## Tenth District Economic Databook

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



MAY 1, 2020

FEDERAL RESERVE BANK of KANSAS CITY

#### SUMMARY OF CURRENT TENTH DISTRICT ECONOMIC CONDITIONS

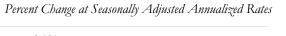
The unemployment rate in the Tenth District at the end of the first quarter of 2020 was 4.2 percent. However, this figure does not reflect job losses that have resulted from the implications of COVID-19, which accelerated sharply through quarter end. In the final two weeks of the quarter 530,000 individuals filed new claims for unemployment insurance across the seven states in the District. Although overall GDP growth for the District at the end of 2019 was 2.4 percent, indices of economic activity based on surveys of manufacturing firms in the District reached historic lows during the first quarter of 2020.

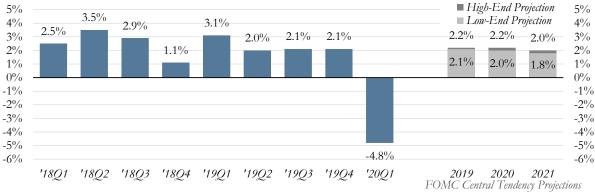
This databook provides current economic indicators to help monitor trends and allow comparison of past information. These indicators include: gross domestic product (GDP); inflation; employment; employment by industry; state unemployment; personal income; home prices; housing indicators; manufacturing activity; oil, gas and coal production; agriculture; and exports. These indicators can be found on the following pages.



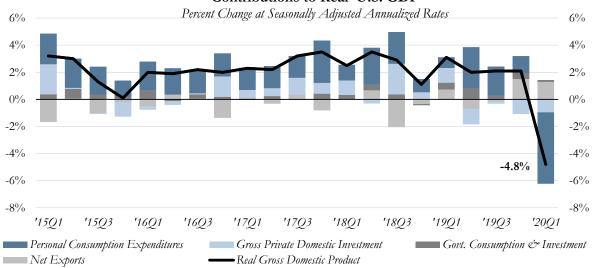
The Federal Reserve Bank of Kansas City's headquarters is located at 1 Memorial Drive in the heart of Kansas City, Missouri. The Federal Reserve Bank of Kansas City serves the Tenth Federal Reserve District, which includes Colorado, Kansas, western Missouri, Nebraska, northern New Mexico, Oklahoma and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

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

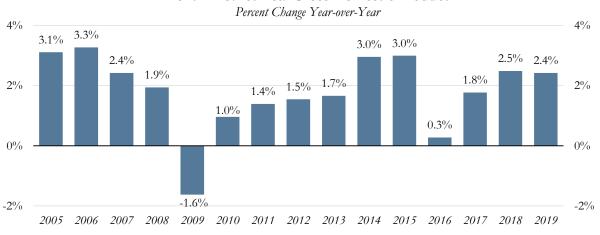




#### Contributions to Real U.S. GDP



#### **Tenth District Real Gross Domestic Product**



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

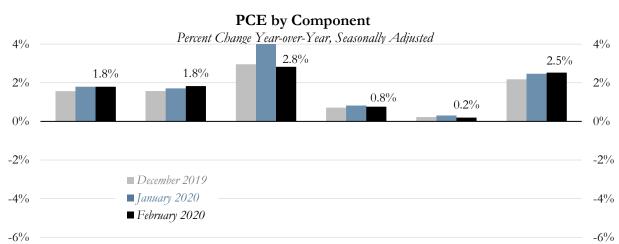
0%

0%

# Percent Change Year-over-Year, Seasonally Adjusted 2% 2%

**PCE & CPI-U Inflation** 



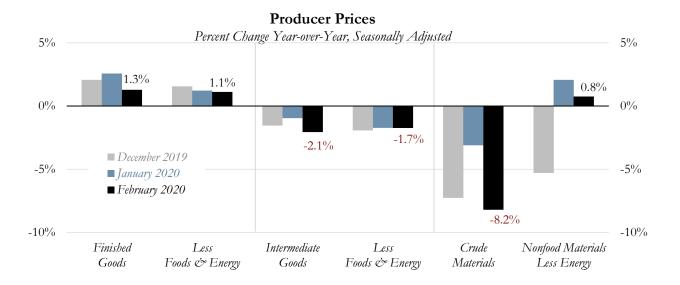


Food

Goods

Services

Energy

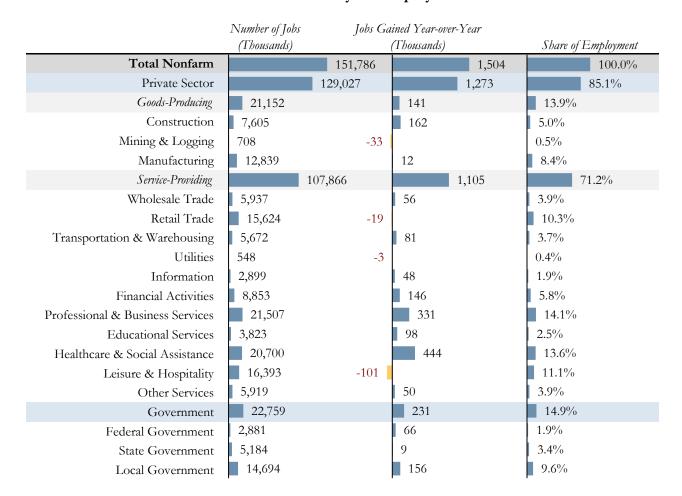


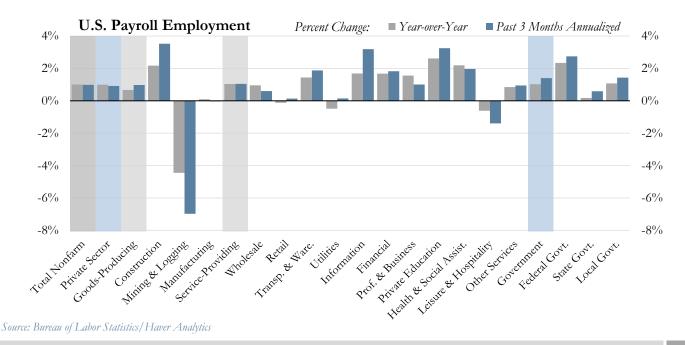
Source: Bureau of Economic Analysis & Bureau of Labor Statistics/Haver Analytics

Headline

Core

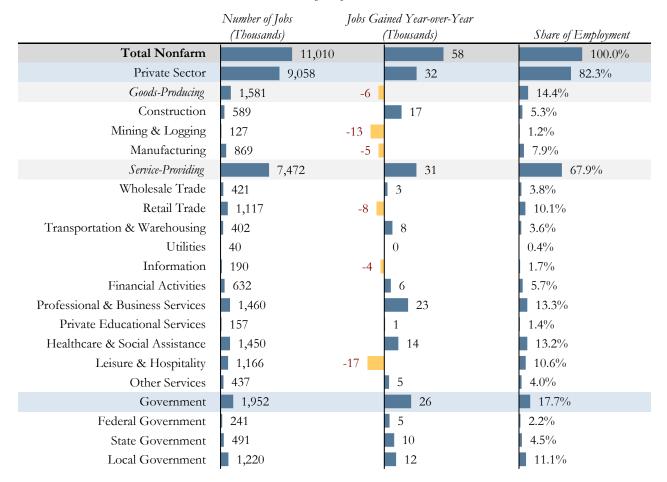
#### March 2020 U.S. Payroll Employment

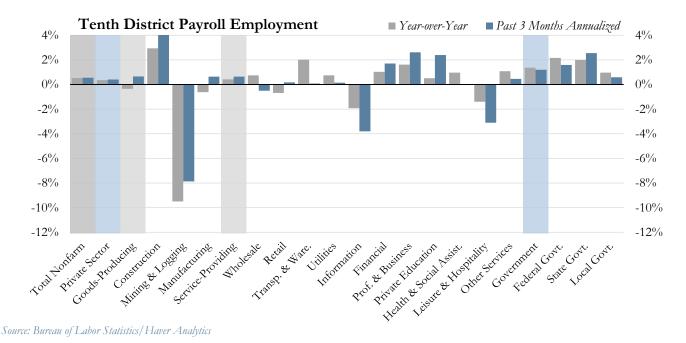


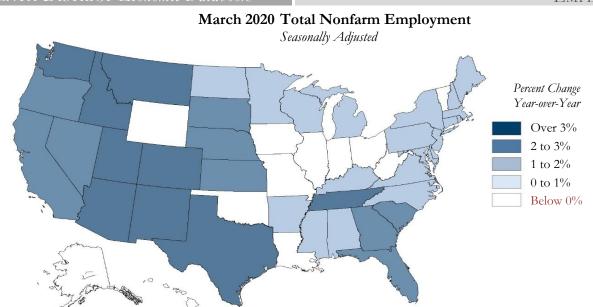


#### March 2020 Tenth District Payroll Employment

Seasonally Adjusted







Percent Change
Year-over-Year

Percent Change Year-over-Year

Year-over-Yea			Year-over-Year	}	
0.3%	Connecticut	25	1.0%	United States	
0.2	New York	26	0.5	Tenth District	
0.2	Pennsylvania	27	2.6	Utah	1
0.2	Maryland	28	2.4	Idaho	2
0.2	Massachusetts	29	2.2	Arizona	3
0.2	Wisconsin	30	2.0	Texas	4
0.1	New Hampshire	31	1.9	Washington	5
0.1	Michigan	32	1.9	Montana	6
0.1	Kentucky	33	1.7	Tennessee	7
0.0	Rhode Island	34	1.7	New Mexico	8
-0.1	Mississippi	35	1.6	Colorado	9
-0.2	Hawaii	36	1.4	Florida	10
-0.2	Maine	37	1.3	South Carolina	11
-0.3	Arkansas	38	1.1	South Dakota	12
-0.3	Minnesota	39	1.1	Nebraska	13
-0.4	Missouri	40	0.9	Georgia	14
-0.4	Indiana	41	0.9	Oregon	15
-0.4	Iowa	42	0.9	California	16
-0.5	Oklahoma	43	0.8	Nevada	17
-0.5	Illinois	44	0.7	Kansas	18
-0.6	Ohio	45	0.7	Delaware	19
-0.6	Wyoming	46	0.7	North Carolina	20
-0.6	Alaska	47	0.6	Alabama	21
-0.9	Louisiana	48	0.6	Virginia	22
-1.7	West Virginia	49	0.5	New Jersey	23
-2.4	Vermont	50	0.3	North Dakota	24

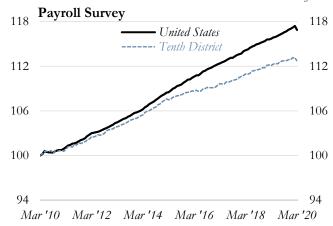
Source: Bureau of Labor Statistics/Haver Analytics

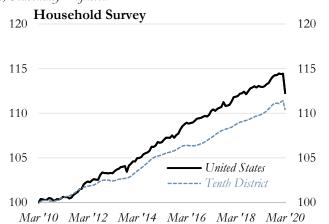


		Unemployed			Unemployed
	United States	4.4%	25	Michigan	4.1%
	Tenth District	4.2	26	New Jersey	3.8
1	Louisiana	6.9	27	Wyoming	3.7
2	Nevada	6.3	27	Connecticut	3.7
3	West Virginia	6.1	27	Iowa	3.7
4	Pennsylvania	6.0	30	Utah	3.6
5	New Mexico	5.9	31	Montana	3.5
6	Kentucky	5.8	31	Tennessee	3.5
7	Alaska	5.6	31	Alabama	3.5
8	Arizona	5.5	34	Wisconsin	3.4
8	Ohio	5.5	35	Oregon	3.3
10	Mississippi	5.3	35	Maryland	3.3
10	California	5.3	35	South Dakota	3.3
12	Washington	5.1	35	Virginia	3.3
12	Delaware	5.1	39	Indiana	3.2
14	Arkansas	4.8	39	Maine	3.2
15	Texas	4.7	39	Vermont	3.2
16	Illinois	4.6	42	Oklahoma	3.1
16	Rhode Island	4.6	42	Minnesota	3.1
18	New York	4.5	42	Kansas	3.1
18	Missouri	4.5	45	Massachusetts	2.9
18	Colorado	4.5	46	Idaho	2.6
21	North Carolina	4.4	46	Hawaii	2.6
22	Florida	4.3	46	New Hampshire	2.6
23	Georgia	4.2	46	South Carolina	2.6
23	Nebraska	4.2	50	North Dakota	2.2

#### **Total Nonfarm Employment**

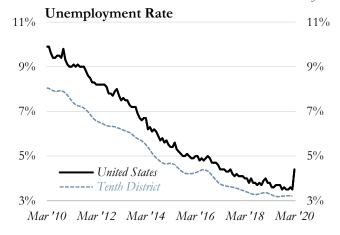
Ten-Year Index of Growth, Seasonally Adjusted

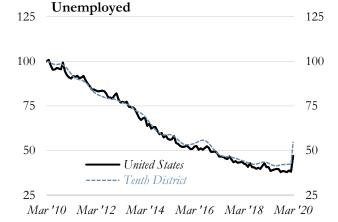


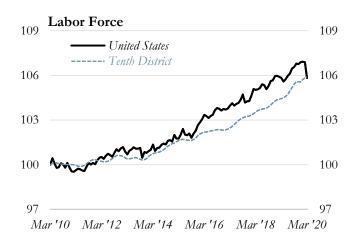


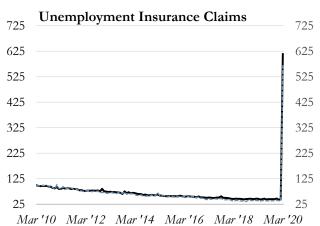
#### Labor Force Dynamics

Ten-Year Index of Growth, Seasonally Adjusted

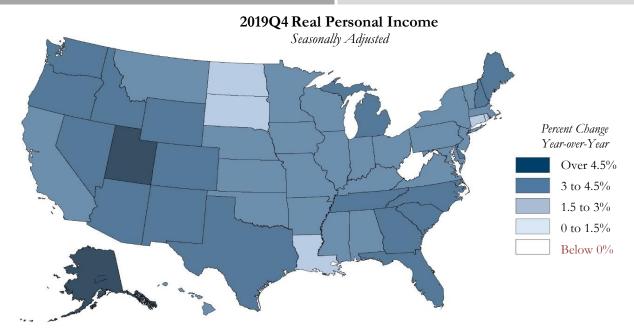








Source: Bureau of Labor Statistics & Department of Labor/Haver Analytics



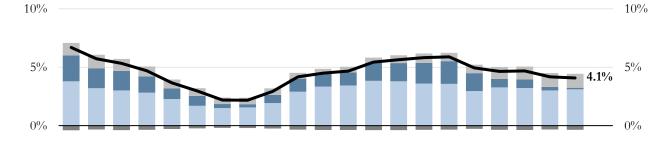
		Percent Change	Per Capita			Percent Change	Per Capita
		Year-over-Year	Personal Income			Year-over-Year	Personal Income
	United States	2.6%	\$57,205	25	Minnesota	2.5%	\$60,436
	Tenth District	2.9	48,545	26	New York	2.5	72,080
1	Utah	4.6	48,961	27	Kentucky	2.5	44,591
2	Arizona	4.3	46,691	28	Massachusetts	2.4	75,453
3	New Mexico	4.2	44,683	29	Pennsylvania	2.4	59,341
4	Washington	4.2	65,634	30	Montana	2.4	49,765
5	Idaho	4.0	46,031	31	Kansas	2.3	54,216
6	Colorado	4.0	61,854	32	Vermont	2.3	57,184
7	Texas	3.9	53,067	33	Maryland	2.2	66,347
8	Tennessee	3.4	49,272	34	Indiana	2.1	49,128
9	Maine	3.3	51,477	35	Wisconsin	2.0	54,018
10	South Carolina	3.1	45,671	36	Mississippi	2.0	39,840
11	Georgia	3.0	48,642	37	New Jersey	2.0	71,540
12	Delaware	2.9	54,758	38	Ohio	2.0	51,082
13	Nevada	2.8	51,296	39	Arkansas	1.9	45,345
14	Florida	2.8	52,329	40	Alaska	1.9	62,796
15	New Hampshire	2.8	64,197	41	Oklahoma	1.8	48,196
16	Wyoming	2.8	63,899	42	Illinois	1.7	59,725
17	Michigan	2.8	51,067	43	Hawaii	1.7	58,102
18	Oregon	2.7	53,402	44	Nebraska	1.7	55,712
19	North Carolina	2.7	48,207	45	North Dakota	1.3	58,246
20	Iowa	2.7	53,489	46	Louisiana	1.2	48,401
21	Missouri	2.6	50,198	47	Rhode Island	1.0	56,766
22	Virginia	2.6	60,778	48	Connecticut	1.0	79,403
23	Alabama	2.6	44,350	49	South Dakota	0.9	54,842
24	California	2.5	67,256	50	West Virginia	0.2	42,676

Source: Bureau of Economic Analysis/Haver Analytics

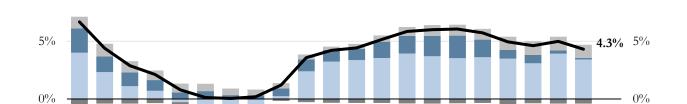
#### Nominal Personal Income

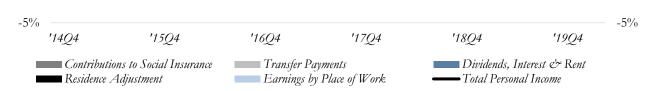
Contributions to Percent Change, Seasonally Adjusted





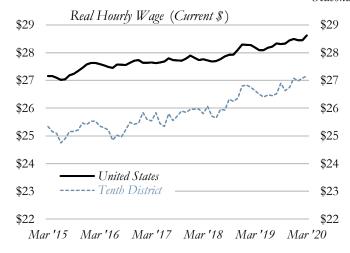


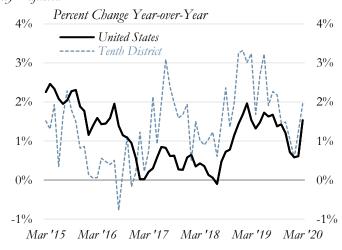




#### Real Average Hourly Wage

#### Seasonally Adjusted

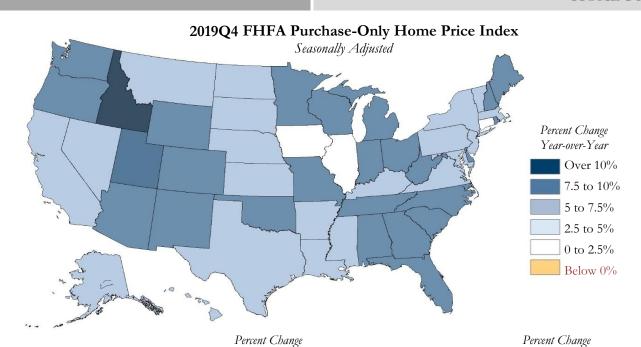




Source: Bureau of Economic Analysis & Bureau of Labor Statistics/Haver Analytics

10%

10%



		Year-over-Year			Year-over-Year
	United States	5.1%	25	Minnesota	5.2%
			26	Michigan	5.2
1	Idaho	12.0	27	Hawaii	4.9
2	Utah	8.1	28	Pennsylvania	4.9
3	Arizona	7.0	29	Montana	4.8
4	Washington	7.0	30	South Dakota	4.8
5	Indiana	7.0	31	Virginia	4.8
6	Delaware	6.7	32	New Jersey	4.7
7	West Virginia	6.7	33	Kansas	4.6
8	Tennessee	6.6	34	Kentucky	4.6
9	Alabama	6.6	35	Texas	4.5
10	North Carolina	6.4	36	California	4.2
11	Colorado	6.4	37	New York	4.1
12	Georgia	6.4	38	Nebraska	3.9
13	Wisconsin	6.1	39	Massachusetts	3.9
14	Florida	6.1	40	Vermont	3.9
15	Rhode Island	5.9	41	Maryland	3.8
16	Ohio	5.8	42	Nevada	3.7
17	Wyoming	5.8	43	Arkansas	3.7
18	South Carolina	5.7	44	Alaska	3.3
19	Missouri	5.7	45	North Dakota	3.2
20	New Hampshire	5.4	46	Louisiana	3.0
21	New Mexico	5.3	47	Mississippi	2.7
22	Oklahoma	5.3	48	Iowa	2.1
	O III di II di	3.3	10	10wa	

49

50

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

Maine

Oregon

5.2

5.2

23

24

Illinois

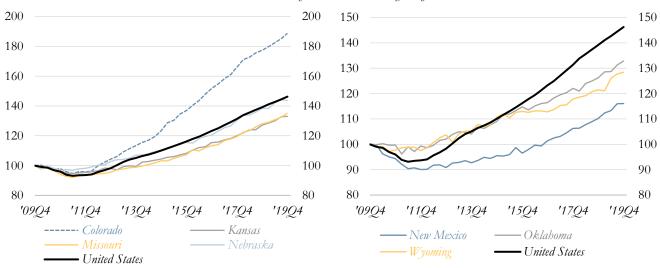
Connecticut

2.0

1.9

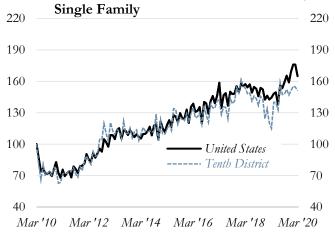
#### FHFA Purchase-Only Home Price Index

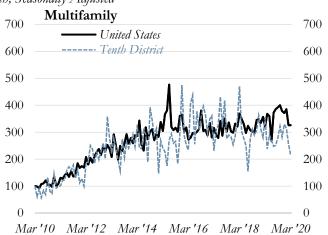
Ten-Year Index of Growth, Seasonally Adjusted

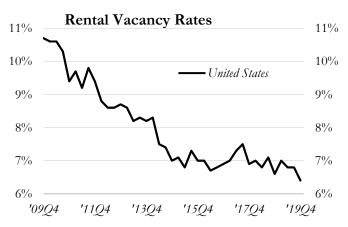


#### **Housing Permits**

Ten-Year Index of Growth, Seasonally Adjusted

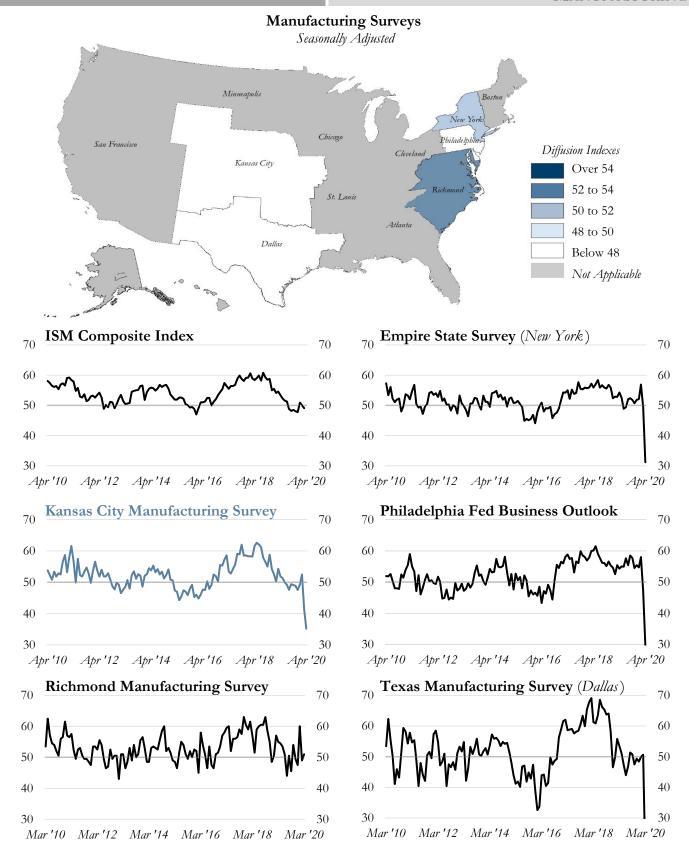






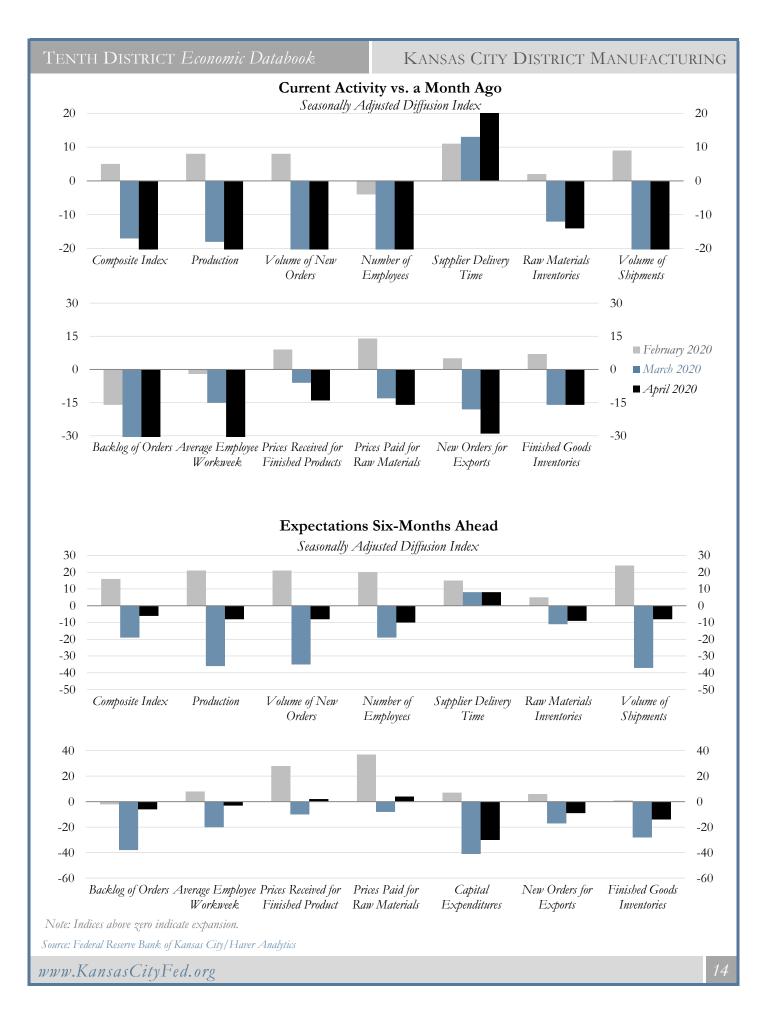
Note: Rental Vacancy Rates are not available for the Tenth District.

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

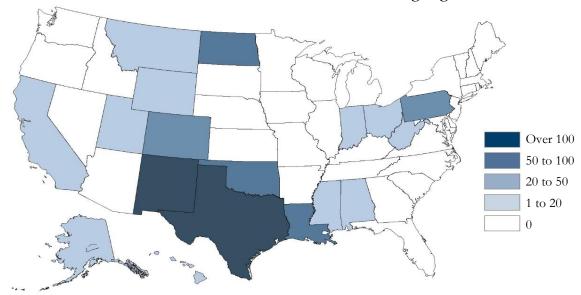


Note: Indices are defined to be between 0 and 100; above 50 indicates growth and below 50 indicates contraction.

Source: Institute for Supply Management (ISM) & Federal Reserve District Banks/Haver Analytics

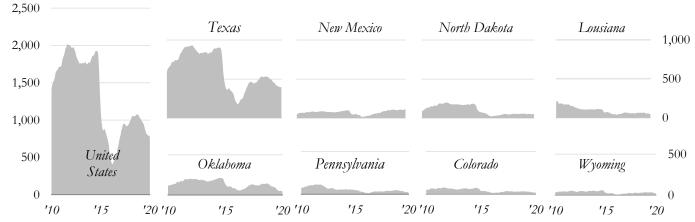


#### March 2020 Active Oil & Gas Drilling Rig Counts



		Average Rig Counts  During the Month	Percent Change Year-over-Year	Current Share of Activity
	United States	771	-23.9%	
	Tenth District	199	-30.4	25.8%
Top Producing States	Texas	394	-21.0	51.1
	New Mexico	114	8.6	14.8
	North Dakota	50	-10.7	6.5
	Lousiana	48	-26.2	6.2
	Oklahoma	44	-60.7	5.7
	Pennsylvania	24	-48.9	3.1
	Colorado	21	-36.4	2.7
	Wyoming	20	-44.4	2.6
	West Virginia	15	-21.1	1.9
	California	12	-20.0	1.6

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



Source: Baker Hughes/Haver Analytics



**Spot Prices** 

- West Texas Intermediate

\$85

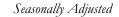
\$60

\$35

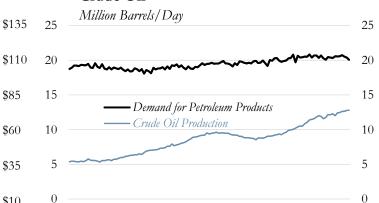
\$10

#### SELECTED ENERGY INDICATORS









Ian '16

Ian '18

Jan '20

Ian '14

#### Gasoline

Crude Oil

\$135

\$110

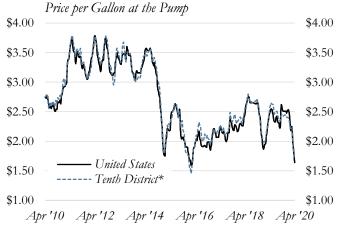
\$85

\$60

\$35

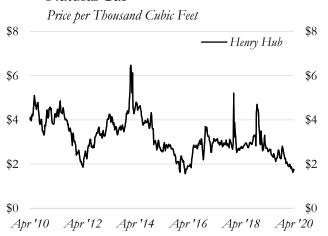
\$10

Price per Barrel



Apr'10 Apr'12 Apr'14 Apr'16 Apr'18

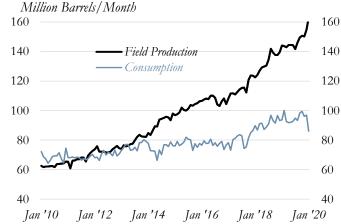
#### **Natural Gas**



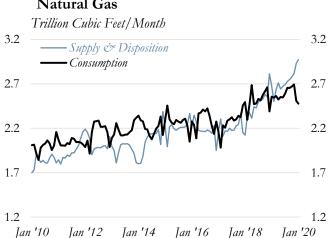
#### Natural Gas Liquids

Jan '12

Jan '10



#### Natural Gas



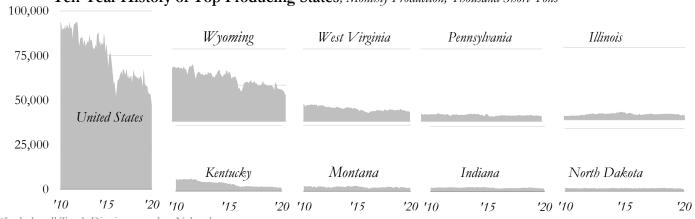
Source: Wall Street Journal, Oil & Gas Journal & Department of Energy, Energy Information Administration/Haver Analytics

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



		(Thousand Short Tons)	Year-over-Year	of Production
	United States	47,292.0	-17.4%	
	Tenth District*	20,542.0	-15.4	43.4%
Top Producing States	Wyoming	18,297.5	-15.9	38.7
	West Virginia	6,439.7	-14.7	13.6
	Pennsylvania	3,551.2	-11.6	7.5
	Illinois	3,050.1	-23.3	6.4
	Kentucky	2,435.5	-21.9	5.1
	Montana	2,390.1	-4.7	5.1
	Indiana	2,118.2	-22.4	4.5
	North Dakota	1,737.3	-23.5	3.7
	Texas	1,578.6	-27.2	3.3
	New Mexico	1,400.1	5.2	3.0

#### 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

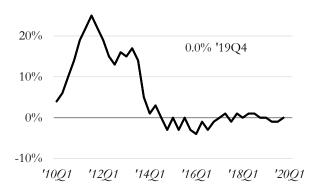




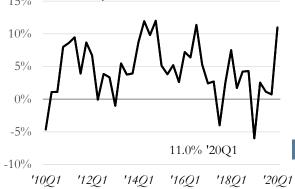
#### Farmland Values by Federal Reserve District

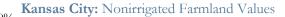
Percent Change Year-over-Year

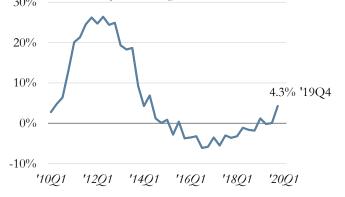
Chicago: Value of "Good" Farmland



**Dallas:** Dryland Values



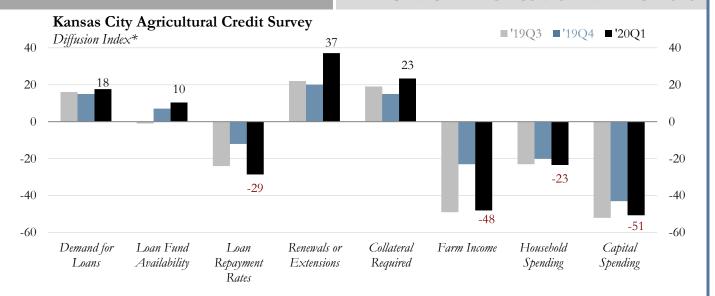




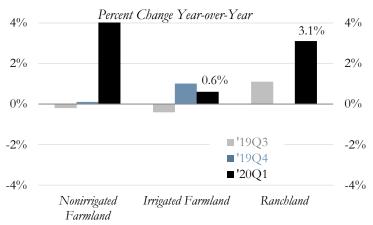
<sup>\*</sup>Values shown for the most recent survey available for each district. Source: Federal Reserve District Banks/Haver Analytics

#### TENTH DISTRICT Economic Databook

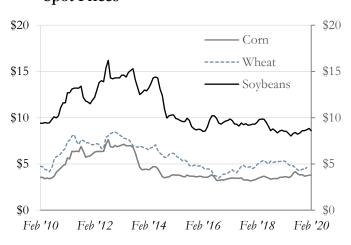
#### SELECTED AGRICULTURAL INDICATORS



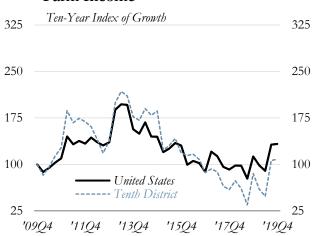
#### Tenth District Farmland Values



#### **Spot Prices**



#### Farm Income

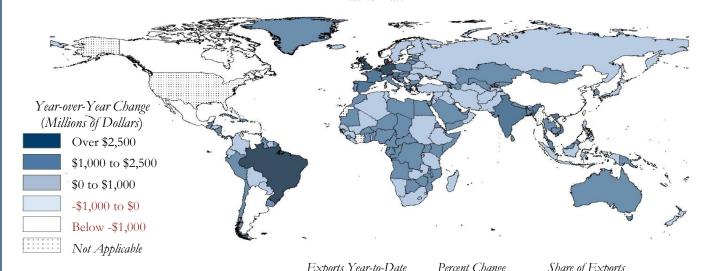


<sup>\*</sup>Calculated as the percentage of total respondents reporting increases less those reporting declines.

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

#### 2019Q4 U.S. Exports

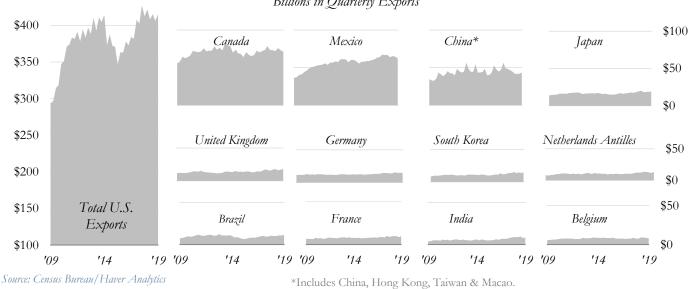
Year-to-Date



		(Billions of Dollars)	Year-to-Date	Year-to-Date
	United States	\$1,645,174.0	-1.1%	
Top Export Markets	Canada	292.4	-2.1	17.8%
	Mexico	256.4	-3.3	15.6%
	China*	169.2	-10.3	10.3%
	Japan	74.7	-0.4	4.5%
	United Kingdom	69.2	4.4	4.2%
	Germany	60.3	4.6	3.7%
	South Korea	56.9	1.0	3.5%
	Netherlands Antilles	51.2	3.7	3.1%
	Brazil	43.1	9.1	2.6%
	France	37.8	4.0	2.3%

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

Billions in Quarterly Exports



www.KansasCityFed.org

\$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://www.bls.gov/web/empsit/ces\_cps\_trends.pdf">http://www.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
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- Educational Tools
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- Speeches

