# Tenth District Economic Databook

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



JANUARY 27, 2020

FEDERAL RESERVE BANK of KANSAS CITY

### SUMMARY OF CURRENT TENTH DISTRICT ECONOMIC CONDITIONS

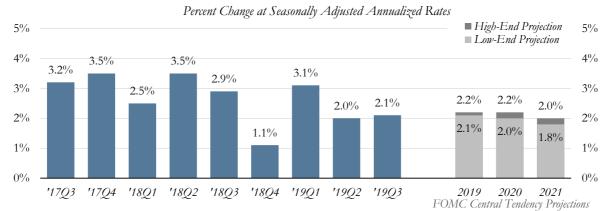
The unemployment rate held steady at 3.2 percent across the Tenth District states in December, and total payroll employment grew 1.1 percent compared to the previous year. Employment growth was broad-based across industries, with the strongest percentage gains in the healthcare and social assistnace and professional and business services sectors. Tenth District nominal personal income grew 4.7 percent in the third quarter of 2019 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 January 2020, 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 0.1 percent in the third 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.

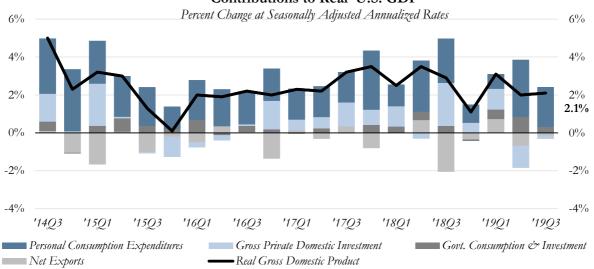


The Federal Reserve Bank of Kansas City's headquarters is located at 1 Memorial Drive in the heart of Kansas City, Missouri. The Federal Reserve Bank of Kansas City serves the Tenth Federal Reserve District, which includes Colorado, Kansas, western Missouri, Nebraska, northern New Mexico, Oklahoma and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

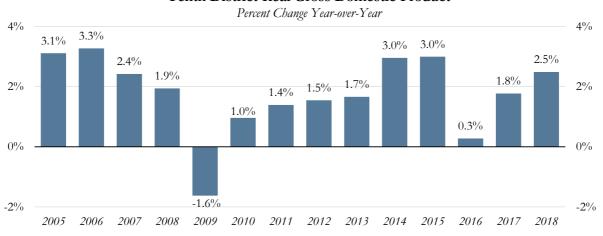
### U.S. Real Gross Domestic Product



### Contributions to Real U.S. GDP

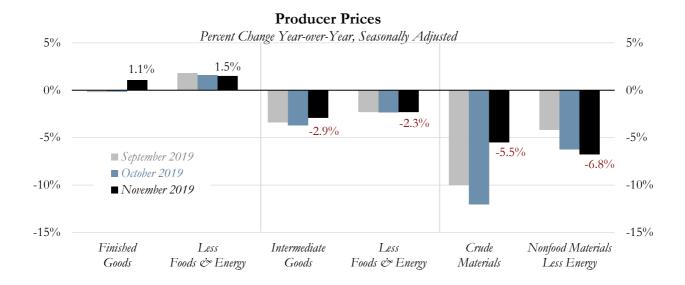


### Tenth District Real Gross Domestic Product



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

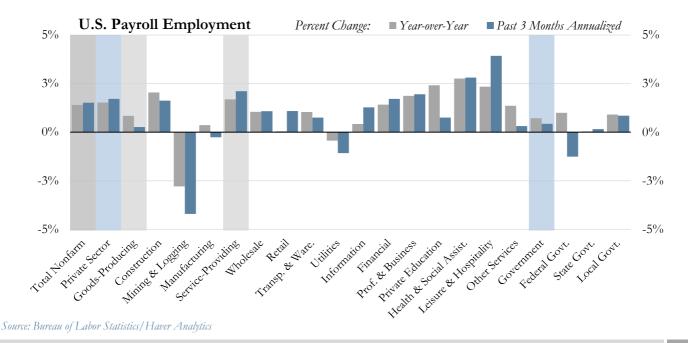
### **PCE & CPI-U Inflation** Percent Change Year-over-Year, Seasonally Adjusted 4% 4% 0% 0% PCE Headline ----- PCE Core - CPI-U Headline ----- CPI-U Core -2% -2% Nov '09 Nov '11 Nov '13 Nov '15 Nov '17 Nov '19 **PCE** by Component Percent Change Year-over-Year, Seasonally Adjusted 4% 4% 2.2% 1.6% 1.5% 2% 2% 0.9% 0% 0% -0.2% -0.7% -2% -2% ■ September 2019 ■ October 2019 -4%-4%■ November 2019 -6% -6% Headline Core Energy Food Goods Services



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

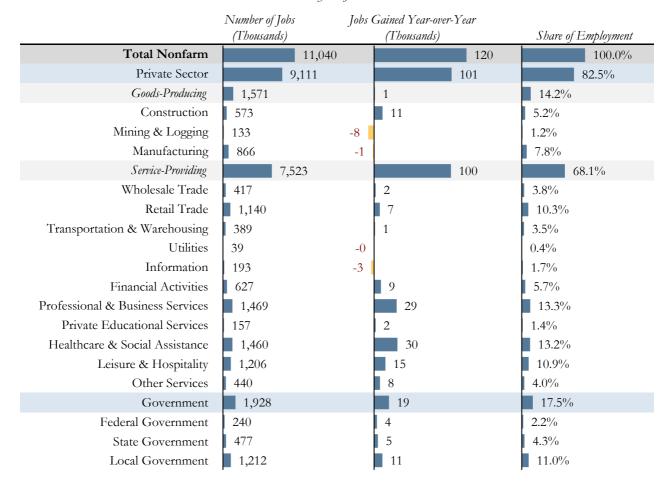
### December 2019 U.S. Payroll Employment

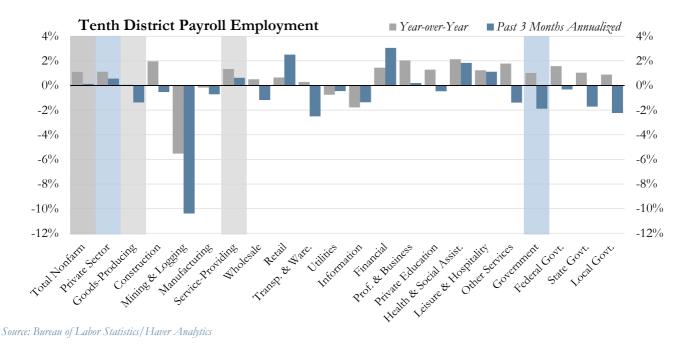
Number of Jobs Jobs Gained Year-over-Year (Thousands) (Thousands) Share of Employment **Total Nonfarm** 152,383 100.0% 2,108 Private Sector 129,737 1,947 85.1% Goods-Producing 21,137 13.9% 176 Construction 4.9% 7,551 151 Mining & Logging 731 -21 0.5% Manufacturing 12,855 46 8.5% Service-Providing 108,624 1,807 71.3% Wholesale Trade 5,963 62 3.9% Retail Trade 15,830 10.4% Transportation & Warehousing 5,568 57 3.7% 0.4%Utilities 552 -2 1.9% Information 2,839 12 Financial Activities 8,737 122 5.7% 397 14.2% Professional & Business Services 21,651 3,836 90 2.5% **Educational Services** Healthcare & Social Assistance 20,723 557 13.6% Leisure & Hospitality 16,942 388 11.1% 5,959 80 3.9% Other Services 22,646 161 14.9% Government 1.9% 2,826 28 Federal Government 5,185 2 3.4% State Government 14,635 9.6% 131 Local Government



### December 2019 Tenth District Payroll Employment

Seasonally Adjusted





# December 2019 Total Nonfarm Employment Seasonally Adjusted Percent Change Year-over-Year Over 3% 2 to 3% 1 to 2% 0 to 1% Below 0%

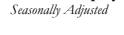
Percent Change Year-over-Year

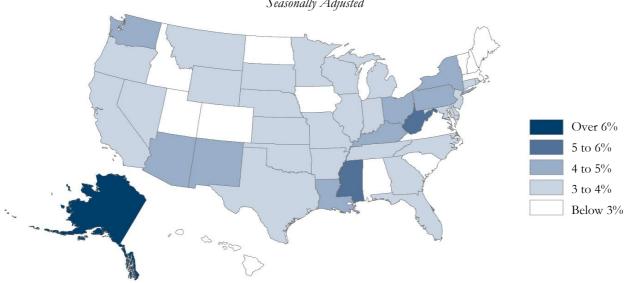
Percent Change Year-over-Year

1 ear-over-1 ea			ear-over-1 ear	-	
1.1%	Maryland	25	1.4%	United States	
1.1	New York	26	1.1	Tenth District	
0.9	New Hampshire	27	3.1	Utah	1
0.9	New Jersey	28	2.9	Idaho	2
0.9	South Dakota	29	2.8	Arizona	3
0.8	Montana	30	2.7	Texas	4
0.8	Hawaii	31	2.4	Washington	5
0.7	Illinois	32	2.4	Florida	6
0.7	Kentucky	33	2.2	Alabama	7
0.7	Missouri	34	2.1	North Carolina	8
0.5	Pennsylvania	35	2.1	Colorado	9
0.5	North Dakota	36	1.9	Nevada	10
0.5	Mississippi	37	1.9	Oregon	11
0.5	Ohio	38	1.8	New Mexico	12
0.5	Louisiana	39	1.8	California	13
0.4	Michigan	40	1.7	Rhode Island	14
0.2	Wisconsin	41	1.6	Tennessee	15
0.2	Minnesota	42	1.5	Nebraska	16
0.2	Connecticut	43	1.5	Georgia	17
0.1	Indiana	44	1.4	Arkansas	18
0.0	Alaska	45	1.4	Kansas	19
-0.2	Iowa	46	1.3	Delaware	20
-0.3	Oklahoma	47	1.3	South Carolina	21
-0.3	Vermont	48	1.2	Massachusetts	22
-0.4	West Virginia	49	1.2	Maine	23
-1.1	Wyoming	50	1.1	Virginia	24

Source: Bureau of Labor Statistics/Haver Analytics

### December 2019 Unemployment Rates





		Percent			Percent
		Unemployed			Unemployed
	United States	3.5%	22	New Jersey	3.5%
	Tenth District	3.2	26	Montana	3.4
1	Alaska	6.1	26	Oklahoma	3.4
2	Mississippi	5.7	26	Wisconsin	3.4
3	West Virginia	5.0	29	Tennessee	3.3
4	Louisiana	4.9	29	Minnesota	3.3
5	New Mexico	4.7	29	Missouri	3.3
6	Arizona	4.6	32	Georgia	3.2
7	Pennsylvania	4.5	32	Indiana	3.2
8	Washington	4.3	32	Kansas	3.2
8	Kentucky	4.3	32	South Dakota	3.2
10	Ohio	4.2	36	Nebraska	3.1
11	New York	4.0	37	Florida	3.0
12	Michigan	3.9	38	Idaho	2.9
12	California	3.9	38	Maine	2.9
12	Delaware	3.9	40	Massachusetts	2.8
15	Nevada	3.8	41	Alabama	2.7
16	Oregon	3.7	41	Iowa	2.7
16	North Carolina	3.7	43	Hawaii	2.6
16	Illinois	3.7	43	Virginia	2.6
16	Wyoming	3.7	43	New Hampshire	2.6
16	Connecticut	3.7	46	Colorado	2.5
21	Arkansas	3.6	47	North Dakota	2.4
22	Maryland	3.5	48	South Carolina	2.3
22	Rhode Island	3.5	48	Utah	2.3

48

22 Source: Bureau of Labor Statistics/Haver Analytics

Texas

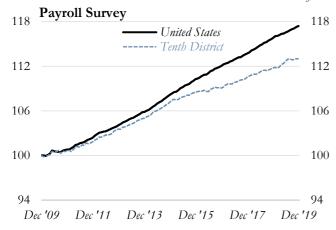
3.5

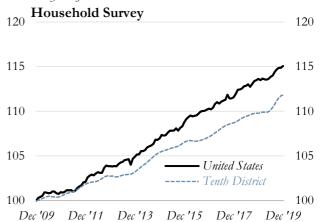
2.3

Vermont

### Total Nonfarm Employment

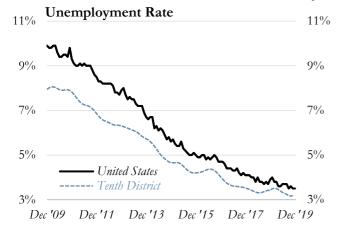
Ten-Year Index of Growth, Seasonally Adjusted

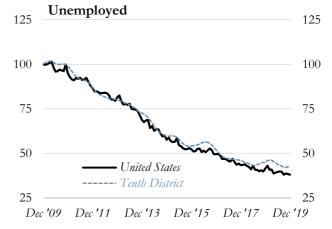


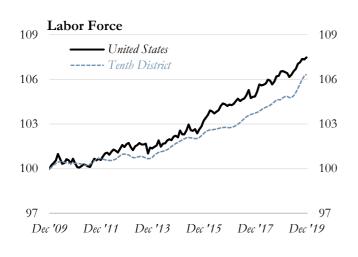


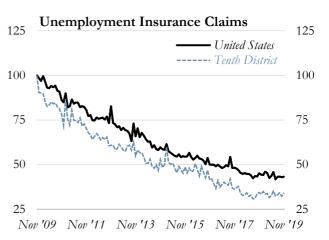
### Labor Force Dynamics

Ten-Year Index of Growth, Seasonally Adjusted





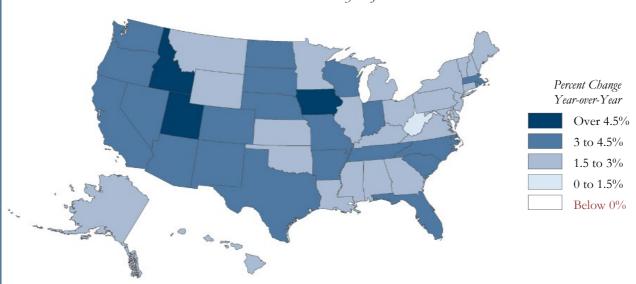




Source: Bureau of Labor Statistics & Department of Labor/Haver Analytics

### 2019Q3 Real Personal Income

Seasonally Adjusted



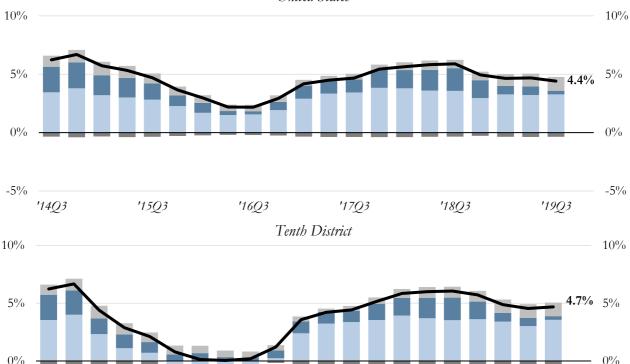
		Percent Change	Per Capita			Percent Change	Per Capita
		Year-over-Year	Personal Income			Year-over-Year	Personal Income
	United States	3.0%	\$56,832	25	Pennsylvania	3.0%	\$59,082
	Tenth District	3.2	48,302	26	Minnesota	3.0	59,912
1	Iowa	4.9	53,113	27	New Hampshire	3.0	64,066
2	Idaho	4.7	45,677	28	Mississippi	3.0	39,614
3	Utah	4.5	48,381	29	Georgia	2.9	48,419
4	South Dakota	4.3	54,418	30	Maine	2.9	51,242
5	Washington	4.2	65,024	31	Wyoming	2.9	63,567
6	North Dakota	4.1	58,235	32	Alabama	2.8	44,073
7	Arizona	3.9	46,167	33	Kansas	2.7	53,748
8	California	3.9	67,021	34	Vermont	2.6	56,496
9	Colorado	3.8	61,084	35	Oklahoma	2.5	48,109
10	Texas	3.7	52,487	36	Virginia	2.5	60,034
11	Arkansas	3.7	45,376	37	Kentucky	2.5	44,078
12	New Mexico	3.6	44,018	38	Delaware	2.4	54,208
13	North Carolina	3.6	48,041	39	Louisiana	2.3	48,266
14	Nevada	3.4	50,676	40	Ohio	2.3	50,753
15	Nebraska	3.4	55,316	41	Michigan	2.3	50,372
16	South Carolina	3.4	45,414	42	Maryland	2.3	65,881
17	Wisconsin	3.2	53,997	43	Montana	2.3	48,938
18	Oregon	3.2	52,963	44	New York	2.2	71,818
19	Florida	3.2	51,894	45	New Jersey	2.1	70,984
20	Rhode Island	3.2	57,181	46	Alaska	1.9	62,099
21	Missouri	3.1	49,893	47	Connecticut	1.6	79,560
22	Tennessee	3.1	48,955	48	Hawaii	1.6	57,465
23	Indiana	3.0	49,164	49	Illinois	1.5	59,060
24	Massachusetts	3.0	74,818	50	West Virginia	0.5	42,452

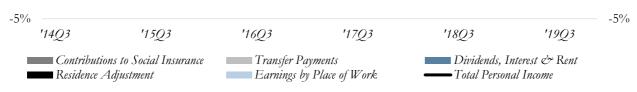
Source: Bureau of Economic Analysis/Haver Analytics

### Nominal Personal Income

Contributions to Percent Change, Seasonally Adjusted

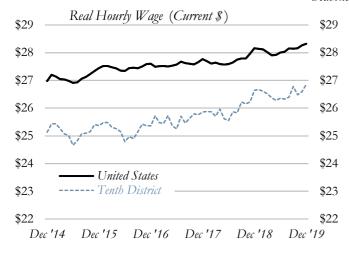


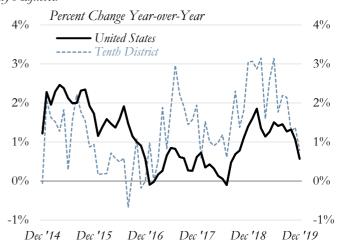




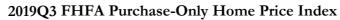
### Real Average Hourly Wage

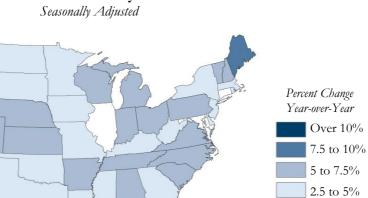
### Seasonally Adjusted





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





Percent Change Year-over-Year

Percent Change Year-over-Year

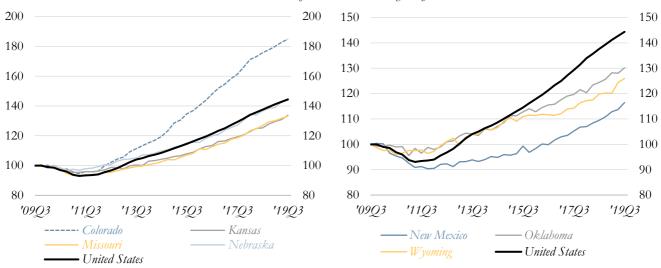
0 to 2.5% Below 0%

		Year-over-Year			Year-over-Year
	United States	4.9%	25	Arkansas	5.1%
			26	Florida	5.0
1	Idaho	11.6	27	Nevada	5.0
2	Maine	7.9	28	Kentucky	5.0
3	Arizona	7.9	29	Missouri	4.9
4	Utah	7.8	30	Texas	4.9
5	Indiana	7.4	31	Oregon	4.8
6	Vermont	7.1	32	Georgia	4.8
7	Kansas	6.8	33	Delaware	4.7
8	Wisconsin	6.4	34	Rhode Island	4.7
9	New Mexico	6.4	35	Alaska	4.7
10	Tennessee	6.3	36	Oklahoma	4.6
11	Hawaii	6.2	37	Minnesota	4.5
12	Montana	6.1	38	Massachusetts	4.3
13	Nebraska	6.1	39	California	4.1
14	New Hampshire	6.0	40	West Virginia	3.7
15	South Carolina	5.8	41	North Dakota	3.6
16	Michigan	5.8	42	New York	3.4
17	North Carolina	5.7	43	New Jersey	3.3
18	Ohio	5.6	44	Mississippi	3.2
19	Washington	5.6	45	Louisiana	3.2
20	Virginia	5.4	46	Iowa	3.2
21	Alabama	5.4	47	South Dakota	2.7
22	Pennsylvania	5.2	48	Maryland	2.4
23	Wyoming	5.1	49	Connecticut	2.2
24	Colorado	5.1	50	Illinois	1.9

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

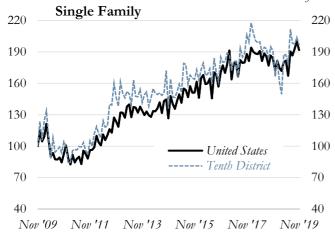
### FHFA Purchase-Only Home Price Index

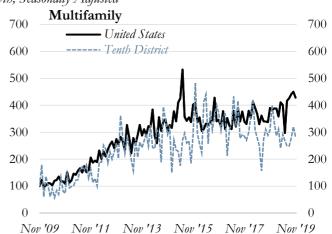
Ten-Year Index of Growth, Seasonally Adjusted

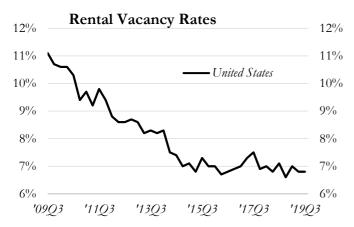


### **Housing Permits**

Ten-Year Index of Growth, Seasonally Adjusted

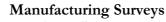




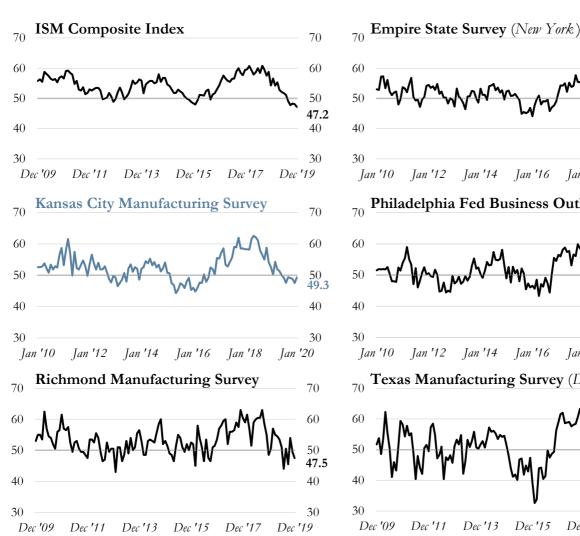


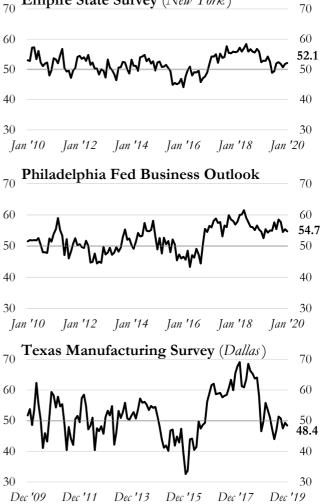
Note: Rental Vacancy Rates are not available for the Tenth District.

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

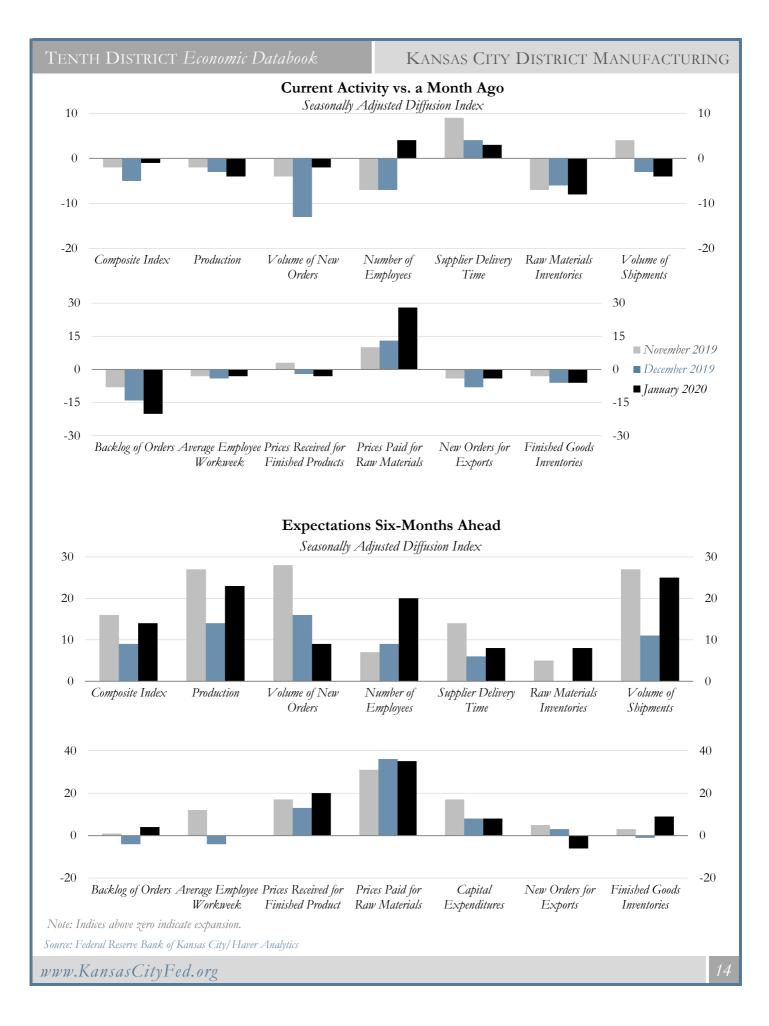




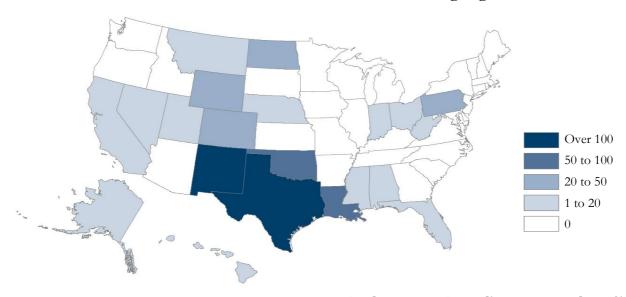




Note: Indices are defined to be between 0 and 100; above 50 indicates growth and below 50 indicates contraction. Source: Institute for Supply Management (ISM) & Federal Reserve District Banks/Haver Analytics

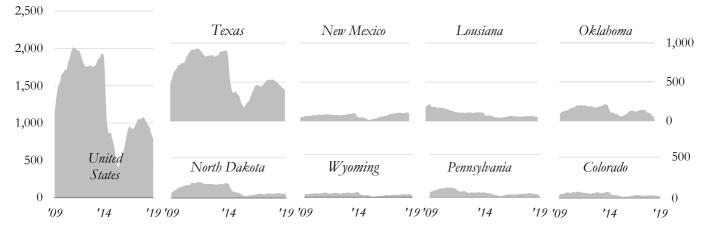


### December 2019 Active Oil & Gas Drilling Rig Counts



		Average Rig Counts  During the Month	Percent Change Year-over-Year	Current Share of Activity
	United States	804	-24.5%	
	Tenth District	204	-35.8	25.4%
Top Producing States	Texas	406	-23.5	50.5
	New Mexico	103	-3.7	12.8
	Lousiana	57	-12.3	7.1
	Oklahoma	51	-63.8	6.3
	North Dakota	50	-3.8	6.2
	Wyoming	27	-20.6	3.4
	Pennsylvania	25	-46.8	3.1
	Colorado	22	-35.3	2.7
	West Virginia	15	25.0	1.9
	California	15	0.0	1.9

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



Source: Baker Hughes/Haver Analytics



**Spot Prices** 

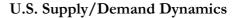
- West Texas Intermediate

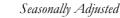
\$75

\$25

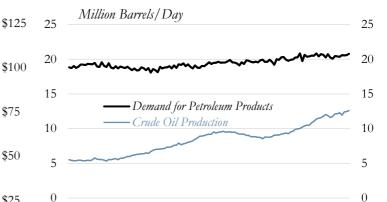
Jan '20

### SELECTED ENERGY INDICATORS









Oct '15

Oct '17

Oct '19

Oct '13

### Gasoline

Jan '12

Jan '14

Jan '16

Jan '18

Crude Oil

\$125

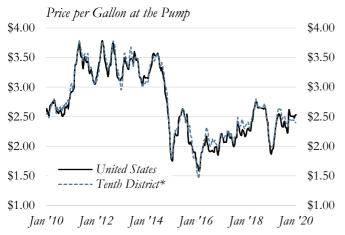
\$100

\$50

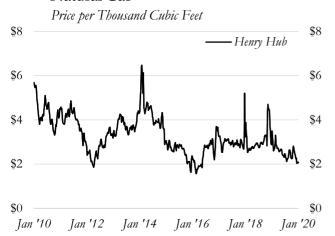
\$25

Jan '10

Price per Barrel



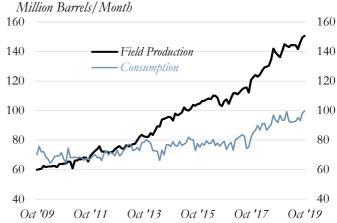
### Natural Gas

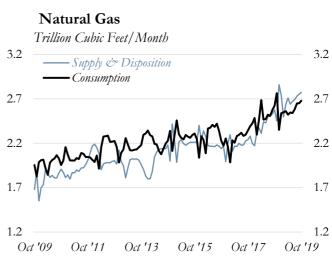


### Natural Gas Liquids

Oct '11

Oct '09



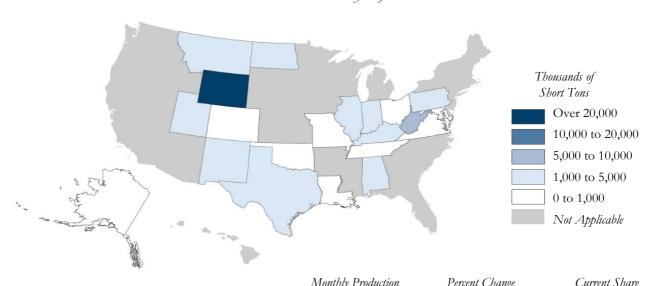


Source: Wall Street Journal, Oil & Gas Journal & Department of Energy, Energy Information Administration/Haver Analytics

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

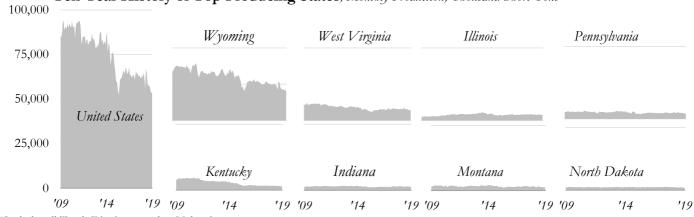
### **December 2019 Coal Production**

Seasonally Adjusted



		(Thousand Short Tons)	Year-over-Year	of Production
	United States	53,583.2	-15.5%	
	Tenth District*	22,833.6	-17.6	42.6%
Top Producing States	Wyoming	20,594.0	-18.7	38.4
	West Virginia	7,178.8	-9.4	13.4
	Illinois	3,880.7	-9.6	7.2
	Pennsylvania	3,749.1	-12.1	7.0
	Kentucky	2,868.1	-12.6	5.4
	Indiana	2,716.3	-14.3	5.1
	Montana	2,528.2	-25.9	4.7
	North Dakota	2,031.3	-16.0	3.8
	Texas	1,589.7	-8.3	3.0
	New Mexico	1,262.1	2.5	2.4

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



\*Includes all Tenth District states but Nebraska.

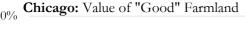
Source: U.S. Department of Energy, Energy Information Administration/Haver Analytics

Farm Land Values\*



### Farmland Values by Federal Reserve District

Percent Change Year-over-Year





## 15% **Dallas:** Dryland Values



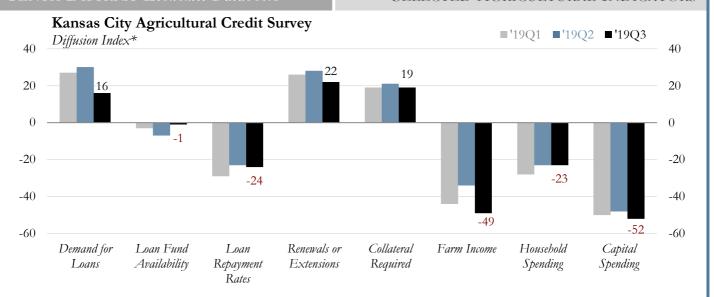




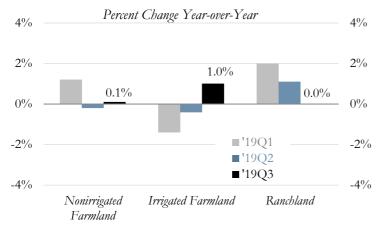
<sup>\*</sup>Values shown for the most recent survey available for each district. Source: Federal Reserve District Banks/Haver Analytics



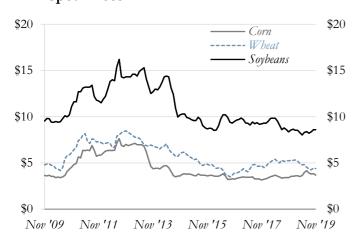
### SELECTED AGRICULTURAL INDICATORS



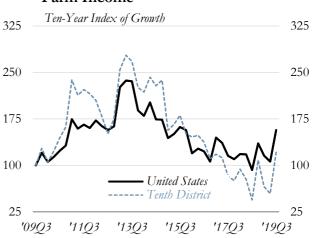
### **Tenth District Farmland Values**



### **Spot Prices**



### Farm Income

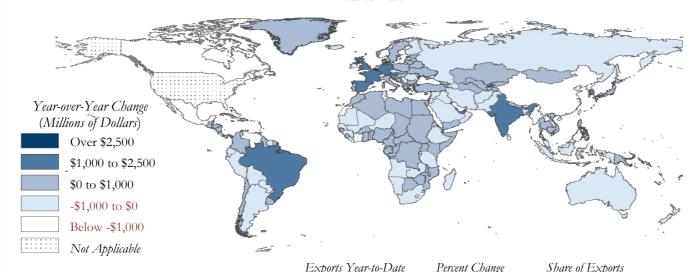


<sup>\*</sup>Calculated as the percentage of total respondents reporting increases less those reporting declines.

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

### 2019Q3 U.S. Exports

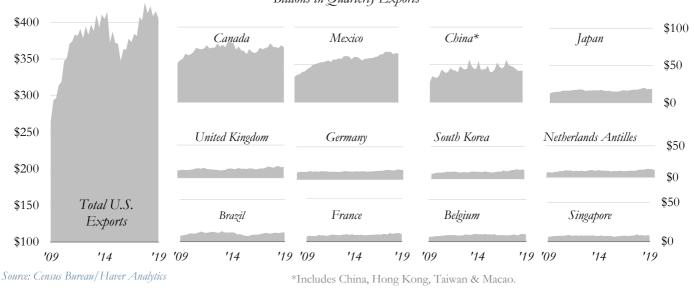
Year-to-Date



		(Billions of Dollars)	Year-to-Date	Year-to-Date
	United States	\$1,229,747.0	-1.0%	
Top Export Markets	Canada	221.2	-1.9	18.0%
	Mexico	194.1	-1.9	15.8%
	China*	125.8	-12.8	10.2%
	Japan	55.4	1.1	4.5%
	United Kingdom	51.2	3.8	4.2%
	Germany	45.3	4.1	3.7%
	South Korea	42.1	2.7	3.4%
	Netherlands Antilles	37.7	4.4	3.1%
	Brazil	31.6	8.0	2.6%
	France	27.9	3.8	2.3%

### 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: <a href="http://nww.bls.gov/web/empsit/ces\_cps\_trends.pdf">http://nww.bls.gov/web/empsit/ces\_cps\_trends.pdf</a> 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
  - Speeches

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