THE Colorado ECONOMIC DATABOOK

*A summary of regional economic indicators
for the state of Colorado*

SUMMARY OF CURRENT COLORADO ECONOMIC CONDITIONS

In Colorado, the unemployment rate was 3.2 percent in October, and total payroll employment grew 2.7 percent compared to the previous year. Employment growth was broad-based across industries, with the strongest gains in the mining and logging and state government sectors. Colorado nominal personal income grew 5.7 percent in the second quarter of 2018 compared to the previous year, with workplace earnings up 5.9 percent. Home prices increased 9.6 percent in the second quarter of 2018 compared to a year ago, while single-family and multifamily permits recorded a 22.0 and -13.8 percent change, respectively, year-to-date through September 2018. In August 2018, crude oil production was up 26.1 percent over last year, while rig counts were slightly below year-ago levels. Colorado exports were 6.8 percent higher in the third quarter of 2018 over the same period in 2017.

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

Alison Felix is Vice President and Denver Branch Executive. In this role, Felix is the Federal Reserve Bank of Kansas City's regional economist and lead officer in Colorado, Wyoming and northern New Mexico. She is responsible for briefing the Kansas City Fed's President on the economy in these states and the Tenth District.
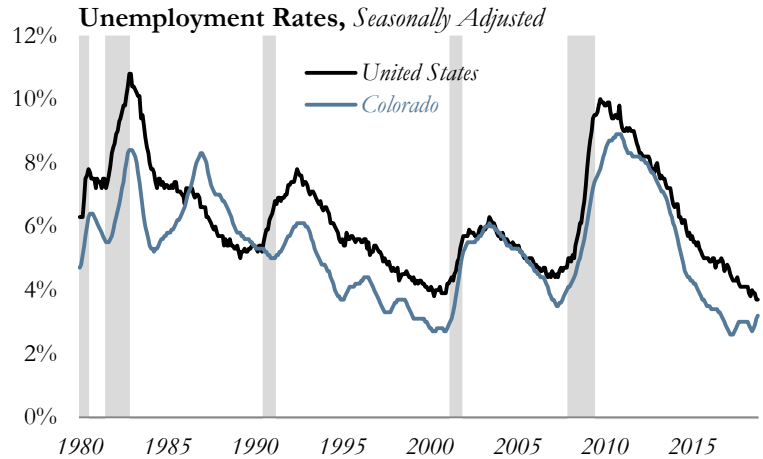
Unemployment Rates
Seasonally Adjusted

October 2018 Unemployment Rates
Seasonally Adjusted
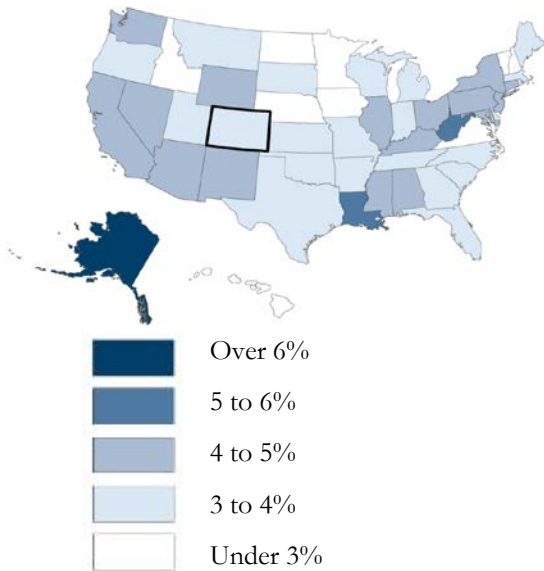
| Over 6% |
| 5 to 6% |
| 4 to 5% |
| 3 to 4% |
| Under 3% |

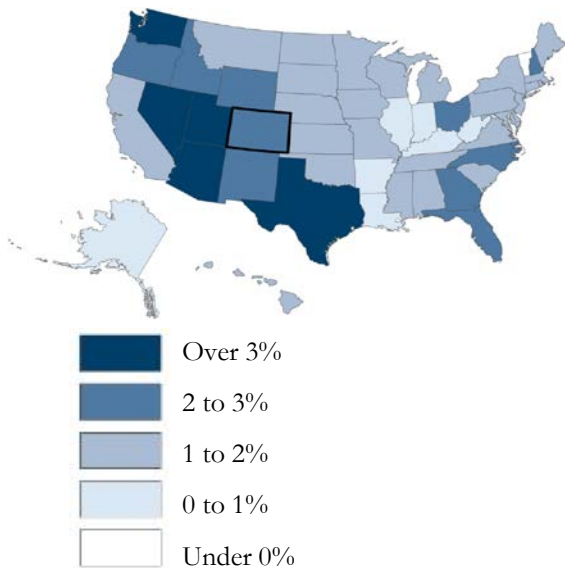| October 2018		
	United States	Colorado
Unemployment Rate	3.7%	3.2%
Unemployment Rate, *Last Year*	4.1%	3.0%

Unemployment Rates, *Seasonally Adjusted*

Note: Gray bars indicate recession.

Payroll Employment
Seasonally Adjusted

October 2018 Payroll Employment
Seasonally Adjusted, Year-over-Year Percent Change

| Over 3% |
| 2 to 3% |
| 1 to 2% |
| 0 to 1% |
| Under 0% |

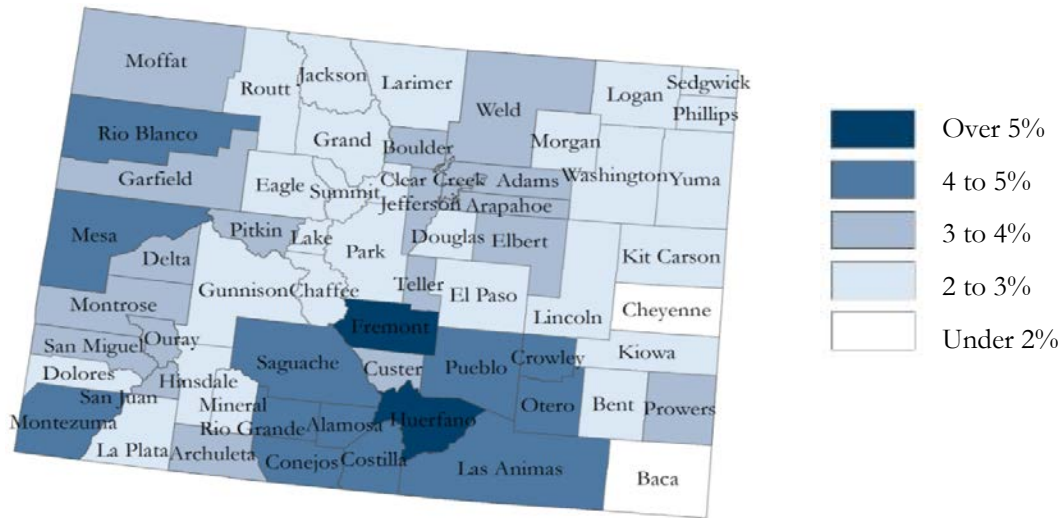| October 2018		
	United States	Colorado
Jobs (*Thousands*)	149,750.0	2,747.1
Change from Last Year	1.7%	2.7%

Payroll Employment
Seasonally Adjusted, Year-over-Year Percent Change
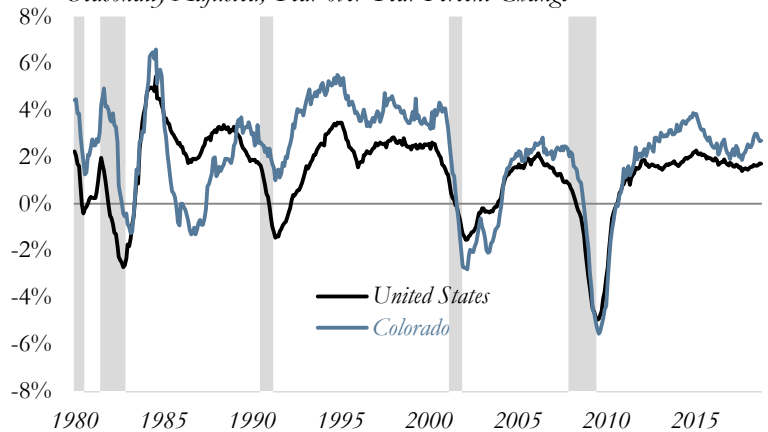
Note: Gray bars indicate recession.

September 2018 Unemployment Rates *&* Civilian Labor Force
Seasonally Adjusted

	Over 5%
	4 to 5%
	3 to 4%
	2 to 3%
	Under 2%

		Percent Unemployed	*Labor Force (Thousands)*			*Percent Unemployed*	*Labor Force (Thousands)*
	United States	**3.7%**	**161,926.0**	25	Ouray	3.5	2.5
	Colorado	**3.1**	**3,095.7**	26	Prowers	3.4	6.7
1	Huerfano	6.4	2.8	27	Garfield	3.3	32.7
2	Fremont	5.3	15.5	28	San Juan	3.3	0.5
3	Pueblo	5.0	74.9	29	Arapahoe	3.2	361.1
4	Otero	5.0	9.0	30	Denver	3.2	408.3
5	Montezuma	4.6	13.6	31	Weld	3.1	165.3
6	Rio Grande	4.6	5.9	32	Jefferson	3.1	334.6
7	Rio Blanco	4.6	3.0	33	Broomfield	3.0	39.1
8	Las Animas	4.6	6.8	34	Boulder	3.0	192.4
9	Costilla	4.6	1.9	35	Clear Creek	3.0	6.0
10	Conejos	4.5	4.2	36	La Plata	3.0	33.2
11	Crowley	4.4	1.6	37	Morgan	3.0	17.1
12	Alamosa	4.3	8.8	38	Douglas	2.9	188.9
13	Saguache	4.2	3.8	39	Larimer	2.9	203.1
14	Mesa	4.1	75.5	40	Park	2.9	10.6
15	El Paso	3.9	343.7	41	Logan	2.9	11.7
16	Teller	3.9	12.8	42	Elbert	2.9	15.0
17	Delta	3.8	15.6	43	Mineral	2.8	0.5
18	Montrose	3.7	22.5	44	Jackson	2.8	1.1
19	Custer	3.7	2.1	45	Bent	2.8	2.1
20	San Miguel	3.7	5.6	46	Lake	2.8	5.0
21	Pitkin	3.6	11.3	47	Hinsdale	2.8	0.5
22	Moffat	3.6	7.7	48	Routt	2.8	16.8
23	Archuleta	3.6	7.0	49	Gilpin	2.7	3.7
24	Adams	3.5	269.2	50	Sedgwick	2.7	1.4

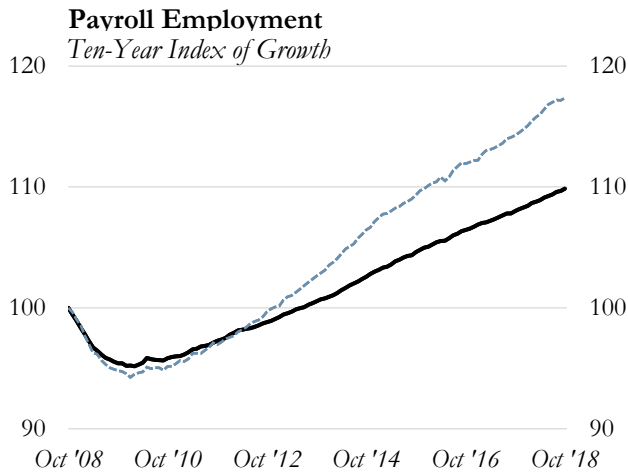*Source: Bureau of Labor Statistics/Haver Analytics*

September 2018 Unemployment Rates & Civilian Labor Force
Seasonally Adjusted

		Percent Unemployed	Labor Force (Thousands)			Percent Unemployed	Labor Force (Thousands)
51	Eagle	2.7	36.9	58	Summit	2.2	22.8
52	Gunnison	2.7	11.4	59	Kit Carson	2.2	5.0
53	Chaffee	2.7	9.7	60	Kiowa	2.2	1.0
54	Grand	2.5	10.3	61	Yuma	2.2	6.3
55	Dolores	2.4	1.3	62	Phillips	2.0	2.9
56	Washington	2.4	3.4	63	Baca	1.9	2.4
57	Lincoln	2.4	2.7	64	Cheyenne	1.7	1.3

Payroll Employment
Seasonally Adjusted

Payroll Employment
Ten-Year Index of Growth

October 2018		
	United States	*Colorado*
Jobs (*Thousands*)	149,750.0	2,747.1
Change from Last Year (*Thousands*)	2,516.0	72.0
Share of U.S. Employment		1.8%

Labor Force Dynamics
Ten-Year Index of Growth, Seasonally Adjusted

Employed (Household Survey)

Unemployed

Labor Force

Unemployment Insurance Claims

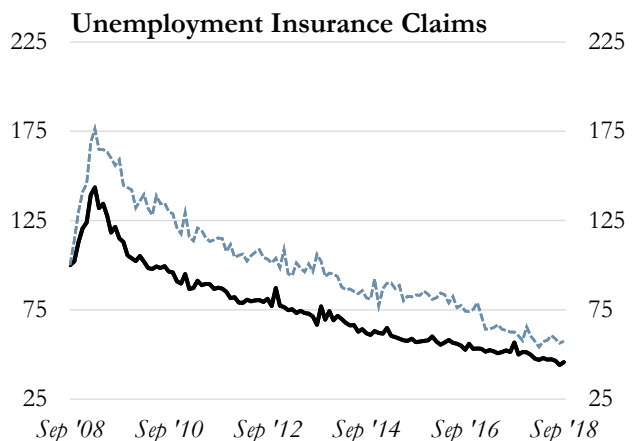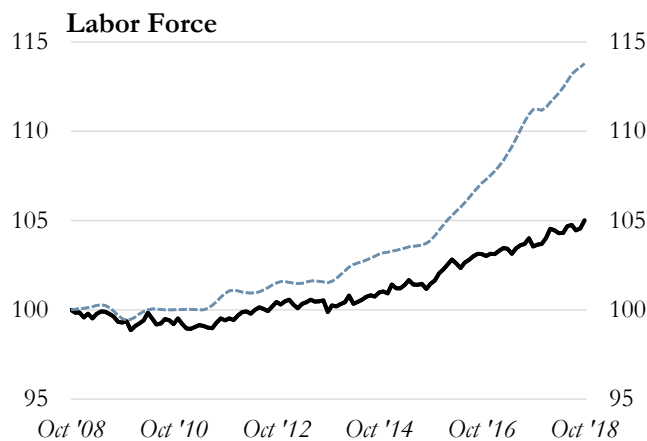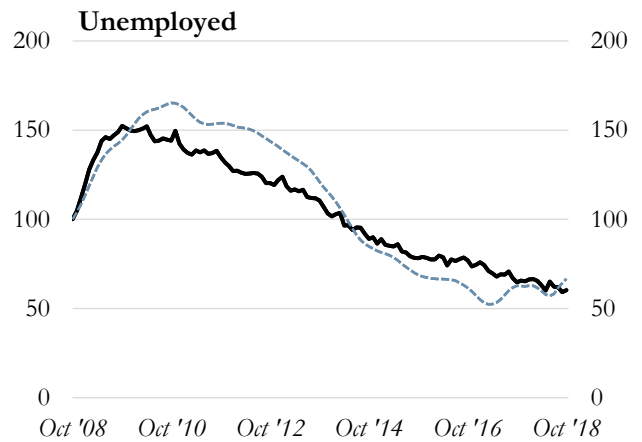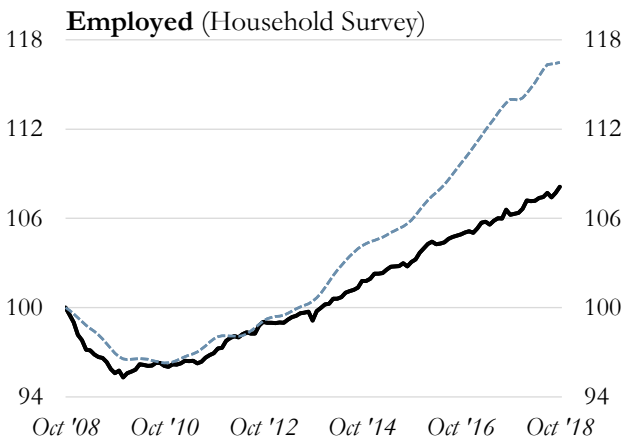*Source: Bureau of Labor Statistics & Department of Labor/Haver Analytics*

Payroll Employment by Industry

Seasonally Adjusted

October 2018 *Percent Change Year-over-Year*

Industry	Percent Change
Mining & Logging	16.9%
State Government	4.6%
Prof. & Business Services	4.3%
Construction	4.3%
Trans. & Warehousing	3.5%
Manufacturing	3.4%
Leisure & Hospitality	3.3%
Information	3.0%
Healthcare & Social Assist.	2.6%
Local Government	1.9%
Retail Trade	1.9%
Wholesale Trade	1.0%
Financial Activities	0.4%
Utilities	0.1%
Other Services	-0.8%
Federal Government	-1.7%
Educational Services	-4.0%
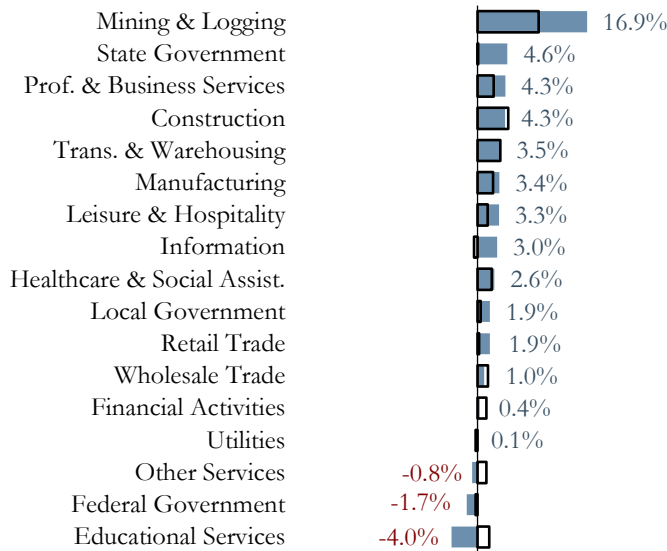
—— *United States*
- - - *Colorado*

Ten-Year Index of Growth

Construction

Share of Jobs
United States
4.9%
Colorado
6.2%

Manufacturing

Share of Jobs
United States
8.5%
Colorado
5.4%

Mining & Logging

United States
0.5%
Colorado
1.1%

Retail Trade

United States
10.6%
Colorado
10.1%

Wholesale Trade

United States
4.0%
Colorado
3.9%

Utilities

United States
0.4%
Colorado
0.3%

Transportation & Warehousing

United States
3.6%
Colorado
2.9%

Payroll Employment by Industry
Ten-Year Index of Growth, Seasonally Adjusted

—— *United States*
- - - - *Colorado*

Information
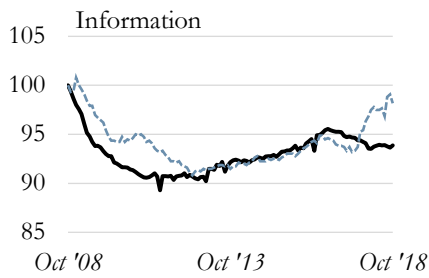
Share of Jobs
United States
1.8%
Colorado
2.7%

Professional & Business Services
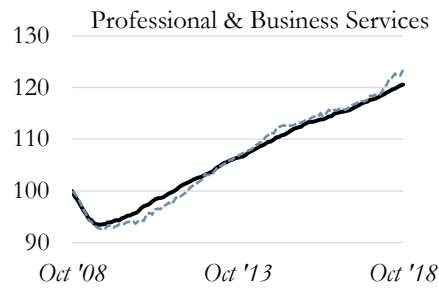
Share of Jobs
United States
14.1%
Colorado
15.8%
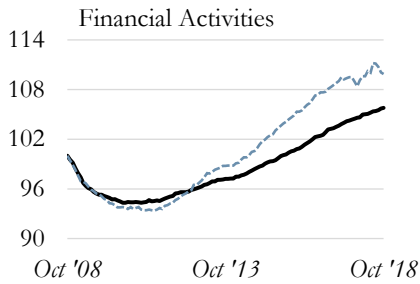
Financial Activities

United States
5.7%
Colorado
6.1%

Healthcare & Social Assistance
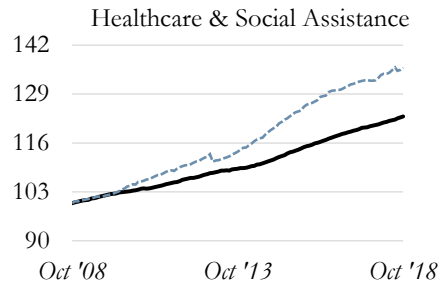
United States
13.4%
Colorado
11.0%
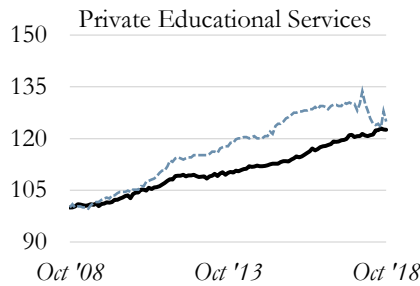
Private Educational Services

United States
2.5%
Colorado
1.4%
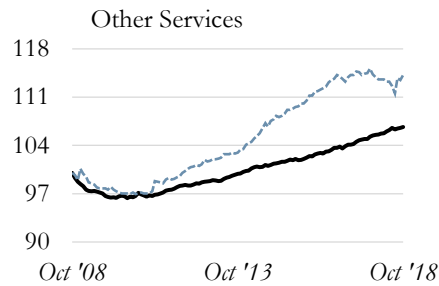
Other Services

United States
3.9%
Colorado
4.0%

Leisure & Hospitality
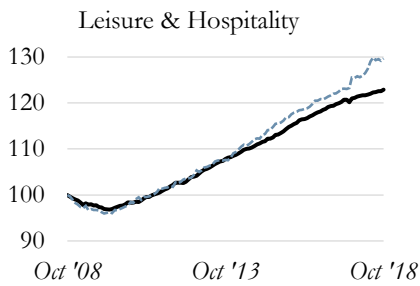
United States
11.0%
Colorado
12.8%

Federal Government
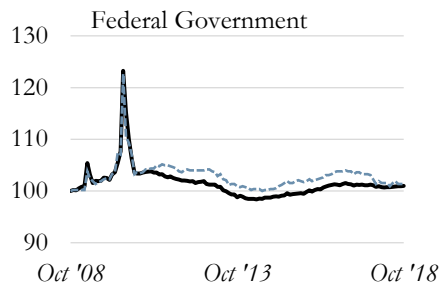
United States
1.9%
Colorado
1.9%

State Government
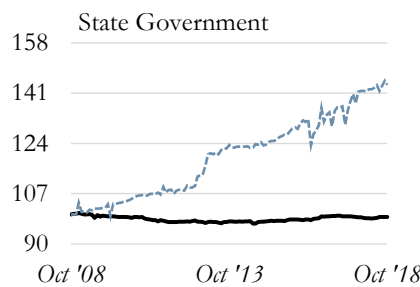
United States
3.4%
Colorado
4.7%

Local Government
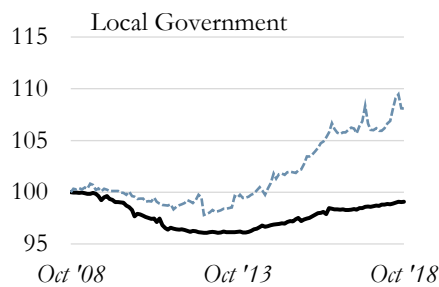
United States
9.7%
Colorado
9.7%

Source: Bureau of Labor Statistics/Haver Analytics

Colorado Nominal Personal Income Growth
Contributions to Percent Change Year-over-Year, Seasonally Adjusted

| Contributions to Social Insurance | Transfer Payments | Dividends, Interest & Rent |
| Residence Adjustment | Earnings by Place of Work | Total Personal Income |
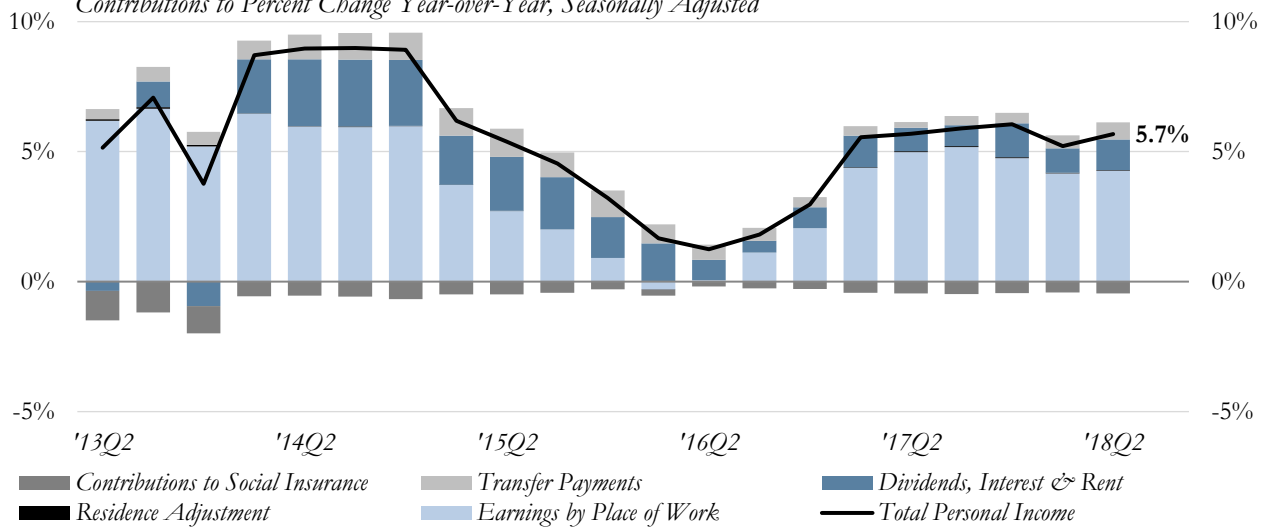
2018Q2	Percent Change Year-over-Year		Share of Personal Income	
	United States	*Colorado*	*United States*	*Colorado*
Total Personal Income	**4.7%**	**5.7%**		
Earnings by Place of Work	4.7%	5.9%	70.8%	72.4%
Social Insurance Contributions*	-5.2%	-5.8%	-7.8%	-7.8%
Residence Adjustment		4.4%		0.4%
Dividends, Interest & Rent	5.0%	5.3%	20.0%	22.1%
Transfer Payments	4.4%	5.1%	16.9%	12.8%

*Subtracted from personal income.

Real Average Hourly Wage
Current Dollars, Seasonally Adjusted

| United States |
| Colorado |
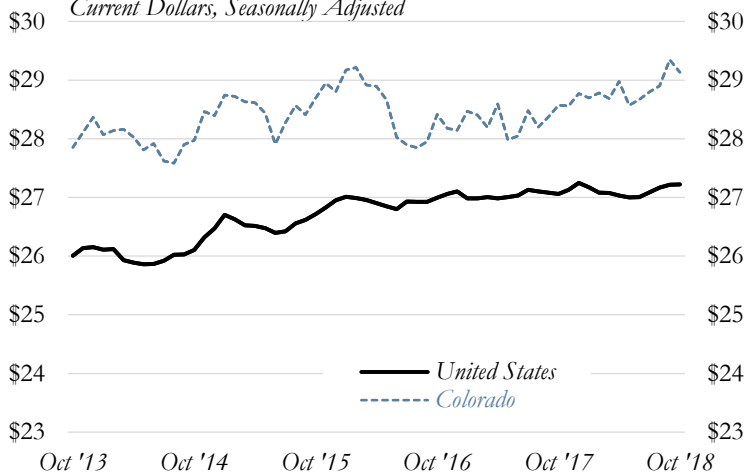
	October 2018	
Average	*United States*	*Colorado*
Hourly Wage	$27.22	$29.13
Real Change from		
Last Month	0.0%	-0.7%
Last Year	0.6%	2.0%

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

FHFA Purchase-Only Home Price Index
Ten-Year Index of Growth, Seasonally Adjusted
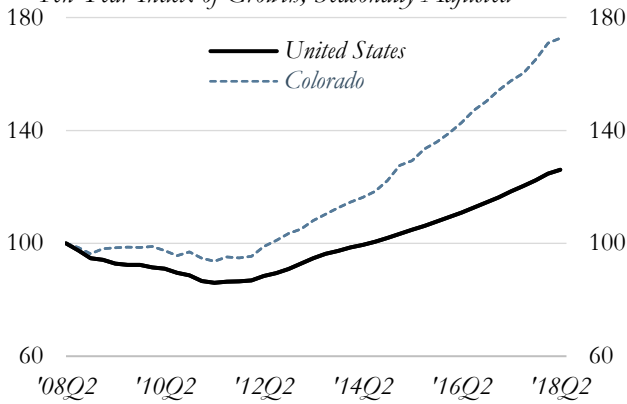
Rental Vacancy Rates
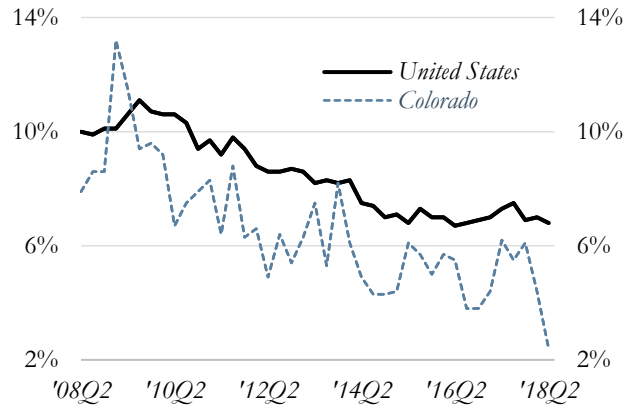
Housing Permits
Ten-Year Index of Growth, Seasonally Adjusted
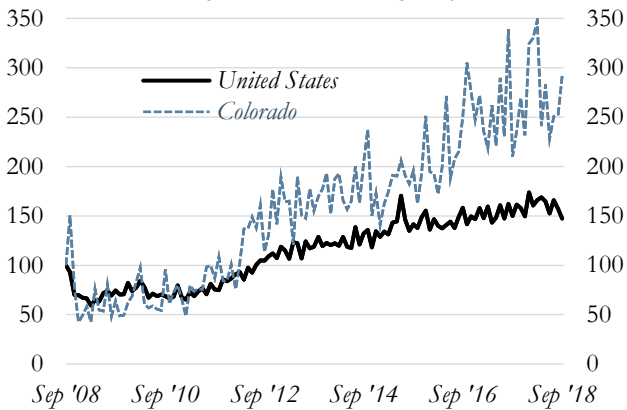
Summary Statistics		
	United States	Colorado
Prices (2018Q2)*	6.5%	9.6%
Vacancy Rates (2018Q2)	6.8%	2.4%
Permits (*Year-to-Date*)*		
Single Family	5.7%	22.0%
Multifamily	4.3%	-13.8%

*Percent change year-over-year.

Top 10 Colorado Counties for Permit Activity
Year-to-Date through September
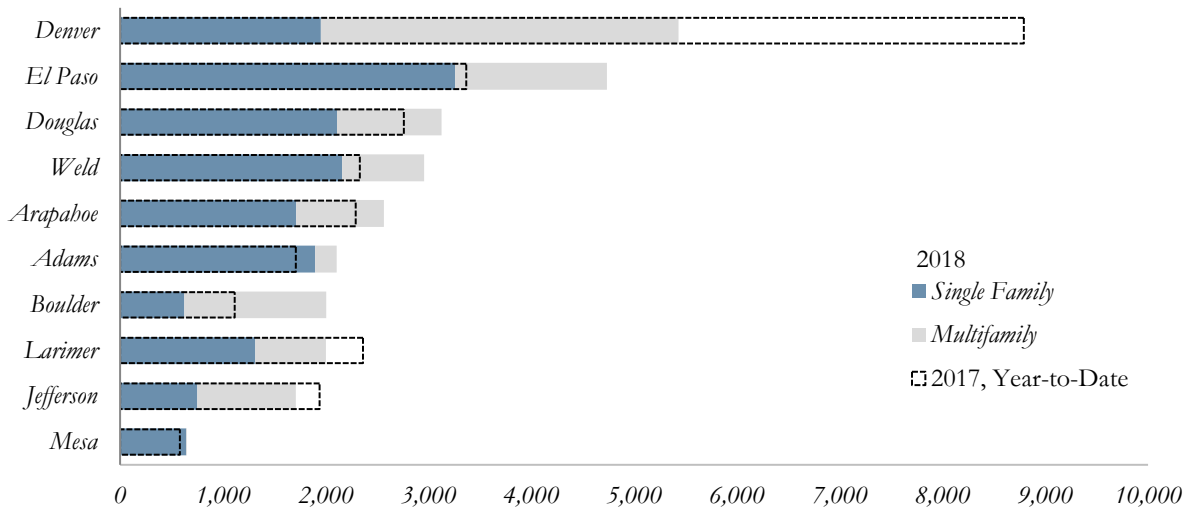
Source: Federal Housing Finance Agency (FHFA) & Census Bureau/Haver Analytics

Colorado Energy Activity

Oil & Gas Rig Counts
Number of Active Drilling Rigs
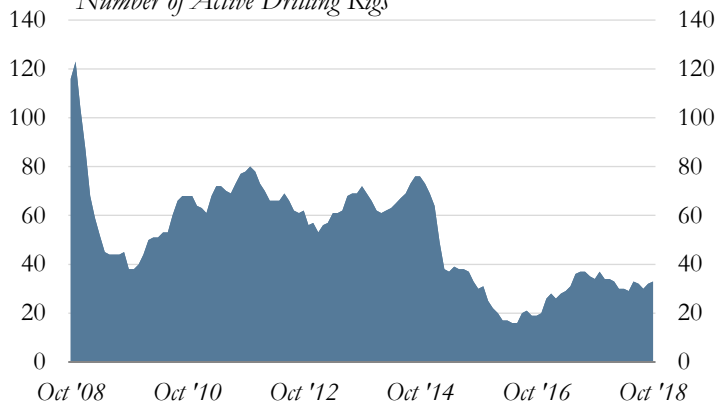
October 2018		
	United States	*Colorado*
Rig Count	1,063	33
Change from		
Last Month	10	1
Last Year	141	-1
Share of U.S. Activity		3.1%

Crude Oil Production
Thousand Barrels per Month, Seasonally Adjusted
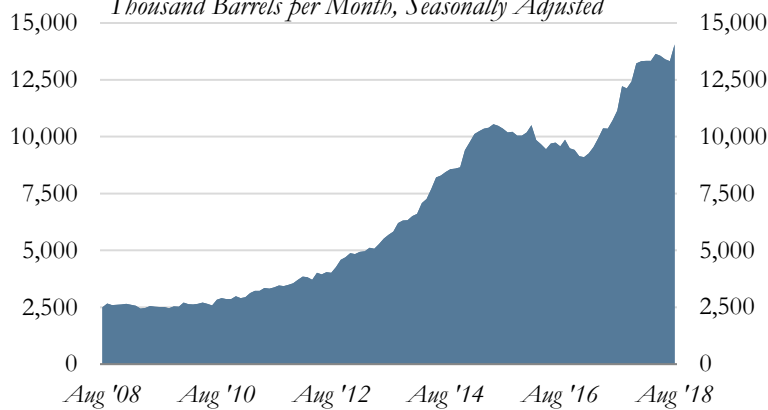
August 2018		
	United States	*Colorado*
Production	347,072	14,058
Change from		
Last Month	3.3%	5.5%
Last Year	22.7%	26.1%
Share of U.S. Activity		4.1%

Coal Production
Thousand Short Tons, Seasonally Adjusted
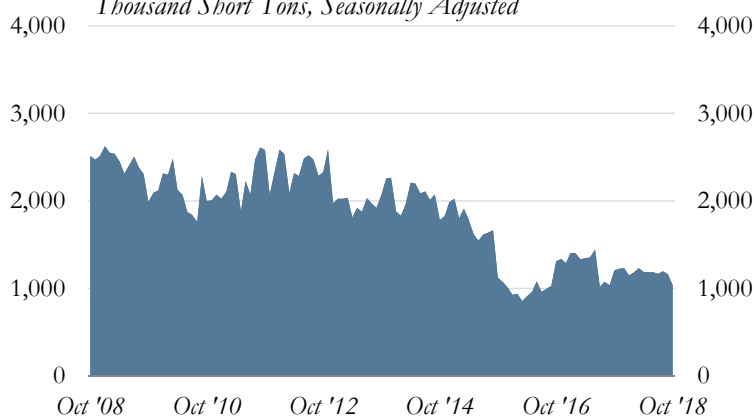
October 2018		
	United States	*Colorado*
Production	60,704	1,036
Change from		
Last Month	-0.4%	-10.8%
Last Year	-1.7%	-14.1%
Share of U.S. Activity		1.7%

Source: Baker Hughes & Department of Energy, Energy Information Administration/Haver Analytics

Global Exports

Ten-Year Index of Growth, Seasonally Adjusted
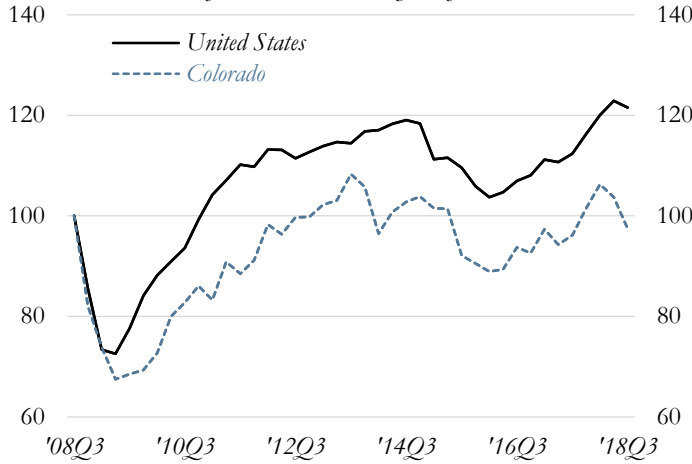
2018Q3		
	United States	*Colorado*
Exports *(Millions)*	$417,275.1	$2,019.0
Change from		
Last Quarter	-1.1%	-6.0%
Last Year *(year-to-date)*	9.0%	6.8%
Share of U.S. Activity		0.5%

2017		
Exports as a	*United States*	*Colorado*
Percent of GDP	7.9%	2.3%

Colorado Exports Year-to-Date through 2018Q3

Percent Change Year-over-Year

Over 100%
50 to 100%
25 to 50%
0 to 25%
-25 to 0%
Below -25%
Not Applicable
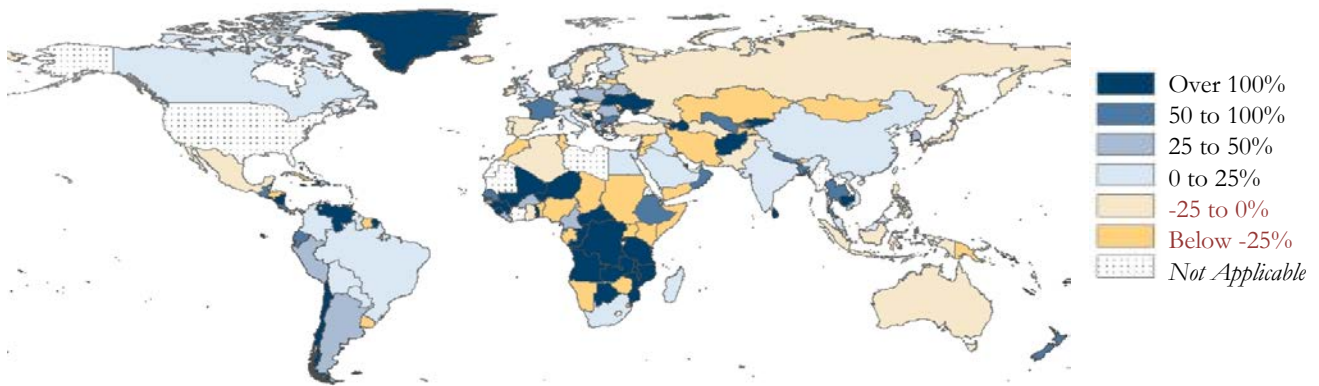
	Top Markets	*Share*
1	Canada	17.2%
2	Mexico	15.8
3	China*	12.3
4	South Korea	6.0
5	Japan	5.5
6	Malaysia	4.7
7	Germany	3.8
8	Netherlands	3.7
9	United Kingdom	2.6
10	Philippines	2.4

	Top Exports	*Share*
1	Computers & Electronics	23.2%
2	Food	20.7
3	Machinery (except Electrical)	10.6
4	Chemicals & Rare Earth Metals	8.2
5	Misc. Manufactures	5.6
6	Transportation Equip.	5.2
7	Fabricated Metal Products	4.2
8	Electronic Equip. & Appliances	3.3
9	Primary Metals	3.2
10	Plastics & Rubber Products	3.0

*Includes Hong Kong, Taiwan, and Macao.

Source: Census Bureau, WISERTrade & Bureau of Economic Analysis/Haver Analytics

Pages 2 - 4: County unemployment rates typically lag state data releases by one month. Gray bars show recessionary periods as designated by the National Bureau of Economic Research. 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, or commonly called the "Household" survey.

Pages 2 and 5: 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. "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 6 and 7: Payroll employment by industry is shown for each of the major two-digit North American Industrial Classification System industries.

Page 8: Personal income provides a measure of all income received by residents of a given geographic area. Data shown are 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 recipient's 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 consumer price index for all urban areas (CPI-U) and are indexed to the most current month of data.

Page 9: Home price indices estimate regional growth in home values based on repeat sales data for detached single family residential properties. Monthly single and multifamily housing permits data are not revised, and therefore, may not sum to published year-end totals.

Page 10: 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. Coal production is shown as production during a given month.

Page 11: 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.
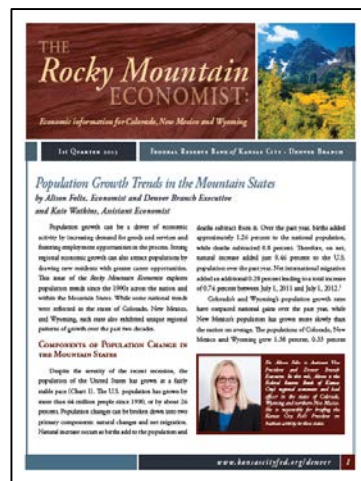
Regional Economic Analysis

Sign up to receive *The Colorado Economic Databook* and other publications each month via email using the link below:
        http://www.KansasCityFed.org/ealert/

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