



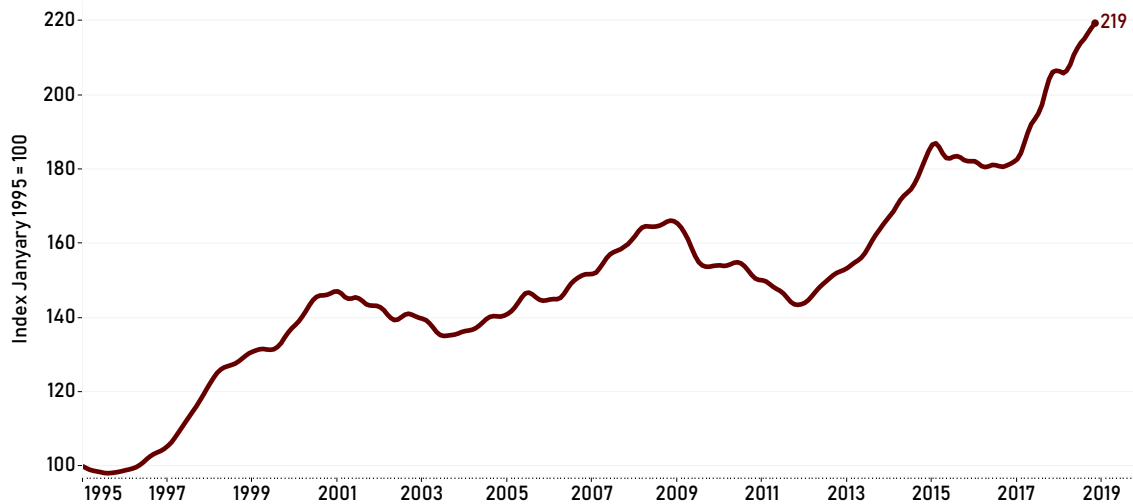
## HIGHLIGHTS

- Employment in November 2018 increased at an annualized rate of 4.4% from its revised October figure and is up 2.5% from the level in November 2017. Employment counts from June to November 2018 were revised upward with the most recent data release.
- The Business Cycle Index for the month of November 2018 rose at an annualized rate of 7.3%, above the long-run average.
- The Unemployment Rate remained unchanged at the historically low rate of 2.8%.
- Real taxable sales for the month of November 2018 were up 4% compared to November of the previous year.
- Local GDP experienced the third highest growth between 2001 and 2017 of the measured Texas Triangle metros, exceeding the state and national GDP growth rates.

## THE COLLEGE STATION-BRYAN BUSINESS-CYCLE INDEX

Figure 1 depicts the College Station-Bryan (CSB) Business-Cycle Index. The November estimate of the CSB Business-Cycle Index is 219, up 1 percentage point from the revised October value.

**FIGURE 1. COLLEGE STATION-BRYAN BUSINESS-CYCLE INDEX**



Last reported data point: November 2018 (monthly). Source: Private Enterprise Research Center.

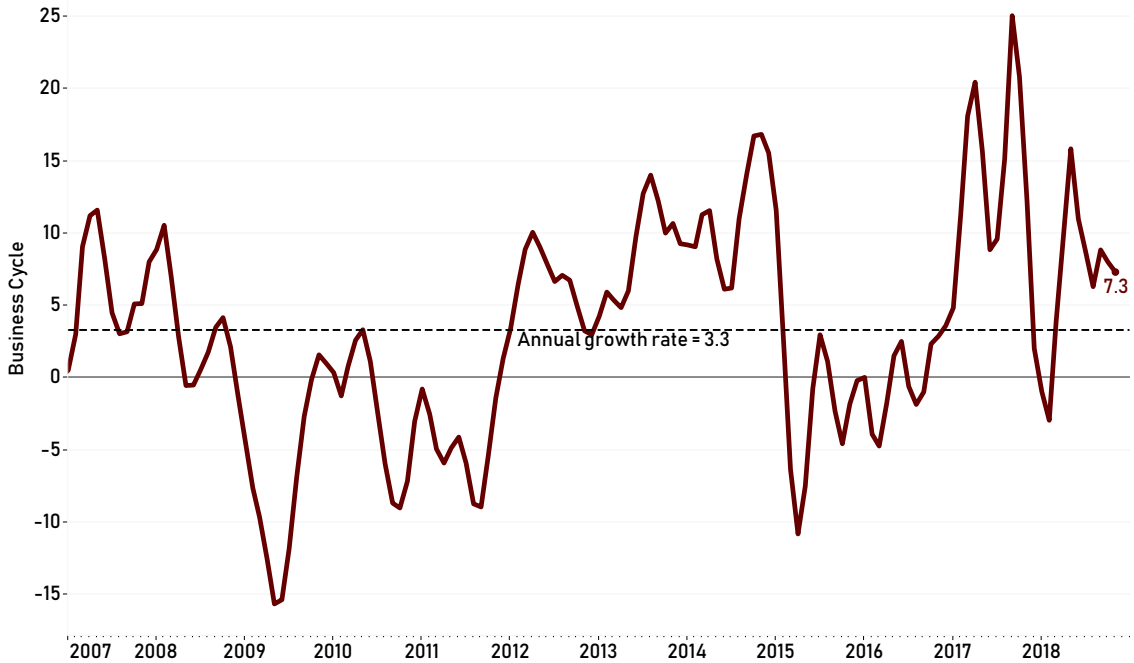
## THE COLLEGE STATION-BRYAN BUSINESS-CYCLE

The CSB Business-Cycle Index grew at an annualized rate of 7.3% in November. Over the course of the first eleven months of 2018, the annualized growth rate averaged 6.9%. The rate of economic growth in recent months is higher than previously estimated due to an upward revision by the Bureau of Labor Statistics in the nonfarm employment counts for the CSB Metropolitan Statistical Area (MSA). This data revision is discussed in the next section. Nonfarm employment is one of the four economic indicators on which the business-cycle is estimated. The other three economic indicators are the unemployment rate, real (inflation adjusted) taxable sales, and real wages. As of November, seasonally adjusted nonfarm employment stood at 122,300, or about 4,000 more workers than the revised estimate for October. Real taxable sales in November (not graphed) were 0.7% higher than in October. Real quarterly wages (not graphed) were updated last month and will be updated with the next release of quarterly wages data in March 2019.

SPONSORED BY THE BRAZOS VALLEY ECONOMIC DEVELOPMENT CORPORATION

PRIVATE ENTERPRISE RESEARCH CENTER, TEXAS A&M UNIVERSITY | JANUARY 2019 INDEX

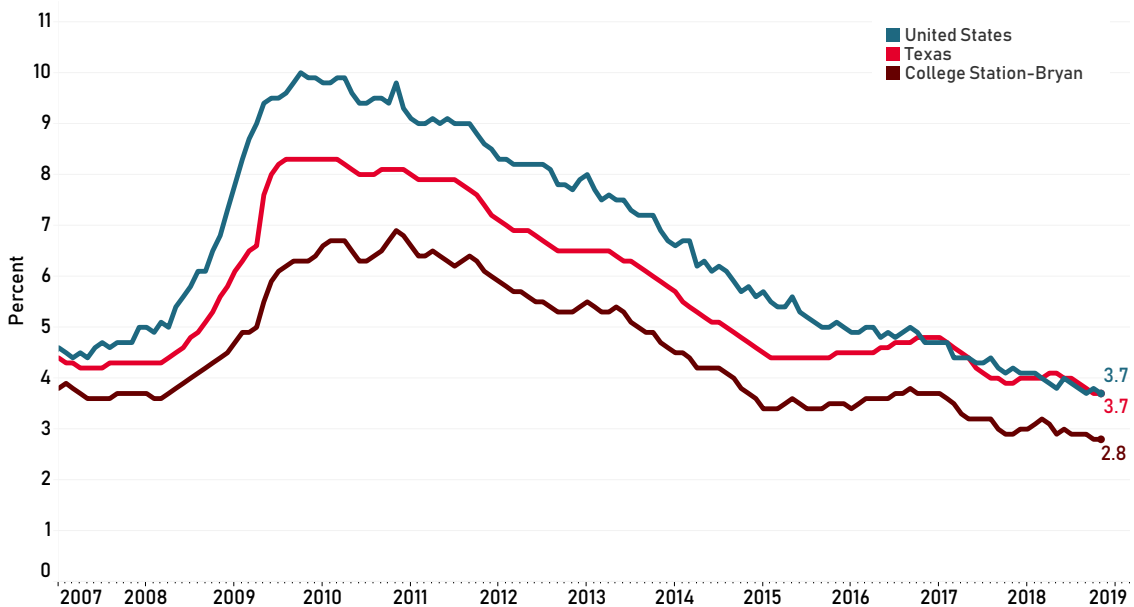
**FIGURE 2. COLLEGE STATION-BRYAN BUSINESS-CYCLE**



**UNEMPLOYMENT RATE**

The November unemployment rate in CSB remained at the low rate of 2.8%. The rate in Texas and in the U.S. were both 3.7% in November. All of these rates indicate a tight labor market by historical standards.

**FIGURE 3. UNEMPLOYMENT RATE**



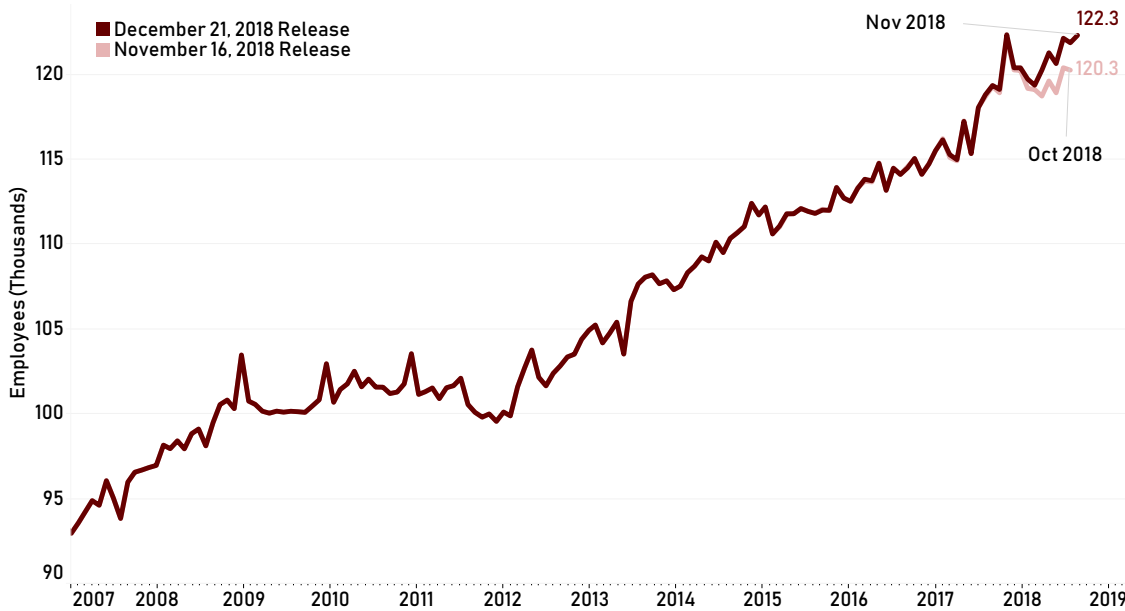
## FOCUS ON THE COLLEGE STATION-BRYAN MSA

This month, we discuss the Bureau of Labor Statistics' revision to the nonfarm employment series, one of the four series used to estimate the local business-cycle. We also compare the growth in real Gross Domestic Product (GDP) in College Station-Bryan to the growth in other Texas MSAs, and compare the composition of GDP by industry to Texas and to the nation as a whole.

### NONFARM EMPLOYMENT

The Bureau of Labor Statistics periodically revises past employment estimates to incorporate new benchmarks which require new seasonal adjustments. This just occurred for data on nonfarm employment in College Station-Bryan. Figure 4 presents two versions of this data for the time period from January 2007 to the present.<sup>1</sup> One version graphs data released in November 2018, and runs through October 2018. The second version graphs data released in December 2018, and runs through November 2018. The versions differ mostly in the past six months, and the most recent data reports significantly higher employment levels. For example, in the November data release, nonfarm employment in CSB for October 2018 was reported at 120,300, but in the December data release, the October count was revised upward to 121,900, or 1.3% higher. Also apparent is the higher growth rate in employment in recent months when using the December data release. Between May 2018 and October 2018, the annualized monthly growth rate was 5.1% based on the December release, but was 2.3% based on the November release of the data. These higher employment growth rates account for much of the higher estimated growth rates in the overall CSB MSA shown in Figures 1 and 2.

FIGURE 4. NONFARM EMPLOYMENT IN COLLEGE STATION-BRYAN

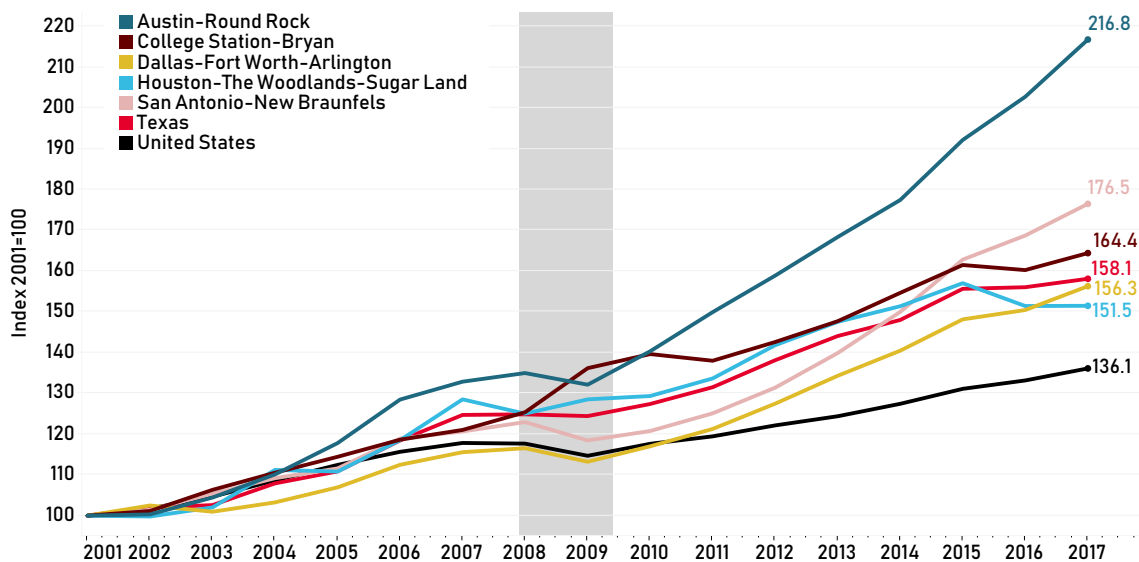


Seasonally adjusted by the Federal Reserve Bank of Dallas. Last reported data point: November and October 2018 (monthly). Source: Bureau of Labor Statistics; Federal Reserve Bank of Dallas, Total Non-farm Payroll Employment for College Station-Bryan, TX (MSA).

## GROSS DOMESTIC PRODUCT

Gross domestic product measures the total value of final goods and services produced in an area. For the nation as a whole, the real (inflation adjusted) movements in GDP mirror the pattern of the business-cycle. Similarly, the pattern of changes in a state's or a MSA's GDP reflect the underlying business-cycle. For MSAs, GDP data is only available annually and data for 2017 is the most recent. While much of the detail of the business-cycle is muted with annual data, the broad timing of business-cycles can still be determined, as illustrated in Figure 5. This figure indexes real GDP to the areas' respective GDP in 2001 for select Texas MSAs, for Texas, and for the U.S. The reduction in GDP during the Great Recession is apparent for most of the economies shown in the figure. However, real GDP in the CSB MSA actually grew during the recession, but fell between 2010 and 2011. This pattern is also seen, but with more detail, in the CSB Business-Cycle Index in Figure 1. As discussed in the November issue of Economic Indicators, the CSB economy's business-cycle is delayed relative to the national and state economy, due in part to the timing of changes in Texas A&M University's budget and the relative importance of Texas A&M to the local economy. The endpoints for each series indicate the growth in each areas' real GDP between 2001 and 2017. Over this period, the CSB MSA experienced the third highest growth rate among the areas depicted.

**FIGURE 5. REAL GROSS DOMESTIC PRODUCT, INDEXED TO 2001**



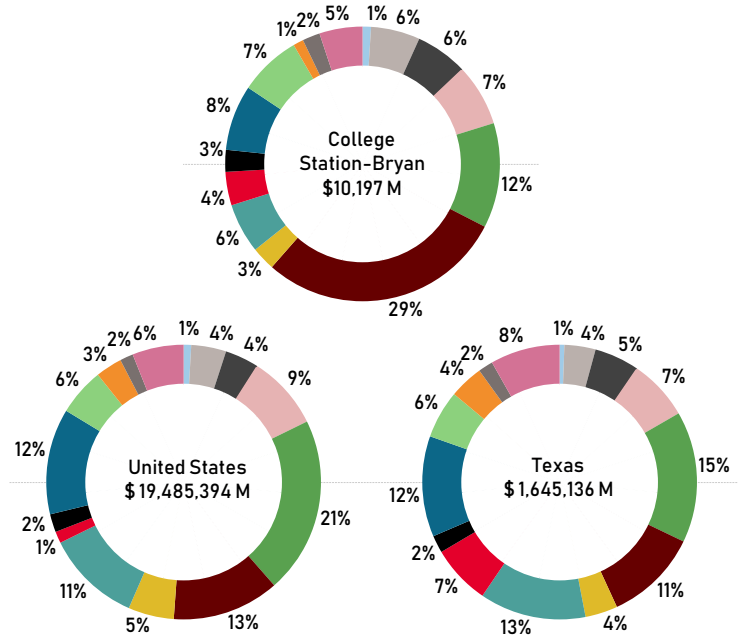
Last reported data point: 2017 (yearly). Real GDP index (2001=100) by state and metropolitan area. Source: Bureau of Economic Analysis; the Private Enterprise Research Center for the index. Shaded area represents U.S. recession.

## GROSS DOMESTIC PRODUCT BY INDUSTRY

Figure 6 illustrates the composition of GDP by industry in the U.S., in Texas and in the CSB MSA. The importance of Texas A&M is reflected in the 29% of local GDP attributed to Government at all levels. This figure is notable when compared to Government's 13% of GDP at the national level and 11% of GDP in Texas. The importance of the oil industry in Texas is reflected by the 7% share of GDP accounted for by Mining and Extraction in the state, compared to 4% locally and only 1% of the country's total GDP. Another notable difference is Finance and Real Estate's share of the Texas economy at 15%, but the national share is 6 percentage points higher at 21%. The Construction industry locally was measured at 6% of GDP, exceeding the shares of the state and national GDP. As of 2017, the Manufacturing, Professional Services and Finance and Real Estate categories all had lower shares compared to the respective state and national shares. In 2001, the Government percentage of GDP was 31% or 2 percentage points higher than the 2017 percentage. As the local economy has grown, the private sector has grown faster than the Government sector.

**FIGURE 6. GROSS DOMESTIC PRODUCT BY COMPOSITION, 2017**

- Agriculture
- Arts
- Construction
- Education, Health, and Social Services
- Finance and Real Estate
- Government
- Information
- Manufacturing
- Mining and Extraction
- Other
- Professional Services
- Retail Trade
- Transportation and Warehousing
- Utilities
- Wholesale Trade



Total Gross Domestic Product in 2017 (yearly). Industry shares. Source: Bureau of Economic Analysis (Millions of current dollars).

**NOTES AND LINKS**

The extent of the College Station-Bryan MSA is defined by the Census Bureau and includes Brazos, Burleson, and Robertson counties. The Business-Cycle Index is re-estimated each month using the most recent data for the four economic variables included in the model: the unemployment rate, nonfarm employment, real wages, and real taxable sales. The real wage series is released on a quarterly basis and the other three are released monthly. The underlying data series are subject to revision. With new monthly data and revisions of past data, each month the Index and the Business-Cycle will differ from previous estimates.

For more details about the CSB Business-Cycle Index see: *Methodology for Constructing an Economic Index for the College Station-Bryan Metropolitan Statistical Area*.

**ENDNOTES**

<sup>1</sup>Our ultimate source of the seasonally adjusted nonfarm employment series for College Station-Bryan is the Federal Reserve Bank Dallas (FRBD). The FRBD series uses a superior two-step seasonal adjustment process that overcomes a data issue arising at the turn of each year in the BLS data. See the discussion of the FRBD’s two-step adjustment process of the nonfarm employment series at: <https://www.dallasfed.org/research/basics/twostep.aspx>

## DATA SOURCES

### **Gross Domestic Product**

Bureau of Economic Analysis, Real GDP by state: All industry total; Real GDP by metropolitan area: All industry total, for Indexed GDP. GDP in current dollars by metropolitan area and by state for GDP composition; [https://apps.bea.gov/iTable/index\\_regional.cfm](https://apps.bea.gov/iTable/index_regional.cfm).

### **Inflation**

U.S. Bureau of Labor Statistics, Consumer Price Index for All Urban Consumers: All Items [CPIAUCSL], retrieved from FRED, Federal Reserve Bank of St. Louis; <https://fred.stlouisfed.org/series/CPIAUCSL>. Wages and Taxable Sales are converted to real dollars (inflation-adjusted) using the CPI-U.

### **Nonfarm Employment**

Federal Reserve Bank of Dallas, Texas Workforce Commission, and Bureau of Labor Statistics, Total Non-farm Payroll Employment for College Station-Bryan, TX (MSA), two-step Seasonally Adjusted, retrieved from Federal Reserve Bank of Dallas, <https://www.dallasfed.org/research/econdata/brysa.aspx>

### **Taxable Sales (Sales and Use Tax Allocation)**

Texas Comptroller of Public Accounts, Allocation Payment Detail, Current Period Collections. Data available through Texas Comptroller of Public Accounts: <https://mycpa.cpa.state.tx.us/allocation/AllocDetail> for years 2016 to 2018. Historical data prior to 2016 from Texas Comptroller of Public Accounts. Seasonal Adjustment by Private Enterprise Research Center.

### **Unemployment Rate**

Bureau of Labor Statistics, Unemployment by Metropolitan Area, Seasonally Adjusted, Local Area Unemployment Statistics, retrieved from Bureau of Labor Statistics, <https://www.bls.gov/lau/metrossa.htm>

### **Wages**

Bureau of Labor Statistics, Total Quarterly Wages in College Station-Bryan, TX (MSA), retrieved from <https://www.bls.gov/cew/datatoc.htm>. Quarterly files by area. Seasonal Adjustment by Private Enterprise Research Center.

## CONTACT



The Brazos Valley Economic Development Corporation serves Brazos County, the City of Bryan, the City of College Station, Texas A&M University, the surrounding region and private sector investors through the Invest Brazos Valley program. BVEDC helps companies launch, grow, and locate in the Brazos Valley.

979.260.1755 | [brazosvalleyedc.org](http://brazosvalleyedc.org)



Founded in 1977 through the generosity of former students, corporations and foundations, the Private Enterprise Research Center pursues a dual mission of supporting academic research at Texas A&M University and developing market-oriented solutions to public policy problems.

979.845.7559 | [perc.tamu.edu](http://perc.tamu.edu)