# Tenth District Economic Databook

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



AUGUST 19, 2019

FEDERAL RESERVE BANK of KANSAS CITY

#### SUMMARY OF CURRENT TENTH DISTRICT ECONOMIC CONDITIONS

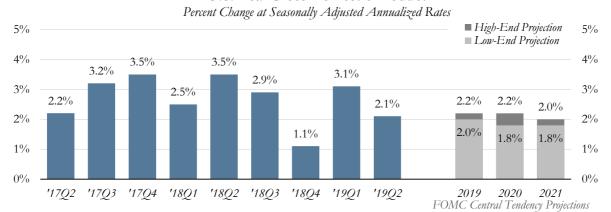
The unemployment rate was 3.3 percent across the Tenth District states in July, and total payroll employment grew 1.3 percent compared to the previous year. Employment growth was broad-based across industries, with the strongest percentage gains in the transportation and warehousing and other services sectors. Tenth District nominal personal income grew 4.1 percent in the first quarter of 2019 compared to the previous year. In the energy sector, rig counts were below year-ago levels. The Federal Reserve Bank of Kansas City's Manufacturing Survey indicated a slight decrease in manufacturing activity in July 2019, with a composite index of 49.3. Nonirrigated farmland values, as measured by the Federal Reserve Bank of Kansas City's Survey of Agricultural Credit Conditions, rose 1.2 percent in the first quarter of 2019 compared to the same period in 2018.

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.

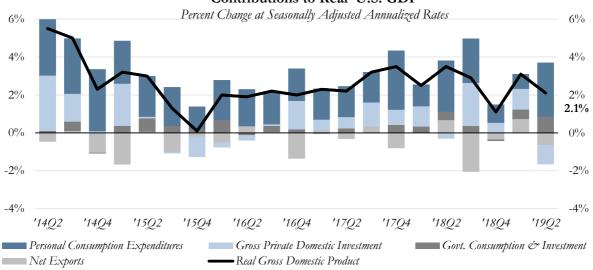


The Federal Reserve Bank of Kansas City's headquarters is located at 1 Memorial Drive in the heart of Kansas City, Missouri. The Federal Reserve Bank of Kansas City serves the Tenth Federal Reserve District, which includes Colorado, Kansas, western Missouri, Nebraska, northern New Mexico, Oklahoma and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

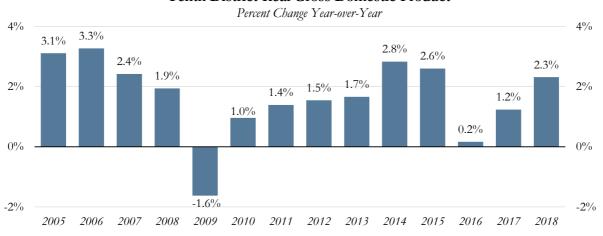
#### U.S. Real Gross Domestic Product



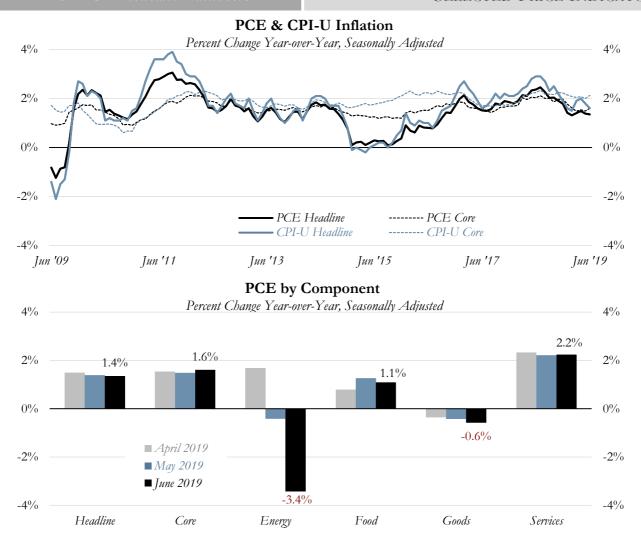
#### Contributions to Real U.S. GDP

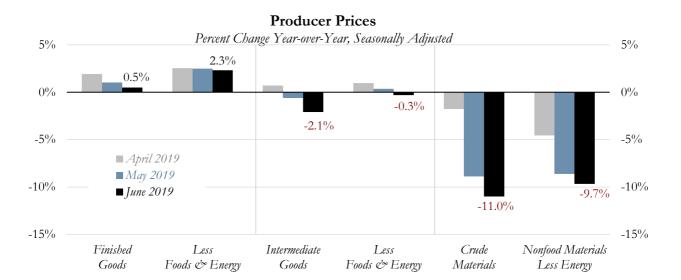


#### Tenth District Real Gross Domestic Product



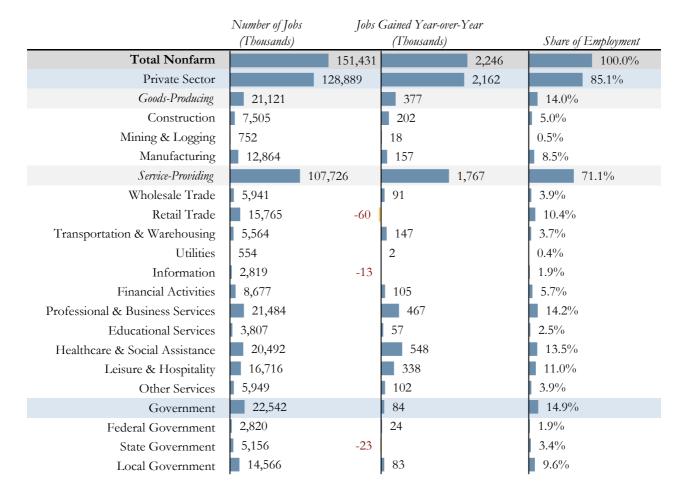
Source: Bureau of Economic Analysis, Federal Open Market Committee/Haver Analytics

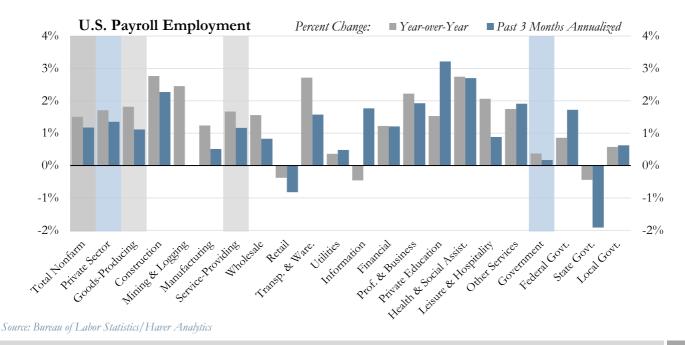




Source: Bureau of Economic Analysis & Bureau of Labor Statistics/Haver Analytics

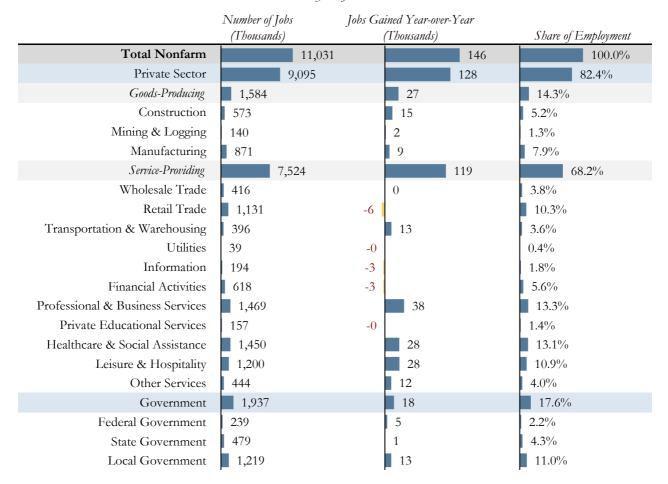
#### July 2019 U.S. Payroll Employment

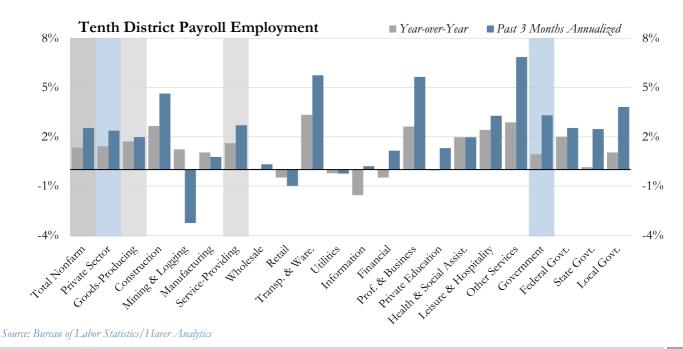




#### July 2019 Tenth District Payroll Employment

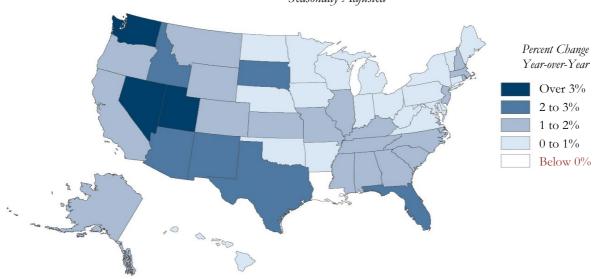
Seasonally Adjusted





# July 2019 Total Nonfarm Employment

Seasonally Adjusted



Percent Change Year-over-Year

Percent Change Year-over-Year

Missouri	25	1.5%	United States	
New Jersey	26	1.3	Tenth District	
Massachusetts	27	3.1	Nevada	1
Illinois	28	3.1	Utah	2
Kansas	29	3.0	Washington	3
West Virginia	30	2.8	Idaho	4
New York	31	2.6	Florida	5
Arkansas	32	2.6	Texas	6
Vermont	33	2.5	Arizona	7
Maine	34	2.4	New Mexico	8
Oklahoma	35	2.1	South Dakota	9
Indiana	36	2.0	Alabama	10
Hawaii	37	1.9	Colorado	11
Iowa	38	1.9	Oregon	12
Virginia	39	1.8	California	13
Delaware	40	1.8	Tennessee	14
Pennsylvania	41	1.7	North Carolina	15
Nebraska	42	1.7	Wyoming	16
Wisconsin	43	1.6	Mississippi	17
Ohio	44	1.6	Georgia	18
Michigan	45	1.5	South Carolina	19
Connecticut	46	1.5	New Hampshire	20
North Dakota	47	1.5	Montana	21
Maryland	48	1.5	Kentucky	22
Minnesota	49	1.4	Rhode Island	23
Louisiana	50	1.4	Alaska	24

Source: Bureau of Labor Statistics/Haver Analytics

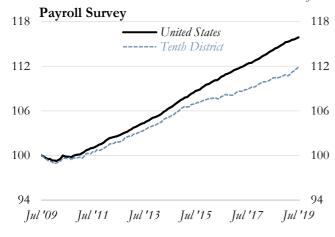


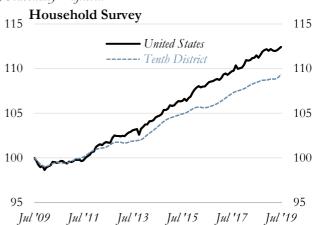
		Unemployed
	United States	3.7%
	Tenth District	3.3
1	Alaska	6.3
2	Mississippi	5.1
3	New Mexico	4.9
3	Arizona	4.9
5	West Virginia	4.7
6	Washington	4.6
7	Louisiana	4.3
7	Michigan	4.3
7	Kentucky	4.3
10	Illinois	4.2
10	North Carolina	4.2
12	California	4.1
12	Nevada	4.1
14	Oregon	4.0
14	Ohio	4.0
14	New York	4.0
17	Pennsylvania	3.9
18	Maryland	3.8
19	Georgia	3.6
19	Connecticut	3.6
19	Wyoming	3.6
22	Rhode Island	3.5
22	Tennessee	3.5
24	Montana	3.4

Source: Bureau of Labor Statistics/Haver Analytics

#### **Total Nonfarm Employment**

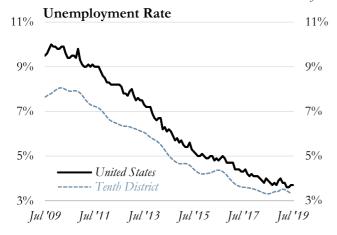
Ten-Year Index of Growth, Seasonally Adjusted

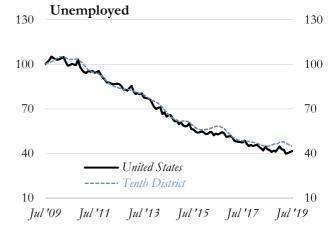


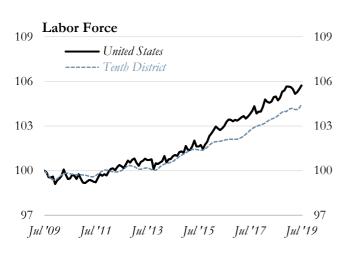


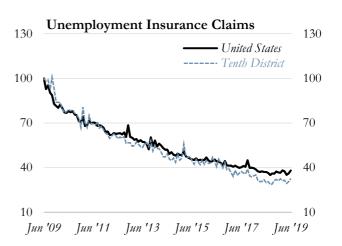
#### **Labor Force Dynamics**

Ten-Year Index of Growth, Seasonally Adjusted





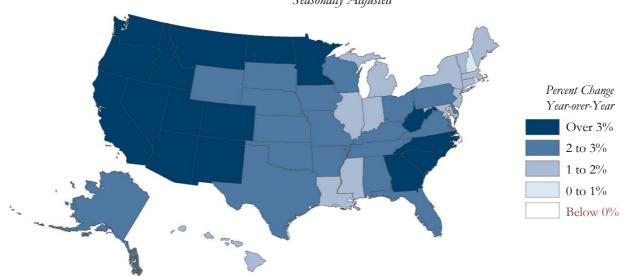




Source: Bureau of Labor Statistics & Department of Labor/Haver Analytics

# 2019Q1 Real Personal Income

Seasonally Adjusted



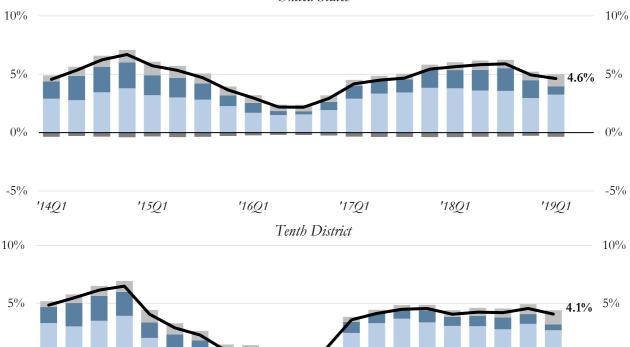
		Percent Change	Per Capita			Percent Change	Per Capita
		Year-over-Year	Personal Income			Year-over-Year	Personal Income
	United States	3.2%	\$54,730	25	Wyoming	2.4%	\$61,556
	Tenth District	2.7	46,636	26	Oklahoma	2.3	47,116
1	West Virginia	4.8	42,135	27	Pennsylvania	2.3	56,526
2	Idaho	4.2	44,291	28	Delaware	2.2	52,118
3	Nevada	4.0	49,458	29	Missouri	2.2	47,459
4	Arizona	3.8	44,633	30	Wisconsin	2.2	51,921
5	Colorado	3.7	58,040	31	Ohio	2.2	49,194
6	Washington	3.6	61,992	32	Kentucky	2.1	42,597
7	North Dakota	3.5	55,571	33	Arkansas	2.1	43,381
8	Montana	3.4	48,402	34	Nebraska	2.1	53,076
9	Oregon	3.4	51,144	35	Kansas	2.1	51,161
10	Minnesota	3.2	57,474	36	Louisiana	2.0	46,475
11	North Carolina	3.2	46,802	37	Maine	1.9	49,172
12	New Mexico	3.1	42,369	38	Mississippi	1.9	38,712
13	Georgia	3.1	46,636	39	Indiana	1.9	47,623
14	Utah	3.0	46,097	40	Vermont	1.7	54,518
15	California	3.0	64,129	41	Michigan	1.6	48,428
16	South Carolina	3.0	43,675	42	New Jersey	1.6	68,691
17	Florida	3.0	50,316	43	Hawaii	1.6	55,766
18	Iowa	3.0	49,865	44	Illinois	1.5	57,829
19	South Dakota	2.9	51,073	45	Maryland	1.5	63,932
20	Texas	2.9	49,960	46	Massachusetts	1.2	71,042
21	Alaska	2.7	61,421	47	New York	1.1	69,420
22	Alabama	2.6	43,416	48	Connecticut	1.0	75,432
23	Tennessee	2.6	47,911	49	Rhode Island	0.8	55,477
24	Virginia	2.5	58,175	50	New Hampshire	0.7	62,038

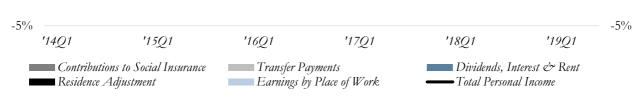
Source: Bureau of Economic Analysis/Haver Analytics

#### Nominal Personal Income

Contributions to Percent Change, Seasonally Adjusted

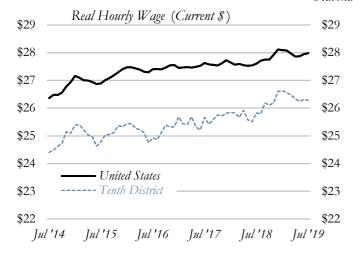


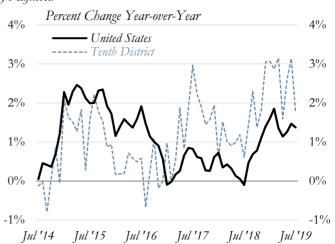




#### Real Average Hourly Wage

#### Seasonally Adjusted



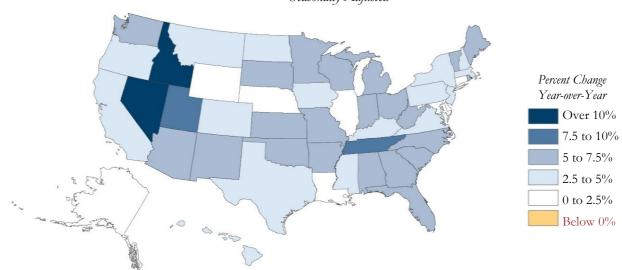


Source: Bureau of Economic Analysis & Bureau of Labor Statistics/Haver Analytics

0%

# 2019Q1 FHFA Purchase-Only Home Price Index

Seasonally Adjusted



Percent Change Year-over-Year

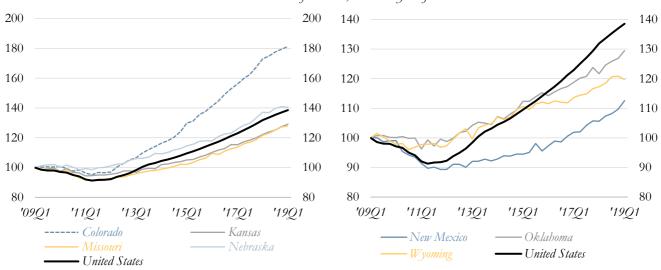
Percent Change Year-over-Year

		Year-over-Year			Y ear-over-Y ea
	United States	5.1%	25	Missouri	5.1%
			26	Arkansas	5.0
1	Idaho	13.4	27	Pennsylvania	4.9
2	Nevada	10.6	28	Colorado	4.8
3	Utah	8.9	29	Massachusetts	4.7
4	Tennessee	7.7	30	New York	4.6
5	Georgia	7.5	31	Kentucky	4.4
6	South Dakota	7.4	32	Texas	4.4
7	Alabama	7.3	33	Iowa	4.3
8	South Carolina	7.1	34	Hawaii	4.0
9	Indiana	7.1	35	Oregon	4.0
10	Arizona	6.9	36	New Hampshire	3.5
11	New Mexico	6.6	37	Virginia	3.5
12	Oklahoma	6.4	38	California	3.2
13	Michigan	6.4	39	Mississippi	3.1
14	Vermont	6.3	40	Montana	3.1
15	Minnesota	6.3	41	New Jersey	3.0
16	Florida	6.2	42	North Dakota	2.9
17	Wisconsin	6.1	43	Nebraska	2.5
18	Washington	6.1	44	Illinois	2.3
19	West Virginia	6.1	45	Connecticut	2.1
20	Ohio	5.9	46	Wyoming	2.1
21	Maine	5.8	47	Alaska	2.1
22	Kansas	5.7	48	Louisiana	1.0
23	Rhode Island	5.6	49	Delaware	0.7
24	North Carolina	5.4	50	Maryland	0.5

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

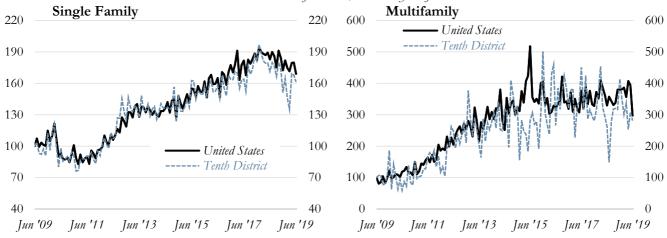
#### FHFA Purchase-Only Home Price Index

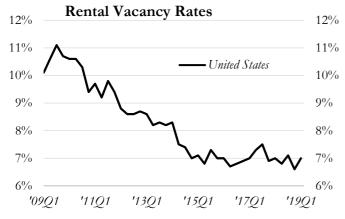
Ten-Year Index of Growth, Seasonally Adjusted



#### **Housing Permits**

Ten-Year Index of Growth, Seasonally Adjusted





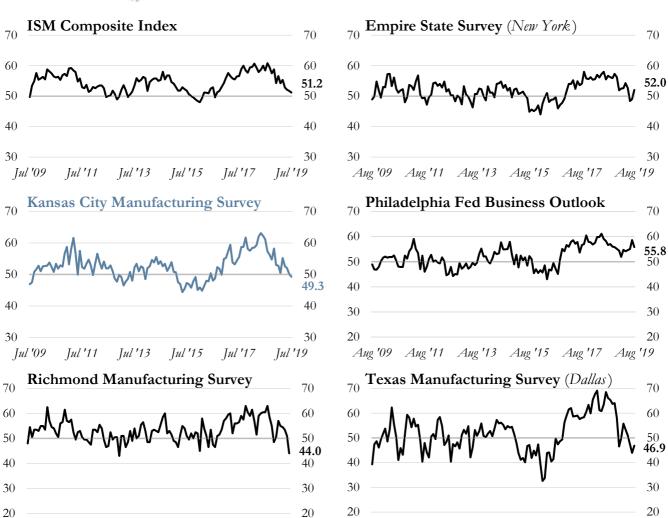
Note: Rental Vacancy Rates are not available for the Tenth District.

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





**Manufacturing Surveys** 



Jul '09

Jul '11

Jul '13

*Jul'15* 

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

Jul '17

Jul'19

Jul '15

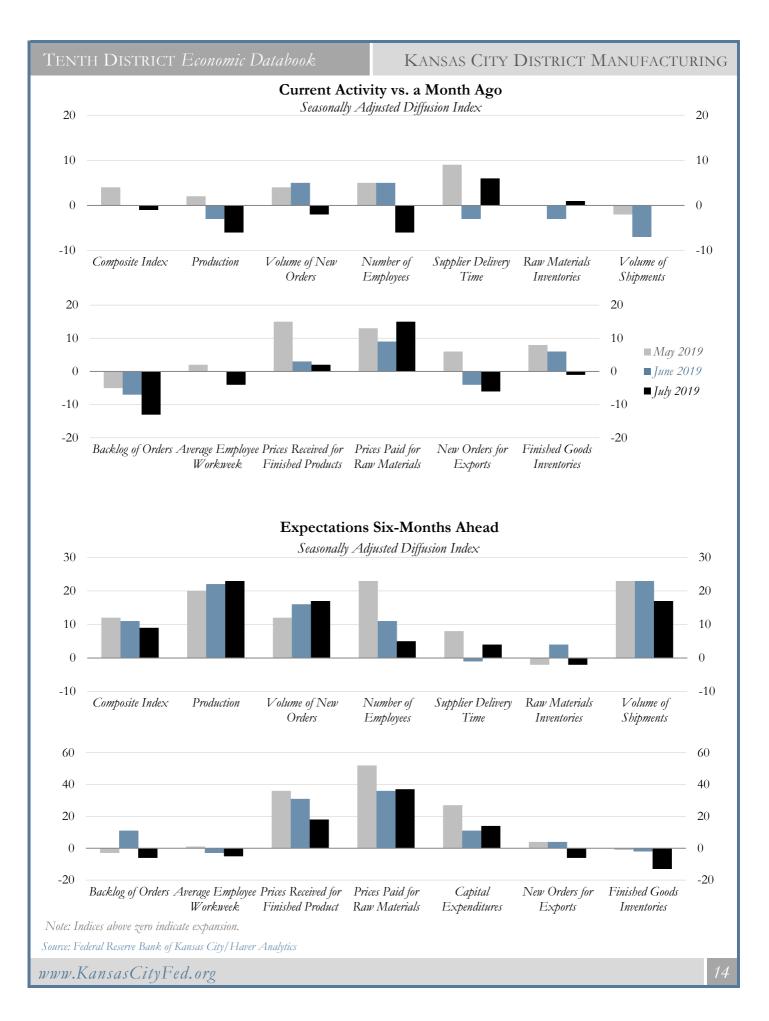
Jul '11

Jul'13

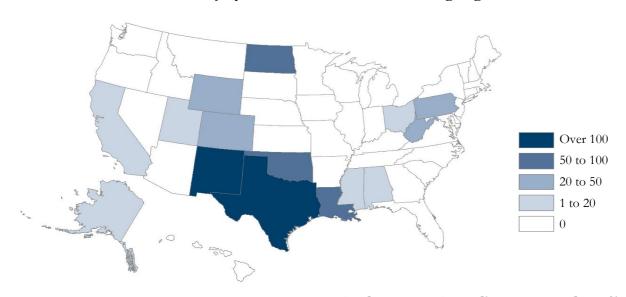
Jul '09

Jul '19

Jul '17

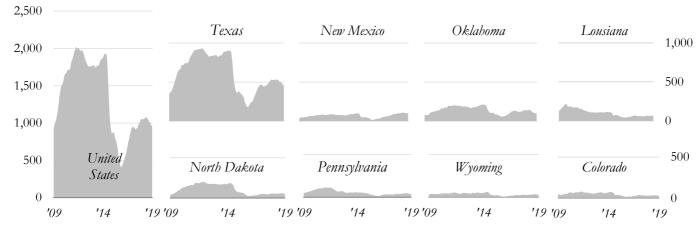


### July 2019 Active Oil & Gas Drilling Rig Counts



		Average Rig Counts  During the Month	Percent Change Year-over-Year	Current Share of Activity
	United States	955	-9.0%	, ,
	Tenth District	265	-11.7	27.7%
Top Producing States	Texas	457	-13.0	47.9
	New Mexico	105	4.0	11.0
	Oklahoma	96	-30.9	10.1
	Lousiana	66	17.9	6.9
	North Dakota	53	-7.0	5.5
	Pennsylvania	37	-2.6	3.9
	Wyoming	33	17.9	3.5
	Colorado	31	-3.1	3.2
	West Virginia	21	23.5	2.2
	California	18	20.0	1.9

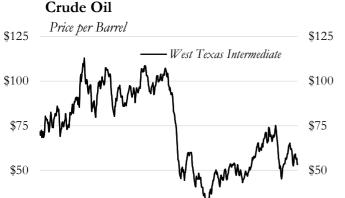
# **Ten-Year History of Most Active States** *Average Active Monthly Drilling Rig Counts*



Source: Baker Hughes/Haver Analytics

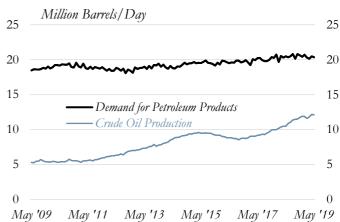
#### U.S. Supply/Demand Dynamics

Seasonally Adjusted



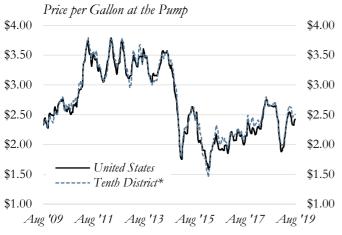
Aug '11 Aug '13 Aug '15

**Spot Prices** 



#### Gasoline

\$25

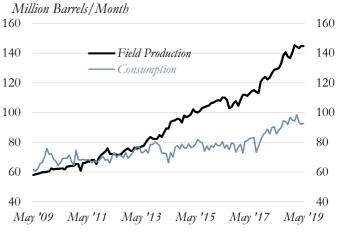


#### Natural Gas Liquids

\$25

Aug '17 Aug '19

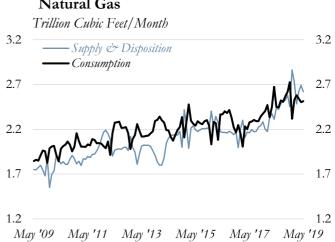
Crude Oil



#### Natural Gas



#### Natural Gas

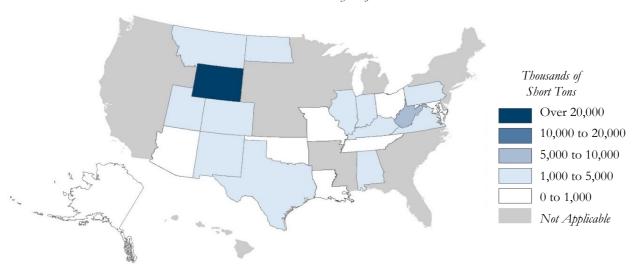


Source: Wall Street Journal, Oil & Gas Journal & Department of Energy, Energy Information Administration/Haver Analytics

<sup>\*</sup>Average price per gallon for major Tenth District metro areas.

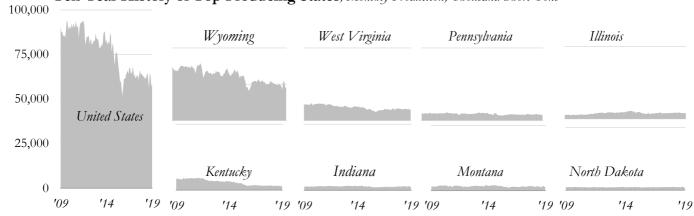
# July 2019 Coal Production

Seasonally Adjusted



		Monthly Production (Thousand Short Tons)	Percent Change Year-over-Year	Current Share of Production
	United States	58,458.0	-7.2%	
	Tenth District*	24,317.2	-11.4	41.6%
Top Producing States	Wyoming	22,050.5	-12.7	37.7
	West Virginia	7,930.0	-2.0	13.6
	Pennsylvania	4,152.1	3.1	7.1
	Illinois	4,039.3	-1.5	6.9
	Kentucky	3,169.4	-4.5	5.4
	Indiana	2,982.4	6.0	5.1
	Montana	2,791.5	-5.0	4.8
	North Dakota	2,325.3	-10.0	4.0
	Texas	1,563.5	-25.8	2.7
	Alabama	1.331.3	2.2	2.3

# 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\*

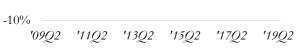


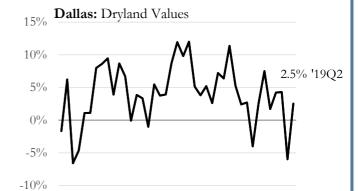
#### Farmland Values by Federal Reserve District

Percent Change Year-over-Year



Chicago: Value of "Good" Farmland





'15Q2

'17Q2

'13Q2

'11Q2

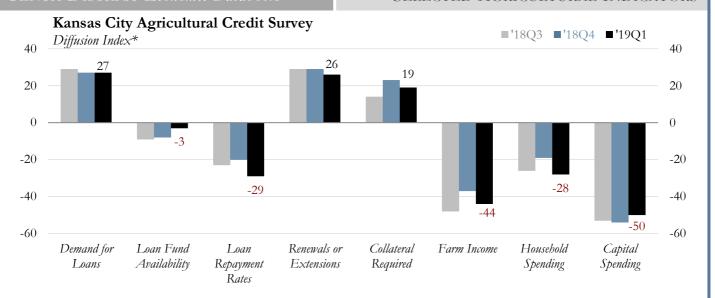




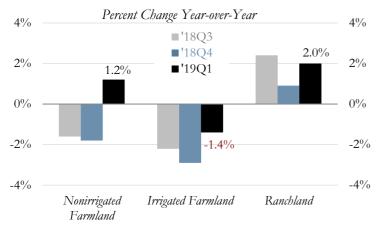
<sup>\*</sup>Values shown for the most recent survey available for each district. Source: Federal Reserve District Banks/Haver Analytics

# TENTH DISTRICT Economic Databook

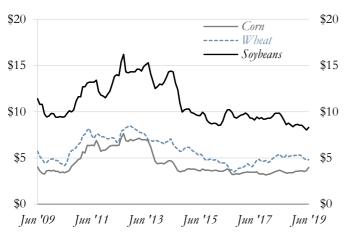
#### SELECTED AGRICULTURAL INDICATORS



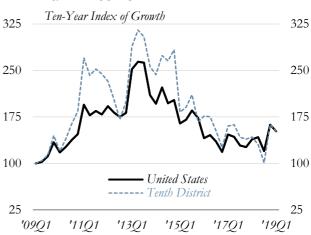
#### **Tenth District Farmland Values**



# **Spot Prices**



#### Farm Income

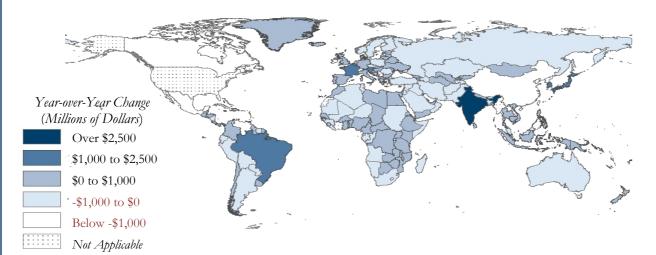


\*Calculated as the percentage of total respondents reporting increases less those reporting declines.

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

#### 2019Q2 U.S. Exports

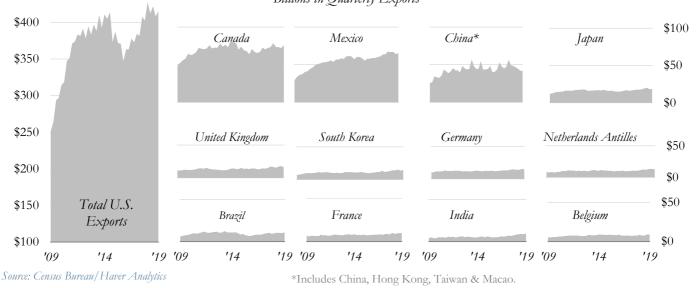
Year-to-Date



		Exports Year-to-Date (Billions of Dollars)	Percent Change Year-to-Date	Share of Exports Year-to-Date
	United States	\$823,610.0	-0.8%	
Top Export Markets	Canada	148.1	-2.5	18.0%
	Mexico	129.3	-1.5	15.7%
	China*	83.7	-14.2	10.2%
	Japan	36.8	3.3	4.5%
	United Kingdom	34.1	0.5	4.1%
	South Korea	28.3	4.5	3.4%
	Germany	30.4	3.4	3.7%
	Netherlands Antilles	26.1	7.8	3.2%
	Brazil	20.8	9.7	2.5%
	France	19.4	7.4	2.4%

#### 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.

#### Additional Resources Available

- Agricultural Surveys
- Manufacturing Surveys
- Regional Economic Analysis
- Banker Resources
- Economic Indicators
- Economic Research
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