Tenth District Economic Databook

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



MARCH 25, 2019

FEDERAL RESERVE BANK of KANSAS CITY

SUMMARY OF CURRENT TENTH DISTRICT ECONOMIC CONDITIONS

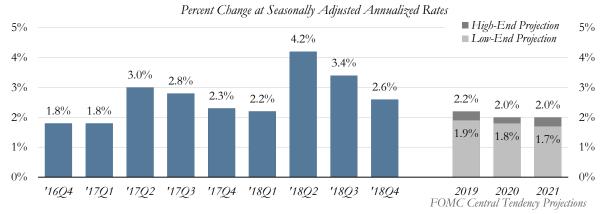
The unemployment rate was 3.5 percent across the Tenth District states in February, and total payroll employment grew 0.9 percent compared to the previous year. Employment growth was mixed across industries, with the strongest percentage gains in the mining and logging and transportation and warehousing sectors. Tenth District nominal personal income grew 1.9 percent in the third 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 February 2019, with a composite index of 50.4. Nonirrigated farmland values, as measured by the Federal Reserve Bank of Kansas City's Survey of Agricultural Credit Conditions, decreased 1.8 percent in the fourth 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.

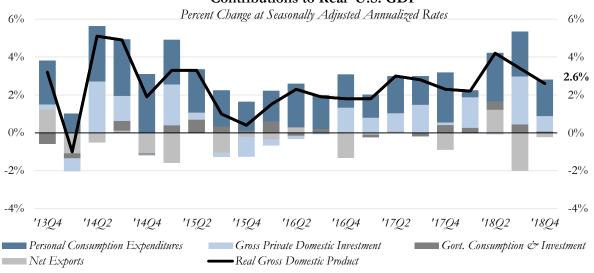


The Federal Reserve Bank of Kansas City's headquarters is located at 1 Memorial Drive in the heart of Kansas City, Missouri. The Federal Reserve Bank of Kansas City serves the Tenth Federal Reserve District, which includes Colorado, Kansas, western Missouri, Nebraska, northern New Mexico, Oklahoma and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

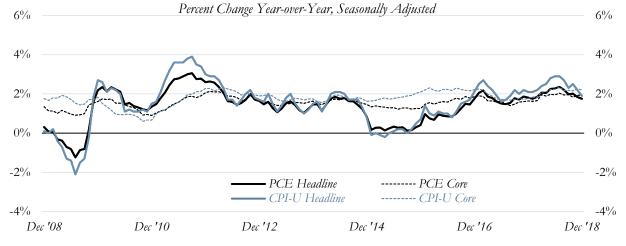


Tenth District Real Gross Domestic Product

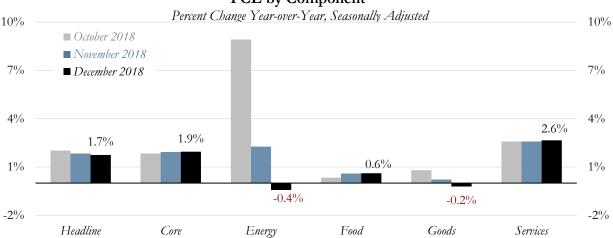


Source: Bureau of Economic Analysis, Federal Open Market Committee/Haver Analytics

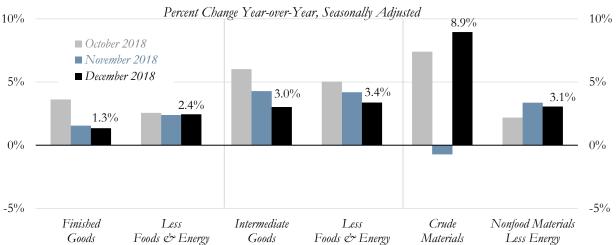
PCE & CPI-U Inflation



PCE by Component

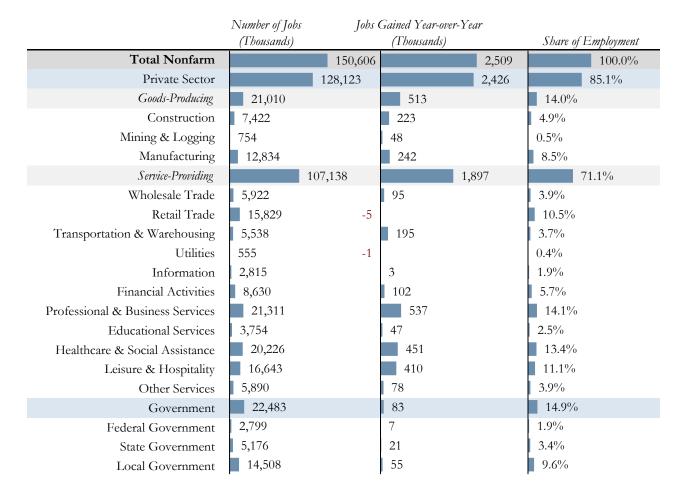


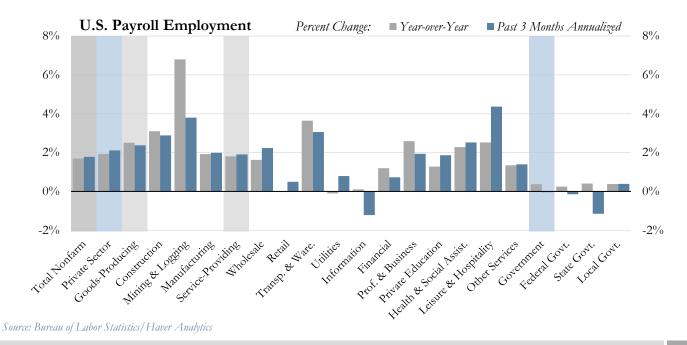
Producer Prices



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

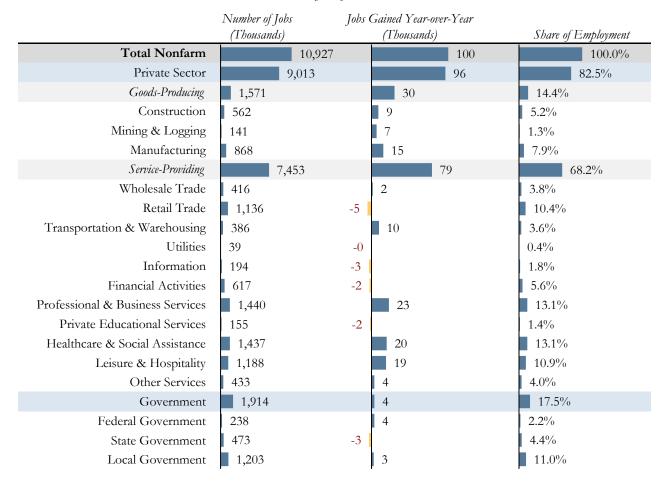
February 2019 U.S. Payroll Employment

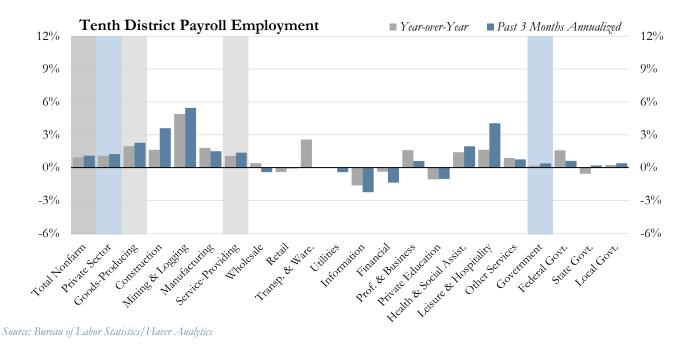




February 2019 Tenth District Payroll Employment

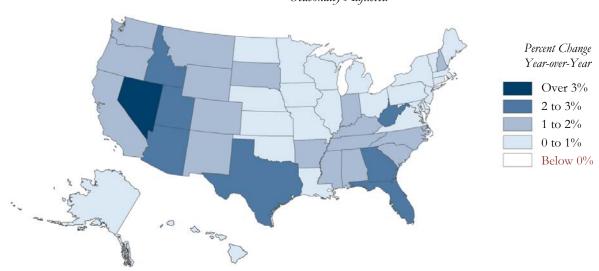
Seasonally Adjusted





February 2019 Total Nonfarm Employment

Seasonally Adjusted



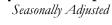
Percent Change Year-over-Year

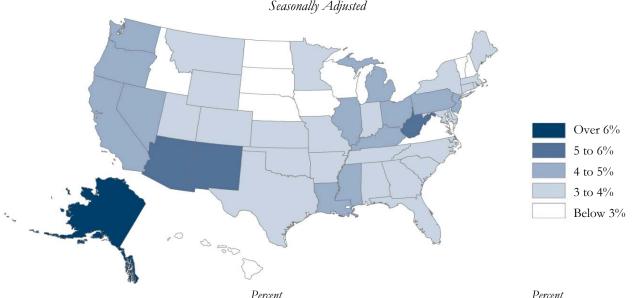
Percent Change Year-over-Year

Y ear-over-			x ear-over- Y ear	<u> </u>	
1.0%	New Mexico	25	1.7%	United States	
1.0	New York	26	0.9	Tenth District	
1.0	Illinois	27	3.5	Nevada	1
0.9	Michigan	28	2.9	Utah	2
0.9	Delaware	29	2.7	Arizona	3
0.9	Oklahoma	30	2.5	Idaho	4
0.8	New Jersey	31	2.4	West Virginia	5
0.8	Virginia	32	2.4	Florida	6
0.7	Pennsylvania	33	2.2	Texas	7
0.7	Maine	34	2.2	Georgia	8
0.6	Ohio	35	2.0	Washington	9
0.6	Kansas	36	2.0	South Dakota	10
0.6	Massachusetts	37	1.7	Tennessee	11
0.5	Alaska	38	1.7	Colorado	12
0.5	Missouri	39	1.6	Alabama	13
0.5	Hawaii	40	1.6	Wyoming	14
0.5	North Dakota	41	1.5	Oregon	15
0.5	Maryland	42	1.5	South Carolina	16
0.4	Vermont	43	1.4	North Carolina	17
0.4	Nebraska	44	1.4	Indiana	18
0.4	Wisconsin	45	1.3	California	19
0.4	Iowa	46	1.1	Kentucky	20
0.3	Louisiana	47	1.1	Arkansas	21
0.3	Connecticut	48	1.1	Mississippi	22
0.1	Minnesota	49	1.1	Montana	23
-0.3	Rhode Island	50	1.0	New Hampshire	24

Source: Bureau of Labor Statistics/Haver Analytics

February 2019 Unemployment Rates





		Percent Unemployed			Percent Unemployed
	United States	3.8%	26	Alabama	3.7%
	Tenth District	3.5	26	Maryland	3.7
1	Alaska	6.5	22	Arkansas	3.8
2	West Virginia	5.2	26	Colorado	3.7
3	New Mexico	5.1	31	Delaware	3.4
3	Arizona	5.1	29	Indiana	3.5
5	Louisiana	4.9	31	Maine	3.4
6	Mississippi	4.8	29	Florida	3.5
7	Ohio	4.6	31	Kansas	3.4
8	Washington	4.5	35	Tennessee	3.2
10	Nevada	4.3	35	South Carolina	3.2
10	Illinois	4.3	34	Oklahoma	3.3
9	Oregon	4.4	35	Missouri	3.2
12	California	4.2	39	Massachusetts	3.0
13	Kentucky	4.1	39	Utah	3.0
14	Pennsylvania	4.0	38	Minnesota	3.1
14	Michigan	4.0	41	Wisconsin	2.9
14	New Jersey	4.0	41	South Dakota	2.9
17	Rhode Island	3.9	41	Virginia	2.9
17	Wyoming	3.9	41	Idaho	2.9
17	New York	3.9	45	Nebraska	2.8
22	Connecticut	3.8	46	Hawaii	2.7
17	North Carolina	3.9	47	Vermont	2.4
17	Georgia	3.9	47	North Dakota	2.4
22	Texas	3.8	47	Iowa	2.4

47

New Hampshire

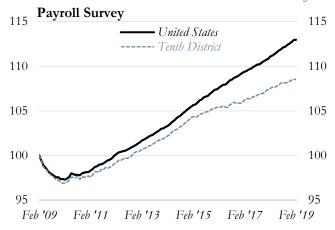
2.4

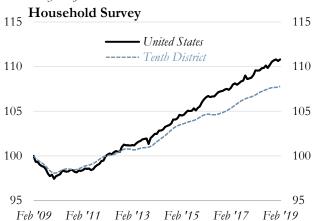
Montana

3.8

Total Nonfarm Employment

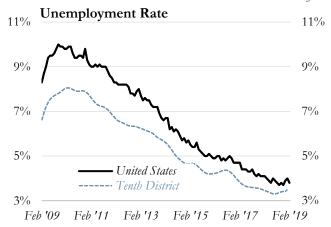
Ten-Year Index of Growth, Seasonally Adjusted

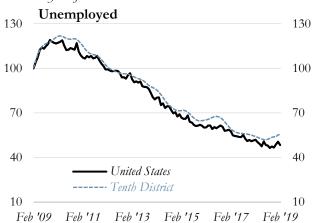


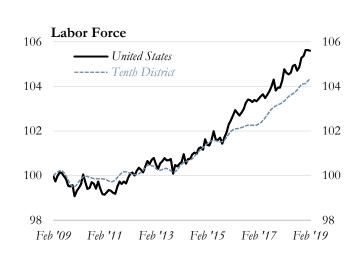


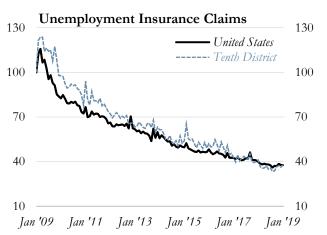
Labor Force Dynamics

Ten-Year Index of Growth, Seasonally Adjusted





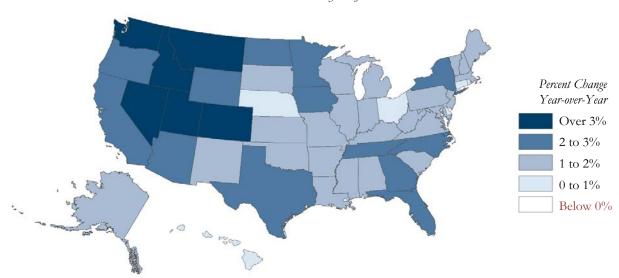




Source: Bureau of Labor Statistics & Department of Labor/Haver Analytics

2018Q3 Real Personal Income

Seasonally Adjusted



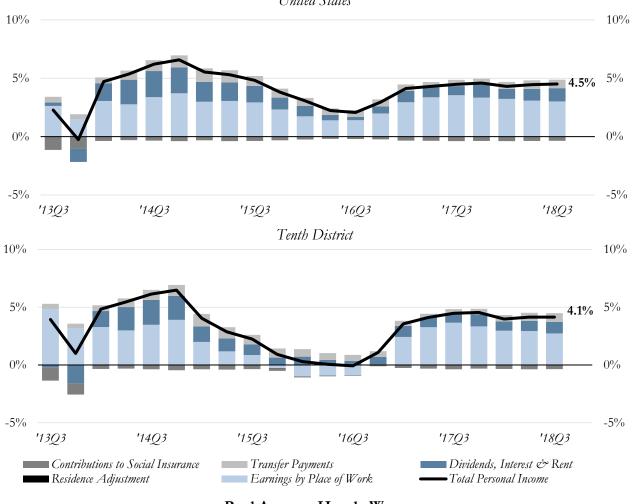
		Percent Change	Per Capita			Percent Change	Per Capita
		Year-over-Year	Personal Income			Year-over-Year	Personal Income
	United States	2.3%	\$53,683	25	South Carolina	1.7%	\$42,726
	Tenth District	1.9	45,980	26	Oklahoma	1.5	46,178
1	Washington	4.8	61,085	27	Louisiana	1.5	45,449
2	Utah	3.9	45,457	28	Michigan	1.4	47,810
3	Nevada	3.3	48,006	29	Alaska	1.4	59,647
4	Colorado	3.3	57,079	30	Virginia	1.4	56,950
5	Idaho	3.2	43,155	31	Maine	1.4	48,198
6	Montana	3.1	47,196	32	West Virginia	1.4	40,389
7	Oregon	2.9	49,948	33	New Mexico	1.3	41,313
8	Texas	2.9	49,245	34	Pennsylvania	1.3	55,412
9	California	2.9	62,572	35	New Jersey	1.3	66,956
10	North Dakota	2.8	54,735	36	Maryland	1.3	62,860
11	New York	2.7	67,859	37	Wisconsin	1.3	50,753
12	North Carolina	2.6	45,909	38	Indiana	1.2	46,589
13	Florida	2.5	49,258	39	Kentucky	1.2	41,889
14	Arizona	2.5	43,847	40	Mississippi	1.2	37,990
15	Minnesota	2.5	56,280	41	South Dakota	1.1	49,980
16	Wyoming	2.2	60,553	42	New Hampshire	1.1	61,856
17	Tennessee	2.1	47,134	43	Vermont	1.1	54,110
18	Iowa	2.1	48,743	44	Kansas	1.0	50,121
19	Georgia	2.0	45,624	45	Ohio	0.9	48,230
20	Illinois	1.9	56,850	46	Delaware	0.8	51,069
21	Massachusetts	1.9	70,410	47	Nebraska	0.8	52,000
22	Alabama	1.7	42,380	48	Rhode Island	0.8	54,736
23	Arkansas	1.7	42,373	49	Connecticut	0.5	74,076
24	Missouri	1.7	46,703	50	Hawaii	0.4	54,411

Source: Bureau of Economic Analysis/Haver Analytics

Nominal Personal Income

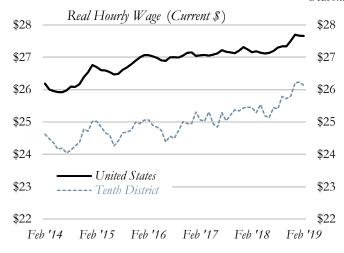
Contributions to Percent Change, Seasonally Adjusted

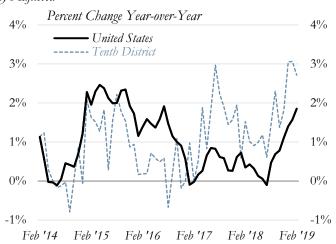




Real Average Hourly Wage

Seasonally Adjusted

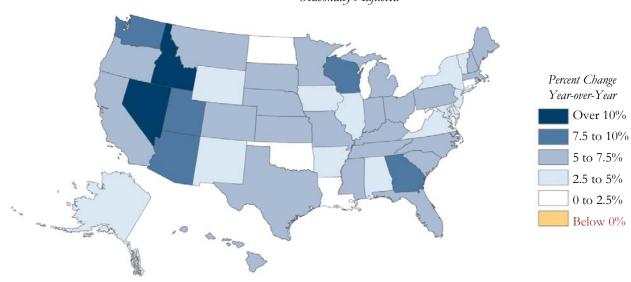




Source: Bureau of Economic Analysis & Bureau of Labor Statistics/Haver Analytics

2018Q4 FHFA Purchase-Only Home Price Index

Seasonally Adjusted



Percent Change Year-over-Year

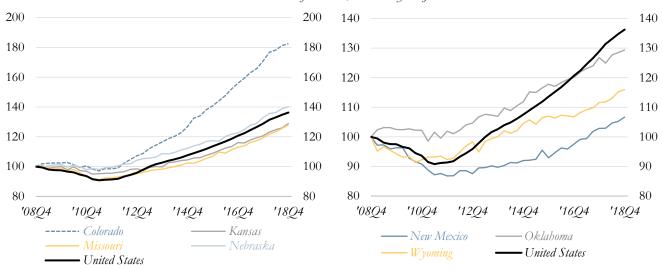
Percent Change Year-over-Year

		Year-over-Year				Year-over-Yea
	United States	5.7%	2.	5	Ohio	6.0%
			20	6	Kentucky	5.8
1	Idaho	11.9	2	7	Nebraska	5.4
2	Nevada	11.2	2	8	Hawaii	5.4
3	Utah	9.8	25	9	California	5.4
4	Georgia	8.2	30	0	Texas	5.1
5	Arizona	8.2	3	1	Rhode Island	5.0
6	Washington	7.9	32	2	Pennsylvania	5.0
7	Wisconsin	7.6	33	3	Arkansas	4.9
8	Montana	7.4	34	4	Alabama	4.6
9	Michigan	7.4	3.	5	Virginia	4.4
10	Missouri	7.3	30	6	Delaware	4.4
11	Mississippi	7.1	3	7	Iowa	4.4
12	Tennessee	6.9	38	8	New York	4.3
13	Kansas	6.9	39	9	Wyoming	3.9
14	Florida	6.8	40	0	New Mexico	3.7
15	New Hampshire	6.8	4	1	Alaska	3.4
16	Colorado	6.7	42	2	New Jersey	3.3
17	North Carolina	6.7	43	3	Illinois	2.8
18	South Carolina	6.7	4	4	Maryland	2.7
19	Maine	6.6	4.	5	Vermont	2.6
20	Minnesota	6.5	40	6	Oklahoma	2.0
21	Oregon	6.3	4	7	Louisiana	1.8
22	Massachusetts	6.3	48	8	West Virginia	1.6
23	Indiana	6.3	49	9	Connecticut	0.9
24	South Dakota	6.2	50	0	North Dakota	0.0

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

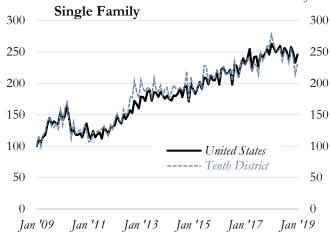
FHFA Purchase-Only Home Price Index

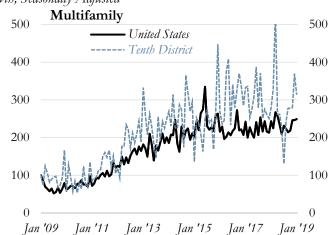
Ten-Year Index of Growth, Seasonally Adjusted

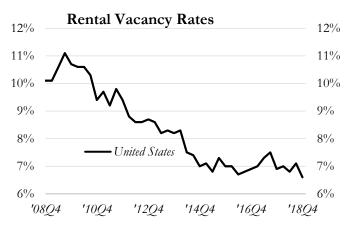


Housing Permits

Ten-Year Index of Growth, Seasonally Adjusted

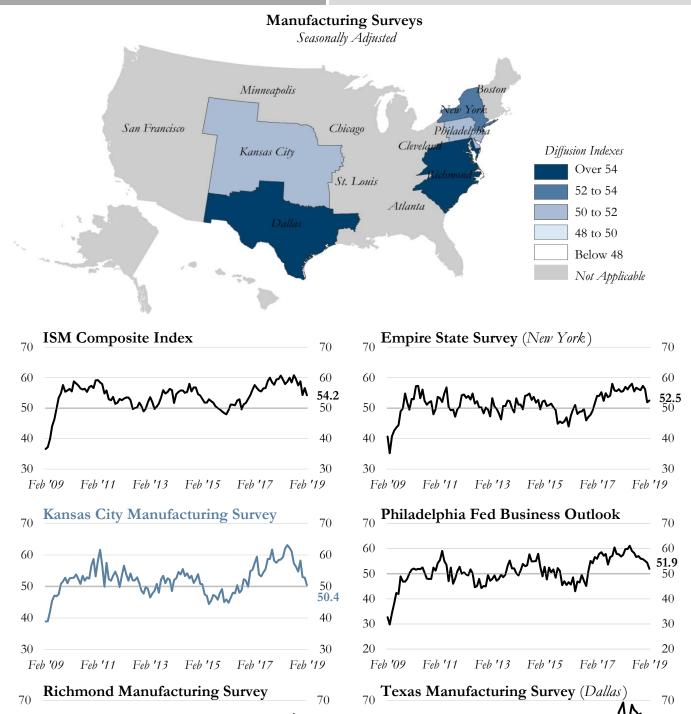






Note: Rental Vacancy Rates are not available for the Tenth District.

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



60

50

40

30

20

Feb '09

Feb '11

Feb '13

Feb '15

Feb '17

40

30

20

Feb '19

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

Feb '17

Feb '15

Feb '11

Feb '13

60

50 40

30

20

60 **56.6**

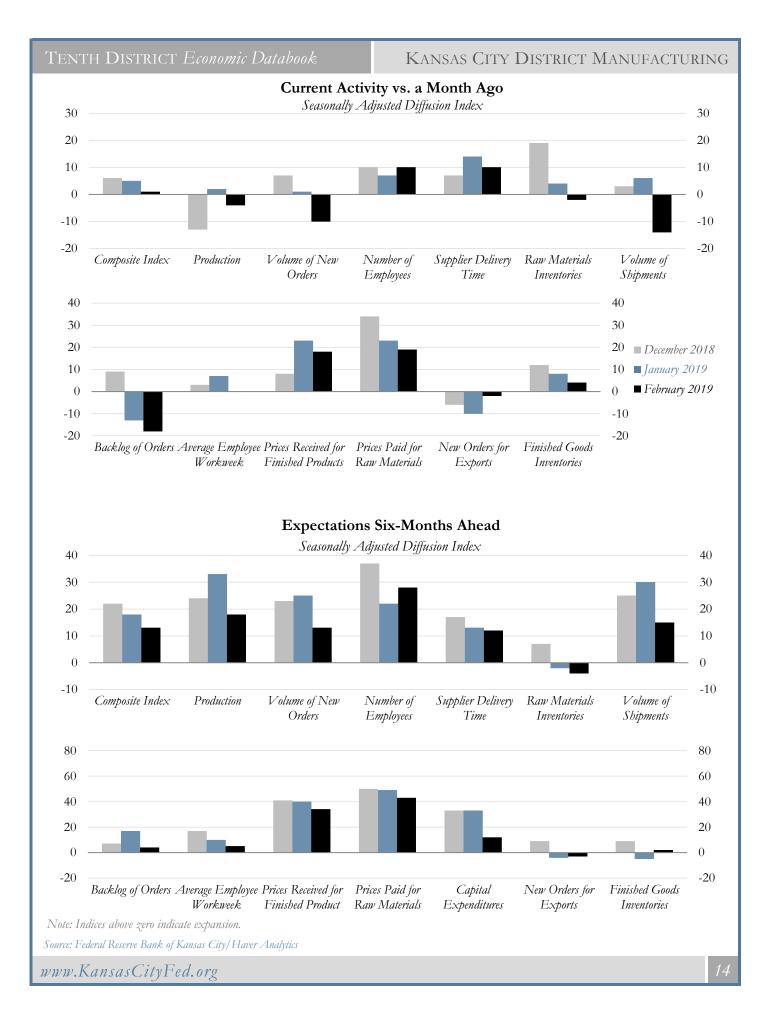
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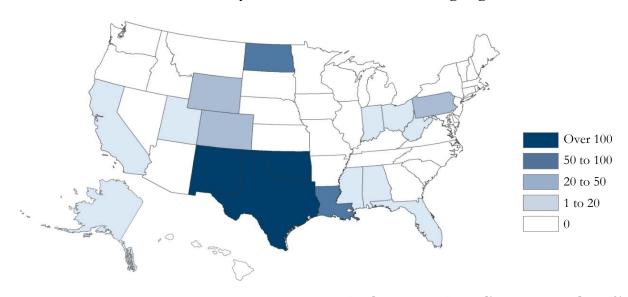
30

20

Feb '19

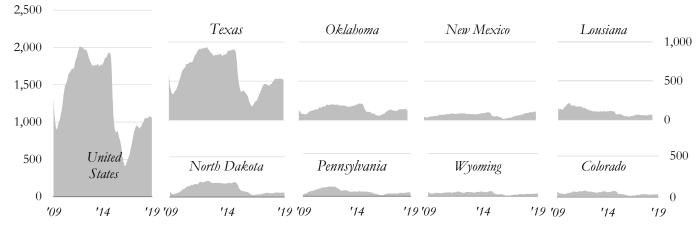


February 2019 Active Oil & Gas Drilling Rig Counts



		Average Rig Counts During the Month	Percent Change Year-over-Year	Current Share of Activity
	United States	1,048	6.0%	
	Tenth District	300	11.5	28.6%
Top Producing States	Texas	511	7.4	48.8
	Oklahoma	120	0.0	11.5
	New Mexico	110	27.9	10.5
	Lousiana	64	6.7	6.1
	North Dakota	58	20.8	5.5
	Pennsylvania	46	21.1	4.4
	Wyoming	35	20.7	3.3
	Colorado	35	6.1	3.3
	West Virginia	18	0.0	1.7
	Ohio	18	-18.2	1.7

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



Source: Baker Hughes/Haver Analytics

Crude Oil

\$125

\$100

\$50

\$25

Mar '09

Price per Barrel

Spot Prices

West Texas Intermediate

U.S. Supply/Demand Dynamics

Seasonally Adjusted

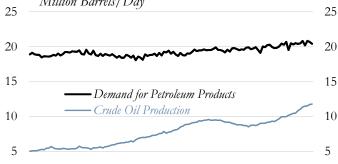


\$125

\$100

\$75

\$25



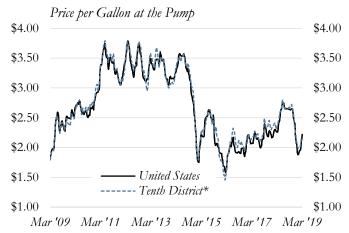
Dec '14

Dec '16

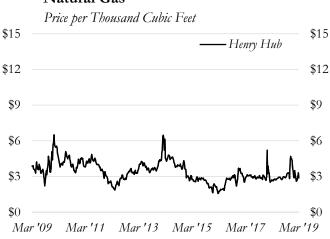
Dec '12

Gasoline

Mar'11 Mar'13 Mar'15 Mar'17 Mar'19



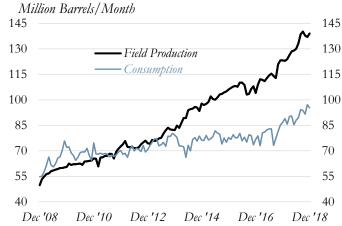
Natural Gas



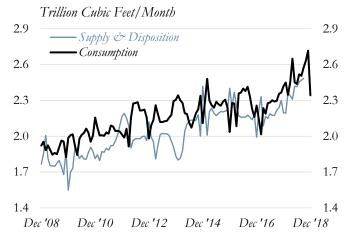
Natural Gas Liquids

Dec '10

Dec '08



Natural Gas



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

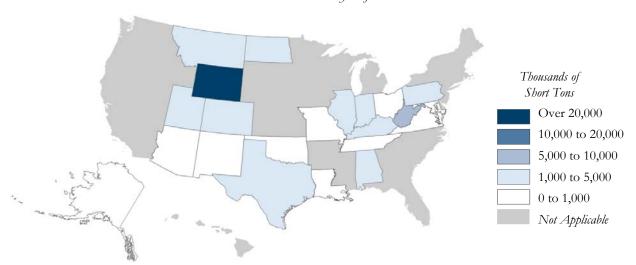
0

Dec '18

^{*}Average price per gallon for major Tenth District metro areas.

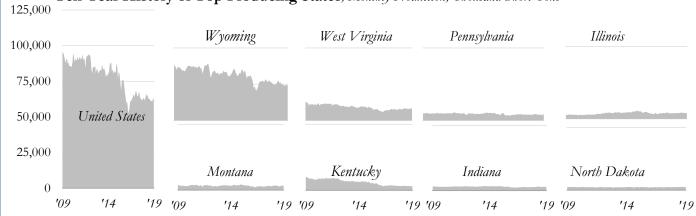
January 2019 Coal Production

Seasonally Adjusted



		Monthly Production (Thousand Short Tons)	Percent Change Year-over-Year	Current Share of Production
	United States	61,973.0	1.0%	
	Tenth District*	26,089.4	-3.2	42.1%
Top Producing States	Wyoming	24,204.2	-3.4	39.1
	West Virginia	8,038.8	9.7	13.0
	Pennsylvania	4,193.0	7.9	6.8
	Illinois	3,891.7	0.6	6.3
	Montana	3,539.8	10.9	5.7
	Kentucky	3,149.7	-2.7	5.1
	Indiana	2,830.7	7.9	4.6
	North Dakota	2,447.9	3.9	3.9
	Texas	2,032.8	-4.6	3.3
	Colorado	1.197.9	6.2	1.9

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



*Includes all Tenth District states but Nebraska.

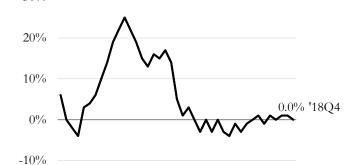
Source: U.S. Department of Energy, Energy Information Administration/Haver Analytics

Farm Land Values*



Farmland Values by Federal Reserve District

Percent Change Year-over-Year



Chicago: Value of "Good" Farmland



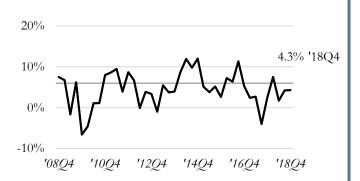
'12Q4

'10Q4



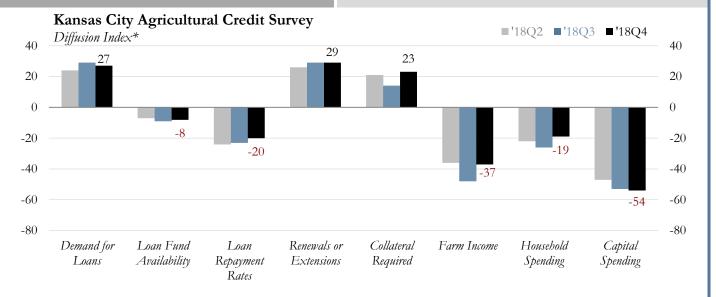
^{*}Values shown for the most recent survey available for each district. Source: Federal Reserve District Banks/Haver Analytics

30% **Dallas:** Dryland Values

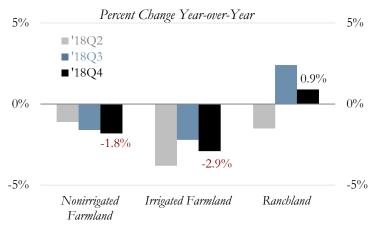


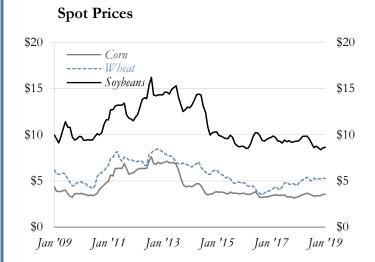


SELECTED AGRICULTURAL INDICATORS

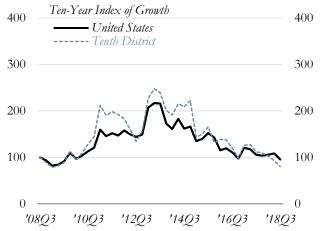


Tenth District Farmland Values





Farm Income

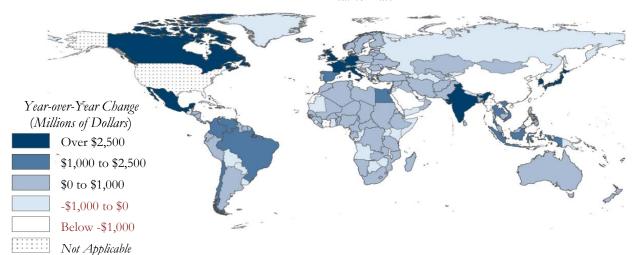


^{*}Calculated as the percentage of total respondents reporting increases less those reporting declines.

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

2018Q4 U.S. Exports

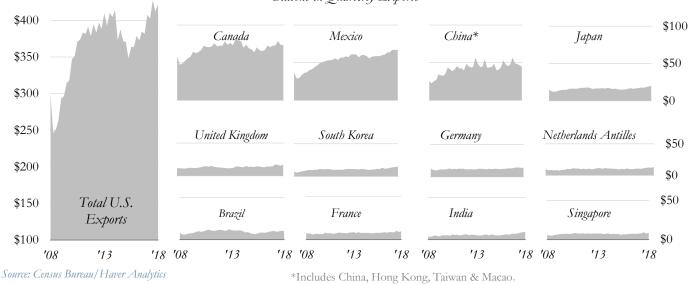
Year-to-Date



		Exports Year-to-Date (Billions of Dollars)	Percent Change Year-to-Date	Share of Exports Year-to-Date
	United States	\$1,664,056.0	7.6%	
Top Export Markets	Canada	298.7	5.8	18.0%
	Mexico	265.0	9.1	15.9%
	China*	188.6	-4.1	11.3%
	Japan	75.0	10.7	4.5%
	United Kingdom	66.2	17.6	4.0%
	South Korea	56.3	16.7	3.4%
	Germany	57.7	7.8	3.5%
	Netherlands Antilles	49.4	17.0	3.0%
	Brazil	39.5	6.5	2.4%
	France	36.3	8.2	2.2%

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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