

# THE *Tenth District* ECONOMIC DATABOOK

*A summary of regional and national economic indicators  
for the Tenth District states*



FEBRUARY 25, 2019

FEDERAL RESERVE BANK of KANSAS CITY

## SUMMARY OF CURRENT TENTH DISTRICT ECONOMIC CONDITIONS

The unemployment rate was 3.4 percent across the Tenth District states in December, and total payroll employment grew 1.9 percent compared to the previous year. Employment growth was broad-based across industries, with the strongest percentage gains in the mining and logging and leisure and hospitality sectors. Tenth District nominal personal income grew 4.1 percent in the third quarter of 2018 compared to the previous year. In the energy sector, rig counts were well above year-ago levels. The Federal Reserve Bank of Kansas City's Manufacturing Survey indicated an increase in manufacturing activity in January 2019, with a composite index of 52.8. Nonirrigated farmland values, as measured by the Federal Reserve Bank of Kansas City's Survey of Agricultural Credit Conditions, decreased 1.8 percent in the fourth quarter of 2018 compared to the same period in 2017.

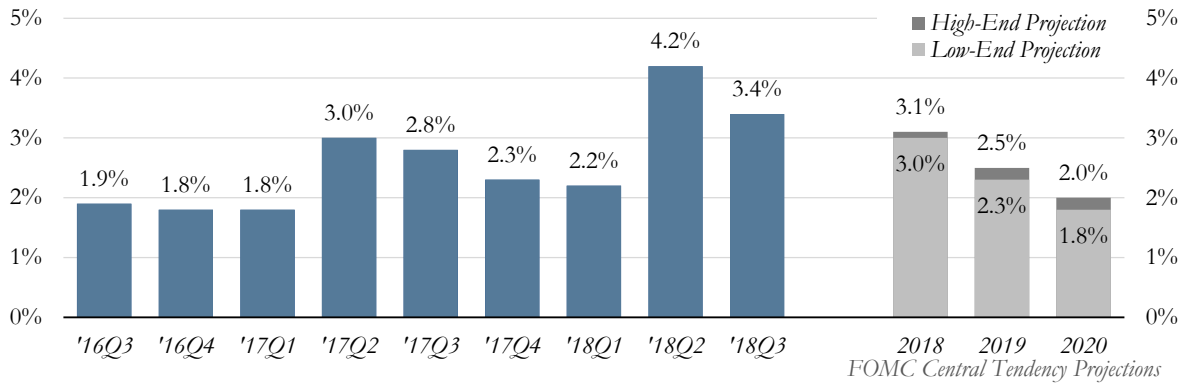
This databook provides current economic indicators to help monitor trends and allow comparison of past information. These indicators include: gross domestic product (GDP); inflation; employment; employment by industry; state unemployment; personal income; home prices; housing indicators; manufacturing activity; oil, gas and coal production; agriculture; and exports. These indicators can be found on the following pages.



The Federal Reserve Bank of Kansas City's headquarters is located at 1 Memorial Drive in the heart of Kansas City, Missouri. The Federal Reserve Bank of Kansas City serves the Tenth Federal Reserve District, which includes Colorado, Kansas, western Missouri, Nebraska, northern New Mexico, Oklahoma and Wyoming. There are three branches across the Tenth Federal Reserve District located in Denver, Oklahoma City, and Omaha.

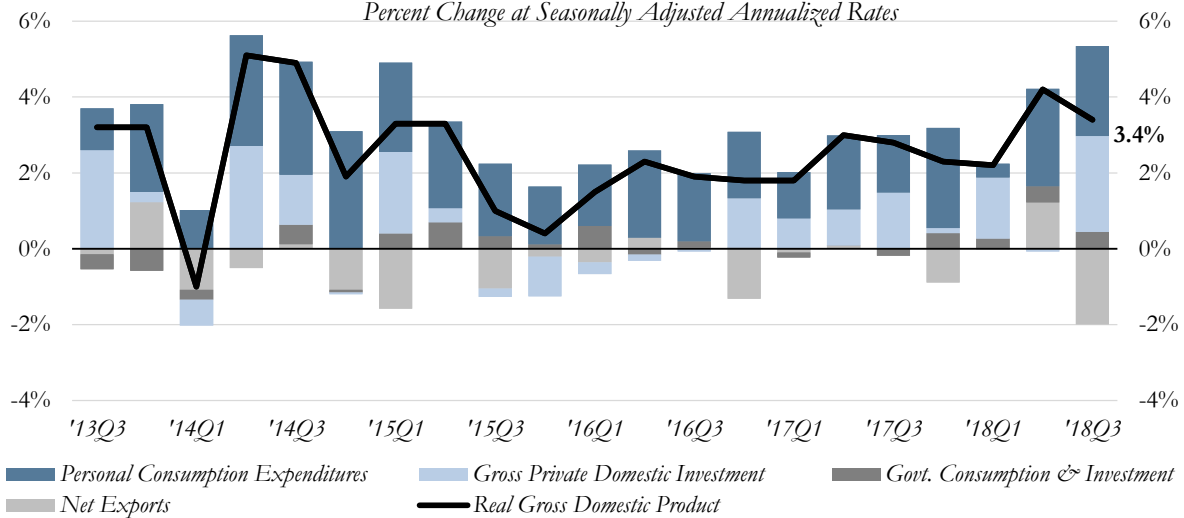
**U.S. Real Gross Domestic Product**

*Percent Change at Seasonally Adjusted Annualized Rates*



**Contributions to Real U.S. GDP**

*Percent Change at Seasonally Adjusted Annualized Rates*

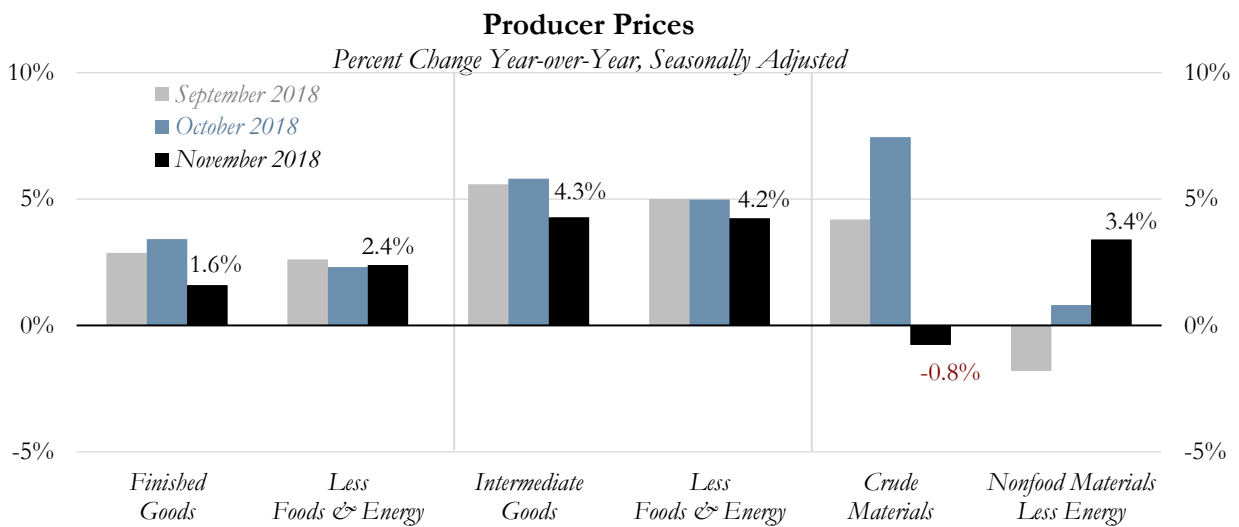
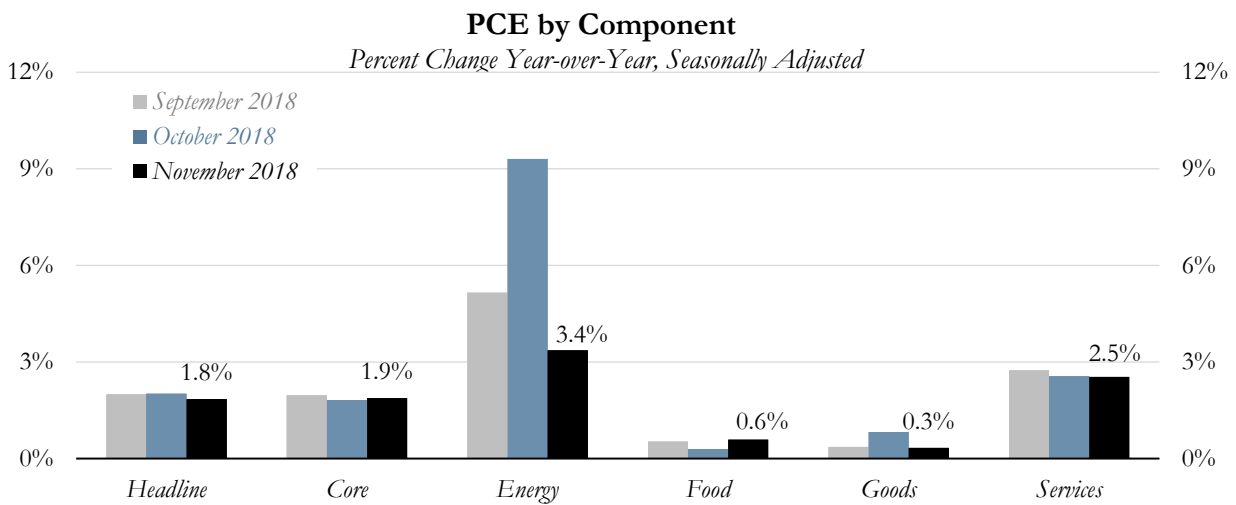
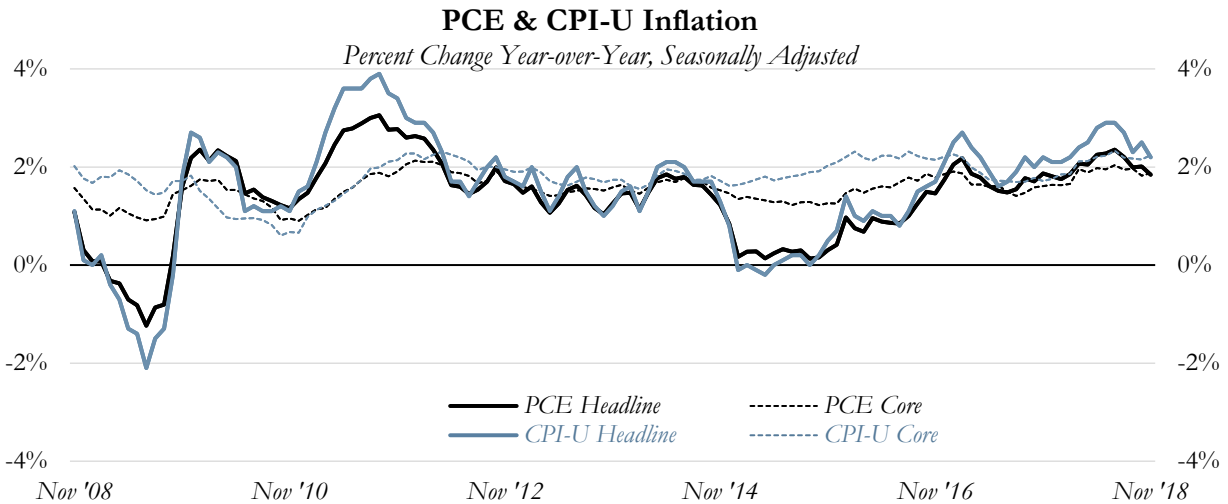


**Tenth District Real Gross Domestic Product**

*Percent Change Year-over-Year*



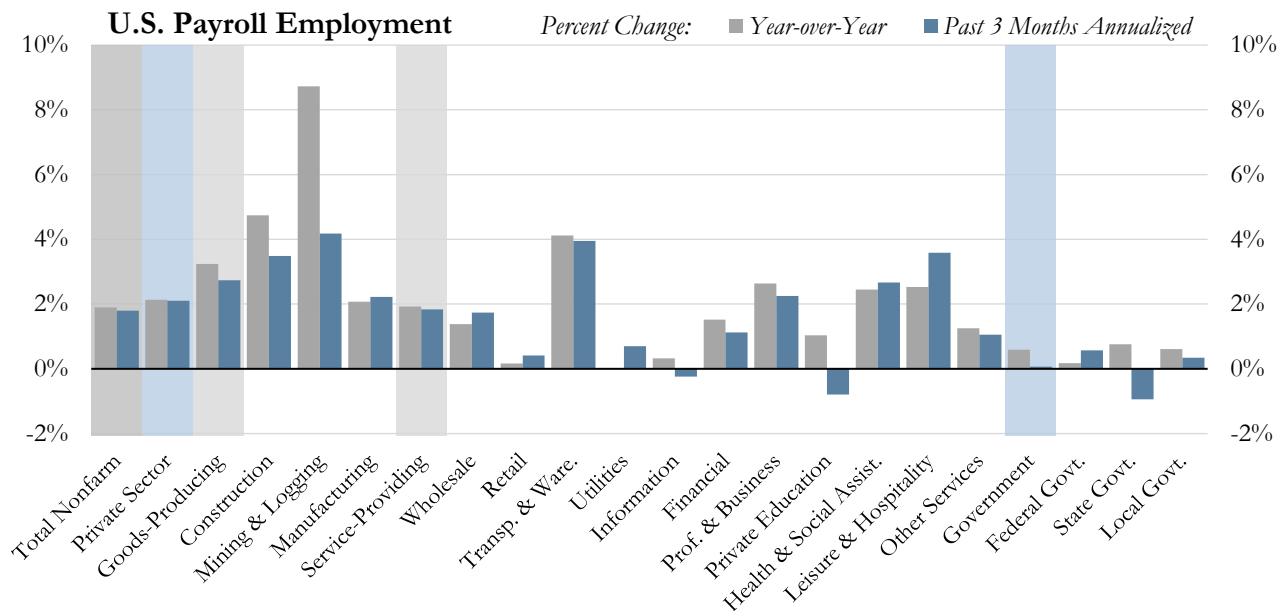
Source: Bureau of Economic Analysis, Federal Open Market Committee/Haver Analytics



Source: Bureau of Economic Analysis & Bureau of Labor Statistics/Haver Analytics

**January 2019 U.S. Payroll Employment**

	<i>Number of Jobs (Thousands)</i>	<i>Jobs Gained Year-over-Year (Thousands)</i>	<i>Share of Employment</i>
<b>Total Nonfarm</b>	150,574	2,807	100.0%
Private Sector	128,068	2,675	85.0%
<i>Goods-Producing</i>			
Goods-Producing	21,046	660	14.0%
Construction	7,464	338	4.9%
Mining & Logging	760	61	0.5%
Manufacturing	12,822	261	8.5%
<i>Service-Providing</i>	106,967	2,023	71.1%
Wholesale Trade	5,904	80	3.9%
Retail Trade	15,836	26	10.5%
Transportation & Warehousing	5,534	219	3.7%
Utilities	554	0	0.4%
Information	2,821	9	1.9%
Financial Activities	8,631	129	5.7%
Professional & Business Services	21,276	546	14.1%
Educational Services	3,752	39	2.5%
Healthcare & Social Assistance	20,214	483	13.4%
Leisure & Hospitality	16,618	410	11.0%
Other Services	5,881	73	3.9%
Government	22,506	132	15.0%
Federal Government	2,800	5	1.9%
State Government	5,186	39	3.5%
Local Government	14,520	88	9.7%

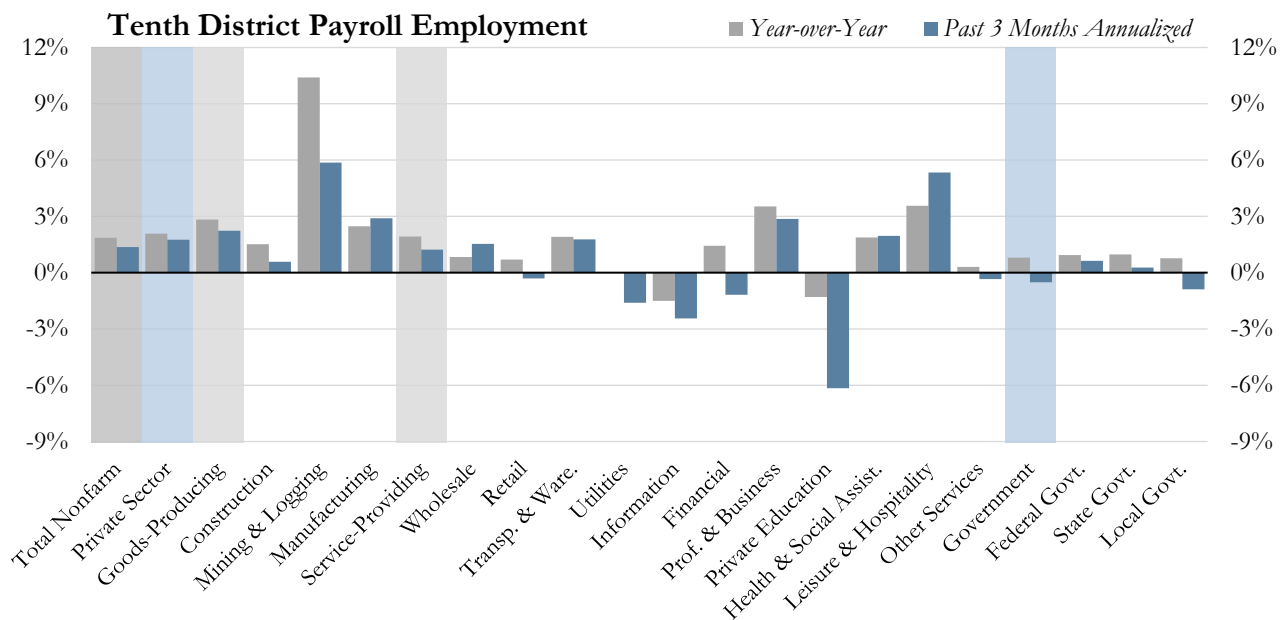


Source: Bureau of Labor Statistics/Haver Analytics

### December 2018 Tenth District Payroll Employment

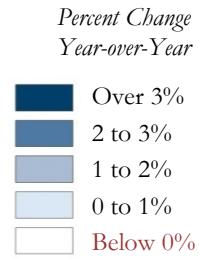
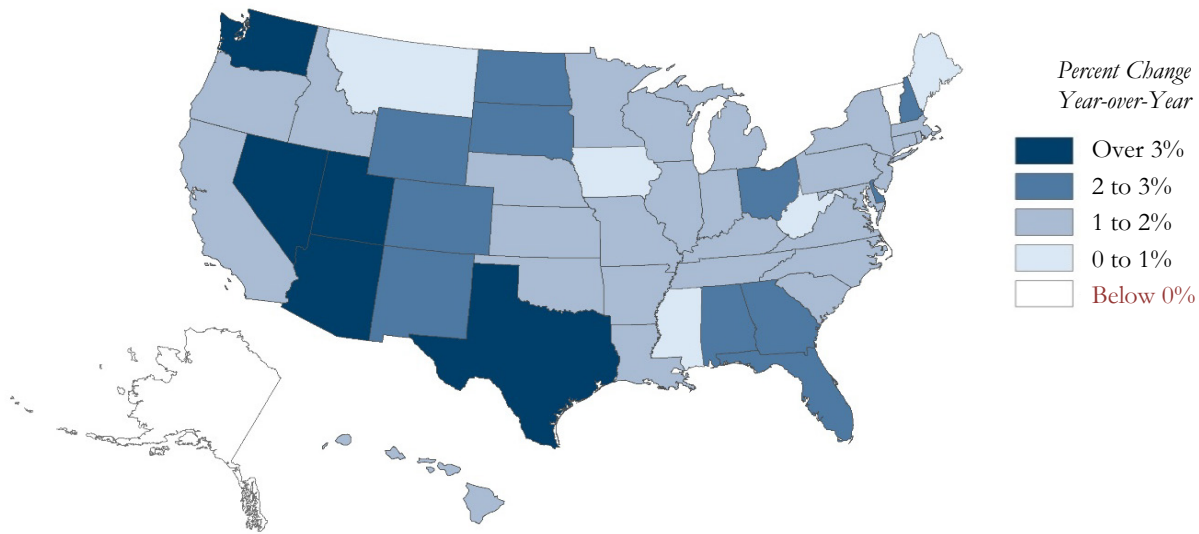
*Seasonally Adjusted*

	<i>Number of Jobs (Thousands)</i>	<i>Jobs Gained Year-over-Year (Thousands)</i>	<i>Share of Employment</i>
<b>Total Nonfarm</b>	10,997	201	100.0%
Private Sector	9,074	185	82.5%
<i>Goods-Producing</i>	1,561	43	14.2%
Construction	557	8	5.0%
Mining & Logging	143	14	1.3%
Manufacturing	862	21	7.8%
<i>Service-Providing</i>	7,498	142	68.3%
Wholesale Trade	423	4	3.9%
Retail Trade	1,144	8	10.5%
Transportation & Warehousing	389	7	3.6%
Utilities	40	0	0.4%
Information	194	-3	1.8%
Financial Activities	627	9	5.7%
Professional & Business Services	1,466	50	13.3%
Private Educational Services	151	-2	1.4%
Healthcare & Social Assistance	1,432	26	13.0%
Leisure & Hospitality	1,221	42	11.1%
Other Services	424	1	3.9%
<b>Government</b>	1,924	15	17.5%
Federal Government	236	2	2.1%
State Government	481	5	4.4%
Local Government	1,207	9	11.0%



Source: Bureau of Labor Statistics/Haver Analytics

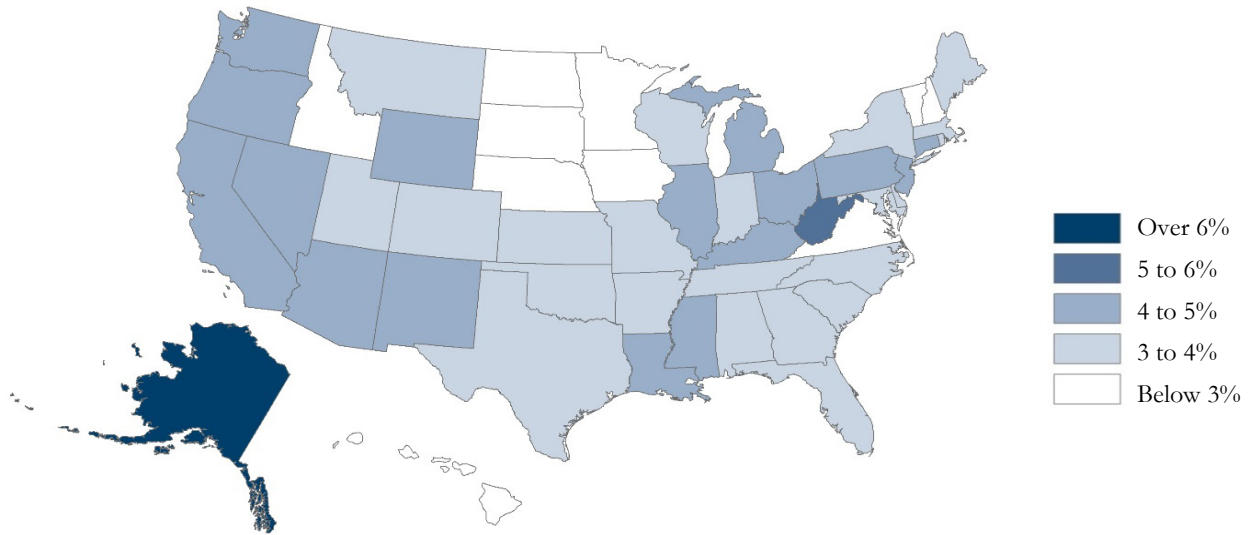
**December 2018 Total Nonfarm Employment**  
*Seasonally Adjusted*



		<i>Percent Change Year-over-Year</i>			<i>Percent Change Year-over-Year</i>
	<b>United States</b>	<b>1.8%</b>	25	California	1.7%
	<b>Tenth District</b>	<b>1.9</b>	26	Wisconsin	1.6
1	Nevada	3.9	27	<b>Oklahoma</b>	1.5
2	Arizona	3.4	28	New Jersey	1.5
3	Texas	3.2	29	Hawaii	1.4
4	Utah	3.1	30	Indiana	1.4
5	Washington	3.1	31	Rhode Island	1.4
6	<b>Wyoming</b>	2.8	32	<b>Kansas</b>	1.4
7	<b>Colorado</b>	2.8	33	Arkansas	1.4
8	New Hampshire	2.7	34	<b>Missouri</b>	1.4
9	Florida	2.7	35	New York	1.3
10	Georgia	2.5	36	Michigan	1.3
11	<b>New Mexico</b>	2.4	37	Pennsylvania	1.2
12	Delaware	2.2	38	<b>Nebraska</b>	1.2
13	Alabama	2.2	39	Connecticut	1.2
14	North Dakota	2.1	40	Illinois	1.2
15	Ohio	2.1	41	Louisiana	1.1
16	South Dakota	2.0	42	Kentucky	1.1
17	Idaho	2.0	43	Minnesota	1.1
18	North Carolina	2.0	44	Montana	1.0
19	South Carolina	2.0	45	Iowa	1.0
20	Tennessee	2.0	46	Mississippi	0.9
21	Virginia	1.9	47	Maine	0.7
22	Maryland	1.9	48	West Virginia	0.6
23	Oregon	1.9	49	Vermont	-0.1
24	Massachusetts	1.8	50	Alaska	-0.1

Source: Bureau of Labor Statistics/Haver Analytics

**December 2018 Unemployment Rates**  
*Seasonally Adjusted*



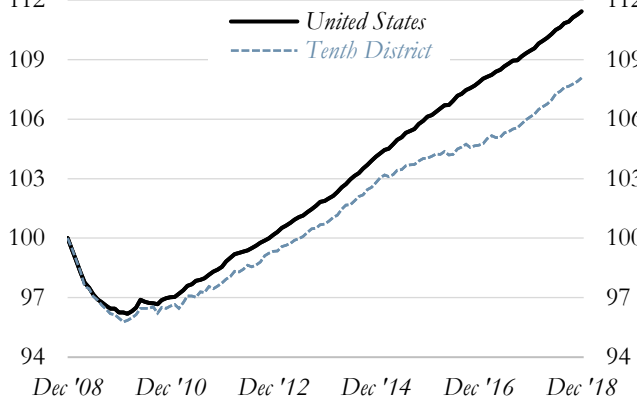
<i>Percent Unemployed</i>			<i>Percent Unemployed</i>		
	<b>United States</b>	<b>3.9%</b>	23	Montana	3.7
	<b>Tenth District</b>	<b>3.4</b>	26	Tennessee	3.6
1	Alaska	6.3	26	North Carolina	3.6
2	West Virginia	5.1	26	Arkansas	3.6
3	Louisiana	4.9	26	Indiana	3.6
4	Arizona	4.8	26	Georgia	3.6
5	Mississippi	4.7	31	<b>Colorado</b>	3.5
5	<b>New Mexico</b>	4.7	32	Maine	3.4
7	Ohio	4.6	33	Massachusetts	3.3
8	Kentucky	4.4	33	Florida	3.3
8	Nevada	4.4	33	South Carolina	3.3
10	Washington	4.3	33	<b>Kansas</b>	3.3
10	Illinois	4.3	37	<b>Oklahoma</b>	3.2
12	Pennsylvania	4.2	37	Utah	3.2
12	California	4.2	39	<b>Missouri</b>	3.1
14	<b>Wyoming</b>	4.1	40	Wisconsin	3.0
14	Oregon	4.1	41	South Dakota	2.9
16	Connecticut	4.0	42	Virginia	2.8
16	New Jersey	4.0	42	Minnesota	2.8
16	Michigan	4.0	42	<b>Nebraska</b>	2.8
19	Maryland	3.9	45	North Dakota	2.7
19	Alabama	3.9	45	Vermont	2.7
19	New York	3.9	47	Idaho	2.6
19	Rhode Island	3.9	48	New Hampshire	2.5
23	Delaware	3.7	48	Hawaii	2.5
23	Texas	3.7	50	Iowa	2.4

Source: Bureau of Labor Statistics/Haver Analytics

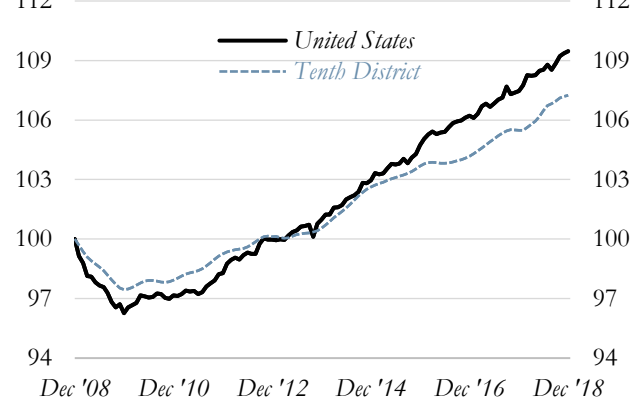
**Total Nonfarm Employment**

*Ten-Year Index of Growth, Seasonally Adjusted*

**Payroll Survey**



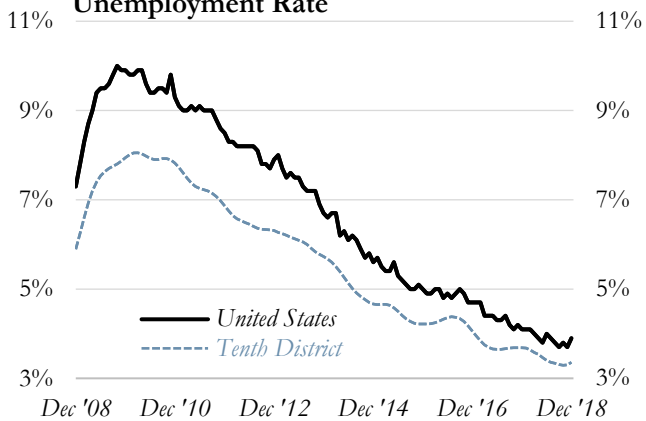
**Household Survey**



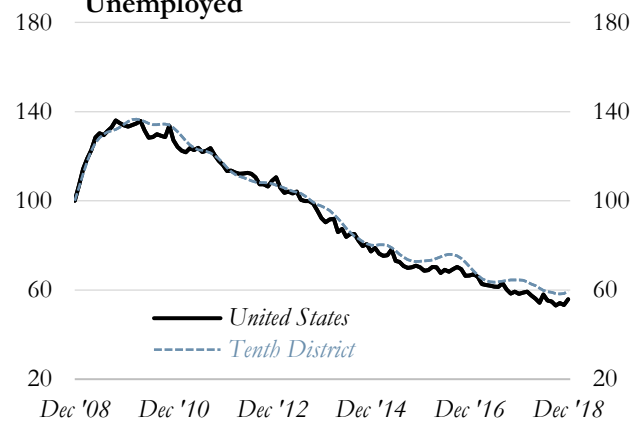
**Labor Force Dynamics**

*Ten-Year Index of Growth, Seasonally Adjusted*

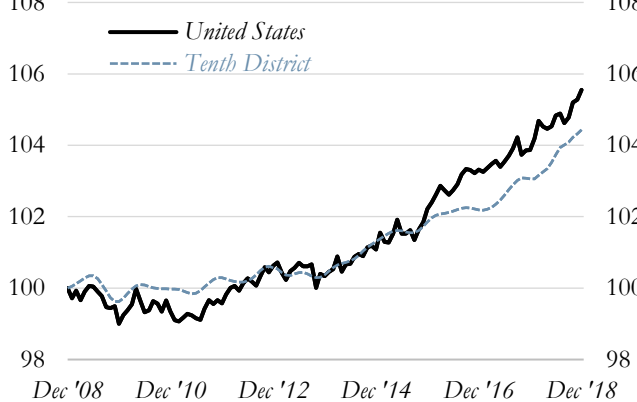
**Unemployment Rate**



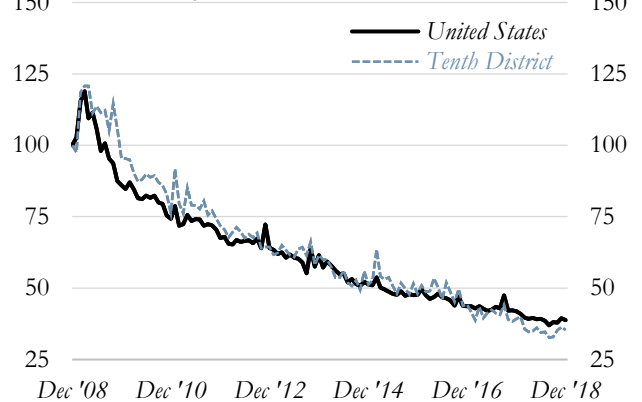
**Unemployed**



**Labor Force**



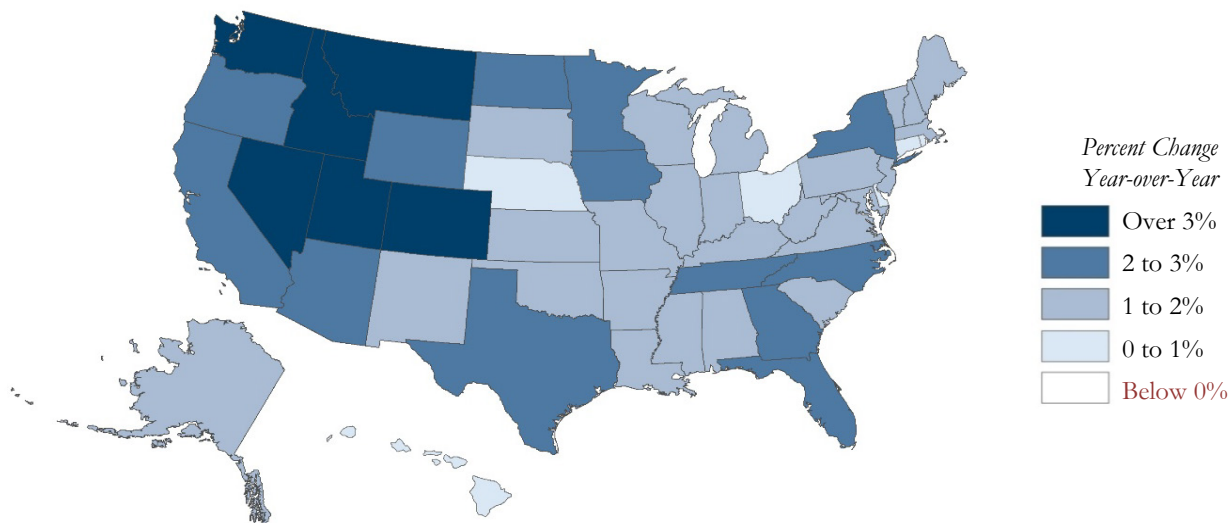
**Unemployment Insurance Claims**



Source: Bureau of Labor Statistics & Department of Labor/Haver Analytics



**2018Q3 Real Personal Income**  
*Seasonally Adjusted*

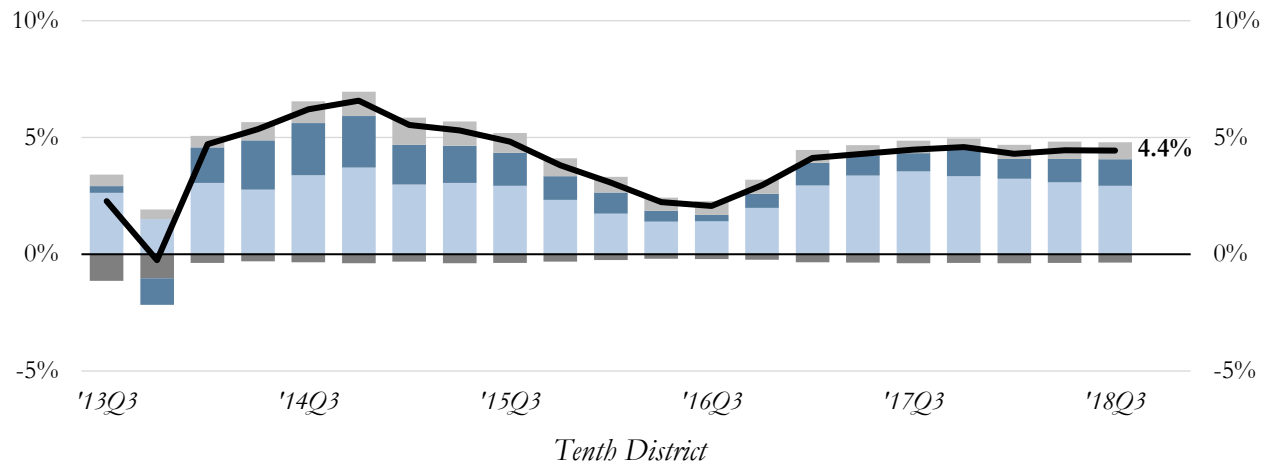


	<i>Percent Change Year-over-Year</i>	<i>Per Capita Personal Income</i>		<i>Percent Change Year-over-Year</i>	<i>Per Capita Personal Income</i>		
<b>United States</b>	<b>2.2%</b>	<b>\$53,683</b>	25	South Carolina	1.7%	\$42,726	
<b>Tenth District</b>	<b>1.9</b>	<b>45,980</b>	26	<b>Oklahoma</b>	1.5	46,178	
1	Washington	4.8	61,085	27	Louisiana	1.5	45,449
2	Utah	3.9	45,457	28	Michigan	1.4	47,810
3	Nevada	3.3	48,006	29	Alaska	1.4	59,647
4	<b>Colorado</b>	3.3	57,079	30	Virginia	1.4	56,950
5	Idaho	3.2	43,155	31	Maine	1.4	48,198
6	Montana	3.1	47,196	32	West Virginia	1.4	40,389
7	Oregon	2.9	49,948	33	<b>New Mexico</b>	1.3	41,313
8	Texas	2.9	49,245	34	Pennsylvania	1.3	55,412
9	California	2.9	62,572	35	New Jersey	1.3	66,956
10	North Dakota	2.8	54,735	36	Maryland	1.3	62,860
11	New York	2.7	67,859	37	Wisconsin	1.3	50,753
12	North Carolina	2.6	45,909	38	Indiana	1.2	46,589
13	Florida	2.5	49,258	39	Kentucky	1.2	41,889
14	Arizona	2.5	43,847	40	Mississippi	1.2	37,990
15	Minnesota	2.5	56,280	41	South Dakota	1.1	49,980
16	<b>Wyoming</b>	2.2	60,553	42	New Hampshire	1.1	61,856
17	Tennessee	2.1	47,134	43	Vermont	1.1	54,110
18	Iowa	2.1	48,743	44	<b>Kansas</b>	1.0	50,121
19	Georgia	2.0	45,624	45	Ohio	0.9	48,230
20	Illinois	1.9	56,850	46	Delaware	0.8	51,069
21	Massachusetts	1.9	70,410	47	<b>Nebraska</b>	0.8	52,000
22	Alabama	1.7	42,380	48	Rhode Island	0.8	54,736
23	Arkansas	1.7	42,373	49	Connecticut	0.5	74,076
24	<b>Missouri</b>	1.7	46,703	50	Hawaii	0.4	54,411

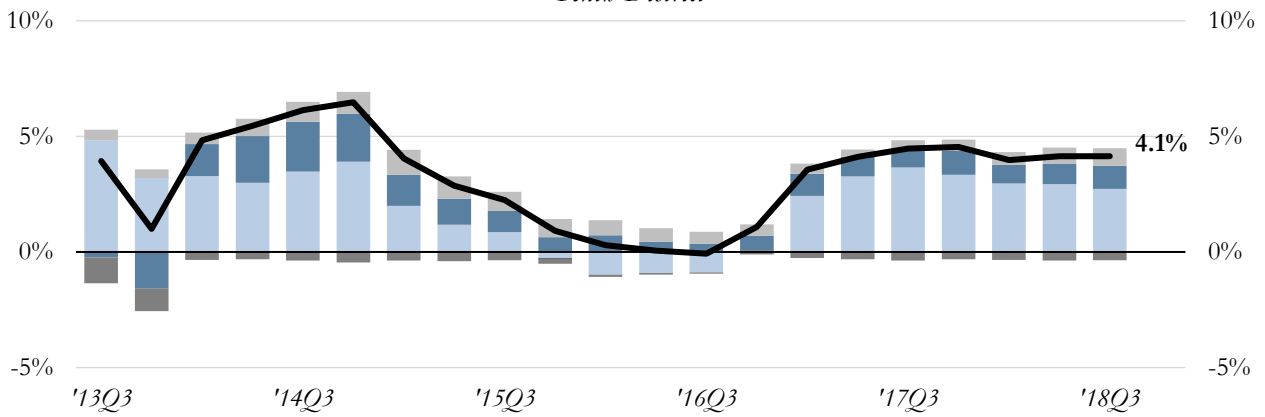
Source: Bureau of Economic Analysis/Haver Analytics

### Nominal Personal Income

*Contributions to Percent Change, Seasonally Adjusted*  
United States



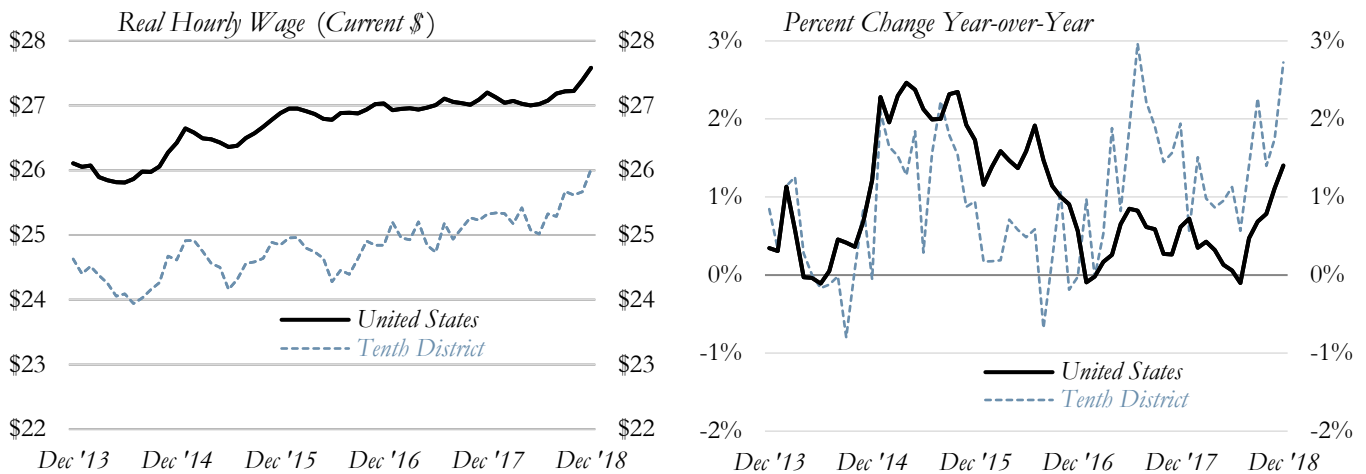
### Tenth District



Contributions to Social Insurance    
  Transfer Payments    
  Dividends, Interest & Rent  
 Residence Adjustment    
  Earnings by Place of Work    
  Total Personal Income

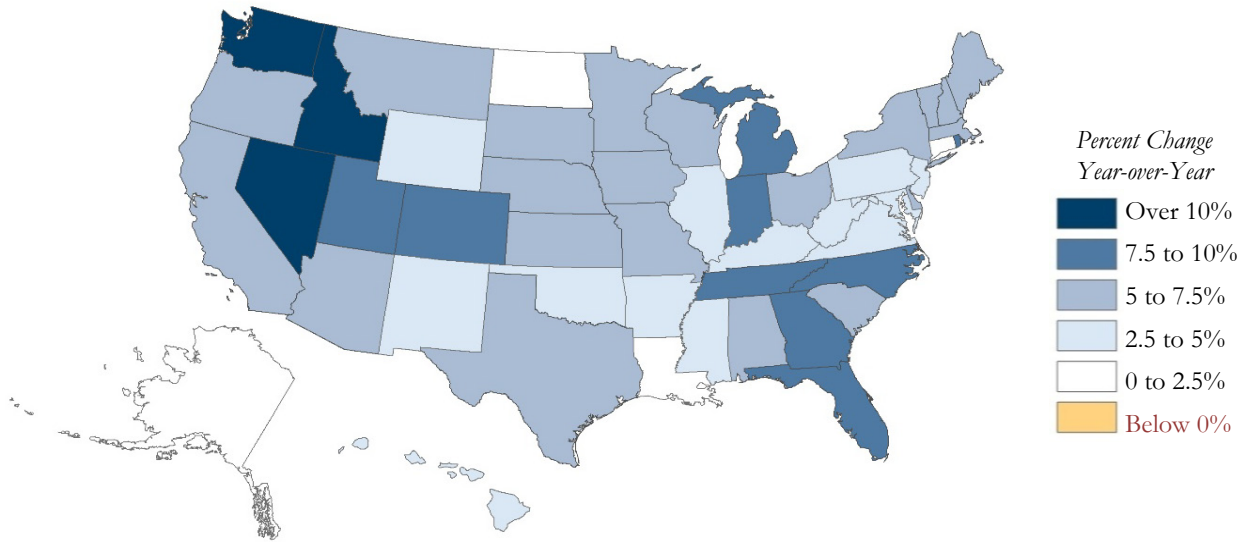
### Real Average Hourly Wage

*Seasonally Adjusted*



Source: Bureau of Economic Analysis & Bureau of Labor Statistics/Haver Analytics

**2018Q3 FHFA Purchase-Only Home Price Index**  
*Seasonally Adjusted*



*Percent Change  
Year-over-Year*

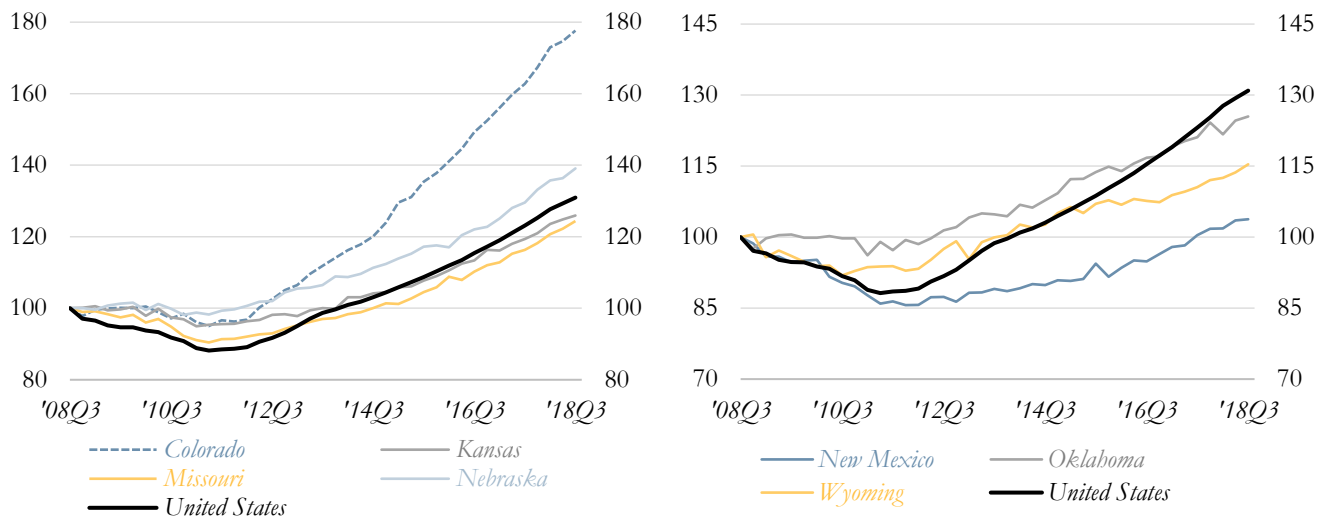
*Percent Change  
Year-over-Year*

<i>Percent Change Year-over-Year</i>			<i>Percent Change Year-over-Year</i>		
	<b>United States</b>	<b>6.3%</b>	25	Delaware	6.2%
1	Idaho	15.1	26	New York	5.9
2	Nevada	15.0	27	Texas	5.7
3	Washington	10.6	28	Montana	5.6
4	Utah	10.0	29	<b>Kansas</b>	5.5
5	<b>Colorado</b>	9.2	30	Vermont	5.5
6	Florida	8.9	31	Massachusetts	5.3
7	Rhode Island	8.6	32	Maine	5.2
8	Georgia	8.4	33	Iowa	5.0
9	Indiana	7.9	34	Arkansas	4.5
10	North Carolina	7.7	35	Kentucky	4.5
11	Michigan	7.6	36	Virginia	4.4
12	Tennessee	7.5	37	Pennsylvania	4.4
13	<b>Nebraska</b>	7.4	38	<b>Wyoming</b>	4.4
14	Oregon	7.3	39	New Jersey	3.9
15	South Carolina	7.3	40	<b>Oklahoma</b>	3.6
16	Arizona	7.1	41	Illinois	3.5
17	South Dakota	6.9	42	West Virginia	3.4
18	<b>Missouri</b>	6.9	43	<b>New Mexico</b>	3.4
19	Wisconsin	6.9	44	Hawaii	3.0
20	Minnesota	6.8	45	Maryland	2.8
21	Ohio	6.5	46	Mississippi	2.7
22	California	6.5	47	Connecticut	2.2
23	Alabama	6.4	48	Louisiana	1.5
24	New Hampshire	6.2	49	North Dakota	1.0
			50	Alaska	0.1

Source: Federal Housing Finance Agency (FHFA)/Haver Analytics

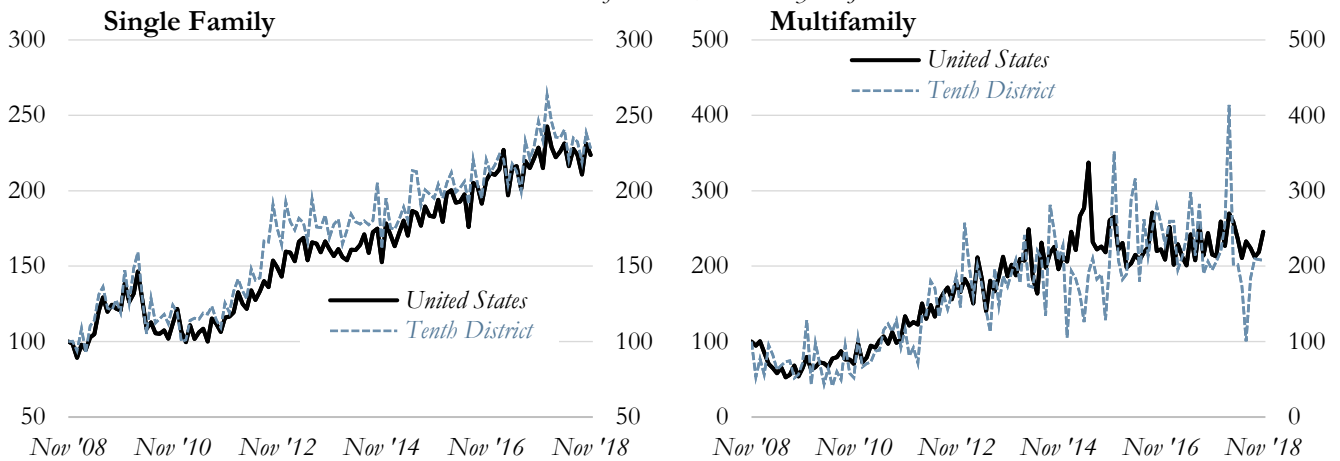
### FHFA Purchase-Only Home Price Index

Ten-Year Index of Growth, Seasonally Adjusted

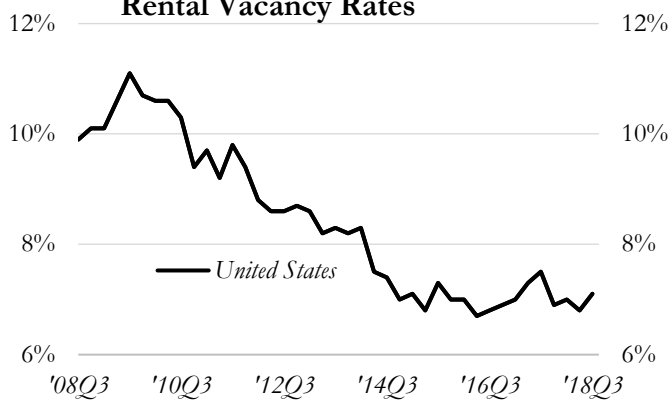


### Housing Permits

Ten-Year Index of Growth, Seasonally Adjusted



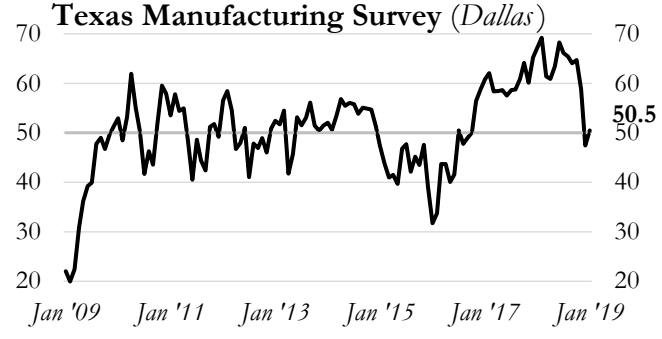
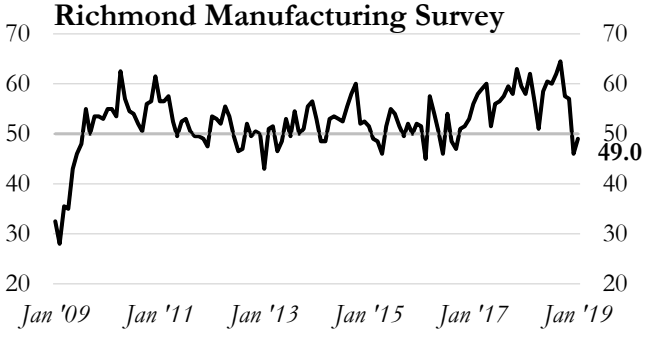
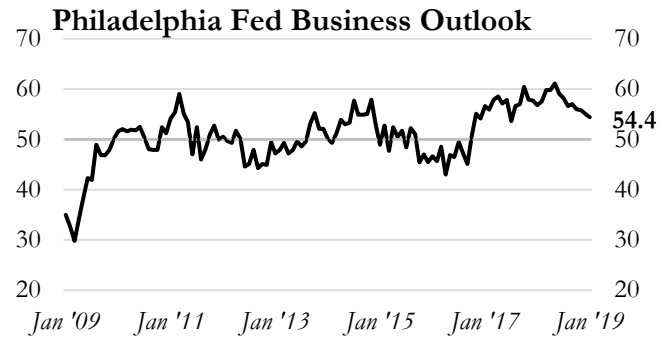
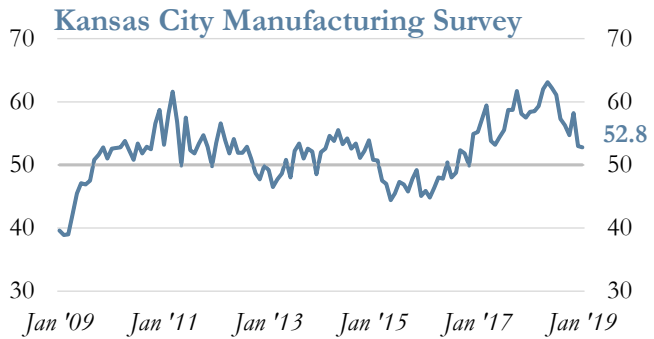
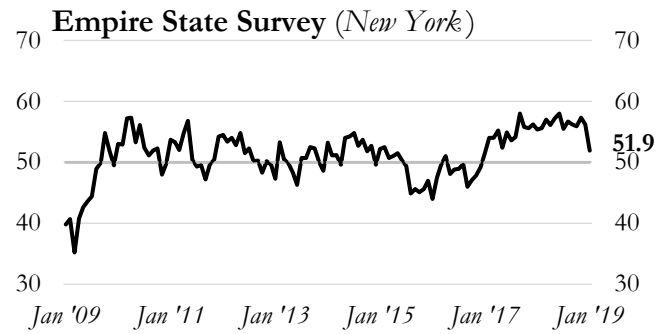
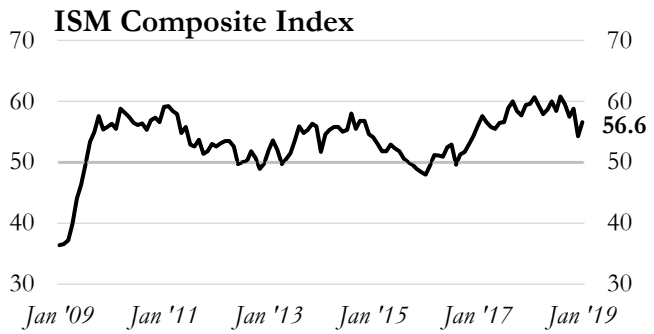
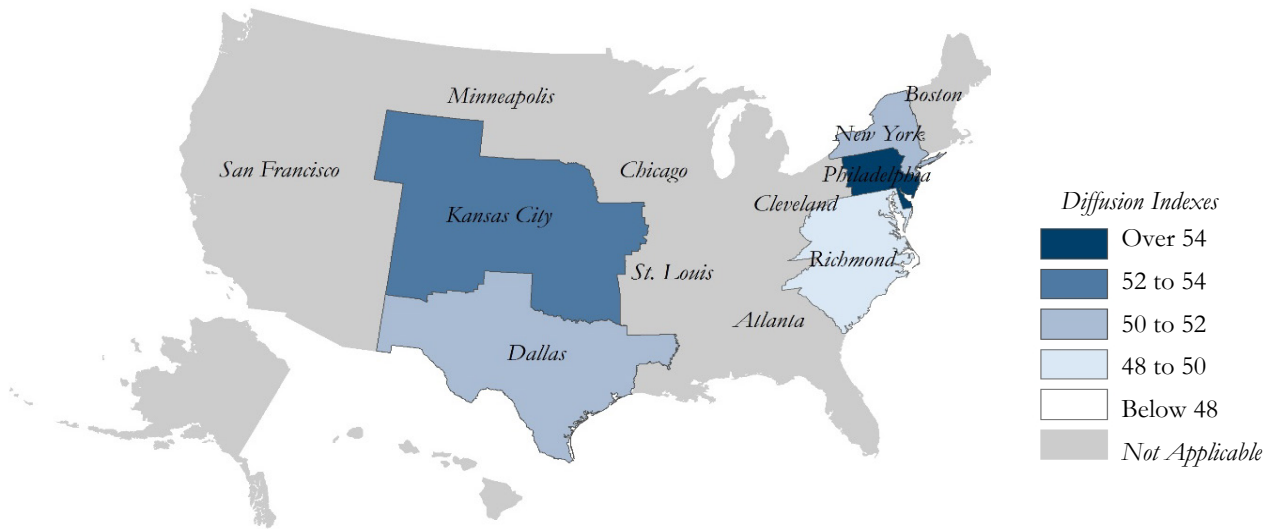
### Rental Vacancy Rates



Note: Rental Vacancy Rates are not available for the Tenth District.

Source: Federal Housing Finance Agency (FHFA) & Census Bureau/Haver Analytics

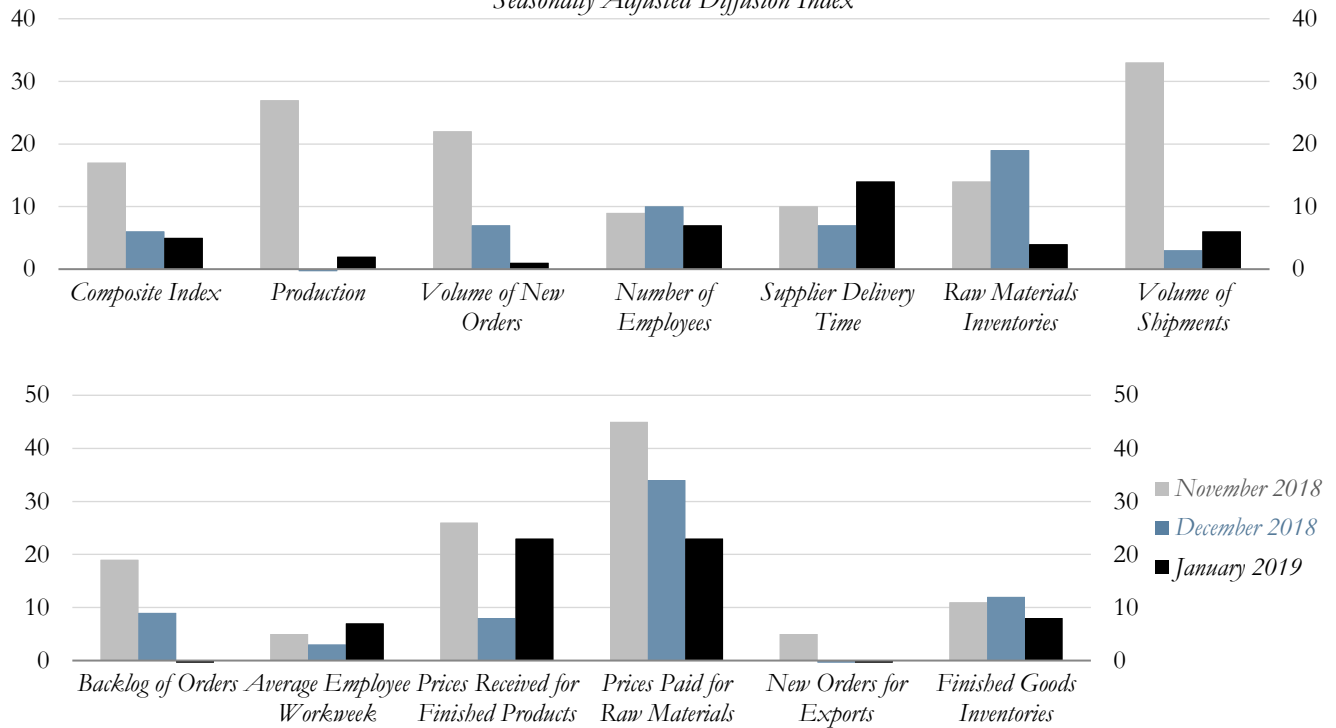
**Manufacturing Surveys**  
*Seasonally Adjusted*



Note: Indices are defined to be between 0 and 100; above 50 indicates growth and below 50 indicates contraction.  
Source: Institute for Supply Management (ISM) & Federal Reserve District Banks/Haver Analytics

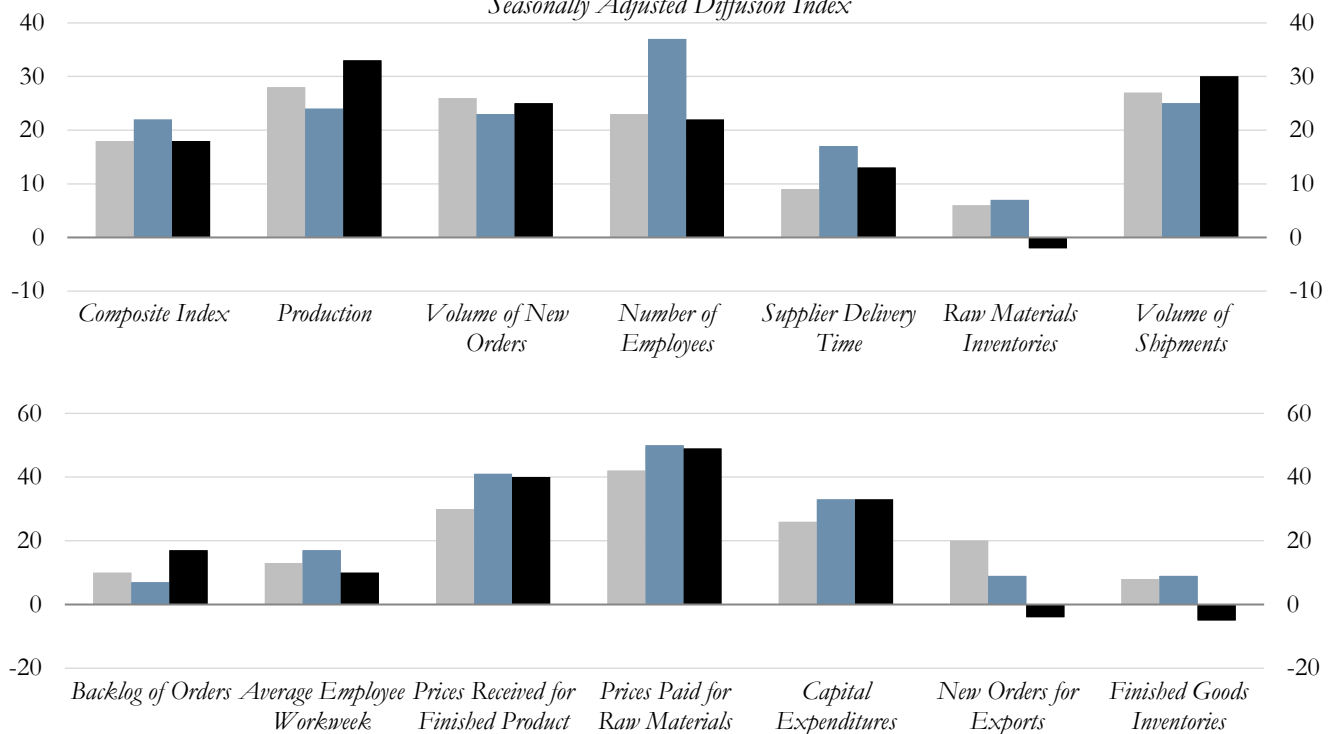
**Current Activity vs. a Month Ago**

*Seasonally Adjusted Diffusion Index*



**Expectations Six-Months Ahead**

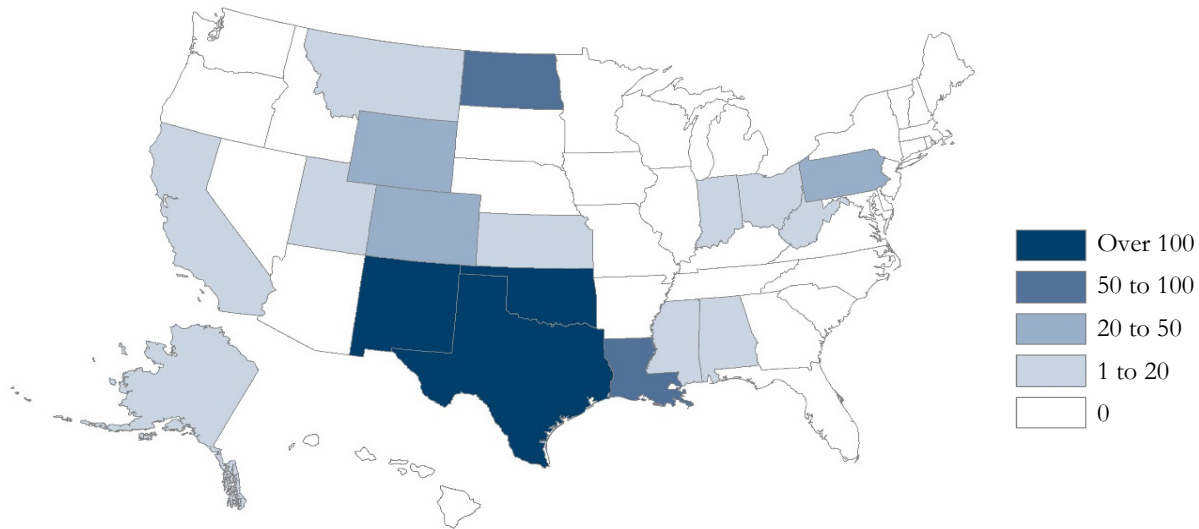
*Seasonally Adjusted Diffusion Index*



Note: Indices above zero indicate expansion.

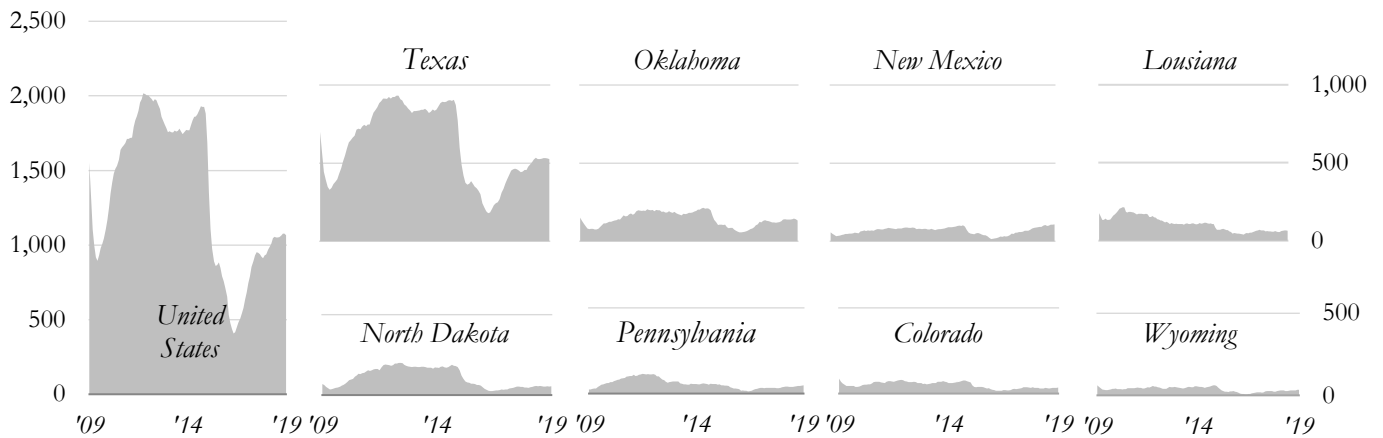
Source: Federal Reserve Bank of Kansas City/Haver Analytics

### January 2019 Active Oil & Gas Drilling Rig Counts



	<i>Average Rig Counts During the Month</i>	<i>Percent Change Year-over-Year</i>	<i>Current Share of Activity</i>
<b>United States</b>	<b>1,065</b>	<b>9.9%</b>	
<b>Tenth District</b>	<b>310</b>	<b>18.3</b>	<b>29.1%</b>
<i>Top Producing States</i>			
Texas	526	15.4	49.4
<b>Oklahoma</b>	132	10.9	12.4
<b>New Mexico</b>	108	33.3	10.1
Louisiana	63	5.0	5.9
North Dakota	54	20.0	5.1
Pennsylvania	48	29.7	4.5
<b>Colorado</b>	35	2.9	3.3
<b>Wyoming</b>	33	17.9	3.1
Ohio	17	-32.0	1.6
West Virginia	15	0.0	1.4

### Ten-Year History of Most Active States *Average Active Monthly Drilling Rig Counts*

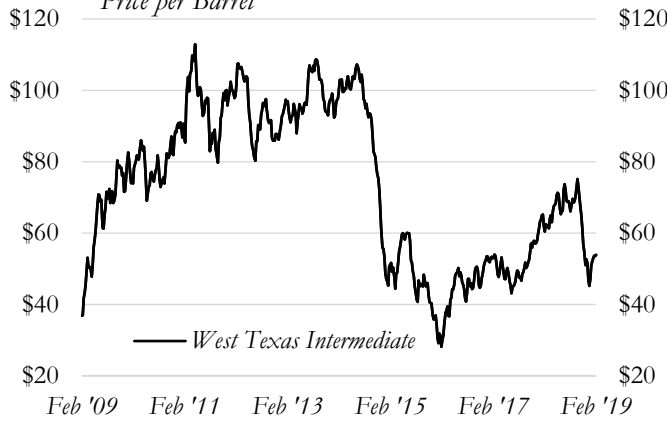


Source: Baker Hughes/Haver Analytics

**Spot Prices**

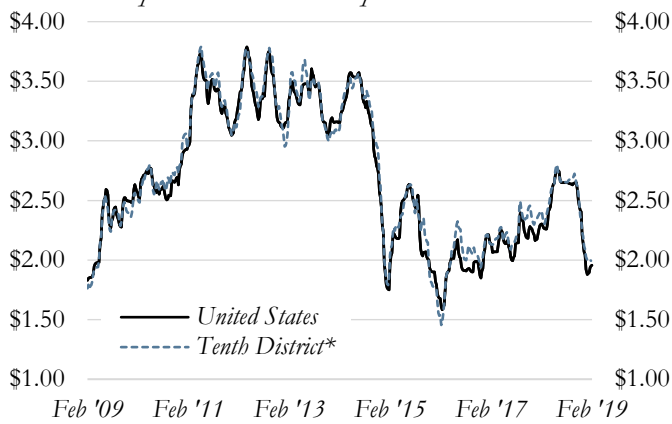
**Crude Oil**

*Price per Barrel*



**Gasoline**

*Price per Gallon at the Pump*



**Natural Gas**

*Price per Thousand Cubic Feet*

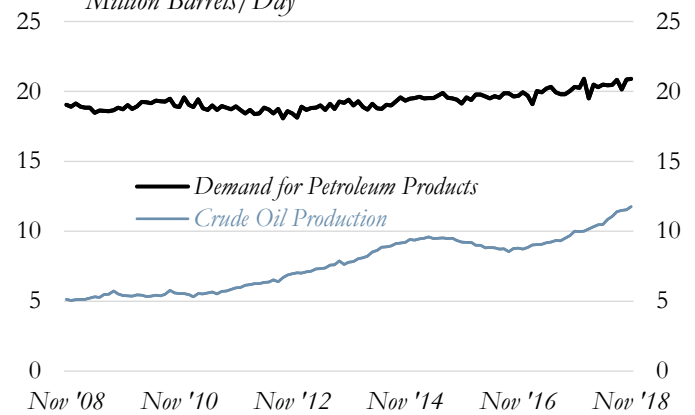


**U.S. Supply/Demand Dynamics**

*Seasonally Adjusted*

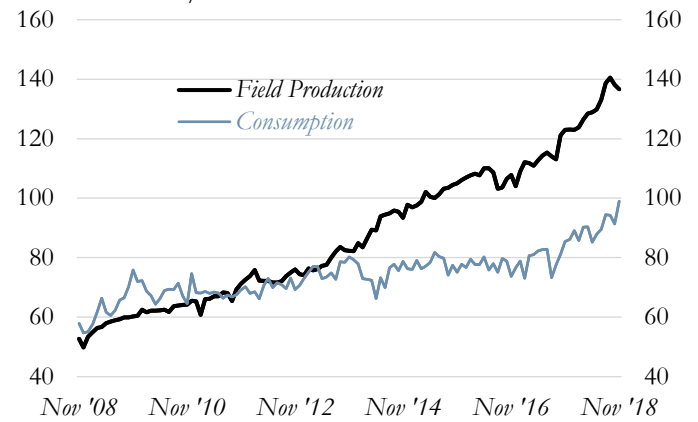
**Crude Oil**

*Million Barrels/Day*



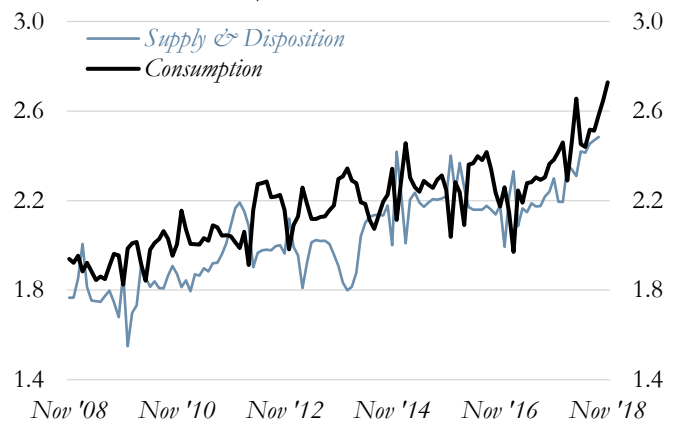
**Natural Gas Liquids**

*Million Barrels/Month*



**Natural Gas**

*Trillion Cubic Feet/Month*

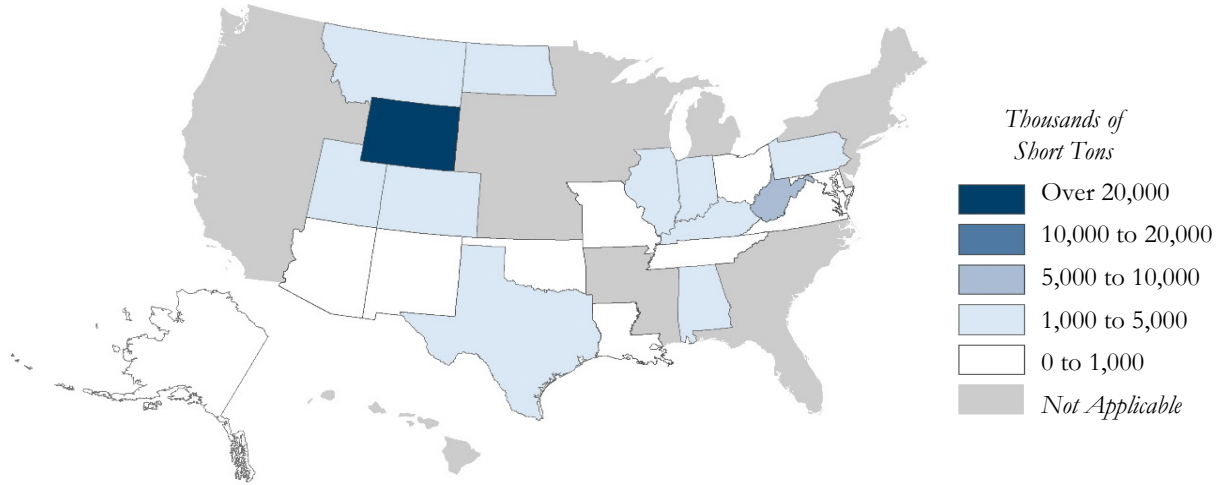


\*Average price per gallon for major Tenth District metro areas.

Source: Wall Street Journal, Oil & Gas Journal & Department of Energy, Energy Information Administration/Haver Analytics

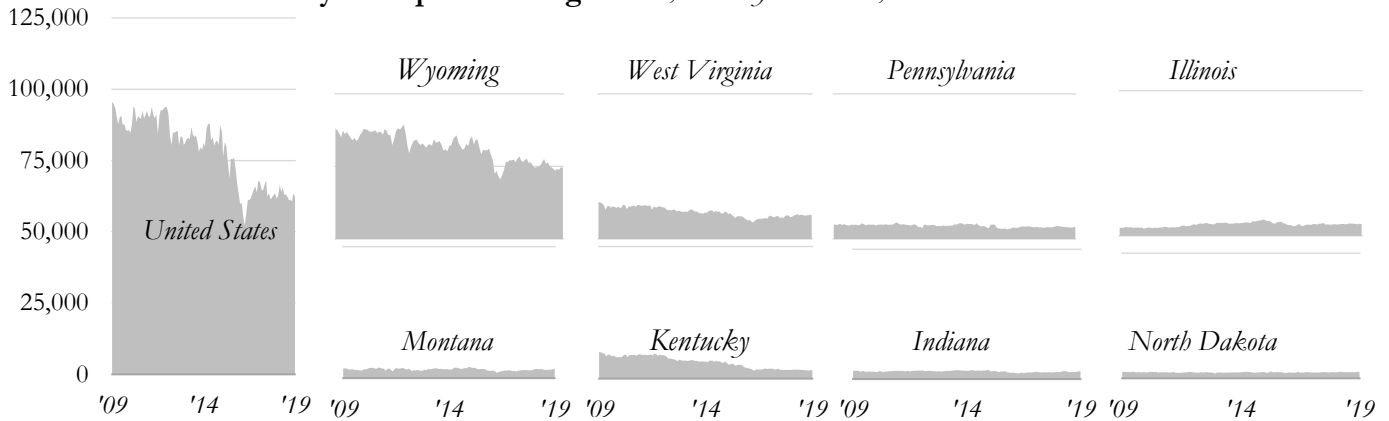


**January 2019 Coal Production**  
*Seasonally Adjusted*



	<i>Monthly Production (Thousand Short Tons)</i>	<i>Percent Change Year-over-Year</i>	<i>Current Share of Production</i>
<b>United States</b>	<b>62,316.2</b>	<b>1.1%</b>	
<b>Tenth District*</b>	<b>26,227.1</b>	<b>-3.1</b>	<b>42.1%</b>
<i>Top Producing States</i>			
<b>Wyoming</b>	24,352.5	-3.3	39.1
West Virginia	8,199.2	9.9	13.2
Pennsylvania	4,212.0	8.0	6.8
Illinois	3,915.0	0.7	6.3
Montana	3,563.3	11.0	5.7
Kentucky	3,167.3	-2.7	5.1
Indiana	2,855.8	8.0	4.6
North Dakota	2,457.1	4.0	3.9
Texas	2,034.9	-4.5	3.3
<b>Colorado</b>	1,193.7	6.2	1.9

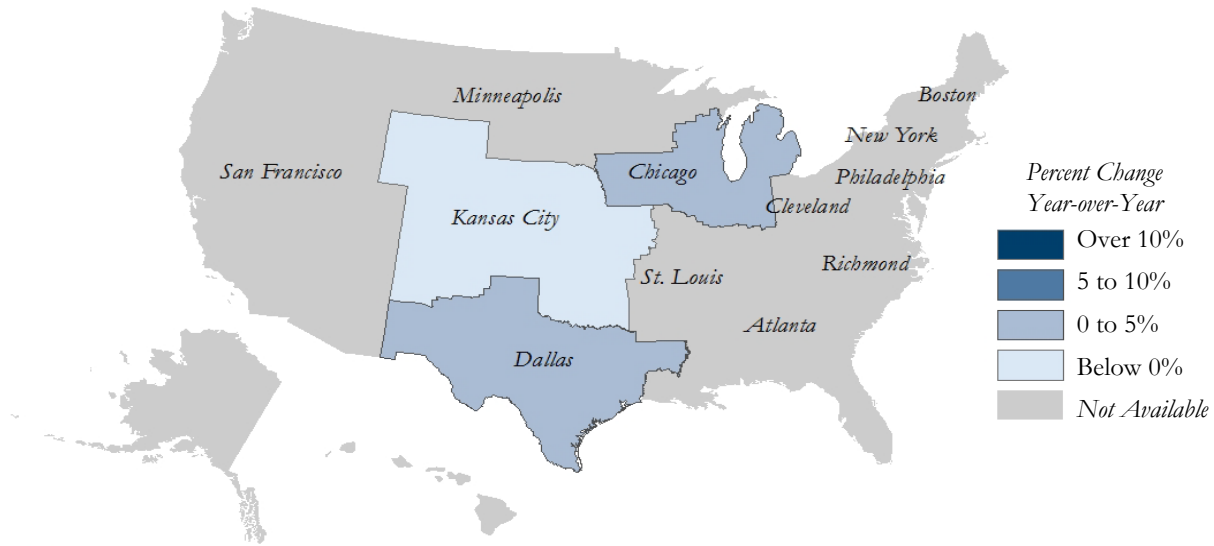
**Ten-Year History of Top Producing States, Monthly Production, Thousand Short Tons**



\*Includes all Tenth District states but Nebraska.

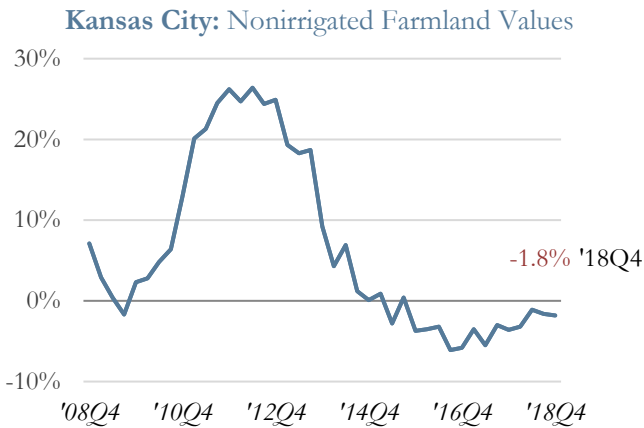
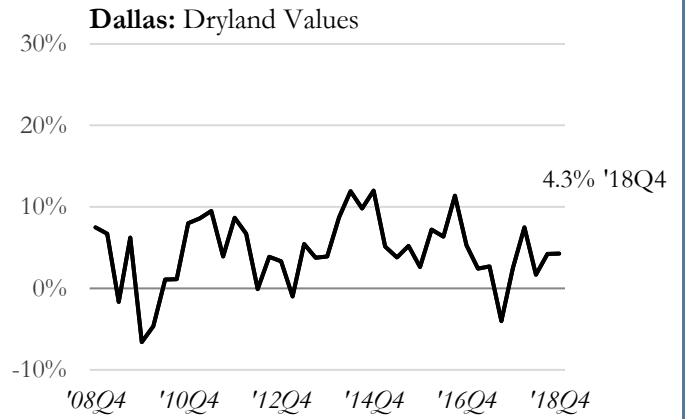
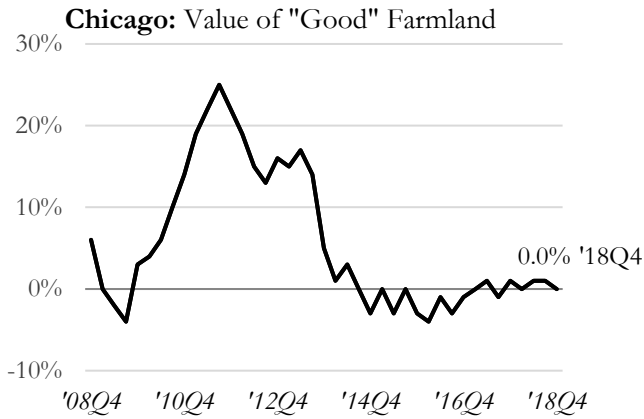
Source: U.S. Department of Energy, Energy Information Administration/Haver Analytics

**Farm Land Values\***



**Farmland Values by Federal Reserve District**

*Percent Change Year-over-Year*



\*Values shown for the most recent survey available for each district.  
 Source: Federal Reserve District Banks/Haver Analytics

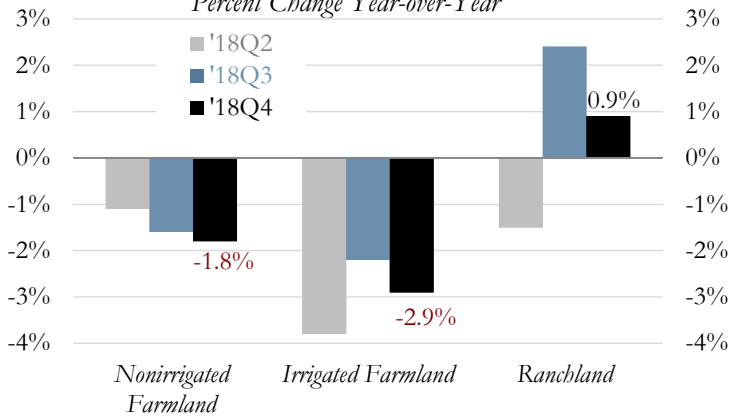
**Kansas City Agricultural Credit Survey**

*Diffusion Index\**

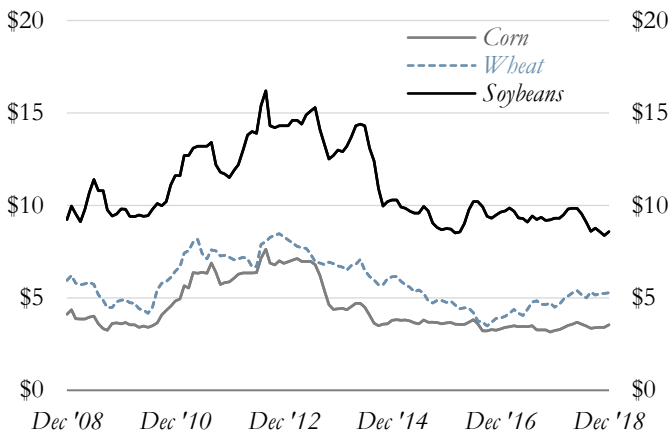


**Tenth District Farmland Values**

*Percent Change Year-over-Year*

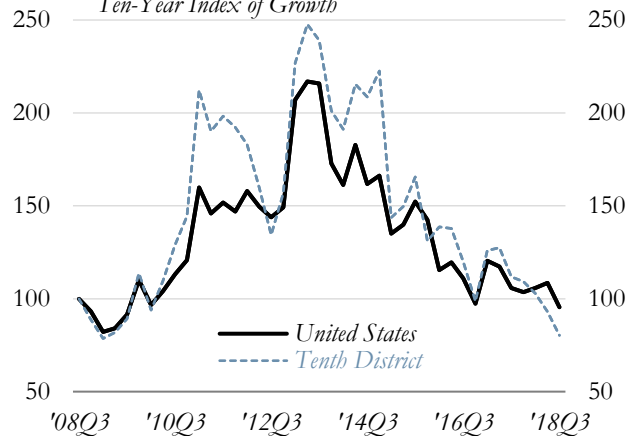


**Spot Prices**



**Farm Income**

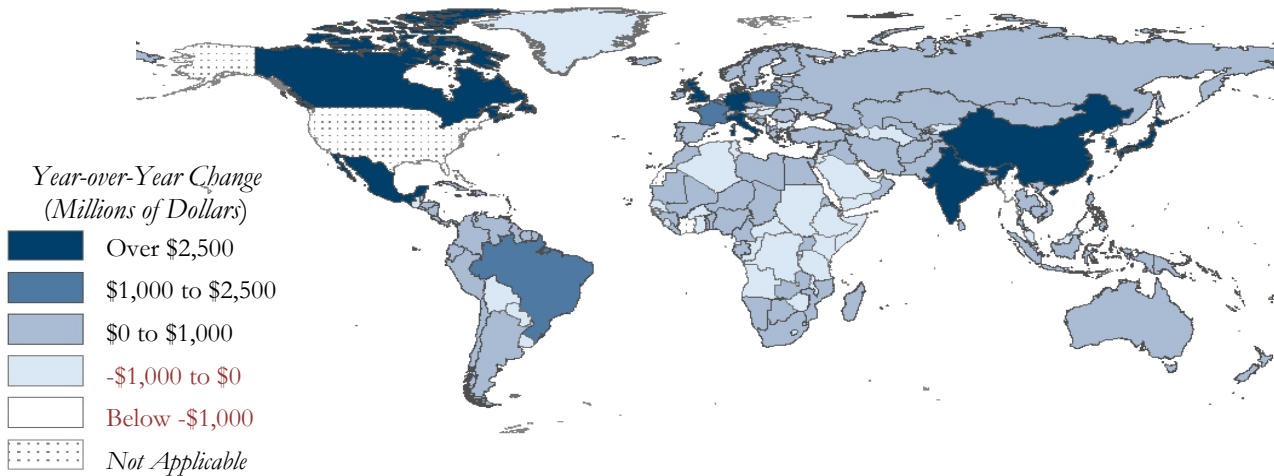
*Ten-Year Index of Growth*



\*Calculated as the percentage of total respondents reporting increases less those reporting declines.

Source: Wall Street Journal, Bureau of Economic Analysis & Federal Reserve Bank of Kansas City/Haver Analytics

**2018Q3 U.S. Exports**  
*Year-to-Date*



		<i>Exports Year-to-Date (Billions of Dollars)</i>	<i>Percent Change Year-to-Date</i>	<i>Share of Exports Year-to-Date</i>
	<b>United States</b>	<b>\$1,242.2</b>	<b>9.1%</b>	
<i>Top Export Markets</i>	Canada	225.4	7.3	18.1%
	Mexico	197.9	10.2	15.9%
	China*	144.2	2.8	11.6%
	Japan	54.8	9.9	4.4%
	United Kingdom	49.3	18.4	4.0%
	Germany	43.5	10.3	3.5%
	South Korea	41.0	13.8	3.3%
	Netherlands Antilles	36.2	15.0	2.9%
	Brazil	29.3	9.0	2.4%
	France	26.9	8.1	2.2%

**Ten-Year History of U.S. Top Export Countries**  
*Billions in Quarterly Exports*



Source: Census Bureau/Haver Analytics

\*Includes China, Hong Kong, Taiwan & Macao.

*Page 2:* Gross domestic product (GDP) is the most commonly used measure of aggregate U.S. economic activity. Real GDP is indexed for inflation to 2009 dollars using the personal consumption expenditure price index (PCEPI). Advance, second, and third GDP estimates are released during the first, second, and third month of the following quarter. Each release reflects more complete information. Federal Open Market Committee (FOMC) projections for GDP are released quarterly. Contributions to GDP show how each component of GDP contributes to GDP growth. Tenth District GDP is the year-over-year percent change for the sum of the Gross State Products from CO, KS, MO, NE, NM, OK and WY.

*Page 3:* Inflation is calculated as the year-over-year change in price indices. Headline inflation includes all price components, while core inflation excludes the more volatile components of food and energy. Producer prices reflect price changes in production components, while PCEPI and CPI-U (consumer price index for all urban consumers) estimates show changes in commodities sold to consumers.

*Pages 4, 5 and 6:* Nonfarm employment data from the Bureau of Labor Statistics Current Employment Survey are commonly called "Payroll" employment data. Estimates from this survey are revised throughout the year and a major revision or "benchmark" of the data occurs in March of each year.

*Page 7:* The "official" and most commonly reported unemployment rate is calculated as the number of unemployed workers divided by the total civilian labor force. These data are reported from the Bureau of Labor Statistics Current Population Survey, commonly called the "Household" survey.

*Page 8:* "Payroll" and "Household" surveys are released monthly, providing the most current estimates of employment published by the Bureau of Labor Statistics. Because methodologies differ between surveys, employment estimates also differ. For more information, visit: [http://www.bls.gov/web/empsit/ces\\_cps\\_trends.pdf](http://www.bls.gov/web/empsit/ces_cps_trends.pdf) Initial claims show monthly applications for initial claims for state unemployment insurance benefits.

*Pages 9 and 10:* Personal income provides a measure of all income received by residents of a given geographic area. Data shown on page 9 are in real terms (adjusted for inflation) and data on page 10 are shown in nominal terms (not adjusted for inflation). Transfer payments include social benefits such as unemployment insurance, Social Security, and Medicaid. Contributions to social insurance are subtracted from personal income. These contributions include taxes paid by businesses and employees that support social insurance programs such as unemployment insurance, Social Security, and Medicaid. The residence adjustment adds income received outside of a recipients state of residence and makes a corresponding subtraction from the area where this income was earned or received. Real average hourly wages are calculated as total earnings divided by total employment for a given geographic area. Data are adjusted for inflation using the CPI-U and are indexed to the most current month of data.

*Pages 11 and 12:* Home price indices estimate regional growth in home values based on repeat sales data for detached single family residential properties.

*Page 12:* Monthly single and multifamily housing permits data are not revised and therefore may not sum to published year-end totals.

*Page 13:* The ISM composite index, also commonly called the Purchasing Managers Index (PMI), represents a weighted average of diffusion indices for new orders, production, supplier deliveries, inventories, and employment. Federal Reserve district surveys differ slightly in methodologies for composite indices.

*Page 14:* Kansas City Manufacturing Survey diffusion indices are calculated as the percentage of total respondents reporting increases in activity less those reporting declines.

*Page 15:* The active rig count is the number of rigs actively exploring for or developing oil or natural gas. Rig counts provide an indicator of new drilling activity and potential for expanded crude oil or natural gas production.

*Page 16:* A spot price is the current market delivery price of a given commodity.

*Page 17:* Coal production is shown as production during a given month.

*Pages 18 and 19:* Farmland values surveyed differ across Federal Reserve districts.

*Page 20:* Exports measure the total physical movement of a given product from the United States to a foreign country.

#### **Data Revisions**

Most data are revised periodically to correct for errors and incorporate additional information as it becomes available. Data shown in this report are subject to change.

#### **Seasonal Adjustments**

Most data are seasonally adjusted to remove variance caused by seasonal fluctuations in economic activity. Data in this report show the seasonal adjustments of data publishers where available. In other cases, Census X-12 adjustments were applied.

### *Additional Resources Available*

- Agricultural Surveys
- Manufacturing Surveys
- Regional Economic Analysis
- Banker Resources
- Economic Indicators
- Economic Research
- Educational Tools
- Energy Survey
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