Tenth District Economic Databook

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



JULY 23, 2018

FEDERAL RESERVE BANK of KANSAS CITY

SUMMARY OF CURRENT TENTH DISTRICT ECONOMIC CONDITIONS

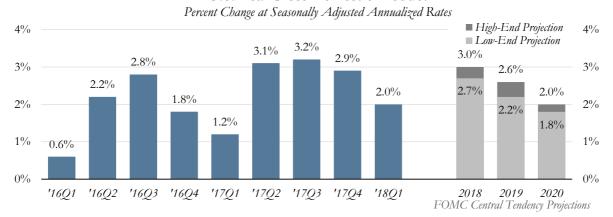
The unemployment rate was 3.4 percent across the Tenth District states in June, and total payroll employment grew 1.8 percent compared to the previous year. Employment growth was broad-based across industries, with the strongest percentage gains in the mining and logging and transportation and warehousing sectors. Tenth District nominal personal income grew 3.2 percent in the first 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 June 2018, with a composite index of 63.8. 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 first 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.

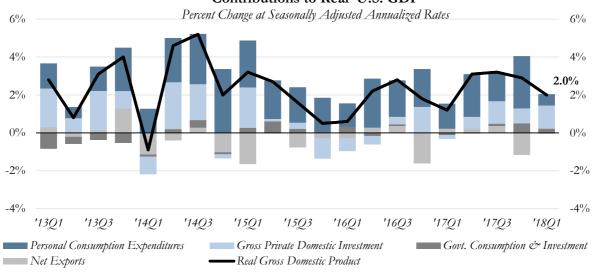


The Federal Reserve Bank of Kansas City's headquarters is located at 1 Memorial Drive in the heart of Kansas City, Missouri. The Federal Reserve Bank of Kansas City serves the Tenth Federal Reserve District, which includes Colorado, Kansas, western Missouri, Nebraska, northern New Mexico, Oklahoma and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

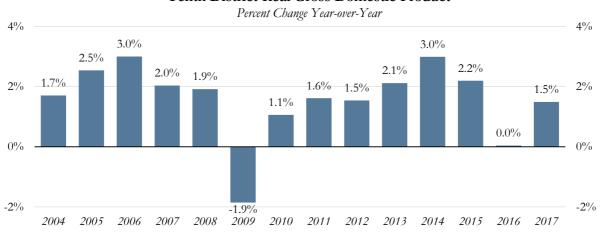
U.S. Real Gross Domestic Product



Contributions to Real U.S. GDP

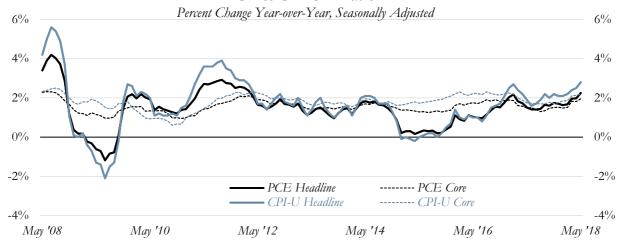


Tenth District Real Gross Domestic Product

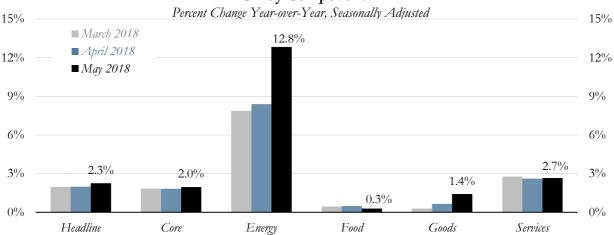


Source: Bureau of Economic Analysis, Federal Open Market Committee/Haver Analytics

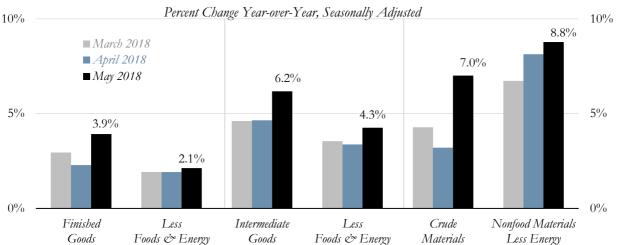
PCE & CPI-U Inflation



PCE by Component

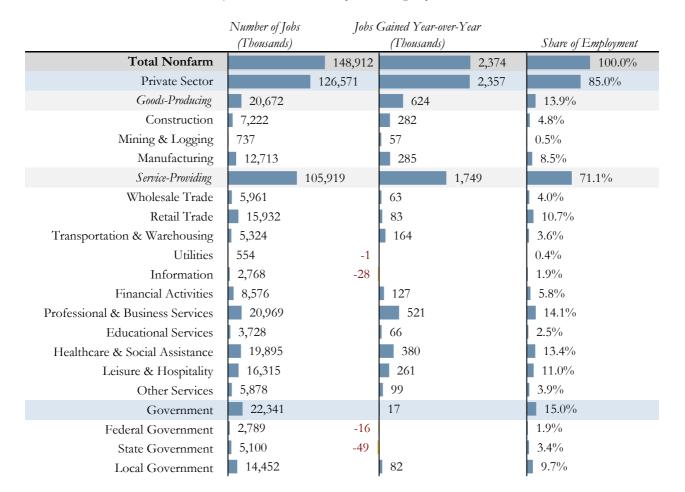


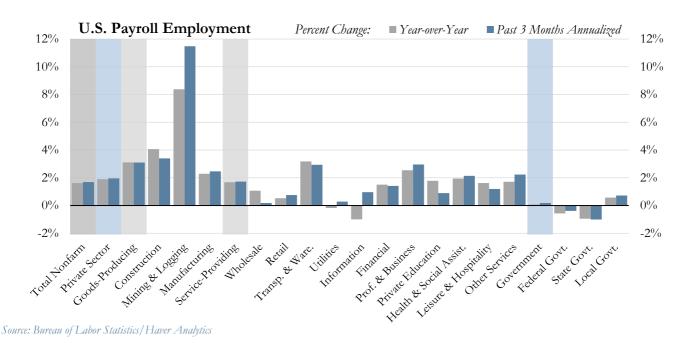
Producer Prices



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

June 2018 U.S. Payroll Employment

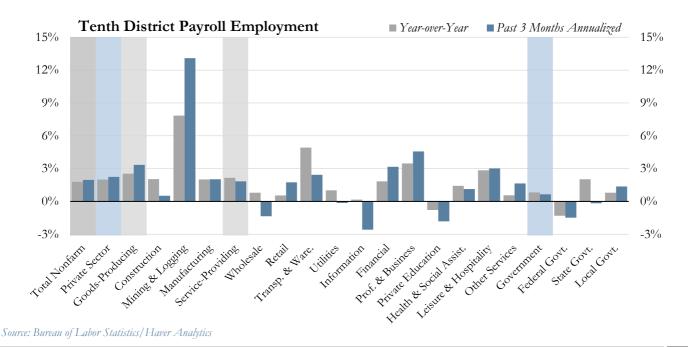


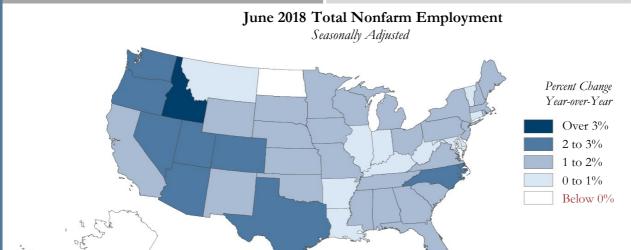


June 2018 Tenth District Payroll Employment

Seasonally Adjusted

Number of Jobs Jobs Gained Year-over-Year (Thousands) (Thousands) Share of Employment Total Nonfarm 10,907 100.0% 192 Private Sector 8,991 82.4% 176 Goods-Producing 1,539 38 14.1% Construction 551 11 5.0% Mining & Logging 1.2% 136 10 Manufacturing 851 17 7.8% Service-Providing 7,467 157 68.4% Wholesale Trade 3.9% 420 3 Retail Trade 1,147 6 10.6% Transportation & Warehousing 388 18 3.5% Utilities 40 0 0.4%Information 198 1.8% Financial Activities 5.7% 630 11 Professional & Business Services 13.2% 1,448 Private Educational Services 153 1.4% -1 Healthcare & Social Assistance 20 13.0% 1,420 Leisure & Hospitality 1,188 10.9% 33 Other Services 426 2 3.9% Government 1,916 16 17.6% Federal Government 234 2.2% -3 477 10 4.4%State Government Local Government 1,206 10 11.1%





Percent Change Year-over-Year

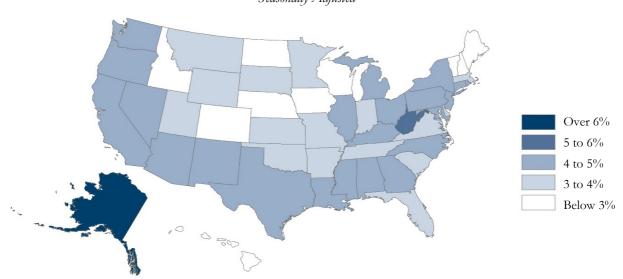
Percent Change Year-over-Year

1 000 0001 1					
1.3%	Nebraska	25	1.6%	United States	
1.3	Alabama	26	1.8	Tenth District	
1.3	Ohio	27	3.0	Idaho	1
1.3	Pennsylvania	28	3.0	Utah	2
1.2	Missouri	29	2.9	Texas	3
1.2	Michigan	30	2.8	Colorado	4
1.1	Minnesota	31	2.8	Nevada	5
1.1	New York	32	2.7	Washington	6
1.1	Virginia	33	2.4	Arizona	7
1.1	Maine	34	2.3	North Carolina	8
1.1	New Jersey	35	2.0	Oregon	9
1.0	Wisconsin	36	2.0	Florida	10
1.0	Iowa	37	2.0	Tennessee	11
1.0	Illinois	38	1.8	New Hampshire	12
0.9	West Virginia	39	1.8	Kansas	13
0.9	Connecticut	40	1.7	Massachusetts	14
0.9	Delaware	41	1.7	Wyoming	15
0.9	Louisiana	42	1.7	Georgia	16
0.6	Montana	43	1.7	South Carolina	17
0.6	Arkansas	44	1.6	Oklahoma	18
0.6	Indiana	45	1.6	California	19
0.2	Maryland	46	1.5	Mississippi	20
0.2	Kentucky	47	1.5	New Mexico	21
0.1	Vermont	48	1.5	Rhode Island	22
-0.1	North Dakota	49	1.5	Hawaii	23
-1.0	Alaska	50	1.5	South Dakota	24

Source: Bureau of Labor Statistics/Haver Analytics

June 2018 Unemployment Rates

Seasonally Adjusted

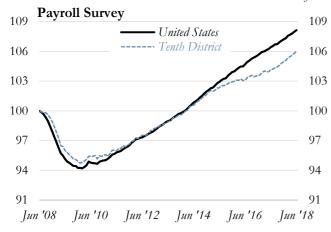


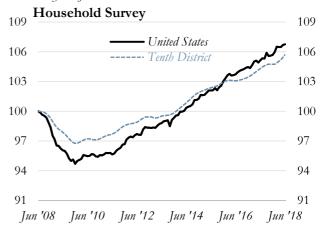
		Percent			Percent
		Unemployed			Unemployed
	United States	4.0%	25	Delaware	3.9%
	Tenth District	3.4	25	Oklahoma	3.9
1	Alaska	7.1	27	South Carolina	3.8
2	West Virginia	5.3	27	Montana	3.8
3	New Mexico	4.9	27	Florida	3.8
4	Nevada	4.7	27	Arkansas	3.8
4	Arizona	4.7	31	Wyoming	3.7
4	Washington	4.7	32	Missouri	3.5
4	Mississippi	4.7	32	Massachusetts	3.5
4	Louisiana	4.7	32	Tennessee	3.5
9	Michigan	4.5	35	Kansas	3.4
9	New York	4.5	36	Indiana	3.3
9	Ohio	4.5	37	South Dakota	3.2
12	Connecticut	4.4	37	Virginia	3.2
13	Pennsylvania	4.3	39	Minnesota	3.1
13	New Jersey	4.3	40	Utah	3.0
13	Rhode Island	4.3	41	Idaho	2.9
13	Illinois	4.3	41	Wisconsin	2.9
13	Maryland	4.3	41	Nebraska	2.9
18	North Carolina	4.2	41	Maine	2.9
18	California	4.2	45	Vermont	2.8
18	Kentucky	4.2	46	Colorado	2.7
21	Georgia	4.1	46	Iowa	2.7
21	Alabama	4.1	46	New Hampshire	2.7
23	Oregon	4.0	49	North Dakota	2.6
23	Texas	4.0	50	Hawaii	2.1

Source: Bureau of Labor Statistics/Haver Analytics

Total Nonfarm Employment

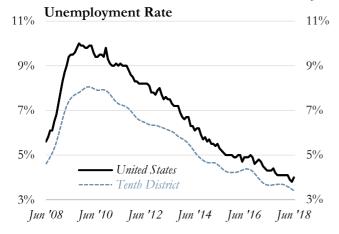
Ten-Year Index of Growth, Seasonally Adjusted

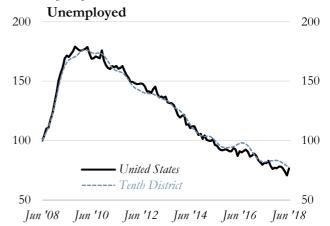


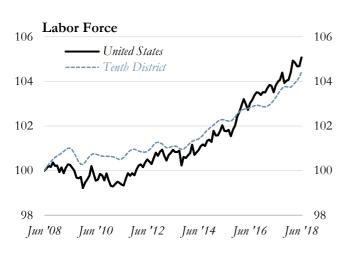


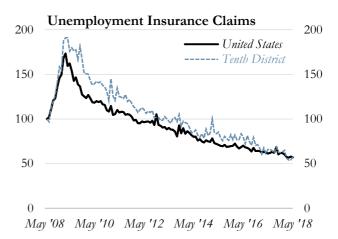
Labor Force Dynamics

Ten-Year Index of Growth, Seasonally Adjusted



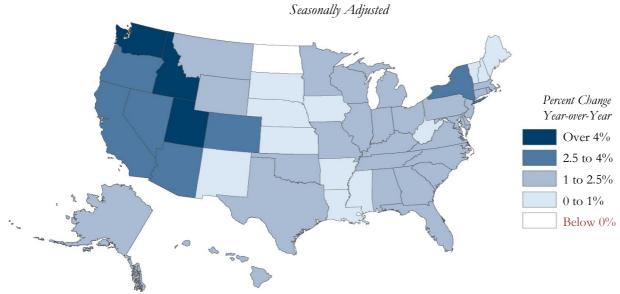






Source: Bureau of Labor Statistics & Department of Labor/Haver Analytics

2018Q1 Real Personal Income



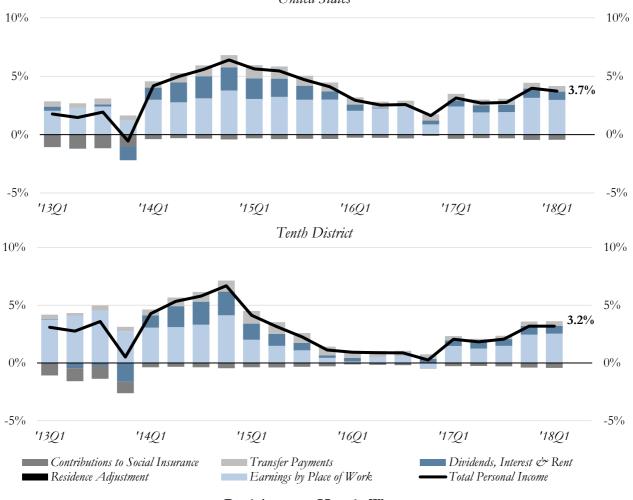
		Percent Change Year-over-Year	Per Capita Personal Income			Percent Change Year-over-Year	Per Capita Personal Income
	United States	1.9%	\$51,410	25	Massachusetts	1.3%	\$66,925
	Tenth District	1.4	41,867	26	Alabama	1.3	40,822
1	Washington	4.2	58,000	27	Connecticut	1.3	71,588
2	Idaho	3.2	41,261	28	Michigan	1.3	46,271
3	Utah	3.1	42,940	29	Wyoming	1.2	58,237
4	Oregon	2.8	47,421	30	Oklahoma	1.2	44,147
5	New York	2.7	63,038	31	Wisconsin	1.2	48,631
6	California	2.7	59,689	32	Minnesota	1.2	54,075
7	Colorado	2.6	54,539	33	Ohio	1.1	46,389
8	Arizona	2.4	42,361	34	Hawaii	1.1	52,965
9	Nevada	2.2	45,040	35	Rhode Island	1.1	52,108
10	Florida	2.0	47,652	36	Alaska	1.1	57,269
11	Georgia	1.9	44,122	37	Illinois	1.0	53,899
12	Pennsylvania	1.9	53,260	38	Maine	0.9	45,849
13	North Carolina	1.9	44,116	39	West Virginia	0.7	38,740
14	Tennessee	1.9	45,098	40	New Hampshire	0.6	58,034
15	Indiana	1.8	45,245	41	Nebraska	0.4	50,995
16	Maryland	1.7	60,737	42	Kansas	0.4	48,341
17	Texas	1.6	47,591	43	Vermont	0.4	51,896
18	New Jersey	1.6	63,752	44	Arkansas	0.3	41,236
19	Virginia	1.6	55,304	45	New Mexico	0.2	39,567
20	Montana	1.5	44,663	46	Iowa	0.2	46,731
21	Kentucky	1.5	40,295	47	Louisiana	0.1	44,015
22	South Carolina	1.5	41,060	48	Mississippi	0.1	36,915
23	Delaware	1.5	49,921	49	South Dakota	0.1	48,689
24	Missouri	1.4	44,503	50	North Dakota	-0.7	54,998

Source: Bureau of Economic Analysis/Haver Analytics

Nominal Personal Income

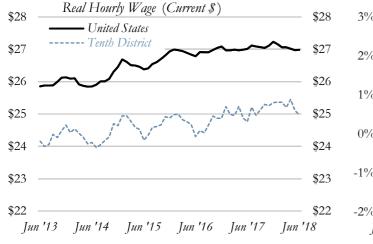
Contributions to Percent Change, Seasonally Adjusted

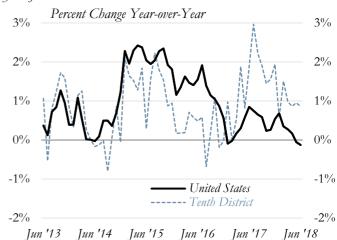




Real Average Hourly Wage

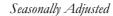
Seasonally Adjusted

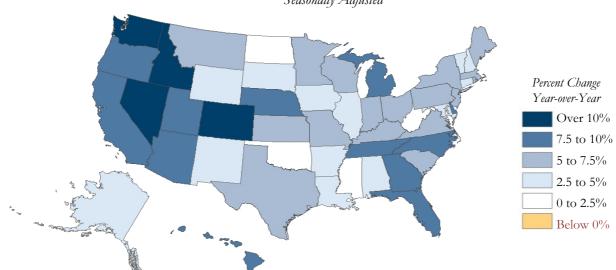




Source: Bureau of Economic Analysis & Bureau of Labor Statistics/Haver Analytics

2018Q1 FHFA Purchase-Only Home Price Index





Percent Change Year-over-Year

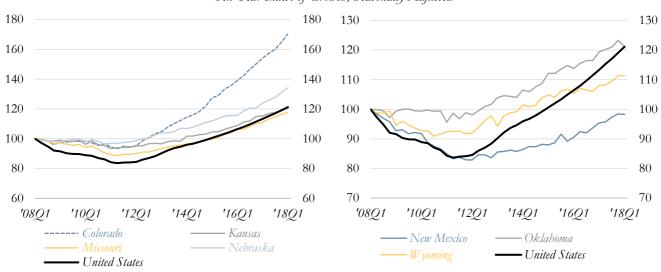
Percent Change Year-over-Year

		1 ear-over- 1 ear			1 ear-over-1 ear
	United States	6.9%	25	New York	6.2%
			26	Missouri	6.1
1	Nevada	13.7	27	Minnesota	6.1
2	Washington	13.1	28	Montana	6.1
3	Idaho	11.1	29	Kansas	5.8
4	Colorado	10.6	30	Maine	5.3
5	Utah	9.9	31	Pennsylvania	5.2
6	Oregon	9.6	32	New Jersey	5.2
7	Arizona	9.5	33	Virginia	5.2
8	Hawaii	9.2	34	Maryland	5.0
9	California	8.9	35	New Hampshire	4.6
10	North Carolina	8.4	36	Iowa	4.3
11	Florida	8.4	37	Arkansas	3.7
12	Nebraska	8.3	38	Connecticut	3.6
13	Michigan	7.8	39	Louisiana	3.6
14	Delaware	7.7	40	Alabama	3.4
15	Tennessee	7.7	41	Wyoming	3.2
16	Georgia	7.7	42	South Dakota	3.1
17	Indiana	7.5	43	New Mexico	3.0
18	Texas	7.4	44	Illinois	2.8
19	South Carolina	7.4	45	Alaska	2.7
20	Ohio	7.3	46	Vermont	2.6
21	Rhode Island	7.0	47	North Dakota	2.3
22	Massachusetts	6.9	48	Mississippi	2.2
23	Wisconsin	6.6	49	Oklahoma	1.5
24	Kentucky	6.3	50	West Virginia	0.9

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

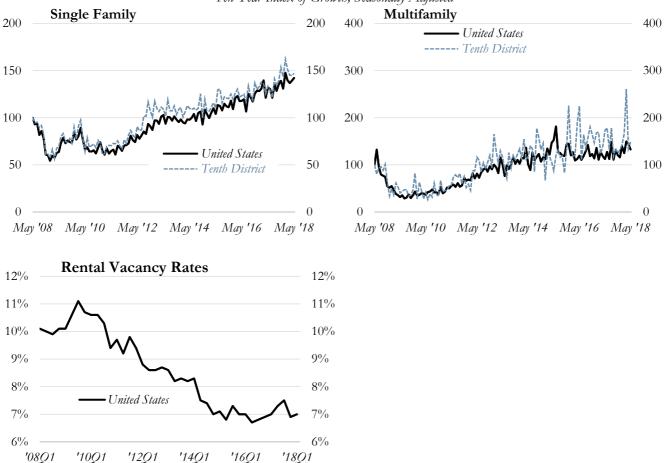
FHFA Purchase-Only Home Price Index

Ten-Year Index of Growth, Seasonally Adjusted



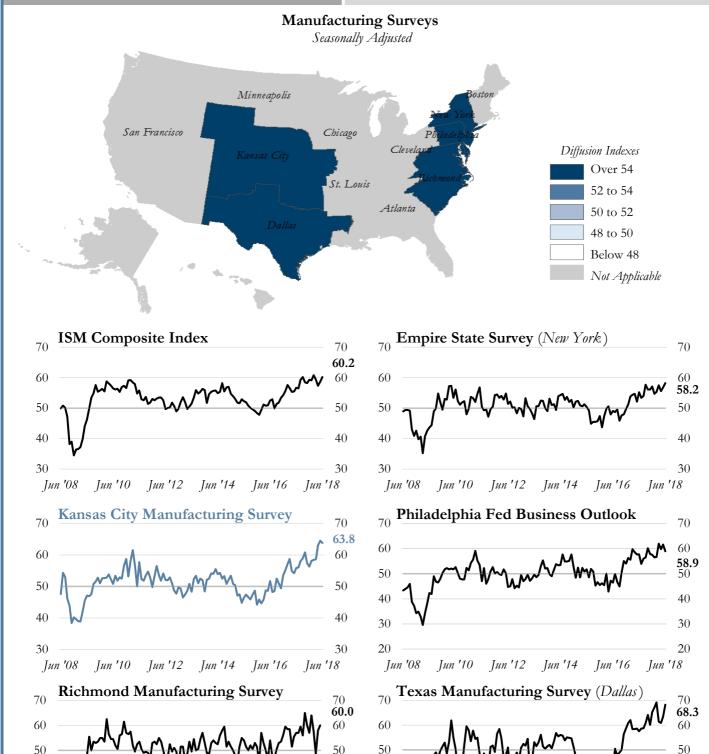
Housing Permits

Ten-Year Index of Growth, Seasonally Adjusted



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

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



40

30

20

Jun '18

30

20

Jun '08

Jun '10

Jun '12

Jun '14

Jun '16

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

Jun '16

Jun '14

Jun '10

Jun '12

40

30

20

40

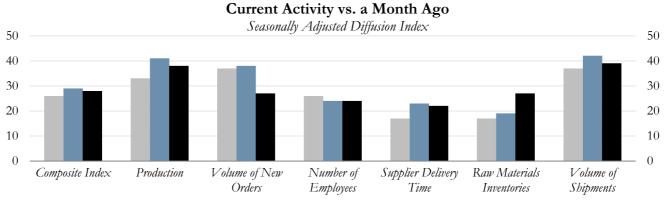
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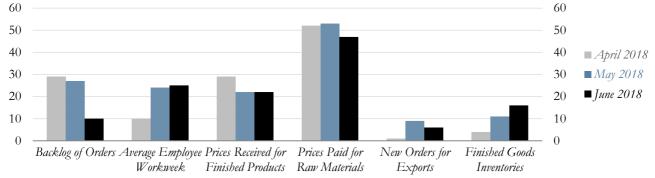
20

Jun '18

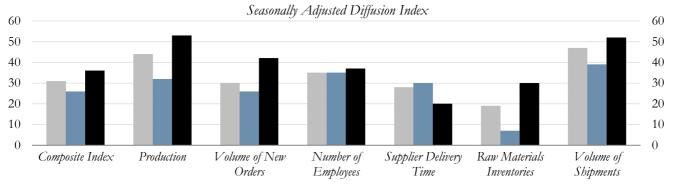


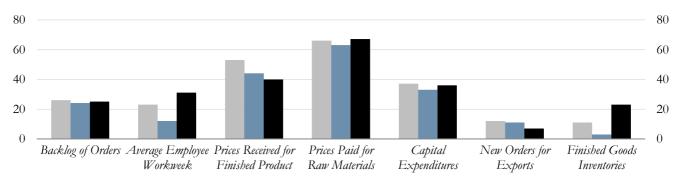
KANSAS CITY DISTRICT MANUFACTURING





Expectations Six-Months Ahead

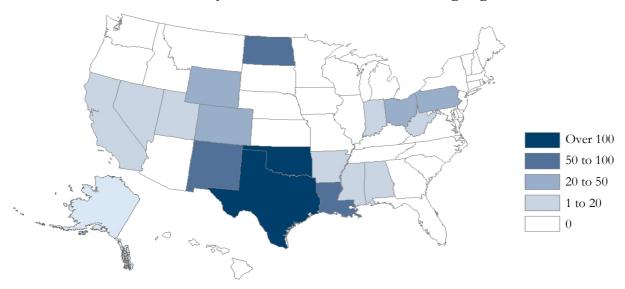




Note: Indices above zero indicate expansion.

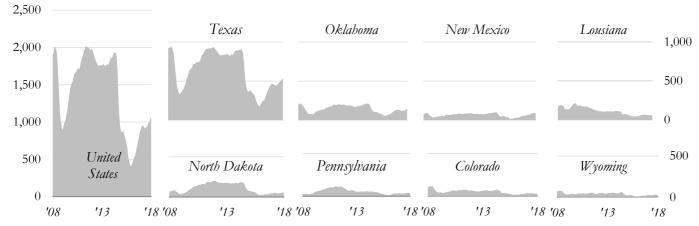
Source: Federal Reserve Bank of Kansas City/Haver Analytics

June 2018 Active Oil & Gas Drilling Rig Counts



		Average Rig Counts During the Month	Percent Change Year-over-Year	Current Share of Activity
	United States	1,056	10.8%	
	Tenth District	291	16.4	27.6%
Top Producing States	Texas	534	15.8	50.6
	Oklahoma	140	7.7	13.3
	New Mexico	92	55.9	8.7
	Lousiana	58	-10.8	5.5
	North Dakota	55	12.2	5.2
	Pennsylvania	38	11.8	3.6
	Colorado	33	-8.3	3.1
	Wyoming	26	4.0	2.5
	Ohio	22	-18.5	2.1
	West Virginia	17	30.8	1.6

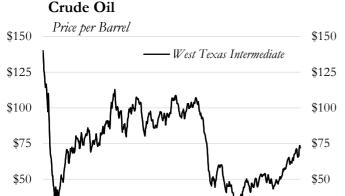
Ten-Year History of Most Active States *Average Active Monthly Drilling Rig Counts*



Source: Baker Hughes/Haver Analytics

U.S. Supply/Demand Dynamics

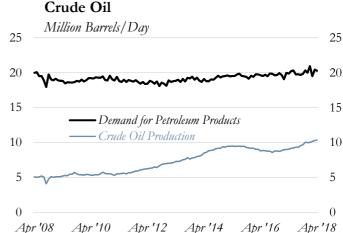
Seasonally Adjusted



Jul '14

Jul '16

Spot Prices



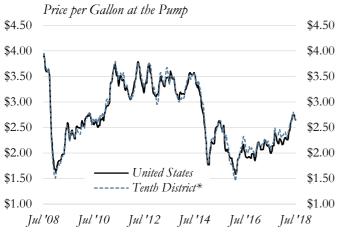


Jul'10

Jul '12

\$25

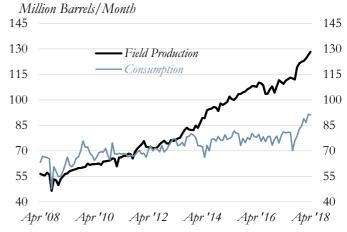
Jul '08



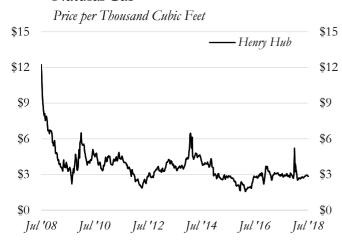
Natural Gas Liquids

\$25

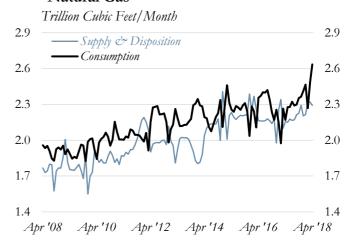
Jul'18



Natural Gas



Natural Gas

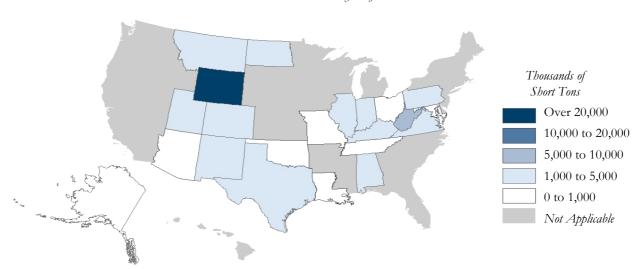


Source: Wall Street Journal, Oil & Gas Journal & Department of Energy, Energy Information Administration/Haver Analytics

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

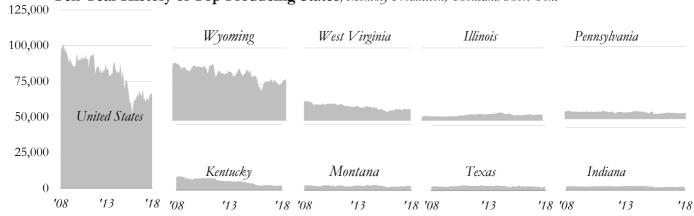
June 2018 Coal Production

Seasonally Adjusted



		Monthly Production (Thousand Short Tons)	Percent Change Year-over-Year	Current Share of Production
	United States	65,368.0	-5.5%	
	Tenth District*	29,920.4	-3.0	45.8%
Top Producing States	Wyoming	27,489.5	-2.0	42.1
	West Virginia	7,688.4	-4.1	11.8
	Illinois	4,094.0	-8.9	6.3
	Pennsylvania	3,818.4	-11.4	5.8
	Kentucky	3,555.6	-13.2	5.4
	Montana	3,245.1	5.0	5.0
	Texas	2,762.4	-10.9	4.2
	Indiana	2,566.7	-4.6	3.9
	North Dakota	2,426.2	-3.7	3.7
	Colorado	1,242.3	-14.4	1.9

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



*Includes all Tenth District states but Nebraska.

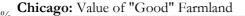
Source: U.S. Department of Energy, Energy Information Administration/Haver Analytics

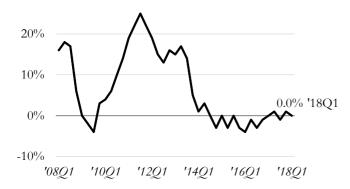
Farm Land Values*

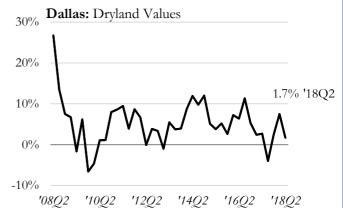


Farmland Values by Federal Reserve District

Percent Change Year-over-Year







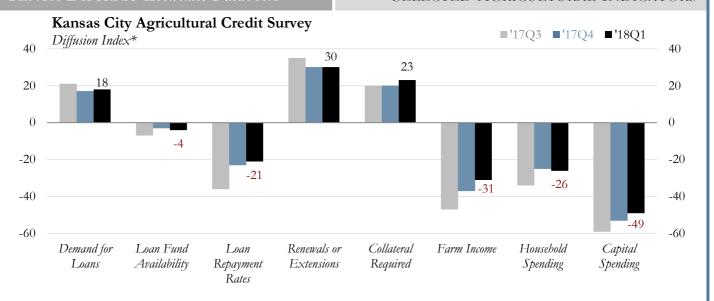
Kansas City: Nonirrigated Farmland Values



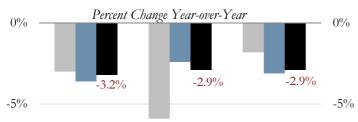
*Values shown for the most recent survey available for each district. Source: Federal Reserve District Banks/Haver Analytics



SELECTED AGRICULTURAL INDICATORS

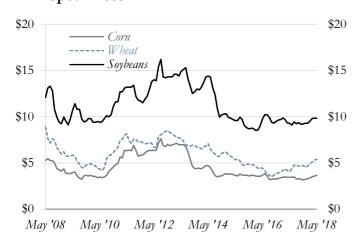


Tenth District Farmland Values

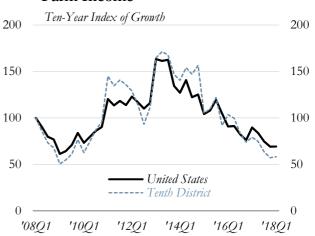




Spot Prices



Farm Income

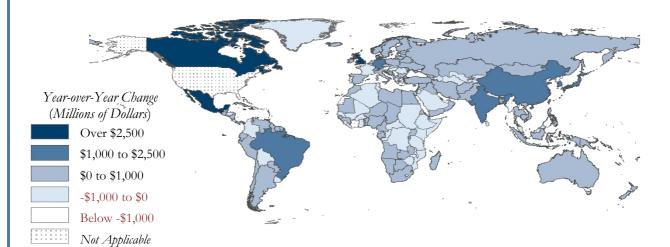


*Calculated as the percentage of total respondents reporting increases less those reporting declines.

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

2018Q1 U.S. Exports

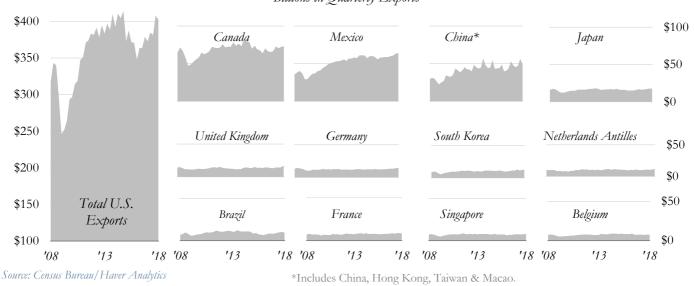
Year-to-Date



		Exports Year-to-Date (Billions of Dollars)	Percent Change Year-to-Date	Share of Exports Year-to-Date
	United States	\$402,510.0	8.0%	
Top Export Markets	Canada	73.3	9.8	18.2%
	Mexico	63.9	8.9	15.9%
	China*	49.3	3.2	12.2%
	Japan	17.5	8.9	4.3%
	United Kingdom	17.2	31.4	4.3%
	Germany	14.8	14.0	3.7%
	South Korea	13.1	15.6	3.2%
	Netherlands Antilles	11.8	13.6	2.9%
	Brazil	9.2	13.4	2.3%
	France	8.1	-4.5	2.0%

Ten-Year History of U.S. Top Export Countries

Billions in Quarterly Exports



\$450

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 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.

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