate for 2019 is forecast to increase by 2.9 percent. Projected real growth rates for each sector (displayed in black type) are 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 construction with a projected real increase of 5.7 percent; other services with a projected real increase of 4.9 percent; information with a projected real increase of 4.9 percent; transportation, warehousing; utilities (TWU) with a projected real increase of 4.9 percent; durable goods manufacturing with a projected real increase of 4.6 percent; retail trade with a projected real increase of 4.2 percent; wholesale trade with a projected real increase of 3.5 percent; finance, insurance, and real estate (FIRE) with a projected real increase of 3.4 percent; hospitality and leisure services with a projected real increase of 3.3 percent; and business and professional services with a projected real increase of 3.2 percent.

Four other sectors are expected to experience growth rates, but at levels at or below the overall 2.9 percent GSP real growth rate. These sectors are nondurable goods manufacturing with a projected real increase of 2.2 percent, educational and health services with a projected real increase of 1.8 percent, mining with a projected real increase of 1.2 percent, and government with a projected real increase of 0.1 percent.

Only agriculture is expected to experience an output decline in 2019.

2018 Year-End Employment Trends



2018 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 4,558,200 persons by December 2018, an increase of 2.5 percent over the employment level in December 2017. The state added 109,000 net jobs during the year.

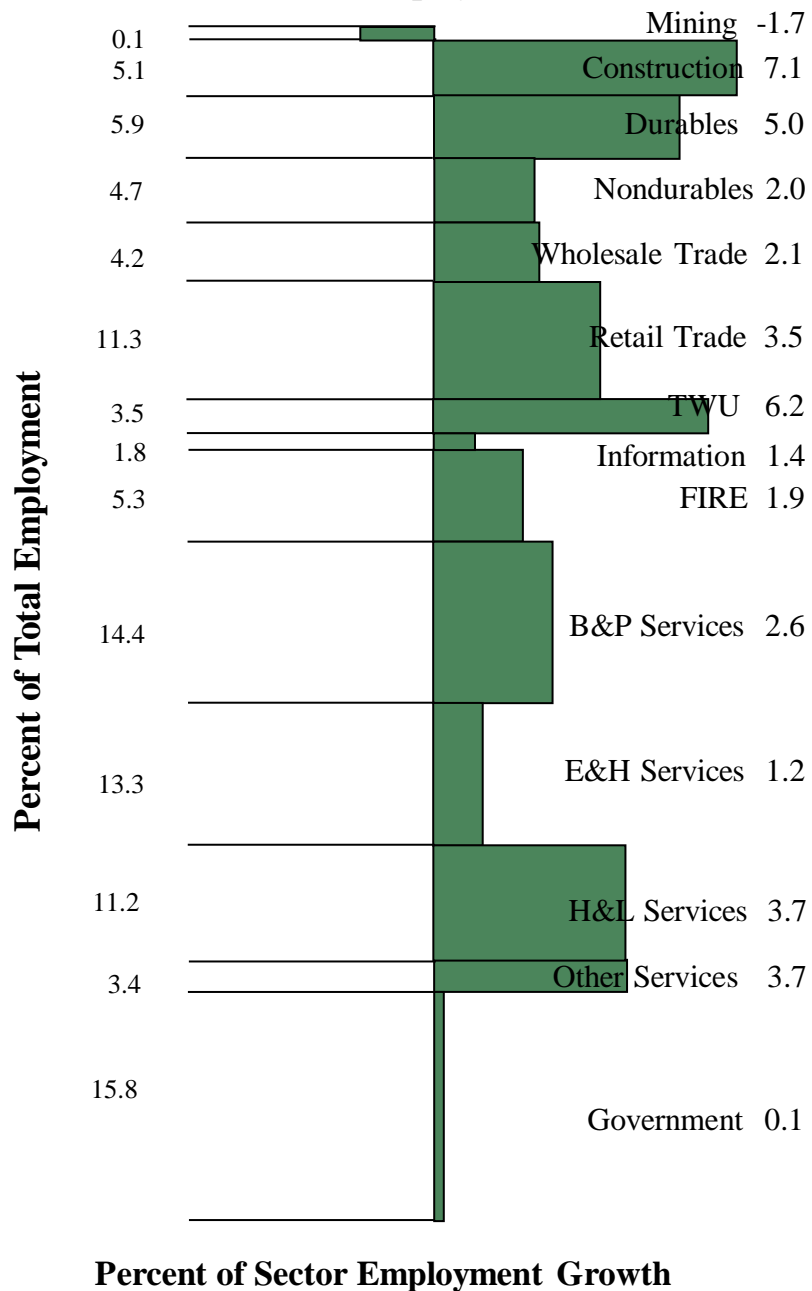
Thirteen of the state's fourteen nonagricultural sectors of the economy are expected to experience employment increases during 2018. The sectors with the strongest employment increases in 2018 are construction at 6.0 percent, TWU at 4.4 percent, and business and professional services at 4.0 percent.

2018 Employment Highlights

	Year-End*	Percent Change
Total Establishment		
Employment	4,558.2	2.5
Mining	5.4	-5.5
Construction	223.1	6.0
Manufacturing	477.0	1.8
Durable Goods	261.3	3.0
Nondurable Goods	215.7	0.6
Wholesale Trade	193.5	1.9
Retail Trade	510.9	2.9
TWU	153.6	4.4
Information	82.3	3.1
FIRE	242.8	3.3
B&P Services	656.9	4.0
E&H Services	615.6	2.1
H&L Services	507.3	2.1
Other Services	151.9	0.8
Government	738.0	0.5

*thousands of persons

2019 Year-End Employment Trends



2019 EMPLOYMENT SECTOR ANALYSIS

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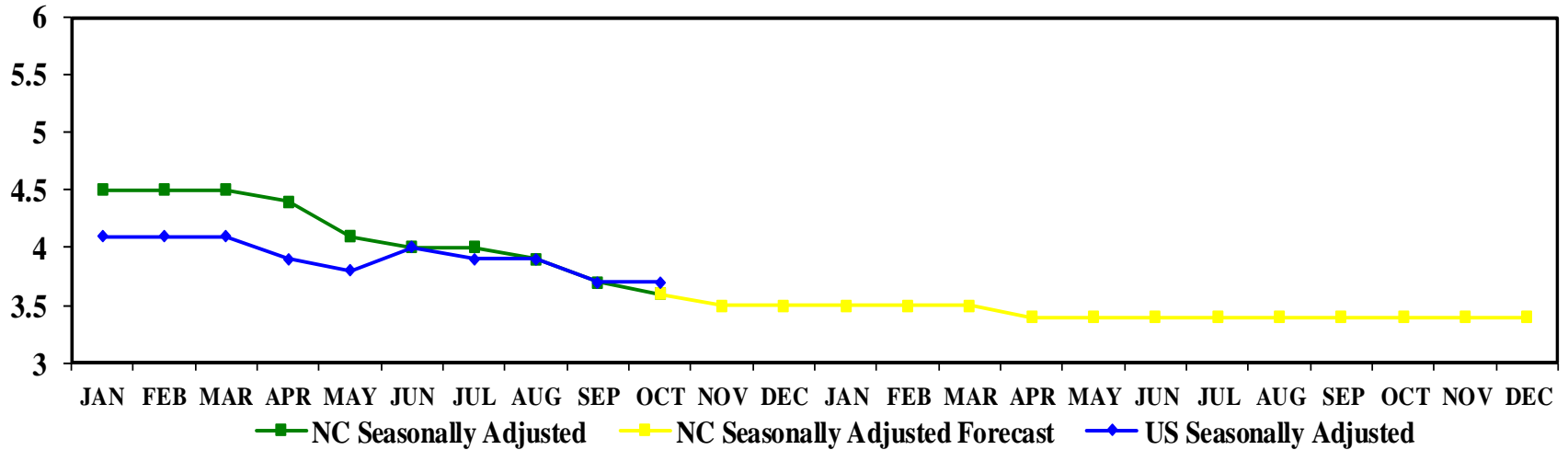
Thirteen of the state's fourteen nonagricultural sectors of the economy are expected to experience employment increases during 2019. The sectors with the strongest expected employment increases in 2019 are construction at 7.1 percent, TWU at 6.2 percent, and durable goods manufacturing at 5.0 percent.

2019 Employment Highlights

	Year-End*	Percent Change
Total Establishment		
Employment	4,678.2	2.6
Mining	5.3	-1.7
Construction	239.1	7.2
Manufacturing	494.4	3.5
Durable Goods	274.4	5.0
Nondurable Goods	220.0	2.0
Wholesale Trade	197.6	2.1
Retail Trade	528.6	3.5
TWU	163.1	6.2
Information	83.4	1.4
FIRE	247.3	1.9
B&P Services	673.8	2.6
E&H Services	623.1	1.2
H&L Services	526.2	3.7
Other Services	157.5	3.7
Government	738.6	0.1

*thousands of persons

2018-2019 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 2018 and 2019. 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 2018 with an unemployment rate of 4.1 percent, which has declined to 3.7 percent by October. North Carolina started the year with a 4.5 percent rate of unemployment, which declined to 3.6 percent by October. By December of 2018 the North Carolina unemployment rate is expected to drop to 3.5 percent and by December 2019 the unemployment rate is expected to be around 3.4 percent.