

# THE *Tenth District* ECONOMIC DATABOOK

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



SEPTEMBER 21, 2016

FEDERAL RESERVE BANK of KANSAS CITY

## SUMMARY OF CURRENT TENTH DISTRICT ECONOMIC CONDITIONS

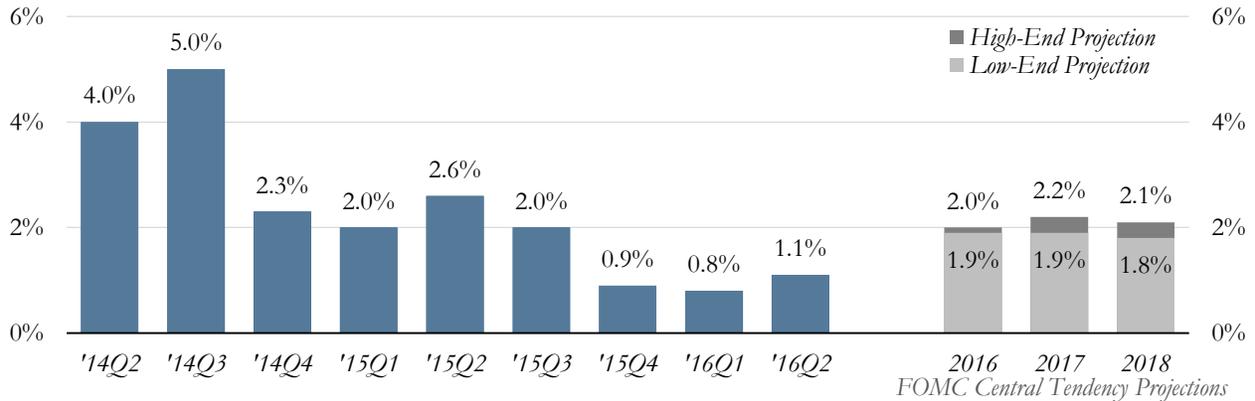
The unemployment rate was 4.6 percent across the Tenth District states in August, and total payroll employment grew 0.8 percent compared to the previous year. Employment growth was mixed across industries, with the strongest percentage gains in the construction and leisure and hospitality sectors. Tenth District nominal personal income grew 3.1 percent in the first 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 a decrease in manufacturing activity in August 2016, with a composite index of 47.8. Nonirrigated farmland values, as measured by the Federal Reserve Bank of Kansas City's Survey of Agricultural Credit Conditions, decreased 3.2 percent in the second 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.

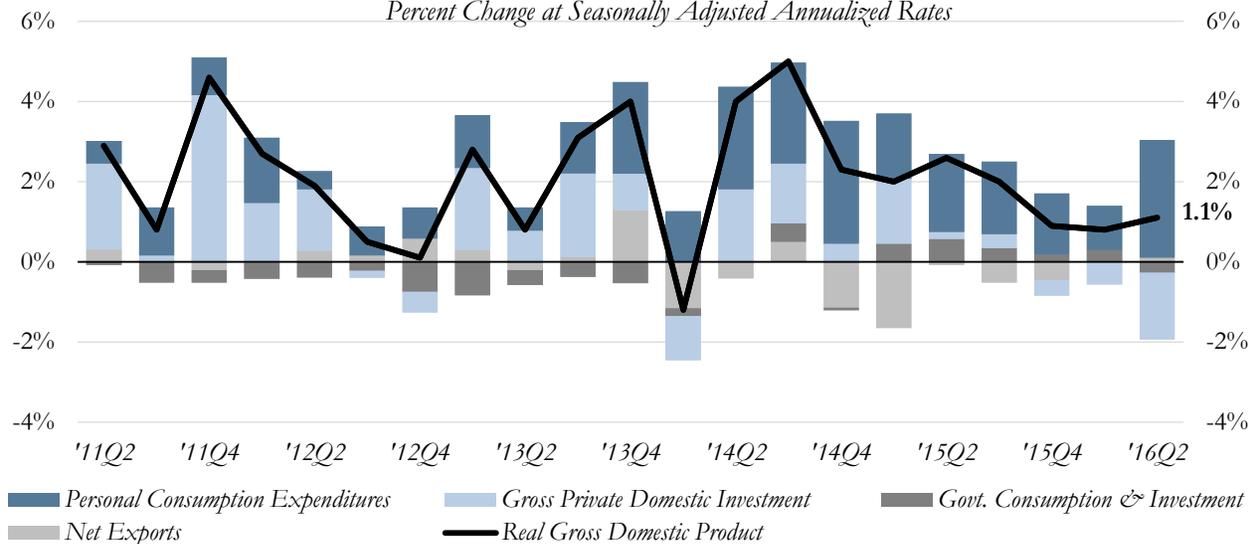


The Federal Reserve Bank of Kansas City's headquarters is located at 1 Memorial Drive in the heart of Kansas City, Missouri. The Federal Reserve Bank of Kansas City serves the Tenth Federal Reserve District, which includes Colorado, Kansas, western Missouri, Nebraska, northern New Mexico, Oklahoma and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

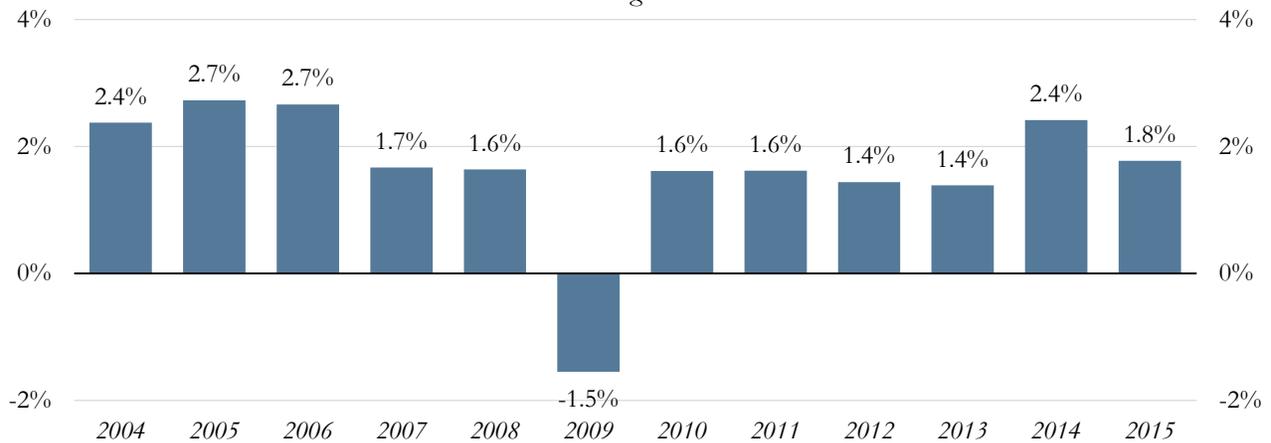
**U.S. Real Gross Domestic Product**  
*Percent Change at Seasonally Adjusted Annualized Rates*



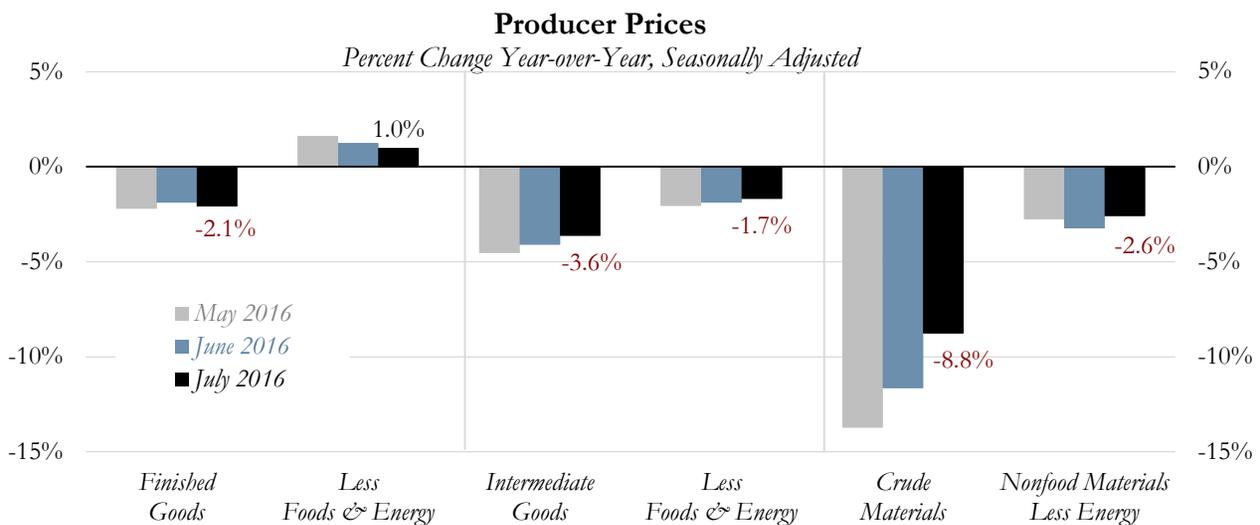
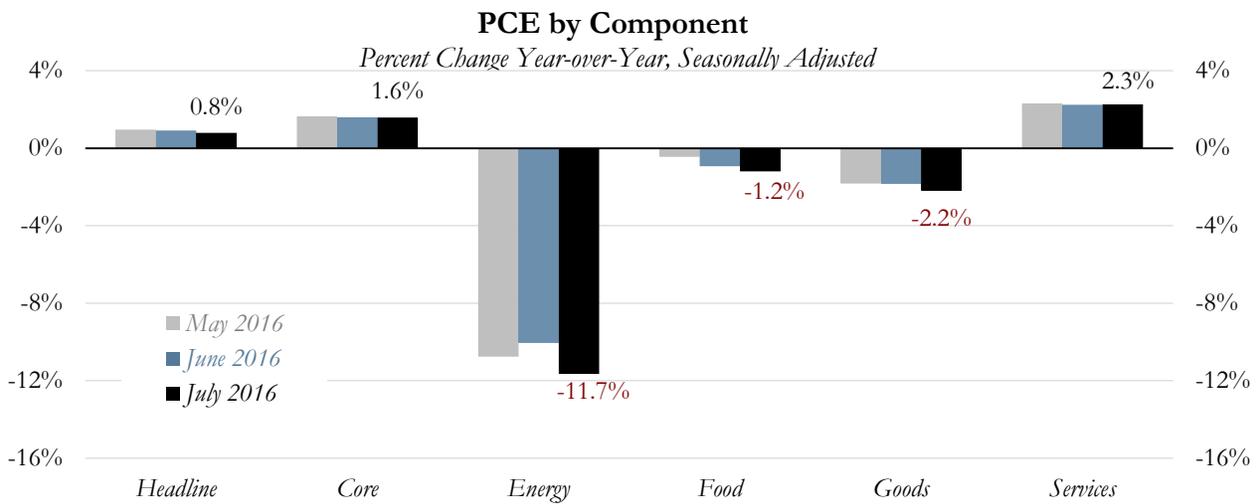
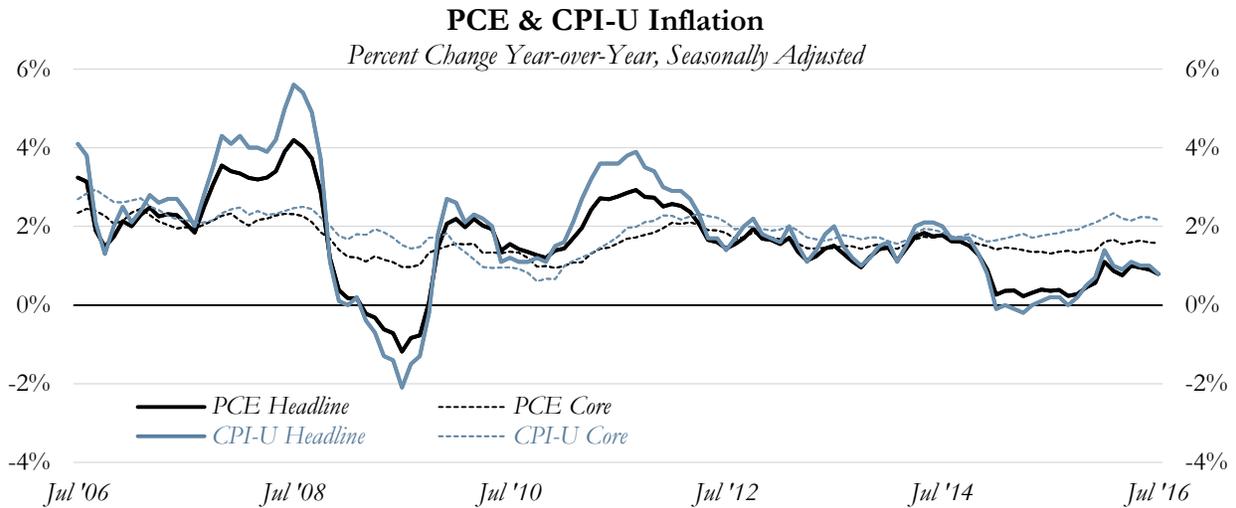
**Contributions to Real U.S. GDP**  
*Percent Change at Seasonally Adjusted Annualized Rates*



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



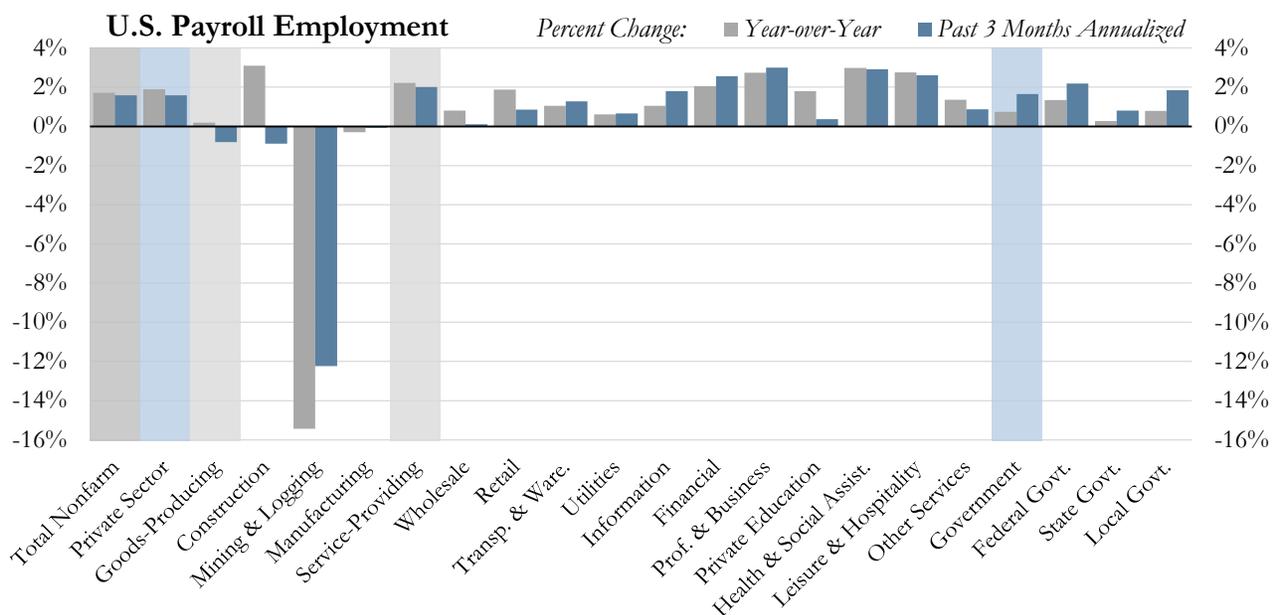
Source: Bureau of Economic Analysis, Federal Open Market Committee/Haver Analytics



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

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

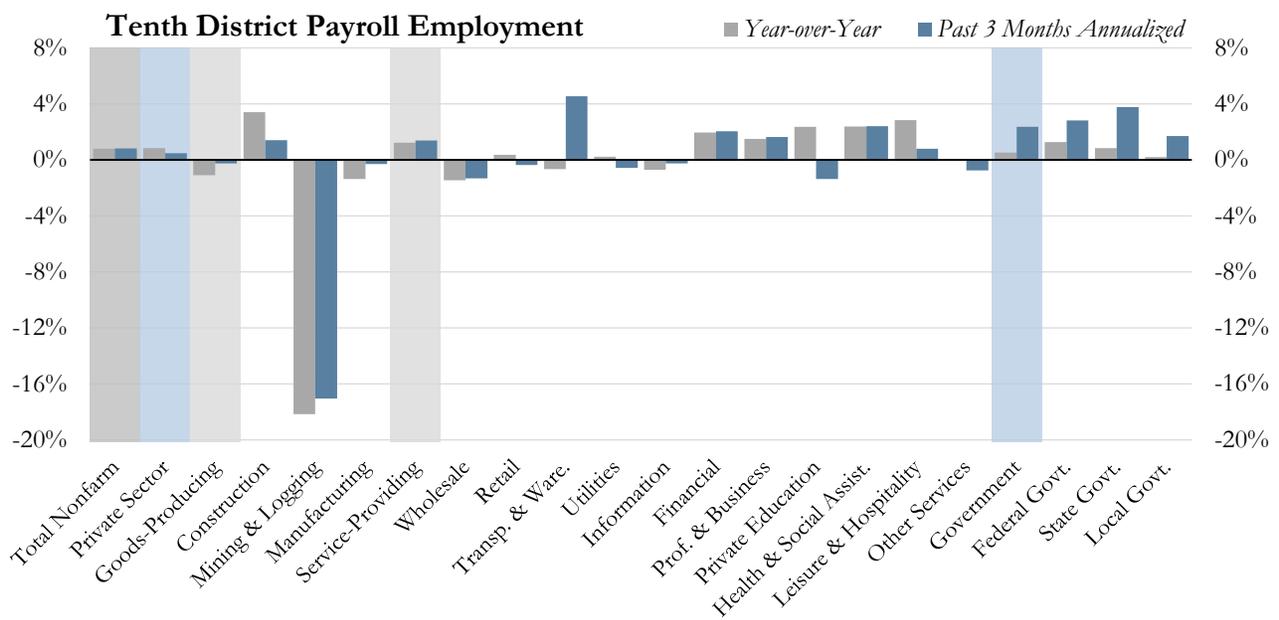
	<i>Number of Jobs (Thousands)</i>	<i>Jobs Gained Year-over-Year (Thousands)</i>	<i>Share of Employment</i>
<b>Total Nonfarm</b>	144,598	2,447	100.0%
Private Sector	122,385	2,283	84.6%
<i>Goods-Producing</i>			
Construction	19,600	38	13.6%
Manufacturing	6,640	199	4.6%
Mining & Logging	679	-124	0.5%
Wholesale Trade	12,281	-37	8.5%
<i>Service-Providing</i>	102,781	2,235	71.1%
Retail Trade	5,926	47	4.1%
Transportation & Warehousing	15,968	293	11.0%
Utilities	4,914	51	3.4%
Information	564	3	0.4%
Financial Activities	2,782	29	1.9%
Professional & Business Services	8,317	167	5.7%
Educational Services	20,284	542	14.0%
Healthcare & Social Assistance	3,525	62	2.4%
Leisure & Hospitality	19,229	556	13.3%
Other Services	15,576	418	10.8%
Government	5,698	76	3.9%
Federal Government	22,213	164	15.4%
State Government	2,790	37	1.9%
Local Government	5,120	14	3.5%
	14,303	113	9.9%



Source: Bureau of Labor Statistics/Haver Analytics

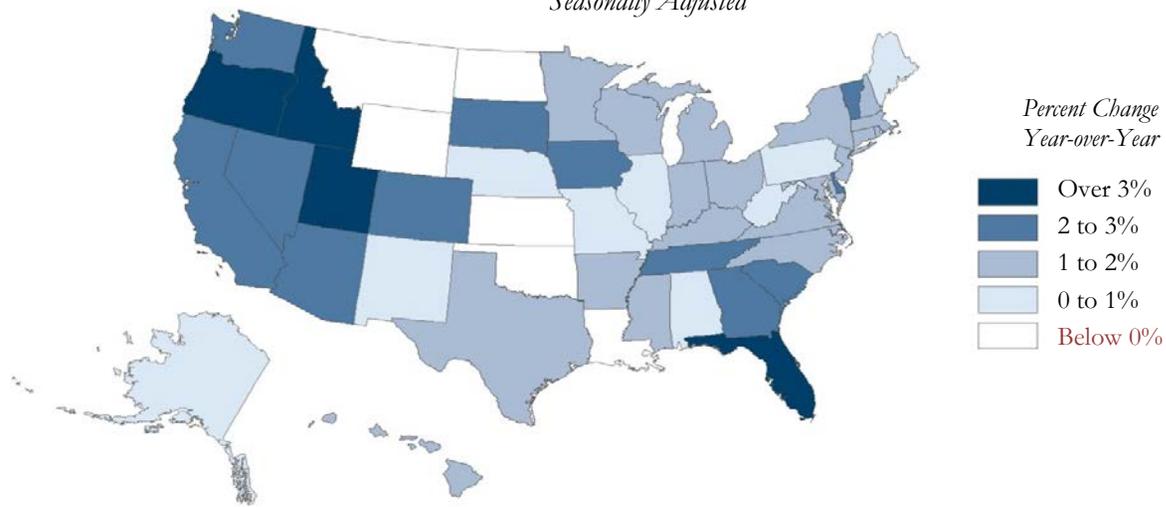
**August 2016 Tenth District Payroll Employment**  
*Seasonally Adjusted*

	<i>Number of Jobs (Thousands)</i>	<i>Jobs Gained Year-over-Year (Thousands)</i>	<i>Share of Employment</i>
<b>Total Nonfarm</b>	10,616	83	100.0%
Private Sector	8,710	73	82.0%
<i>Goods-Producing</i>	1,476	-16	13.9%
Construction	535	18	5.0%
Mining & Logging	117	-26	1.1%
Manufacturing	821	-11	7.8%
<i>Service-Providing</i>	7,231	88	68.2%
Wholesale Trade	411	-6	3.9%
Retail Trade	1,149	4	10.8%
Transportation & Warehousing	352	-2	3.3%
Utilities	42	0	0.4%
Information	200	-1	1.9%
Financial Activities	614	12	5.8%
Professional & Business Services	1,390	21	13.1%
Private Educational Services	156	4	1.5%
Healthcare & Social Assistance	1,379	32	12.9%
Leisure & Hospitality	1,142	32	10.8%
Other Services	405	0	3.8%
Government	1,906	10	18.0%
Federal Government	235	3	2.2%
State Government	470	4	4.4%
Local Government	1,201	3	11.3%



Source: Bureau of Labor Statistics/Haver Analytics

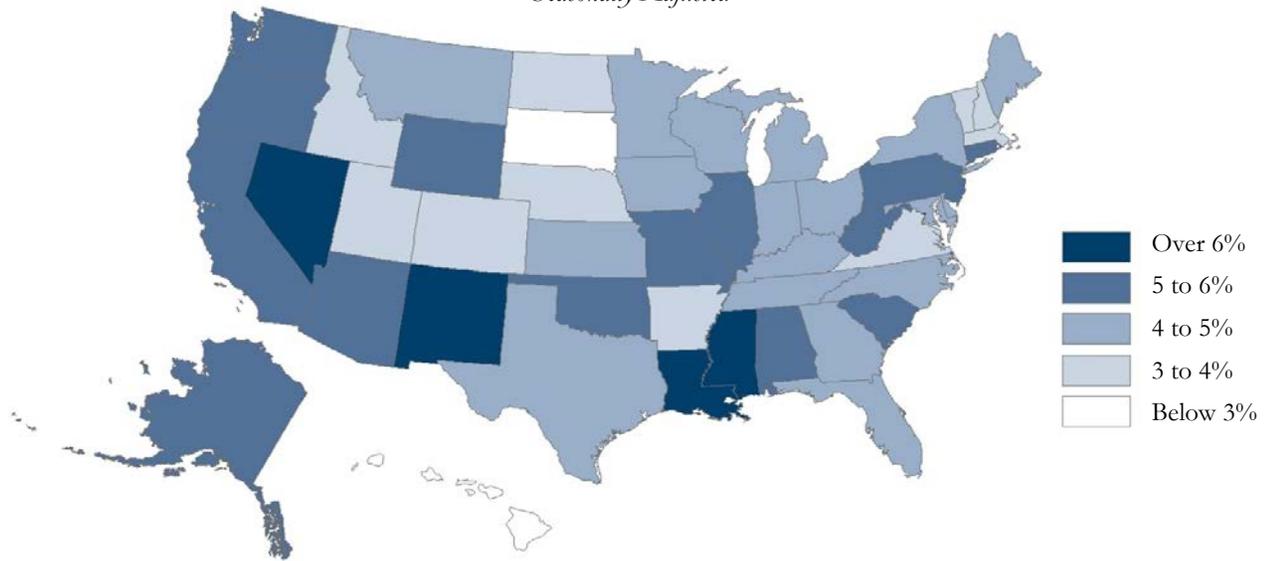
**August 2016 Total Nonfarm Employment**  
*Seasonally Adjusted*



		<i>Percent Change Year-over-Year</i>			<i>Percent Change Year-over-Year</i>
	<b>United States</b>	<b>1.7%</b>	25	Ohio	1.4%
	<b>Tenth District</b>	<b>0.8</b>	26	Wisconsin	1.4
1	Oregon	3.3	27	Arkansas	1.4
2	Idaho	3.3	28	Minnesota	1.4
3	Florida	3.2	29	New Jersey	1.3
4	Utah	3.1	30	Rhode Island	1.2
5	Nevada	2.9	31	Connecticut	1.1
6	<b>Colorado</b>	2.8	32	New York	1.1
7	Washington	2.8	33	Mississippi	1.1
8	Delaware	2.8	34	Indiana	1.0
9	South Carolina	2.5	35	Kentucky	1.0
10	Georgia	2.4	36	<b>Missouri</b>	1.0
11	South Dakota	2.4	37	Pennsylvania	1.0
12	California	2.3	38	Alabama	1.0
13	Tennessee	2.2	39	<b>Nebraska</b>	0.8
14	Vermont	2.1	40	Maine	0.8
15	Arizona	2.0	41	Illinois	0.7
16	Iowa	2.0	42	Alaska	0.3
17	New Hampshire	2.0	43	West Virginia	0.2
18	Massachusetts	1.9	44	<b>New Mexico</b>	0.2
19	Virginia	1.9	45	Montana	-0.4
20	Michigan	1.8	46	<b>Oklahoma</b>	-0.4
21	North Carolina	1.8	47	<b>Kansas</b>	-0.6
22	Maryland	1.8	48	Louisiana	-0.9
23	Hawaii	1.7	49	North Dakota	-1.7
24	Texas	1.6	50	<b>Wyoming</b>	-3.3

Source: Bureau of Labor Statistics/Haver Analytics

**August 2016 Unemployment Rates**  
*Seasonally Adjusted*

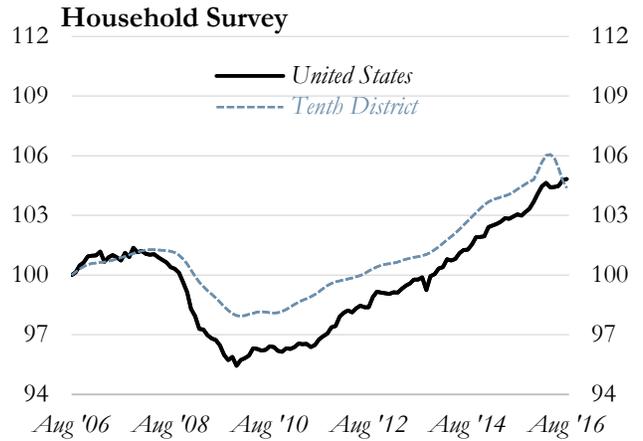
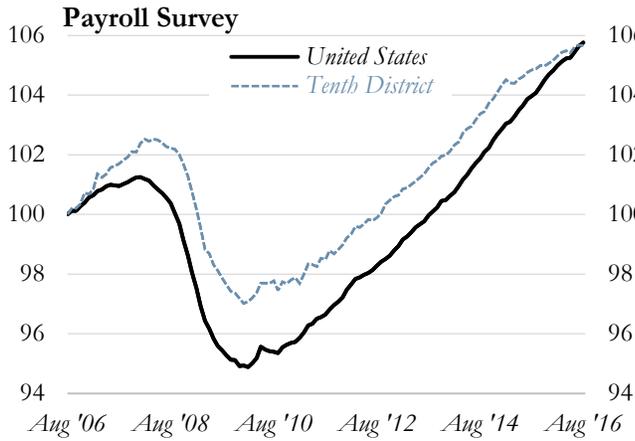


		<i>Percent Unemployed</i>			<i>Percent Unemployed</i>
<b>United States</b>		<b>4.9%</b>	24	Florida	4.7%
<b>Tenth District</b>		<b>4.6</b>	24	Texas	4.7
1	Alaska	6.8	27	North Carolina	4.6
2	<b>New Mexico</b>	6.6	28	Indiana	4.5
3	Nevada	6.3	28	Michigan	4.5
3	Louisiana	6.3	30	Tennessee	4.4
5	Mississippi	6.0	31	Maryland	4.3
6	Arizona	5.8	31	Delaware	4.3
7	Washington	5.7	31	Montana	4.3
7	West Virginia	5.7	31	<b>Kansas</b>	4.3
7	Pennsylvania	5.7	35	Wisconsin	4.2
10	Connecticut	5.6	35	Iowa	4.2
10	Rhode Island	5.6	37	Minnesota	4.0
12	Illinois	5.5	37	Maine	4.0
12	<b>Wyoming</b>	5.5	39	Massachusetts	3.9
12	California	5.5	39	Arkansas	3.9
15	Alabama	5.4	39	Virginia	3.9
15	Oregon	5.4	42	Idaho	3.8
17	New Jersey	5.3	42	<b>Colorado</b>	3.8
18	South Carolina	5.1	44	Utah	3.7
18	<b>Oklahoma</b>	5.1	45	Hawaii	3.4
18	<b>Missouri</b>	5.1	46	Vermont	3.3
21	Georgia	4.9	47	<b>Nebraska</b>	3.2
21	Kentucky	4.9	48	North Dakota	3.1
23	New York	4.8	49	New Hampshire	3.0
24	Ohio	4.7	50	South Dakota	2.9

Source: Bureau of Labor Statistics/Haver Analytics

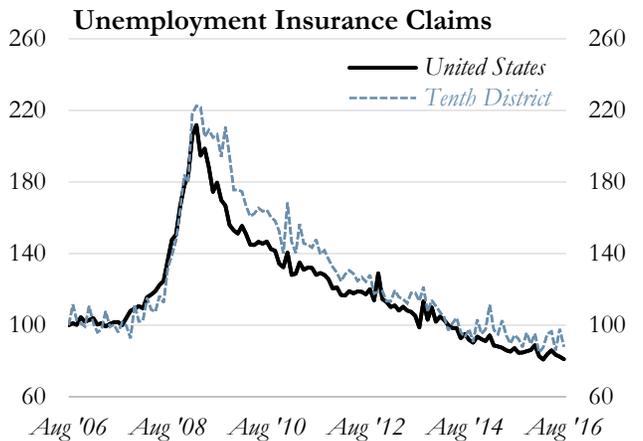
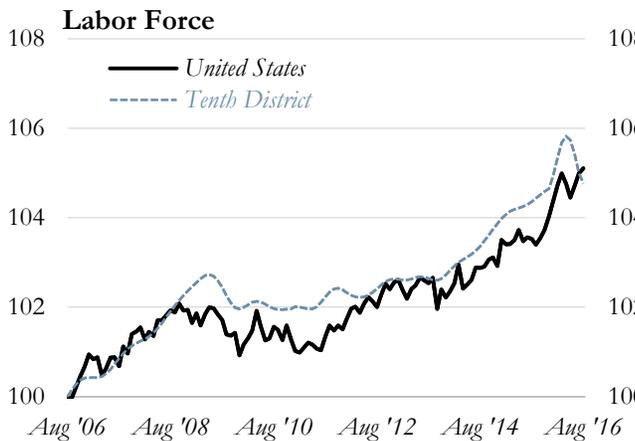
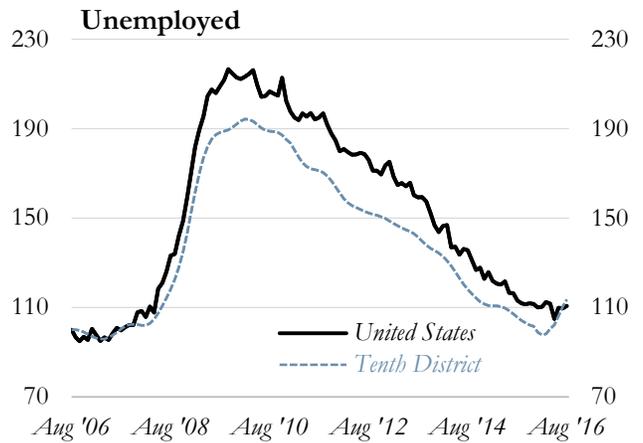
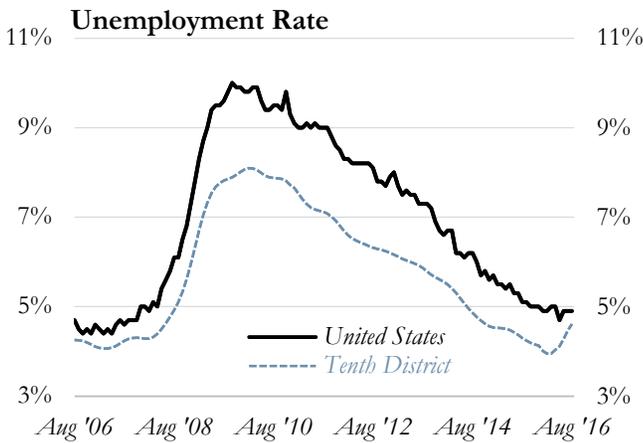
**Total Nonfarm Employment**

*Ten-Year Index of Growth, Seasonally Adjusted*



**Labor Force Dynamics**

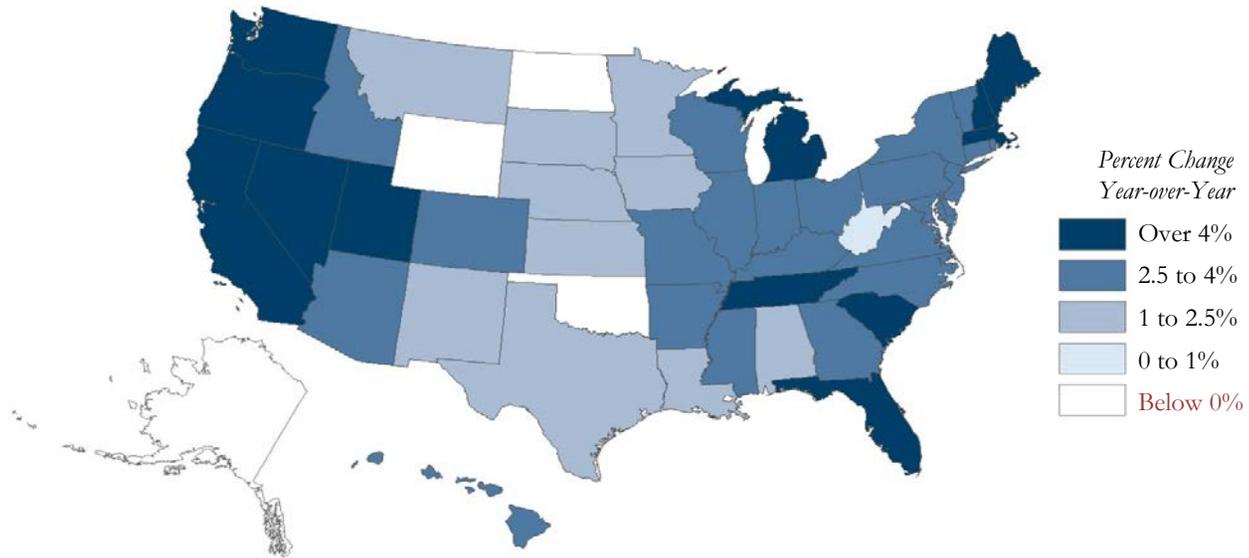
*Ten-Year Index of Growth, Seasonally Adjusted*



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

**2016Q1 Real Personal Income**

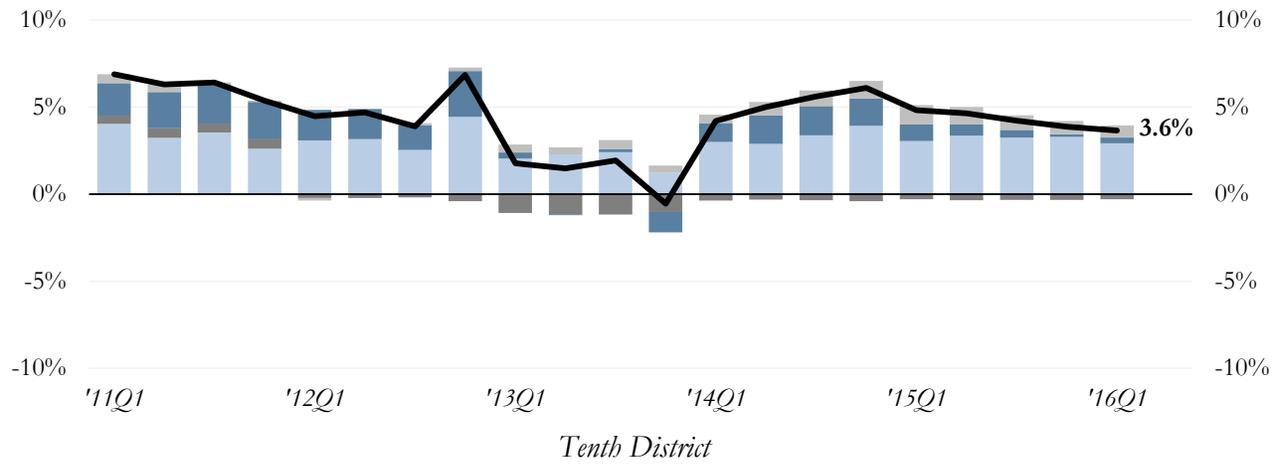
*Seasonally Adjusted*



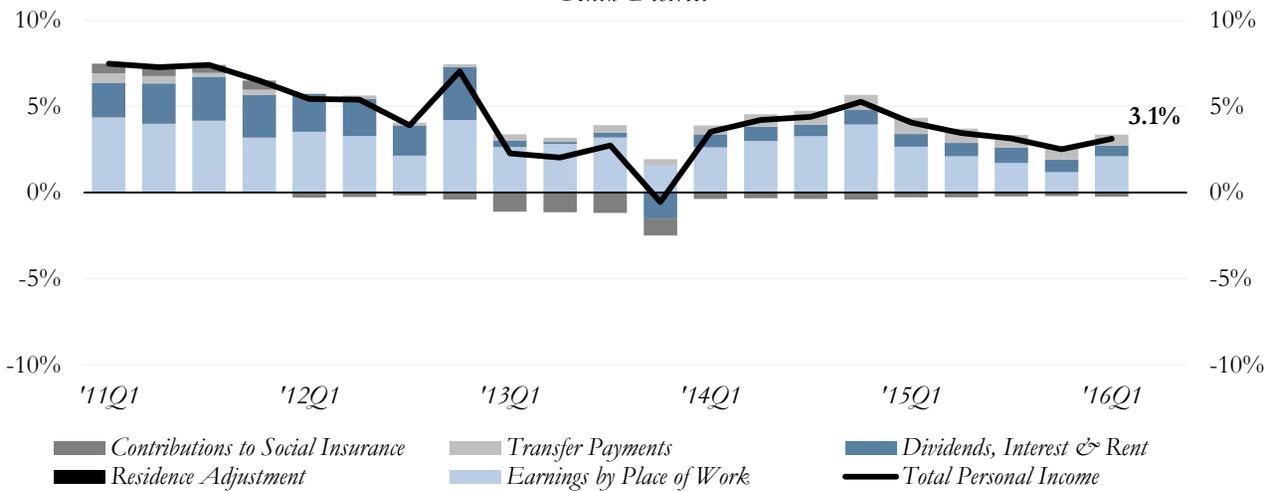
	<i>Percent Change Year-over-Year</i>	<i>Per Capita Personal Income</i>		<i>Percent Change Year-over-Year</i>	<i>Per Capita Personal Income</i>		
<b>United States</b>	<b>2.7%</b>	<b>\$48,707</b>	25	Wisconsin	3.4%	\$46,830	
<b>Tenth District</b>	<b>2.1</b>	<b>42,076</b>	26	<b>Missouri</b>	3.3	43,853	
1	New Hampshire	5.7	57,123	27	Vermont	3.2	49,153
2	Maine	4.8	43,692	28	<b>Colorado</b>	3.2	51,103
3	Tennessee	4.6	43,251	29	Pennsylvania	3.2	50,627
4	Utah	4.6	39,988	30	New Jersey	3.1	61,145
5	Oregon	4.5	44,047	31	Delaware	3.1	48,609
6	South Carolina	4.5	39,000	32	Illinois	3.1	50,841
7	Washington	4.5	52,351	33	Connecticut	2.9	68,722
8	Michigan	4.5	43,967	34	Mississippi	2.6	36,247
9	California	4.3	53,836	35	Idaho	2.5	37,994
10	Nevada	4.3	42,963	36	Alabama	2.2	39,732
11	Florida	4.0	44,989	37	Iowa	2.2	45,794
12	Massachusetts	4.0	62,895	38	South Dakota	2.1	45,555
13	North Carolina	3.9	41,648	39	<b>Kansas</b>	1.9	46,657
14	Georgia	3.8	41,484	40	<b>New Mexico</b>	1.8	39,084
15	Kentucky	3.8	40,086	41	Minnesota	1.8	51,385
16	Indiana	3.7	42,169	42	Texas	1.6	47,063
17	Arizona	3.7	39,867	43	<b>Nebraska</b>	1.5	48,329
18	New York	3.6	59,023	44	Louisiana	1.3	43,665
19	Ohio	3.6	44,750	45	Montana	1.3	41,392
20	Maryland	3.6	57,660	46	West Virginia	0.7	37,407
21	Arkansas	3.6	40,114	47	Alaska	-0.2	56,269
22	Hawaii	3.6	48,915	48	<b>Oklahoma</b>	-0.2	44,420
23	Virginia	3.6	53,291	49	<b>Wyoming</b>	-2.2	54,500
24	Rhode Island	3.5	51,490	50	North Dakota	-3.8	52,653

Source: Bureau of Economic Analysis/Haver Analytics

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

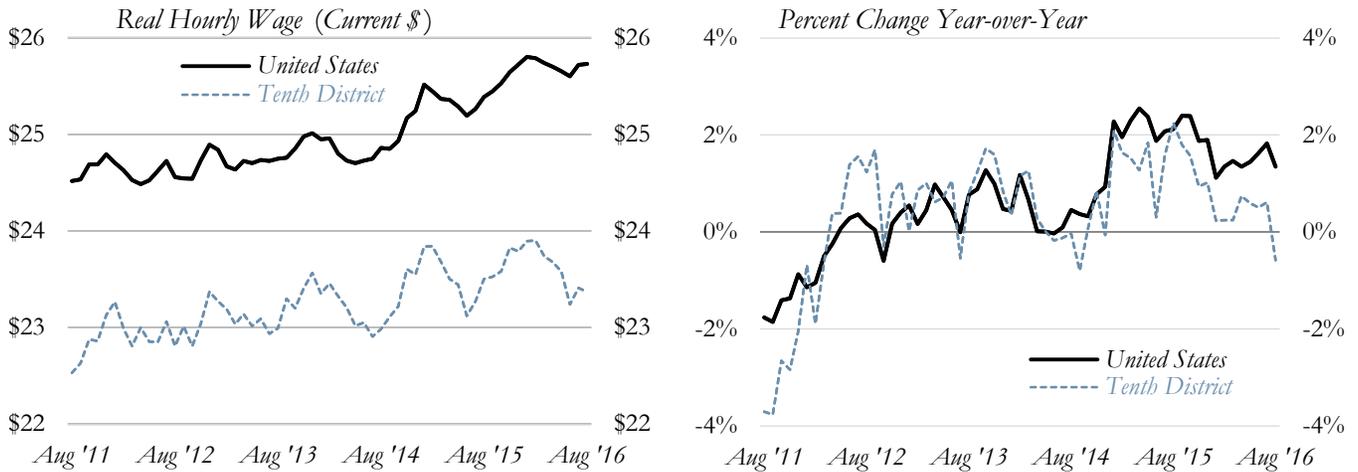


*Tenth District*



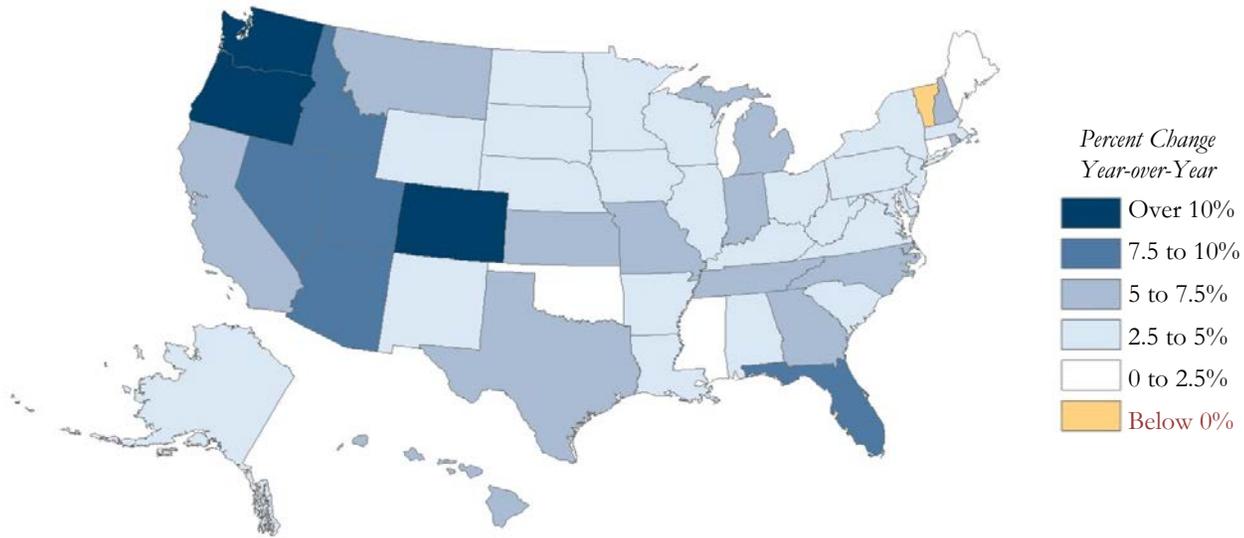
- Contributions to Social Insurance
- Transfer Payments
- Dividends, Interest & Rent
- Residence Adjustment
- Earnings by Place of Work
- Total Personal Income

**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*

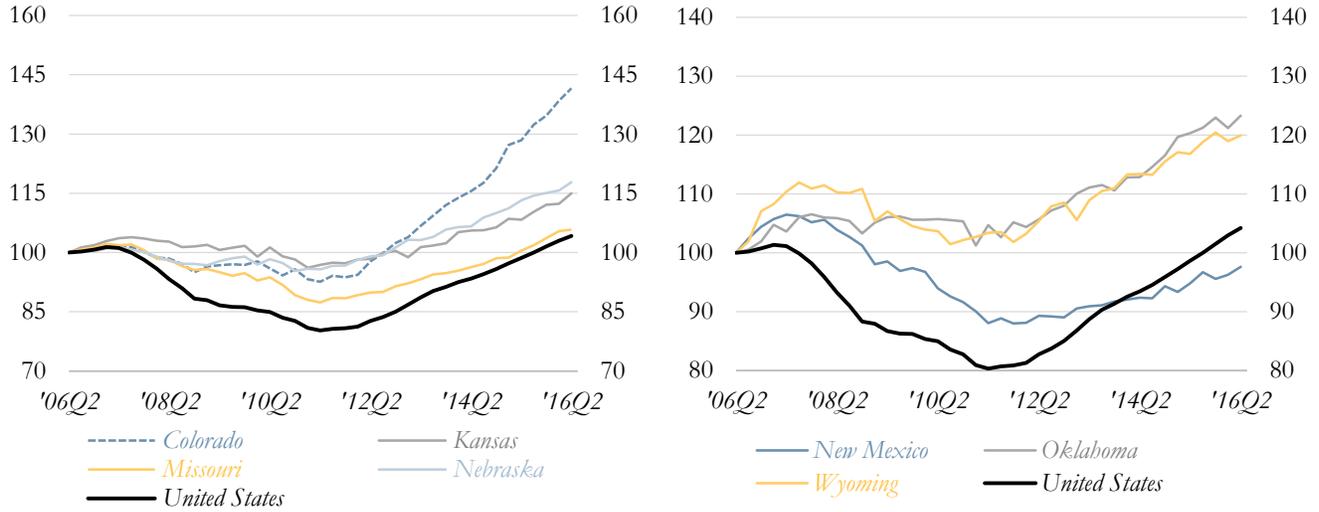


<i>Percent Change Year-over-Year</i>			<i>Percent Change Year-over-Year</i>		
	<b>United States</b>	<b>5.6%</b>	25	Kentucky	4.6%
1	Oregon	11.7	26	Ohio	4.5
2	Washington	10.3	27	Massachusetts	4.4
3	<b>Colorado</b>	10.2	28	Virginia	4.2
4	Florida	10.0	29	<b>Nebraska</b>	4.1
5	Nevada	9.6	30	South Carolina	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

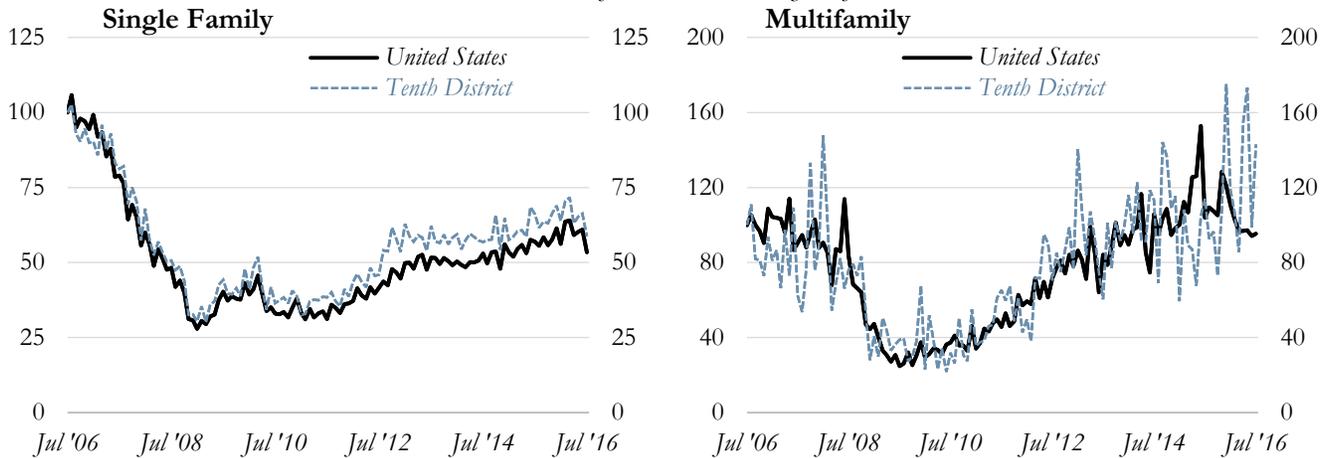
### FHFA Purchase-Only Home Price Index

Ten-Year Index of Growth, Seasonally Adjusted

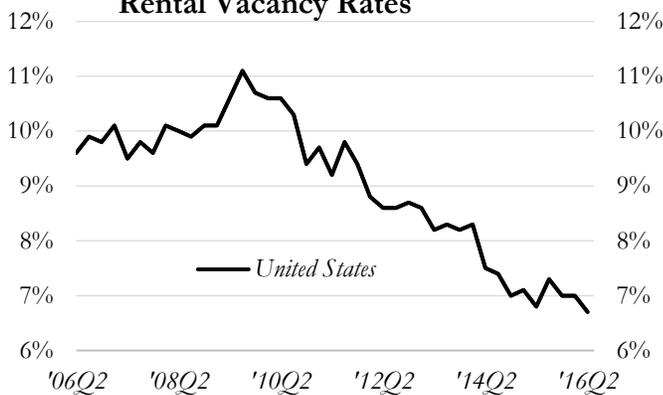


### Housing Permits

Ten-Year Index of Growth, Seasonally Adjusted



### Rental Vacancy Rates

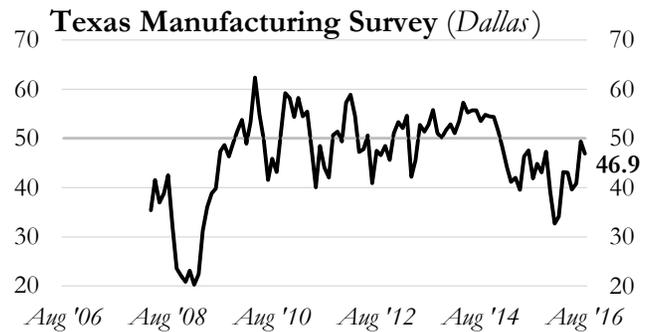
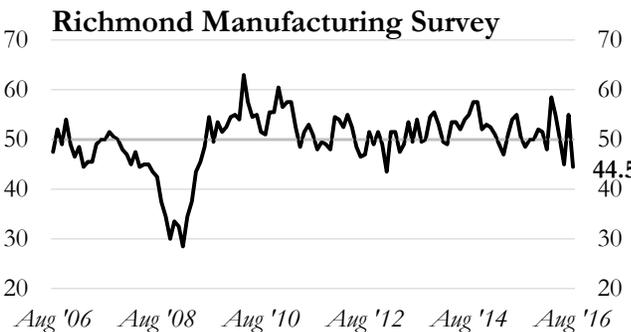
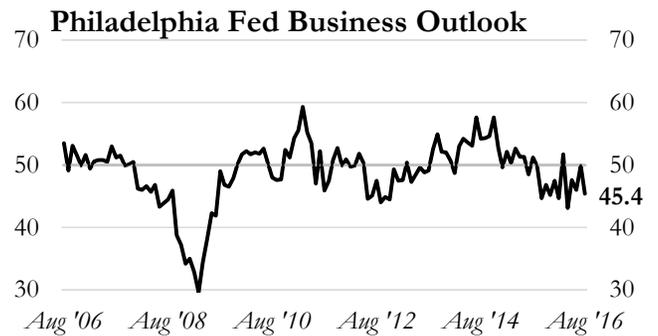
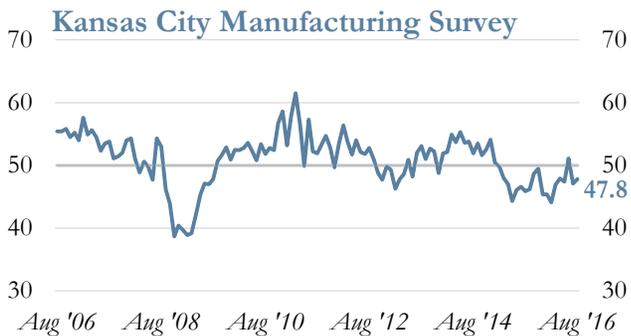
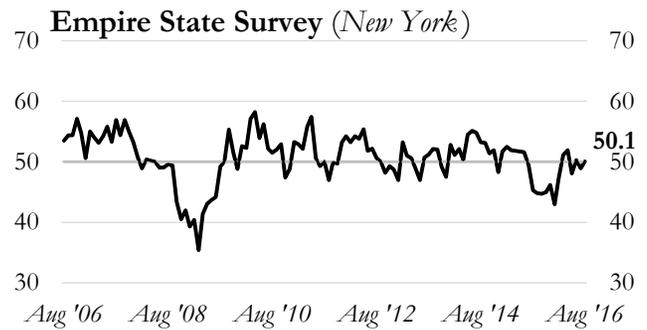
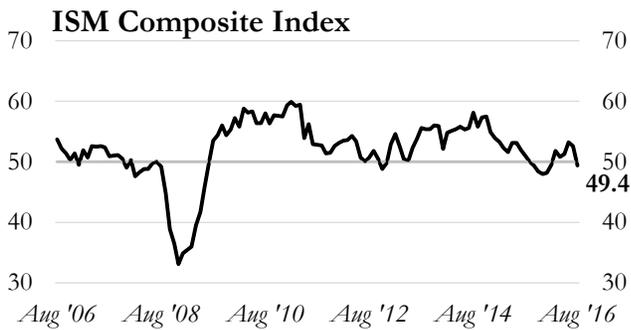


Note: Rental Vacancy Rates are not available for the Tenth District.

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

**Manufacturing Surveys**

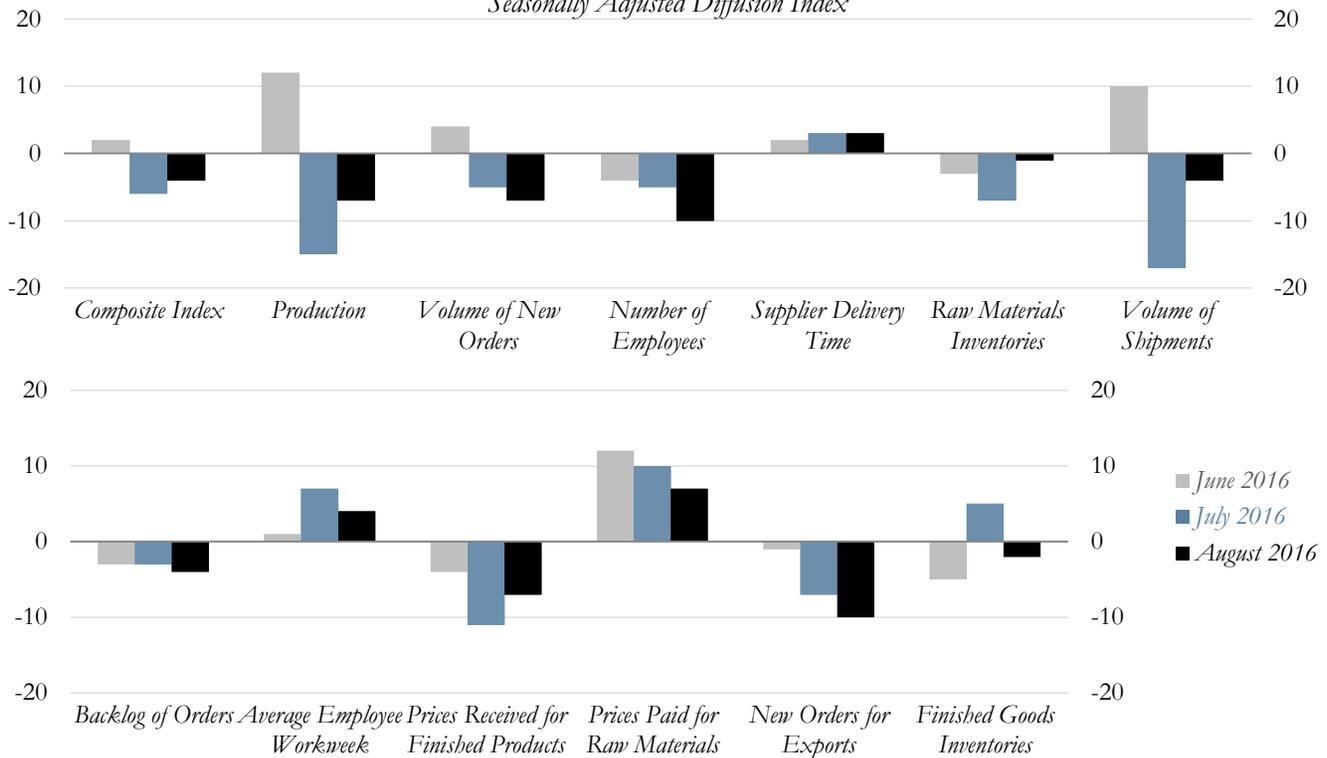
*Seasonally Adjusted*



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

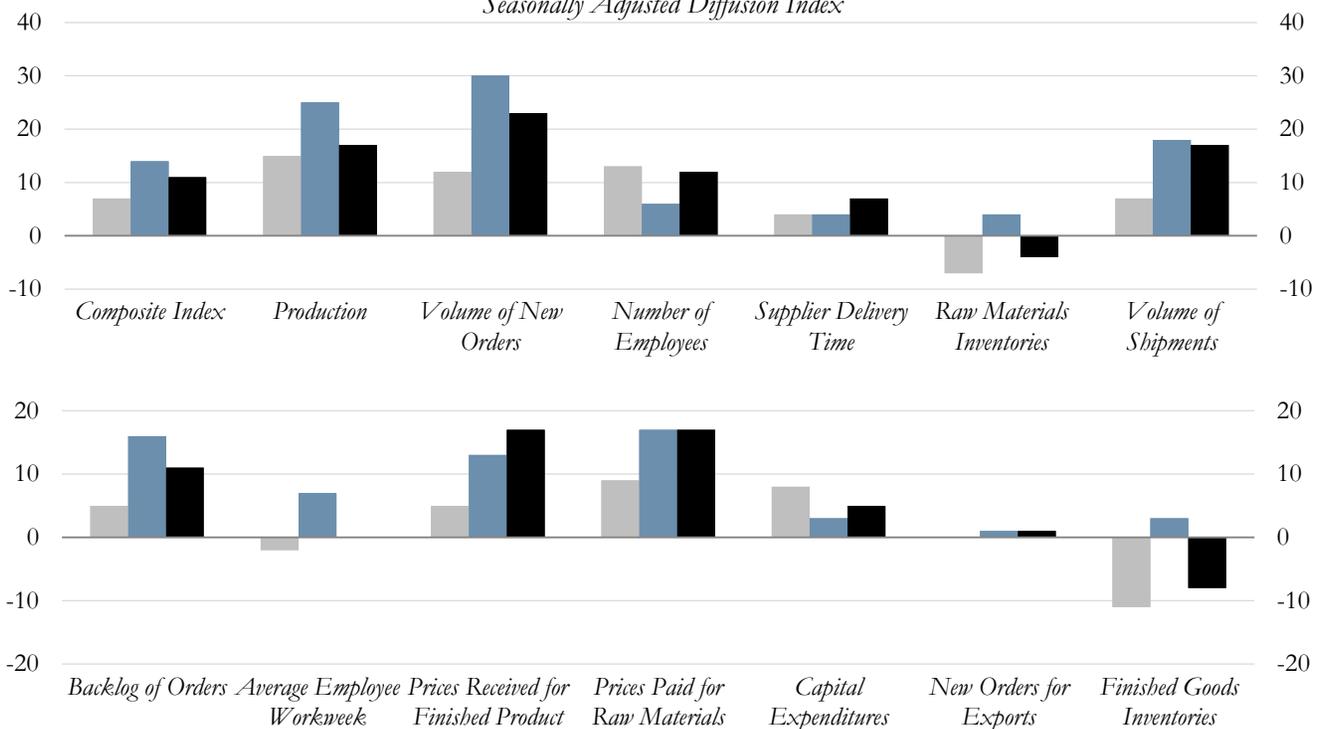
**Current Activity vs. a Month Ago**

*Seasonally Adjusted Diffusion Index*



**Expectations Six-Months Ahead**

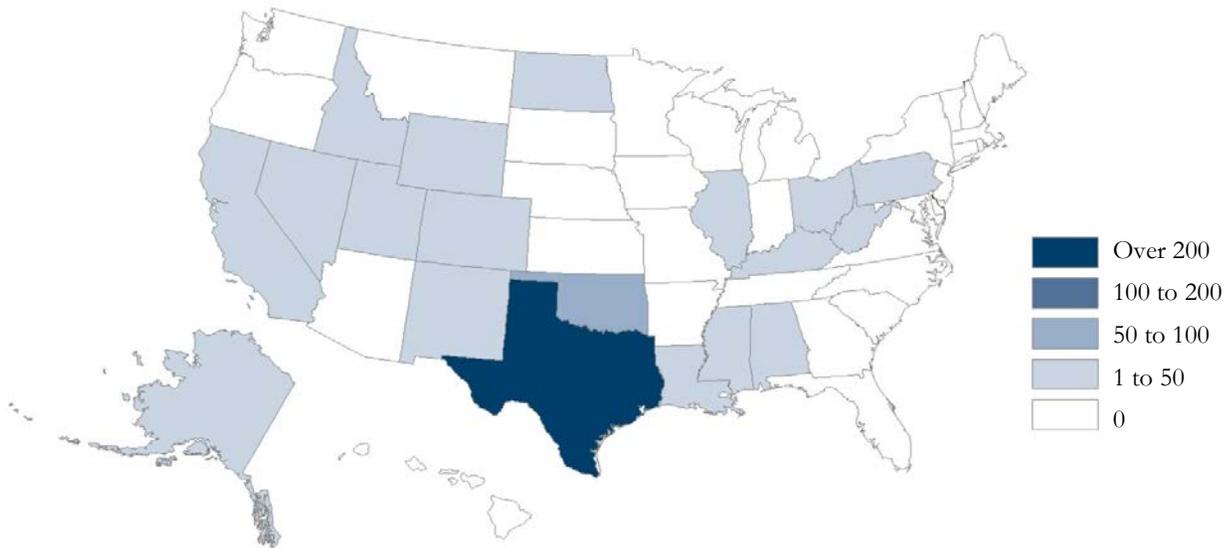
*Seasonally Adjusted Diffusion Index*



Note: Indices above zero indicate expansion.

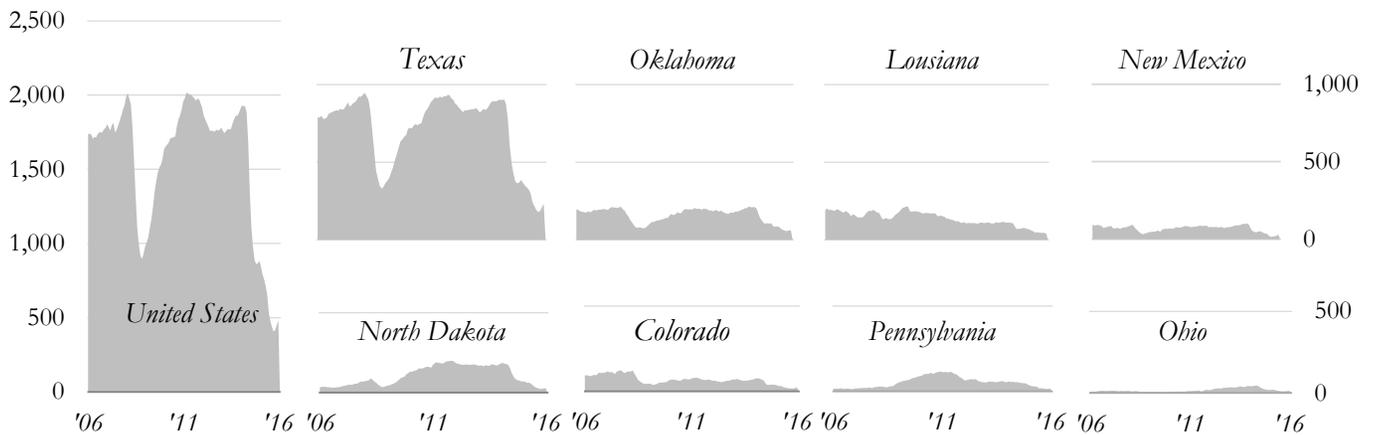
Source: Federal Reserve Bank of Kansas City/Haver Analytics

**August 2016 Active Oil & Gas Drilling Rig Counts**



	Average Rig Counts During the Month	Percent Change Year-over-Year	Current Share of Activity
<b>United States</b>	<b>481</b>	<b>-43.3%</b>	
<b>Tenth District</b>	<b>121</b>	<b>-48.1</b>	<b>25.2%</b>
<i>Top Producing States</i>			
Texas	231	-40.0	48.0
<b>Oklahoma</b>	62	-41.0	12.9
Louisiana	42	-45.5	8.7
<b>New Mexico</b>	30	-42.3	6.2
North Dakota	28	-60.6	5.8
<b>Colorado</b>	21	-43.2	4.4
Pennsylvania	17	-54.1	3.5
Ohio	14	-26.3	2.9
<b>Wyoming</b>	8	-66.7	1.7
West Virginia	7	-61.1	1.5

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



Source: Baker Hughes/Haver Analytics

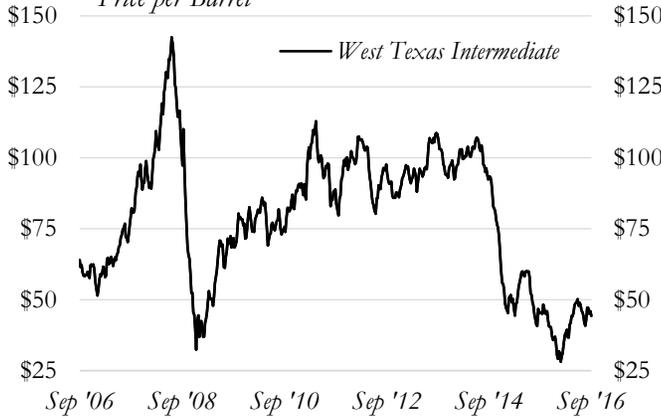
**U.S. Supply/Demand Dynamics**

*Seasonally Adjusted*

**Spot Prices**

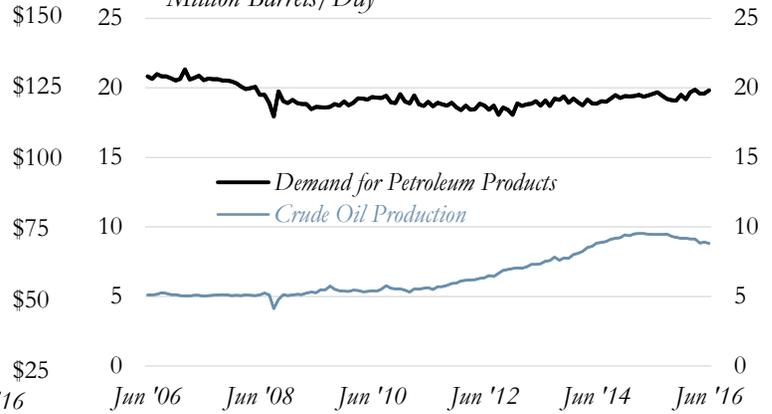
**Crude Oil**

*Price per Barrel*



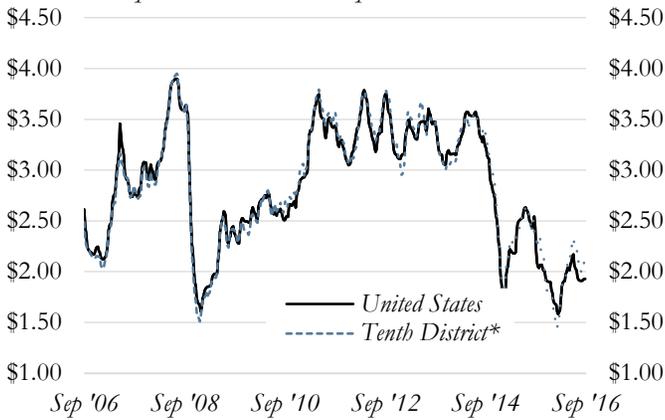
**Crude Oil**

*Million Barrels/Day*



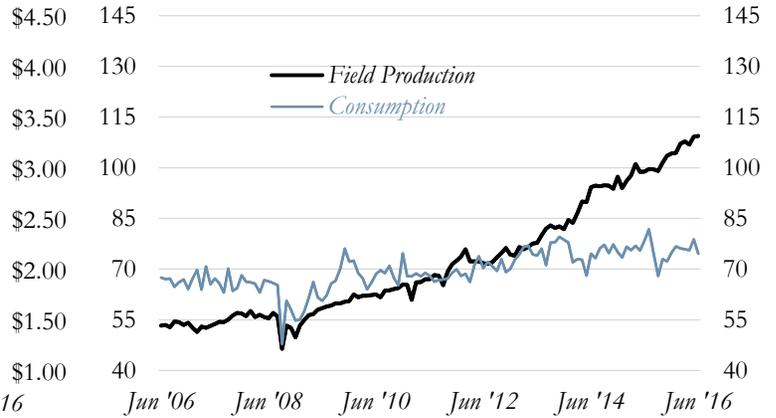
**Gasoline**

*Price per Gallon at the Pump*



**Natural Gas Liquids**

*Million Barrels/Month*



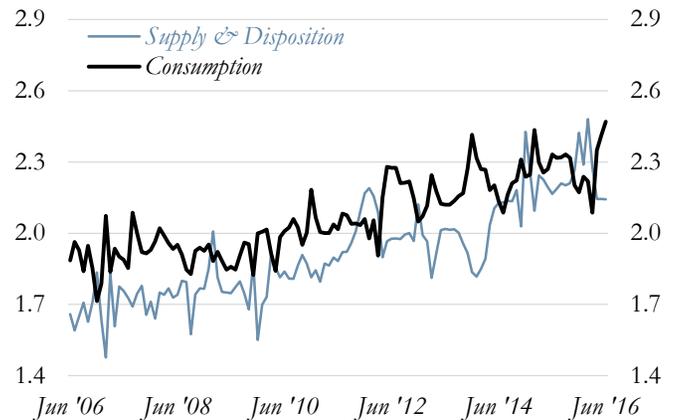
**Natural Gas**

*Price per Thousand Cubic Feet*



**Natural Gas**

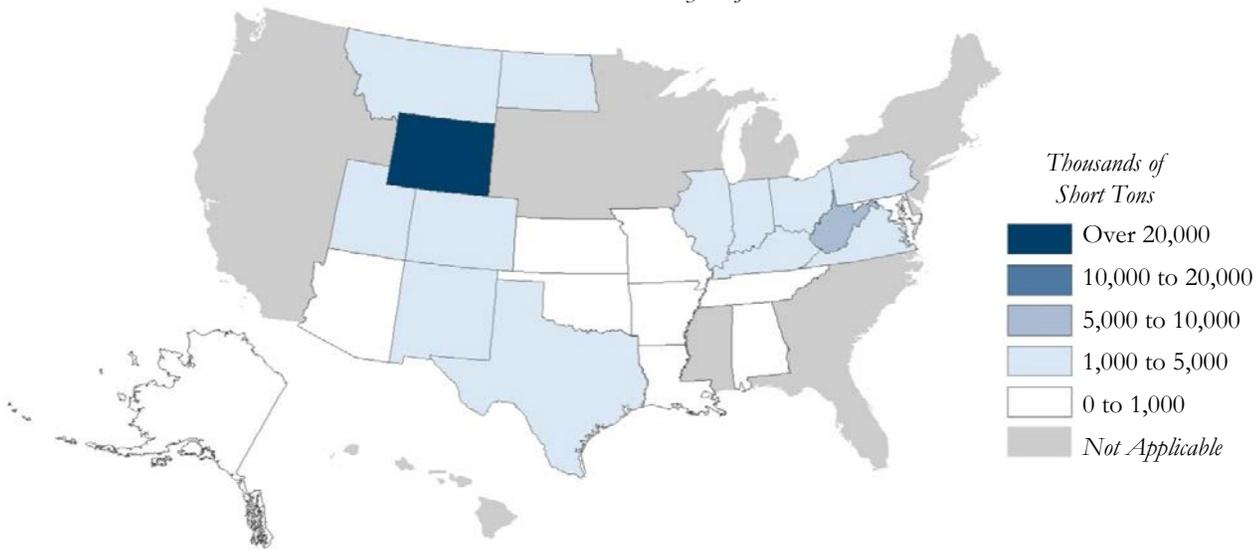
*Trillion Cubic Feet/Month*



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

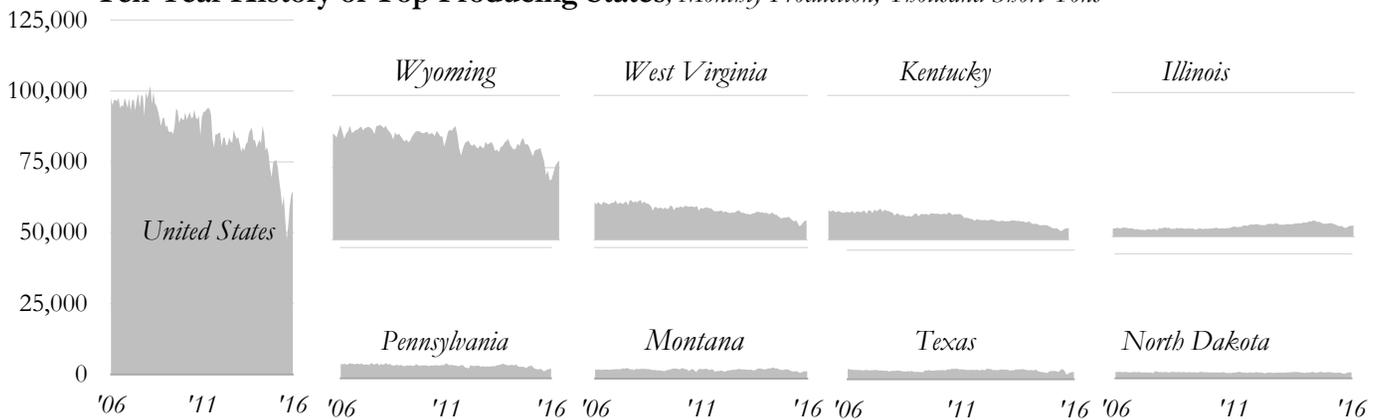
Source: Wall Street Journal, Oil & Gas Journal & Department of Energy, Energy Information Administration/Haver Analytics

**August 2016 Coal Production**  
*Seasonally Adjusted*



	Monthly Production (Thousand Short Tons)	Percent Change Year-over-Year	Current Share of Production
<b>United States</b>	<b>64,703.7</b>	<b>-14.1%</b>	
<b>Tenth District*</b>	<b>30,387.0</b>	<b>-12.3</b>	<b>47.0%</b>
<i>Top Producing States</i>			
<b>Wyoming</b>	27,528.6	-12.1	42.5
West Virginia	6,665.2	-13.8	10.3
Kentucky	4,035.2	-20.6	6.2
Illinois	3,902.8	-16.0	6.0
Pennsylvania	3,700.9	-20.7	5.7
Montana	2,906.9	-18.0	4.5
Texas	2,886.2	-9.1	4.5
North Dakota	2,443.7	-0.4	3.8
Indiana	2,398.6	-17.5	3.7
<b>New Mexico</b>	1,714.9	1.0	2.7

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



\*Includes all Tenth District states but Nebraska.

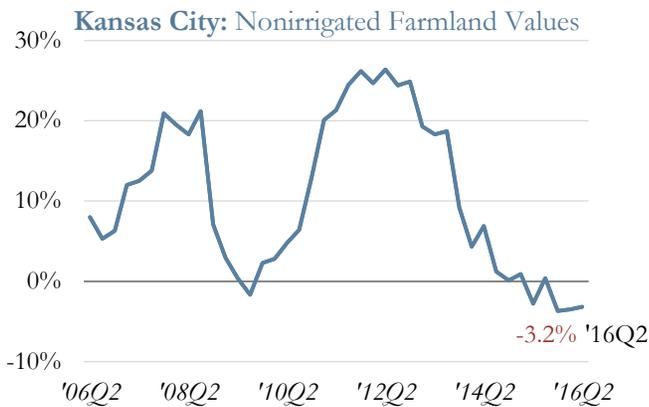
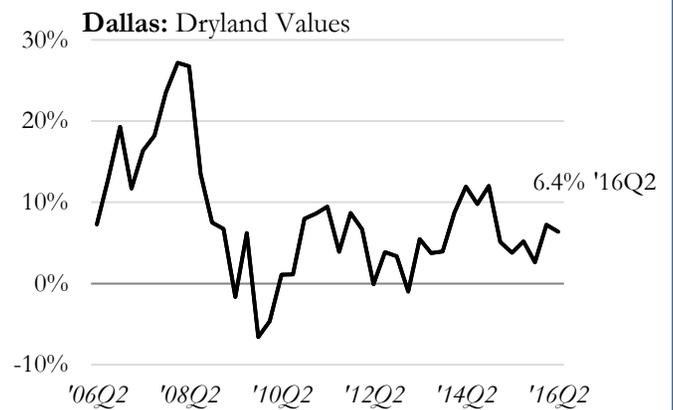
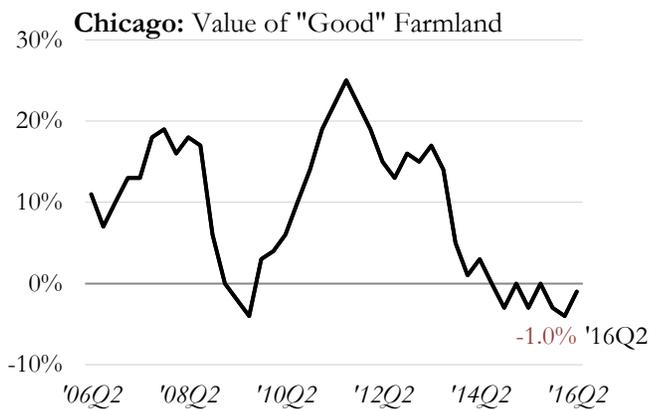
Source: U.S. Department of Energy, Energy Information Administration/Haver Analytics

**Farm Land Values\***



**Farmland Values by Federal Reserve District**

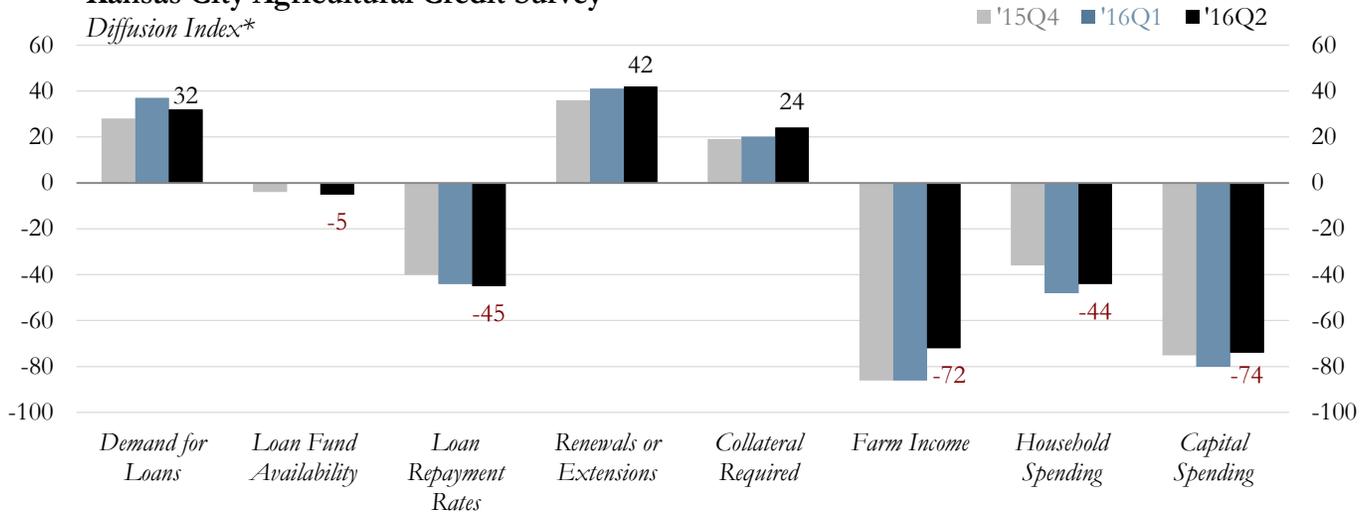
*Percent Change Year-over-Year*



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

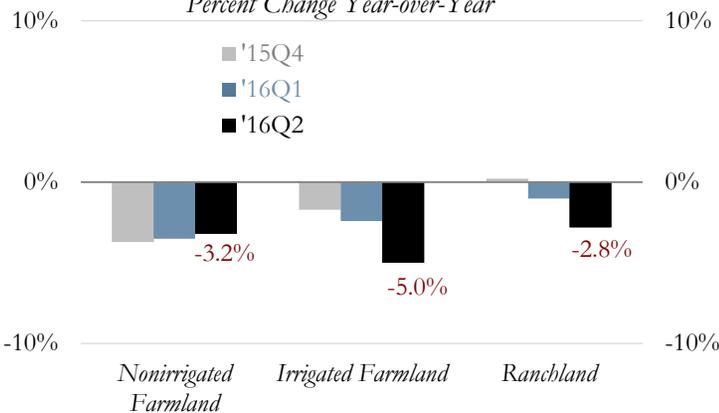
**Kansas City Agricultural Credit Survey**

*Diffusion Index\**

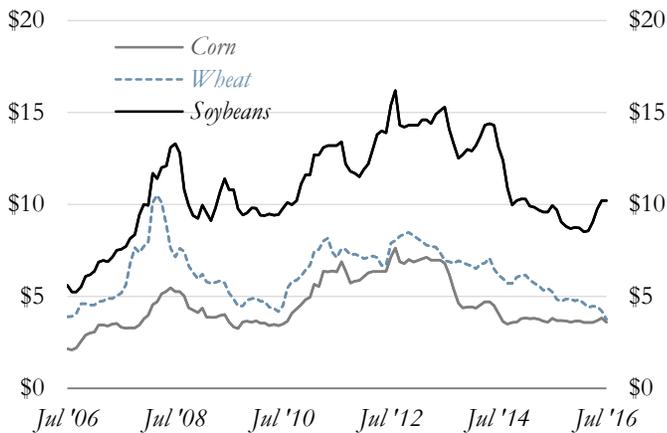


**Tenth District Farmland Values**

*Percent Change Year-over-Year*

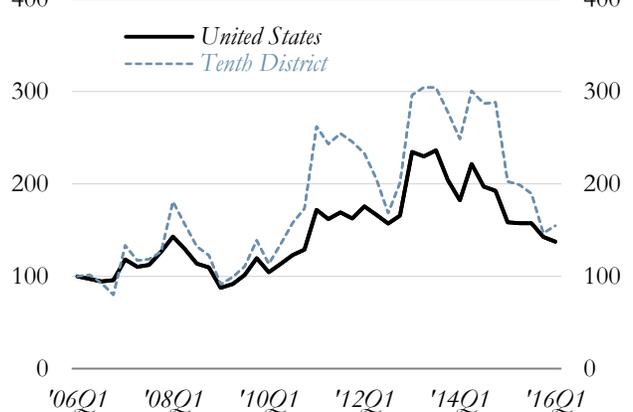


**Spot Prices**



**Farm Income**

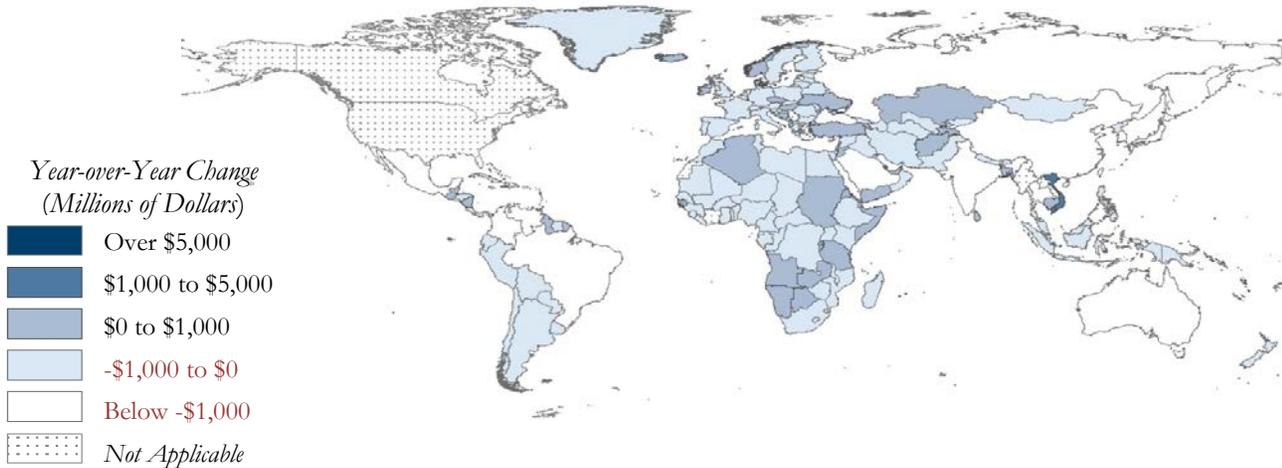
*Ten-Year Index of Growth*



\*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

**2016Q2 U.S. Exports**  
*Year-to-Date*



		<i>Exports Year-to-Date</i> <i>(Billions of Dollars)</i>	<i>Percent Change</i> <i>Year-to-Date</i>	<i>Share of Exports</i> <i>Year-to-Date</i>
	<b>United States</b>	<b>\$701,864.0</b>	<b>-6.4%</b>	
<i>Top Export Markets</i>	Canada	134.0	-6.8	19.1%
	Mexico	113.6	-3.0	16.2%
	China*	80.4	-7.6	11.5%
	Japan	30.1	-6.2	4.3%
	United Kingdom	27.7	-2.1	3.9%
	Germany	24.4	-2.1	3.5%
	Netherlands Antilles	20.5	-0.4	2.9%
	South Korea	20.1	-9.6	2.9%
	Belgium	17.2	-0.3	2.4%
	France	15.3	-1.4	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
- Energy Survey
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