



FOCUS COLORADO: ECONOMIC AND REVENUE FORECAST

COLORADO LEGISLATIVE COUNCIL STAFF
ECONOMICS SECTION

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Photo captures the Rocky Mountains from I-70, courtesy of Simon Maghakyan.

HIGHLIGHTS

The near-term **economic outlook** for Colorado and the nation is bright, though risks of an overheating economy cloud the longer-term outlook. The passage of the federal Tax Cuts and Jobs Act (TCJA) boosted business investment in recent months that will promote future productivity gains. Higher wages and federal tax cuts will sustain consumer activity and partially offset demographic drags on income and consumption. Rising wage and inflationary pressures and tighter labor markets will restrain business growth and profits. In Colorado, high housing costs will continue to constrain net migration to the state, and will dampen consumer spending unless strong wage gains can offset the rising cost of living.

General Fund revenue expectations for **FY 2017-18** were increased \$243.0 million on stronger than expected collections to date for sales and use tax, and individual and corporate income taxes. The General Fund is expected to end the year with an 8.1 percent reserve, \$171.8 million above the required reserve. Revenue will fall short of the Referendum C cap by \$264.2 million.

In **FY 2018-19**, the General Assembly will have \$1,291.6 million more to spend or save than is budgeted for FY 2017-18. General Fund revenue expectations were increased \$297.0 million on stronger expectations for near-term economic activity. Revenue is expected to exceed the Referendum C cap by \$8.4 million, resulting in a \$30.3 million **TABOR refund** that includes the \$21.8 million refund obligation carried over from the FY 2014-15 surplus.

Pursuant to Senate Bill 17-267, local government reimbursements for the senior homestead and disabled veteran property tax exemptions will be the TABOR refund mechanism used to meet the refund obligation.

The impact of the TCJA on state income tax revenue remains uncertain, resulting in a higher than usual margin of error in the forecast.

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EXECUTIVE SUMMARY

This report presents the budget outlook based on current law and the March 2018 General Fund revenue, cash fund revenue, and TABOR forecasts. It also includes summaries of expectations for the U.S. and Colorado economies and summaries of current economic conditions in nine regions of the state.

General Fund Budget Outlook

FY 2016-17. The General Fund ended FY 2016-17 with a \$614.5 million reserve, equal to 6.3 percent of General Fund operating appropriations. This amount was \$30.2 million above the required 6.0 percent reserve. Revenue subject to TABOR fell short of the Referendum C cap by \$436.2 million. The year-end reserve is \$0.1 million higher than expected in December 2017, reflecting accounting adjustments made in the Comprehensive Annual Financial Report for FY 2016-17.

FY 2017-18. The General Fund is expected to end the year with an 8.1 percent reserve, \$171.8 million above the 6.5 percent statutory reserve. Revenue subject to TABOR is expected to fall short of the Referendum C cap by \$264.2 million.

FY 2018-19—unbudgeted. The General Assembly will have \$1,291.6 million, or 11.5 percent, more to spend or save in the General Fund than what is budgeted to be spent this year. Any additional supplemental appropriations or other changes to revenue or expenditures in FY 2017-18 will change this amount. Revenue is expected to exceed the Referendum C cap by \$8.4 million, resulting in a TABOR refund in tax year 2019. The amount refunded will total \$30.3 million, and includes \$21.8 million carried over from the FY 2014-15 refund obligation. Pursuant to Senate Bill 17-267, local government reimbursements for the senior homestead and disabled veteran property tax exemptions will be the TABOR refund mechanism used to meet the TABOR refund obligation.

Higher than usual forecast uncertainty. Forecast estimates are subjected to a higher margin of error than usual in FY 2017-18 and FY 2018-19. Significant shifts in taxpayer behavior occurred following the passage of the federal Tax Cuts and Jobs Act (TCJA), resulting in unusual collection patterns.

Cash Fund Revenue

In FY 2017-18, cash fund revenue subject to TABOR is expected to fall 19.5 percent to \$2.23 billion. The drop in revenue from the elimination of the Hospital Provider Fee and the repeal of the 2.9 percent sales tax on retail marijuana in Senate Bill 17-267 more than offsets expected increases in transportation-related and severance tax revenue. Cash fund revenue subject to TABOR will increase from this lower level by 6.1 percent to \$2.37 billion in FY 2018-19 and 3.9 percent to \$2.46 billion in FY 2019-20, as most revenue sources are projected to continue to rise.

*More information about the **General Fund budget overview** begins on page 5.*

*More information about the state's **TABOR outlook** begins on page 13.*

*The **General Fund revenue forecast** begins on page 17 and is summarized in Table 8 on page 21.*

*The **cash fund revenue forecasts** begin on page 23. Forecasts for state revenue subject to TABOR are summarized in Table 9 on page 24.*

Economic Outlook

The near-term economic outlook is bright, though risks of an overheating economy cloud the longer-term outlook. The passage of the TCJA boosted business investment in recent months that will promote future productivity gains. However, this near-term boost may have pulled economic activity forward, at the cost of steadier and more consistent growth over the longer term.

The U.S. and Colorado economies will continue to expand in 2018 and 2019. Teamed with federal tax cuts, higher wages will sustain consumer activity throughout the forecast period and will partially offset demographic drags on income and consumption. The national and state economies will face rising inflationary pressures and tighter labor markets, which restrain business growth and profits. Low unemployment and rising inflation will prompt additional interest rate hikes, which are likely to heighten financial market volatility, as investors shift strategies.

In Colorado, high housing costs will continue to constrain net migration to the state, and will dampen consumer spending unless strong wage gains can offset the rising cost of living.

*More information about the **state and national economic outlook** begins on page 31.*

*Summaries of economic conditions in nine **regions** around the state begin on page 62.*

GENERAL FUND BUDGET OVERVIEW

This section presents the General Fund overview based on current law. A summary of the General Fund overview is shown in Table 1. This section also presents expectations for the following:

- revenue to the State Education Fund (Figure 2);
- statutory transfers to transportation and capital construction funds (Table 2);
- the availability of tax policies dependent on revenue collections (Table 3);
- General Fund rebates and expenditures (Table 4); and
- cash fund transfers to and from the General Fund (Table 5).

FY 2016-17. The General Fund ended FY 2016-17 with a \$614.5 million reserve, equal to 6.3 percent of General Fund operating appropriations. This amount is \$30.2 million above the required 6.0 percent reserve. These figures incorporate the impact of a \$53.8 million diversion of income taxes from the General Fund to cover the costs of severance tax refunds pursuant to Senate Bill 16-218. The year-end reserve is \$0.1 million higher than expected in December due to minor accounting adjustments made in the Comprehensive Annual Financial Report.

FY 2017-18. The General Fund is expected to end the year with a 8.1 percent reserve, \$171.8 million above the 6.5 percent statutory reserve, as shown in Table 1 (line 20). Relative to the December forecast, expectations for General Fund revenue were increased \$243.0 million on stronger than expected collections to date for all major sources of revenue, including sales and use tax, and individual and corporate income taxes. While budgeted expenditures increased by \$98.4 million, the budget situation improved due to higher revenue expectations. Revenue subject to TABOR is expected to fall short of the Referendum C cap by \$264.2 million.

FY 2018-19—unbudgeted. Because a budget has not yet been enacted for FY 2018-19, Table 1 (lines 22 and 23) shows the amount of revenue available in FY 2018-19 relative to the amount budgeted to be spent or saved in FY 2017-18. Based on this forecast, the General Assembly will have \$1,291.6 million, or 11.5 percent, more to spend or save in the General Fund than what is budgeted for this year. This assumes current law, including a 6.5 percent required reserve, and stronger economic activity than expected in December. This amount will change with any changes to revenue or expenditures in FY 2017-18.

Revenue is expected to exceed the Referendum C cap by \$8.4 million, resulting in a TABOR refund for tax year 2019. The amount refunded will total \$30.3 million, and includes \$21.8 million carried over from the FY 2014-15 refund obligation for which money is already set-aside in the General Fund. Pursuant to Senate Bill 17-267, local government reimbursements for the senior homestead and disabled veteran property tax exemptions will be the TABOR refund mechanism used to meet the TABOR refund obligation.

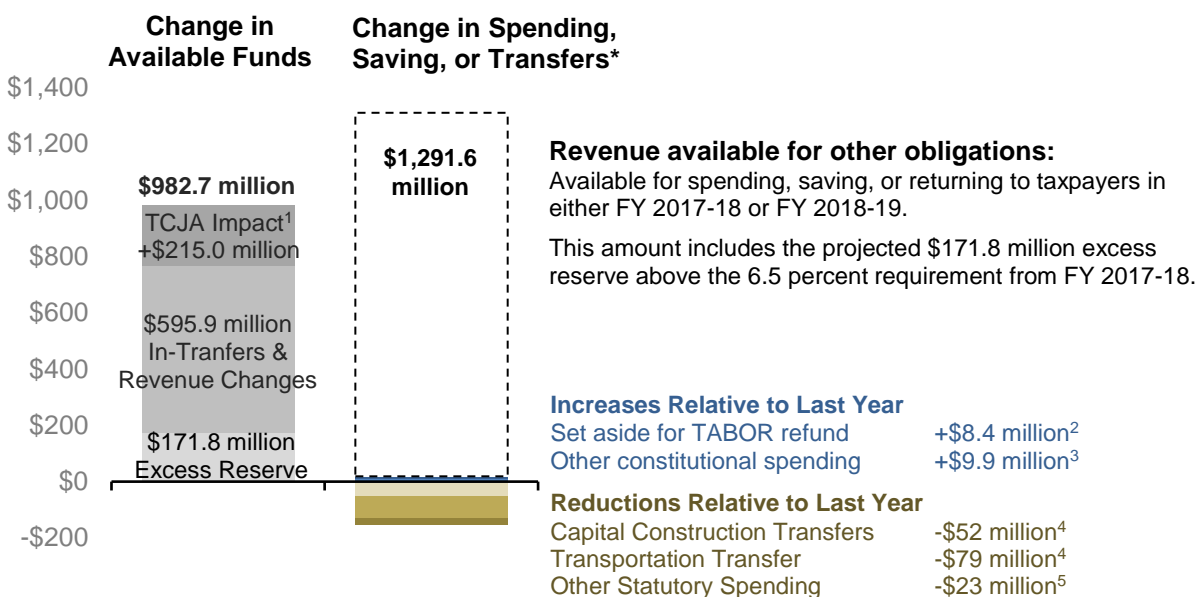
Higher than usual forecast uncertainty due to federal tax law changes. Significant shifts in taxpayer behavior occurred in anticipation of and following the passage of the TCJA, resulting in unusual income tax collection patterns at the end of calendar year 2017 and start of 2018 that cannot easily be isolated from underlying economic conditions. Revenue impact estimates of the TCJA remain preliminary and unchanged relative to those published in December. The TCJA enacts changes that affect the 2018 tax year, data for which will not be available until more than a year from now. Even with collections data, the revenue impact of the TCJA cannot be isolated from pre-TCJA tax revenue or economic processes. Considering these factors, revenue estimates in this forecast are subject to a higher than usual margin of error.

Comparing the current and next year's budget situation. Figure 1 illustrates the change in the General Fund budget situation between FY 2017-18 and FY 2018-19. Amounts shown in the figure are based on current law, including the FY 2017-18 supplemental package. Amounts do not reflect the FY 2018-19 budget, because a budget has not yet been adopted.

As illustrated by the grey bar on the left in Figure 1, funds available in the General Fund are expected to be \$982.7 million higher next year (FY 2018-19) than in the current year. In addition to stronger revenue and the change in transfers to the General Fund, this amount includes estimated revenue impacts from the TCJA, and a \$171.8 million FY 2017-18 excess reserve (revenue expected to exceed the required 6.5 percent General Fund reserve). Based on current law, General Fund obligations for spending and transfers are reduced on net in FY 2018-19 relative to FY 2017-18. The majority of this change is attributable to smaller infrastructure transfers from the General Fund to the Highway Users Tax Fund and capital construction funds (shown as gold bars on the right in Figure 1). These amounts will change after capital and operating budgets are adopted for FY 2018-19.

With significantly more funds available and smaller General Fund obligations, the General Assembly is expected to have \$1,291.6 million more to spend, save in the General Fund reserve, or return to taxpayers (e.g., through tax cuts or tax expenditures) in FY 2018-19 relative to the current year. This amount is \$328.9 million larger than expected in December. Future policy decisions, including new supplemental requests adopted for the FY 2017-18 budget year, and any budget decisions made for FY 2018-19, will result in changes to this amount.

Figure 1
Change in the General Fund Budget Situation between FY 2017-18 and FY 2018-19



*Changes required by current state law, including the FY 2017-18 supplemental. Amounts exclude changes in the General Fund operating or capital budgets in FY 2018-19, because they have not yet been adopted.

¹Preliminary estimates of changes under the federal Tax Cuts and Jobs Act (TCJA).

²Excludes the \$21.8 million in TABOR refund obligations carried over from the FY 2014-15 TABOR surplus.

³Includes the Old Age Pension program and the senior and veterans property tax exemptions.

⁴Represent the change in infrastructure transfers required by state law between FY 2018-19 and FY 2017-18.

⁵Includes changes in cash fund transfers (Table 5) and other rebates and expenditures (Table 4).

Table 1
General Fund Overview
Dollars in Millions

	FY 2016-17	FY 2017-18	FY 2018-19	FY 2019-20
	Actual	Estimate	Estimate	Estimate
Funds Available				
1 Beginning Reserve	\$512.7	\$614.5	\$853.5	*
2 General Fund Revenue	\$10,275.8	\$11,347.9	\$12,163.3	\$12,853.4
3 Transfers from Other Funds (Table 5)	44.8	90.1	18.2	18.5
4 Total Funds Available	\$10,833.3	\$12,052.4	\$13,035.1	*
5 Percent Change	1.4%	11.3%	8.2%	*
Expenditures				
	Actual	Budgeted	Estimate	Estimate
6 General Fund Appropriations Subject to Limit ¹	\$9,784.5	\$10,536.5	*	*
7 Adjustments to Appropriations ²	1.5	*	*	*
8 TABOR Refund Obligation Under Art. X, §20, (7)(d) ³	0.0	0.0	30.3	156.4
9 Rebates and Expenditures (Table 4)	285.1	274.7	287.2	266.3
10 Transfers to Other Funds (Table 5) ⁴	164.8	171.3	145.4	156.0
11 Transfers to the State Education Fund Pursuant to SB 13-234	25.3	25.3	25.0	NA
12 Transfers to the Highway Users Tax Fund	79.0	79.0	0.0	0.0
13 Transfers to Capital Construction Funds ¹	84.5	112.1	60.0	60.0
14 Total Expenditures	\$10,424.7	\$11,198.9	*	*
15 Percent Change	2.3%	7.4%	*	*
16 Accounting Adjustments ⁵	205.8	*	21.8	*
Reserve				
	Actual	Budgeted	Estimate	Estimate
17 Year-End General Fund Reserve	\$614.5	\$853.5	*	*
18 Year-End Reserve as a Percent of Appropriations	6.3%	8.1%	*	*
19 Statutorily Required Reserve ⁶	584.3	681.7	*	*
20 Amount in Excess or (Deficit) of Statutory Reserve	\$30.2	\$171.8	*	*
21 Excess Reserve as a Percent of Expenditures	0.3%	1.5%	*	*
Perspective on FY 2018-19 (Unbudgeted Year)			Estimate	Estimate
Amount Available in FY 2018-19 Relative to FY 2017-18 Expenditures ⁷				
22 Amount in Excess of (Deficit) of 6.5% Statutory Reserve			1,291.6	*
23 As a Percent of Prior-Year Expenditures			11.5%	*
Addendum				
	Actual	Estimate	Estimate	Estimate
24 Percent Change in General Fund Appropriations	4.8%	7.7%	*	*
25 5% of Colorado Personal Income Appropriations Limit	\$13,361.3	\$14,133.3	\$14,405.2	\$14,952.6
26 Transfers to State Education Fund Per Amendment 23	\$540.0	\$595.1	\$640.8	\$679.0

*Totals may not sum due to rounding. *Not estimated.*

¹Includes the FY 2017-18 supplemental budget package.

²Includes \$1.5 million in over-expenditures pursuant to HB 18-1161 and HB 18-1162 for FY 2016-17.

³Pursuant to Section 24-75-201(2), C.R.S., the TABOR refund obligation is required to be set aside during the year it is collected to be refunded in the following fiscal year.

⁴Includes diversions from the General Fund to cover severance tax refunds pursuant to SB 16-218, which totaled \$56.8 million in FY 2015-16 and \$53.8 million for FY 2016-17.

⁵The \$21.8 million adjustment in FY 2018-19 represents the FY 2018-19 TABOR refund obligation that is carried forward from the FY 2014-15 refund obligation; this amount is already restricted in the fund balance.

⁶The required reserve is calculated as a percent of operating appropriations, and is required to equal to 6.0 percent in FY 2016-17 and 6.5 percent each year thereafter. Appropriations to fulfill the state's obligations of certain certificates of participation are excluded for purposes of calculating the statutory reserve requirement.

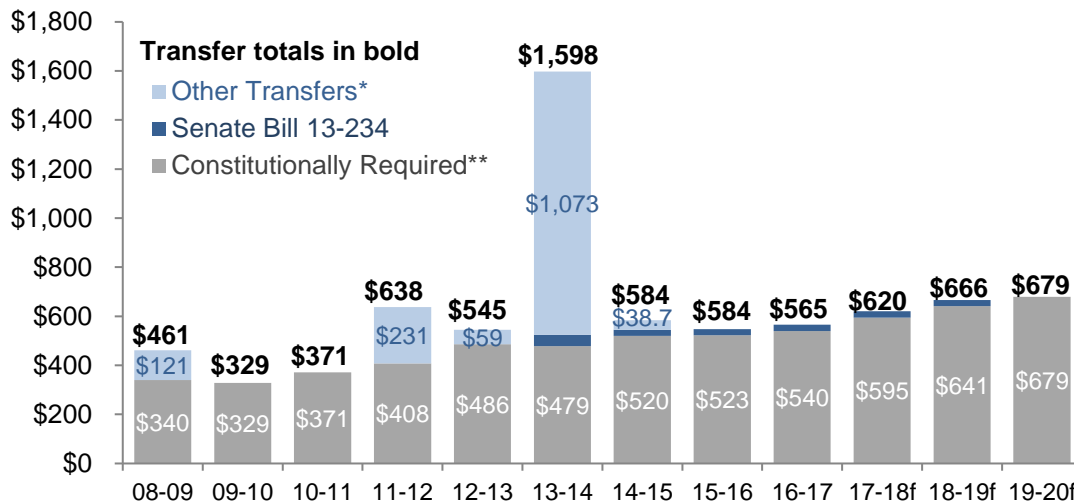
⁷This scenario holds appropriations in FY 2018-19 equal to appropriations in FY 2017-18 (line 6) to determine the total amount of money available relative to FY 2017-18 expenditures, net of the obligations in lines 8 through 13.

State Education Fund

The Colorado Constitution requires the State Education Fund to receive one-third of one percent of taxable income (see Table 1, line 11). In addition, the General Assembly has at different times authorized the transfer of additional moneys from the General Fund to the State Education Fund. Money in the State Education Fund is required to be used to fund kindergarten through twelfth grade public education. However, additional revenue in the State Education Fund does not affect the overall flexibility of the General Fund budget.

Figure 2 shows a history and forecast for revenue sources to the State Education Fund through the end of the forecast period. General Fund transfers to the State Education Fund pursuant to Senate Bill 13-234, which have occurred annually since FY 2013-14, are scheduled to end after FY 2018-19. In FY 2017-18, the State Education Fund is expected to receive \$620.4 million, with higher amounts in subsequent years resulting from growth in taxable income among Colorado taxpayers.

Figure 2
Revenue to the State Education Fund
Dollars in Millions



Source: Colorado State Controller's Office and Legislative Council Staff forecast (f).

* Includes transfers under SB 09-260 for FY 2008-09, SB 11-183 and SB 11-156 for FY 2011-12, HB 12-1338 for FY 2012-13 and FY 2013-14, and HB 14-1342 for FY 2014-15.

**One-third of one percent of federal taxable income is required be dedicated to the State Education Fund under Article IX, Section 17 of the Colorado Constitution.

General Fund Transfers to Transportation and Capital Construction

Table 2 shows statutory transfers from the General Fund to the Highway Users Tax Fund (HUTF) and capital construction funds. Senate Bill 17-267, which authorized up to \$1.88 billion in certificates of participation for transportation projects, repealed transfers from the General Fund to the HUTF in FY 2018-19 and FY 2019-20 previously specified by Senate Bill 17-262 and requires General Fund appropriations for certificate of participation-related lease payments beginning in FY 2018-19. Transfers in Table 2 are also shown in lines 12 and 13 of Table 1. Other non-infrastructure-related transfers to and from the General Fund are summarized in Table 5 on page 12.

Table 2
Infrastructure Transfers from the General Fund
Dollars in Millions

Capital Construction Funds	2016-17	2017-18	2018-19	2019-20
HB 16-1416	\$52.7			
HB 16-1417	\$31.8			
SB 17-263		\$109.2		
SB 17-262			\$60.0	\$60.0
HB 18-1173		\$2.9		
Total	\$84.5	\$112.1	\$60.0	\$60.0
Highway Users Tax Fund	2016-17	2017-18	2018-19	2019-20
SB 17-262	\$79.0	\$79.0		
Total	\$79.0	\$79.0	\$0	\$0

Tax Policies Dependent on Revenue Conditions

Several tax expenditures are “triggered” by certain state revenue conditions. These include the historic preservation income tax credit, the low-income child care expenses tax credit, and partial refundability of the conservation easement income tax credit. Table 3 summarizes the availability of these tax policies, each of which is described in greater detail below.

Historic preservation income tax credit available in tax year 2018. The historic preservation income tax credit will be triggered on for tax year 2018 based on the December 2017 forecast, which expected sufficient revenue to grow appropriations by more than 6.0 percent in FY 2017-18. Based on the March 2018 forecast, the credit is also expected to be available in tax year 2019.

Low-income child care expenses tax credit unavailable in tax year 2017. Under House Bill 17-1002, the low-income child care expenses income tax credit was extended for three years. The bill requires the three-year period during which the tax credit is extended to shift forward in time from tax years 2017 through 2019 to tax years 2018 through 2020 if the June 2017 forecast predicts that the General Fund will have less than \$2.9 million available in the General Fund in excess of the required 6.0 percent reserve at the end of FY 2016-17. Because the June 2017 forecast did not expect sufficient revenue to meet this threshold, the credit will be available for tax years 2018 through 2020, but will not be available for tax year 2017.

Partial refundability of the conservation easement tax credit expected to be available in tax years 2019 and 2020. The conservation easement income tax credit is available as a nonrefundable credit in most years. In tax years when the state refunds a TABOR surplus, taxpayers may claim an amount up to \$50,000, less their income tax liability, as a refundable credit. This forecast expects a TABOR surplus in FY 2018-19 and FY 2019-20. If a surplus occurs in these fiscal years, partial refundability of the credit will be available in tax years 2019 and 2020.

Table 3
Availability of Tax Policies Dependent on Revenue Conditions

Tax Policy	Availability Criteria	Availability
Historic Property Preservation Income Tax Credit (Section 39-22-514, C.R.S.) <i>Revenue reduction of less than \$1.0 million per tax year*</i>	December forecast immediately before the tax year when the credit becomes available. Forecast that projects sufficient General Fund to grow General Fund appropriations by 6 percent.	Available in tax years 2013 through 2015. Not available in tax years 2016 and 2017. Expected to be available in tax years 2018 and 2019. Repealed tax year 2020.
Low-Income Child Care Expenses Tax Credit (Section 39-22-119.5, C.R.S.) <i>Revenue reduction of at least \$6.0 million per tax year</i>	June 2017 forecast. Sufficient General Fund surplus to fund the tax credit.	Available in tax years 2014 through 2016. Not available in tax year 2017. Available in tax years 2018 to 2020. Repealed tax year 2021.
Conservation Easement Tax Credit Partial Refundability (Section 39-22-522 (5)(b)(II), C.R.S.) <i>Revenue reduction of at least \$5.0 million per tax year</i>	TABOR surplus.	Available in tax year 2015 due to the FY 2014-15 TABOR surplus. Unavailable in tax years 2016, 2017, and 2018. Expected to be available in tax years 2019 and 2020.

**Estimates may differ in future analyses.*

Table 4
General Fund Rebates and Expenditures
Dollars in Millions

Category	Actual FY 2016-17	Percent Change	Estimate FY 2017-18	Percent Change	Estimate FY 2018-19	Percent Change	Estimate FY 2019-20	Percent Change
Senior and Veterans Property Tax Exemptions	\$136.4	7.3	\$139.1	2.0	\$151.9	9.2	\$160.6	5.7
TABOR Refund Mechanism ¹			NA		NA		-\$30.3	
Cigarette Rebate	10.3	-2.2	10.4	0.5	10.2	-1.8	10.0	-1.9
Old-Age Pension Fund	96.5	-10.9	83.9	-13.0	81.1	-3.4	79.9	-1.4
Aged Property Tax and Heating Credit	8.7	-7.3	5.5	-36.8	5.3	-3.0	5.2	-2.0
Older Coloradans Fund	10.0	0.0	10.0	0.0	10.0	0.0	10.0	0.0
Interest Payments for School Loans	3.4	171.6	5.0	47.7	5.6	11.9	5.9	6.0
Firefighter Pensions	4.2	14.3	4.4	3.5	4.4	0.9	4.4	1.1
Amendment 35 Distributions	0.9	-1.0	0.8	-1.8	0.8	-0.7	0.8	-0.9
Marijuana Sales Tax Transfer to Local Governments	14.7	46.0	15.7	6.4	18.0	14.5	19.6	9.2
Total Rebates and Expenditures	\$285.1	1.4	\$274.7	-3.6	\$287.2	4.5	\$266.3	-7.3

Totals may not sum due to rounding. NA = Not applicable.

¹*Pursuant to SB 17-267, local government reimbursements for these property tax exemptions are the first TABOR refund mechanism used to meet the prior year's refund obligation.*

Table 5
Cash Fund Transfers
Dollars in Millions

Transfers to the General Fund		2016-17	2017-18	2018-19	2019-20
HB 05-1262	Amendment 35 Tobacco Tax	\$0.9	\$0.8	\$0.8	\$0.8
HB 10-1325	Natural Resource Damage Recovery Fund	0.1			
SB 13-133	Limited Gaming Fund	15.2	17.2	17.4	17.7
SB 15-168, SB 16-196, & HB 16-1398	Intellectual and Developmental Disability Fund	1.2			
SB 15-249 & HB 16-1418	Marijuana Tax Cash Fund	26.3	0.04		
HB 16-1413	Water Quality Improvement Fund	1.2			
SB 17-260	Severance Tax Funds		45.7		
SB 17-265	State Employee Reserve Fund		26.3		
Total Transfers to the General Fund		\$44.8	\$90.1	\$18.2	\$18.5
Transfers from the General Fund		2016-17	2017-18	2018-19	2019-20
SB 11-047	Bioscience Income Tax Transfer to OEDIT	\$5.3	\$5.9	\$6.4	\$6.8
HB 12-1315	Clean Renewable Energy Fund	1.6			
HB 13-1193	Advanced Industries Export Acceleration Fund	0.3	0.3		
SB 14-215	Marijuana Tax Cash Fund	83.6	101.4	116.1	126.8
HB 14-1016 ¹	Procurement Technical Assistance Cash Fund	0.2	0.2	0.2	0.2
HB 15-1178	CWCB Emergency Dewatering Grant Account	0.3			
SB 15-112	Building Regulation Fund	0.2			
SB 15-244 & SB 17-267	State Public School Fund	7.8	37.8	20.3	22.2
SB 15-245	Natural Hazard Mapping Fund	2.4	0.7		
HB 16-1288	Industry Infrastructure Fund	0.3	0.3	0.3	
HB 16-1453	Cybersecurity Cash Fund	7.9			
SB 16-003	Wildfire Risk Reduction Fund	1.0			
SB 16-218	State Severance Tax Refunds	53.8			
HB 17-1282	Veterinary Loan Education Repayment Fund		0.14		
SB 17-255	Technology Advancement and Emergency Fund		2.0	2.0	
SB 17-259	Severance Tax Tier-2 Natural Resource Funds		10.0		
SB 17-261	2013 Flood Recovery Account		12.5		
Total Transfers from the General Fund		\$164.8	\$171.3	\$145.4	\$156.0
Net General Fund Impact		(\$120.0)	(\$81.2)	(\$127.1)	(\$137.5)

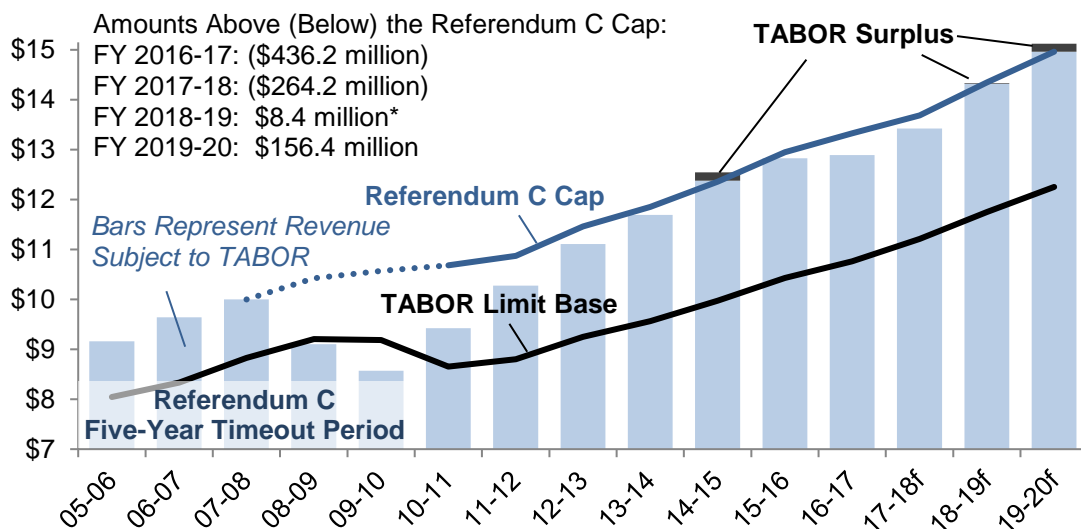
¹ The transfer is contingent upon the receipt of at least \$200,000 in gifts, grants, and donations by the relevant contractor.

TABOR OUTLOOK

This section presents the outlook for the state's TABOR situation through FY 2019-20. Forecasts for TABOR revenue are summarized in Table 7 on page 16 and illustrated in Figure 3, which also provides a 12-year history of the TABOR limit base and the Referendum C cap.

State revenue fell short of the Referendum C cap by \$436.2 million in FY 2016-17, and is expected to fall short of the Referendum C cap by \$264.2 million in FY 2017-18. State revenue is projected to **exceed the Referendum C cap** by \$8.4 million in FY 2018-19 and by \$156.4 million in FY 2019-20. Based on these projections, the state will issue **TABOR refunds in FY 2019-20 and FY 2020-21**.

Figure 3
TABOR Revenue, TABOR Limit Base, and the Referendum C Cap
Dollars in Billions



Source: Office of the State Controller and Legislative Council Staff.

*The refund amount for FY 2018-19 differs from the surplus amount because it includes underrefunds and other adjustments to previous TABOR surpluses.

The state TABOR refund requirement is estimated at \$30.3 million in FY 2019-20 and \$156.4 million in FY 2020-21. The refund requirement for FY 2019-20 includes the \$8.4 million TABOR surplus expected for FY 2018-19 and \$21.8 million that has already been restricted in the General Fund as an obligation for underrefunds of prior year TABOR surpluses. The refund requirement for FY 2020-21 includes only the TABOR surplus expected for FY 2019-20. For both years, the entire TABOR refund obligation is expected to be refunded via the property tax exemption reimbursement TABOR refund mechanism.

Expectations for the state's TABOR outlook have shifted since the December forecast as a result of increased expectations for most TABOR revenue sources. Changes to the TABOR outlook are presented in Table 6.

Table 6
Change in TABOR Estimates, December 2017 to March 2018
Dollars in Millions

FY 2017-18	March	December	Change
TABOR Revenue	\$13,424.8	\$13,134.5	\$290.3
General Fund ¹	11,191.0	10,937.5	253.5
Cash Funds ¹	2,233.8	2,197.0	36.8
Referendum C Cap	\$13,689.0	\$13,702.3	(\$13.3)
Revenue Above (Below) Ref C Cap	(\$264.2)	(\$567.8)	\$303.6

FY 2018-19	March	December	Change
TABOR Revenue	\$14,354.5	\$13,964.4	\$390.1
General Fund ¹	11,983.8	11,676.1	307.7
Cash Funds ¹	2,370.7	2,288.3	82.4
Referendum C Cap	\$14,346.0	\$14,318.9	\$27.1
Revenue Above (Below) Ref C Cap	\$8.4	(\$354.5)	\$362.9

FY 2019-20	March	December	Change
TABOR Revenue	\$15,119.3	\$14,633.0	\$486.3
General Fund ¹	12,657.3	12,268.6	388.7
Cash Funds ¹	2,462.0	2,364.4	97.6
Referendum C Cap	\$14,962.9	\$14,891.6	\$71.3
Revenue Above (Below) Ref C Cap	\$156.4	(\$258.7)	\$415.1

¹These figures may differ from the revenues reported in the General Fund and cash fund revenue summary tables because of accounting adjustments across TABOR boundaries.

TABOR surplus. Article X, Section 20 of the Colorado Constitution (TABOR) limits *state fiscal year spending*, the amount of revenue the state may retain and either spend or save each year. The limit is equal to the previous year's limit or revenue, whichever is lower, adjusted for inflation, population growth, and any revenue changes approved by voters. Referendum C, approved by voters in 2005, is a permanent voter-approved revenue change that raises the amount of revenue the state may spend or save.

Referendum C allowed the state to spend all revenue collected above the limit during a five-year timeout period covering FY 2005-06 through FY 2009-10. Beginning in FY 2010-11, Referendum C allows the state to retain revenue collected above the TABOR limit base up to a capped amount. The cap is based on the amount of state revenue collected in FY 2007-08, adjusted annually for inflation and population growth. It is grown from the prior year's cap regardless of the level of revenue collected. Senate Bill 17-267 applied a \$200.0 million one-time downward adjustment

Fiscal Year Spending:

The legal term used by TABOR to denote the amount of revenue TABOR allows the state to keep and either spend or save.

to the Referendum C cap in FY 2017-18 and requires that the cap for FY 2018-19 and subsequent years be grown from this reduced level.

When revenue exceeds the cap, TABOR requires the surplus to be refunded during the following fiscal year. Additionally, state law requires adjustments to the refund amount based on over-refunds or under-refunds of previous TABOR surpluses. Most recently, revenue exceeded the Referendum C cap in FY 2014-15, prompting TABOR refunds on returns for tax year 2015. The amount of the FY 2014-15 refund obligation is now estimated to have been \$159.4 million, adjusting for accounting errors discovered after refunds were issued. To date, the state has refunded \$137.6 million of this obligation. The remaining \$21.8 million is required to be refunded with the next TABOR surplus.

Amount encumbered for FY 2014-15 refunds. The General Assembly set aside (or “encumbered”) \$169.7 million in the General Fund for payment of the refund obligation generated by the FY 2014-15 surplus. This amount is reflected in the Comprehensive Annual Financial Report for FY 2015-16. State fiscal year spending for FY 2014-15 exceeded the Referendum C cap by \$155.8 million, less than the amount originally projected. The \$13.9 million difference represents an over-encumbrance of revenue.

TABOR refund mechanisms. This forecast anticipates that state TABOR refunds in FY 2019-20 and FY 2020-21 will both be administered via the property tax exemption reimbursement TABOR refund mechanism. Pursuant to Senate Bill 17-267, state law requires that any TABOR surplus first be refunded via this mechanism. The exemption disburses state funds to counties, school districts, and special districts to offset these governments’ property tax loss associated with the senior homestead and disabled veteran property tax exemptions. Amounts required to be refunded are encumbered in the General Fund in the year in which a surplus is collected and paid to local governments in the following fiscal year.

As shown in Table 1 (line 8), the TABOR refund obligation expected for FY 2018-19 requires a set-aside of \$30.3 million from the General Fund; however, because \$21.8 million of this amount was set aside in previous years and remains restricted in the fund balance, Table 1 (line 16) includes a positive accounting adjustment for this amount. Table 4 on page 11 shows the portion of the expenditure for property tax exemption reimbursements for FY 2019-20 that is administered as a TABOR refund mechanism in FY 2018-19.

Other TABOR refund mechanisms, including the six-tier sales tax refund mechanism and temporary income tax rate reduction, are triggered if and only if the amount of the TABOR refund obligation exceeds the amount of the property tax exemption reimbursement.

TABOR forecast uncertainty. The state TABOR surplus represents the amount of state revenue subject to TABOR collected in excess of the Referendum C cap. Relatively small fluctuations in the amount of state revenue can have disproportionately large effects on the amount of the TABOR surplus and refund obligation. For all three years of the current forecast period, the possibilities that revenue could fall short of or exceed the Referendum C cap exist within the normal degree of forecast error. Similarly, the amount of the TABOR surplus may trigger refund mechanisms beyond the property tax exemption reimbursement mechanism within this same degree of forecast error.

Table 7
TABOR Limit and Retained Revenue
Dollars in Millions

	Actual FY 2016-17	Estimate FY 2017-18	Estimate FY 2018-19	Estimate FY 2019-20
TABOR Revenue				
1 General Fund ¹	\$10,156.1	\$11,191.0	\$11,983.8	\$12,657.3
2 Cash Funds ¹	\$2,735.6	\$2,233.8	\$2,370.7	\$2,462.0
3 Total TABOR Revenue	\$12,891.7	\$13,424.8	\$14,354.5	\$15,119.3
Revenue Limit				
4 Allowable TABOR Growth Rate	3.1%	4.4%	4.8%	4.3%
5 Inflation (<i>from Prior Calendar Year</i>)	1.2%	2.8%	3.4%	2.9%
6 Population Growth (<i>from Prior Calendar Year</i>)	1.9%	1.6%	1.4%	1.4%
7 TABOR Limit Base	\$10,761.7	\$11,209.9	\$11,748.0	\$12,253.2
8 Voter Approved Revenue Change (Referendum C)	\$2,130.0	\$2,214.9	\$2,598.0	\$2,709.8
9 Total TABOR Limit / Referendum C Cap	\$13,327.8	\$13,689.0	\$14,346.0	\$14,962.9
10 TABOR Revenue Above (Below) Referendum C Cap	(\$436.2)	(\$264.2)	\$8.4	\$156.4
Retained/Refunded Revenue				
11 Revenue Retained under Referendum C ²	\$2,130.0	\$2,214.9	\$2,598.0	\$2,709.8
12 Fiscal Year Spending (<i>revenue available to be spent or saved</i>)	\$12,891.7	\$13,424.8	\$14,346.0	\$14,962.9
13 Amount Restricted in General Fund ³			\$21.8	
14 Revenue Refunded to Taxpayers⁴	\$0.0	\$0.0	\$30.3	\$156.4
15 TABOR Reserve Requirement	\$386.7	\$402.7	\$430.4	\$448.9

Totals may not sum due to rounding.

¹These figures may differ from the revenues reported in General Fund and cash fund revenue summary tables because of accounting adjustments across TABOR boundaries.

²Revenue retained under Referendum C is referred to as "General Fund Exempt" in the budget.

³The General Fund contains a restricted \$21.8 million to be refunded with the next TABOR surplus. This amount comprises \$16.1 million under-refunded from the FY 2014-15 surplus and a net \$5.7 million discovered to be subject to TABOR after refunds were processed. Because this money is already set aside within the General Fund (i.e., "restricted"), Table 1 includes an accounting adjustment indicating that this amount does not need to be encumbered a second time.

⁴Pursuant to Section 24-75-201 (2), C.R.S., revenue above the Referendum C cap is required to be set aside during the year it is collected to be refunded in the following fiscal year. For example, excess revenue collected in FY 2014-15 was set aside in the budget for FY 2014-15 and refunded in FY 2015-16 on income tax returns for tax year 2015.

GENERAL FUND REVENUE

This section presents the Legislative Council Staff outlook for General Fund revenue, which provides the state's main source of revenue for operating appropriations. Table 8 on page 21 summarizes General Fund revenue collections for FY 2016-17 and projections for FY 2017-18 through FY 2019-20.

Gross General Fund revenue is expected to total \$11.3 billion in FY 2017-18, representing strong growth of 10.4 percent over the \$10.3 billion collected in FY 2016-17. Every major source of General Fund revenue is expected to make strong contributions to overall revenue gains. Expectations for individual and corporate income tax, sales tax, and use tax were all revised upward from the December forecast. In total, current year General Fund expectations were increased by \$243.0 million, or 2.2 percent, from December.

Gross General Fund revenue is expected to increase an additional 7.2 percent in FY 2018-19 to total \$12.2 billion. Revenue expectations are consistent with an economic forecast of continued employment growth and moderate to strong increases in income and consumer spending. The General Fund revenue forecast for FY 2018-19 was increased \$297.0 million, or 2.5 percent, from December, with the most significant increases occurring in expectations for individual and corporate income tax revenue.

General Fund revenue is expected to increase an additional 5.7 percent to total \$12.5 billion in FY 2019-20, an upward revision of \$378.3 million relative to the December forecast.

Impacts from the TCJA and higher than usual forecast uncertainty. This forecast incorporates adjustments to the outlook for individual and corporate income taxes as a result of the federal income tax policy changes under the Tax Cuts and Jobs Act (TCJA). Increases to individual income tax revenue and reductions to corporate income tax revenue are projected to increase General Fund revenue by a net of \$35.2 million in FY 2017-18, \$196.5 million in FY 2018-19 and \$329.8 million in FY 2019-20. These estimates are unchanged relative to those published in December.

This forecast contains both upside and downside risk due to the late stage of the economic expansion and uncertainty surrounding the impacts of the TCJA. Significant shifts in taxpayer behavior occurred in anticipation of and following the passage of the TCJA, resulting in unusual income tax collection patterns at the end of calendar year 2017 and start of 2018 that cannot easily be isolated from underlying economic conditions. Considering these factors, revenue estimates in this forecast carry a higher than usual margin of error.

Triggered tax expenditure impacts. The Historic Preservation Income Tax Credit is triggered on for tax year 2018 because the December revenue forecast projected sufficient revenue to allow 6 percent growth in General Fund appropriations in FY 2017-18. The Gross Conservation Easement Tax Credit is expected to become partially refundable in tax year 2019 and tax year 2020 because the state is expected to collect a TABOR surplus in each of FY 2018-19 and FY 2019-20.

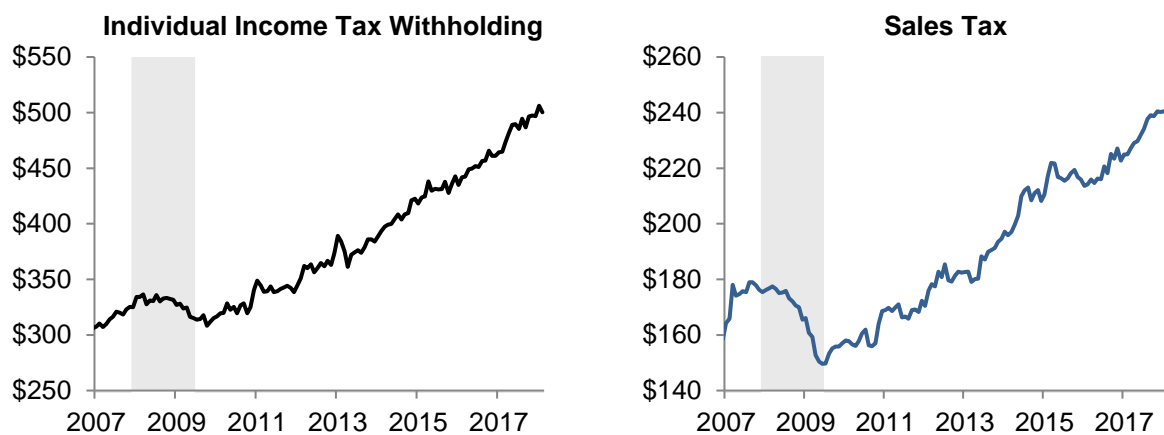
Expiring tax expenditures. This forecast estimates state revenue under current state and federal law. Under current state law, certain tax expenditures available now are scheduled to expire in future years. The forecast includes upward adjustments to revenue projections for years after current tax expenditures are scheduled to expire.

Individual income taxes. The state's 4.63 percent tax on individual income generates roughly two-thirds of gross General Fund revenue. Individual income tax revenue has four components: (1) wage withholding, which makes up a majority of collections and includes income taxes withheld from employee paychecks; (2) estimated payments, which are quarterly payments made generally by self-owned businesses and taxpayers with large income tax liabilities; (3) cash with returns, which include payments made when taxpayers file income tax returns; and (4) refunds to taxpayers who pay more than they owe in taxes or who are able to claim refundable tax credits.

Expectations for net individual income tax revenue were increased by \$145.4 million in FY 2017-18 and \$204.9 million in FY 2018-19. Revisions are primarily attributable to increased expectations for withholding and estimated payments. These expectations assume a long-lived economic expansion, characterized by rising wage pressure and increased nonwage earnings.

Wage withholding grew 8.3 percent on a cash basis in the first eight months of FY 2017-18 relative to the same period in FY 2016-17 (Figure 4, left). This strong pace of growth is consistent with rising wages and the tightening labor market. Expectations for withheld wages have been increased relative to the December forecast based on stronger than expected collections to date. Withholding is now expected to increase at rates above 5.0 percent annually through the forecast period, outpacing population growth and inflation.

Figure 4
Selected Sources of General Fund Revenue
Millions of Dollars Collected per Month



Source: Colorado Department of Revenue. Data seasonally adjusted by Legislative Council Staff using the Census x12 method. Data shown on a cash-accounting basis as three-month moving averages. Data are through February 2018. February 2018 data are preliminary.

The smaller components of individual income tax collections also increased significantly during the first eight months of FY 2017-18. On these trends, current fiscal year expectations for each of these components have been revised upward, and all are expected to increase at a more moderate pace through the forecast period. This forecast assumes that acceleration in the amounts of cash with returns and refunds are each attributable to faster tax return processing in the Department of Revenue.

Stronger than expected estimated payments, which surged up 45 percent over December and January compared with the same two months in FY 2016-17, are assumed to be attributable to prepayment of 2017 federal income taxes by quarterly filers before the end of calendar year 2017. Quarterly filers who pre-paid their state income taxes can claim a higher state income tax deduction on their federal 2017 tax return by deducting 15 months of state income taxes instead of just 12 before the \$10,000 cap on this deduction goes into place in tax year 2018 under the TCJA. Distortions of this type were interpreted as a movement of revenue within FY 2017-18 and did not change expectations for future fiscal years.

Expectations for the revenue increase anticipated to result from the TCJA have not changed from the December forecast. The federal legislation broadens the federal income tax base by eliminating or reducing exclusions, exemptions, and deductions that had been available before its enactment. While federal income tax revenue is expected to fall as federal tax rates are lower, the broader tax base will increase Colorado taxable income and therefore Colorado tax revenue. Provisions in the tax bill, on net, are expected to increase individual income tax revenue by \$61.9 million in FY 2017-18, \$218.8 million in FY 2018-19, and \$312.2 million in FY 2019-20.

Sales taxes. The 2.9 percent state sales tax is assessed on the purchase of goods, except those specifically exempted, and a relatively small collection of services. Sales tax receipts are expected to increase 7.2 percent to total \$2.9 billion during the current FY 2017-18 before slowing to 5.5 percent in FY 2018-19 and 4.7 percent in FY 2019-20, as shown in Table 8. Beginning with this forecast, Table 8 distinguishes between revenue attributable to the 2.9 percent state sales tax and the special state sales tax on retail marijuana; these amounts were combined in previous versions of this table.

Sales tax collections have grown quickly thus far in the current fiscal year (Figure 4, right), reflecting higher household incomes and improved consumer confidence. The TCJA is expected to boost consumption slightly in both FY 2017-18 and FY 2018-19 due to increased consumer spending as a result of federal tax cuts. Strong employment growth and moderate wage growth both have contributed to increased sales tax receipts this year as well. Growth in sales tax collections is expected to moderate slightly but continue to outpace changes in prices and population.

Use taxes. The 2.9 percent state use tax is due when sales tax is owed but is not collected at the point of sale. Use tax revenue is largely driven by capital investment among manufacturing, energy, and mining firms. Use tax collections surged during the early part of the fiscal year, rising 17.8 percent from the June to January period compared with the same period last year on the strength of a recovering energy industry. Revenue is expected to continue to grow at robust rates through the forecast period, increasing 16.2 percent in the current FY 2017-18 before adding 8.6 percent in FY 2018-19 and 5.3 percent in FY 2019-20. The forecast represents upward revisions to December expectations primarily as a result of current year performance. Expected collections were revised upward by \$2.4 million in FY 2017-18 and \$10.1 million in FY 2018-19.

Projections for FY 2017-18 assume the implementation of House Bill 10-1193, which requires out-of-state (including online) retailers not collecting sales taxes to notify customers and the Department of Revenue of customers' state use tax obligations. Implementation of the bill had been stayed pending resolution of an ongoing legal dispute and affected sales made by out-of-state retailers for the first time during 2017. This forecast assumes that retailers have chosen to comply with the law by notifying consumers of their use tax obligation rather than collecting sales taxes. Notifications are required to be issued by January 31 for purchases made during the prior calendar year, and consumers are required to remit use taxes by April 15 for the

prior year's purchases on their state income tax form. The fiscal impacts of this policy change are uncertain at this time; however, the policy is assumed to increase use tax revenue during FY 2018-19, with a slight tapering off in FY 2019-20.

Corporate income taxes. Corporate income tax collections are projected to increase 20.7 percent in FY 2017-18 to \$614.9 million. This increase is based on higher corporate profits in an economy with growth across industries. Corporate income tax revenue will continue to increase through the forecast period, totaling \$658.8 million in FY 2018-19 and \$701.5 million in FY 2019-20. The forecast incorporates the expected impacts of the TCJA, for which downward adjustments of \$26.7 million and \$22.2 million were applied, respectively, to corporate income tax revenue for FY 2017-18 and FY 2018-19. A positive adjustment of \$17.6 million was applied to the forecast for FY 2019-20.

Compared with the December forecast, the estimate of FY 2017-18 corporate income tax revenue was increased by \$109.3 million due to higher than expected acceleration in collections during the first eight months of the fiscal year. Forecasted corporate income tax revenue was increased relative to December by \$78.7 million in FY 2018-19 based on increased expectations for business activity and corporate profits.

Table 8
General Fund Revenue Estimates
Dollars in Millions

Category		Actual FY 2016-17	Percent Change	Estimate FY 2017-18	Percent Change	Estimate FY 2018-19	Percent Change	Estimate FY 2019-20	Percent Change
Excise Taxes									
1	Sales	\$2,727.7	5.5	\$2,923.1	7.2	\$3,082.9	5.5	\$3,227.8	4.7
2	Use	259.5	7.6	301.5	16.2	327.5	8.6	345.0	5.3
3	Retail Marijuana Sales	98.3	46.0	156.9	59.6	179.6	14.5	196.1	9.2
4	Cigarette	36.6	-1.7	35.4	-3.2	34.8	-1.8	34.1	-1.9
5	Tobacco Products	21.2	0.6	22.4	5.8	23.3	3.7	24.2	3.9
6	Liquor	45.0	3.3	46.6	3.5	47.7	2.3	49.2	3.3
7	Total Excise	3,188.3	6.4	3,485.9	9.3	3,695.6	6.0	3,876.4	4.9
Income Taxes									
8	Net Individual Income	6,760.9	3.6	7,484.3	10.7	8,075.0	7.9	8,564.3	6.1
9	Net Corporate Income	509.3	-21.9	614.9	20.7	658.8	7.1	701.5	6.5
10	Total Income Taxes	7,270.2	1.3	8,099.3	11.4	8,733.8	7.8	9,265.7	6.1
11	Less: Portion Diverted to the SEF	-540.0	3.3	-595.1	10.2	-640.8	7.7	-679.0	6.0
12	Income Taxes to the General Fund	6,730.2	1.1	7,504.2	11.5	8,093.1	7.8	8,586.7	6.1
Other Sources									
13	Estate	0.0	NA	0.0	NA	0.0	NA	0.0	NA
14	Insurance	290.5	3.6	303.7	4.5	312.6	2.9	320.3	2.5
15	Pari-Mutuel	0.6	-6.6	0.5	-7.3	0.5	-5.8	0.5	-4.7
16	Investment Income	14.7	18.6	13.4	-9.2	19.8	48.0	25.7	29.7
17	Court Receipts	4.1	17.4	5.0	21.8	5.8	17.8	6.7	14.2
18	Other Income	47.3	109.8	35.2	-25.6	35.9	2.0	37.1	3.4
19	Total Other	357.2	11.8	357.8	0.2	374.7	4.7	390.3	4.2
20	Gross General Fund Revenue	\$10,275.8	3.1	\$11,347.9	10.4	\$12,163.3	7.2	\$12,853.4	5.7

Totals may not sum due to rounding. NA = Not applicable. SEF = State Education Fund.

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CASH FUND REVENUE

Table 9 summarizes the forecast for cash fund revenue subject to TABOR. The largest revenue sources are motor fuel taxes and other transportation-related revenue, the Hospital Provider Fee, gaming taxes, and severance taxes. The end of this section also presents the forecasts for marijuana sales and excise tax, Federal Mineral Lease, and unemployment insurance revenue. These forecasts are presented separately because they are not subject to TABOR limitations.

Cash fund revenue subject to TABOR totaled \$2.78 billion in FY 2016-17. This revenue is expected to fall 19.5 percent to \$2.23 billion in FY 2017-18. The drop in revenue is attributable to the elimination of the Hospital Provider Fee and the 2.9 percent sales tax on retail marijuana in Senate Bill 17-267. These reductions more than offset expected increases in transportation-related and severance tax revenue. Year-over-year changes in other cash fund categories are minimal.

Total cash fund revenue subject to TABOR will rebound from this lower level by 6.1 percent to \$2.37 billion in FY 2018-19, and will increase 3.9 percent to \$2.46 billion in FY 2019-20, as most revenue sources are projected to rise.

Transportation-related revenue subject to TABOR totaled \$1,220.3 million in FY 2016-17. Transportation funding will increase 2.9 percent in FY 2017-18 to \$1,255.3 million and 2.1 percent in FY 2018-19. The forecast for TABOR revenue to transportation-related cash funds is shown in Table 10 on page 25.

The largest source of revenue into the Highway Users Tax Fund (HUTF) is motor fuel excise tax (22¢ per gallon of gasoline and 20.5¢ per gallon of diesel fuel). Fuel excise tax revenue is projected to increase 1.8 percent in FY 2017-18 to \$645.2 million, and 1.7 percent in FY 2018-19 to \$657.5 million. The HUTF also receives revenue from other sources, including registration fees, which are expected to increase 3.0 percent to \$380.2 million in FY 2017-18. Total HUTF revenue is expected to increase 2.5 percent to \$1,092.2 million in FY 2017-18 and 1.9 percent to \$1,112.5 million in FY 2018-19.

The State Highway Fund (SHF) is the primary fund for the state Department of Transportation to meet state transportation needs. The SHF receives money from HUTF transfers, local government grants, and interest earnings. HUTF revenue is subject to TABOR when it is originally collected by the state but disbursements from the HUTF to the SHF are not. Local government revenue into the SHF fluctuates based on local budgeting decisions and large annual fluctuations are common. SHF revenue subject to TABOR is expected to increase 11.4 percent to \$44.5 million in FY 2017-18 and increase 5.3 percent to \$46.9 million in FY 2018-19.

Other transportation cash fund revenue subject to TABOR is expected to total \$118.5 million in FY 2017-18, a 3.2 percent increase from the previous year. Revenue will grow slowly through the remainder of forecast period. Other transportation revenue is from the sale of aviation and jet fuel, certain registration fees, and fines for driving violations.

Revenue to the Statewide Bridge Enterprise is not subject to TABOR and is shown as an addendum to Table 10. Revenue to this enterprise is expected to grow 3.0 percent to \$109.9 million in FY 2017-18 and 2.1 percent to \$112.2 million in FY 2018-19. Bridge safety surcharge collections typically grow at the same rate as vehicle registrations.

Table 9
Cash Fund Revenue Subject to TABOR
Dollars in Millions

	Actual FY 2016-17	Estimate FY 2017-18	Estimate FY 2018-19	Estimate FY 2019-20	CAAGR*
Transportation-Related Percent Change	\$1,220.3 3.0%	\$1,255.3 2.9%	\$1,281.4 2.1%	\$1,303.4 1.7%	2.2%
Hospital Provider Fee ¹ Percent Change	\$654.4 -18.6%	NA	NA	NA	
Severance Tax Percent Change	\$19.5 3.0%	\$76.8 294.1%	\$135.2 77.1%	\$153.9 13.2%	99.1%
Gaming Revenue ² Percent Change	\$103.7 0.9%	\$106.8 3.0%	\$108.1 1.2%	\$109.0 0.8%	1.7%
Insurance-Related Percent Change	\$10.3 -9.6%	\$16.0 54.6%	\$19.5 21.8%	\$19.6 0.7%	23.8%
Regulatory Agencies Percent Change	\$75.5 9.8%	\$78.0 3.3%	\$80.0 2.5%	\$81.9 2.4%	2.7%
Capital Construction Related – Interest ³ Percent Change	\$4.6 -12.2%	\$5.3 15.5%	\$4.9 -7.4%	\$4.7 -3.5%	1.0%
2.9% Sales Tax on Marijuana ⁴ Percent Change	\$40.9 28.6%	\$18.1 -55.8%	\$13.5 -25.2%	\$13.4 -0.7%	-31.0%
Other Cash Funds Percent Change	\$646.5 -7.6%	\$677.5 4.8%	\$727.4 7.4%	\$776.1 6.7%	6.3%
Total Cash Fund Revenue Subject to the TABOR Limit	\$2,775.6 -5.2%	\$2,233.8 -19.5%	\$2,370.7 6.1%	\$2,462.0 3.9%	-3.9%

Totals may not sum due to rounding. NA = Not applicable.

*CAAGR: Compound average annual growth rate for FY 2016-17 to FY 2019-20.

¹Pursuant to Senate Bill 17-267, the Hospital Provider Fee subject to TABOR has been repealed.

²Gaming revenue in this table does not include Amendment 50 because it is not subject to TABOR.

³Includes interest earnings to the Capital Construction Fund, the Controlled Maintenance Trust Fund, and transfers from certain enterprises.

⁴Includes revenue from the 2.9 percent sales tax collected from the sale of medical and retail marijuana and accessories sold by marijuana retailers. SB 17-267 eliminated the 2.9 percent sales tax for retail marijuana beginning in FY 2017-18. This revenue is subject to TABOR.

Table 10
Transportation Revenue by Source
Dollars in Millions

	Actual FY 2016-17	Estimate FY 2017-18	Estimate FY 2018-19	Estimate FY 2019-20	CAAGR*
Highway Users Tax Fund (HUTF)					
Motor and Special Fuel Taxes	\$629.4	\$645.2	\$657.5	\$667.8	2.0%
Percent Change	3.2%	1.8%	1.7%	1.4%	
Total Registrations	\$369.0	\$380.2	\$388.3	\$395.4	2.3%
Percent Change	3.6%	3.0%	2.1%	1.8%	
<i>Registrations</i>	\$218.4	\$225.0	\$229.8	\$233.8	
<i>Road Safety Surcharge</i>	\$130.6	\$134.6	\$137.4	\$139.8	
<i>Late Registration Fees</i>	\$20.1	\$20.6	\$21.2	\$21.8	
Other HUTF Receipts ¹	\$67.0	\$66.8	\$66.6	\$66.4	-0.3%
Percent Change	3.9%	-0.3%	-0.3%	-0.3%	
Total HUTF	\$1,065.4	\$1,092.2	\$1,112.5	\$1,129.7	2.0%
Percent Change	3.4%	2.5%	1.9%	1.5%	
State Highway Fund (SHF) ²	\$40.0	\$44.5	\$46.9	\$49.4	7.3%
Percent Change	-23.4%	11.4%	5.3%	5.3%	
Other Transportation Funds	\$114.9	\$118.5	\$122.0	\$124.4	2.7%
Percent Change	12.3%	3.2%	2.9%	2.0%	
<i>Aviation Fund</i> ³	\$23.1	\$23.9	\$24.9	\$25.6	
<i>Law-Enforcement-Related</i> ⁴	\$8.8	\$8.7	\$8.9	\$8.9	
<i>Registration-Related</i> ⁵	\$83.0	\$85.9	\$88.1	\$89.9	
Total Transportation Funds	\$1,220.3	\$1,255.3	\$1,281.4	\$1,303.4	2.2%
Percent Change	3.0%	2.9%	2.1%	1.7%	

Totals may not sum due to rounding.

*CAAGR: Compound average annual growth rate for FY 2016-17 to FY 2019-20.

¹Includes daily rental fee, oversized overweight vehicle surcharge, interest receipts, judicial receipts, drivers' license fees, and other miscellaneous receipts in the HUTF.

²Includes only SHF revenue subject to Article X, Section 20, of the Colorado Constitution (TABOR).

³Includes revenue from aviation fuel excise taxes and the 2.9 percent sales tax on the retail cost of jet fuel.

⁴Includes revenue from driving under the influence (DUI) and driving while ability impaired (DWAI) fines.

⁵Includes revenue from Emergency Medical Services registration fees, emissions registration and inspection fees, motorcycle and motor vehicle license fees, and P.O.S.T. Board registration fees.

Addendum: TABOR-Exempt FASTER Revenue

	Actual FY 2016-17	Estimate FY 2017-18	Estimate FY 2018-19	Estimate FY 2019-20	CAAGR*
Bridge Safety Surcharge	\$106.7	\$109.9	\$112.2	\$114.2	1.7%
Percent Change	-0.6%	3.0%	2.1%	1.8%	

Note: Revenue to the Statewide Bridge Enterprise from the bridge safety surcharge is TABOR-exempt and therefore not included in the table above. It is included as an addendum for informational purposes.

After accounting for \$654.4 million in fee collections and associated interest earnings subject to TABOR in FY 2016-17, the **Hospital Provider Fee** was repealed on July 1, 2017. Under Senate Bill 17-267, hospitals now remit a Healthcare Affordability and Sustainability Fee to a new TABOR enterprise. Beginning in the current FY 2017-18, fee and interest earnings are omitted from Table 9 because they are enterprise funds exempt from TABOR. For all three years of the current forecast period, the “other cash funds” line item in Table 9 includes \$15.7 million in fee revenue that is authorized to be spent for nonexempt programs and thus subject to TABOR.

Severance tax revenue including interest earnings is expected to total \$76.8 million in FY 2017-18 and \$135.9 million in FY 2018-19 as shown in Table 11. Relative to other revenue sources, severance tax revenue is extremely volatile because the value of natural resources severed from the earth fluctuates considerably with changes in commodity prices, and the severance tax structure amplifies the boom-bust cycle of the industry. The forecast for severance tax revenue is \$15.5 million higher in FY 2017-18 and \$59.7 million higher in FY 2018-19 than estimated in December, reflecting acceleration in year-to-date collections and higher oil prices, which will spur additional oil development.

Table 11
Severance Tax Revenue Forecast by Source
Dollars in Millions

	Actual FY 2016-17	Estimate FY 2017-18	Estimate FY 2018-19	Estimate FY 2019-20	CAAGR*
Oil and Gas	\$4.0	\$62.2	\$122.3	\$140.3	226.6%
Percent Change	-22.8%	1445.5%	96.6%	14.7%	
Coal	\$4.2	\$4.6	\$4.5	\$4.3	0.9%
Percent Change	15.9%	11.5%	-3.7%	-4.4%	
Molybdenum and Metallica	\$2.9	\$3.3	\$3.3	\$3.3	4.0%
Percent Change	100.2%	11.0%	0.6%	0.6%	
Total Severance Tax Revenue	\$11.1	\$70.1	\$130.1	\$147.8	136.9%
Percent Change	8.2%	530.6%	85.5%	13.7%	
Interest Earnings	\$8.4	\$6.7	\$5.9	\$6.0	-10.3%
Percent Change	-3.3%	-20.4%	-11.4%	2.3%	
Total Revenue to the Severance Tax Fund	\$19.5	\$76.8	\$135.9	\$153.9	99.1%
Percent Change	3.0%	294.1%	77.1%	13.2%	

*CAAGR: Compound average annual growth rate for FY 2016-17 to FY 2019-20.

Severance taxes from **oil and natural gas** are forecast to total \$62.2 million in FY 2017-18 and \$122.3 million in FY 2018-19. Strong growth from FY 2016-17 lows reflect the boom-bust structure of the oil and gas severance tax. Oil and gas producers are able to claim a credit against severance taxes for property taxes paid, called the ad valorem credit. The credit has contributed to recent volatility in revenue, as described below.

Property taxes on oil and natural gas are based on the prior year’s production. In the year following peak oil and gas production, the amount of the ad valorem credit claimed is large because it is based on a higher production value, allowing the oil and gas producer to reduce severance taxes by a larger amount. As a result, severance tax collections are reduced because of lower production as well as the larger impact of the ad valorem credit. This was the case in FY 2016-17 when oil and gas severance tax collections totaled \$4.0 million. The low amount in FY 2016-17 also reflects adjustments for severance tax refunds paid out of the General Fund pursuant to Senate Bill 16-218.

When the value of oil and gas production increases, the ad valorem credit is based on the lower production value from the previous year, allowing the oil and gas producer to reduce severance taxes by a relatively small amount. This is the state of the oil markets in FY 2017-18. In the current fiscal year, oil production subject to the severance tax is increasing and the amount of the ad valorem credit is decreasing because the credit reflects value of production in 2016 when the oil and gas sector was going through an industry-specific recession.

Oil prices have averaged \$62.90 per barrel year-to-date, compared with \$50.80 per barrel in 2017. Prices are expected to increase slowly throughout the forecast period and average \$63.74 per barrel in 2018 and \$63.95 per barrel in 2019. Based on a survey of oil and gas producers by the Federal Reserve Bank of Kansas City, a price of \$63.00 per barrel will lead to substantial increases in oil and gas development in the region, which includes Colorado. Based on current price levels and ongoing development activity, oil production in Colorado is expected to reach an all-time high in 2018 and increase in each year through 2020.

Natural gas prices have been much more stable than oil prices. Producers in Colorado have received an average price of \$2.92 per Mcf in 2017 and have averaged \$2.72 per Mcf year-to-date in 2018. Natural gas producers are able to quickly place natural gas on the market due to new technologies and existing infrastructure, which will keep natural gas prices below \$3.50 throughout the forecast period. Prices are expected to average \$3.10 per Mcf in 2018 and rise to \$3.32 per Mcf in 2019.

Coal has historically been the second largest mineral source of severance taxes in Colorado after oil and natural gas. Coal severance tax revenue is expected to increase 11.5 percent over the prior year generating \$4.6 million in severance taxes in FY 2017-18. Projected growth is based on increased coal production in Colorado as a result of the owners of the two largest coal mines emerging from bankruptcy. Coal severance taxes are expected to decline 3.7 percent in FY 2018-19 to \$4.5 million as the demand for coal as a fuel for electricity production declines. Utility companies are realigning their electricity production away from coal toward natural gas and renewable sources.

Metal and molybdenum mines will pay \$3.3 million in severance taxes on the value of minerals produced in FY 2017-18. International demand for steel has increased mining activity at the two molybdenum mines in Colorado, the Climax Mine outside Leadville and the Henderson Mine outside Empire. Based on continued demand, metal and molybdenum severance taxes are expected to be \$3.3 million in each year of the forecast period.

Limited gaming revenue includes taxes, fees, and interest earnings collected in the Limited Gaming Fund and the State Historical Fund. Most of this revenue is subject to TABOR. Revenue attributable to Amendment 50, which expanded gaming beginning in FY 2009-10, is TABOR-exempt. The state limited gaming tax is a graduated tax assessed on casino *adjusted gross proceeds*, the amount of wagers collected less the amount paid to players in winnings, in the three state-sanctioned gaming municipalities: Black Hawk, Central City, and Cripple Creek. Casinos on tribal lands in southwestern Colorado are not subject to the state tax.

Limited gaming revenue subject to TABOR totaled \$103.7 million in FY 2016-17 and is expected to grow 3.0 percent to \$106.8 million in FY 2017-18. Fiscal year-to-date through January, tax revenue grew 7.6 percent from the July to January period in 2016 on the strength of additional wagers and higher “hold” percentages, the percentages of wagers retained by casinos and not paid to players in winnings. By statutory formula, gaming tax revenue subject to TABOR cannot grow faster than 3.0 percent annually, but growth in tax revenue is expected to be

supplemented by higher fee and interest earnings. Gaming revenue is expected to grow at slower rates through the remainder of the forecast period, including by 1.2 percent during FY 2018-19.

Under state law, annual growth in gaming tax revenue that exceeds 3.0 percent is attributed to Amendment 50 and is exempt from TABOR. Years when total gaming tax revenue grows by more than 3.0 percent therefore result in disproportionately higher distributions of Amendment 50 revenue. This revenue primarily supports the state community college system. In the current FY 2017-18, fast growth in gaming tax revenue is expected to increase community college distributions to \$11.2 million, representing growth of 7.1 percent.

The marijuana market is maturing, leading to the slower growth in **marijuana tax** revenue. A maturing market has moderated growth in consumption, competition from other states that have legalized the adult-use of marijuana, and more efficient marijuana cultivation. Total marijuana tax revenue is expected to reach \$253.0 million in FY 2017-18 and \$275.3 million in FY 2018-19. Tax revenue from marijuana sales is shown in Table 12.

Table 12
Tax Revenue from the Marijuana Industry
Dollars in Millions

	Actual 2016-17	Estimate 2017-18	Estimate 2018-19	Estimate 2019-20	CAAGR*
Proposition AA Taxes	\$170.3	\$235.0	\$261.8	\$279.9	26.2%
Special Sales Tax	98.3	156.9	179.6	196.1	25.9%
State Share	83.6	141.2	161.6	176.5	
Local Share	14.8	15.7	18.0	19.6	
15% Excise Tax	71.9	78.1	82.2	83.8	5.2%
2.9 Sales Tax (Subject to TABOR)	\$40.9	\$18.1	\$13.5	\$13.4	-31.0%
Medical Marijuana	12.4	12.2	11.8	11.7	-1.9%
Retail Marijuana	28.1	5.7	1.4	1.6	
Subject to TABOR Interest	0.3	0.1	0.1	0.1	
Total Taxes on Marijuana	\$211.1	\$253.0	\$275.3	\$293.3	11.6%

*CAAGR: Compound average annual growth rate for FY 2016-17 to FY 2019-20.

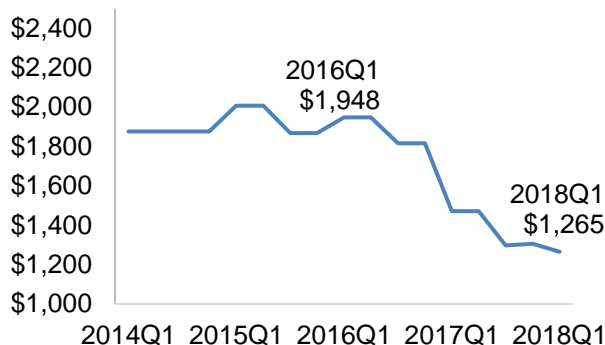
Special sales tax revenue on retail marijuana is expected to reach \$156.9 million in FY 2017-18 and \$179.6 million in FY 2018-19. This anticipates a significant slowdown in growth as the marijuana industry matures, as mentioned above.

Excise tax revenue is forecast to reach \$78.1 million in FY 2017-18 and \$82.2 million in FY 2018-19. The average wholesale market rate for marijuana products has been declining as marijuana cultivators become more efficient. The Department of Revenue publishes an average wholesale market rate for marijuana products, which is the basis for the state's excise tax. The calculated wholesale rate for marijuana flower has declined from \$1,948 per pound in the first quarter of 2016 to \$1,265 per pound in the first quarter of 2018, as shown in Figure 5. Because the average market rate is forecast to fall through the forecast period, marijuana excise tax collections are projected to grow very slowly through the forecast period.

The 2.9 percent state sales tax rate applies to medical marijuana and marijuana accessories purchased at a retail marijuana store. Medical marijuana sales tax revenue is expected to decline through the forecast period, generating about \$12.2 million in FY 2017-18 and \$11.8 million in FY 2018-19. Retail marijuana is exempt from the 2.9 percent state sales tax starting July 1, 2017.

Retailers have remitted a total of \$4.6 million year-to-date in FY 2017-18, which is higher than tax collections from taxable marijuana accessories. Taxpayers are either continuing to collect the 2.9 percent sales tax on marijuana sales or filing sales tax returns for periods prior to FY 2017-18. It is assumed that the 2.9 percent sales tax remitted from retail marijuana dispensaries will decline in FY 2018-19 and FY 2019-20 as sales tax returns from prior periods when retail marijuana was taxable are processed. Revenue from the 2.9 percent sales tax is deposited in the Marijuana Tax Cash Fund and is subject to TABOR.

Figure 5
Calculated Wholesale Rate
of Marijuana Flowers
Price per Pound



Source: Colorado Department of Revenue.

Federal Mineral Lease (FML) revenue is the state's portion of the money the federal government collects from mineral production on federal lands. Collections are mostly determined by the value of mineral production. Since FML revenue is not deposited into the General Fund and is exempt from TABOR, the forecast is presented separately from other sources of state revenue. FML revenue is expected to increase 1.1 percent from the previous year, to \$92.0 million in FY 2017-18. FML revenue is expected to increase 12.0 percent in FY 2018-19 to \$103.0 million as the state fulfills its obligations for previous payments associated with canceled leases on the Roan Plateau. FML revenue is expected to increase 4.6 percent in FY 2019-20 to \$107.7 million.

Forecasts for **Unemployment Insurance (UI) Trust Fund** revenue, benefit payments, and year-end balance are shown in Table 13. Revenue to the UI Trust Fund has not been subject to TABOR since FY 2009-10 and is therefore excluded from Table 9. Revenue to the Employment Support Fund, which receives a portion of the UI premium surcharge, is still subject to TABOR and is included in the revenue estimates for other cash funds in Table 9.

The ending balance for the state's UI Trust Fund was \$739.4 million in FY 2016-17, up 8.8 percent from the previous fiscal year. The fund has benefited from the state's healthy labor market and historically low unemployment rates. In FY 2016-17, the total amount of benefits paid from the fund dropped to \$466.0 million, the lowest amount in almost ten years. Premium contributions ticked up in FY 2016-17, despite employers shifting to a lower premium rate schedule, which reduces the amount of UI contributions they are required to pay for each employee.

The UI Trust Fund is expected to continue to improve throughout the forecast period. A higher employee chargeable wage base will support the fund. The chargeable wage is indexed annually to the average weekly wage growth. The chargeable wage base is \$12,500 for 2017, up \$300 from 2016. The amount of benefits paid from the fund is also expected to continue to fall, further reinforcing the fund balance.

Table 13
Unemployment Insurance Trust Fund
Revenues, Benefits Paid, and Fund Balance
Dollars in Millions

	Actual 2016-17	Estimate 2017-18	Estimate 2018-19	Estimate 2019-20	CAAGR*
Beginning Balance	\$679.8	\$739.4	\$904.6	\$1,072.0	
Plus Income Received					
UI Premium	\$633.0	\$561.6	\$544.0	\$539.4	-5.19%
Interest	\$15.7	\$18.1	\$19.5	\$21.1	
Total Revenues	\$648.7	\$579.8	\$563.5	\$560.6	-4.75%
Percent Change	1.7%	-10.6%	-2.8%	-0.5%	
Less Benefits Paid	\$466.0	\$414.6	\$396.1	\$384.2	-6.23%
Percent Change	-9.7%	-11.0%	-4.5%	-3.0%	
UI Bonds Principal Repayment	(\$125.0)	\$0.0	\$0.0	\$0.0	
Accounting Adjustment	\$1.8	\$0.0	\$0.0	\$0.0	
Ending Balance	\$739.4	\$904.6	\$1,072.0	\$1,248.4	19.08 %
Solvency Ratio					
Fund Balance as a Percent of Total Annual Private Wages	0.66%	0.77%	0.85%	0.96%	

Totals may not sum due to rounding.

**CAAGR: Compound average annual growth rate for FY 2016-17 to FY 2019-20.*

ECONOMIC OUTLOOK

U.S. and Colorado economic activity is expected to continue to improve in 2018 and 2019. The current economic recovery and expansion has reached the second longest on record. In the late stages of expansion, both the national and state economies are feeling the constraints of a tightening labor market. Employment growth continues to slow and wage pressures are mounting. Workers are being lured back into the labor force by more attractive job offerings and higher pay, fueling continued growth. However, the constraints of the tight labor market and demographic drag from a larger share of the population moving into retirement will persist, dampening longer-term business growth prospects.

Business activity continues to rebound, as indicated by further improvements in industrial production, manufacturing activity, and exports. Stronger global economic activity will continue to put upward pressure on commodity prices, supporting agricultural and energy industries. A depreciating U.S. dollar and rising global demand will spur additional growth in U.S. exports. However, geopolitical risk and trade policy uncertainty continue to pose downside risks to the forecast.

The passage of the federal Tax Cuts and Jobs Act (TCJA) has provided a boost to business investment, which is expected to produce future productivity gains. Rising wages and tax cuts to households are expected to support consumer activity in the near-term. However, the near-term stimulus from the TCJA could come at the cost of longer-term growth. Inflationary pressures are mounting and signal increasing risk that the economy is overheating. Additional interest rate hikes are expected to reign in inflationary pressures. However, the timing and pace of rate hikes could cause shifts in investor holdings that kindle financial market volatility.

In Colorado, high housing costs will continue to constrain in-migration to the state, contributing to an even tighter labor market. Unless wage gains can offset the rising cost of living, consumer spending will slow. Tables 14 and 15 on pages 60 and 61 present histories and expectations for economic indicators for the U.S. and Colorado, respectively.

Gross Domestic Product

The U.S. economy has entered its ninth year of economic expansion. After growing 1.5 percent in 2016, real gross domestic product (GDP), an estimate of the inflation-adjusted value of final U.S. goods and services produced, increased 2.3 percent in 2017. Demographic and structural changes in the economy have dampened growth in the current expansion compared with other business cycles. Real GDP growth slowed in the last three months of 2017 after a strong third quarter on a drag from net exports. Colorado's economy continues to outpace the nation, but the rate of growth has been slowing. GDP growth is expected to continue in 2018 and 2019, with the federal Tax Cuts and Jobs Act and the federal budget bill providing a near-term boost to consumer spending and business activity. This growth, however, poses a risk of pulling future economic activity forward at the expense of longer-term growth.

Robust consumer spending and strong business investment were the main drivers for the U.S. economy in 2017. Consumer spending, which accounts for more than two-thirds of U.S. economic activity, grew by 2.7 percent. Rising home prices boosted household wealth, helping to underpin consumer spending. After declining in 2016, business spending and investment increased 3.2 percent in 2017. Business investment was broad-based, with healthy gains in equipment and intellectual property investments. Despite a weak U.S. dollar, imports grew

GDP growth slowed from an annual rate of 3.2 percent in the third quarter of 2017 to 2.5 percent in the fourth quarter of 2017. Contributions to growth came from three of the four main components of GDP. Strong consumer spending on both goods and services sustained economic growth in the final three months of 2017. Businesses continued to spend and invest at a healthy rate, but at a slower pace than previous quarters. Investment in residential projects reversed a two-quarter decline and posted a healthy contribution to economic growth in the final quarter of 2017. Government spending and investment also added modestly to economic growth. However, growth was moderated somewhat, as strong consumer demand for imports offset gains from U.S. exporters. Figure 6 presents the annualized change in real U.S. GDP and contributions from its four major components since 2008.

Real GDP

Contributions to GDP

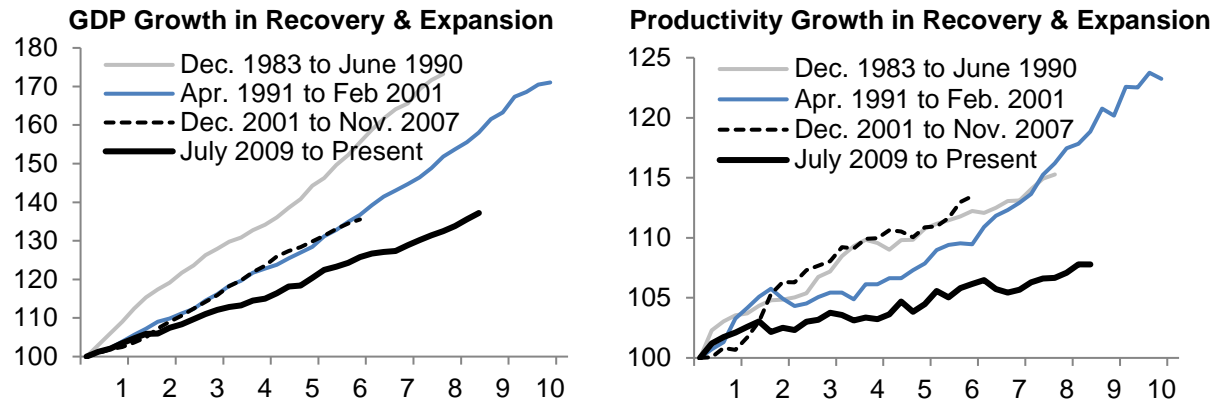
- Gov't Consumption & Investment
- Net Exports
- Gross Private Investment
- Personal Consumption Expenditures

2.5%

The U.S. economy marked 106 consecutive months of growth in real GDP by late 2017, tying the recovery that followed the 1960-61 recession for the second longest expansion in the nation's recorded history. Only the recovery following the 1990-91 recession was longer in duration, lasting 120 months. Relative to prior business cycles, the strength of growth in the current expansion continues to underwhelm, even with recent GDP acceleration in 2017 (Figure 7).

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Figure 7
U.S. Economic Growth in Recovery and Expansion
Index of Quarterly Growth since the Start of the Past Four Recoveries

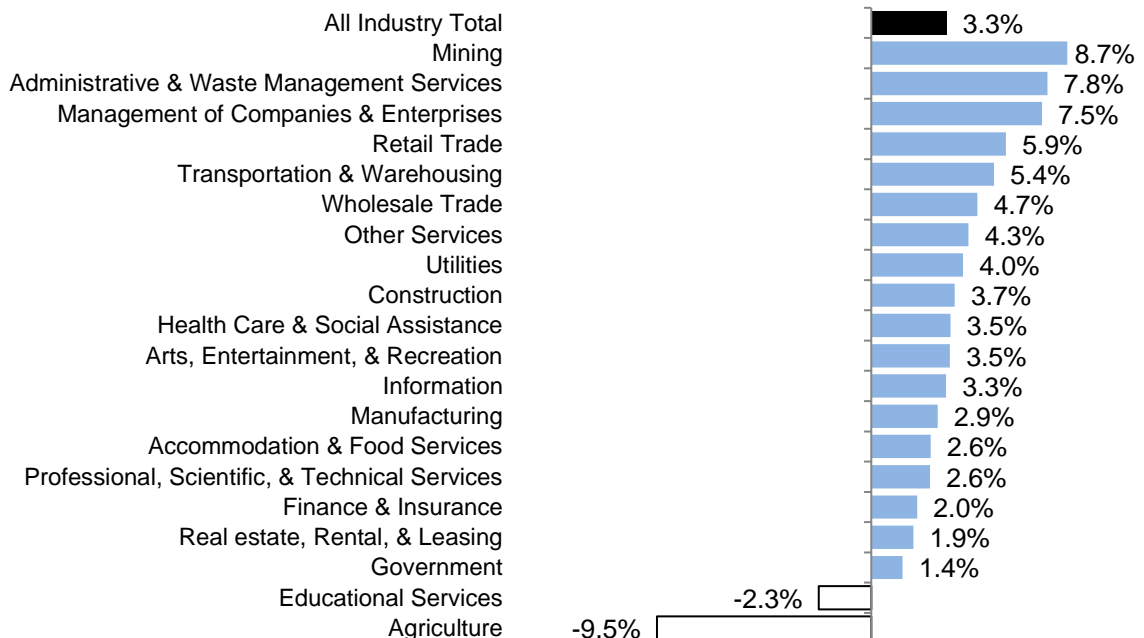


Source: U.S. Bureau of Economic Analysis.

*Productivity growth is calculated as real GDP divided by the number of labor hours worked by all U.S. workers.

Colorado's real GDP grew 3.3 percent in the third quarter of 2017 over the same period one year prior. Economic growth for the state outpaced national activity, and was broad-based across most industries, with 18 of 20 sectors registering growth. The mining industry has benefited from stabilizing oil prices and a smaller workforce, while Colorado's strong consumer confidence and buoyant housing market have allowed the state's retail industry to buck national trends. Consistent with national trends, an abundant supply of farming goods and low prices continue to hamper the agricultural economy. Figure 8 shows the change in Colorado GDP by industry in the first three quarters of 2017 over the same period in 2016.

Figure 8
Colorado Real Gross Domestic Product, Year-to-Date through the Third Quarter of 2017
Percent Change, Year-over-Year



Source: U.S. Bureau of Economic Analysis. Real GDP is inflation-adjusted.

- Real U.S. GDP is expected to increase 2.7 percent in 2018 and 2.2 percent in 2019. Near-term stimulus to business investment and consumer spending from the TCJA will provide a short-term boost to GDP growth.

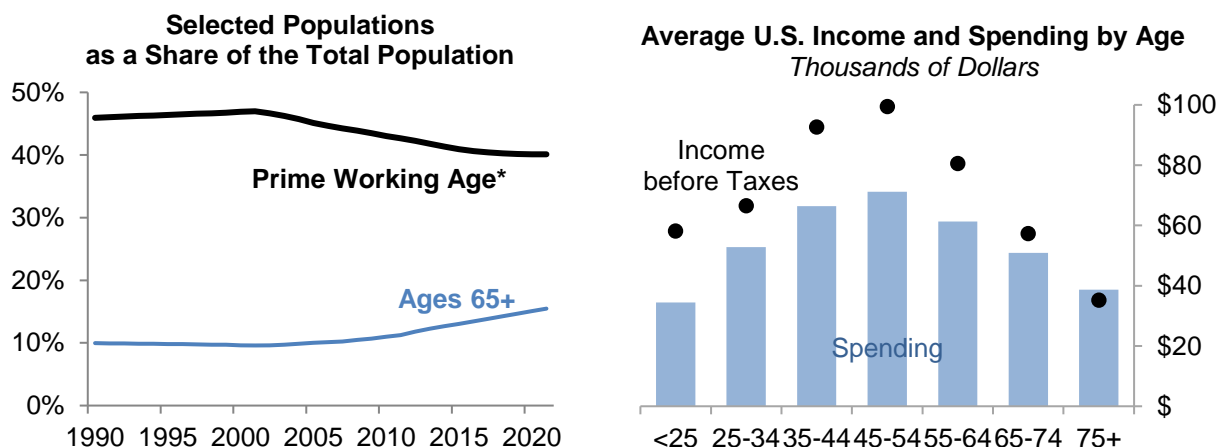
Demographics

Net migration has slowed. Data published by the U.S. Census Bureau in December show a slowdown in Colorado population growth attributable primarily to slower net migration. Lower levels of net migration reflect fewer new residents to the state and more residents moving elsewhere. Slower population growth will contribute to an even tighter labor market in the state. Locations outside of Colorado are proving more affordable to many would-be residents of the state as housing costs continue to rise in Colorado. Economic growth has improved in many areas of the U.S., offering encouraging job prospects in less expensive areas. Consistent with nationwide trends, international migration to Colorado has also slowed due to changes in federal immigration policy and improved economic prospects abroad.

The aging population is slowing economic activity. Demographic change actively affects economic performance across the U.S. and in Colorado, impacting the supply of labor, income, consumption, and inflation. An increasing share of the baby boomer generation — those born between 1946 and 1964 — is retiring, causing labor force participation to decline and slowing income and consumption growth over the long run. Based on projections recently released by the State Demography Office, Colorado's prime working age population, comprising persons between ages 25 and 54, is projected to fall from a high of 47 percent of the population in 2001 to 41.1 percent by 2020 (Figure 9, left). The share of those aged 65 and older is expected to rise from a historical average of about 10 percent to nearly 15 percent by 2020.

Income and consumption rise and fall with age (Figure 9, right). In particular, the average earning and consumption levels of those in the U.S. peak between ages 45 and 54 and decline steadily thereafter. As the baby boomer generation reached their 40s and 50s, the U.S. enjoyed a “demographic dividend,” marked by strong economic growth in the 1990s and 2000s.

Figure 9
Selected Demographic Indicators



Source: Colorado State Demography Office.
*Ages 25 to 54 as a share of the total population.

Source: U.S. Bureau of Labor Statistics, 2016 Consumer Expenditure Survey.

The current expansion has been less impressive than in previous business cycles in part because of the demographic drag on the U.S. and Colorado economies, which is expected to continue well into the future. The oldest baby boomers reached age 65 in 2010. The youngest will reach retirement age in 2029. The number of baby boomers leaving the labor force is expected to peak in Colorado in the early 2020s.

Evolving consumption patterns. In addition to the rise and fall of income and spending, consumption patterns tend to evolve over time with changes in technology and economic activity. Anecdotal evidence and economic data suggest that members of the millennial generation — those born between 1980 and 1999 — spend more on experiences, such as travel and dining out, and less on things, such as apparel, books, and food consumed at home, than previous generations did at their age. Millennials are also making different decisions than prior generations with respect to housing, which makes up the largest share of household expenses (over 40 percent in the Denver-Boulder-Greeley combined statistical area). National data from the Consumer Expenditure Survey suggest that relative to prior generations aged 25 to 34, millennials are less likely to own a home, more likely to rent or live with their parents, and less likely to move. These consumption trends have subdued national demand for housing construction and sales in recent years. However, these trends are abating as a rising share of Millennials are reaching their 30s.

- With the slowdown in net migration to the state, Colorado population growth is projected to grow 1.4 percent in 2018 and 1.3 percent 2019.

Business Income and Activity

Business income and manufacturing activity continue to expand on strong demand for business outputs. Business activity and incomes are expected to continue to grow throughout the forecast period. However, rising wage and inflationary pressures will increase business costs which may constrain future business opportunities. Private business activity has recovered from the December 2014 oil price plunge, which resulted in an industry-specific recession in the energy sector. Commodity prices for metals and crops have picked up on stronger global demand, boosting industrial production, manufacturing and export activity. The federal Tax Cuts and Jobs Act is expected to increase after-tax profits of corporations and business owners, which may result in additional business investments and boost productivity. The extent and duration of the boost, however, is uncertain. Additionally, the boost may add additional competition to a tight business environment.

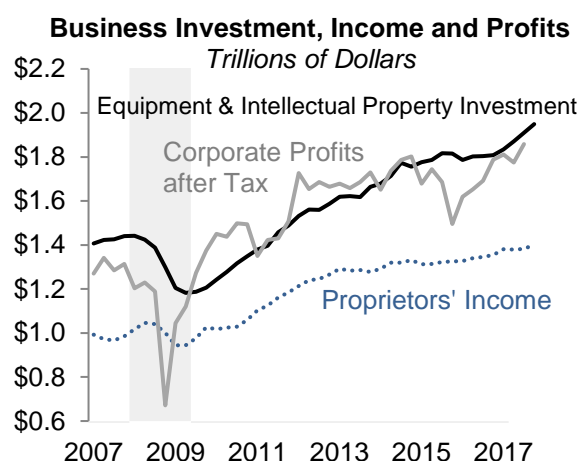
Figure 10 shows selected measures of business activity. Business investment, proprietors' income, and corporate profits after tax (top left) continued to increase through 2017. **Investment** in equipment and intellectual property increased 5.1 percent over the course of the year. **Business income** also showed strength. Corporate profits after tax were up 9.7 percent through the third quarter of 2017, while proprietors' income increased 3.3 percent through the end of 2017.

Both the Institute for Supply Management's (ISM) **manufacturing** index and its non-manufacturing business activity index indicate expanding business activity. The manufacturing index has been in expansionary territory (with values above 50) for the past seventeen months, rising to 60.8 in February (Figure 10, top right). The non-manufacturing business activity index read 59.5 in February. The non-manufacturing index had consistently over-performed the manufacturing index since the end of the 2008-09 recession. However, the two indices converged in the last six months as manufacturing activity has accelerated. The Federal Reserve Bank of Kansas City produces a manufacturing index similar to the ISM index

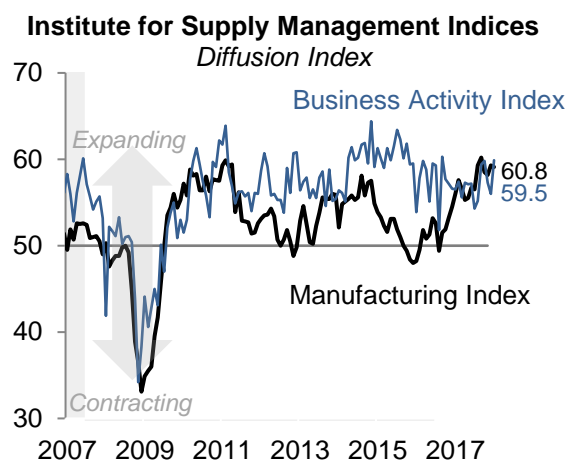
for businesses within its region, which includes Colorado in addition to six other states. The Kansas City Fed index strengthened to 67.0 in February, as shown in Figure 11. Regional manufacturers reported higher prices for finished products and expect similar activity to continue in coming months.

As measured by the Federal Reserve, **industrial production** (Figure 10, bottom left) increased 2.0 percent in 2017, despite some weakness in industrial production because of lost oil and gas output in Texas as a result of Hurricane Harvey. Manufacturing and industrial production orders (Figure 10, bottom right) continue to increase as the expansion matures and global markets improve. Total new manufacturing orders increased 6.3 percent in 2017 and new orders for durable goods increased 5.9 percent, partially on the strength of increased orders for airplanes.

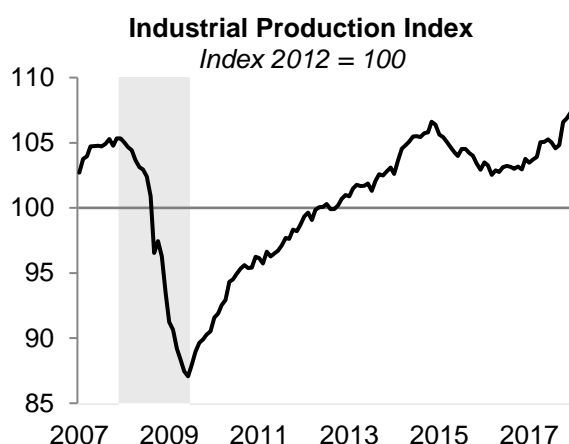
Figure 10
Selected Indicators of U.S. Business Activity



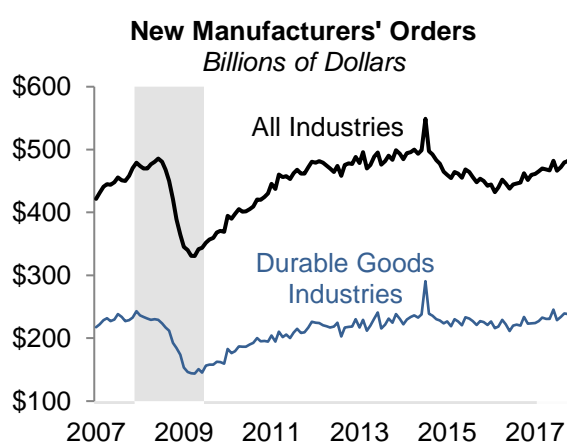
Source: U.S. Bureau of Economic Analysis.
Data are not adjusted for inflation.



Source: Institute for Supply Management.

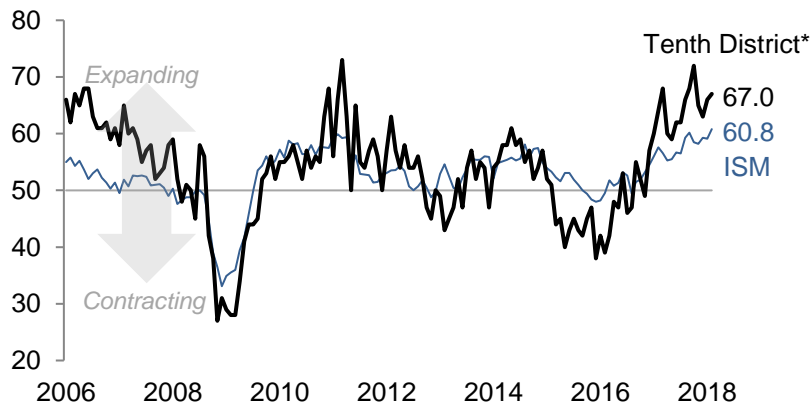


Source: Federal Reserve Board of Governors.



Source: U.S. Census Bureau.
Data are not adjusted for inflation.

Figure 11
Business Activity in Tenth Federal Reserve District

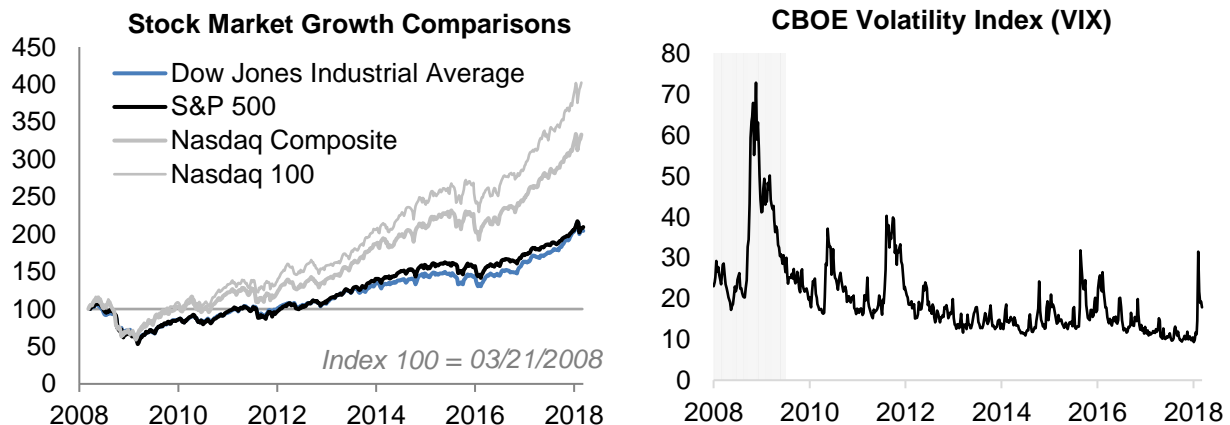


Source: Institute for Supply Management (ISM) and Federal Reserve Bank of Kansas City.

*The Tenth District composite index is adjusted to the ISM scale. The Tenth District includes Colorado, Nebraska, Oklahoma, Kansas, Wyoming, and portions of New Mexico and Missouri.

Passage of the federal Tax Cuts and Jobs Act helped to propel **stock markets** at the end of 2017; however, volatility returned to the markets in the first two months of 2018. The Dow Jones Industrial Average reached an all-time high in the last week of January before falling 7.8 percent in the next two weeks on inflation fears and the potential for faster than expected interest rate hikes (Figure 12, left). Volatility indicators continue to reflect heightened concern for future fluctuations. The Chicago Board Options Exchange (CBOE) Volatility Index is based on S&P 500 option prices. When the index goes up, it indicates near-term expectations for market volatility. As illustrated in Figure 12 (right), the index spiked at the start of February and remains elevated relative to the period of historically low volatility in 2017.

Figure 12
Selected Indicators of Stock Market Activity



Source: S&P Dow Jones Indices LLC and NASDAQ OMX Group.

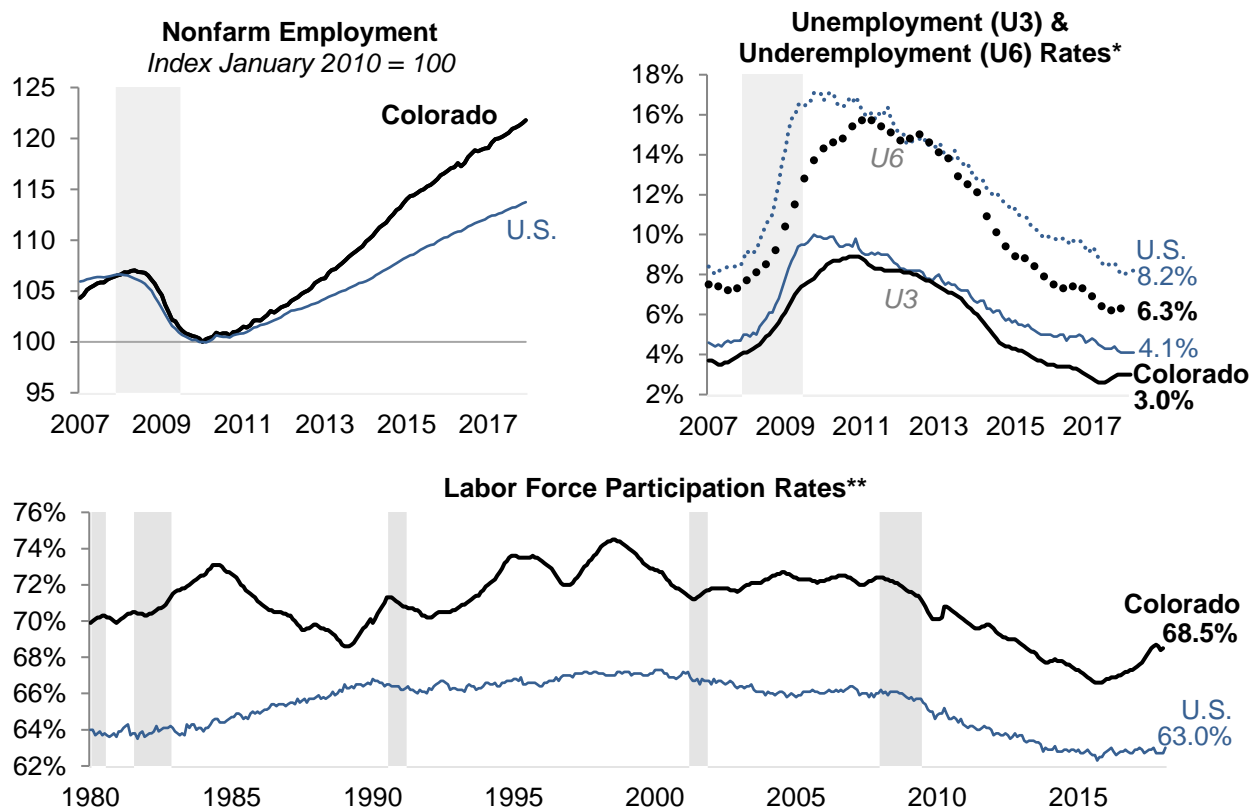
Source: Chicago Board Options Exchange (CBOE).

Labor Markets

U.S. and Colorado labor markets continue to tighten. Job growth has slowed and unemployment rates have stabilized over the past two years, consistent with the late stages of economic expansion. Colorado labor market activity continues to outpace that of the nation as a whole and the state unemployment rate remains among the lowest in the country. Wage gains in 2018 and 2019 are expected to attract more workers into the labor force. This trend will sustain employment growth and will put some upward pressure on unemployment rates. Figure 13 compares labor market activity for the U.S. and Colorado.

The aging of the U.S. and Colorado populations into retirement have contributed to a decline in **labor force participation** rates over the past decade (Figure 13, bottom). Additionally, globalized markets and structural shifts toward automation have reduced demand for lower-skilled workers in many industries, including the manufacturing and publishing sectors. Over the past year and a half, however, labor force participation rates have ticked up slightly for the nation and at a much stronger pace in Colorado. These trends suggest there is still some slack in the labor market, and that employment growth has the potential to be stronger for longer as the expansion ages further. These trends will sustain employment growth through the forecast period.

Figure 13
Selected U.S. and Colorado Labor Market Indicators



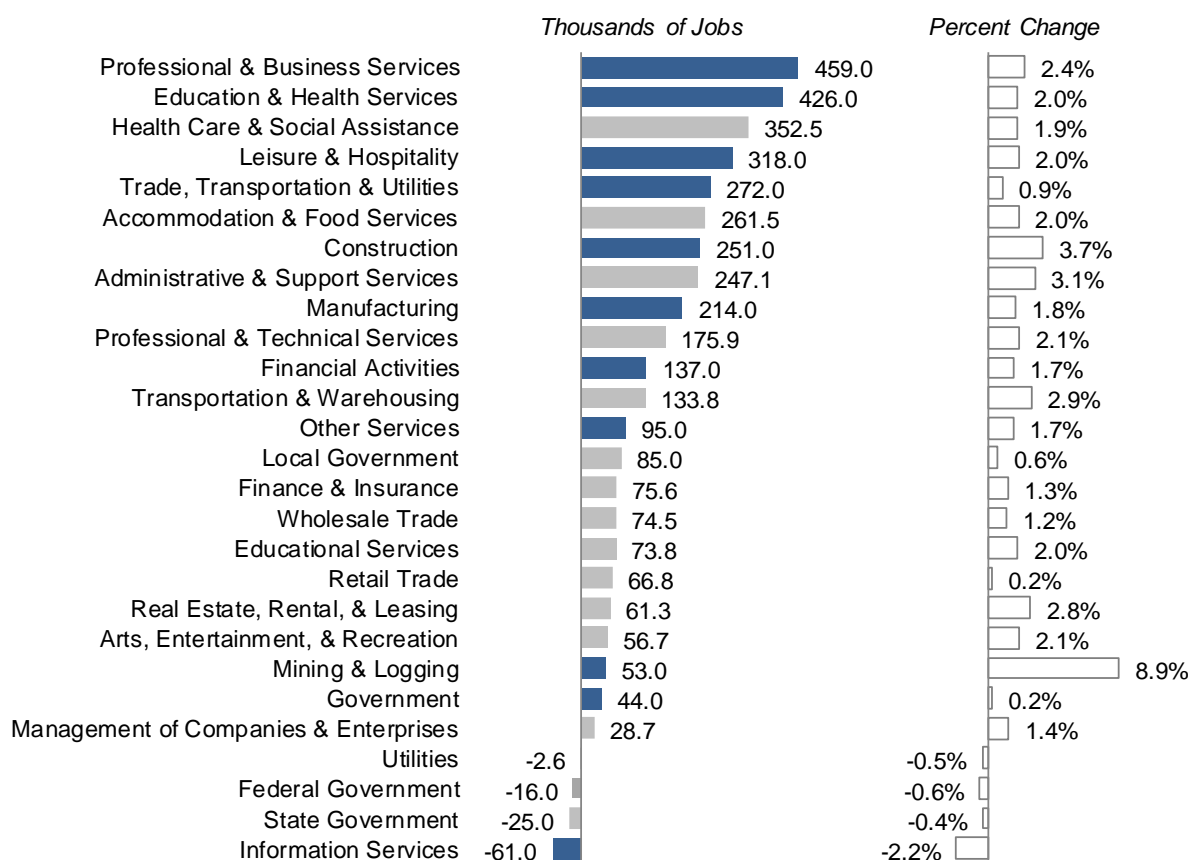
Source: U.S. Bureau of Labor Statistics. Data are seasonally adjusted and are through February 2018 for the U.S. and January 2018 for Colorado.

*Underemployment rates for Colorado are shown as four-quarter averages, while data for the U.S. are monthly.

**Labor force participation is calculated as the percent of the civilian population, age 16 and older, who are working or seeking employment.

Job growth nationwide picked up momentum in the last quarter of 2017 following hurricane-related disruptions and has continued to remain strong in the first two months of 2018. In February 2018, U.S. employment rose 1.6 percent over year-ago levels, an acceleration from 1.5 percent growth in January. On average, employers added 190,000 new jobs each month over the past 12 months. Job growth has remained broad-based across supersectors, with professional and business services and education and health services adding the most jobs since February 2017 (Figure 14). Job gains in the construction and manufacturing industries remain encouraging. Mining and logging employment continue to show considerable improvement in recent months as oil production and investment has rebounded with rising oil prices. However, total employment in the sector is still well below its peak employment of 900,000 jobs in early 2014.

Figure 14
U.S. Job Gains and Losses by Industry
Year-over-Year Change, February 2018 over February 2017

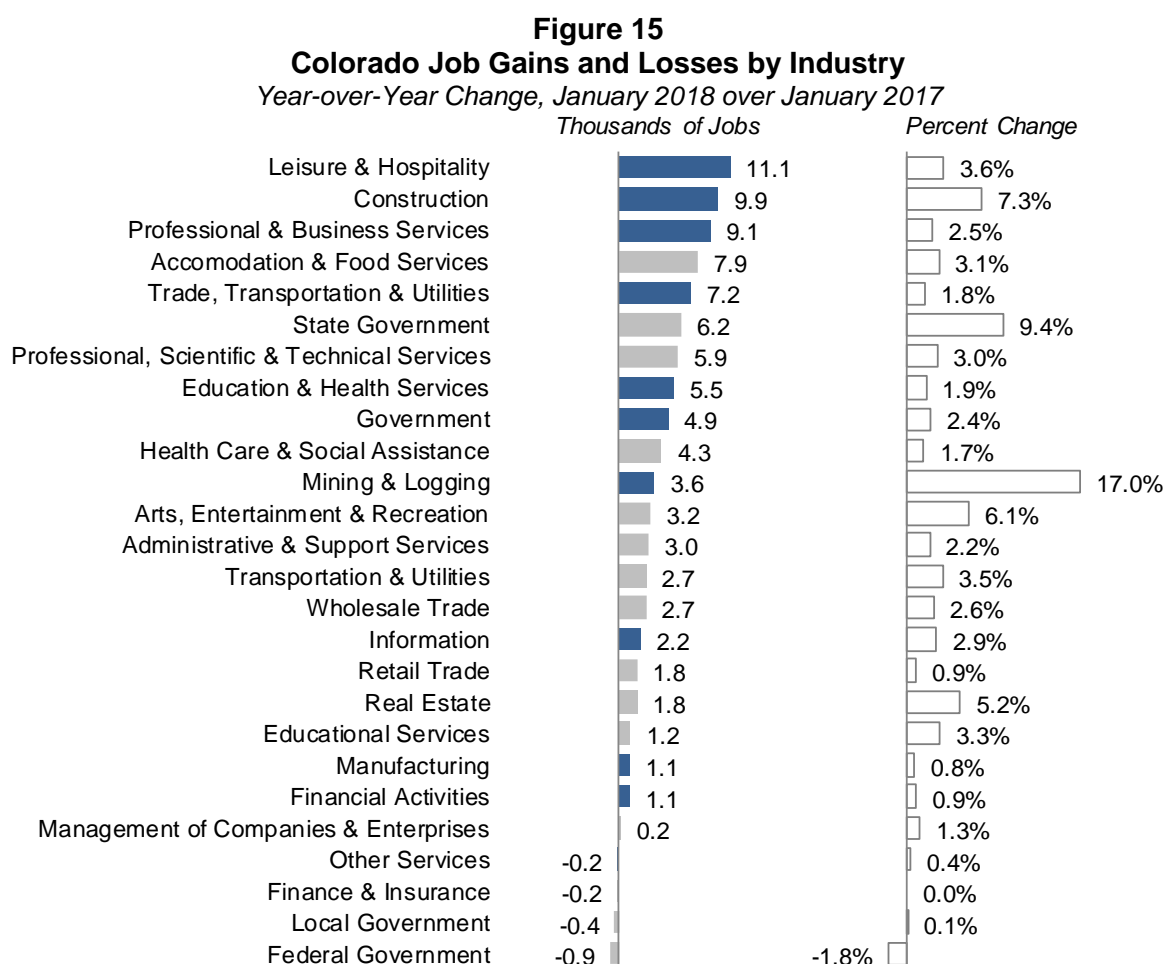


Source: U.S. Bureau of Labor Statistics. Data are seasonally adjusted. Blue shading indicates a supersector, while grey shading indicates a subsector.

The U.S. unemployment rate was 4.1 percent in February 2018 for the fifth month in a row because recent job growth has been sufficient to absorb the workers reentering the labor force. The labor force participation rate increased slightly to 63.0 percent in February 2018, as workers reentered the labor force. The U-6 (or underemployment) rate, a broader measure of the share of unemployed workers, was 8.2 percent in February 2018, down from 9.2 percent in the same month one year ago.

Colorado employers continue to add jobs at a faster pace than the nation, but gains have slowed compared to earlier periods in the current economic expansion. After growing 2.4 percent in 2016, Colorado employers added new jobs at a slightly lower rate in 2017, increasing 2.2 percent. Expansionary job growth peaked at 3.8 percent at the start of 2015 and has since slowed. Slower in-migration to the state will constrain growth further. Many employers are reporting that it is becoming increasingly difficult to find the talented and skilled labor needed to grow business. Colorado's unemployment rate remains among the lowest in the country and the number of new unemployment claims remain near historical lows. The state unemployment rate held steady at 3.0 percent in January 2018, a slight uptick from lows of 2.6 percent in mid-2017, reflecting the boost in labor force participation.

In January 2018, job growth in Colorado rose an estimated 2.6 percent over year-ago levels. Gains occurred across nearly all sectors (Figure 15). Similar to the nation as a whole, the professional and business services supersector continues to add a significant number of jobs. The supersector has consistently added jobs in the current business cycle, adding approximately 75,000 jobs in Colorado since 2010.



Source: U.S. Bureau of Labor Statistics. Data are seasonally adjusted. Blue shading indicates a supersector, while grey shading indicates a subsector.

Strong residential and nonresidential construction activity continues to drive demand for construction workers. Relative to a year ago, the industry has added 9,900 jobs to its payrolls, a 7.3 percent increase. The leisure and hospitality supersector, which includes the arts,

entertainment, recreation and accommodation, and food sectors, continues to benefit from Colorado's thriving tourism industry. Finally, job growth in the mining and logging supersector continues to pick up momentum from improving oil prices.

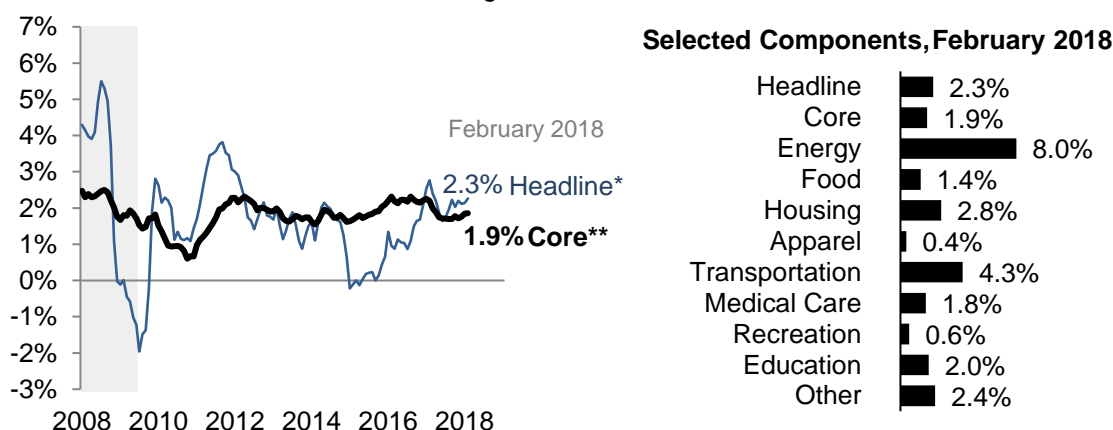
- Colorado will continue to add jobs through the forecast period, although at a slower pace than in recent years as labor market shortages constrain growth. Nonfarm employment in the state will increase 1.9 percent in 2018 and 1.7 percent in 2019. The state's unemployment rate will average 3.0 percent in 2018 and 3.1 percent in 2019.
- As the nation maintains full employment, U.S. nonfarm employment will increase 1.4 percent in 2018 and 1.1 percent in 2019. The national unemployment rate will average 4.0 percent in 2018 and 4.2 percent in 2019.

Monetary Policy and Inflation

At the January Federal Open Market Committee meeting, voting members maintained the target range for the federal funds rate at between 1.25 percent and 1.50 percent. Historically low unemployment rates and rising wage and price pressures are expected to prompt at least three interest rate hikes in 2018. The Federal Reserve continues to slowly shrink its balance sheet. These efforts are expected to contribute to a rise in longer-term interest rates.

U.S. consumer prices, as measured by the consumer price index for all urban areas (CPI-U), increased 2.3 percent in February relative to the same month a year prior (Figure 16). Core consumer prices, which exclude the volatile components of food and energy, increased at a more modest rate of 1.9 percent. Energy price inflation is attributable in part to the ongoing recovery of oil prices from their late-2014 plunge and the persistence of higher prices following Hurricane Harvey, which inhibited refining capacity along the Gulf Coast. All major price components rose year-over-year in February, evidencing broad-based price pressures. The housing component is the largest single consumer expenditure and contributed the most to headline inflation.

Figure 16
Consumer Price Index Inflation for All Urban Areas in the U.S.
Percent Change in Prices, Year-over-Year

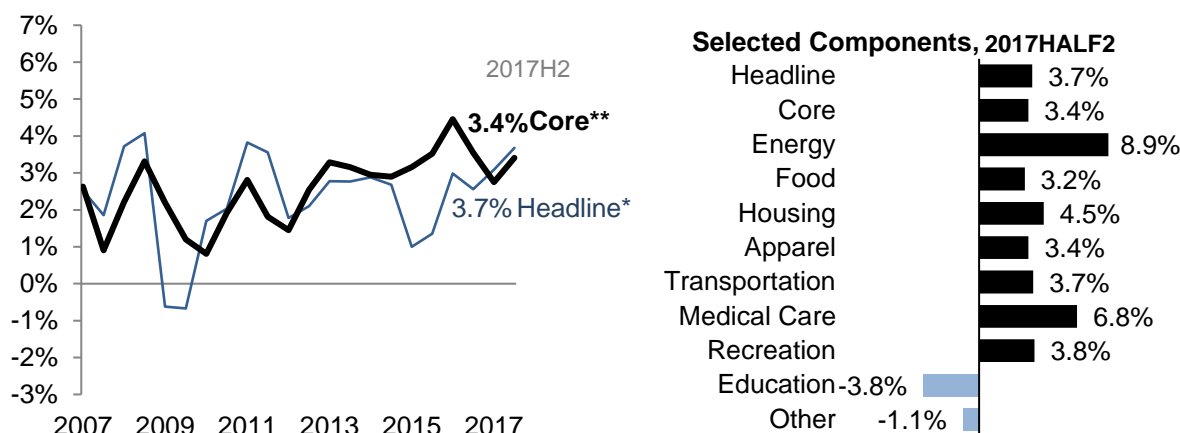


Source: U.S. Bureau of Labor Statistics. Inflation is calculated as the percent change in prices.

*Headline inflation includes all products and services. **Core inflation excludes food and energy prices.

Consumer prices in Colorado will continue to rise at a faster rate than average prices in the U.S. as a whole, due in large part to rapid growth in housing costs across most of the state and spill-over effects from the higher cost of living. In the second half of 2017, the headline Denver-Boulder-Greeley consumer price index rose 3.7 percent over year-ago levels, while core prices rose 3.4 percent (Figure 17). Due to methodological changes beginning in February 2018, a new inflation series replaced the Denver-Boulder-Greeley series. The new series, which will be produced on a bi-monthly and a semi-annual basis, includes the Denver-Aurora-Lakewood core-based statistical area, a geographically more concentrated area than the previous index.

Figure 17
Denver-Boulder-Greeley Consumer Price Index (CPI-U) Inflation
Percent Change in Prices, Year-over-Year



Source: U.S. Bureau of Labor Statistics. Inflation is calculated as the percent change in prices. *Headline inflation includes all products and services. **Core inflation excludes food and energy prices.

- Consumer prices for the Denver-Aurora-Lakewood area are expected to increase 2.9 percent in 2018 and 2.8 percent in 2019. By comparison, the national measure for all urban areas is expected to rise 2.5 percent in 2018 and 2.3 percent in 2019.

Households and Consumers

Consumer spending continues to be the primary driver of economic activity for the nation. In a low inflation environment, discretionary household incomes can reach further. Yet, wages rose slowly and disproportionately across regions of the nation and state and across skilled and unskilled labor following the 2008-09 recession. Only in recent months have wages shown more broad-based growth. Over the past two years, consumers have increasingly turned toward debt spending to fund their consumption, contributing to a decline in the personal savings rate. Consumer spending is expected to continue to bolster economic activity throughout the forecast period. However, the pace of consumer contributions will be constrained by the demographic drag and rising inflationary pressures.

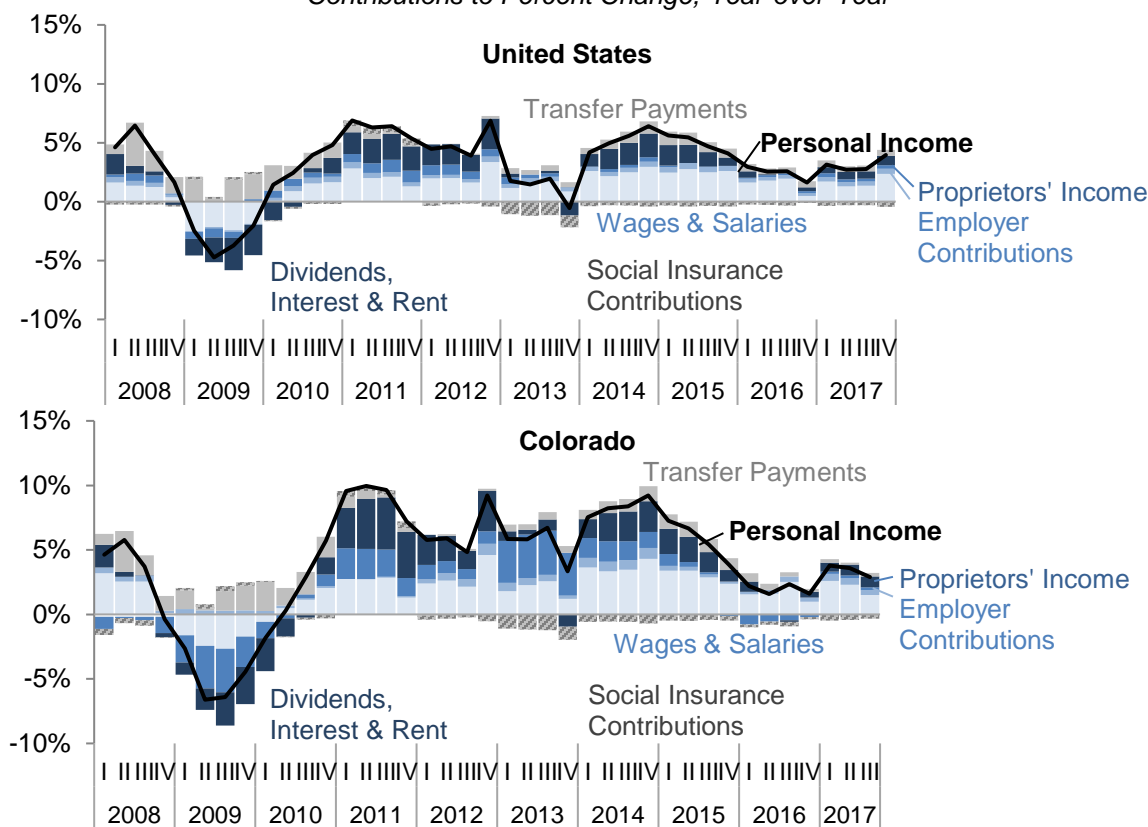
Personal income. Personal income growth across U.S. households remains modest to moderate by the standards of past expansions. U.S. personal income increased 3.1 percent in 2017, accelerating somewhat from the 2.4 percent growth rate posted in 2016. A history of U.S. personal income by its components is presented in Figure 18.

U.S. personal income accelerated across all of its principal components during 2017. The most significant pickup was in dividends, interest, and rents, which grew 3.3 percent in 2017 after sluggish 1.2 percent growth in 2016. Dividend income, in particular, stabilized in 2017 (growing 0.3 percent) after falling 5.6 percent during the year prior. Nonfarm business proprietors' income also accelerated, from 2.7 percent in 2016 to 4.0 percent in 2017. Acceleration in these income amounts reflect a strengthening in private sector performance and expectations relative to the weakness experienced in 2016.

Wage and salary income comprises just over half of aggregate U.S. personal income. Wages and salaries accelerated modestly in 2017, growing 3.1 percent after the 2.9 percent rate posted in 2016. These rates of increase are modest by the standards of previous late-cycle expansion and relative to earlier years in the current expansion. For example, U.S. wage and salary income grew 5.1 percent in both 2014 and 2015.

Weak advancement in wages and salaries is likely attributable to demographic factors. Growth in wage and salary income during 2017 was less than what would have been predicted by adding growth in nonfarm payrolls (1.6 percent) to headline inflation (2.1 percent). This suggests that average real wage income is falling among wage earners. Many economists attribute this phenomenon to the retirement of long-tenured veteran employees, who earned relatively high wages and salaries, and their replacement by younger, less experienced employees who earn less.

Figure 18
Personal Income and Its Components
Contributions to Percent Change, Year-over-Year



Source: U.S. Bureau of Economic Analysis with Legislative Council Staff calculations.
Data are not adjusted for inflation.

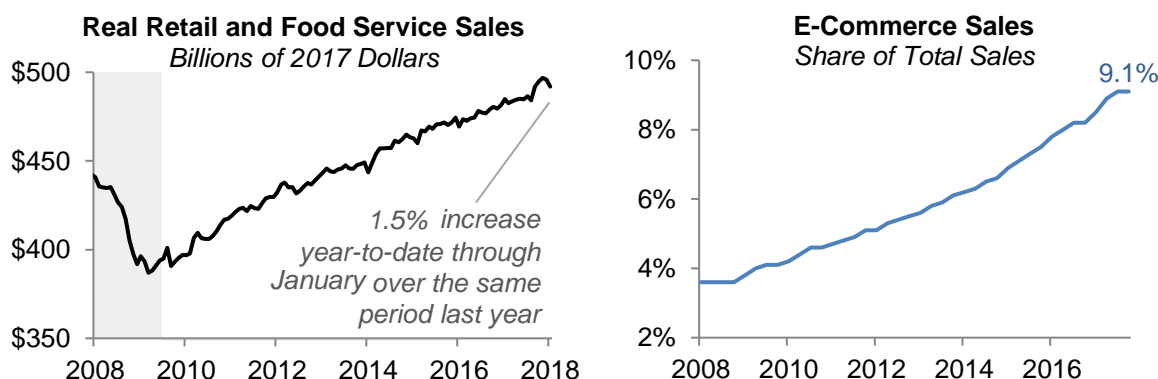
Colorado personal income has resumed its outperformance of the nation. While data are available only through the third quarter of 2017, Colorado personal income was on pace to grow 3.4 percent, beating the national figure and accelerating from anemic 1.9 percent growth in 2016 (Figure 18, bottom). The composition of Colorado personal income growth is even more skewed towards wage and salary income than in the nation at large. Wage and salary income grew 4.0 percent through the first three quarters of 2017 compared with 3.2 percent growth during 2016. While outperforming the nation, the increase in Colorado wage and salary growth fell short of the combined contributions of employment growth (2.2 percent) and headline Denver-Boulder-Greeley inflation (3.4 percent). Like the nation, demographic factors act as a drag on wage and salary growth as older and more experienced workers retire. Nonfarm proprietors' income increased 2.9 percent after falling 2.7 percent in 2016, and dividend, interest, and rent income grew 3.7 percent on a hot rental market and improving dividends and interest earnings.

Consumer spending. Consumer spending is a primary driver of overall economic performance, accounting for two-thirds of the U.S. economic activity. Consumer spending, as measured by personal consumption expenditures, grew 3.8 percent in the fourth quarter of 2017 over the third quarter on an annualized basis. The increase was largely driven by expenditures on goods, with durable goods spending up 13.8 percent. Motor vehicles and parts, furnishings and durable household equipment, and recreational goods and vehicles all saw double-digit growth in this category. Expenditures on services grew at a more modest 1.8 percent over the same period.

The University of Michigan's **consumer sentiment** index rose to 99.7 in February 2018, indicating greater consumer sentiment than the highs experienced before the 2008-09 recession. According to the survey, recent optimism is in part attributable to federal tax law changes and job gains, while February's stock market correction was not of concern to over 90 percent of respondents. The other two measures included in the survey, current economic conditions and consumer expectations, also ticked up in February.

U.S. retail sales continue to rise. As of January 2018, the advanced monthly retail report published by the U.S. Census Bureau shows sales up 4.5 percent over the same period last year. Adjusted for inflation, sales are up 1.5 percent in January (Figure 19, left). Growth in online sales continue to propel overall growth (Figure 19, right). E-commerce sales were up 14.4 percent in the fourth quarter in 2017 relative to the same period a year prior. Growth in online sales continues to grow at the expense of traditional brick and mortar stores.

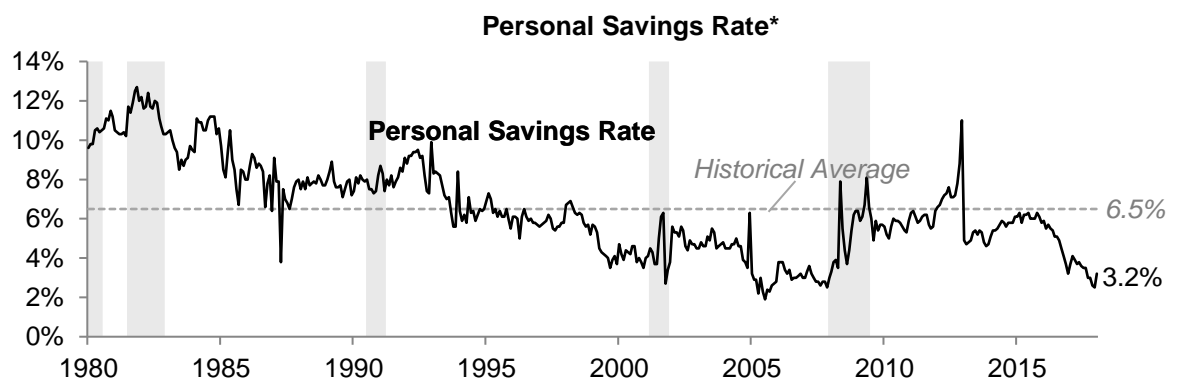
Figure 19
Selected Indicators of U.S. Consumer Spending



Source: U.S. Census Bureau. Data are seasonally adjusted.

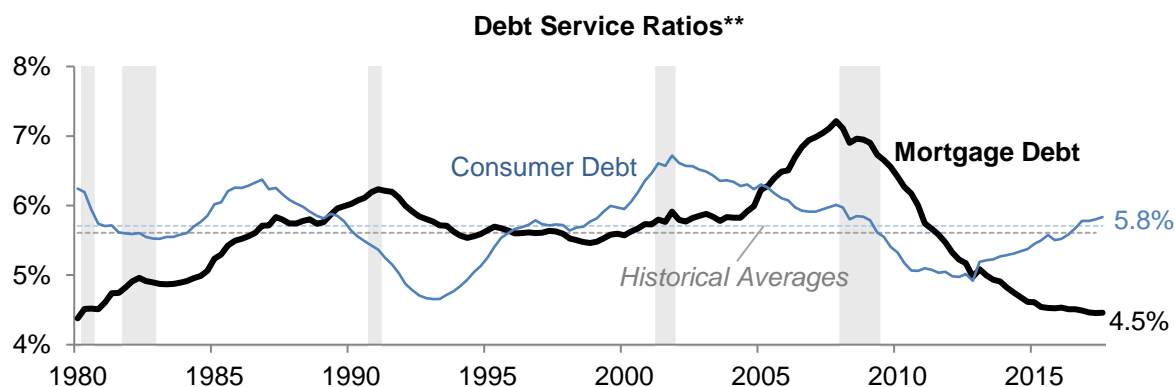
Household saving is down and consumer debt continues to rise. Modest wage growth has failed to keep pace with consumer spending, and personal savings rates continue to fall on average across U.S. households. As of January 2018, the saving rate reached 3.2 percent (Figure 20, top). The savings rate may rise some in 2018 as the changes under the federal TCJA will boost after-tax incomes for many households. Consumer debt service ratios continue to rise, reaching above historical averages that date back to the 1980s (Figure 20, bottom). Mortgage debt service ratios have stabilized at historical lows on low interest rates, mortgage refinancing, and a constrained number of new homeowners. These factors pushed down the cost of borrowing to purchase a home.

Figure 20
U.S. Household Savings Rate and Debt Ratios



Source: U.S. Bureau of Economic Analysis.

*The personal savings rate is calculated as the ratio of personal saving as a percentage of disposable personal income. Data are shown as seasonally adjusted annual rates.



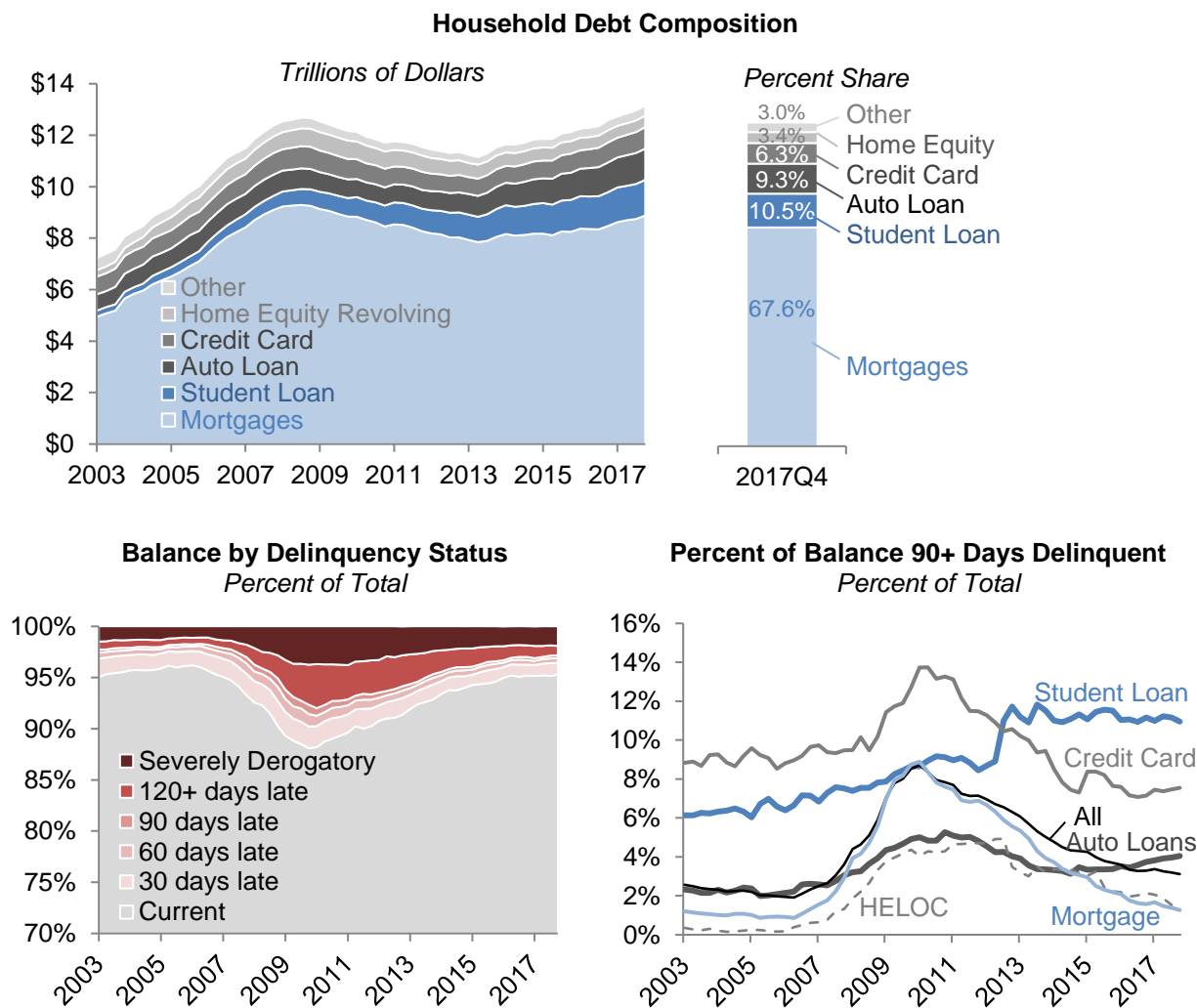
Source: Federal Reserve Board of Governors.

**Debt service ratios are calculated as the ratio of household mortgage and consumer credit (e.g. credit card) debt payments to disposable household income. Historical averages are calculated from 1980 to the most recent quarter of data (2017Q2). Data are seasonally adjusted.

Mortgages make up the largest share of household debt (Figure 21, top). Home price appreciation, rising homeownership rates, and rising interest rates are causing growth in debt balances to accelerate. These trends are likely to continue into 2018. Credit card and auto loan debt showed the strongest growth among components of household debt in 2017, growing 7.5 percent and 7.3 percent, respectively, over the prior year. By comparison, student loan balances rose 6.1 percent, mortgage debt rose 4.1 percent, and total household debt balances rose 4.5 percent.

While debt continues to rise, the share of debt that is delinquent continues to fall (Figure 21, bottom left). As of the fourth quarter of the year, 4.7 percent of debt was 30 or more days delinquent, and 3.1 percent was severely delinquent (more than 90 days past due). Delinquency rates for total household debt have been falling since 2010, led primarily by improvements in mortgage debt payments. By contrast, delinquency rates for auto loans and credit card loans have been rising in recent years, and student loan debt delinquencies remain elevated (Figure 21, bottom right).

Figure 21
U.S. Household Debt Composition and Delinquency Rates



Source: Federal Reserve Bank of New York/Equifax.

Consumer and mortgage debt in Colorado. Average consumer debt for Coloradans held steady in the third quarter of 2017 over the same period a year prior, according to the biannual Consumer Credit Report published by the Federal Reserve Bank of Kansas City. The Kansas City Fed estimate of consumer credit excludes first mortgages and student loans, which typically are not used to fund consumer spending, but includes all other sources of household debt. Colorado consumer credit balances averaged \$19,135 in the third quarter of 2017, relative to \$18,171 nationally.

In the third quarter of 2017, the average mortgage balance of Colorado homeowners rose 4.7 percent to \$238,950, according to Kansas City Fed estimates. Nationally, mortgage balances averaged \$198,024, up 3.1 percent from year-ago levels.

- U.S. personal income is projected to grow 4.8 percent in 2018 and 4.3 percent in 2019. Wage and salary income will continue to dominate personal income, growing 5.2 percent in 2018 and 4.7 percent in 2019.
- Colorado personal income is expected to continue to outpace the nation, growing 5.2 percent in 2018 and 4.9 percent in 2019. Wage and salary income will advance 5.7 percent in 2018 and 5.3 percent in 2019, contributing to broader growth in personal income.
- Supported by rising wages, Colorado retail sales are expected to increase 5.7 percent in 2018 and 5.1 percent in 2019.

Residential Real Estate

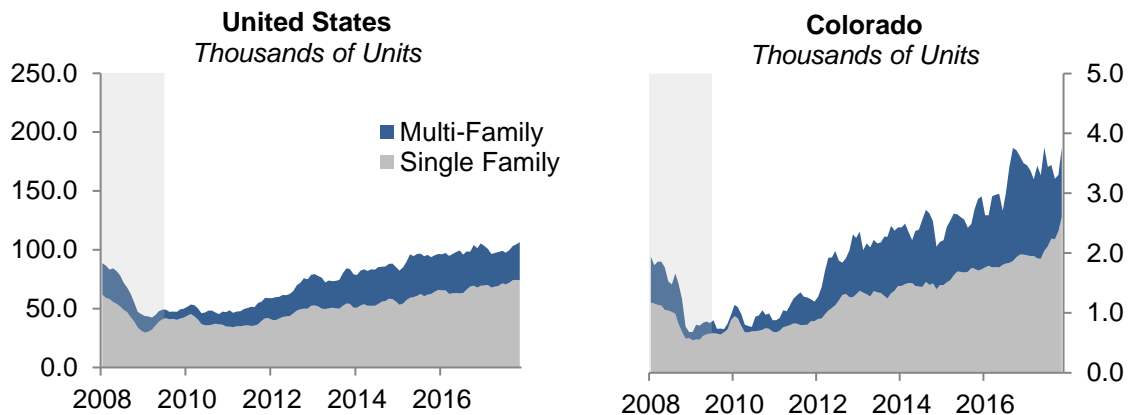
Housing market indicators for the U.S and Colorado remain solid. A strong labor market and rising consumer confidence have spurred housing demand and quickened home price appreciation in many of the nation's largest housing markets. Colorado's real estate market remains one of the hottest in the country; however, appreciation has been uneven across the state. Expectations for higher interest rates and higher housing construction costs may slow activity in the residential real estate market. However, Colorado home prices are expected to continue to rise throughout the forecast period as demand outstrips supply. As home prices rise, potential homeowners are increasingly likely to rent rather than own in the more expensive areas of the state.

Demand for new construction continues. Nationally, the residential construction market continues to improve, though construction costs are rising and labor shortages are increasingly becoming a constraint in high-demand areas of the country. Permits for new homes steadily increased in 2017 (Figure 22, left), and were up 7.4 percent in January 2018 from the same month last year. Housing starts and completions also jumped in January. Homeownership rates continue to rise, supporting demand for new homes. After falling since 2004, the percentage of Americans owning their homes bottomed out at 63.9 percent in early 2016 and began to increase again for the first time in over a decade.

Rising wage pressures, shortages of skilled construction labor, and rising costs for construction inputs will put upward pressure on the price of new construction, which will put upward pressure on home prices and shift the types and amount of homes constructed in Colorado and the U.S.

The number of residential permits issued in Colorado continues to outpace the national market. Total permits grew 23.0 percent in 2017, relative to the previous year. Single-family construction has grown steadily in the state, well outpacing national trends (Figure 22, right). Multi-family construction continues to have a much more significant market presence than during earlier expansions, reflecting development in urban areas (particularly the metro Denver region) of the state with limited developable land.

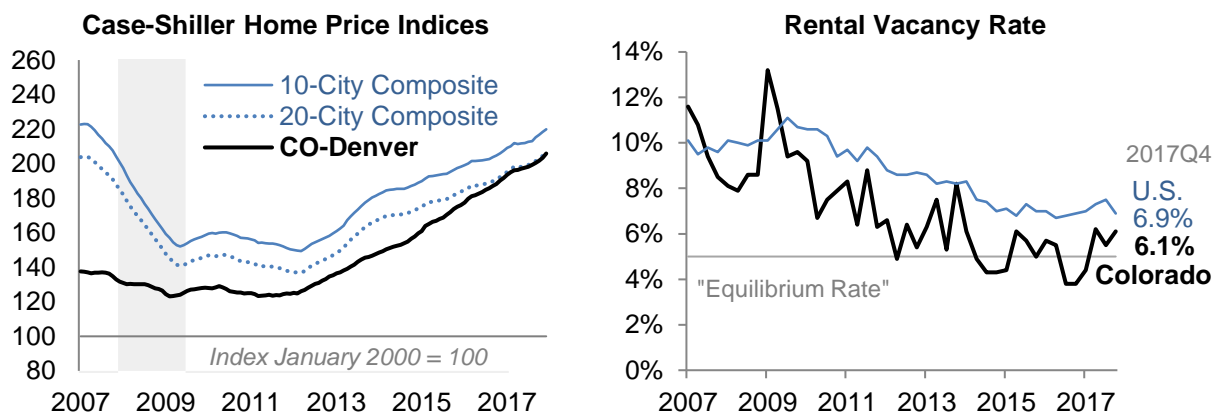
Figure 22
Monthly Building Permits Issued for New Residential Construction



Source: U.S. Census Bureau. Seasonally adjusted three-month moving averages through January 2018.

Home prices continue to rise. Rising incomes and consumer confidence, combined with record low mortgage interest rates, have boosted interest in buying a home. This has spurred housing demand and quickened home price appreciation in many of the nation's largest housing markets. Abetted by a low unemployment rate and low housing stock, the national median price for new homes sold in January 2018 was \$323,000, up 2.5 percent from the same month one year prior. The Case-Shiller 20-city composite home price index increased 6.2 percent in 2017, representing acceleration from 2016 home price appreciation (Figure 23, left). Though home prices in markets like New York, Los Angeles, and Chicago remain below pre-recession peak levels, a sustained economic expansion is expected to drive continued appreciation even as buyers are faced with rising interest rates. As shown in Figure 23 (right), rental vacancy rates remain low by historical standards, signaling upward pressure on the cost of home and apartment rents.

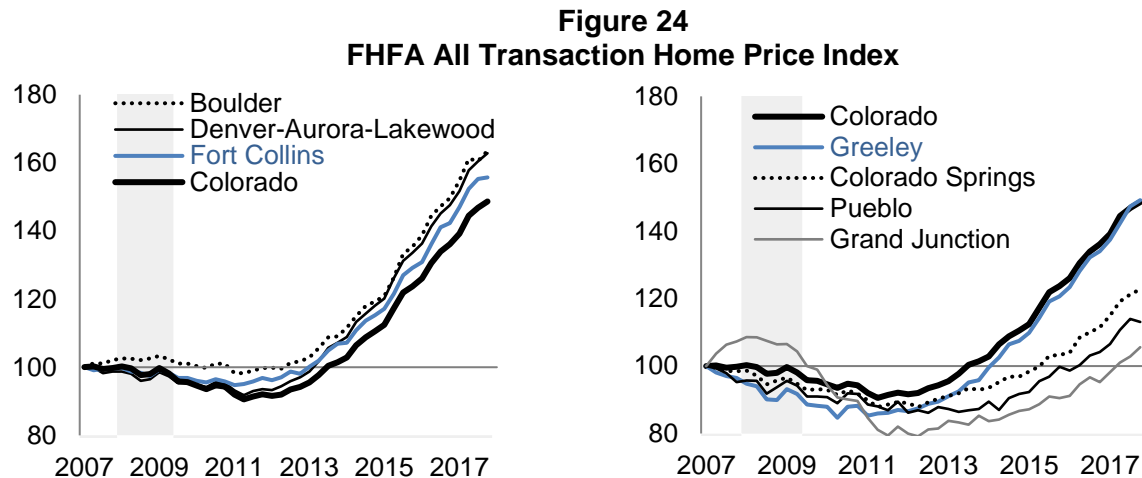
Figure 23
Selected Housing Price Indicators



Source: S&P Dow Jones Indices LLC.
Seasonally adjusted. Data through September 2017

Source: U.S. Census Bureau.
Data through the third quarter of 2017

Regional variation in Colorado housing markets. Colorado has experienced some of the sharpest home price increases in the country. However, home price appreciation and new residential development have been uneven across the state. Figure 25 on page 50 provides a map of the percentage change in home prices from 2016 to 2017, as reported from the Federal Housing Finance Agency's all transaction home price index, which is based on data for home sales and reappraisals. Home price appreciation has been the strongest for counties along the Front Range and I-70 mountain corridors. Likewise, the number of new residential units have been concentrated around these same areas. Figure 26 on page 51 is a map showing the increase in the number of residential units under construction between 2016 and 2017. Finally, Figure 24 compares home price appreciation across Colorado's metro areas.



Source: Federal Housing Finance Agency (FHFA). Data are indexed to the first quarter of 2007.

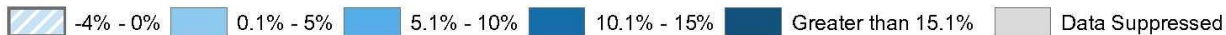
Home price appreciation in Denver has begun to moderate. As measured by the Case-Shiller home price index, Denver home prices were up 7.4 percent in 2017, down from average annual growth in of 9.2 percent in 2016, and 10.4 percent in 2015. Home price appreciation is expected to slow further as new supply comes online, interest rates rise, and an increasing number of buyers turn away from neighborhoods they find less affordable than other options within and outside of the state.

- With demand for housing still elevated, the number of permitted residential construction projects in Colorado is expected to increase 7.6 percent in 2018 and 4.9 percent in 2019. Labor shortages will constrain stronger growth.

Nonresidential Construction

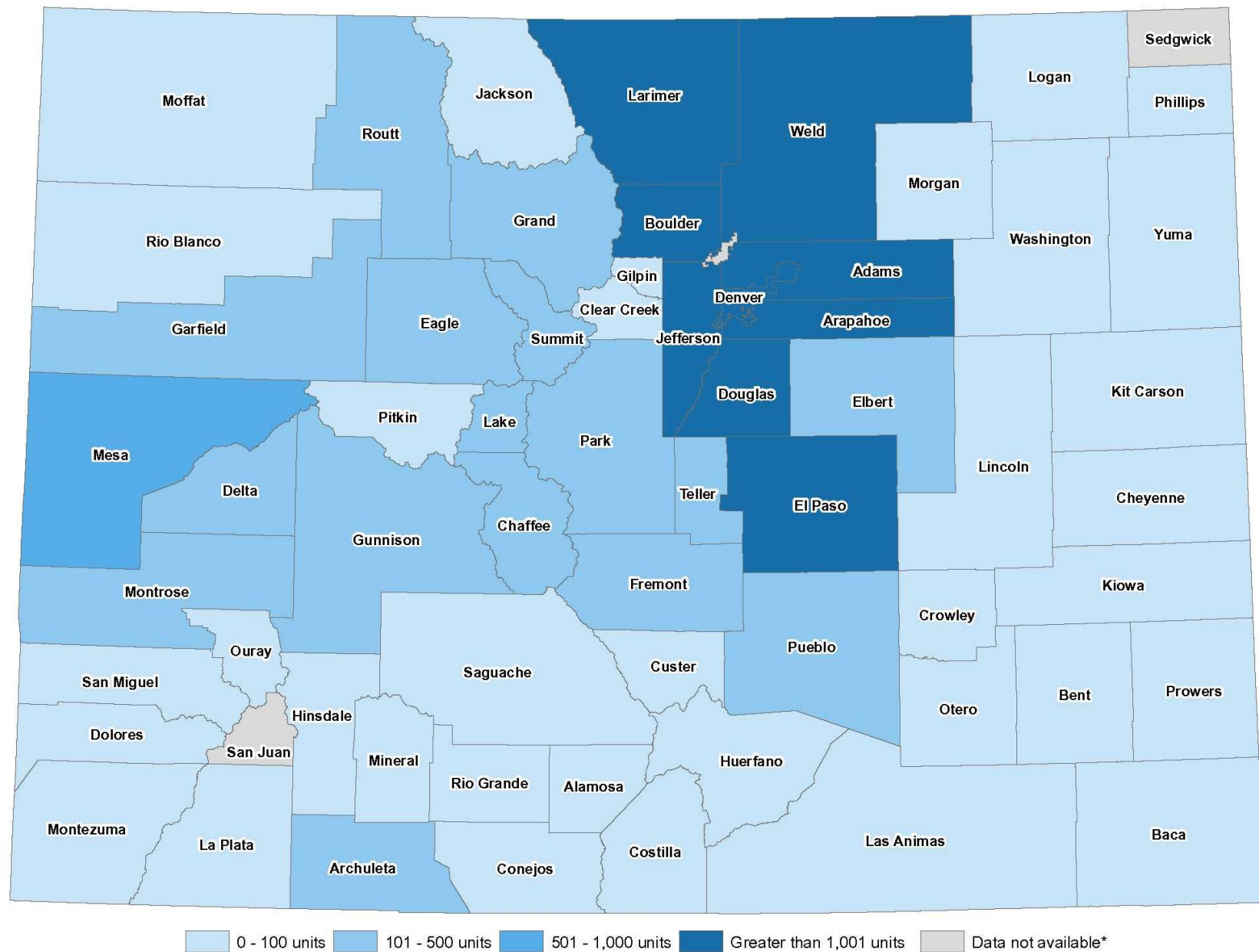
U.S. nonresidential construction spending continues to gradually expand. While rising labor and input costs are expected to boost the value of construction, the number of projects will be constrained by increasing labor shortages in high-growth areas, including Colorado. In January 2018, spending on U.S. nonresidential construction rose 2.3 percent over year-ago levels. The largest year-over-year increases occurred in public safety, transportation, health care and educational projects, while spending on manufacturing and power structures registered the largest declines.

Figure 25



Data source: Federal Housing Finance Agency (FHFA). Map prepared by Legislative Council Staff.

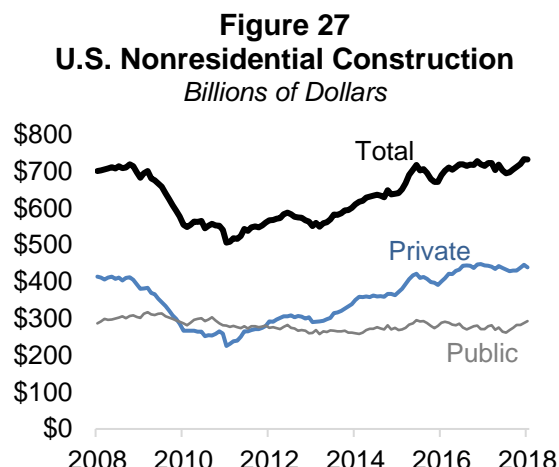
Figure 26
Number of Housing Units Permitted for Construction in 2017



*Data are unavailable for San Juan and Sedgwick counties and the City and County of Broomfield.
 Data source: F.W. Dodge. Map prepared by Legislative Council Staff.

Spending on public nonresidential construction projects continues to accelerate, increasing 8.2 percent in January 2018 from spending a year ago (Figure 27). Improvement has been broad-based, posting strong gains across 11 of the 12 public nonresidential construction categories. The largest year-over-year increase was in public safety projects, up 36.6 percent.

Meanwhile, private nonresidential construction spending declined 1.1 percent in January 2018 over year-ago levels. Private spending on power-related infrastructure and manufacturing buildings were significantly down from the same period one year ago. Increased spending on transportation-related facilities, which increased 36.6 percent from last year, offset some of these declines.



Source: U.S. Census Bureau. Data are seasonally adjusted, annualized, and through January 2018.

In Colorado, the total value of nonresidential construction projects declined slightly in 2017 after posting healthy gains over the prior three years. Several large, multi-year projects have supported the state's nonresidential building sector, including a new Google campus in Boulder, significant work along Brighton Boulevard in Denver's River North neighborhood, and the Gaylord project in Aurora. Nonresidential construction is expected to continue to expand in 2018, but at a slower pace, as a shortage of labor remains an impediment to stronger growth. Major projects scheduled to start in 2018 include the Denver International Airport terminal upgrade, redevelopment of the former RTD Market Street Station, and the \$750 million Redbarre Campus project in Parker. In addition, the first projects funded with Denver's \$937 million bond package approved at last November's election will commence this year. Some of the projects scheduled to start in 2019 include the National Western Center project and three new buildings at Colorado State University.

- Supported by demand for commercial and industrial building and rising construction costs, the value of Colorado nonresidential construction projects is expected to increase 13.9 percent in 2018 and 3.5 percent in 2019.

Energy Markets

Crude oil production in the U.S. energy sector saw consistent growth throughout 2017. The U.S. oil industry continues to rebound slowly from an industry-specific recession caused by the fall in oil prices at the end of 2014. Access to global markets has helped support domestic oil prices and contributed to growth in crude oil production. These trends are expected to continue in 2018. Natural gas producers continue to struggle on excess capacity for domestic natural gas, which is suppressing prices and limiting the amount of new development. Coal remains an important part of electricity production. However, a slow transition to natural gas plants and renewable sources of energy continues to threaten improvements in the industry.

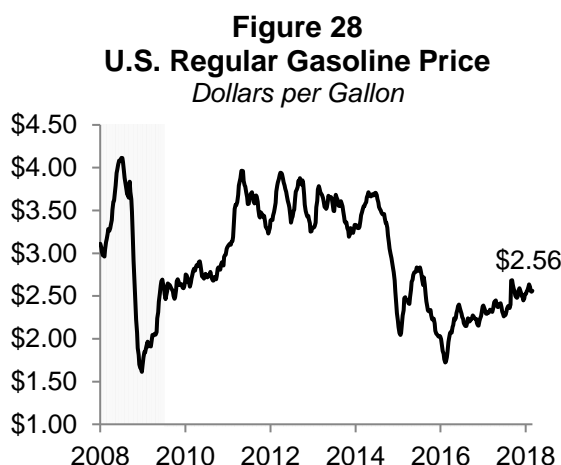
Global oil exports are on the rise. In January 2015, the U.S. lifted its ban on oil exports. The ban had been in place since the 1975 oil crisis. In response, the oil industry has developed new oil wells and improved the export infrastructure in efforts to deliver U.S. oil to global markets. Pipelines have been installed to move crude oil from the Permian Basin in Texas and New Mexico

to the Gulf Coast for export. The Louisiana Offshore Oil Port has been expanded and deepened to accommodate very large crude carriers (VLCCs), the largest and most economical seaborne vessels to export crude oil to global markets. In February 2018, the Louisiana Offshore Oil Port loaded its first carrier with oil for export. The additional export capacity and an improving global economy has helped to support oil prices even while production has increased.

Gasoline prices increased after hurricanes hit the gulf coast in August 2017, and prices have held those gains. Gas prices averaged \$2.56 per gallon through the first week of March, 10.2 percent higher than the same period in 2017 (Figure 28).

Crude oil prices averaged \$62.07 per barrel in the first week of March (Figure 29, top left). Oil prices are expected to grow very modestly throughout the forecast period, averaging slightly more than \$65 per barrel by 2020.

Natural gas prices averaged \$2.64 per thousand cubic feet (Mcf) at the start of March, a 4.8 percent increase from the same week in 2017 (Figure 29, top right). Prices temporarily spiked to \$4.28 during the first week of January 2018 due to extremely cold weather in much of the nation. Average monthly prices are expected to rise to about \$3.60 by the end of 2020.



Source: U.S. Energy Information Administration. Weekly average prices. Data are not seasonally adjusted.

Nationally, **crude oil production** increased throughout 2017 and was 11.3 percent higher in November 2017 than a year prior (Figure 29, middle left). Oil and gas producers responded to the stabilization of oil prices by increasing production and developing new oil and gas wells for future production. **Crude oil stocks** began a sharp decline in March 2017, which continued through the last week of February (Figure 29, middle right). The decline in crude oil stocks is due to an improving global economy and increased export capacity for U.S. oil.

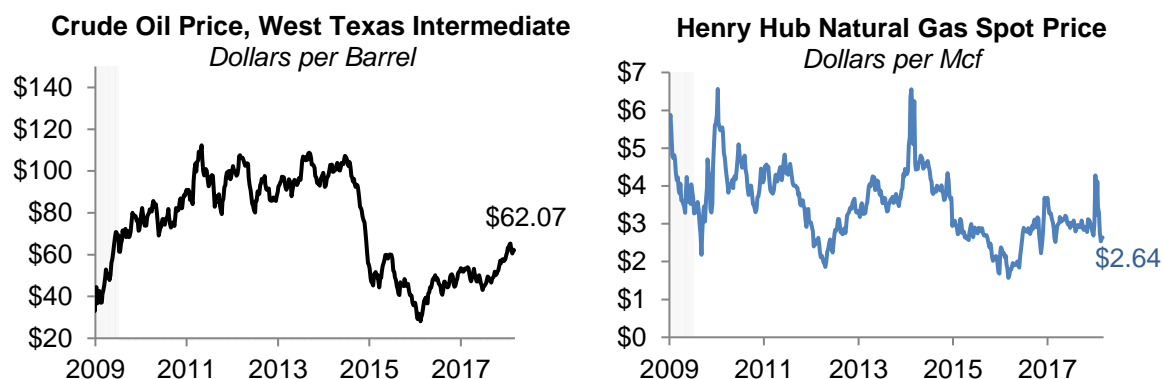
New drilling activity, as measured by **active drilling rigs** (Figure 29, bottom), increased throughout 2017 and into 2018, reaching a total of 759 oil rigs and 188 natural gas wells nationally in the last week of January. Active drilling rigs were 38.4 percent higher in January 2018 than in January 2017.

Colorado energy activity. In Colorado, energy industry investment has also picked up modestly and is expected to rise further with the recent increase in oil prices. In a survey of oil producers in the Federal Reserve Tenth District, which includes Colorado, producers reported that a price of \$62 per barrel of oil would lead to a substantial increase in drilling in the region. Surveyed firms plan to increase exploration and development and expect higher profits in 2018. A price of \$3.59 per million BTU of natural gas would be needed before producers substantially increase production, according to the survey. Prices are not expected to reach this level during the forecast period.

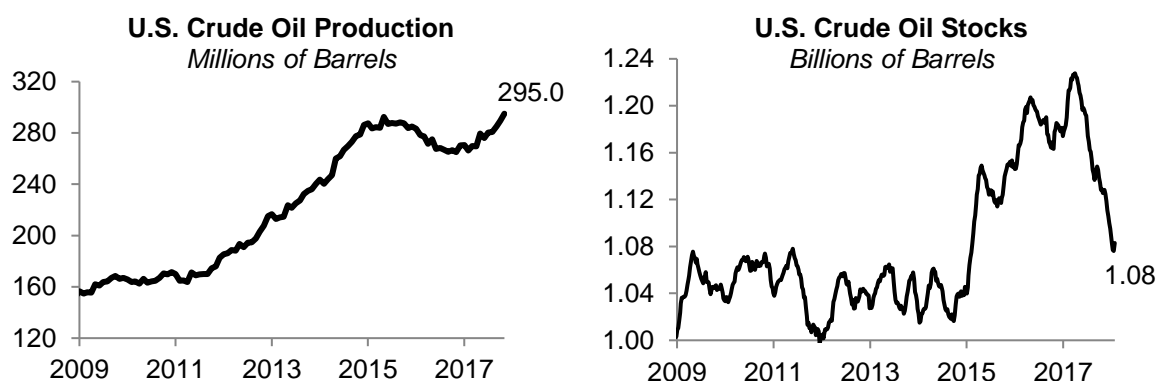
According to the Colorado Department of Natural Resources, coal production in Colorado increased 18.9 percent in 2017. The two largest coal mines in Colorado increased production significantly in 2017. The West Elk and Foidel Creek mines increased production by 16.9 percent and 48.1 percent, respectively, over year-ago levels. Similar to national trends, production at

these two mines were depressed in 2016 while their parent companies, Arch Coal and Peabody Energy, went through bankruptcy.

Figure 29
Selected Indicators of Oil and Gas Industry Activity

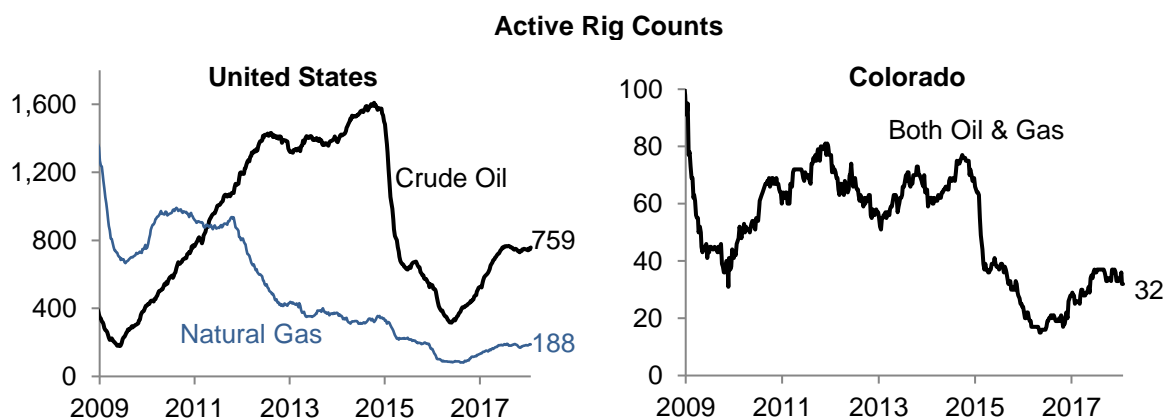


Source: U.S. Energy Information Administration. Weekly average prices. Data are not seasonally adjusted.



Source: U.S. Energy Information Administration. Data are shown as a three-month moving average and are not seasonally adjusted.

Source: U.S. Energy Information Administration. Data are not seasonally adjusted.



Source: Baker Hughes.

Global Economy

Economic growth across the globe continues to strengthen, supporting global demand for U.S. goods and services. Stronger global demand has offset a glut of supply in many key commodities, including agriculture and crude oil, contributing to upward pressure on prices. These trends are supporting U.S. manufacturing and production industries. Additionally, weakening in the U.S. dollar has bolstered U.S. exports as U.S. goods and services have become less expensive.

The global economy faces several downside risks in the year ahead. In recent months, rising volatility in the U.S. markets and rising U.S. interest rates have rattled investor confidence, creating spillovers into international markets. Rising protectionism and tense trade negotiations could slow international trade. Geopolitical tensions with North Korea and Russia have not abated, and the effect of China's presidential consolidation of power is yet to be seen. Many advanced economies are feeling the economic drag of an aging workforce. In many of the same areas, rising nationalistic sentiments are challenging immigration policies, and may further constrain labor supplies.

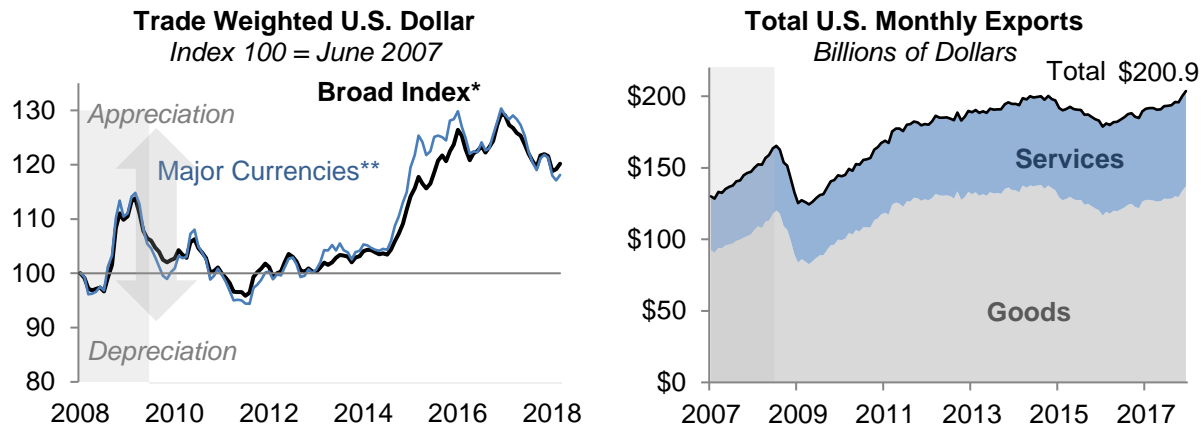
In January, the International Monetary Fund (IMF) updated its global growth forecast for 2018, increasing its projections by 0.2 percent relative to their fall forecast to 3.9 percent. A higher forecast for U.S. growth due in part to the federal TCJA contributed to half of the increased outlook. The IMF projects strong growth in major European economies and Japan, as well as in most emerging and developing economies, bolstered by those in Asia and Eastern Europe.

Despite a healthy U.S. economy, the value of the dollar has decreased relative to other currencies. The trade-weighted U.S. dollar index is down 3.2 percent this year, reaching its lowest point in over two years after falling almost 10 percent in 2017 (Figure 30, left). With the growth prospects strong for the global economy, demand for capital is up and investors are accepting higher amounts of risk. This bodes poorly for the U.S. dollar, which it is typically seen as a safe haven during riskier economic times.

Commodity prices have benefitted from a weaker dollar, increasing in most sectors through the beginning of this year. Energy prices drove the majority of the price increase, up by 9.2 percent, according to the World Bank. Corn and wheat prices have rebounded as well, both reaching their highest levels in over a year. This trend is expected to continue through at least 2018. Seen by some analysts as reaction to a weaker dollar, gold is trading at its highest point since 2016, at over \$1,300 an ounce.

U.S. trade was up overall in December 2017, with imports growing faster than exports. Imports increased due to strong consumer spending and a strong U.S. economy, while exports have benefitted from a weaker dollar (Figure 30, right). In Colorado, exports were up 6.4 percent in 2017 compared with 2016. The increase was largely driven by meat and meat offal exports, providing almost half of the growth. Industrial and electric machinery exports comprised another third of the growth. Canada and Mexico are the two largest importers of Colorado goods.

Figure 30
Selected Global Economic Indicators



Source: Federal Reserve Board of Governors.

*A weighted average of the foreign exchange values of the U.S. dollar against currencies of major U.S. trading partners. **Includes a subset of broad index currencies that circulate widely in global exchanges.

Source: U.S. Bureau of Economic Analysis (balance of payments basis). Data are seasonally adjusted but are not adjusted for inflation.

North Atlantic Free Trade Agreement (NAFTA) renegotiations, initially expected to culminate in March, continue with little resolution in sight. Uncertainty over trade policies pose risks for the Canadian, Mexican, and U.S. economies. Mexico is holding its presidential election this summer and the populist frontrunner in the campaign has insinuated his negotiation tactics would be harsher with the U.S. than those of the current Mexican president. Canada and Mexico are the second and third largest trading partners of the U.S., respectively, representing about 30 percent of total U.S. trade and the top two export markets.

China's economy, the second largest after the U.S., continues to grow at a steady pace of just over 6 percent annually. Consumer spending among China's middle class has remained strong, although it is expected to cool this year with interest rates on the rise. Proposed tariffs on steel and aluminum imports from China may test economic relations between the world's two largest economies.

Economic growth in the European Union (EU) outpaced U.S. growth in 2017 by 0.2 percent. With a stronger economy and a weaker dollar, the exchange rate for the euro has rebounded against the dollar compared with the beginning of 2017. Brexit negotiations continue to pose a risk to the EU outlook. While Brexit is likely to hit Great Britain the hardest, spillover effects could spread throughout the Eurozone, with notable impacts to Ireland. Some analysts forecast a 2 percent to 8 percent decline in economic activity in the U.K. depending on how "soft" the exit, which is not officially set to occur until March 2019.

Agriculture

The strengthening global economy coupled with a weaker dollar is lending to a more favorable outlook for the agricultural sector in both the U.S. and Colorado than in recent years. Farm incomes are projected to stabilize on rising commodity prices.

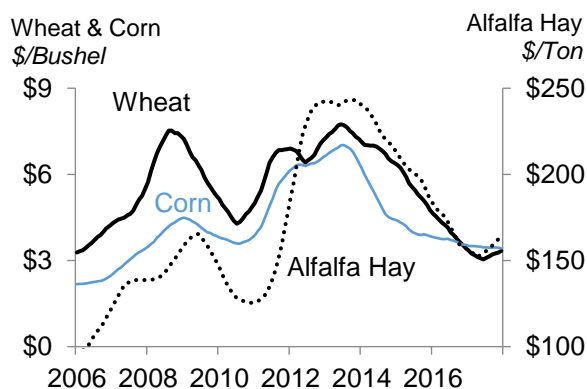
Crop prices are expected to rise in 2018, although they will remain below their ten-year averages. Wheat prices are up over 8 percent over year-ago prices, and corn prices are up slightly. Live cattle and feeder cattle prices are up 8 percent and 19 percent, respectively, year-over-year. Due to shifting global demand and the subsequent shift in prices, up almost 9 percent this year, more farmers will plant soybeans and decrease the acreage of wheat and corn to maximize earnings after this year, according to the USDA. Corn yields in Colorado were up in 2017 over 2016 levels by about 4 percent; however, wheat yields were down by over 10 percent.

Figure 31 shows selected indicators from the Federal Reserve Bank of Kansas City's Agricultural Credit Survey. The survey indicates that farmland values in the tenth District, which includes western Missouri, Nebraska, Kansas, Oklahoma, Wyoming, Colorado and northern New Mexico, decreased slightly over a year prior (Figure 32, upper left). Sales of farmland in 2018 are expected to increase as farm incomes stabilize further. Both the volume and size of farm loans increased in the fourth quarter of 2017. Bankers expect farm loans to tick up in 2018, while loan repayments are projected to decline reflecting continuation of a struggling agricultural sector.

In Colorado, a lack of precipitation and windy conditions this winter put some crops, including winter wheat, at risk. Weather-related risk will continue into the spring. If moisture levels do not improve, crop yields will suffer, potentially pushing prices up.

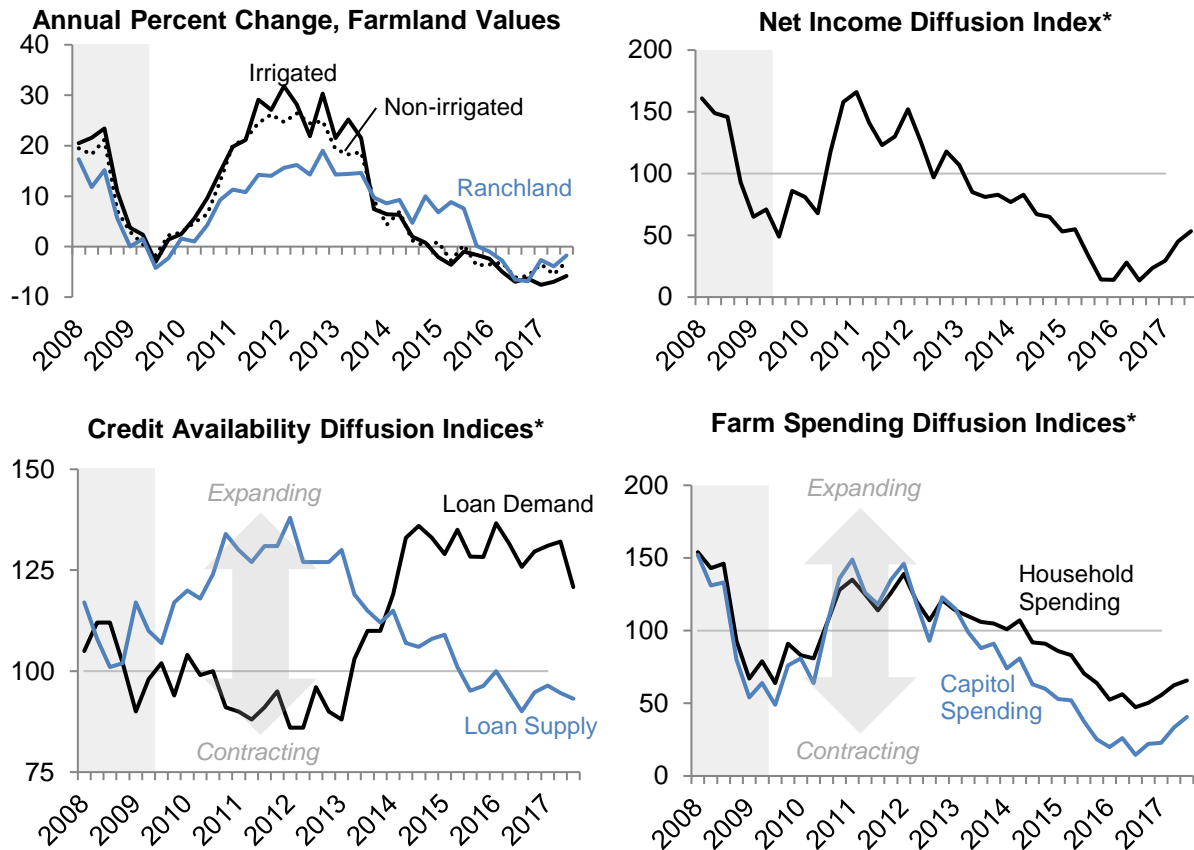
The Federal Reserve Bank of Kansas City's Quarterly Survey of Agricultural Credit Conditions reported smaller declines in farm income during the fourth quarter of 2017 as a sign that the markets for agricultural products may be stabilizing. Slightly less than half of Tenth District bankers expected farm incomes to continue to fall in 2018. Low cash flow among farmers has resulted in lower levels of household and capital spending (Figure 32, bottom right), which has in turn prompted many farmers to take on short-term loans. Concerns over debt solvency have stabilized at elevated levels.

Figure 31
Prices Received for Colorado Crops



Source: USDA National Agriculture Statistics Service.
Data shown as a 12-month moving average through December 2017.

Figure 32
Selected Indicators of Tenth District Agricultural Credit Conditions



Source: Federal Reserve Bank of Kansas City Quarterly Survey of Agricultural Credit Conditions. Data are through the third quarter of 2017.

*Values above 100 indicate expansion; values below 100 indicate contraction.

Summary

The near term economic outlook is bright. The U.S. and Colorado economies will continue to expand in 2018 and 2019. However, national and state economies will wrangle with rising inflationary pressures and tighter labor markets, which will pose challenges to business growth and profits over the longer term. The passage of the federal TCJA boosted business investment in recent months that will promote future productivity gains. However, this near-term boost may have pulled economic activity forward, at the cost of steadier and more consistent growth over the longer term. Additional interest rate hikes may quell inflationary pressures. However, rate hikes are likely to heighten financial market volatility as investors shift strategies.

Teamed with federal tax cuts, higher wages will sustain consumer activity throughout the forecast period and will partially offset demographic drags on income and consumption. In Colorado, high housing costs will continue to constrain net migration to the state, and will dampen consumer spending unless strong wage gains can offset the rising cost of living.

Risks to the Forecast

Several factors could result in stronger or weaker economic activity than forecast. These risks remain skewed to the downside.

Downside. The economy is at or near capacity in most industries, signaled by the tightening of the labor market and accelerating wage pressures. Structural changes, including an aging population and automation, make it difficult to discern both where the economy's productive capacity is and how the economy is performing relative to it. If the economy is operating further beyond capacity than assumed in this forecast, a recession is more likely within the forecast period.

The Federal Reserve continues to tighten monetary policy. Depending on the pace of tightening, consumer spending and business investment could be suppressed more than expected. Additionally, higher interest rates could produce unexpected shifts in investor behavior that could create shocks to U.S. and global financial markets.

Global political events could also produce downside economic shocks. Tensions between the U.S. and China over tariffs could upset trade relationships. Similarly, the renegotiation of NAFTA could destabilize trade with two of the country's three largest trading partners, Canada and Mexico.

Upside. This forecast assumes that employment growth and other economic inputs will be constrained with the economy at or near capacity. The economy could perform better than expected if capacity is greater than estimated. For example, if the labor force participation rate increases substantially over the next two years, economic growth prospects will be greater. Additionally, recent business investment could produce stronger than expected productivity gains.

Table 14
National Economic Indicators

Calendar Years	2013	2014	2015	2016	2017	Legislative Council Staff Forecast		
						2018	2019	2020
Real GDP (<i>Billions</i>) ¹	\$15,612	\$16,013	\$16,472	\$16,716	\$17,092	\$17,554	\$17,940	\$18,317
Percent Change	1.7%	2.6%	2.9%	1.5%	2.3%	2.7%	2.2%	2.1%
Nonfarm Employment (<i>Millions</i>) ²	136.4	138.9	141.8	144.3	146.6	148.7	150.3	151.7
Percent Change	1.6%	1.9%	2.1%	1.8%	1.6%	1.4%	1.1%	0.9%
Unemployment Rate	7.4%	6.2%	5.3%	4.9%	4.4%	4.0%	4.2%	4.3%
Personal Income (<i>Billions</i>) ¹	\$14,073.7	\$14,818.3	\$15,553.0	\$15,928.7	\$16,428.0	\$17,217	\$17,957	\$18,675
Percent Change	1.1%	5.3%	5.0%	2.4%	3.1%	4.8%	4.3%	4.0%
Wage and Salary Income (<i>Billions</i>) ¹	\$7,116.7	\$7,476.8	\$7,858.9	\$8,085.3	\$8,350.9	\$8,785	\$9,198	\$9,594
Percent Change	2.7%	5.1%	5.1%	2.9%	3.3%	5.2%	4.7%	4.3%
Inflation ²	1.5%	1.6%	0.1%	1.3%	2.1%	2.5%	2.3%	2.1%

Sources

¹U.S. Bureau of Economic Analysis. Real gross domestic product (GDP) is adjusted for inflation. Personal income and wages and salaries not adjusted for inflation.

²U.S. Bureau of Labor Statistics. Inflation shown as the year-over-year change in the consumer price index for all urban areas (CPI-U).

Table 15
Colorado Economic Indicators

Calendar Years	2013	2014	2015	2016	2017	Legislative Council Staff Forecast		
						2018	2019	2020
Population (<i>Thousands, as of July 1</i>) ¹	5,262.6	5,342.3	5,440.4	5,530.1	5,607.2	5,685.7	5,759.6	5,834.4
Percent Change	1.5%	1.5%	1.8%	1.6%	1.4%	1.4%	1.3%	1.3%
Nonfarm Employment (<i>Thousands</i>) ²	2,380.8	2,464.0	2,541.7	2,602.6	2,658.7	2,709.2	2,755.3	2,796.6
Percent Change	3.0%	3.5%	3.2%	2.4%	2.2%	1.9%	1.7%	1.5%
Unemployment Rate ²	6.9	5.0	3.9	3.3	2.8	3.0	3.1	3.2
Personal Income (<i>Millions</i>) ³	\$246,648	\$267,225	\$282,665	\$288,103	\$299,051	\$314,602	\$330,017	\$344,868
Percent Change	5.4%	8.3%	5.8%	1.9%	3.8%	5.2%	4.9%	4.5%
Wage and Salary Income (<i>Millions</i>) ³	\$129,597	\$138,678	\$146,635	\$151,322	\$158,283	\$167,305	\$176,173	\$185,157
Percent Change	3.7%	7.0%	5.7%	3.2%	4.6%	5.7%	5.3%	5.1%
Retail Trade Sales (<i>Millions</i>) ⁴	\$83,569	\$90,653	\$94,920	\$98,812	\$104,148	\$110,084	\$115,699	\$120,674
Percent Change	4.4%	8.5%	4.7%	4.1%	5.4%	5.7%	5.1%	4.3%
Housing Permits (<i>Thousands</i>) ¹	27.3	29.2	30.5	37.0	41.0	44.2	46.3	47.7
Percent Change	27.9%	7.2%	4.3%	21.3%	10.9%	7.6%	4.9%	2.9%
Nonresidential Building (<i>Millions</i>) ⁵	\$3,624	\$4,351	\$4,982	\$5,942	\$5,704	\$6,497	\$6,724	\$6,543
Percent Change	-1.9%	20.1%	14.5%	19.3%	-4.0%	13.9%	3.5%	-2.7%
Denver-Boulder-Greeley Inflation ⁶	2.8%	2.8%	1.2%	2.8%	3.4%	2.9%	2.8%	2.6%

Sources

¹U.S. Census Bureau. Residential housing permits are the number of new single and multi-family housing units permitted for building.

²U.S. Bureau of Labor Statistics.

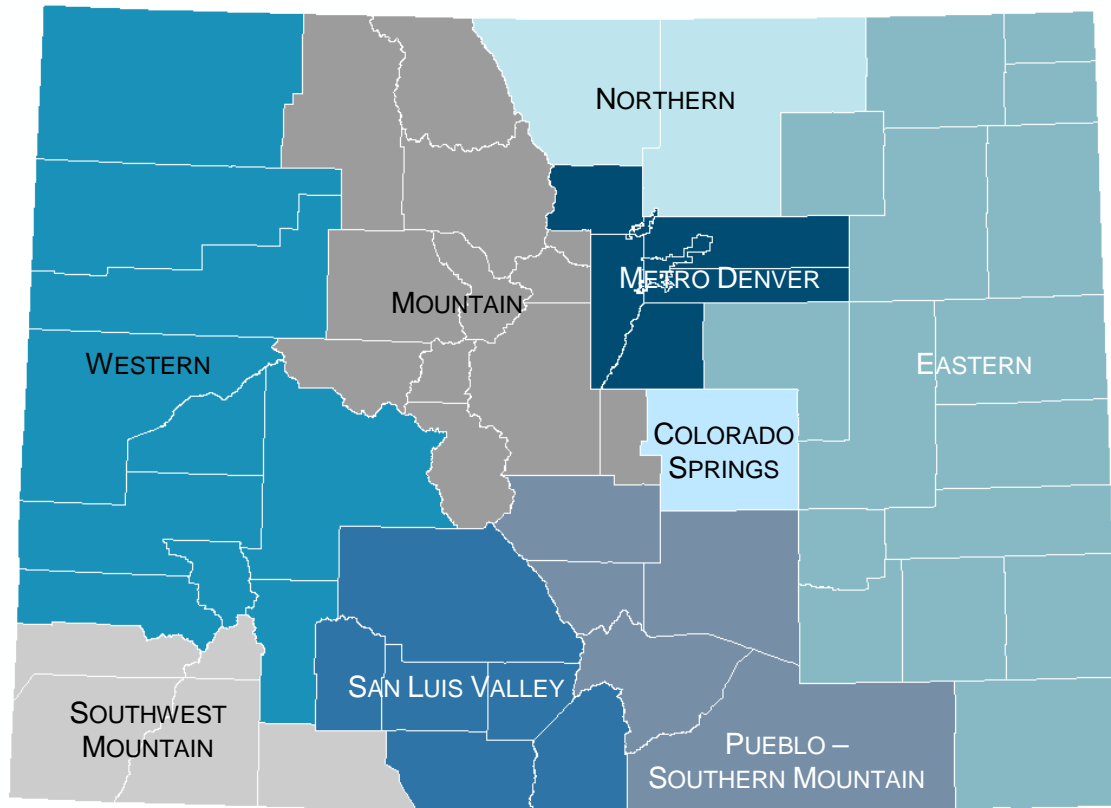
³U.S. Bureau of Economic Analysis. Personal income and wages and salaries not adjusted for inflation. The Legislative Council Staff forecast begins in 2017.

⁴Colorado Department of Revenue. The Legislative Council Staff forecast begins in 2016.

⁵F.W. Dodge.

⁶U.S. Bureau of Labor Statistics. Inflation shown as the year-over-year change in the consumer price index. Beginning in February, the Denver-Boulder-Greeley consumer price index will be replaced with the Denver-Aurora-Lakewood consumer price index.

COLORADO ECONOMIC REGIONS



A NOTE ON DATA REVISIONS

Economic indicators reported in this forecast document are often revised by the publisher of the data and are therefore subject to change. Employment data are based on survey data from a “sample” of individuals representative of the population as a whole. Monthly employment data are based on the surveys received at the time of data publication and data are revised over time as more surveys are collected to more accurately reflect actual employment conditions. Because of these revisions, the most recent months of employment data may reflect trends that are ultimately revised away. Additionally, employment data undergoes an annual revision, which is published in March of each year. This annual revision may affect one or more years of data values. **Notably, data reported for Colorado’s regions do not yet reflect the March rebenchmark revisions.**

Like the employment data, residential housing permits and agriculture data are also based on surveys. These data are revised periodically. Retail trade sales data typically have few revisions because the data reflects actual sales by Colorado retailers. Nonresidential construction data in the current year reflects reported construction activity. These data are revised the following year to reflect actual construction activity.

Metro Denver Region

2017 brought a fully mature economic expansion to the seven-county Denver metropolitan area. While adding to robust growth from prior years, the regional economy reached a point in the business cycle at which the capacity for further expansion is constrained by available labor. The fundamental characteristics of the regional economy are strong: jobs are plentiful, wages are increasing, construction activity is high. Workers have strong employment prospects, but they continue to struggle to find affordable housing. Businesses are expanding but must compete for a small pool of available workers. Homebuilders continue to expand inventory but are still unable to meet demand. Economic indicators for the region are presented in Table 16.



The regional labor market remains strong, but employment growth has moderated significantly over the past two years, signaling the late stages of economic expansion. Denver employers added jobs at a 1.9 percent clip in 2017, the slowest year for job growth since the region was just beginning to recover from the Great Recession. Labor market indicators for the region are presented in Figure 33. As shown, the size of the labor force continues to increase, while the number of new jobs added has slowed as labor market slack is absorbed. The number of new jobs is expected to continue to slow through the forecast period.

Table 16
Metro Denver Region Economic Indicators
Adams, Arapahoe, Broomfield, Boulder, Denver, Douglas, and Jefferson Counties

	2013	2014	2015	2016	2017
Employment Growth ¹	3.6%	3.7%	3.6%	2.6%	1.9%
Unemployment Rate ²	6.5%	4.7%	3.6%	3.1%	2.5%
Housing Permit Growth ³					
Denver-Aurora MSA Single-Family	18.9%	16.3%	17.8%	12.2%	3.8%
Boulder MSA Single-Family	22.5%	17.7%	74.2%	10.2%	-4.3%
Nonresidential Construction Growth ⁴					
Value of Projects	-9.1%	10.5%	25.4%	27.0%	-17.2%
Square Footage of Projects	22.2%	3.9%	43.4%	6.6%	-22.0%
Level (<i>Millions</i>)	14,193	14,745	21,142	22,535	17,567
Number of Projects	22.4%	25.1%	19.6%	8.5%	-30.7%
Level	748	936	1,119	1,214	841
Retail Trade Sales Growth ⁵	5.1%	8.4%	6.2%	NA	NA

MSA = Metropolitan statistical area. NA = Not available.

¹Bureau of Labor Statistics, CES (establishment survey). Seasonally adjusted. Data through December 2017.

²Bureau of Labor Statistics, LAUS (household survey). Seasonally adjusted. Data through December 2017.

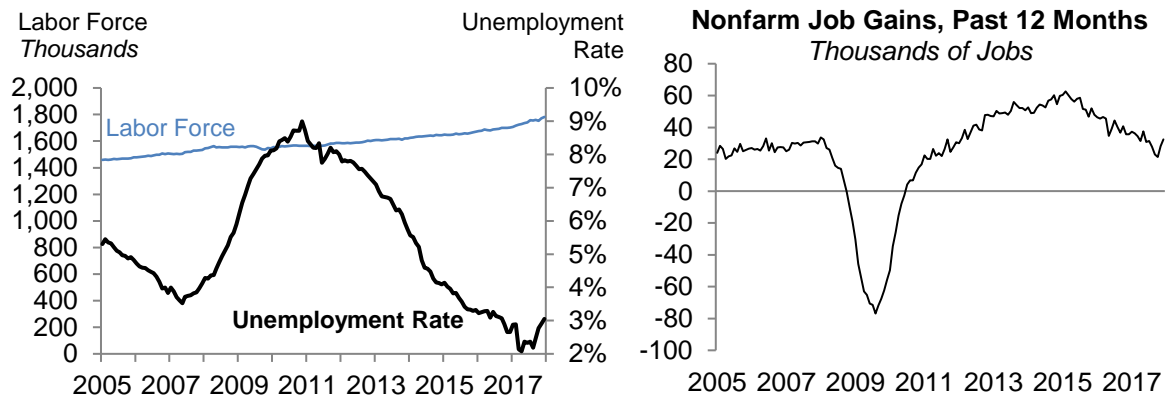
³U.S. Census. Growth in the number of residential building permits. Data through December 2017.

⁴F.W. Dodge. Data through December 2017.

⁵Colorado Department of Revenue. Data through December 2015.

The regional unemployment rate, as measured by the U.S. Bureau of Labor Statistics' household survey, increased in the final quarter of 2017. However, this series is volatile and regularly revised. Future revisions are expected to show stabilization in the unemployment rate at historically low levels.

Figure 33
Metro Denver Region Labor Market Activity



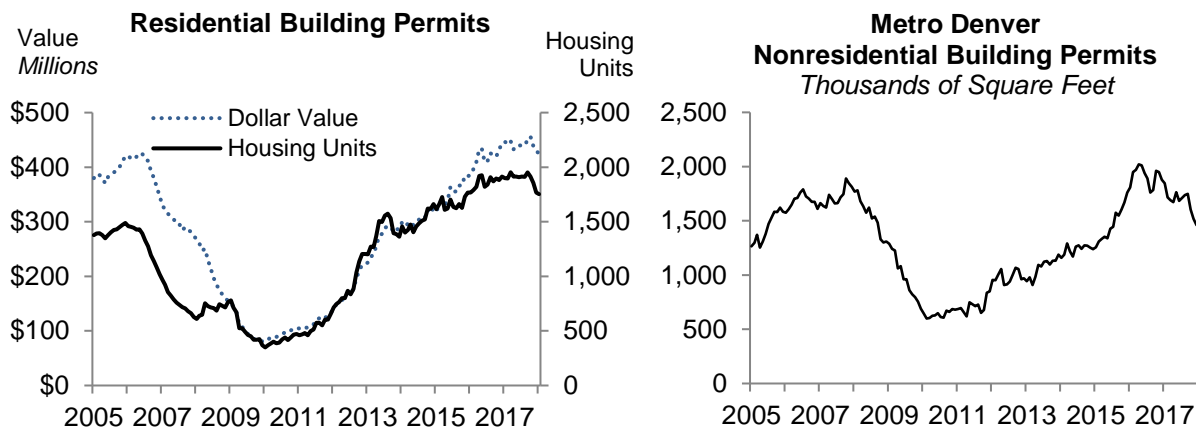
Source: U.S. Bureau of Labor Statistics; LAUS. Data are seasonally adjusted and are through December 2017.

Source: U.S. Bureau of Labor Statistics; CES. Data are seasonally adjusted and are through December 2017.

Construction activity in Denver remains high by historical standards (Figure 34). However, 2017 brought significant slowing in residential construction and decreases from peak nonresidential activity in 2016. The number of residential permits is greater, in terms of both units and value, than at any point since at least 1990. Housing prices, presented in Figure 35, remain elevated, suggesting that the leveling off in construction is attributable not to homebuilder satiation but rather to capacity constraints. Residential construction activity is expected to remain at or above present levels for as long as demand remains high, likely through the end of the expansion.

Nonresidential building fell by every metric in 2017 from the prior year's banner level of activity. Large nonresidential buildings, including many of those permitted last year and earlier, remain under construction. The dropoff in permitted activity this year may simply reflect the strength of prior year numbers. It may also suggest a construction industry constrained by labor.

Figure 34
Metro Denver Region Construction Activity

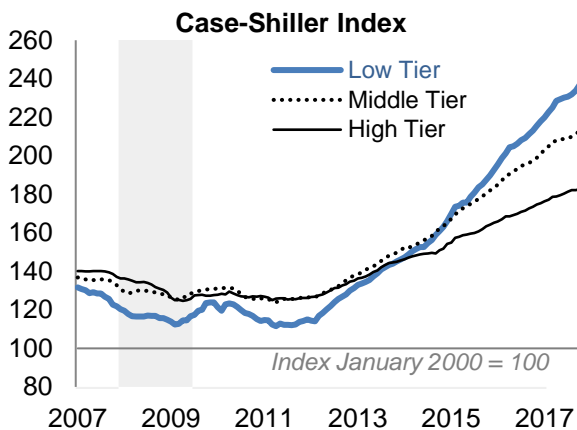


Source: F.W. Dodge. Data shown as twelve-month moving averages. Data are not seasonally adjusted and are through December 2017.

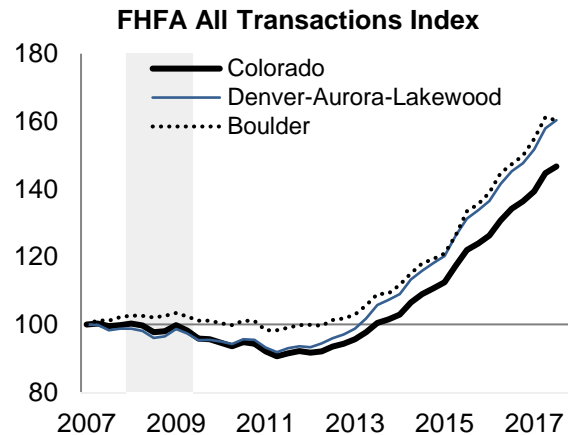
Metro Denver home price appreciation has slowed modestly, as shown in Figure 35. For much of the current expansion, rapid population growth and household formation had contributed to a surge in demand for residential units. With supply constrained, strong housing demand contributed to a strong upswing in prices. Home values moderated somewhat in 2017 after residential construction fully ramped up and net migration slowed. The U.S. Census Bureau reports that Colorado net in-migration fell to 30,000 persons in 2016, with the number of arrivers stabilizing and the number of leavers growing. People departing Colorado cite unaffordable homes and rents as a major contributing factor. Thus, the Denver housing market is exhibiting some signs of negative feedback, wherein strong population growth spurred high prices, which, in turn, has begun to deter a portion of would-be residents.

Though price growth has slowed, finding affordable housing remains a challenge for many residents. In 2016, the regional residential vacancy rate was 1.7 percent, while the statewide average rate was 7.5 percent. The region, by far the state's most populous, accounted for only 12.4 percent of vacant Colorado housing units.

Figure 35
Denver Home Price Indices



Source: S&P Dow Jones Indices LLC. Data are seasonally adjusted and are through November 2017.



Source: U.S. Federal Housing Finance Agency. Data are through the third quarter of 2017.

Northern Region

The northern region continues to have one of the best performing economies in the state. After weathering weakness in the oil and gas sector in 2016, the regional economy regained momentum in 2017. The region added jobs at the fastest pace in the state, and the unemployment rate continues to hover near historical lows. Population growth and a strong labor market have boosted demand for housing and nonresidential real estate. Table 17 shows economic indicators for the northern region.



Table 17
Northern Region Economic Indicators
Weld and Larimer Counties

	2013	2014	2015	2016	2017
Employment Growth ¹					
Fort Collins-Loveland MSA	3.2%	3.4%	4.0%	3.8%	3.7%
Greeley MSA	5.4%	9.0%	2.4%	-1.3%	3.3%
Unemployment Rate ²					
Fort Collins-Loveland MSA	5.8%	4.2%	3.3%	2.8%	2.3%
Greeley MSA	6.5%	4.4%	3.9%	3.4%	2.5%
State Cattle and Calf Inventory Growth ³	-8.7%	-4.2%	-4.4%	1.0%	6.7%
Natural Gas Production Growth ⁴	12.5%	27.0%	44.3%	14.6%	4.7%
Oil Production Growth ⁴	44.5%	52.4%	39.4%	-7.3%	27.3%
Housing Permit Growth ⁵					
Fort Collins-Loveland MSA Total	28.8%	8.7%	-8.1%	47.9%	21.0%
Fort Collins-Loveland MSA Single Family	31.3%	10.2%	1.3%	-2.9%	-18.2%
Greeley MSA Total	45.6%	41.1%	-3.5%	-7.8%	16.4%
Greeley MSA Single Family	37.7%	18.5%	3.8%	-9.9%	23.1%
Nonresidential Construction Growth ⁶					
Value of Projects	55.0%	31.1%	32.3%	1.6%	18.6%
Square Footage of Projects	40.4%	45.5%	19.3%	-16.3%	4.5%
Level (<i>Thousands</i>)	2,285	3,326	3,969	3,321	3,471
Number of Projects	-2.5%	66.5%	-4.3%	10.1%	-6.3%
Level	155	258	247	272	255
Retail Trade Sales Growth ⁷					
Larimer County	6.1%	8.5%	6.7%	NA	NA
Weld County	6.6%	12.2%	1.0%	NA	NA

MSA = Metropolitan statistical area. NA = Not available.

¹Bureau of Labor Statistics, CES (establishment survey). Seasonally adjusted. Data through December 2017.

²Bureau of Labor Statistics, LAUS (household survey). Seasonally adjusted. Data through December 2017.

³National Agricultural Statistics Service. Cattle and calves on feed through December 2017.

⁴Colorado Oil and Gas Conservation Commission. Data through October 2017.

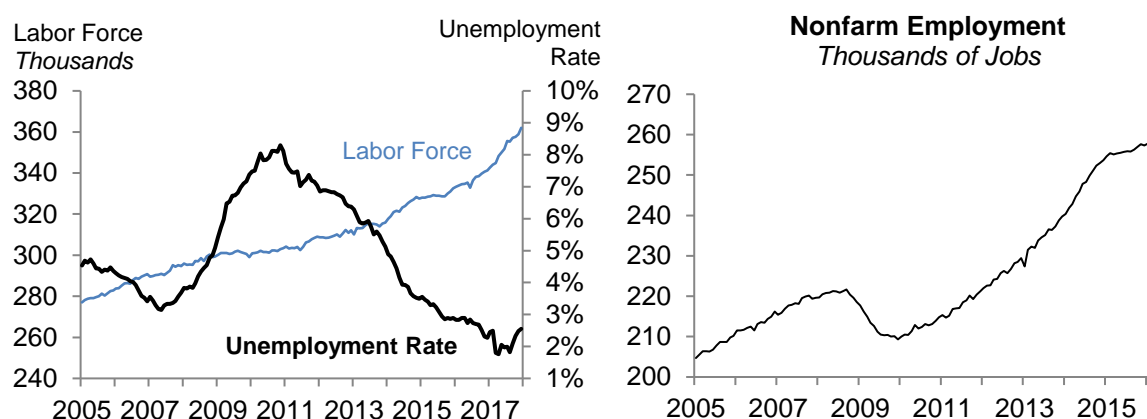
⁵U.S. Census Bureau. Growth in the number of residential building permits. Data through December 2017.

⁶F.W. Dodge. Data through December 2017.

⁷Colorado Department of Revenue. Data through December 2015.

The labor market in the northern region is the strongest in the state. Dependent on a broad base of industries, the region's two metropolitan statistical areas (MSA), Fort Collins-Loveland and Greeley, posted the fastest metro area job growth rates in the state, increasing 3.7 percent and 3.3 percent in 2017, respectively. Employment growth rebounded in the Greeley MSA as energy industries increased investment in the Denver-Julesburg Basin in response to stabilizing oil prices. Area unemployment continues to fall as employment gains outpace growth in the labor force. The Fort Collins-Loveland unemployment rate is the lowest among metro areas in the state at 2.3 percent, while Greeley's is not far behind at 2.5 percent. Figure 36 shows employment trends for the northern region metro areas.

Figure 36
Northern Region Labor Market Activity

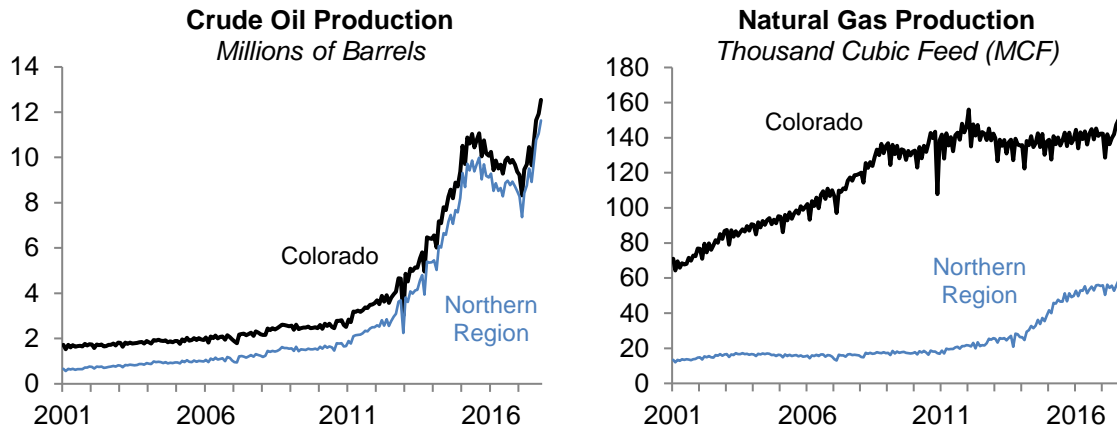


Source: U.S. Bureau of Labor Statistics; CES. Data are seasonally adjusted and are through December 2017.

Agriculture is one of the top industries in the northern region. The industry has struggled over the past few years. An excess supply of agricultural commodity supplies has kept prices low. However, an improving global economy and weak U.S. dollar have modestly increased commodity prices, as demand for U.S. agricultural products has improved.

Oil production in the northern region, particularly in Weld County, has dominated statewide production for over a decade (Figure 37). Between January and October 2017, oil production levels have improved after a decline in 2016. Energy companies active in the northern region significantly slowed their investments in 2015 and 2016 in response to low oil prices, which has a lagged effect on production. While the number of active drilling rigs is only about half the number that were operating in Colorado before oil prices collapsed, during the first week of December 2017 it was 95 percent higher than year-ago levels. Natural gas production in the northern region has modestly increased through October 2017 after growing 14.6 percent in 2016 and 44.3 percent in 2016. Oil and gas production may pick up in 2018, as a new oil and gas lease was approved in Loveland and further investment is expected.

Figure 37
Colorado Energy Production

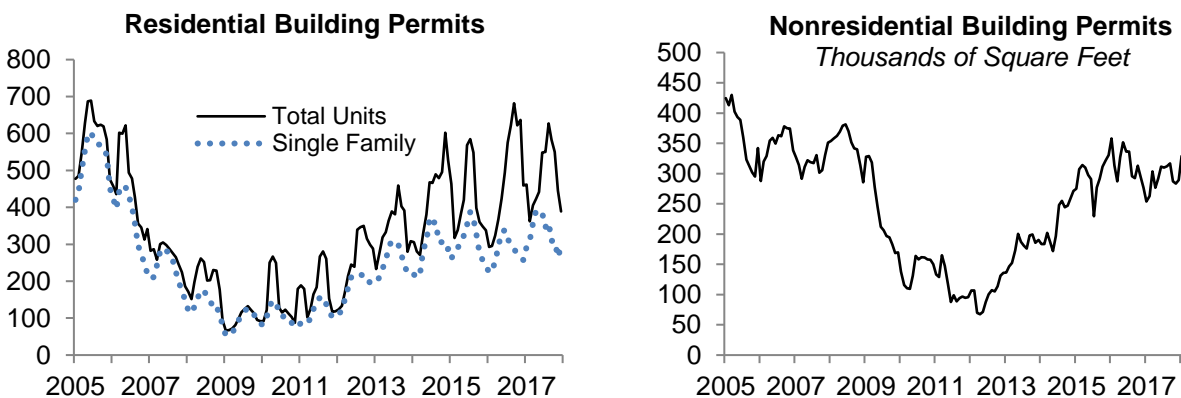


Source: Colorado Oil and Gas Conservation Commission. Monthly data through October 2017

The northern region's residential real estate market remains robust. A strong labor market, high net in-migration to the region, and the availability of land for development have supported strong demand for new residential construction (Figure 38, left). Total residential housing permits for the Fort Collins-Loveland MSA were up 21.0 percent in 2017, an impressive increase after growing by almost 50 percent in the year prior. Residential construction in Weld County, which declined in 2016 with the slowdown in energy activity, rebounded in 2017, growing 16.4 percent from the prior year.

Activity in the nonresidential construction industry also fared well in 2017. The region added almost 3.5 million square feet, 4.5 percent more than the prior year's new nonresidential inventory. The value of these projects was 18.6 percent higher than last year's projects (Figure 38, right).

Figure 38
Northern Region Construction Activity



Source: U.S. Census Bureau. Data shown as three-month moving averages. Data are not seasonally adjusted and are through December 2017.

Source: F.W. Dodge. Data shown as twelve-month moving averages. Data are not seasonally adjusted and are through December 2017.

Pueblo – Southern Mountains Region

The Pueblo – Southern Mountains region includes five southern Front Range counties surrounding the City of Pueblo. While the region lagged most areas of the state in the economic recovery and expansion, labor market indicators have improved considerably over the past two years. Stronger business and construction activity in the region has also boosted the economy. As businesses seek to fill open positions, workers are finding the area increasingly attractive and more affordable than other Front Range regions to the north. Indicators for the regional economy are presented in Table 18.



Table 18
Pueblo Region Economic Indicators
Custer, Fremont, Huerfano, Las Animas, and Pueblo Counties

	2013	2014	2015	2016	2017
Employment Growth					
Pueblo Region ¹	-0.9%	1.0%	0.8%	2.1%	2.9%
Pueblo MSA ²	0.7%	1.5%	2.0%	1.8%	1.1%
Unemployment Rate ¹	10.1%	7.4%	5.7%	4.9%	4.1%
Housing Permit Growth ³					
Pueblo MSA Total	-40.6%	-0.6%	69.4%	6.0%	16.2%
Pueblo MSA Single-Family	-8.1%	-0.6%	29.9%	29.9%	14.9%
Nonresidential Construction Growth ⁴					
Value of Projects	-72.2%	197.9%	2.4%	-22.6%	-76.5%
Square Footage of Projects	-75.3%	192.7%	14.6%	-3.8%	-62.7%
Level (<i>Thousands</i>)	106	309	355	341	127
Number of Projects	7.1%	96.7%	-20.3%	51.1%	-77.5%
Level	30	59	47	71	16
Retail Trade Sales Growth ⁵	1.5%	4.9%	2.9%	NA	NA

MSA = Metropolitan statistical area. NA = Not available.

¹U.S. Bureau of Labor Statistics, CES (establishment survey). Data through December 2017.

²U.S. Bureau of Labor Statistics, LAUS (household survey). Data through December 2017.

³U.S. Census. Growth in the number of residential building permits. Data through December 2017.

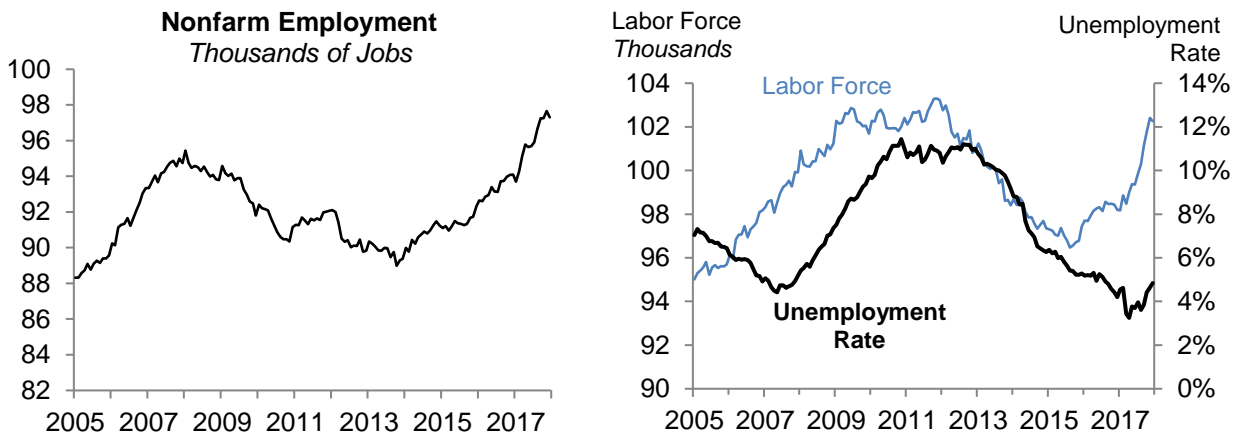
⁴F.W. Dodge. Data through December 2017.

⁵Colorado Department of Revenue. Data through December 2015.

Labor market indicators continue to show an improving economy. In 2017, employers added workers at a rate of 2.9 percent over the same period last year (Figure 39, left). Employment levels have surpassed pre-recessionary highs. The regional unemployment rate continues to fall, averaging 4.1 percent in 2017 (Figure 39, right). Consistent with historical trends, the rate remains elevated relative to most other areas in the state. Employment gains continue to outpace strong growth in the labor force, forcing the unemployment rate to historical lows. Primary employers in the region include the Parkview Medical Center in Pueblo and various government entities across the region's counties.

Sales tax collections to the City of Pueblo came in lower than expected in 2017. Following two strong years of growth, collections leveled off at 1.2 percent pace over the prior year.

Figure 39
Pueblo Region Labor Market Trends

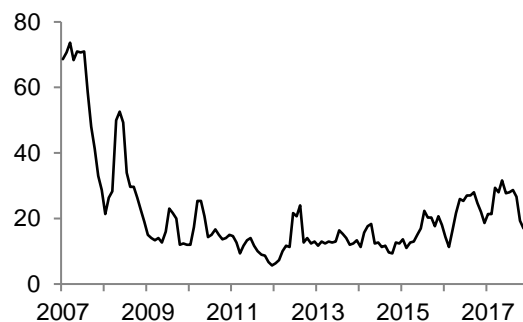


Source: U.S. Bureau of Labor Statistics; LAUS. Data prior to 2010 adjusted by Legislative Council Staff. Data are seasonally adjusted and are through December 2017.

Residential construction activity in the region has gained momentum but has been subdued relative to pre-recessionary levels and relative to other areas of the state. Housing permits in the Pueblo metro area are up 16.2 percent over year-ago levels, driven by new construction of both single- and multi-family building (Figure 40). The area housing market continues to tighten, putting upward pressure on home prices. According to data published by the Federal Housing Finance Agency, home prices rose 8.6 percent in the fourth quarter of 2017 compared to the same period a year prior. Throughout the recovery and expansion, home price appreciation in the Pueblo metro area lagged other regions of the state.

Nonresidential construction activity was down in 2017. The value, number, and square footage of projects all fell relative to year-ago levels following three years of elevated activity.

Figure 40
Single Family Residential Permits
Number of Housing Units



Source: U.S. Census Bureau. Data shown as three-month moving averages. Data are not seasonally adjusted and are through December 2017.

Colorado Springs Region

The Colorado Springs economy continues to expand, with population growth and tourism boosting employment and construction activity. Offering attractive job opportunities and lower real estate prices than the Denver metro area, the region continues to attract a growing number of young professionals. The regional economy has a large public sector presence, supporting area defense operations, higher education institutions, and health care facilities. Yet, private sector growth continues to diversify the area economy. Indicators for the regional economy are presented in Table 19.



Table 19
Colorado Springs Region Economic Indicators
El Paso County

	2013	2014	2015	2016	2017
Employment Growth ¹					
Colorado Springs MSA	2.3%	2.2%	3.2%	2.9%	1.8%
Unemployment Rate ²	7.9%	6.0%	4.6%	3.8%	3.1%
Housing Permit Growth ³					
Total	17.2%	3.8%	-0.4%	41.3%	-3.9%
Single-Family	19.2%	-7.7%	13.3%	19.7%	6.7%
Nonresidential Construction Growth ⁴					
Value of Projects	6.5%	-4.2%	-1.0%	48.4%	-25.7%
Square Footage of Projects	25.2%	-12.0%	-0.2%	25.1%	3.4%
Level (<i>Thousands</i>)	2,124	1,870	1,865	2,333	2,412
Number of Projects	-1.7%	-5.9%	12.6%	11.7%	28.6%
Level	355	334	376	420	540
Retail Trade Sales Growth ⁵	4.9%	4.1%	5.8%	NA	NA

MSA = Metropolitan statistical area. NA = Not available.

¹U.S. Bureau of Labor Statistics, CES (establishment survey). Data through December 2017.

²U.S. Bureau of Labor Statistics, LAUS (household survey). Data through December 2017.

³U.S. Census. Growth in the number of residential building permits. Data through December 2017.

⁴F.W. Dodge. Data through December 2017.

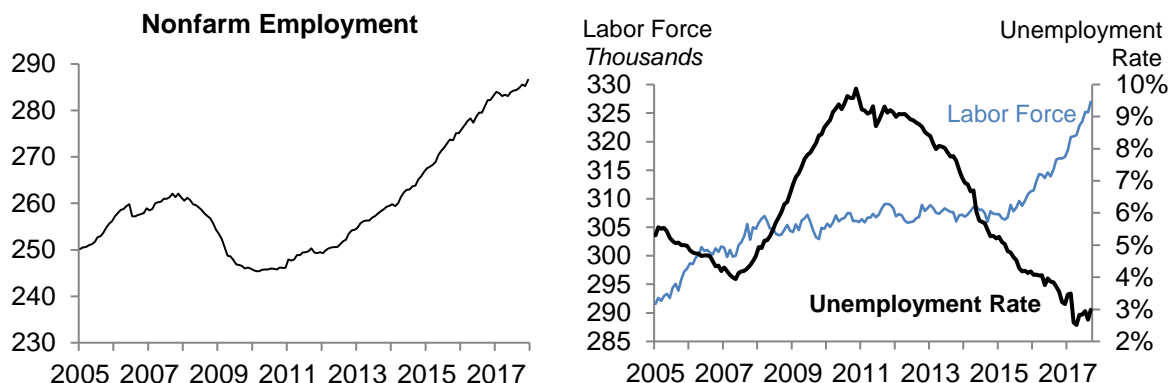
⁵Colorado Department of Revenue. Data through December 2015.

Preliminary data for 2017 suggest that employment in the Colorado Springs metropolitan statistical area (MSA) increased 1.8 percent over year-ago levels (Figure 41, left). This marks the seventh consecutive year of job growth in the region. While job growth has been broad-based across most industries, population growth in the region has supported demand for housing, goods, and basic services — boosting employment in the construction, retail trade, transportation, and health care sectors. Strong in-migration to the area is reflected in the steep increase in the labor force over the past two years (Figure 41, right). The declining unemployment rate in the region demonstrates ease among new in-migrants in finding employment. The unemployment rate averaged 3.1 percent in 2017, a new historical low.

The improving labor market, population growth, and strong tourism growth are aiding retail sales in the region. According to the City of Colorado Springs, revenue from the city's general sales and use tax increased 5.0 percent in 2017 over year-ago levels after increasing 9.4 percent in 2016. Tax statistics point to healthy construction and tourism industries: the largest sales tax increases occurred in the building materials, hotel, and restaurant industries. The city's lodger's tax increased 15.1 percent over year-ago levels, further demonstrating healthy tourism and

business activity. Following a banner year, collections from the auto rental tax in 2017 were down slightly, falling 1.9 percent from peak collections in 2016.

Figure 41
Colorado Springs Labor Market Trends



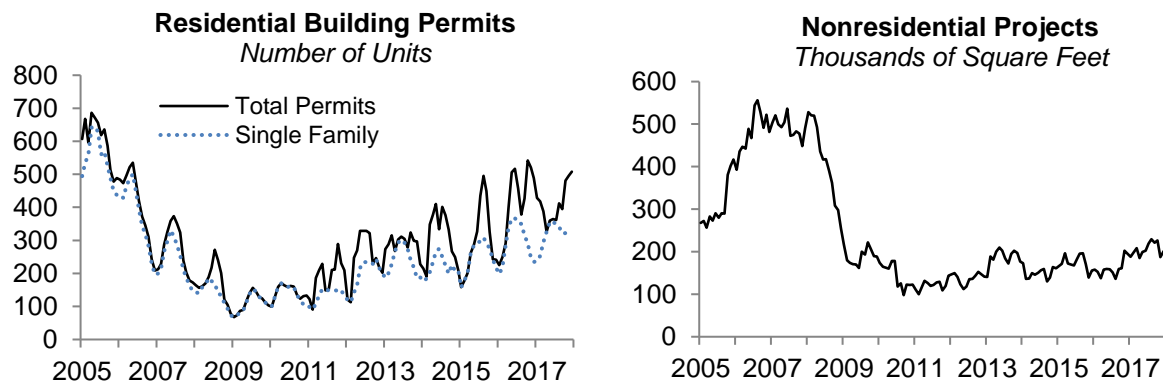
Source: U.S. Bureau of Labor Statistics; CES. Data are seasonally adjusted and are through December 2017.

Source: U.S. Bureau of Labor Statistics; LAUS. Data are seasonally adjusted and are through December 2017.

The number of permits issued for residential construction fell 3.9 percent in 2017 after a strong year in 2016. In spite of the modest decline, construction activity remains elevated (Figure 42, left). Single family permits increased 6.7 percent over the prior year. Fewer multi-family permits were issued in 2017, following large developments permitted in 2016. While more affordable than real estate in the Denver metro area, Colorado Springs home prices are rising at a double-digit pace. According to data published by the Federal Housing Finance Agency, home prices rose 10.1 percent in the fourth quarter of 2017 over the same period a year prior.

While the value of nonresidential construction dipped in 2017, the square footage and number of projects increased. Demand for new nonresidential construction remains subdued relative to pre-recessionary levels (Figure 42, right). The growing area population and strong business activity, however, are expected to result in lower office and commercial vacancy rates, spurring additional development in coming years.

Figure 42
Colorado Springs Construction Activity



Source: U.S. Census Bureau. Data are shown as three-month moving averages. Data are not seasonally adjusted and are through December 2017.

Source: F.W. Dodge. Data shown as three-month moving averages. Data are not seasonally adjusted and are through December 2017.

San Luis Valley Region

The San Luis Valley has the state's smallest and oldest population, as well as its lowest household incomes. The economy of its six counties is largely agricultural. Nonfarm employers include regional commercial, health, and government services as well as a small but resilient tourism sector. Economic data for the region are sparse, but those that are available suggest that the regional housing market is growing and the nonfarm job market is improving. Regional indicators are summarized in Table 20.

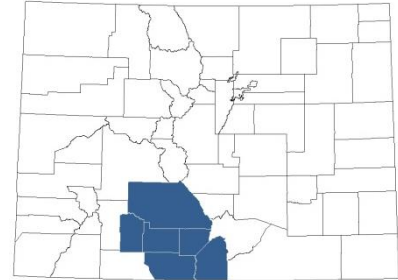


Table 20
San Luis Valley Region Economic Indicators
Alamosa, Conejos, Costilla, Mineral, Rio Grande, and Saguache Counties

	2013	2014	2015	2016	2017
Employment Growth ¹	-2.2%	2.6%	3.8%	5.4%	4.7%
Unemployment Rate ¹	10.5%	8.0%	5.7%	4.6%	3.7%
San Luis Valley Agriculture District ²					
Barley					
Acres Harvested	46,600	42,900	52,100	NA	NA
Crop Value (\$/Acre)	\$824	\$730	\$879	NA	NA
Potatoes					
Acres Harvested	49,600	53,900	51,800	51,500	51,700
Crop Value (\$/Acre)	\$3,614	\$3,218	\$3,234	NA	NA
Housing Permit Growth ³	15.0%	-25.0%	-10.4%	0.8%	13.8%
Retail Trade Sales Growth ⁴	0.6%	3.7%	11.5%	NA	NA

NA = Not available.

¹U.S. Bureau of Labor Statistics, LAUS (household survey). Seasonally adjusted. Data through December 2017.

²National Agricultural Statistics Service. Potato harvest data through 2017; others through 2015.

³F.W. Dodge. Data through December 2017.

⁴Colorado Department of Revenue. Data through December 2015.

San Luis Valley agricultural producers are faced with different challenges and opportunities than farmers and ranchers in other areas of the state. The valley is fed by the Upper Rio Grande, but producers away from waterways often rely on groundwater instead. Water supply factors, combined with a high, cool, and dry climate, have historically driven valley farmers to focus on potato, barley, and alfalfa production, though other crops and livestock production are attractive to some producers. Figure 45 shows steady, yet modest, increases in Colorado potato prices since 2016, a relative boon for producers after years of volatility. However, water conditions may act to constrain production during the coming growing season. Data from the U.S. Department of Agriculture's snow telemetry service (SNOTEL) indicate that Upper Rio Grande precipitation had achieved only 53 percent of normal snowfall between October 1 and March 5, versus 106 percent at the same point last year.

In addition to the agricultural industry, tourism, a large retirement community, and government services, including Adams State University, support the San Luis Valley economy. Labor market conditions continue to improve in the region at rates among the fastest in the state as this small region continues to add jobs at a respectable pace. Regional employment increased 4.7 percent in 2017, edging the neighboring Southwest Mountain region for the state's fastest growth rate among economic regions (Figure 43). The region's unemployment rate also continues to

improve. The unemployment rate averaged 3.7 percent in 2017, down nearly a full percentage point from the 2016 rate even in the face of significant labor force population growth (Figure 44).

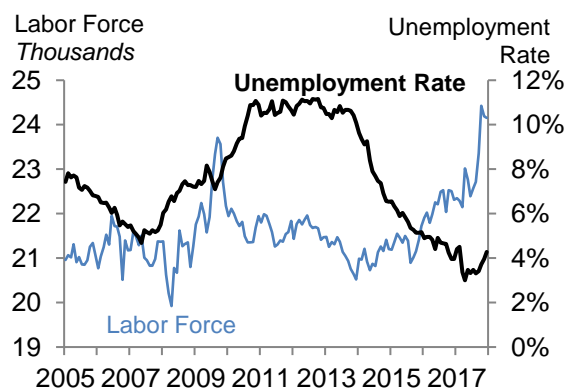
San Luis Valley real estate is relatively affordable but caters to a small resident population even when compared to other rural regions. Residential construction in the region has been limited and fairly volatile throughout the recent economic recovery and expansion. However, 2017 was a strong year for regional homebuilding. The 148 residences permitted exceed prior year permitted projects by 18 homes, or 13.8 percent. Demand for regional housing will continue consistent with the economic expansion.

Figure 43
Nonfarm Employment
Thousands of Jobs



Source: U.S. Bureau of Labor Statistics; LAUS. Data prior to 2010 adjusted by Legislative Council Staff. Data are seasonally adjusted and are through July 2017.

Figure 44
Labor Market Trends



Source: U.S. Bureau of Labor Statistics; LAUS. Data prior to 2010 adjusted by Legislative Council Staff. Data are seasonally adjusted and are through July 2017.

Figure 45
Prices Received for Colorado Potatoes
\$/Cwt



Source: National Agricultural Statistics Service. Data shown as twelve-month moving averages. Data through December 2016.

Southwest Mountain Region

Despite being the smallest region by population, the Southwest Mountain region has a diverse economy. Its geography and relative isolation from the rest of the state lend to both its traditional and nontraditional sectors, including agriculture, energy, tourism and outdoor recreation, and healthcare. Outlooks in the agricultural and energy industries improved over last year, with commodity and oil prices rising. Recent expansions in the healthcare sector have helped to alleviate the pressure of the traditionally more cyclical and volatile energy, tourism, and agricultural sectors. Regional indicators are summarized in Table 21.

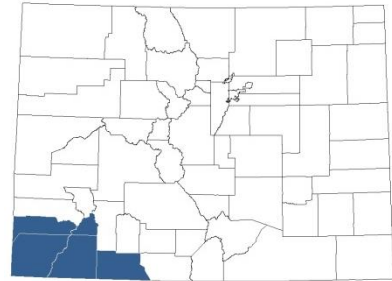


Table 21
Southwest Mountain Region Economic Indicators
Archuleta, Dolores, La Plata, Montezuma, and San Juan Counties

	2013	2014	2015	2016	2017
Employment Growth ¹	0.7%	3.2%	0.6%	2.7%	4.5%
Unemployment Rate ¹	6.6%	4.9%	4.1%	3.5%	2.7%
Housing Permit Growth ²	44.7%	14.2%	17.6%	-4.6%	29.8%
Retail Trade Sales Growth ³	5.0%	3.0%	1.7%	NA	NA
National Park Recreation Visits ⁴	-5.9%	8.9%	10.2%	7.5%	4.4%

NA = Not available.

¹U.S. Bureau of Labor Statistics, LAUS (household survey). Seasonally adjusted. Data through December 2017.

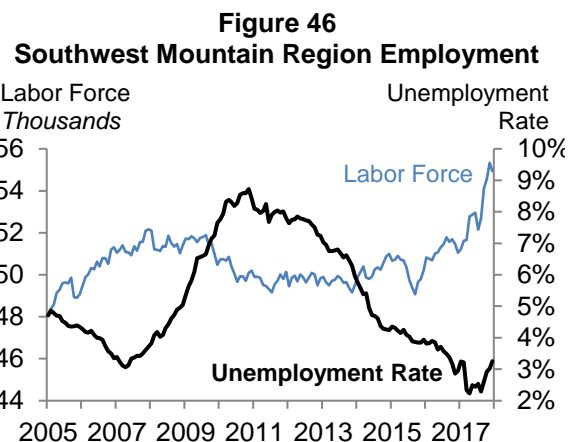
²F.W. Dodge. Data through December 2017.

³Colorado Department of Revenue. Data through December 2015.

⁴National Park Service. Data through December 2017. Recreation visits for Mesa Verde National Park and Hovenweep National Monument.

Employment growth in the region increased 4.5 percent in 2017 compared with 2016, while the unemployment rate decreased from 3.5 percent to 2.7 percent over the same period (Figure 46). All counties in the region, except Montezuma County, had unemployment rates at or below the statewide average in 2017. Service industries employ a significant portion of residents in the region. Strong area tourism has sustained growth in area service sectors. National park visitations continued to climb in 2017, marking the fourth consecutive year of increases.

Housing permits rebounded in 2017, growing by 29.8 percent – a turnaround from the decrease of 4.6 percent in 2016. With the construction industry booming in La Plata County, there are not enough workers to meet demand, since many relocate to warmer climates during the typically slow winter months in Colorado. The additional residential construction has not brought home prices down, however, as the region is attractive for second-home buyers who continue to prop up prices.



Source: U.S. Bureau of Labor Statistics; LAUS. Data prior to 2010 adjusted by Legislative Council Staff. Data are seasonally adjusted and are through December 2017.

Western Region

The western region is characterized by a diverse economy. Key industries in the northern counties of Mesa, Garfield, Moffat, and Rio Blanco are energy and agriculture, while the counties of Delta, Gunnison, Hinsdale, Montrose, Ouray, and San Miguel are more reliant on tourism, mining and retiree related spending. The region's economy has lagged behind other areas in the state over the past few years; however, the economy has been improving as of late and more people are moving to the western region. Relatively affordable housing and an improving labor market are attracting people from Denver and other areas of the state and country. Economic indicators for the region are summarized in Table 22.

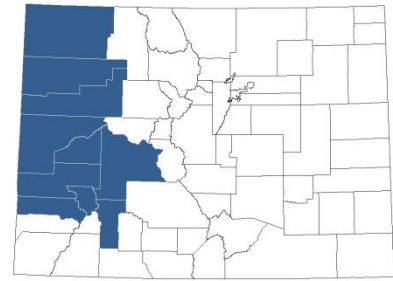


Table 22
Western Region Economic Indicators

Delta, Garfield, Gunnison, Hinsdale, Mesa, Moffat, Montrose, Ouray, Rio Blanco, and San Miguel Counties

	2013	2014	2015	2016	2017
Employment Growth					
Western Region ¹	-0.7%	2.1%	-0.4%	1.4%	2.7%
Grand Junction MSA ²	0.6%	2.5%	0.0%	-0.3%	-0.4%
Unemployment Rate ¹	8.2%	5.9%	5.0%	4.5%	3.3%
Natural Gas Production Growth ³	-8.8%	-5.3%	-12.8%	-6.7%	-5.2%
Housing Permit Growth ⁴	-1.0%	7.9%	1.8%	8.2%	38.0%
Nonresidential Construction Growth ⁴					
Value of Projects	-24.7%	221.9%	-37.9%	8.7%	-34.9%
Square Footage of Projects	-42.0%	157.9%	-41.0%	-11.2%	-18.8%
Level (<i>Thousands</i>)	396	1,021	602	535	435
Number of Projects	-28.6%	21.8%	-17.9%	32.7%	-45.2%
Level	55	67	55	73	40
Retail Trade Sales Growth ⁵	2.4%	4.7%	7.4%	NA	NA

MSA = Metropolitan statistical area. NA = Not available.

¹ U.S. Bureau of Labor Statistics, LAUS (household survey). Seasonally adjusted. Data through December 2017.

² U.S. Bureau of Labor Statistics, CES (establishment survey). Seasonally adjusted. Data through December 2017.

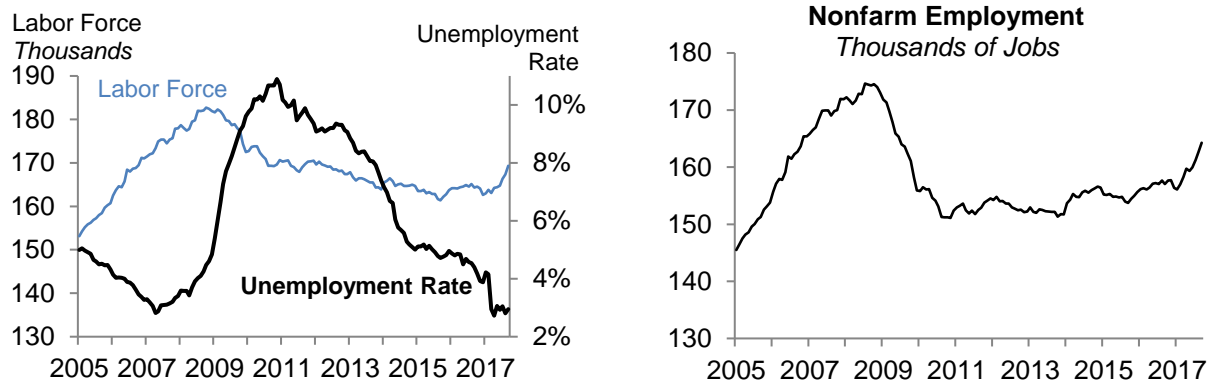
³ Colorado Oil and Gas Conservation Commission. Data through October 2017.

⁴ F.W. Dodge. Data through December 2017.

⁵ Colorado Department of Revenue. Data through December 2015.

Despite lower natural gas production, a decline in the coal industry in the area, and low agricultural prices, the region's labor market in 2017 still showed improvement by posting the strongest job gains since 2008, increasing 2.7 percent over the prior year. The region's unemployment rate declined for the seventh consecutive year, as employment gains outpaced growth in the labor force. Government and hospitals are some of the largest employers in the region. However, employment growth in Grand Junction, the region's largest city, has decelerated modestly over the past three years. Figure 47 below shows labor market activity in the western region through December 2017.

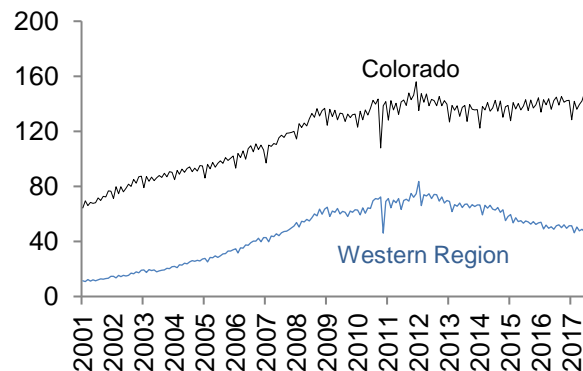
Figure 47
Western Region Labor Market Activity



Source: U.S. Bureau of Labor Statistics; LAUS. Data prior to 2010 adjusted by Legislative Council Staff. Data are seasonally adjusted and are through December 2017.

After years of subpar growth, the region's residential construction market has gained momentum. In 2017, the region's planning departments issued permits that will add almost 1,300 residential units, up 38.0 percent from the prior year. Growth picked up considerably in the last half of the year, suggesting the trend will continue into 2018. A limited number of existing homes and more people moving into the region is buoying the housing market. Higher rental prices in the region are also stimulating more people to buy a home. Conversely, activity in the region's nonresidential construction was down in 2017 compared with the year prior. The total value of nonresidential construction projects was down 34.9 percent in 2017, relative to year-ago levels.

Figure 48
Natural Gas Production
Millions of BCF



Source: Colorado Oil and Gas Conservation Commission. Data through October 2017. BCF=Billion cubic feet.

The Piceance Basin is located in the western region of Colorado and is the second largest potentially developable natural gas resource in the country. Natural gas production has declined for five consecutive years due to persistently low natural gas prices and a lack of investment from energy firms in the western region of the state (Figure 48). This trend is continuing, with natural gas production declining 5.2 percent in 2017.

The number of people that visited the Black Canyon of the Gunnison National Park increased 29 percent in 2017 from the prior year. Although the Black Canyon of the Gunnison National Park is not far from the struggling coal city of Somerset, most visitors to the park visit the south rim of the canyon and patronize businesses in the gateway communities of Montrose and Gunnison. Tourism has been less strong in other areas of the region. Visitations to the Colorado National Monument near Grand Junction decreased about 2 percent year-to-date through November.

Mountain Region

The mountain region, comprising the twelve mountain counties north of Poncha Pass, remains among the state's healthiest local economies. The region capitalized on another strong year of job growth, with tourism activity driving employment gains. Construction activity has been solid, particularly in the casino industry, but the lack of affordable housing remains a threat to further regional economic expansion. Economic indicators for the region are presented in Table 23.

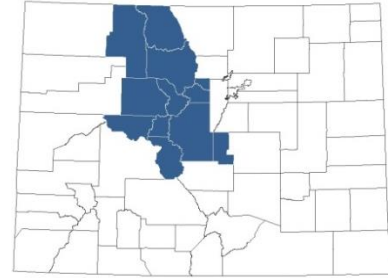


Table 23
Mountain Region Economic Indicators

Chaffee, Clear Creek, Eagle, Gilpin, Grand, Jackson, Lake, Park, Pitkin, Routt, Summit, and Teller Counties

	2013	2014	2015	2016	2017
Employment Growth ¹	0.7%	3.4%	1.4%	2.7%	3.4%
Unemployment Rate ¹	6.1%	4.3%	3.3%	2.8%	2.3%
Housing Permit Growth ²	26.2%	20.4%	-28.4%	37.3%	8.6%
Nonresidential Construction Growth ²					
Value of Projects	-8.6%	84.8%	43.9%	-31.2%	291.7%
Square Footage of Projects	-19.6%	206.5%	-62.0%	18.7%	216.5%
Level (<i>Thousands</i>)	441	1,352	514	609	1,929
Number of Projects	2.0%	20.0%	-35.0%	56.4%	-4.9%
Level	50	60	39	61	58
Retail Trade Sales Growth ³	6.1%	8.5%	6.7%	NA	NA

NA = Not available.

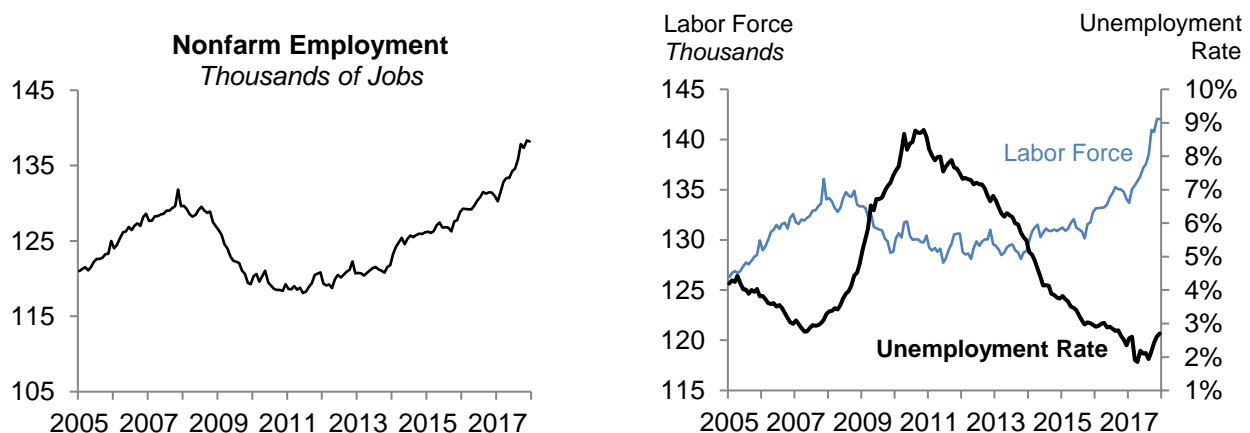
¹Bureau of Labor Statistics. LAUS (household) survey. Seasonally adjusted. Data through December 2017.

²F.W. Dodge. Data through December 2017.

³Colorado Department of Revenue. Seasonally adjusted. Data through December 2015.

Labor market activity continues to improve in the region, as shown in Figure 49. The regional unemployment rate for 2017 fell to 2.3 percent, with many of the counties enjoying some of the lowest unemployment rates in the state. The labor force has expanded, as have the total number of jobs in the region, mostly due to migration into the region.

Figure 49
Mountain Region Labor Market Activity

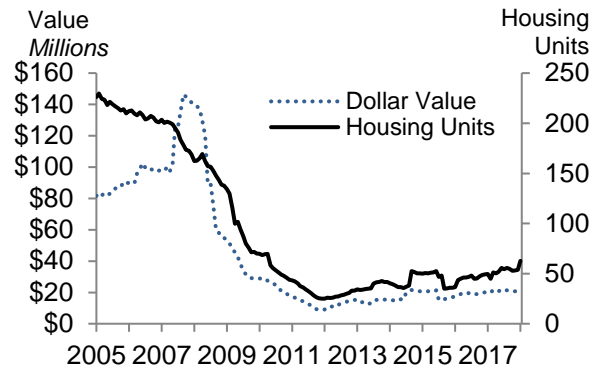


Source: U.S. Bureau of Labor Statistics; LAUS. Data prior to 2010 adjusted by Legislative Council Staff. Data are seasonally adjusted and are through December 2017.

The mountain economy is dominated by the tourism industry, which is most active during the ski season. Tourism in 2018 will be dampened by the lack of snowfall across the region. In low snow years, tourism declines by as much as 10 percent. According to the 23 ski areas represented by Ski Country USA, skier visits are down 13 percent in the early season, from opening day to December 31, 2017. The dip in tourism this season may adversely affect retail trade in 2018; however, consumption may hold steady with the agricultural and gaming industries forecasting stronger growth this year.

Housing permit growth slowed in 2017, up just 8.6 percent after 2016 experienced robust permit growth of over 37 percent (Figure 50). Nonresidential construction growth, on the other hand, rose considerably in 2017. The value of projects increased by almost 300 percent in 2017 after falling over 30 percent in 2016. In particular, the city of Blackhawk invested significantly in construction during 2017, both on new construction and renovation of casinos, and on infrastructure and diversification of its tourist offerings throughout the city.

Figure 50
Mountain Region Residential Building



Source: F.W. Dodge. Data shown as twelve-month moving averages. Data are not seasonally adjusted and are through December 2017.

Eastern Region

The eastern region comprises Colorado's 16 rural plains counties. The region relies on agriculture as its primary industry, with retailers, other locally-focused business, and government operations supporting area farming and ranching communities. Field crop producers are seeing prices inch upward, providing some relief. Progress in regional livestock production and the growing nonfarm sector, however, are contributing to economic strength of the region. Additionally, the expansion of some Front Range exurbs into the region's westernmost counties has added concentrated commuter communities to this part of the state. As a result, the region is diversifying unevenly. Indicators for the region are presented in Table 24.

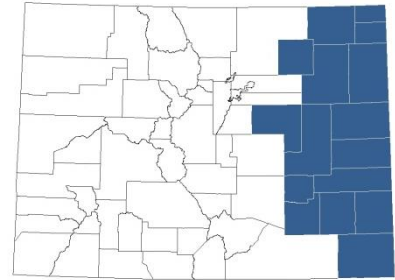


Table 24
Eastern Region Economic Indicators
 Baca, Bent, Logan, Cheyenne, Crowley, Elbert, Kiowa, Kit Carson, Lincoln,
 Morgan, Otero, Phillips, Prowers, Sedgwick, Washington, and Yuma Counties

	2013	2014	2015	2016	2017
Employment Growth ¹	-1.4%	3.0%	2.0%	3.5%	3.5%
Unemployment Rate ¹	6.1%	4.4%	3.5%	3.0%	2.3%
Crop Price Changes ²					
Wheat (\$/Bushel)	0.8%	-11.5%	-25.6%	-27.9%	-2.9%
Corn (\$/Bushel)	-2.8%	-31.0%	-13.1%	-7.7%	-3.4%
Alfalfa Hay (Baled, \$/Ton)	-0.1%	-11.3%	-13.9%	-15.5%	4.8%
Livestock ³					
State Cattle and Calf Inventory Growth	-8.7%	-4.2%	-4.4%	1.0%	6.7%
Milk Production	3.5%	7.9%	3.9%	5.2%	6.7%
Retail Trade Sales Growth ⁴	2.3%	9.7%	-5.4%	NA	NA

NA = Not available.

¹U.S. Bureau of Labor Statistics, LAUS (household survey). Data through December 2017.

²National Agricultural Statistics Service. Price data through December 2017.

³National Agricultural Statistics Service. Data through December 2017.

⁴Colorado Department of Revenue. Data through December 2015.

Colorado's top agricultural commodities include beef, corn, wheat, and milk. The eastern region also produces a diverse array of other products, including beets, soybeans, canola, and other animal, grain, and vegetable products. The region's agricultural producers have struggled with low commodity prices for key crops such as corn and wheat, which have weakened farm incomes.

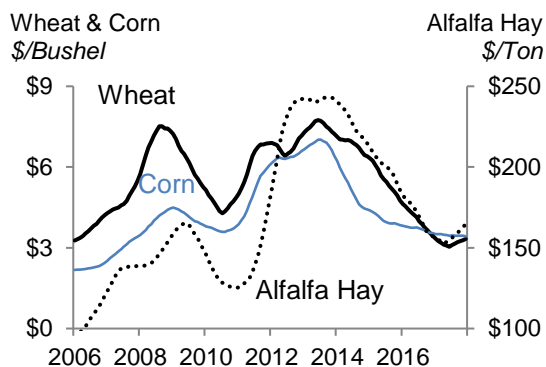
Figure 51 shows the prices received for Colorado wheat, corn, and alfalfa hay. Commodity prices for these items began a downward trend in 2013 as global supply outstripped demand. Prices have stabilized in recent months and even climbed for some crops. Field crop prices are expected to remain low and grow slowly, maintaining pressure on farm profitability.

Ranchers have fared better in recent months and retain reason for cautious optimism. Lower corn prices have modestly boosted the cattle inventory as feed costs for livestock operators have declined. Colorado milk producers continue to increase production at a healthy rate, with volume production increasing more quickly in 2017 than in either of the two previous years. Relative to national dairies, strength in local milk markets is attributable in part to demand from local cheese and dairy product manufacturers.

The number of nonfarm jobs in the region has finally surpassed its historical peak (Figure 52, left), after increasing a healthy 3.5 percent during 2017. The regional unemployment rate averaged 2.3 percent in 2017, tied for the state's lowest. Growth has been uneven across counties in the region. Many of the rural counties with small populations have experienced volatile labor markets in recent years as the agricultural economy stumbled. Counties closer to Front Range urban areas, by contrast, have generally experienced stronger, more consistent growth stimulated by new residential development in exurban areas.

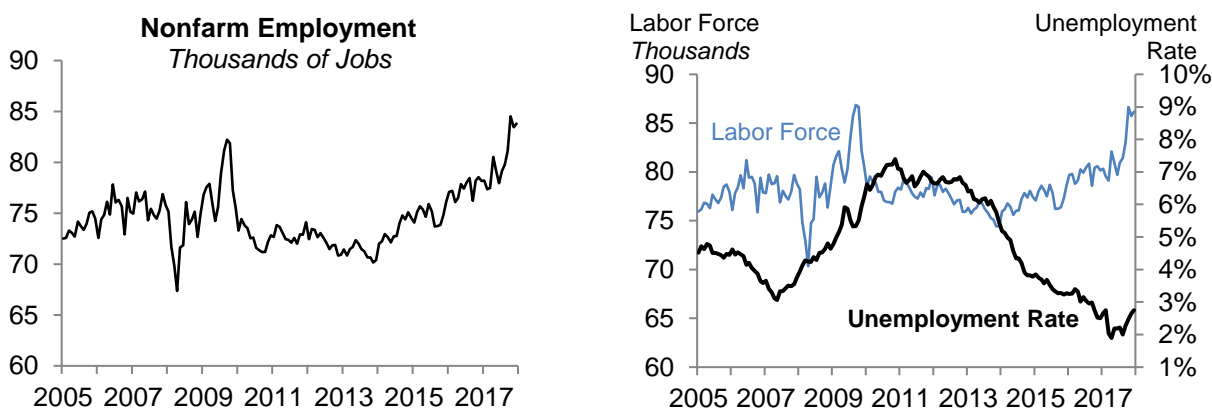
The regional economy is expected to continue to expand due to the growing population in the counties closest to metropolitan areas. Morgan County, which is characterized by a strong agricultural industry presence, is currently the region's largest in terms of both population and employment. Elbert County, however, is projected to become the most populated county in the region next year as new residential developments continue. The State Demographer projects that Elbert County's population will grow an average of 4.6 percent annually through 2020, the fastest projected county growth rate in the state by more than a full percentage point.

Figure 51
Prices Received for Colorado Crops



Source: National Agricultural Statistics Service. Data shown as twelve-month moving averages. Data are through December 2017.

Figure 52
Eastern Region Labor Market Indicators



Source: U.S. Bureau of Labor Statistics; LAUS. Data prior to 2010 adjusted by Legislative Council Staff. Data are seasonally adjusted and are through December 2017.

APPENDIX: HISTORICAL DATA

National Economic Indicators

Calendar Years	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017
GDP (\$ Billions) ¹	11,510.7	12,274.9	13,093.7	13,855.9	14,477.6	14,718.6	14,418.7	14,964.4	15,517.9	16,155.3	16,691.5	17,427.6	18,120.7	18,624.5	19,386.2
Percent Change	4.9%	6.6%	6.7%	5.8%	4.5%	1.7%	-2.0%	3.8%	3.7%	4.1%	3.3%	4.4%	4.0%	2.8%	4.1%
Real GDP (\$ Billions) ¹	13,271.1	13,773.5	14,234.2	14,613.8	14,873.7	14,830.4	14,418.7	14,783.8	15,020.6	15,354.6	15,612.2	16,013.3	16,471.5	16,716.2	17,092.5
Percent Change	2.8%	3.8%	3.3%	2.7%	1.8%	-0.3%	-2.8%	2.5%	1.6%	2.2%	1.7%	2.6%	2.9%	1.5%	2.3%
Unemployment Rate ²	6.0%	5.5%	5.1%	4.6%	4.6%	5.8%	9.3%	9.6%	8.9%	8.1%	7.4%	6.2%	5.3%	4.9%	4.4%
Inflation ²	2.3%	2.7%	3.4%	3.2%	2.9%	3.8%	-0.3%	1.6%	3.1%	2.1%	1.5%	1.6%	0.1%	1.3%	2.1%
10-Year Treasury Note ³	4.0%	4.3%	4.3%	4.8%	4.6%	3.7%	3.3%	3.2%	2.8%	1.8%	2.4%	2.5%	2.1%	1.8%	2.3%
Personal Income (\$ Billions) ¹	9,492.0	10,053.9	10,615.0	11,394.8	12,001.1	12,503.2	12,095.6	12,477.1	13,254.5	13,915.1	14,073.7	14,818.3	15,553.0	15,928.7	16,428.0
Percent Change	3.7%	5.9%	5.6%	7.3%	5.3%	4.2%	-3.3%	3.2%	6.2%	5.0%	1.1%	5.3%	5.0%	2.4%	3.1%
Wage & Salaries (\$ Billions) ¹	5,137.9	5,421.9	5,692.0	6,057.4	6,395.2	6,531.9	6,251.4	6,377.5	6,633.2	6,930.3	7,116.7	7,476.8	7,858.9	8,085.3	8,350.9
Percent Change	2.8%	5.5%	5.0%	6.4%	5.6%	2.1%	-4.3%	2.0%	4.0%	4.5%	2.7%	5.1%	5.1%	2.9%	3.3%
Nonfarm Employment (Millions) ²	130.3	131.8	134.0	136.5	138.0	137.2	131.3	130.4	131.9	134.2	136.4	138.9	141.8	144.3	146.6
Percent Change	-0.2%	1.1%	1.7%	1.8%	1.1%	-0.5%	-4.3%	-0.7%	1.2%	1.7%	1.6%	1.9%	2.1%	1.8%	1.6%

Sources

¹U.S. Bureau of Economic Analysis. Real gross domestic product (GDP) is adjusted for inflation. Personal income and wages and salaries not adjusted for inflation.

²U.S. Bureau of Labor Statistics. Inflation shown as the year-over-year change in the consumer price index for all urban areas (CPI-U).

³Federal Reserve Board of Governors.

Colorado Economic Indicators

Calendar Years	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017
Nonfarm Employment (<i>Thousands</i>) ¹	2,179.4	2,225.9	2,279.7	2,331.1	2,350.6	2,245.5	2,221.4	2,258.1	2,312.3	2,380.8	2,464.0	2,541.7	2,602.6	2,658.7
Percent Change	1.2%	2.1%	2.4%	2.3%	0.8%	-4.5%	-1.1%	1.7%	2.4%	3.0%	3.5%	3.2%	2.4%	2.2%
Unemployment Rate ¹	5.5	4.9	4.2	3.8	4.9	7.6	8.7	8.4	7.9	6.9	5.0	3.9	3.3	2.8
Personal Income (\$ <i>Millions</i>) ²	\$164,457	\$176,129	\$189,493	\$201,743	\$208,608	\$198,082	\$201,570	\$219,861	\$234,006	\$246,648	\$267,225	\$282,665	\$288,103	NA
Percent Change	3.4%	7.1%	7.6%	6.5%	3.4%	-5.0%	1.8%	9.1%	6.4%	5.4%	8.3%	5.8%	1.9%	
Per Capita Personal Income (\$) ²	35,947	38,025	40,143	41,996	42,663	39,838	39,926	42,955	45,089	46,824	49,952	51,876	51,999	NA
Percent Change	2.3%	5.8%	5.6%	4.6%	1.6%	-6.6%	0.2%	7.6%	5.0%	3.8%	6.7%	3.9%	0.2%	
Wage & Salary Income (\$ <i>Millions</i>) ²	\$93,569	\$98,787	\$105,664	\$112,506	\$116,678	\$112,297	\$113,786	\$118,558	\$125,014	\$129,597	\$138,678	\$146,635	\$151,322	NA
Percent Change	4.8%	5.6%	7.0%	6.5%	3.7%	-3.8%	1.3%	4.2%	5.4%	3.7%	7.0%	5.7%	3.2%	
Retail Trade Sales (\$ <i>Millions</i>) ³	\$62,288	\$65,492	\$70,437	\$75,329	\$74,760	\$66,345	\$70,738	\$75,548	\$80,073	\$83,569	\$90,653	\$94,920	NA	NA
Percent Change	6.1%	5.1%	7.5%	6.9%	-0.8%	-11.3%	6.6%	6.8%	6.0%	4.4%	8.5%	4.7%		
Residential Housing Permits ⁴	44,855	45,422	39,211	30,149	19,507	9,385	11,531	13,386	21,329	27,270	29,238	30,493	36,998	41,042
Percent Change	9.3%	1.3%	-13.7%	-23.1%	-35.3%	-51.9%	22.9%	16.1%	59.3%	27.9%	7.2%	4.3%	21.3%	10.9%
Nonresidential Construction (<i>Millions</i>) ⁵	\$3,245	\$4,275	\$4,641	\$5,259	\$4,114	\$3,354	\$3,147	\$3,923	\$3,695	\$3,624	\$4,351	\$4,982	\$5,942	\$5,704
Percent Change	20.8%	31.7%	8.6%	13.3%	-21.8%	-18.5%	-6.2%	24.7%	-5.8%	-1.9%	20.1%	14.5%	19.3%	-4.0%
Denver-Boulder-Greeley Inflation ¹	0.1%	2.1%	3.6%	2.2%	3.9%	-0.6%	1.9%	3.7%	1.9%	2.8%	2.8%	1.2%	2.8%	3.4%
Population (<i>Thousands, July 1</i>) ⁴	4,575	4,632	4,720	4,804	4,890	4,972	5,048	5,116	5,186	5,263	5,342	5,440	5,530	5,607
Percent Change	1.0%	1.2%	1.9%	1.8%	1.8%	1.7%	1.5%	1.4%	1.4%	1.5%	1.5%	1.8%	1.6%	1.4%

NA = Not available.

¹U.S. Bureau of Labor Statistics. Inflation shown as the year-over-year change in the consumer price index for Denver-Boulder-Greeley metro area.

²U.S. Bureau of Economic Analysis. Personal income and wages and salaries not adjusted for inflation.

³Colorado Department of Revenue.

⁴U.S. Census Bureau. Residential housing permits are the number of new single and multi-family housing units permitted for building.

⁵F.W. Dodge.