

# THE *Tenth District* ECONOMIC DATABOOK

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



NOVEMBER 21, 2016

FEDERAL RESERVE BANK of KANSAS CITY

## SUMMARY OF CURRENT TENTH DISTRICT ECONOMIC CONDITIONS

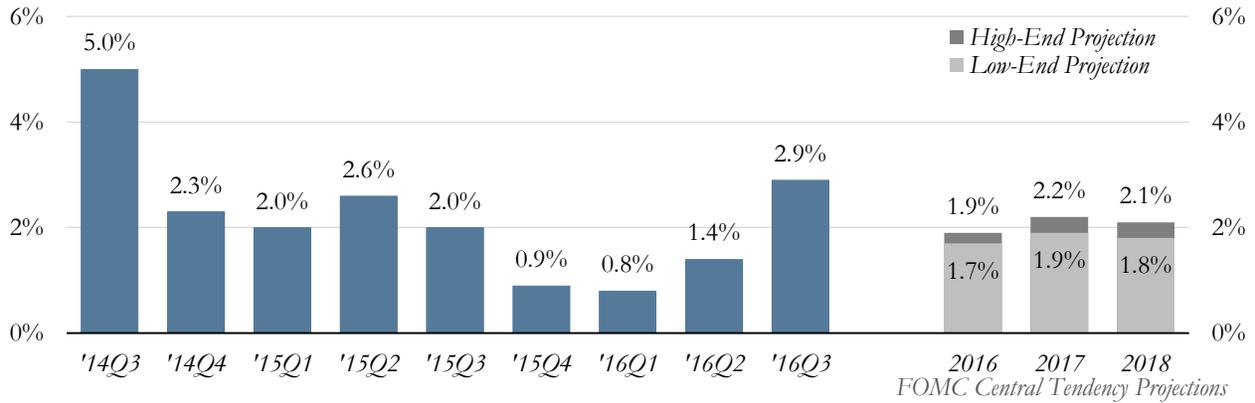
The unemployment rate was 4.6 percent across the Tenth District states in October, and total payroll employment grew 0.8 percent compared to the previous year. Employment growth was mixed across industries, with the strongest percentage gains in the construction and leisure and hospitality sectors. Tenth District nominal personal income grew 2.3 percent in the second quarter of 2016 compared to the previous year. In the energy sector, rig counts were well below year-ago levels. The Federal Reserve Bank of Kansas City's Manufacturing Survey indicated an increase in manufacturing activity in October 2016, with a composite index of 50.5. Nonirrigated farmland values, as measured by the Federal Reserve Bank of Kansas City's Survey of Agricultural Credit Conditions, decreased 6.1 percent in the third quarter of 2016 compared to the same period in 2015.

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.

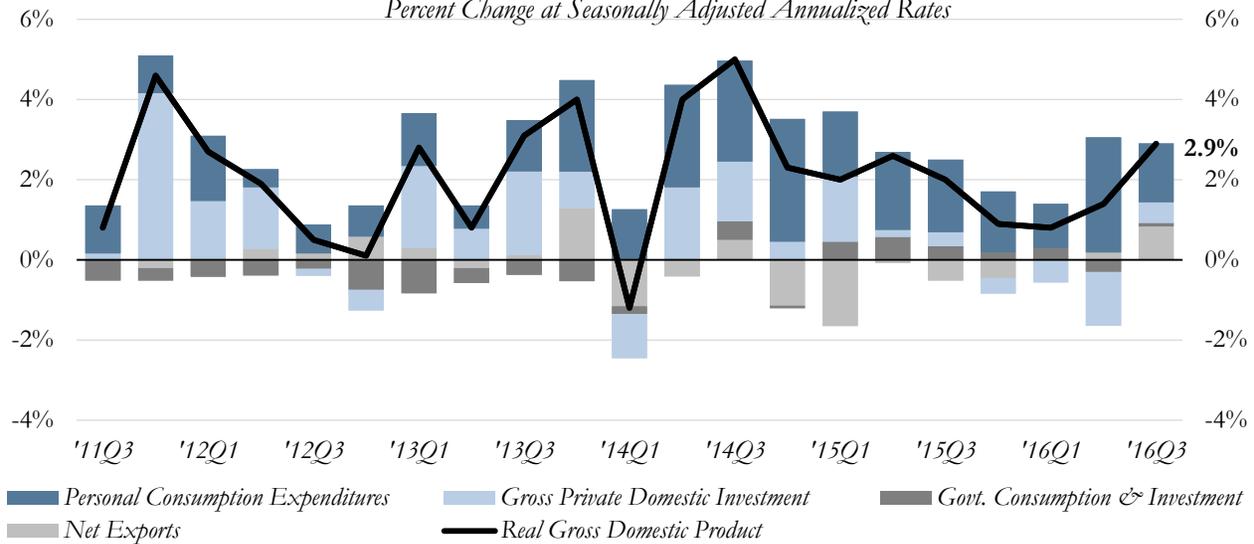


The Federal Reserve Bank of Kansas City's headquarters is located at 1 Memorial Drive in the heart of Kansas City, Missouri. The Federal Reserve Bank of Kansas City serves the Tenth Federal Reserve District, which includes Colorado, Kansas, western Missouri, Nebraska, northern New Mexico, Oklahoma and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

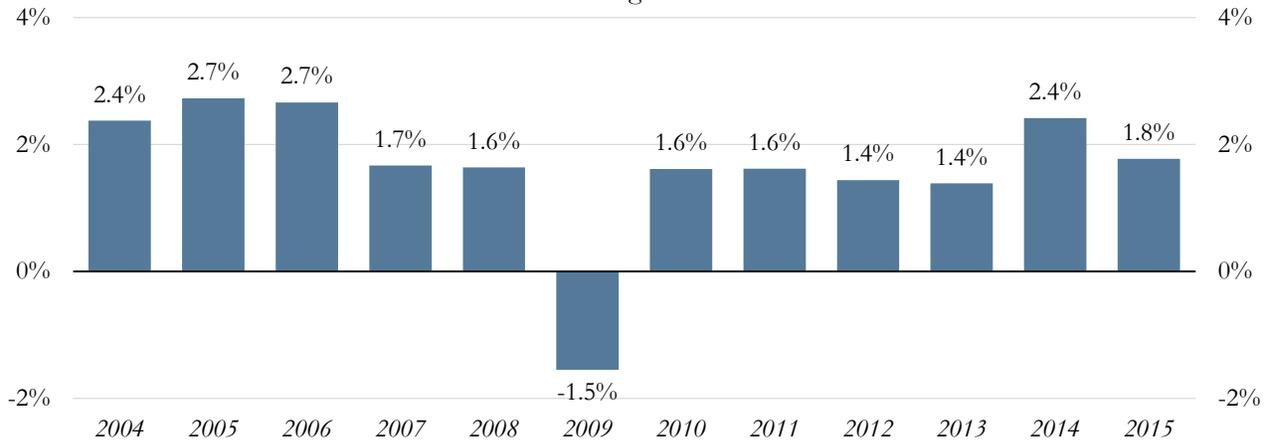
**U.S. Real Gross Domestic Product**  
*Percent Change at Seasonally Adjusted Annualized Rates*



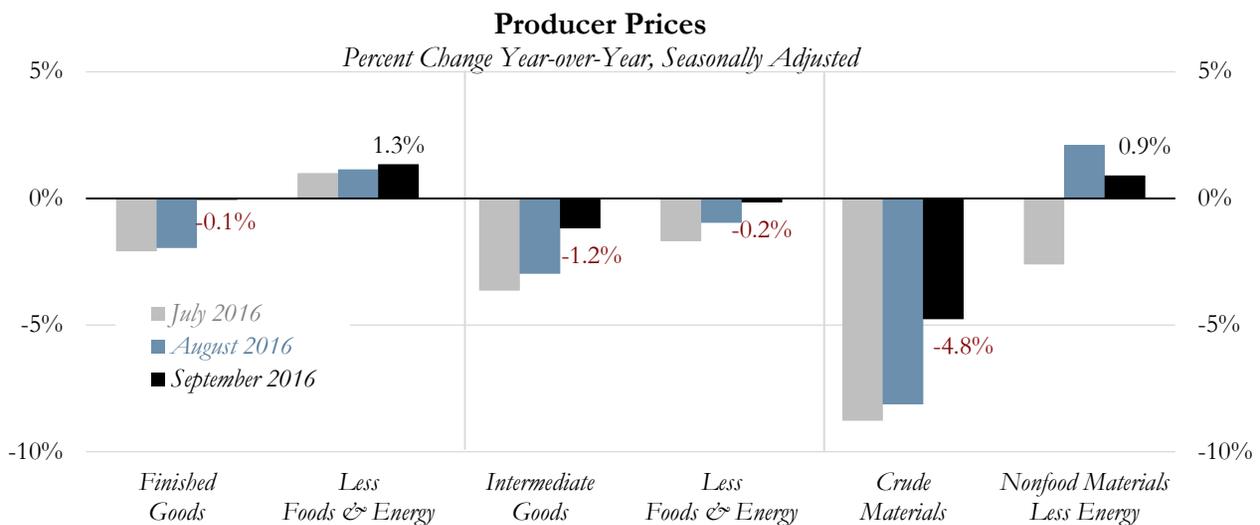
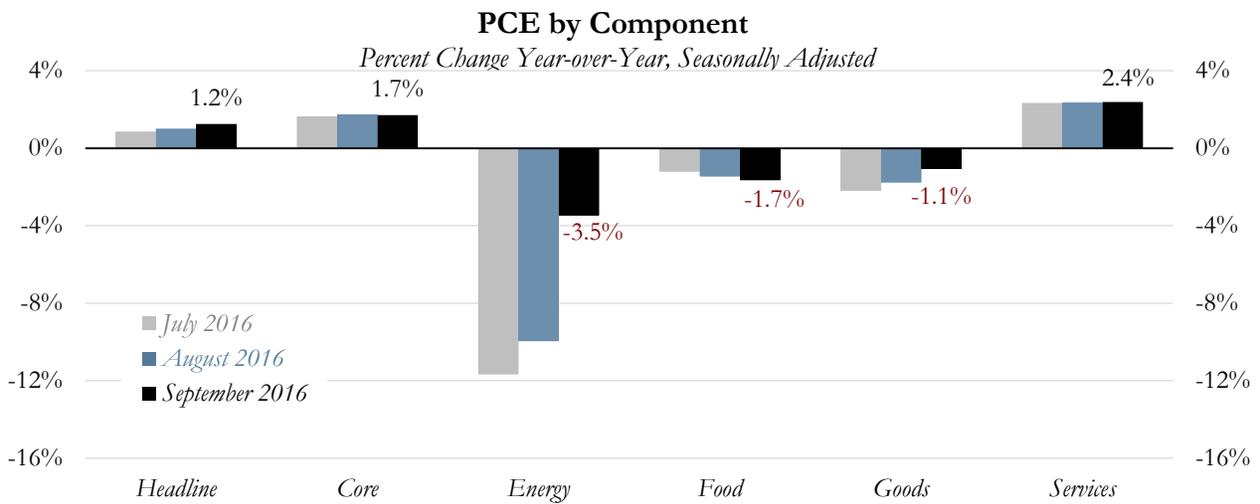
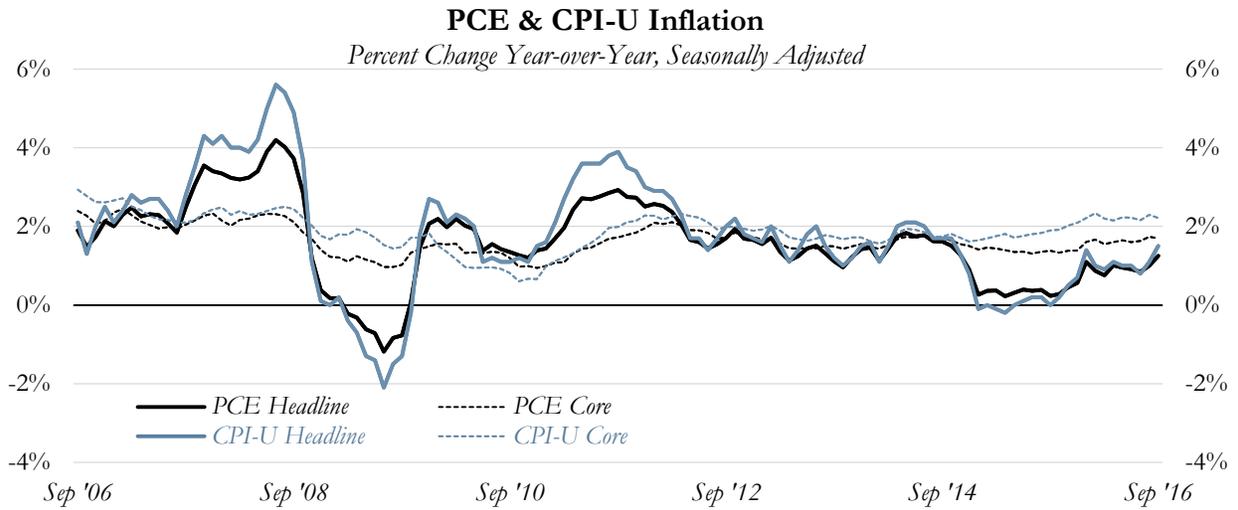
**Contributions to Real U.S. GDP**  
*Percent Change at Seasonally Adjusted Annualized Rates*



**Tenth District Real Gross Domestic Product**  
*Percent Change Year-over-Year*



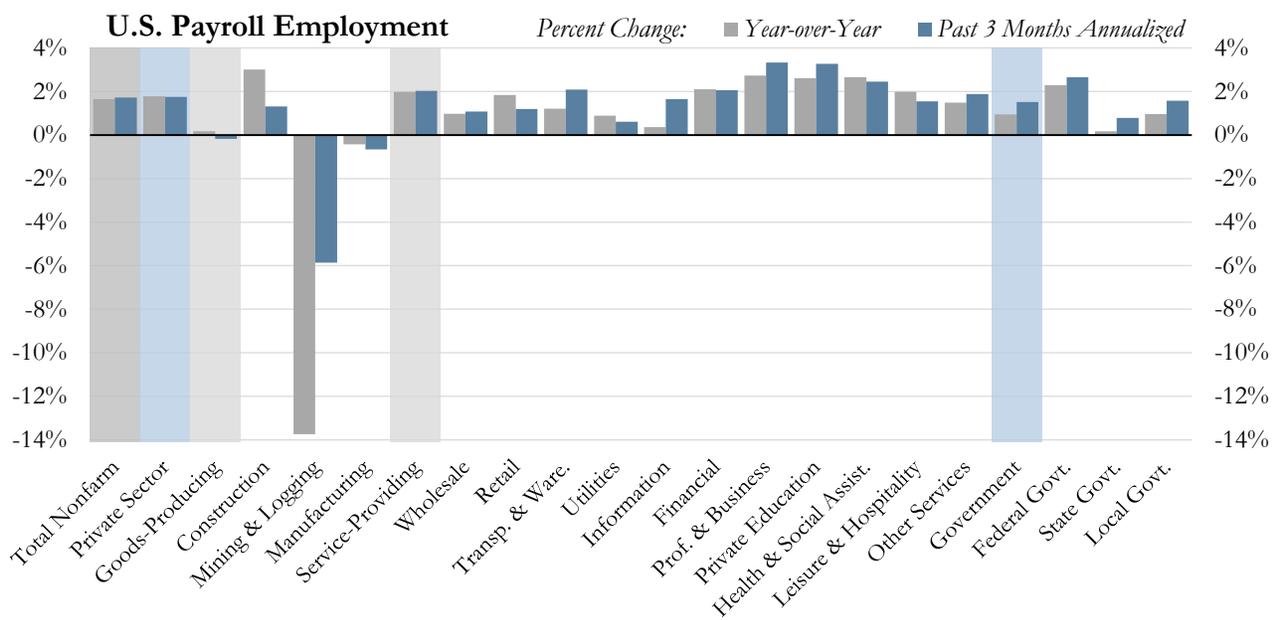
Source: Bureau of Economic Analysis, Federal Open Market Committee/Haver Analytics



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

**October 2016 U.S. Payroll Employment**  
*Seasonally Adjusted*

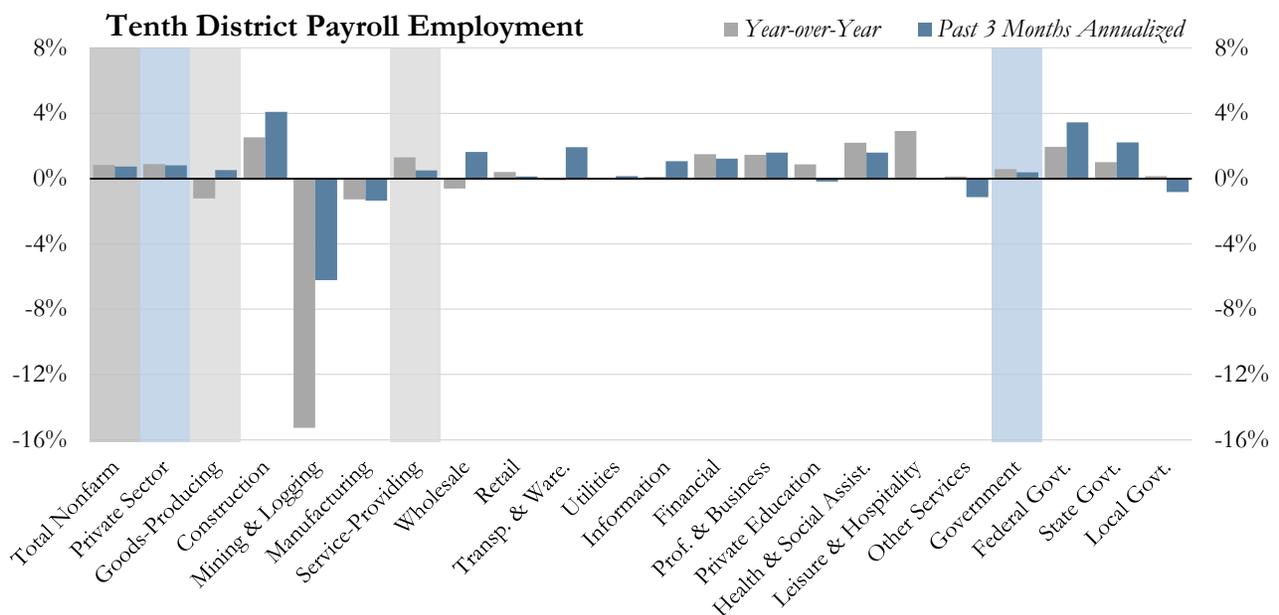
	<i>Number of Jobs (Thousands)</i>	<i>Jobs Gained Year-over-Year (Thousands)</i>	<i>Share of Employment</i>
<b>Total Nonfarm</b>	144,952	2,357	100.0%
Private Sector	122,717	2,149	84.7%
<i>Goods-Producing</i>			
Construction	19,615	34	13.5%
Mining & Logging	6,679	195	4.6%
Manufacturing	678	-108	0.5%
Manufacturing	12,258	-53	8.5%
<i>Service-Providing</i>	103,063	2,015	71.1%
Wholesale Trade	5,946	58	4.1%
Retail Trade	15,993	290	11.0%
Transportation & Warehousing	4,919	59	3.4%
Utilities	566	5	0.4%
Information	2,781	10	1.9%
Financial Activities	8,336	172	5.7%
Professional & Business Services	20,415	542	14.1%
Educational Services	3,574	91	2.5%
Healthcare & Social Assistance	19,288	501	13.3%
Leisure & Hospitality	15,565	304	10.7%
Other Services	5,721	84	3.9%
<b>Government</b>	22,235	208	15.3%
Federal Government	2,815	63	1.9%
State Government	5,123	9	3.5%
Local Government	14,297	136	9.9%



Source: Bureau of Labor Statistics/Haver Analytics

**October 2016 Tenth District Payroll Employment**  
*Seasonally Adjusted*

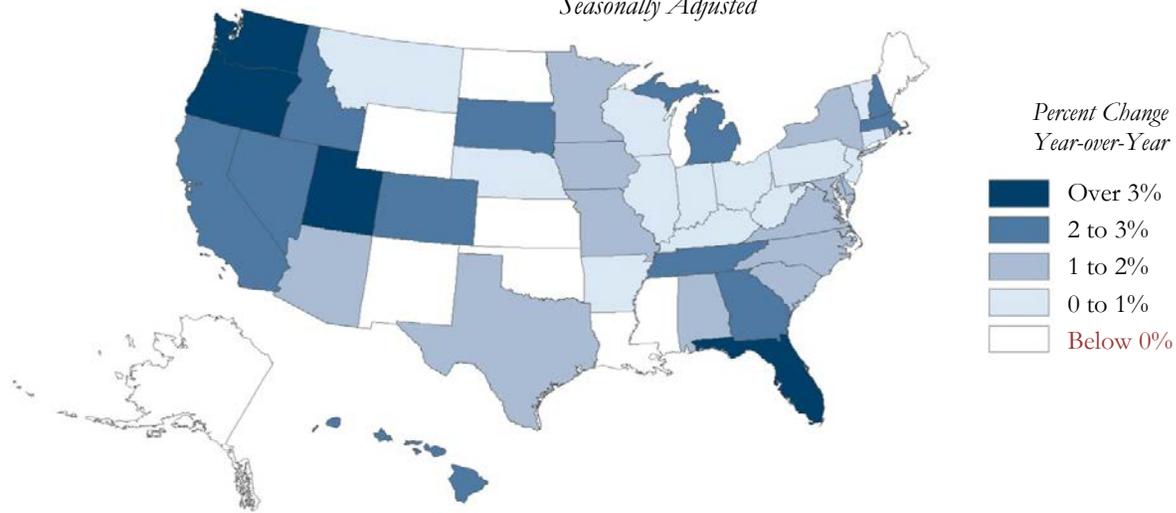
	<i>Number of Jobs (Thousands)</i>	<i>Jobs Gained Year-over-Year (Thousands)</i>	<i>Share of Employment</i>
<b>Total Nonfarm</b>	10,636	88	100.0%
Private Sector	8,731	77	82.0%
<i>Goods-Producing</i>	1,476	-18	13.9%
Construction	538	13	5.1%
Mining & Logging	117	-21	1.1%
Manufacturing	820	-10	7.7%
<i>Service-Providing</i>	7,250	93	68.2%
Wholesale Trade	414	-3	3.9%
Retail Trade	1,151	5	10.8%
Transportation & Warehousing	352	-0	3.3%
Utilities	42	0	0.4%
Information	200	0	1.9%
Financial Activities	612	9	5.8%
Professional & Business Services	1,396	20	13.1%
Private Educational Services	155	1	1.5%
Healthcare & Social Assistance	1,384	30	13.0%
Leisure & Hospitality	1,145	33	10.8%
Other Services	405	1	3.8%
Government	1,905	11	18.0%
Federal Government	237	5	2.2%
State Government	471	5	4.5%
Local Government	1,197	2	11.3%



Source: Bureau of Labor Statistics/Haver Analytics

**October 2016 Total Nonfarm Employment**

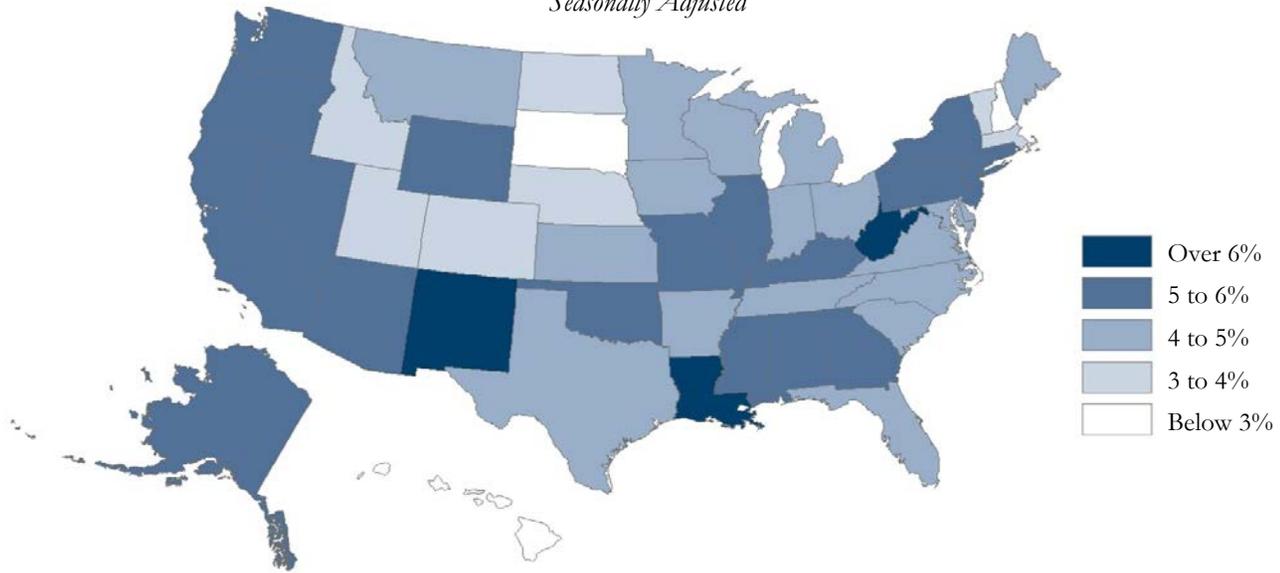
*Seasonally Adjusted*



		<i>Percent Change Year-over-Year</i>			<i>Percent Change Year-over-Year</i>
<b>United States</b>		<b>1.7%</b>	25	Alabama	1.2%
<b>Tenth District</b>		<b>0.8</b>	26	Iowa	1.1
1	Washington	3.5	27	Minnesota	1.1
2	Oregon	3.3	28	New York	1.1
3	Florida	3.1	29	Indiana	1.0
4	Utah	3.0	30	Wisconsin	1.0
5	South Dakota	2.5	31	Kentucky	1.0
6	<b>Colorado</b>	2.5	32	Arkansas	0.9
7	Tennessee	2.4	33	Ohio	0.9
8	California	2.4	34	Montana	0.8
9	Nevada	2.3	35	New Jersey	0.7
10	Georgia	2.3	36	Pennsylvania	0.7
11	Michigan	2.2	37	Vermont	0.6
12	Hawaii	2.2	38	Illinois	0.5
13	Idaho	2.2	39	<b>Nebraska</b>	0.4
14	New Hampshire	2.1	40	Connecticut	0.2
15	Massachusetts	2.0	41	West Virginia	0.0
16	Arizona	2.0	42	Maine	0.0
17	North Carolina	2.0	43	Mississippi	-0.1
18	South Carolina	2.0	44	Alaska	-0.1
19	Delaware	1.9	45	Louisiana	-0.3
20	<b>Missouri</b>	1.8	46	<b>New Mexico</b>	-0.4
21	Texas	1.7	47	<b>Kansas</b>	-0.4
22	Virginia	1.7	48	<b>Oklahoma</b>	-0.7
23	Rhode Island	1.4	49	North Dakota	-1.8
24	Maryland	1.3	50	<b>Wyoming</b>	-3.5

Source: Bureau of Labor Statistics/Haver Analytics

**October 2016 Unemployment Rates**  
*Seasonally Adjusted*

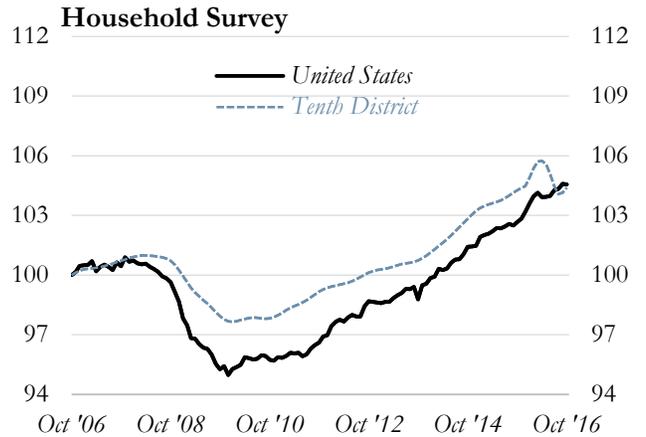
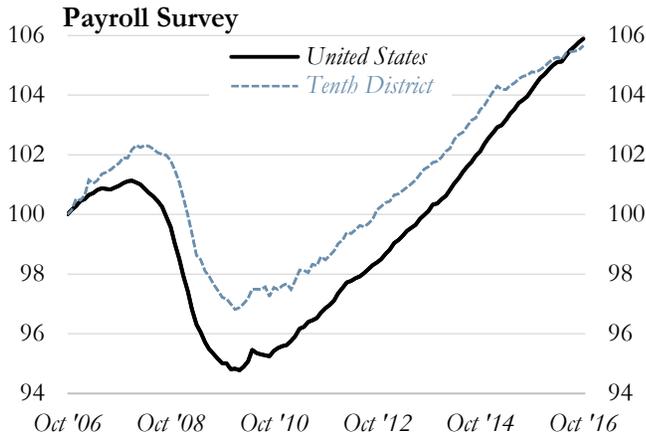


		<i>Percent Unemployed</i>			<i>Percent Unemployed</i>
<b>United States</b>		<b>4.9%</b>	25	Florida	4.8%
<b>Tenth District</b>		<b>4.6</b>	25	Tennessee	4.8
1	Alaska	6.8	27	South Carolina	4.7
2	<b>New Mexico</b>	6.7	27	Texas	4.7
3	Louisiana	6.3	27	Michigan	4.7
4	West Virginia	6.0	30	Indiana	4.4
5	Mississippi	5.9	30	<b>Kansas</b>	4.4
6	Pennsylvania	5.8	32	Delaware	4.3
7	Alabama	5.7	32	Montana	4.3
8	Illinois	5.6	34	Maryland	4.2
9	Nevada	5.5	34	Virginia	4.2
9	Rhode Island	5.5	36	Iowa	4.1
9	California	5.5	36	Wisconsin	4.1
12	Washington	5.4	38	Maine	4.0
13	Oregon	5.3	38	Minnesota	4.0
14	Arizona	5.2	38	Arkansas	4.0
14	New Jersey	5.2	41	Idaho	3.8
14	<b>Oklahoma</b>	5.2	42	<b>Colorado</b>	3.5
14	Georgia	5.2	43	Massachusetts	3.3
14	New York	5.2	43	Vermont	3.3
19	Connecticut	5.1	43	<b>Nebraska</b>	3.3
19	<b>Wyoming</b>	5.1	46	Utah	3.2
19	<b>Missouri</b>	5.1	46	Hawaii	3.2
19	Kentucky	5.1	48	North Dakota	3.0
23	Ohio	4.9	49	New Hampshire	2.8
23	North Carolina	4.9	49	South Dakota	2.8

Source: Bureau of Labor Statistics/Haver Analytics

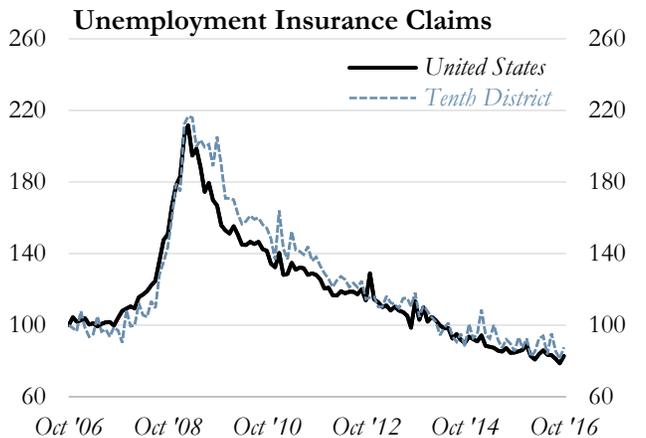
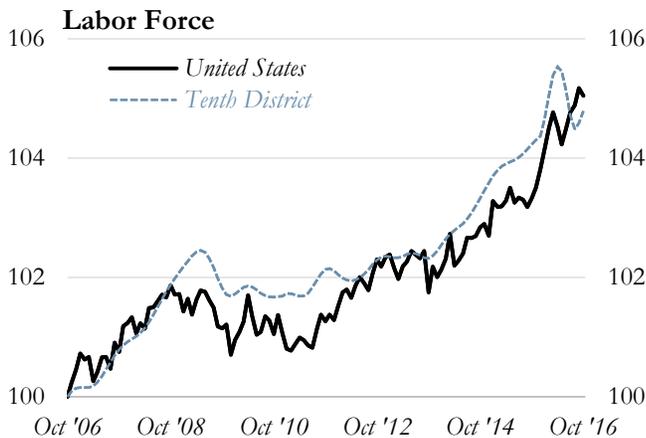
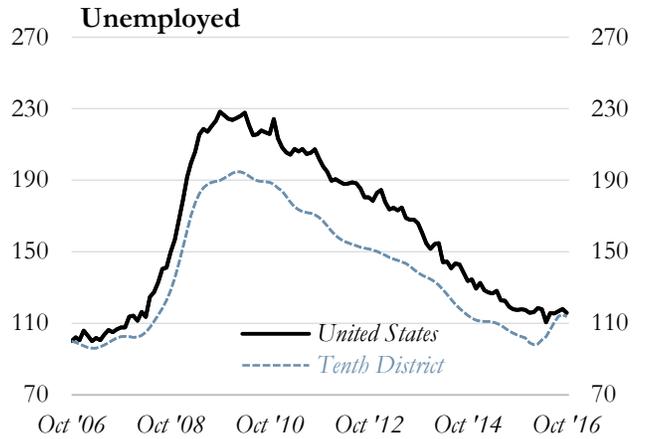
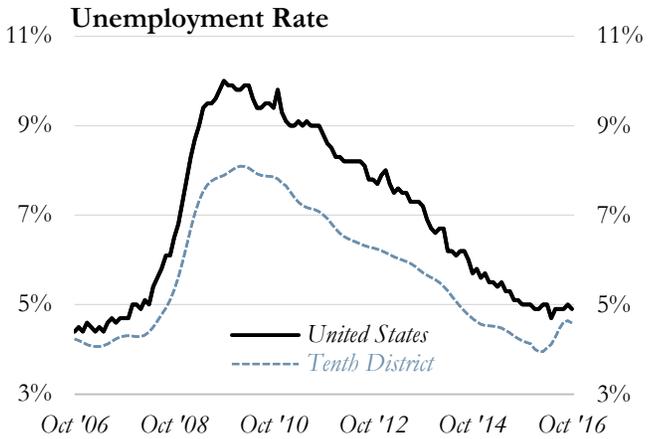
**Total Nonfarm Employment**

*Ten-Year Index of Growth, Seasonally Adjusted*



**Labor Force Dynamics**

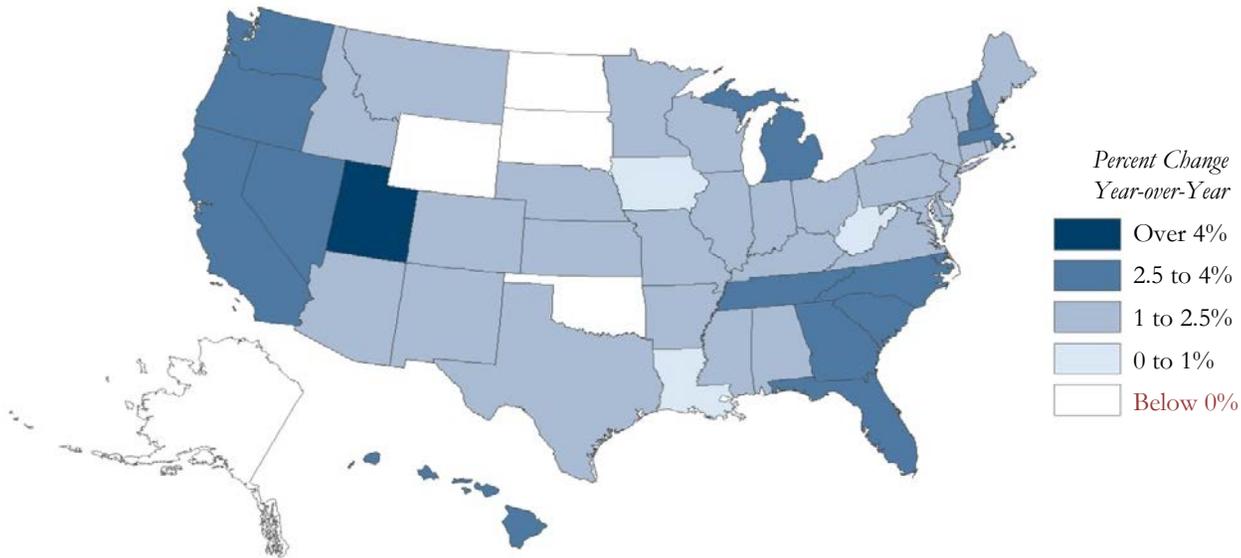
*Ten-Year Index of Growth, Seasonally Adjusted*



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

**2016Q2 Real Personal Income**

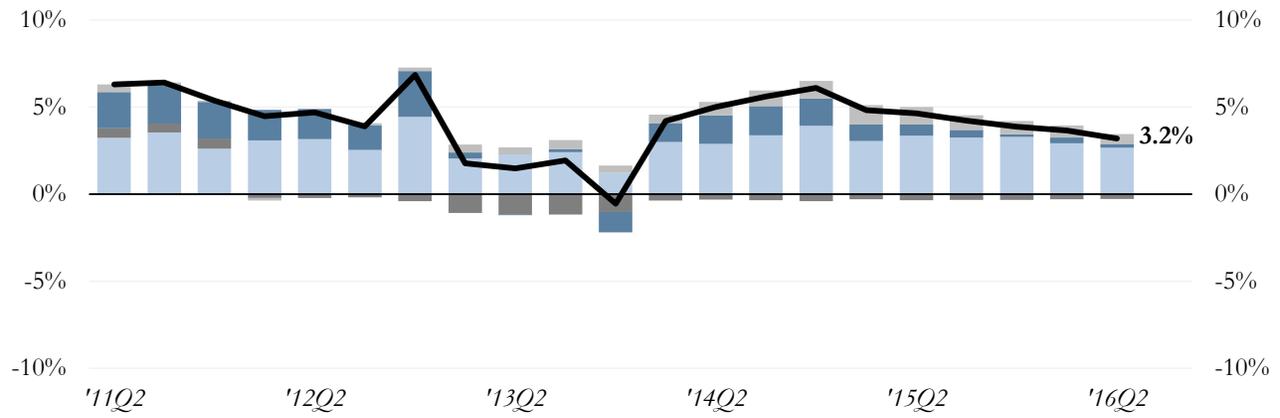
*Seasonally Adjusted*



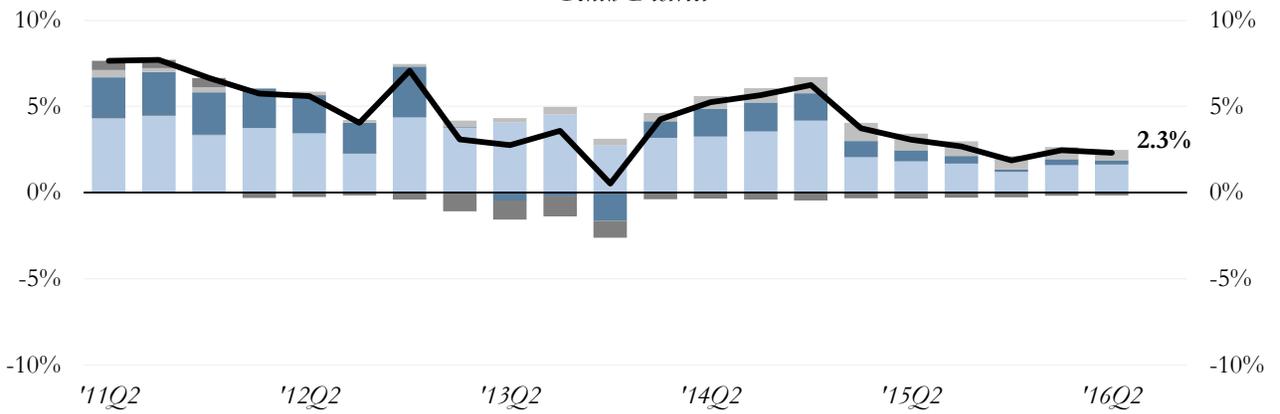
	<i>Percent Change Year-over-Year</i>	<i>Per Capita Personal Income</i>		<i>Percent Change Year-over-Year</i>	<i>Per Capita Personal Income</i>		
<b>United States</b>	<b>2.2%</b>	<b>\$49,142</b>	25	Maryland	2.2%	\$57,261	
<b>Tenth District</b>	<b>1.4</b>	<b>42,210</b>	26	<b>Colorado</b>	2.0	51,485	
1	Utah	4.3	40,565	27	Idaho	1.9	38,923
2	Georgia	3.9	41,636	28	Wisconsin	1.9	46,946
3	Oregon	3.9	45,057	29	New Jersey	1.9	61,381
4	Washington	3.4	53,422	30	Ohio	1.9	44,565
5	Florida	3.4	45,413	31	New York	1.7	60,138
6	Nevada	3.3	42,874	32	Connecticut	1.5	70,330
7	North Carolina	3.3	41,876	33	Pennsylvania	1.5	50,693
8	Hawaii	3.2	49,793	34	Texas	1.5	47,194
9	South Carolina	3.2	39,208	35	Minnesota	1.4	51,567
10	Tennessee	2.9	43,163	36	<b>Kansas</b>	1.4	48,148
11	Michigan	2.9	44,182	37	Rhode Island	1.4	51,028
12	New Hampshire	2.7	57,678	38	Kentucky	1.3	39,205
13	Massachusetts	2.6	64,241	39	Delaware	1.3	48,225
14	California	2.6	55,061	40	Montana	1.3	42,342
15	Illinois	2.4	51,805	41	<b>New Mexico</b>	1.1	38,696
16	Vermont	2.4	50,086	42	<b>Nebraska</b>	1.1	49,170
17	Indiana	2.4	43,078	43	Louisiana	0.7	43,362
18	Arizona	2.4	39,812	44	Iowa	0.4	46,095
19	Maine	2.4	44,091	45	West Virginia	0.1	37,245
20	<b>Missouri</b>	2.3	43,415	46	<b>Oklahoma</b>	-0.2	45,423
21	Alabama	2.3	39,019	47	Alaska	-0.6	56,346
22	Virginia	2.3	53,288	48	South Dakota	-0.6	47,615
23	Mississippi	2.2	35,824	49	<b>Wyoming</b>	-2.4	55,345
24	Arkansas	2.2	39,215	50	North Dakota	-3.3	53,568

Source: Bureau of Economic Analysis/Haver Analytics

**Nominal Personal Income**  
*Contributions to Percent Change, Seasonally Adjusted*  
 United States

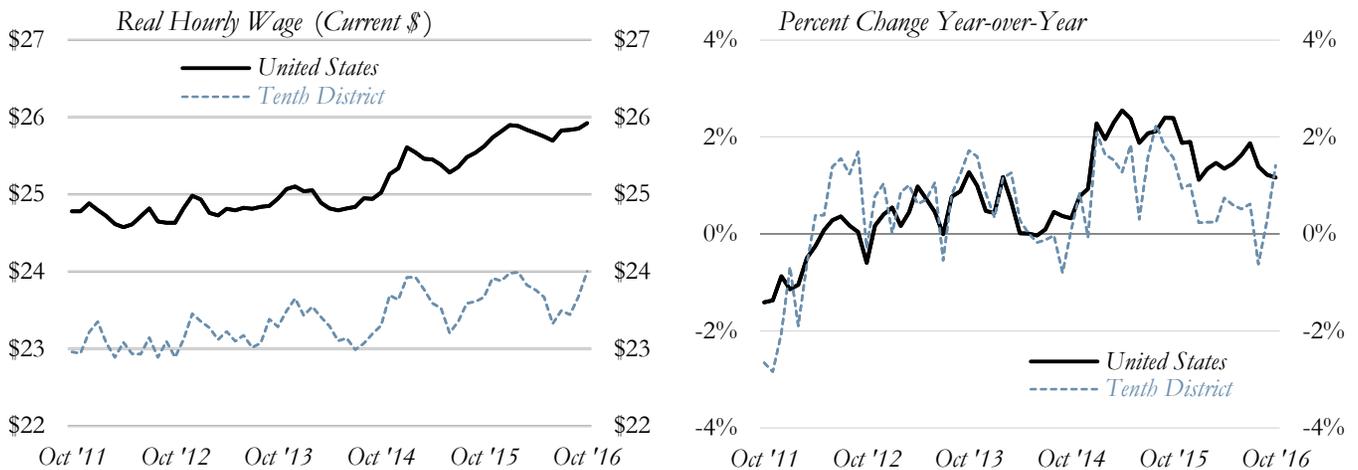


Tenth District



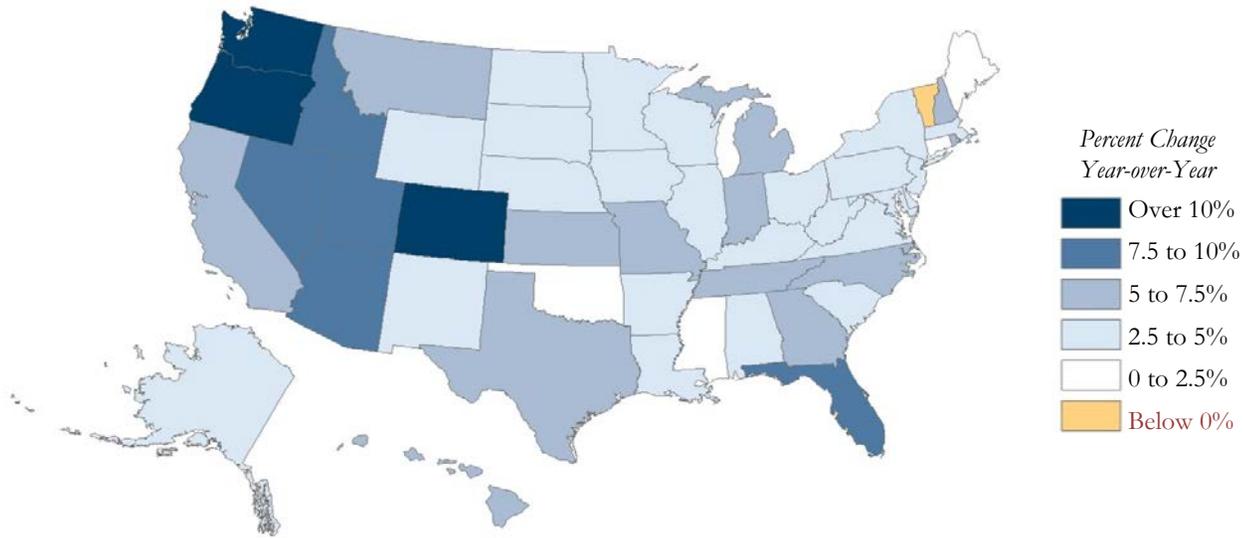
Contributions to Social Insurance    
  Transfer Payments    
  Dividends, Interest & Rent  
 Residence Adjustment    
  Earnings by Place of Work    
  Total Personal Income

**Real Average Hourly Wage**  
*Seasonally Adjusted*



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

**2016Q2 FHFA Purchase-Only Home Price Index**  
*Seasonally Adjusted*

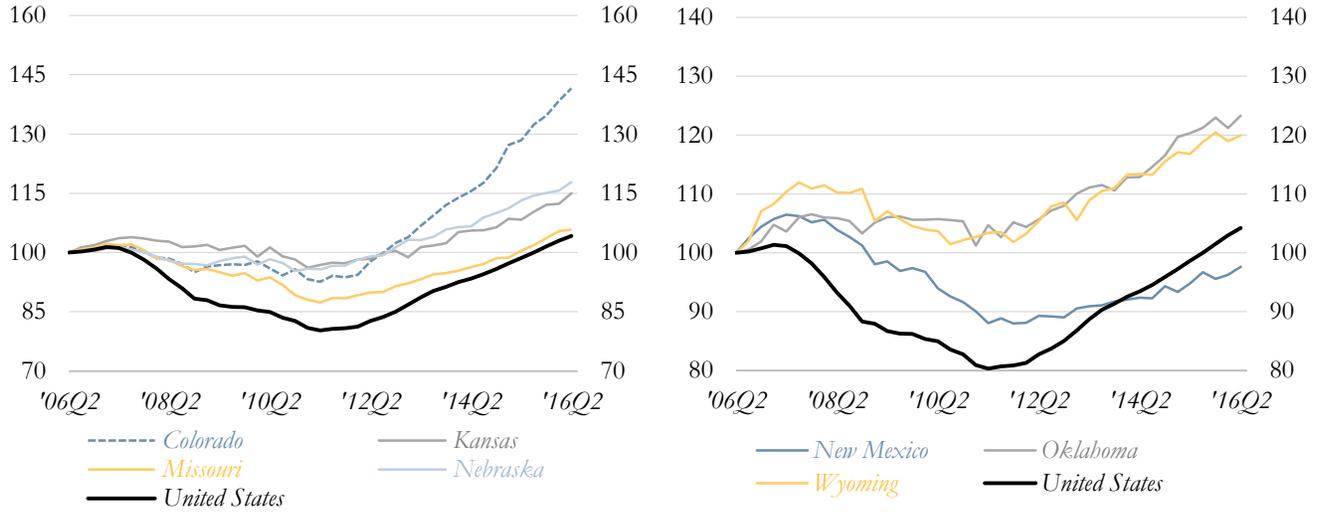


<i>Percent Change Year-over-Year</i>			<i>Percent Change Year-over-Year</i>		
	<b>United States</b>	<b>5.6%</b>	25	Kentucky	4.6%
1	Oregon	11.7	26	Ohio	4.5
2	Washington	10.3	27	Massachusetts	4.4
3	<b>Colorado</b>	10.2	28	Virginia	4.2
4	Florida	10.0	29	<b>Nebraska</b>	4.1
5	Nevada	9.6	30	South Carolina	4.0
6	Utah	8.8	31	Louisiana	3.9
7	Arizona	8.3	32	Iowa	3.7
8	Idaho	7.6	33	North Dakota	3.7
9	California	7.2	34	Alabama	3.6
10	Texas	7.0	35	Delaware	3.5
11	Rhode Island	7.0	36	New Jersey	3.4
12	Georgia	6.9	37	Maryland	3.2
13	<b>Kansas</b>	6.2	38	Alaska	3.1
14	Montana	6.2	39	West Virginia	3.1
15	Tennessee	6.1	40	Pennsylvania	3.0
16	New Hampshire	6.1	41	Illinois	2.9
17	North Carolina	5.8	42	<b>New Mexico</b>	2.9
18	Michigan	5.3	43	New York	2.8
19	<b>Missouri</b>	5.3	44	Arkansas	2.7
20	Hawaii	5.1	45	<b>Wyoming</b>	2.7
21	Indiana	5.1	46	<b>Oklahoma</b>	2.5
22	Wisconsin	4.9	47	Mississippi	1.7
23	Minnesota	4.8	48	Maine	0.7
24	South Dakota	4.6	49	Connecticut	0.1
			50	Vermont	-0.4

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

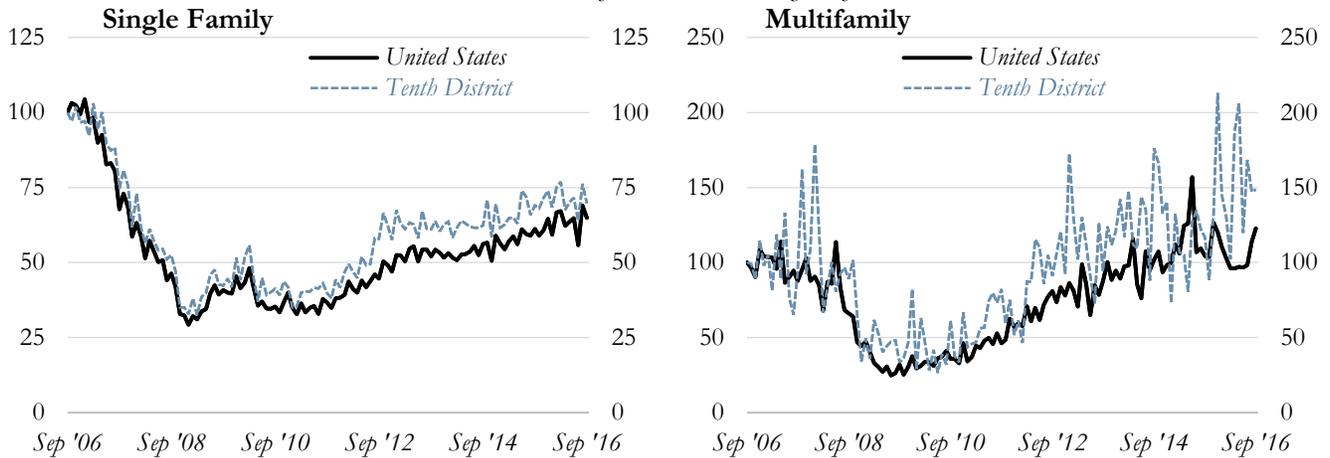
**FHFA Purchase-Only Home Price Index**

*Ten-Year Index of Growth, Seasonally Adjusted*

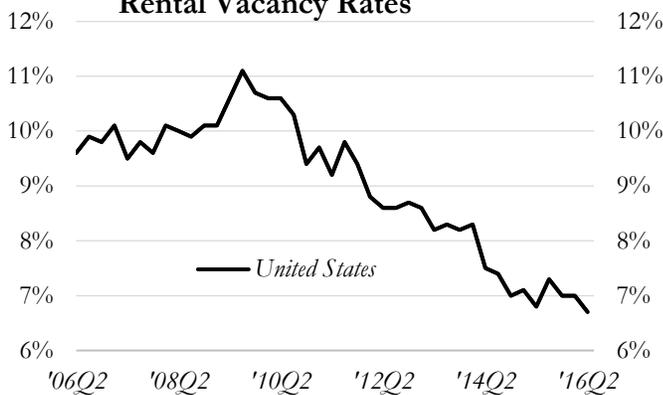


**Housing Permits**

*Ten-Year Index of Growth, Seasonally Adjusted*



**Rental Vacancy Rates**

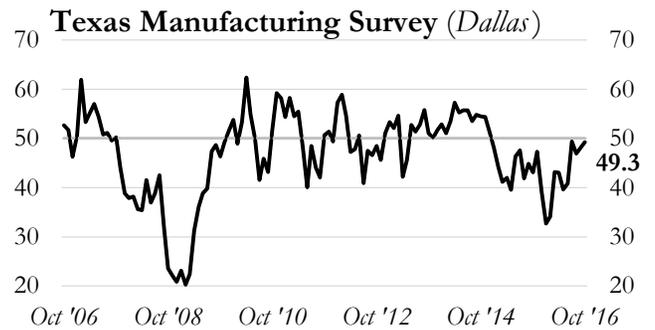
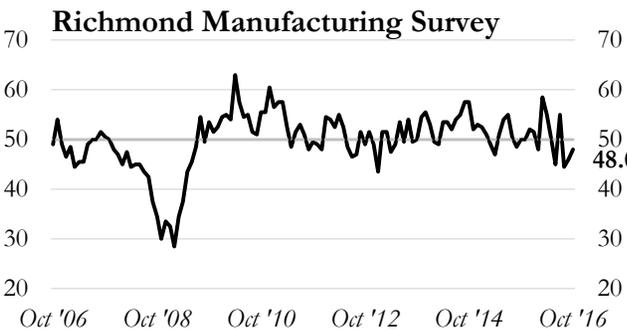
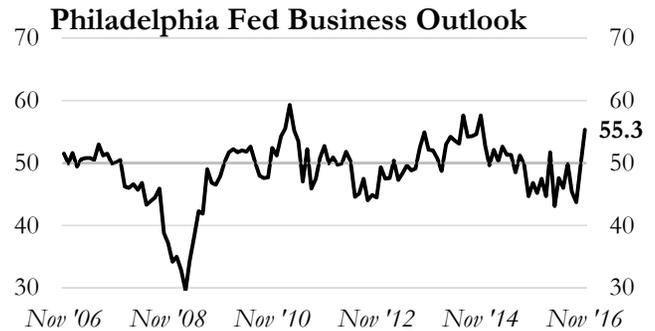
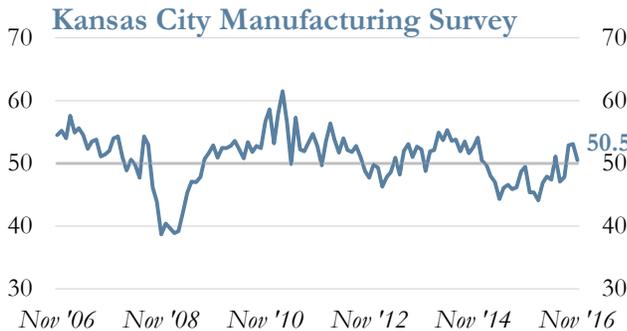
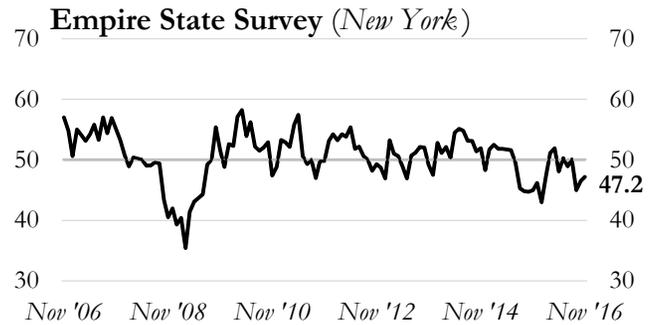
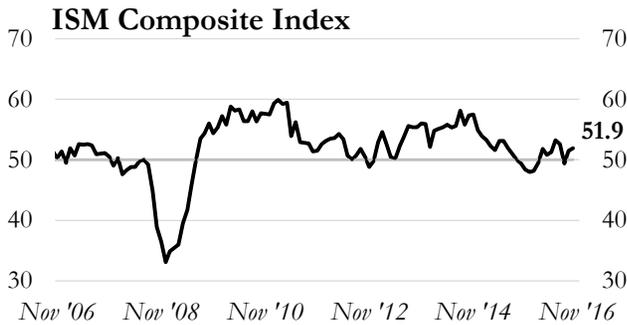


Note: Rental Vacancy Rates are not available for the Tenth District.

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

**Manufacturing Surveys**

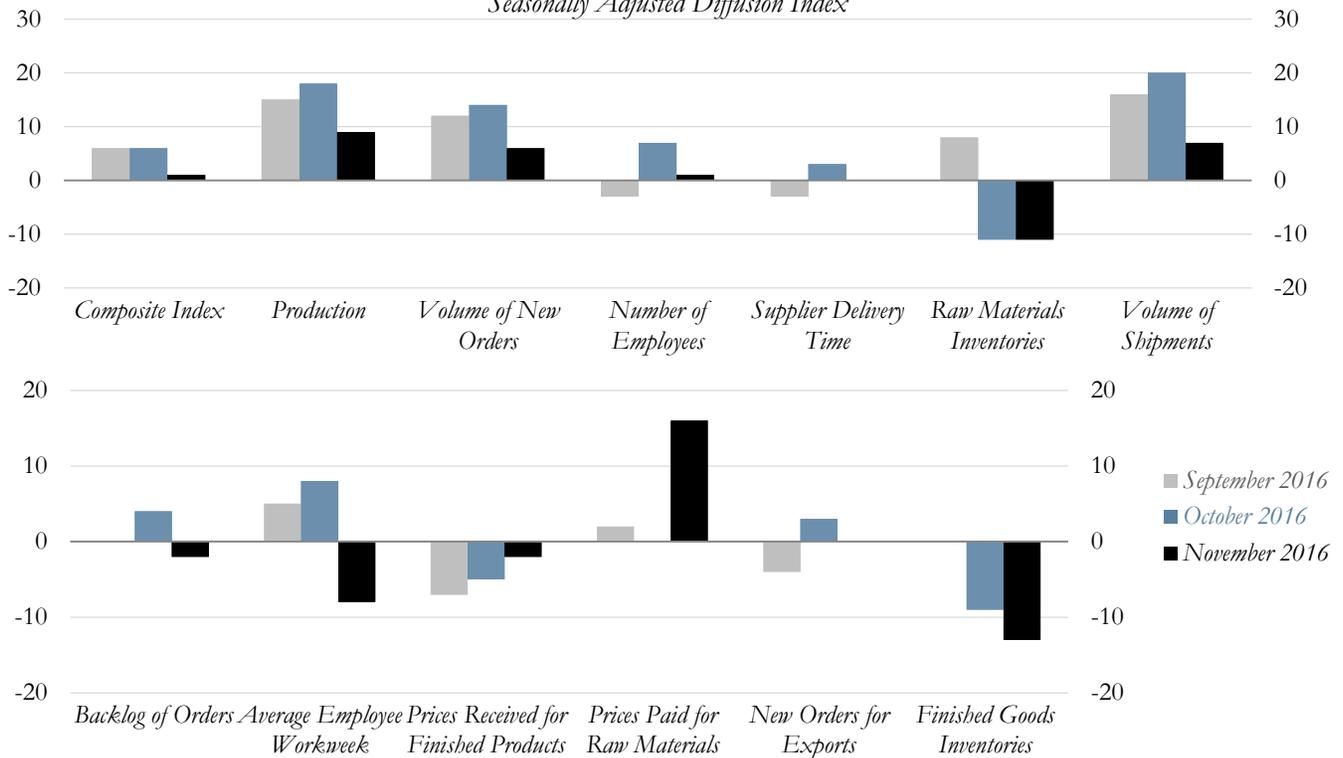
*Seasonally Adjusted*



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

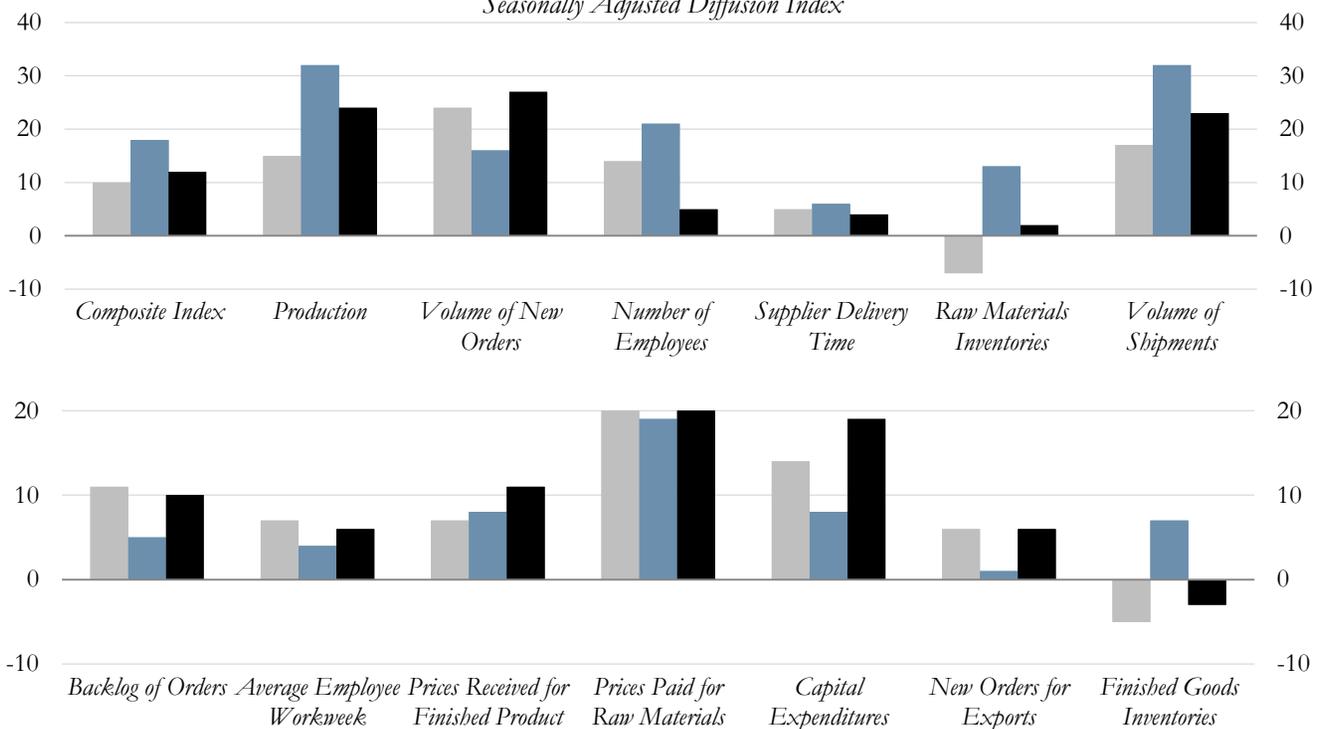
**Current Activity vs. a Month Ago**

*Seasonally Adjusted Diffusion Index*



**Expectations Six-Months Ahead**

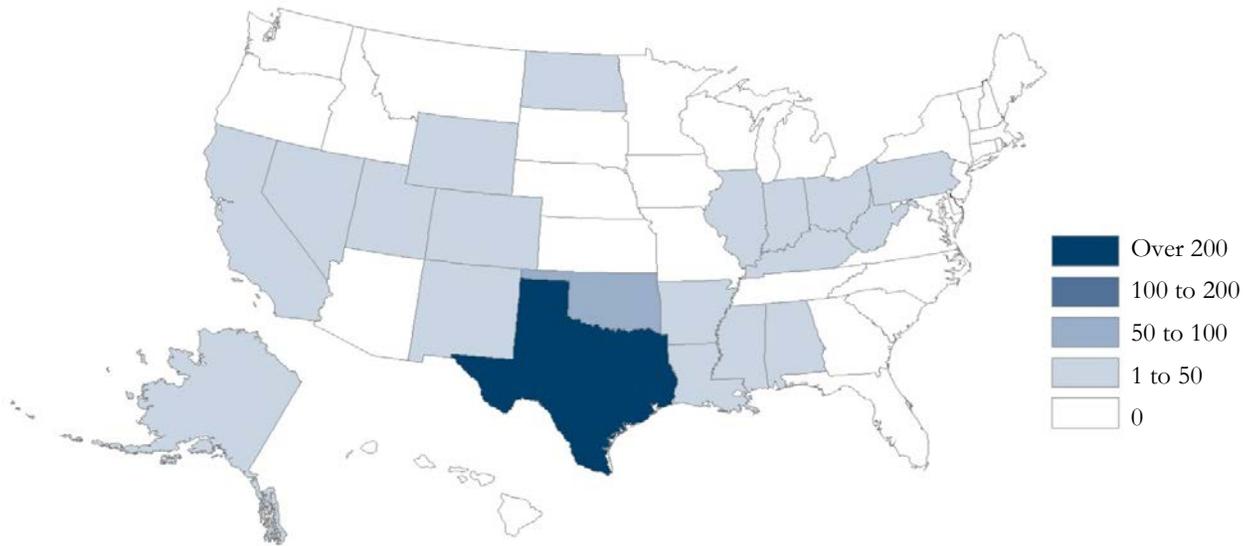
*Seasonally Adjusted Diffusion Index*



Note: Indices above zero indicate expansion.

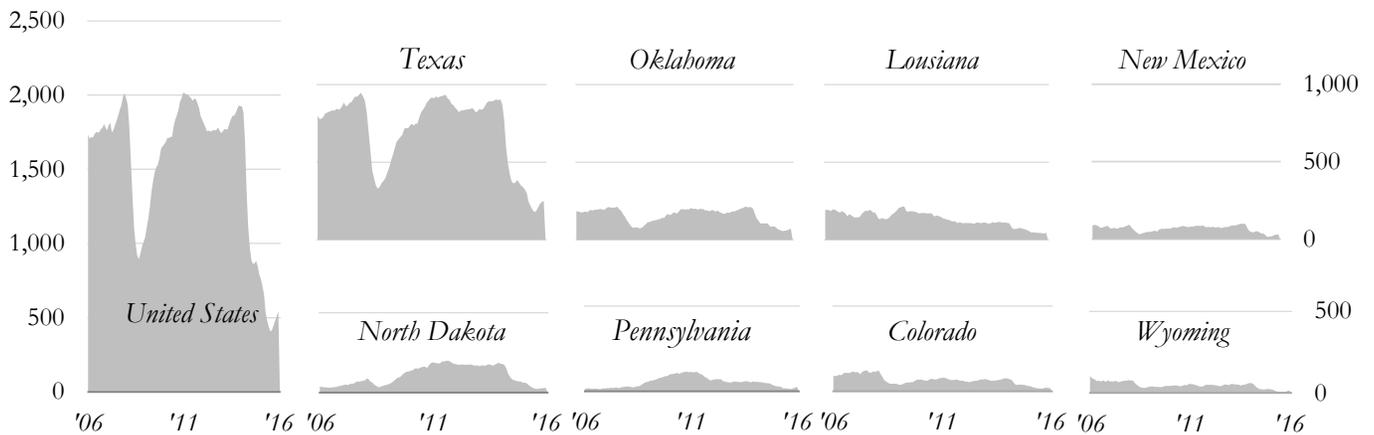
Source: Federal Reserve Bank of Kansas City/Haver Analytics

**October 2016 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>543</b>	<b>-28.6%</b>	
<b>Tenth District</b>	<b>138</b>	<b>-30.3</b>	<b>25.4%</b>
<i>Top Producing States</i>			
Texas	250	-28.4	46.0
<b>Oklahoma</b>	72	-20.0	13.3
Louisiana	46	-33.3	8.5
<b>New Mexico</b>	32	-25.6	5.9
North Dakota	31	-50.8	5.7
Pennsylvania	25	-13.8	4.6
<b>Colorado</b>	19	-36.7	3.5
<b>Wyoming</b>	15	-40.0	2.8
Ohio	14	-30.0	2.6
West Virginia	10	-41.2	1.8

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



Source: Baker Hughes/Haver Analytics

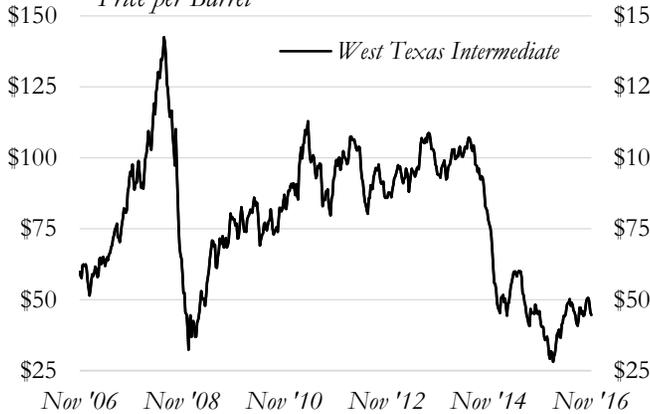
**U.S. Supply/Demand Dynamics**

*Seasonally Adjusted*

**Spot Prices**

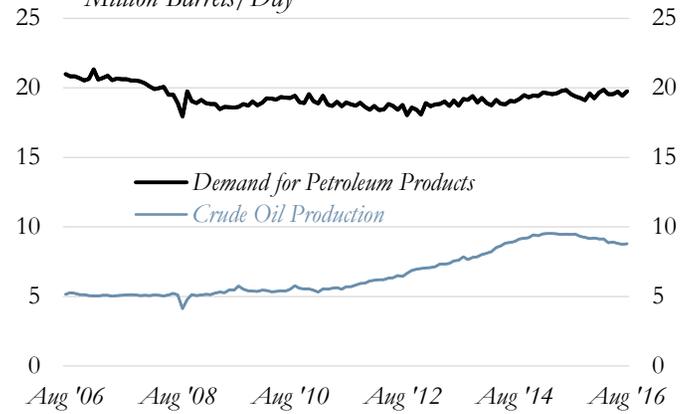
**Crude Oil**

*Price per Barrel*



**Crude Oil**

*Million Barrels/Day*



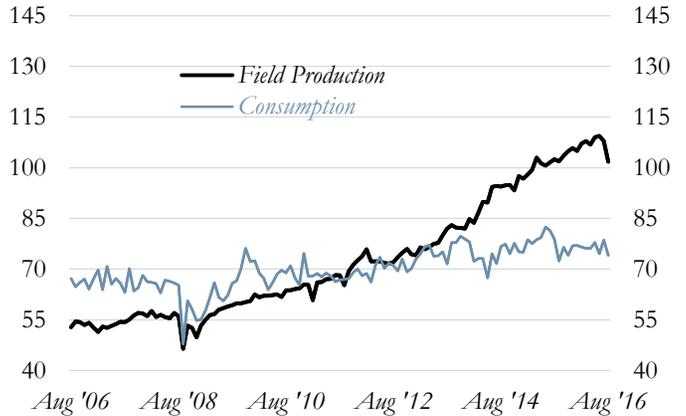
**Gasoline**

*Price per Gallon at the Pump*



**Natural Gas Liquids**

*Million Barrels/Month*



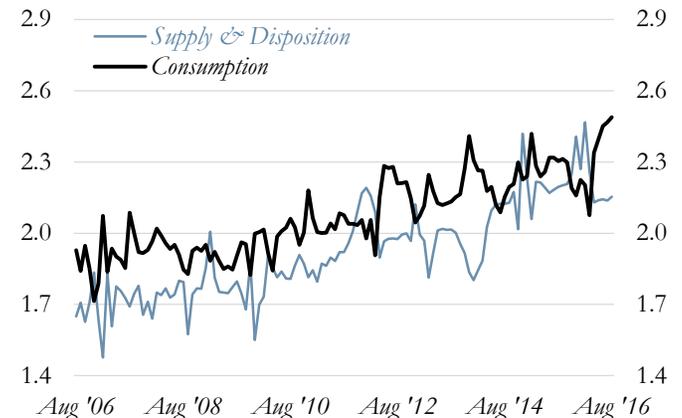
**Natural Gas**

*Price per Thousand Cubic Feet*



**Natural Gas**

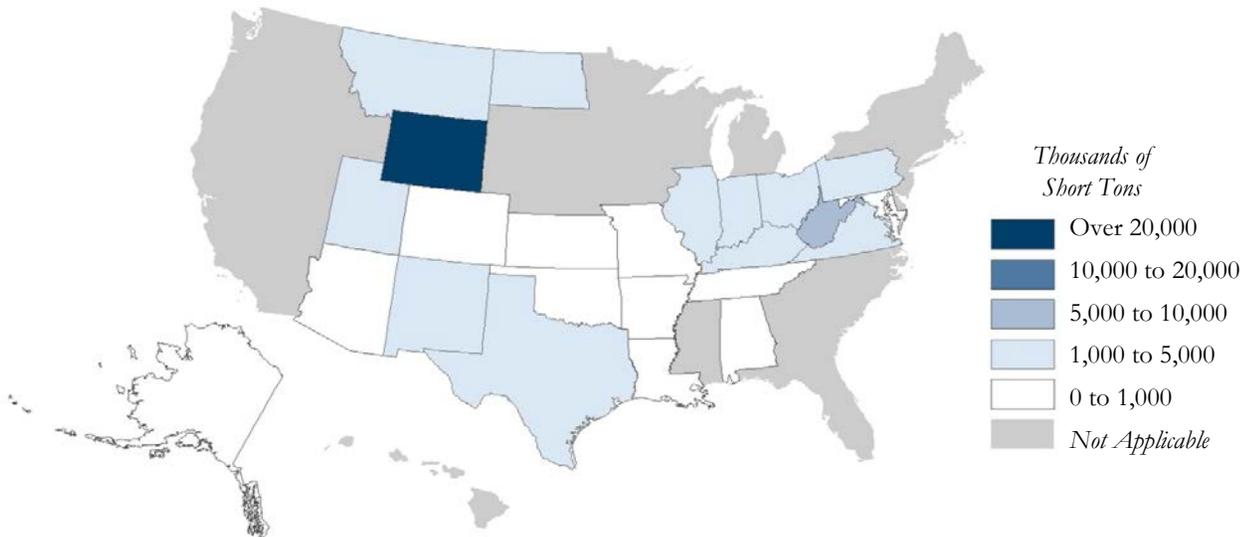
*Trillion Cubic Feet/Month*



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

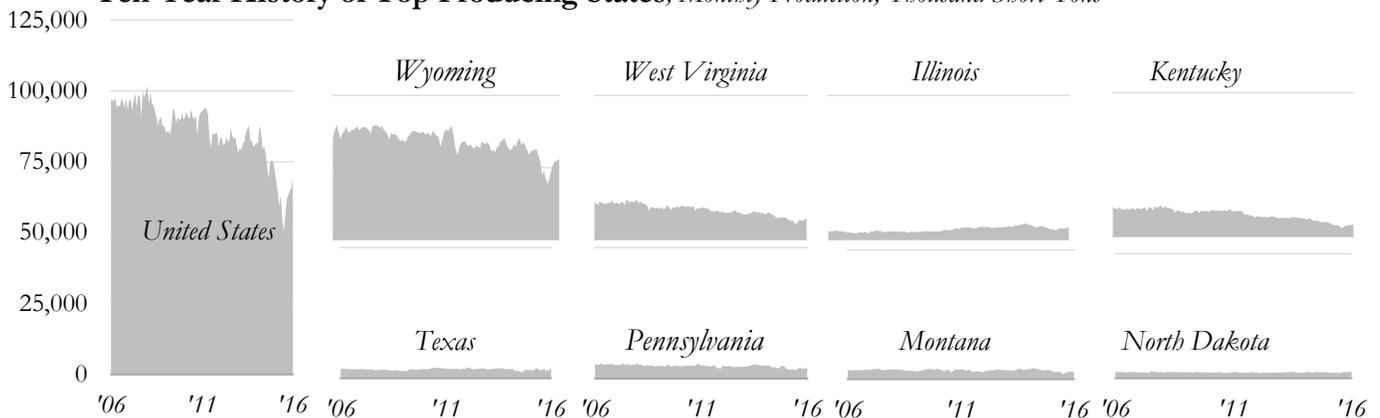
Source: Wall Street Journal, Oil & Gas Journal & Department of Energy, Energy Information Administration/Haver Analytics

**October 2016 Coal Production**  
*Seasonally Adjusted*



	Monthly Production (Thousand Short Tons)	Percent Change Year-over-Year	Current Share of Production
<b>United States</b>	<b>69,099.7</b>	<b>-4.0%</b>	
<b>Tenth District*</b>	<b>30,967.7</b>	<b>-10.6</b>	<b>44.8%</b>
<i>Top Producing States</i>			
<b>Wyoming</b>	28,041.7	-11.1	40.6
West Virginia	7,610.0	-1.6	11.0
Illinois	4,312.8	-1.1	6.2
Kentucky	4,237.4	-9.5	6.1
Texas	4,088.4	28.9	5.9
Pennsylvania	4,065.2	4.5	5.9
Montana	2,859.6	-11.2	4.1
North Dakota	2,774.5	18.8	4.0
Indiana	2,654.4	2.2	3.8
<b>New Mexico</b>	1,834.2	2.4	2.7

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



\*Includes all Tenth District states but Nebraska.

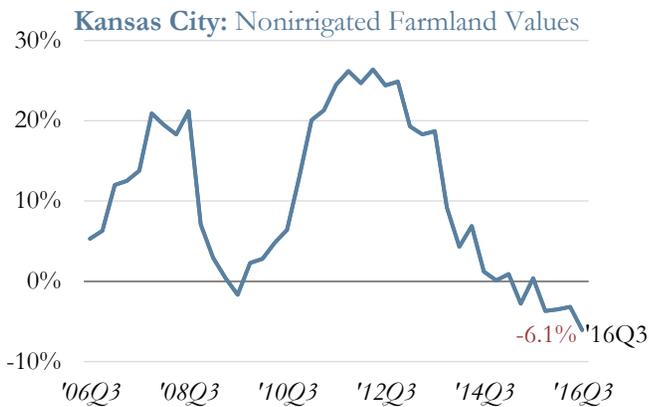
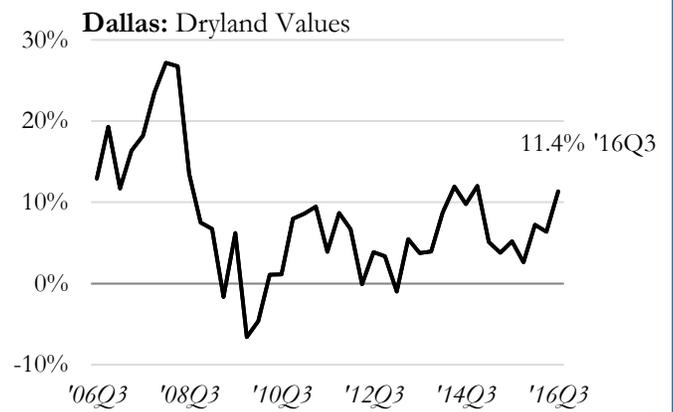
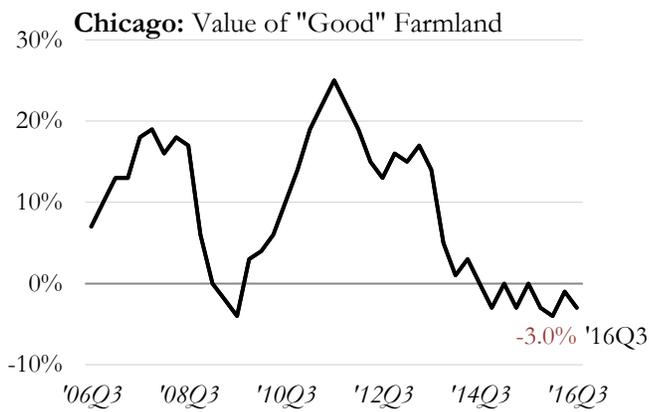
Source: U.S. Department of Energy, Energy Information Administration/Haver Analytics

**Farm Land Values\***



**Farmland Values by Federal Reserve District**

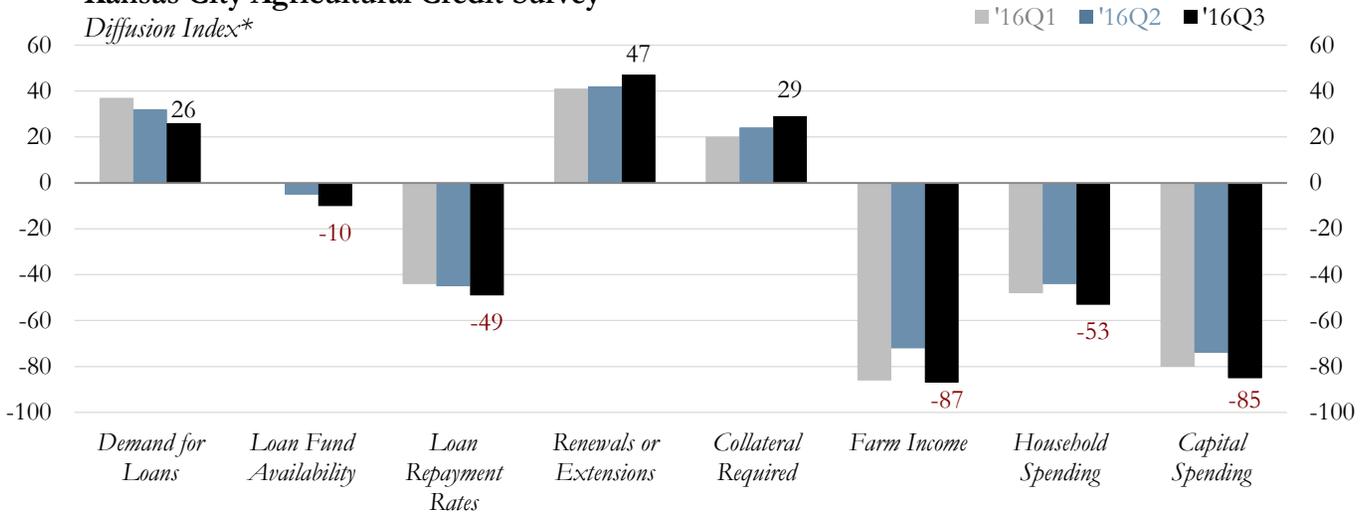
*Percent Change Year-over-Year*



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

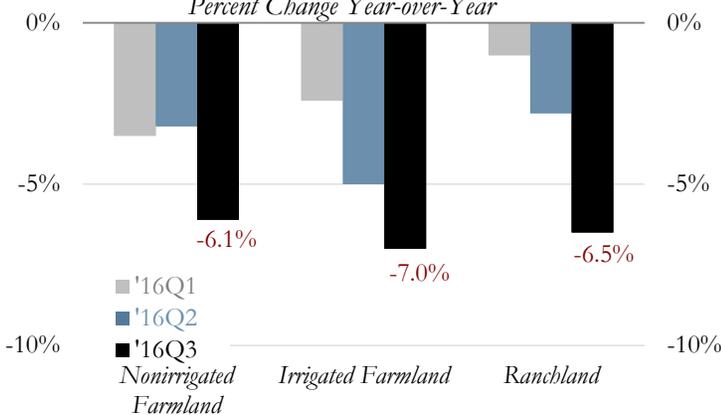
**Kansas City Agricultural Credit Survey**

*Diffusion Index\**

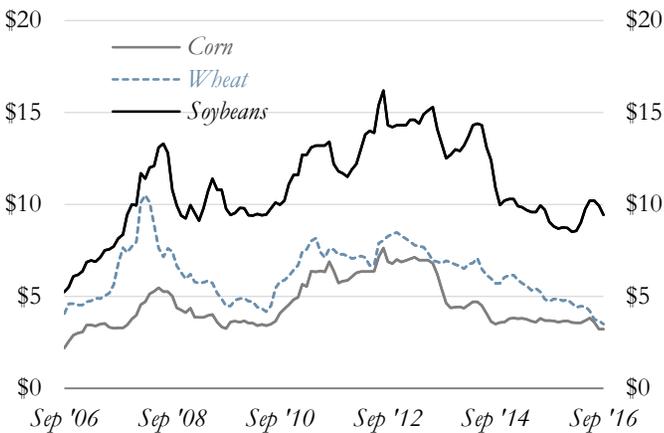


**Tenth District Farmland Values**

*Percent Change Year-over-Year*

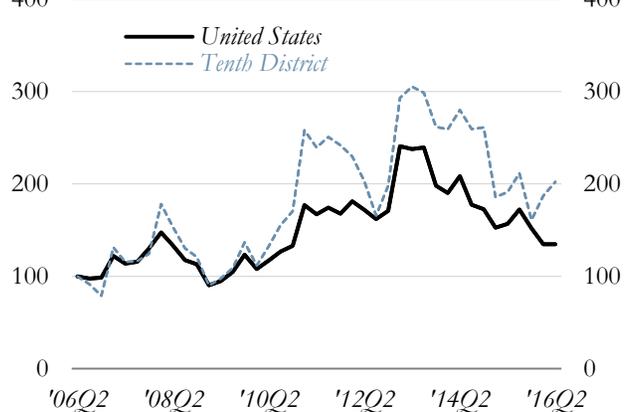


**Spot Prices**



**Farm Income**

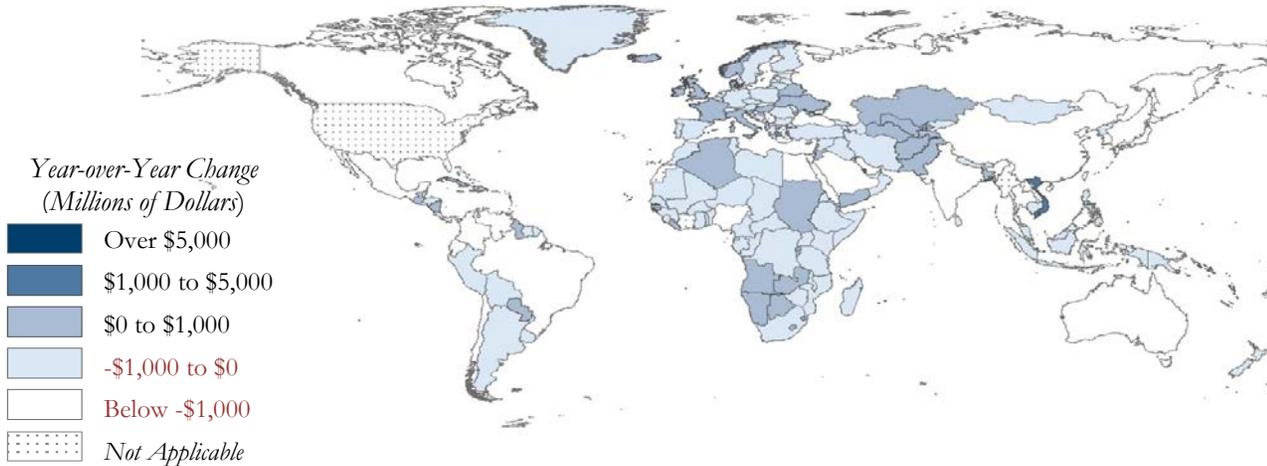
*Ten-Year Index of Growth*



\*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

**2016Q3 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>\$1,060,904.0</b>	<b>-5.1%</b>	
<i>Top Export Markets</i>	Canada	200.4	-5.8	18.9%
	Mexico	172.0	-2.9	16.2%
	China*	124.3	-5.2	11.7%
	Japan	46.4	-2.4	4.4%
	United Kingdom	42.1	0.5	4.0%
	Germany	36.8	-0.7	3.5%
	South Korea	30.7	-7.3	2.9%
	Netherlands Antilles	30.5	1.8	2.9%
	Brazil	22.0	-11.1	2.1%
	France	23.1	1.6	2.2%



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
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