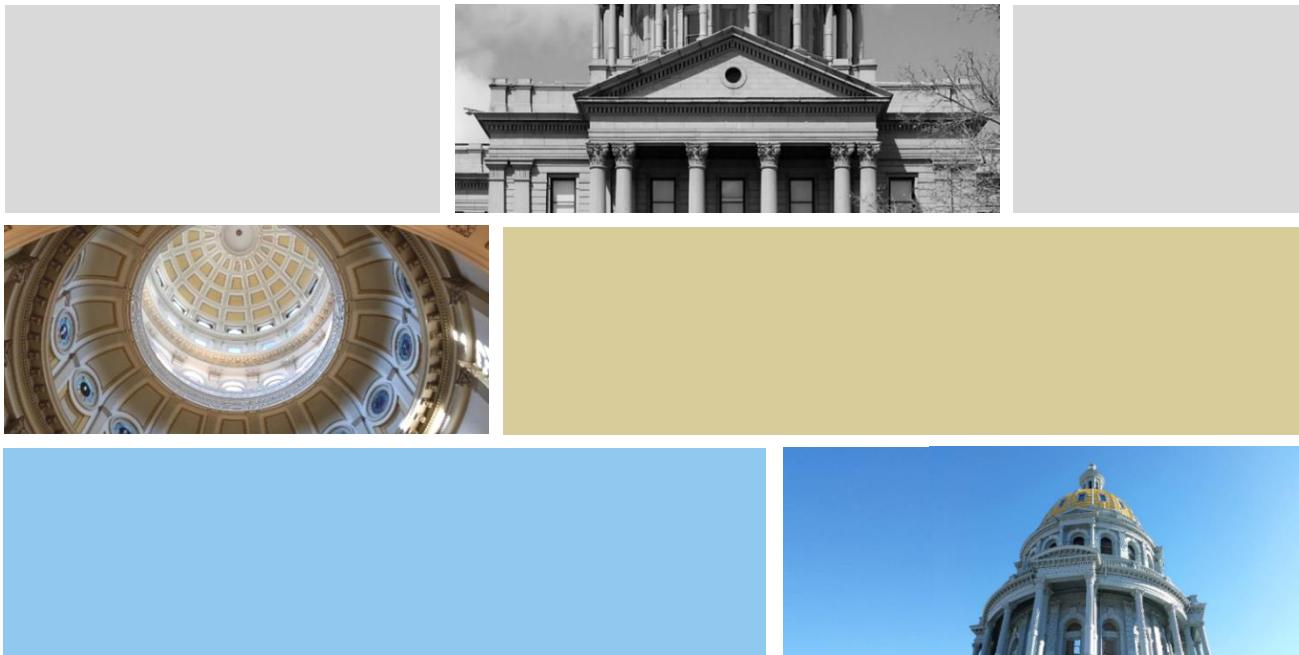




Colorado Legislative Council Staff
June 2019 | Economic & Revenue Forecast



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Executive Summary

This report presents the budget outlook based on current law and the June 2019 General Fund revenue, cash fund revenue, and TABOR forecasts. This document includes summaries of expectations for the U.S. and Colorado economies and an overview of current economic conditions in nine regions of the state.

General Fund Budget Outlook

FY 2018-19	In FY 2018-19, the General Fund is expected to end the year with a 10.0 percent reserve, \$303.3 million above the 7.25 percent statutory reserve. Revenue subject to TABOR is expected to exceed the Referendum C cap by \$574.7 million, resulting in a TABOR refund in FY 2019-20. The TABOR refund obligation is expected to trigger a temporary income tax rate reduction for tax year 2019 in addition to fully funding local government reimbursements for property tax exemptions, with remaining refunds returned to taxpayers via the six tier sales tax refund mechanism.
FY 2019-20	In FY 2019-20, the General Fund is expected to end the year with an 8.1 percent reserve, \$97.5 million above the 7.25 percent statutory reserve. Revenue subject to TABOR is expected to exceed the Referendum C cap by \$310.0 million, resulting in a TABOR refund in FY 2020-21. The TABOR refund obligation is expected to fully fund reimbursements to local governments for property tax exemptions with remaining refunds returned to taxpayers via the six tier sales tax refund mechanism.
FY 2020-21 Unbudgeted	The General Assembly is projected to have \$763.1 million, or 5.8 percent, more to spend or save in the General Fund than what is budgeted to be spent and saved in FY 2019-20. If appropriations were grown by inflation and population growth, this amount is reduced to \$338.2 million, and if grown by historical rates during an economic expansion, the state would incur a \$13.0 million deficit relative to the required 7.25 percent reserve. Any changes to revenue or expenditures in FY 2019-20 will change these amounts. Revenue is expected to come in \$342.1 million above the Referendum C cap in FY 2020-21, resulting in a FY 2021-22 TABOR refund obligation.

Risks to the forecast. This revenue forecast contains both upside and downside risk due to the late stage of the economic expansion and uncertainty surrounding continued shifts in taxpayer behavior in response to the federal Tax Cuts and Jobs Act (TCJA), recent court decisions on corporate income tax payments, and ongoing sales tax reform for remote (including online) transactions. The March forecast identified significant upside risk to the forecast in the near term, which bore out during the regular filing season for the 2018 tax year. Forecast uncertainty remains elevated as taxpayers continue to adjust their behavior to an evolving policy environment, and the degree to which revenue strength has been attributable to changes in policy or economic strength remains cloudy.

Cash Fund Revenue

Cash fund revenue subject to TABOR totaled \$2.30 billion in FY 2017-18, a decline of \$471.4 million, or 17.0 percent, from the prior fiscal year. The drop in revenue is attributable to the elimination of both the Hospital Provider Fee and the 2.9 percent sales tax on retail marijuana. Total cash fund revenue subject to TABOR will rebound from this lower level, growing by 6.4 percent to total

\$2.45 billion in FY 2018-19, and will decrease by 0.3 percent to \$2.44 billion in FY 2019-20, as increases in most major revenue sources are more than offset by declines in severance tax collections. By FY 2020-21, total cash fund revenue is expected to increase to \$2.53 billion, a 3.4 percent increase from the prior year.

Economic Outlook

Following healthy growth in 2018, momentum in the U.S. and Colorado economies continued into the first quarter of 2019. Aided by the stimulative effects of federal tax cuts, the state and national economies continue to post strong growth in the late stages of an expansion. Inflation remains in check, and an ever-tighter labor market is helping to bolster personal income growth and consumer activity. The U.S. and Colorado economies are expected to continue to expand through the remainder of 2019 and into 2020, though at a slower pace of growth as labor market tightening constrains business activity, global economic activity slows, and trade tensions persist.

Risks to the outlook are skewed to the downside, as several leading economic indicators signal rising concerns over future growth. Factory orders and business investment began to weaken in the first quarter of the year as firms took a wait-and-see approach before committing to capital investments. Consumer demand for automobiles and other durable goods has softened, and supply chain disruptions induced by tariffs between the U.S. and its major trade partners pose an ongoing challenge to producers and exporters. Labor scarcity is constraining business activity for an increasing number of industries. In Colorado, higher interest rates have dampened the housing market along the Front Range as homes become less affordable. Discussion of the economic outlook begins on page 35, and summaries of expectations for the U.S. and Colorado economies are respectively presented in Tables 18 and 19 on pages 61 and 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:

- transfers to the State Education Fund (Figure 1);
- statutory transfers to transportation and capital construction funds (Table 3);
- the availability of tax policies (Table 4) and transfers (Table 5) dependent on revenue collections;
- General Fund rebates and expenditures (Table 6); and
- cash fund transfers to and from the General Fund (Table 7).

FY 2018-19

The General Fund is expected to end the year with a 10.0 percent reserve, \$303.3 million higher than the required 7.25 percent reserve (Table 1, line 20). Revenue is expected to exceed the Referendum C cap by \$574.7 million, resulting in a TABOR refund of an equal amount in FY 2019-20. The TABOR refund obligation is expected to trigger a temporary income tax rate reduction for 2019, in addition to fully funding the senior homestead and disabled veteran property tax exemptions, with remaining refunds returned to taxpayers via the six tier sales tax refund mechanism.

The General Fund excess reserve (Table 1, line 20) is expected to be \$69.3 million lower than projected in March, reflecting 2019 legislative increases to expenditures and a larger TABOR refund obligation that more than offset increased revenue expectations. Relative to the March 2019 forecast, General Fund collections were increased \$459.4 million on robust income tax collections from the 2018 filing season, and a corporate income tax settlement in June that results in a large payment to the state. Cash fund revenue expectations remained consistent with those published in March.

FY 2019-20

The General Fund is expected to end the year with an 8.1 percent reserve, \$97.5 million higher than the budgeted 7.25 percent reserve. Revenue is expected to exceed the Referendum C cap by \$310.0 million, resulting in a TABOR refund in FY 2020-21. The TABOR refund obligation will fully fund FY 2020-21 local government reimbursements for the senior homestead and disabled veteran property tax exemptions, with the remaining obligation refunded via the six-tier sales tax mechanism.

Gross General Fund revenue expectations were revised up \$388.6 million on 2019 legislative changes and higher expectations for income tax collections. Cash fund revenue expectations were reduced \$11.2 million on a lower forecast for severance tax revenue.

Changes to the budget situation relative to the March 2019 forecast. Table 2 summarizes changes in the FY 2018-19 and FY 2019-20 General Fund budget situation relative to the March forecast. This summary incorporates changes resulting from 2019 legislation and changes in forecast expectations.

FY 2020-21 (Unbudgeted)

Because a budget has not yet been enacted for FY 2020-21, Table 1 (line 22) shows the amount of revenue available in FY 2020-21 relative to the amount budgeted to be spent or saved in FY 2019-20.

Table 1
General Fund Overview
Dollars in Millions

	FY 2017-18 Actual	FY 2018-19 Estimate	FY 2019-20 Estimate	FY 2020-21 Estimate
Funds Available				
1 Beginning Reserve	\$614.5	\$1,366.0	\$1,117.5	\$967.9
2 General Fund Revenue	\$11,723.9	\$12,646.4	\$13,029.9	\$13,429.9
3 Transfers from Other Funds (<i>Table 7</i>)	\$98.6	\$67.2	\$40.3	\$18.4
4 Total Funds Available	\$12,436.9	\$14,079.6	\$14,187.7	\$14,416.2
5 Percent Change	14.8%	13.2%	0.8%	1.6%
Expenditures	Actual	Budgeted	Budgeted	Estimate
6 General Fund Appropriations Subject to Limit ¹	\$10,430.9	\$11,230.7	\$12,004.7	*
7 Adjustments to Appropriations ²	\$29.0	*	*	*
8 TABOR Refund Obligation Under Art. X, §20, (7)(d) ³	\$39.8	\$574.7	\$310.0	\$342.1
9 Rebates and Expenditures (<i>Table 6</i>)	\$290.7	\$250.2	\$144.3	\$145.1
10 Transfers to Other Funds (<i>Table 7</i>)	\$208.6	\$205.8	\$194.8	\$240.9
11 Transfers to the State Education Fund Pursuant to SB 13-234	\$25.3	\$25.0	\$40.3	\$0.0
12 Transfers to Transportation Fund (<i>Table 3</i>)	\$79.0	\$495.0	\$300.0	\$50.0
13 Transfers to Capital Construction Funds (<i>Table 3</i>)	\$112.1	\$180.5	\$225.7	\$0.0
14 Total Expenditures	\$11,215.4	\$12,962.1	\$13,219.8	*
15 Percent Change	7.6%	15.6%	2.0%	*
16 Accounting Adjustments ⁴	144.4	*	*	*
Reserve	Actual	Budgeted	Budgeted	Estimate
17 Year-End General Fund Reserve	\$1,366.0	\$1,117.5	\$967.9	*
18 Year-End Reserve as a Percent of Appropriations	13.1%	10.0%	8.1%	*
19 Statutorily Required Reserve ⁵	\$674.9	\$814.2	\$870.3	*
20 Amount in Excess or (Deficit) of Statutory Reserve	\$691.1	\$303.3	\$97.5	*
21 Excess Reserve as a Percent of Expenditures	6.2%	2.3%	0.7%	*
Perspective on FY 2020-21 (Unbudgeted)				Estimate
Scenario A: Hold FY 2019-20 Appropriations Constant⁶				
22 Amount in Excess or (Deficit) of 7.25% Statutory Reserve				\$763.1
23 As a Percent of Prior-Year Expenditures				5.8%
Scenario B: Increase FY 2019-20 Appropriations by Inflation and Population Growth (3.3%)⁷				
24 Amount in Excess or (Deficit) of 7.25% Statutory Reserve				\$338.2
25 As a Percent of Prior-Year Expenditures				2.6%
Scenario C: Increase FY 2019-20 Appropriations by Historical Growth During Expansions (6.0%)⁸				
26 Amount in Excess or (Deficit) of 7.25% Statutory Reserve				(\$13.0)
27 As a Percent of Prior-Year Expenditures				-0.1%
Addendum	Actual	Estimate	Estimate	Estimate
28 Percent Change in General Fund Appropriations	6.9%	7.4%	6.9%	*
29 5% of Colorado Personal Income Appropriations Limit	\$14,207.1	\$14,481.0	\$15,320.6	\$16,188.4
30 Transfers to State Education Fund Per Amendment 23	\$617.0	\$692.8	\$710.6	\$726.2

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

¹Includes the FY 2018-19 supplemental package and FY 2019-20 budget package adopted during the 2019 legislative session.

²For FY 2018-19, includes \$29.0 million in overexpenditures, primarily from allowable Medicaid overexpenditures pursuant to Section 24-75-109 (1), C.R.S.

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 a \$21.3 million to the FY 2017-18 TABOR refund obligation that is carried forward from the FY 2014-15 refund obligation.

⁵The required reserve is calculated as a percent of operating appropriations, and is required to equal 6.5 percent in FY 2017-18 and 7.25 percent in FY 2018-19 and each year thereafter. Pursuant to SB 18-276, certificates of participation are included in the statutory reserve requirement calculation beginning in FY 2018-19.

⁶This scenario holds appropriations in FY 2020-21 equal to appropriations in FY 2019-20 (line 6) to determine the total amount of money available relative to FY 2019-20 expenditures, net of the obligations in lines 7 through 13.

⁷This scenario increases FY 2019-20 appropriations by projected 2020 inflation plus population growth to determine the total amount of money available relative to FY 2019-20 expenditures, net of the obligations in lines 7 through 13.

⁸This scenario increases FY 2019-20 appropriations by average annual growth over the past two expansions to determine the total amount of money available relative to FY 2019-20 expenditures, net of the obligations in lines 7 through 13.

Based on this forecast, the General Assembly will have \$763.1 million, or 5.8 percent, more to spend or save in the General Fund than what is budgeted for FY 2019-20. This amount assumes FY 2020-21 transfers, rebates and expenditures, and TABOR refund obligations under current law. The \$763.1 million amount is attributable to the FY 2019-20 excess reserve carrying into the FY 2020-21 beginning balance, year-over-year growth in General Fund revenue, and smaller transfers from the General Fund in FY 2020-21 (lines 10 through 13). Table 1 provides two additional scenarios (lines 24 and 26), the former assuming appropriations growth equal to 2020 inflation plus population growth (3.3 percent), and the latter applying 6.0 percent appropriations growth—the average annual rate of growth during the last two expansions. Under these scenarios, the state would have an excess reserve of \$338.2 million or fall short of the required reserve by \$13.0 million, respectively.

Relative to the March forecast, General Fund revenue expectations were increased by \$438.9 million on higher expectations for income and sales taxes. Expectations for cash fund revenue subject to TABOR were increased by \$38.5 million on 2019 legislative changes to fee revenue. Combined with lower expectations for inflation, revenue subject to TABOR is now expected to exceed Referendum C cap by \$342.1 million in FY 2020-21.

Table 2
Changes in the General Fund Budget Situation Relative to the March Forecast

Components of Change	2018-19	2019-20	Description of Changes
1 Funds Available	\$487.9	\$343.9	
2 Beginning Reserve	\$0.0	-\$67.0	Carries the reduction in the FY 2018-19 reserve from increases in expenditures forward.
3 General Fund Revenue	\$459.4	\$388.6	Stronger revenue on increased expectations for income tax revenue.
4 Transfers from Other Funds	\$28.5	\$22.3	See Table 7.
5 Expenditures	\$557.2	\$1,428.5	
6 Operating Appropriations	\$32.3	\$806.3	Reflects supplementals adopted for FY 2018-19. The FY 2019-20 amount reflects growth in appropriations authorized in the 2019 Long Bill.
7 TABOR Refund Set Aside	\$509.9	\$310.0	Reflects stronger income tax revenue expectations (see page 21).
8 Rebates and Expenditures	\$5.2	-\$75.1	Reflects increased expectations for the senior homestead exemption. In FY 2019-20, reflects a larger TABOR refund, reducing the expenditure for property tax exemptions.
9 State Education Fund Transfers	\$0.0	\$40.3	SB 19-246.
10 Transportation Transfers	\$0.0	\$100.0	SB 19-262.
11 Capital Construction Transfers	\$0.0	\$165.7	See Table 3.
12 Other Cash Fund Transfers	\$7.5	\$22.8	See Table 7.
13 Required Reserve (7.25% of General Fund appropriations subject to limit)	\$2.3	\$58.5	Reflects changes to appropriations under FY 2018-19 supplementals and the FY 2019-20 budget package.
Surplus Relative to Required Reserve			
14 Reduction in Surplus	-\$69.3	*	Higher expenditures under 2019 legislation more than offsets increases in revenue expectations.

*Not estimated in the March 2019 forecast.

Higher than Usual Forecast Uncertainty

Federal tax law changes. Significant shifts in taxpayer behavior occurred in anticipation of and following the passage of the federal Tax Cuts and Jobs Act, resulting in unusual individual and corporate income tax collection patterns that cannot easily be isolated from underlying economic conditions. The federal tax bill enacts changes starting in the 2018 tax year. Complete collections data for the 2018 tax year will not be available until November 2019, after extension filers submit their returns in October. Even with more complete collections data, the revenue impact of the federal tax changes cannot be isolated from the underlying economic situation. As taxpayers adapt to the federal tax changes, additional shifts in behavior are expected. Considering these factors, revenue estimates in this forecast are subject to a higher than usual margin of error.

Sales tax collections for out-of-state retailers. The 2018 U.S. Supreme Court ruling in *South Dakota v. Wayfair, Inc.*, subsequent administrative rule changes, and the passage of House Bill 19-1240 pose a modest upside risk to the sales tax revenue forecast. These changes require out-of-state (including online) retailers to collect and remit state sales taxes and are expected to increase state collections by up to \$72 million annually when fully implemented.

General Fund Transfers to Transportation and Capital Construction

Statutory transfers from the General Fund to transportation and capital construction funds are shown in Table 3. In the General Fund overview shown in Table 1, these transfers are reflected on lines 12 and 13. Other noninfrastructure-related transfers to and from the General Fund are summarized in Table 5, and shown on lines 3 and 10 of Table 1.

Table 3
Infrastructure Transfers from the General Fund
Dollars in Millions

Capital Construction Funds	2017-18	2018-19	2019-20	2020-21
HB 15-1344			\$20.0	
SB 17-263	\$109.2			
SB 17-262		\$60.0	\$60.0	
HB 18-1006		\$0.7		
HB 18-1173	\$2.9			
HB 18-1340		\$119.8		
HB 19-1250			\$0.2	
SB 19-214			\$145.5	
Total	\$112.1	\$180.5	\$225.7	\$0.0
Transportation Funds	2017-18	2018-19	2019-20	2020-21
SB 17-262	\$79.0			
SB 18-001		\$495.0	\$200.0	\$50.0
SB 19-262			\$100.0	
Total	\$79.0	\$495.0	\$300.0	\$50.0

General Fund contributions to transportation. Senate Bill 17-267, which authorized \$1.88 billion in certificates of participation (COPs) for transportation projects requires General Fund appropriations for COP-related lease payments beginning in FY 2018-19. Under current law, these General Fund appropriations are expected to total \$100 million annually by FY 2021-22. These appropriations are included in line 6 of Table 1, and not included in Table 3.

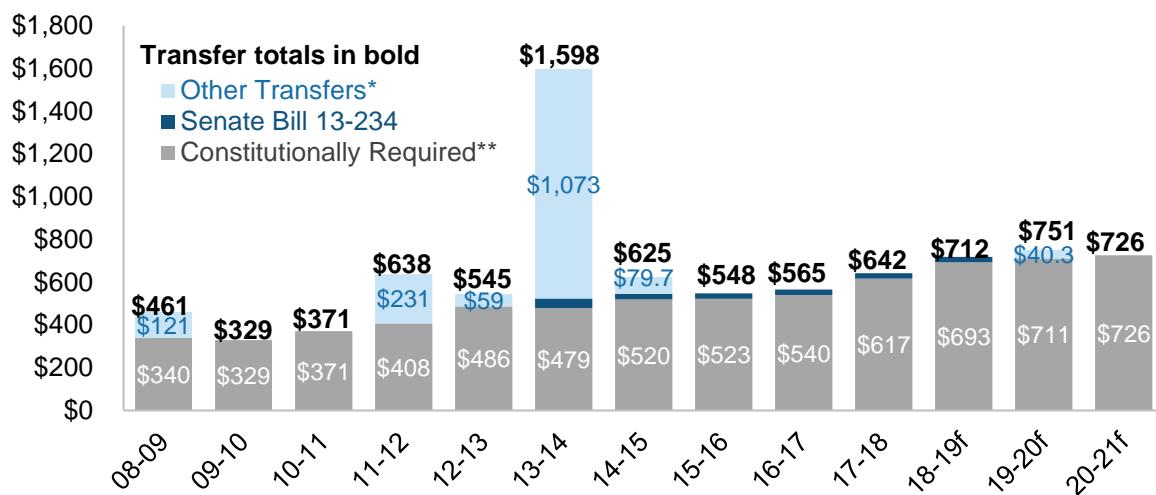
Senate Bill 18-001 created one-time General Fund transfers for transportation of \$495 million in FY 2018-19 and \$150 million in FY 2019-20. These amounts are apportioned to the State Highway Fund, a new Multimodal Transportation Options Fund, and county and municipal governments. Beginning in FY 2018-19, Senate Bill 18-001 authorizes 20 years of additional transfers to the State Highway Fund set at \$50 million per year. Additionally, Senate Bill 19-262 authorized a \$100 million transfer to the State Highway Fund in FY 2019-20 only.

State Education Fund

The Colorado Constitution requires the State Education Fund to receive one-third of 1 percent of taxable income. In addition, the General Assembly has at different times authorized the transfer of additional moneys from the General Fund to the State Education Fund (see Table 1, line 11). Money in the State Education Fund is required to be used to fund kindergarten through twelfth grade public education. Figure 1 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. The 2019 school finance act, Senate Bill 19-246, includes a one-time \$40.3 million General Fund transfer to the State Education Fund in FY 2019-20, after which only constitutionally required transfers are scheduled under current law.

Figure 1
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, and SB 19-246 for FY 2019-20.

**One-third of 1 percent of federal taxable income is required to be dedicated to the State Education Fund under Article IX, Section 17 of the Colorado Constitution.

Fiscal Policies Dependent on Revenue Conditions

Contingent tax expenditures. Two state tax expenditures are “triggered” by certain state revenue conditions. Table 4 summarizes the availability of these tax policies, each of which is described in greater detail below.

- **The historic preservation income tax credit is available in tax years 2018 and 2019.** The historic preservation income tax credit will be triggered in tax years 2018 and 2019 based on the December 2017 and December 2018 forecasts, respectively. These forecasts expected sufficient revenue to grow appropriations by more than 6.0 percent in FY 2017-18 and FY 2018-19.
- **Partial refundability of the conservation easement tax credit is available in tax year 2018 and is expected to be available in tax years 2019, 2020, and 2021.** 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. Because a TABOR surplus was collected in FY 2017-18, the credit was partially refundable for tax year 2018. This forecast expects a TABOR surplus in each of FY 2018-19, FY 2019-20, and FY 2020-21. If one or more of these surpluses occur, partial refundability of the credit will be available in tax years 2019, 2020, and/or 2021.

Table 4
Availability of Tax Policies Dependent on Revenue Conditions

Fiscal 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 that predicts sufficient General Fund to grow General Fund appropriations by 6 percent.	Available in tax years 2018 and 2019. Repealed in tax year 2020.
Conservation Easement Tax Credit Partial Refundability (Section 39-22-522 (5)(b)(II), C.R.S.) <i>Revenue reduction of about \$5.0 million per tax year*</i>	TABOR surplus.	Available in tax year 2018 due to the FY 2017-18 TABOR surplus. Expected to be available in tax years 2019, 2020, and 2021.

*Estimates may differ in future analyses.

Contingent transfers for affordable housing. House Bill 19-1322 created conditional transfers from the Unclaimed Property Trust Fund (UPTF) to the Housing Development Grant Fund for affordable housing projects. These transfers are contingent based on the balance in the UPTF as of June 1 and the Legislative Council Staff June 2021, 2022, and 2023 forecasts. For the fiscal year in which a relevant forecast is published, if revenue subject to TABOR is projected to fall below a “cutoff” amount equal to the projected Referendum C cap minus \$30 million dollars, a transfer will be made. The transfer is equal to the greater of \$30 million, or the UPTF fund balance. As presented in Table 5, based on this June forecast, a transfer is not expected for FY 2020-21 because revenue is expected to exceed the cutoff. However, the June 2021 forecast will determine the actual availability of this transfer. A forecast is not yet available for subsequent years.

Table 5
Availability of Transfers from the Unclaimed Property Tax Fund Under HB 19-1322

	FY 2020-21 Estimate	FY 2021-22 Estimate	FY 2022-23 Estimate
1 Forecast that Determines Availability	June 2021	June 2022	June 2023
2 Available UPTF Balance*	\$116.2 million		
3 Referendum C Cap	\$15,382.4 million		
4 Transfer Cutoff (<i>line 3 minus \$30 million</i>)	\$15,352.4 million		
5 Revenue Subject to TABOR	\$15,724.4 million		
6 Revenue Above or (Below) Cutoff	\$372.1 million		
7 Transfer Amount	None		

*The available balance in the Unclaimed Property Trust Fund is based off of the most recent five-year average.

Table 6
General Fund Rebates and Expenditures
Dollars in Millions

Category	Actual FY 2017-18	Percent Change	Estimate FY 2018-19	Percent Change	Estimate FY 2019-20	Percent Change	Estimate FY 2020-21	Percent Change
Senior and Veterans Property Tax Exemptions	\$132.3	-3.0%	\$145.9	10.3%	\$153.2	5.0%	\$161.9	5.7%
TABOR Refund Mechanism ¹	NA		-\$39.5		-\$153.2		-\$161.9	
Cigarette Rebate	\$9.7	-5.6%	\$9.8	0.7%	\$9.5	-2.7%	\$9.3	-2.6%
Old Age Pension Fund	\$91.3	-5.4%	\$86.7	-5.0%	\$84.4	-2.7%	\$83.0	-1.6%
Aged Property Tax and Heating Credit	\$4.9	-43.3%	\$5.6	14.8%	\$6.4	13.0%	\$7.1	12.3%
Older Coloradans Fund ²	\$25.0	150.0%	\$10.0	-60.0%	\$10.0	0.0%	\$10.0	0.0%
Interest Payments for School Loans	\$5.0	47.7%	\$7.4	48.3%	\$7.4	0.2%	\$7.4	0.0%
Firefighter Pensions	\$4.4	3.5%	\$4.2	-3.9%	\$4.4	4.7%	\$4.2	-3.9%
Amendment 35 Distributions	\$0.8	-3.8%	\$0.8	-2.2%	\$0.8	-1.6%	\$0.8	-1.4%
Marijuana Sales Tax Transfer to Local Governments	\$17.3	17.2%	\$19.3	11.5%	\$21.4	11.2%	\$23.3	8.5%
Total Rebates and Expenditures	\$290.7	2.0%	\$250.2	-13.9%	\$144.3	-42.3%	\$145.1	0.6%

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

¹Pursuant 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.

²Pursuant to HB 16-1161, 95 percent of excess General Fund allocations for local government reimbursements for property tax exemptions are transferred to the senior services account in the Older Coloradans Fund. The amount for FY 2017-18 includes \$15.0 million pursuant to this requirement.

Table 7
Cash Fund Transfers
Dollars in Millions

Transfers to the General Fund		FY 2017-18	FY 2018-19	FY 2019-20	FY 2020-21
HB 05-1262	Amendment 35 Tobacco Tax	\$0.8	\$0.8	\$0.8	\$0.8
SB 13-133 & SB 18-191	Limited Gaming Fund	\$16.9	\$15.6	\$16.5	\$17.6
SB 15-249 & HB 16-1418	Marijuana Tax Cash Fund	\$0.04			
§ 36-1-148 (2)	Land and Water Management Fund	\$0.1			
SB 17-260	Severance Tax Funds	\$34.3			
SB 17-265 & SB 19-208	State Employee Reserve Fund	\$26.3		\$23.0	
HB 18-1338	Reduced Revenue Severance Tax Transfers	\$20.2	\$20.78		
SB 19-158	Pet Animal Care and Facility Fund			\$0.01	\$0.01
SB 19-261	Unclaimed Property Trust Fund		\$30.0		
Total Transfers to the General Fund		\$98.6	\$67.2	\$40.3	\$18.4
Transfers from the General Fund		FY 2017-18	FY 2018-19	FY 2019-20	FY 2020-21
SB 11-047	Bioscience Income Tax Transfer to OEDIT	\$4.4	\$4.8	\$5.0	\$5.1
HB 13-1193	Advanced Industries Export Acceleration Fund	\$0.3			
SB 14-215	Marijuana Tax Cash Fund	\$108.8	\$124.5	\$138.5	\$150.4
HB 14-1016 ¹	Procurement Technical Assistance Cash Fund	\$0.2	\$0.2	\$0.2	
SB 15-244 & SB 17-267	State Public School Fund	\$37.8	\$21.8	\$24.3	\$26.4
SB 15-245	Natural Hazard Mapping Fund	\$0.7			
HB 16-1161 ²	Veterans Grant Program Fund (<i>conditional</i>)	\$0.8			
HB 16-1288	Industry Infrastructure Fund	\$0.3	\$0.3		
HB 17-1282	Veterinary Loan Education Repayment Fund	\$0.1			
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			
HB 18-1171	School Finance Mid-Year Adjustment	\$30.7			
HB 18-1323	Pay For Success Contracts Pilot Program Funding		\$0.4	\$0.5	\$0.5
HB 18-1338	Reduced Revenue Severance Tax Transfers		\$29.5		
HB 18-1363	Recommendations Of Child Support Commission		\$0.04	\$0.04	\$0.04
HB 18-1357	Behavioral Health Care Ombudsperson Parity Reports		\$0.01		
HB 18-1423	Rural Fire Protection District Equipment Grants		\$0.3		
SB 18-016	Transitioning from Criminal & Juvenile Justice System		\$2.0	\$2.0	\$2.0
SB 18-132	1332 State Waiver Catastrophic Health Plans		\$0.01		
SB 18-280	Tobacco Litigation Settlement Cash Fund		\$20.0		
HB 19-1026	Parks and Wildlife			\$0.4	\$0.4
HB 19-1147	Traumatic Brain Injury Program			\$0.5	
HB 19-1168	Reinsurance Cash Fund				\$8.6
HB 19-1174, HB 19-1216, HB 19-1233, HB 19-1269	Division of Insurance Cash Fund for Out-of-Network Health Care Services, Insulin Prices, Investments in Primary Care, Mental Health Parity, and Disclosure of Insurance Liability Coverage			\$0.3	\$0.2
HB 19-1245	Vendor Fee for Reinsurance, Affordable Housing			\$22.8	\$47.3
HB 18-1250 & SB 19-172	State Employee Reserve Fund			\$0.3	
Total Transfers from the General Fund		\$208.6	\$205.8	\$194.8	\$240.9
Net General Fund Impact		(\$109.9)	(\$138.7)	(\$154.5)	(\$222.5)

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

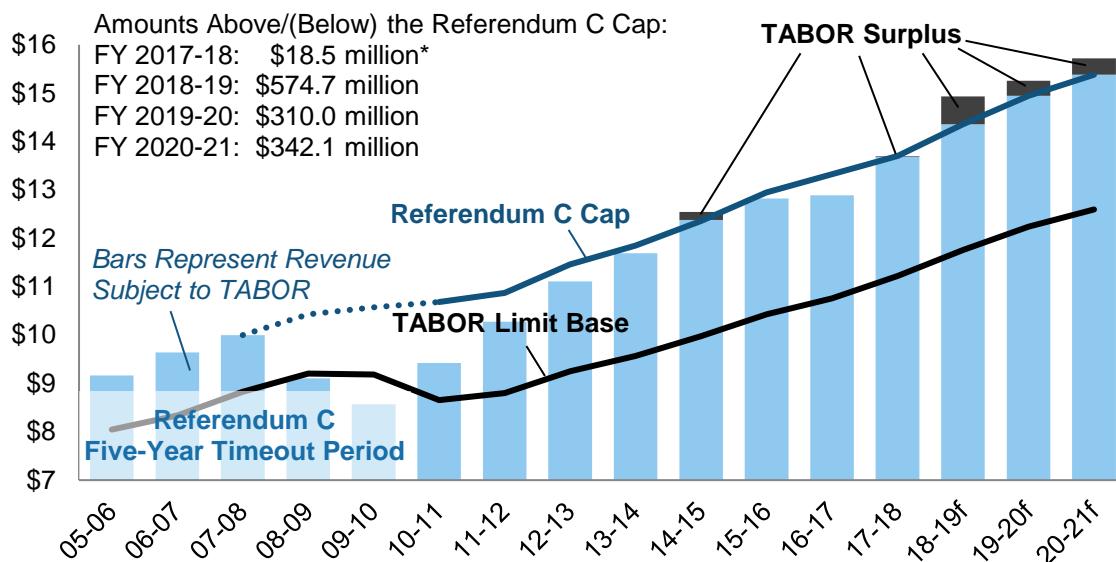
²HB 16-1161 requires transfers to the Older Coloradans Fund of any excess General Fund moneys set aside for reimbursements to local governments for the Senior Homestead and Disabled Veteran property tax exemptions.

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TABOR Outlook

This section presents the outlook for the state's TABOR situation through FY 2020-21. Forecasts for TABOR revenue are summarized in Table 10 on page 20 and illustrated in Figure 2, which also provides a 13-year history of the TABOR limit base and the Referendum C cap.

Figure 2
TABOR Revenue, TABOR Limit Base, and the Referendum C Cap
Dollars in Billions



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

*The refund amount for FY 2017-18 differs from the surplus amount because it includes underrefunds and other adjustments to previous TABOR surpluses.

FY 2017-18. State revenue subject to TABOR exceeded the Referendum C cap by \$18.5 million in FY 2017-18, triggering a TABOR refund of \$39.8 million in the current FY 2018-19. The refund amount differs from the surplus amount because it includes an outstanding \$21.3 million from the FY 2014-15 refund obligation. This amount was refunded to taxpayers via reimbursements paid to county governments for property tax exemptions allowed to seniors and disabled veterans.

FY 2018-19. State revenue subject to TABOR is expected to exceed the Referendum C cap by **\$574.7 million**, triggering an equivalent TABOR refund obligation in FY 2019-20. Expectations for the TABOR surplus amount have increased relative to the March forecast because of stronger-than-expected income tax collections during the regular filing season, motivating upward revisions to the General Fund revenue forecast, and a settlement from a corporate income tax audit that resulted in an unexpected boost to income at the end of the fiscal year. As discussed below, the FY 2018-19 surplus is expected to exceed the amount that can be refunded via FY 2019-20 reimbursements for property tax expenditures, triggering both a **temporary income tax rate reduction** and **sales tax refund** on 2019 tax forms filed in the first half of 2020.

FY 2019-20. State revenue subject to TABOR is expected to exceed the Referendum C cap by **\$310.0 million**, triggering an equivalent TABOR refund obligation in FY 2020-21. Expectations for state revenue subject to TABOR, especially for General Fund revenue, have increased relative to the March forecast. However, the surplus amount is projected to be smaller than that estimated for FY 2018-19 because state revenue subject to TABOR is expected to grow less quickly than the Referendum C cap. Like the estimated FY 2018-19 surplus, this surplus is expected to be refunded via both property tax exemption reimbursements and a six-tier sales tax refund to all full-year resident Colorado taxpayers.

FY 2020-21. State revenue subject to TABOR is expected to exceed the Referendum C cap by **\$342.1 million** in FY 2020-21, triggering an equivalent TABOR refund in FY 2021-22. Table 8 compares forecast expectations for revenue subject to TABOR between the March 2019 and this June 2019 forecast.

Table 8
Change in TABOR Estimates, March 2019 to June 2019
Dollars in Millions

FY 2018-19	June	March	Change
TABOR Revenue	\$14,934.8	\$14,424.9	\$509.9
General Fund ¹	\$12,483.8	\$11,977.8	\$506.0
Cash Funds ¹	\$2,451.0	\$2,447.1	\$3.9
Referendum C Cap	\$14,360.1	\$14,360.1	\$0.0
Revenue Above/(Below) Ref C Cap	\$574.7	\$64.8	\$509.9

FY 2019-20	June	March	Change
TABOR Revenue	\$15,258.8	\$14,879.4	\$379.5
General Fund ¹	\$12,815.6	\$12,424.9	\$390.7
Cash Funds ¹	\$2,443.2	\$2,454.4	(\$11.2)
Referendum C Cap	\$14,948.8	\$14,948.8	\$0.0
Revenue Above/(Below) Ref C Cap	\$310.0	(\$69.5)	\$379.5

FY 2020-21	June	March	Change
TABOR Revenue	\$15,724.4	\$15,244.0	\$480.4
General Fund ¹	\$13,197.3	\$12,755.5	\$441.9
Cash Funds ¹	\$2,527.1	\$2,488.6	\$38.5
Referendum C Cap	\$15,382.4	\$15,502.0	(\$119.6)
Revenue Above/(Below) Ref C Cap	\$342.1	(\$257.9)	\$600.0

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.

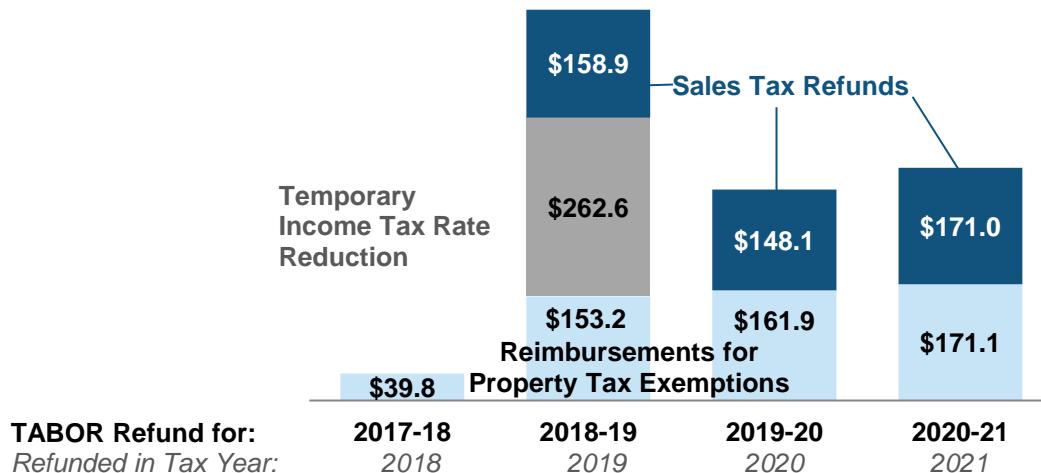
TABOR surplus. Article X, Section 20 of the Colorado Constitution (TABOR) limits *state fiscal year spending*, the amount of revenue the state may retain and either spend or save each year. The limit is equal to the previous year's limit or revenue, whichever is lower, adjusted for inflation, population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

For more information about the TABOR revenue limit, see the Legislative Council Staff memorandum at this link: http://leg.colorado.gov/sites/default/files/the_tabor_revenue_limit.pdf

TABOR refund mechanisms. Figure 3 shows the mechanisms that are expected to be used to issue TABOR refunds during the forecast period. The FY 2017-18 TABOR refund obligation was administered via the **property tax 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 cities, 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. Table 1, line 8, shows the General Fund encumbrance for TABOR refunds in the year when a surplus is collected. Table 1 shows the portion of the property tax exemption reimbursements to be paid from the prior year TABOR surplus as a subtraction from the new General Fund obligation that would otherwise exist for these reimbursements. The reduction in new obligations is also reflected on Table 1, line 9.

Figure 3
TABOR Refund Mechanisms
Dollars in Millions



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.

Because the FY 2018-19, FY 2019-20, and FY 2020-21 TABOR surpluses are expected to exceed the respective amounts of FY 2019-20, FY 2020-21, and FY 2021-22 property tax reimbursements, the amount by which the surplus exceeds the reimbursement in each year will be refunded on income tax forms. The average amounts expected to be refunded to full-year resident Colorado individual income taxpayers are shown in Table 9.

For FY 2018-19 only, the amount of the excess is expected to be sufficient to trigger the **temporary income tax rate reduction**. This mechanism temporarily reduces the state income tax rate from 4.63 percent to 4.50 percent for all individual and corporate income taxpayers. The reduction is expected to apply for tax year 2019, and the tax rate will revert to 4.63 percent beginning tax year 2020 unless the state again collects a sufficiently large TABOR surplus to trigger the reduction.

Any TABOR surplus amount that exceeds the amount that can be refunded via the property tax reimbursement mechanism and is not refunded via the temporary income tax rate reduction is refunded to full-year Colorado resident individual income taxpayers via the **sales tax refund mechanism**. When the amount required to be refunded using this mechanism exceeds \$15 per taxpayer, statute requires that revenue be distributed in six tiers according to a taxpayer's adjusted gross income. The projected tiers for tax years 2019, 2020, and 2021 are shown in Table 9.

Table 9
Forecast Average Taxpayer TABOR Refunds
Via Sales Tax Refund Mechanism and Temporary Income Tax Rate Reduction
Amounts shown reflect refunds for full-year Colorado resident taxpayers only

FY 2018-19 Refund Obligation, Tax Year 2019 Forecast

Adjusted Gross Income	Six-Tier Sales Tax	Income Tax Rate Cut (Average)	Single Filers	Six-Tier Sales Tax	Income Tax Rate Cut (Average)	Joint Filers
up to \$39,900	\$29	\$9	\$38	\$58	\$1	\$59
\$39,900 to \$85,300	38	51	89	76	28	104
\$85,300 to \$132,900	44	101	145	88	85	173
\$132,900 to \$180,600	51	155	206	102	144	246
\$180,600 to \$226,000	55	201	256	110	200	310
\$226,000 and up	87	557	644	174	577	751

FY 2019-20 Refund Obligation, Tax Year 2020 Forecast

Adjusted Gross Income	Six-Tier Sales Tax	Income Tax Rate Cut	Single Filers	Six-Tier Sales Tax	Income Tax Rate Cut	Joint Filers
up to \$41,000	\$26	\$0	\$26	\$52	\$0	\$52
\$41,000 to \$87,600	35	-	35	70	-	70
\$87,600 to \$136,500	40	-	40	80	-	80
\$136,500 to \$185,500	46	-	56	92	-	92
\$185,500 to \$232,100	50	-	50	100	-	100
\$232,100 and up	79	-	79	158	-	158

FY 2020-21 Refund Obligation, Tax Year 2021 Forecast

Adjusted Gross Income	Six-Tier Sales Tax	Income Tax Rate Cut	Single Filers	Six-Tier Sales Tax	Income Tax Rate Cut	Single Filers
up to \$41,700	\$30	\$0	\$30	\$60	\$0	\$60
\$41,700 to \$89,100	40	-	40	80	-	80
\$89,100 to \$138,900	46	-	46	92	-	92
\$138,900 to \$188,700	52	-	52	104	-	104
\$188,700 to \$236,200	57	-	57	114	-	114
\$236,200 and up	90	-	90	180	-	180

Table 10
TABOR Limit and Retained Revenue
Dollars in Millions

	Actual FY 2017-18	Estimate FY 2018-19	Estimate FY 2019-20	Estimate FY 2020-21
TABOR Revenue				
1 General Fund ¹	\$11,416.6	\$12,483.8	\$12,815.6	\$13,197.3
2 Cash Funds ¹	\$2,304.2	\$2,451.0	\$2,443.2	\$2,527.1
3 Total TABOR Revenue	\$13,720.9	\$14,934.8	\$15,258.8	\$15,724.4
Revenue Limit				
4 Allowable TABOR Growth Rate	4.5%	4.8%	4.1%	2.9%
5 Inflation (<i>from Prior Calendar Year</i>)	2.8%	3.4%	2.7%	1.5%
6 Population Growth (<i>from Prior Calendar Year</i>)	1.7%	1.4%	1.4%	1.4%
7 TABOR Limit Base	\$11,220.7	\$11,759.3	\$12,241.5	\$12,596.5
8 Voter Approved Revenue Change (Referendum C)	\$2,481.6	\$2,600.7	\$2,707.4	\$2,785.9
9 Total TABOR Limit / Referendum C Cap	\$13,702.4	\$14,360.1	\$14,948.8	\$15,382.4
10 TABOR Revenue Above (Below) Referendum C Cap	\$18.5	\$574.7	\$310.0	\$342.1
Retained/Refunded Revenue				
11 Revenue Retained under Referendum C ²	\$2,481.6	\$2,600.7	\$2,707.4	\$2,785.9
12 Fiscal Year Spending (<i>revenue available to be spent or saved</i>)	\$13,702.4	\$14,360.1	\$14,948.8	\$15,382.4
13 Outstanding Underrefund Amount ³	\$21.3			
14 Revenue Refunded to Taxpayers⁴	\$39.8	\$574.7	\$310.0	\$342.1
15 TABOR Reserve Requirement	\$411.1	\$430.8	\$448.5	\$461.5

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.

³This amount is restricted in the General Fund as part of the TABOR refund obligation for FY 2014-15. It will be refunded when the state next refunds the FY 2017-18 TABOR surplus. Under this forecast, the next surplus will be collected in FY 2018-19, and the next refund will be paid in FY 2019-20.

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, the state's main source of funding for operating appropriations. Table 12 on page 26 summarizes General Fund revenue projections for FY 2018-19 through FY 2020-21.

FY 2018-19. Net of the diversion to the State Education Fund required under Amendment 23, General Fund revenue is expected to total \$12.6 billion, an increase of 7.9 percent over FY 2017-18. While growth is broad-based across General Fund revenue streams, the most significant increase in dollar terms is in individual income tax collections, which are expected to end the year up \$0.7 billion or 9.2 percent. Income taxes surged on the combination of a strong economy, rising wage pressure, and increases in Colorado taxable income resulting from the federal Tax Cuts and Jobs Act (TCJA). Expectations for the current fiscal year were increased 3.8 percent relative to those published in March after income tax collections in March and April exceeded expectations considerably.

FY 2019-20. General Fund revenue collections are expected to increase at a slower rate, 3.0 percent, to total \$13.0 billion next year. Upside effects on revenue resulting from the TCJA are expected to be mostly accounted for in FY 2018-19 collections, resulting in a significant slowdown in the pace of growth in income tax revenue. Corporate income taxes are expected to decline following a change in the tax treatment of holding companies pursuant to the Colorado Supreme Court's decisions in *Oracle Corporation and subsidiaries v. Colorado Department of Revenue ("Oracle")* and *Agilent Technologies, Inc. v. Colorado Department of Revenue ("Agilent")*. Meanwhile, growth in sales tax revenue is expected to continue apace.

FY 2020-21. Revenue collections are expected to grow at a modest 3.1 percent from FY 2019-20 and total \$13.4 billion. The revenue forecast anticipates diminishing individual income and sales tax revenue growth, coupled with corporate income and use tax declines, as the pace of economic expansion slows further. Risks to the forecast on both the upside and the downside are more significant as the economic and policy outlooks both grow less certain.

Risks to the forecast. This forecast contains both upside and downside risk due to the late stage of the economic expansion and uncertainty surrounding continued shifts in taxpayer behavior in response to the TCJA, the *Oracle* and *Agilent* decisions, and ongoing reform of the collection of sales and use tax on remote transactions. The March forecast identified significant upside risk to the forecast in the near term, which bore out during tax filing season for the 2018 tax year. It is not possible to identify the degree to which revenue strength during the current fiscal year is attributable to changes in tax policy, which will have ongoing effects, or economic strength, which this forecast expects will taper in the coming years.

2019 legislation. Legislation enacted during the 2019 legislative session is expected to increase General Fund revenue, on net, by \$62.9 million in FY 2019-20 and \$99.9 million in FY 2020-21. This forecast reflects these impacts, which are presented in Table 11. The most significant legislative changes to the revenue forecast are attributable to **House Bill 19-1240**, which requires that marketplace facilitators begin collecting and remitting sales tax on behalf of their sellers, and **House Bill 19-1245**, which increases the sales tax vendor allowance ("vendor fee") from 3.33 percent to 4.00 percent but caps the vendor fee at \$1,000 per retailer per month.

Table 11
Changes to the General Fund Revenue Forecast Attributable to 2019 Legislation
Millions of Dollars

	FY 2019-20	FY 2020-21
Income Tax		
HB 19-1013 — Child Care Expenses Tax Credit	-	(\$1.70)
HB 19-1088 — Tax Credit for Health Care Preceptors	(\$0.04)	(\$0.07)
HB 19-1217 — PERA Local Gov't Contribution Rate	\$0.23	\$0.48
HB 19-1228 — Tax Credit Allocation Affordable Housing	-	(\$0.75)
SB 19-233 — Holding Company Income Tax	*	*
Sales and Use Tax		
HB 19-1162 — Farm Equipment Sales Tax Exemption	(\$0.06)	(\$0.08)
HB 19-1240 — Sales and Use Tax Administration	\$40.50	\$54.90
HB 19-1245 — Vendor Fee Changes	\$23.10	\$47.90
HB 19-1323 — Sales by Charitable Organizations	(\$0.03)	(\$0.04)
HB 19-1329 — Agricultural Fertilizer Tax Exemption	(\$0.79)	(0.79)
Other General Fund Income		
HB 19-1174 — Out-of-Network Health Care Services	\$0.02	\$0.02
HB 19-1268 — Assisted Living Referral Disclosures	\$0.02	\$0.02
SB 19-011 — Fermented Malt Beverage Licensing	(0.01)	(\$0.01)
Total	\$62.93	\$99.88

**Senate Bill 19-233 changed state law to allow the assessment of corporate income tax on holding companies to continue consistent with administration of the tax prior to the Colorado Supreme Court's decisions in Oracle and Agilent. The bill did not increase revenue expectations relative to the March forecast; however, expectations for corporate income tax revenue would have been reduced following the Supreme Court decisions had the bill not become law.*

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 within the forecast period. The forecast includes upward adjustments to revenue projections to account for the expiration of these tax expenditures.

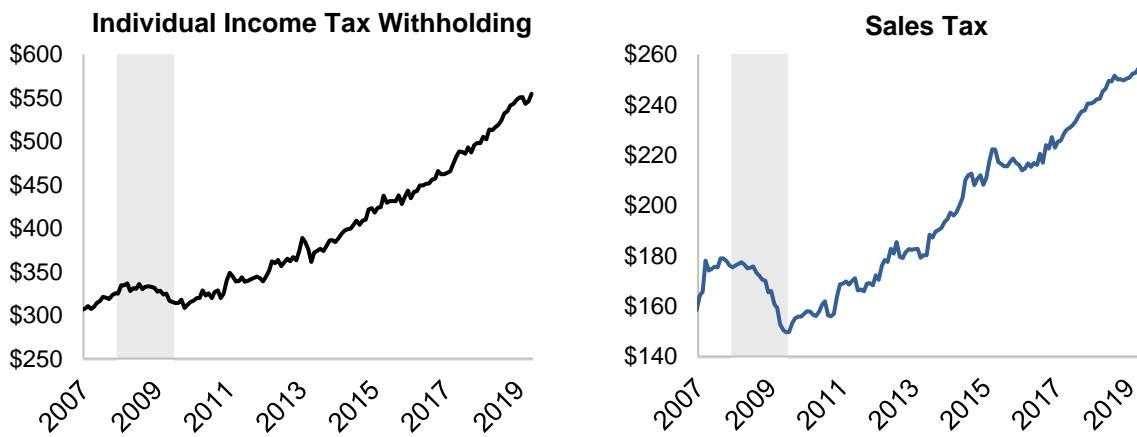
Individual income tax. The individual income tax is assessed at a rate of 4.63 percent and applies to Colorado taxable income earned by households, non-corporate businesses, estates, trusts, and other fiduciaries. Most revenue from the tax is credited to the General Fund, though an amount of revenue representing one-third of 1 percent of taxable income is diverted to the State Education Fund (SEF) and used for school finance purposes. This portion is exempt from the TABOR limit as a voter-approved revenue change under Amendment 23. Payers of the individual income tax are the most significant contributors to the General Fund. The tax accounted for just less than 60 percent of FY 2017-18 General Fund revenue, net of the SEF diversion.

Individual income tax revenue has increased significantly since early 2018 following the enactment of the TCJA. In broad terms, the TCJA reduced or eliminated many federal income tax deductions and credits and cut federal income tax rates. While the rate cuts reduced most taxpayers' federal income tax liability, many taxpayers saw their federal taxable income increase, thereby increasing their Colorado income tax liability because the state income tax base is based on the federal tax base. Combined with general strength in economic conditions, the change in tax policy has driven Colorado income tax collections upward considerably.

Collections during the spring tax season beat March expectations. The state was required to refund \$761.2 million to taxpayers who overpaid taxes via wage withholding or estimated tax payments during tax year 2018, an increase of just \$8.6 million, or 1.1 percent, from the prior tax filing season. By contrast, taxpayers who underpaid during the tax year and were required to remit cash payments paid \$703.0 million over the three month filing season, an increase of \$157.6 million, or 28.9 percent, from the prior filing season.

Taxpayers may respond to higher-than-expected April tax bills by increasing the amount of taxes withheld from their wages and salaries, making higher quarterly estimated tax payments, or simply staying the course and footing future April bills as they arise. The trajectory of wage withholding is presented in the left panel of Figure 4 and shows robust, steady growth. Estimated tax payments surged in April 2019, when they increased \$266.9 million, or 62.9 percent, from estimated payments made in April 2018. Contacts in other states confirm that this trend, suggesting that it may reflect nationwide equity market conditions and investor behavior in the early months of 2019. This forecast assumes that the large influx in payments was a one-time phenomenon attributable to economic conditions. However, future estimated payments may be higher than forecast if the increase reflects ongoing elevated economic activity or ongoing base-broadening from the TCJA, or may be lower than forecast if the increase in April borrows against payments to be made later in the 2019 tax year.

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



Source: Office of the State Controller and Department of Revenue. Data are seasonally adjusted by Legislative Council Staff using the Census x12 method. Data are shown on a cash-accounting basis as three-month moving averages. Data are through May 2019. May 2019 data are preliminary.

Forecast. Individual income tax revenue is expected to total \$8.3 billion in FY 2018-19, an increase of 9.2 percent from FY 2017-18 on an accrual accounting basis. Taxpayers making estimated payments will remit a quarterly payment in June, adding a small degree of uncertainty in the forecast for the current fiscal year.

Growth in individual income tax revenue is expected to slow considerably during the forecast period. Revenue is expected to increase 4.2 percent to total \$8.6 billion in FY 2019-20, before increasing a further 3.1 percent to total \$8.9 billion in FY 2020-21. Wage withholding will drive individual income tax collections through the forecast period, albeit at a decelerating pace as employment growth slows.

The other components of individual income tax revenue are expected to pose drags based on a muted outlook for investment earnings and the assumption that growth effects attributable to the TCJA were mostly realized in FY 2017-18 and FY 2018-19. While this forecast includes reduced assumptions for individual income tax growth in the next two fiscal years, the forecast has been revised upward in dollar terms by \$314.0 million in FY 2019-20 and \$301.8 million in FY 2020-21 because of greater-than-expected revenue collections to date from the 2019 income tax filing season.

As the economic outlook grows less clear, and as taxpayers continue to adjust their financial strategies in response to economic conditions and tax reform, risks to the individual income tax forecast remain elevated on both the upside and downside.

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 4.7 percent to total \$3.1 billion during the current FY 2018-19 before growing by 5.2 percent in FY 2019-20 and 5.4 percent in FY 2020-21. Sales tax collections have grown slower than expected this fiscal year (Figure 4, right), decelerating from a 7.3 percent increase in FY 2017-18. Despite the tight labor market and rising wages, growth in consumer spending has sputtered, as the stimulative effects of the TCJA have worn off and uncertainty surrounding future economic conditions has rattled consumer confidence for some. Increased growth is expected over the next two fiscal years, as more out-of-state retailers collect and remit sales taxes into Colorado at higher rates based on recently implemented administrative rules and law.

E-commerce sales tax. In June 2018, the U.S. Supreme Court issued a decision in *South Dakota v. Wayfair* that changes how out-of-state (including online) retail sales are taxed. This case challenged a 1992 precedent related to out-of-state retailer nexus, which established that a retailer must have physical presence in a state in order to be required to collect and remit sales tax in that state. This physical presence requirement was overturned in the *Wayfair* decision, citing features of South Dakota's sales tax system as not overly burdensome to out-of-state retailers with a significant economic nexus in the state.

On September 11, 2018, the Colorado Department of Revenue (DOR) announced that it would start to require out-of-state retailers to collect and remit sales tax on online purchases beginning on December 1, 2018. The deadline was subsequently extended to May 31, 2019. **House Bill 19-1240**, signed into law in May, requires that marketplace facilitators begin collecting and remitting sales tax on behalf of their sellers beginning on October 1, 2019. Based on these statutory and administrative changes, the DOR will collect sales tax from out-of-state retailers with a significant economic nexus in Colorado for the state government, as well as for counties, special districts, and statutory cities for whom it already administers sales tax. Home rule municipalities may choose to opt-in to these state-administered collections. These changes pose both upside and downside risks to the sales tax forecast based on the timing and extent of their implementation.

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 FY 2017-18, growing 19.4 percent on the strength of a recovering energy industry. Revenue is expected to continue to grow by a robust 9.8 percent during FY 2018-19 before declining by 7.5 percent in FY 2019-20 and by 2.9 percent in FY 2020-21. Oil industry

capital expenditures have slowed, as prices remain below break-even points for some producers, domestic production is strong, and global demand is soft. Additionally, rules promulgated by the DOR requiring that out-of-state sellers collect sales tax will gradually convert retail use tax collections, around 7 percent of total use tax collections in 2018, to sales tax.

Corporate income tax collections remain elevated. Corporate income tax revenue will remain at historical highs through the forecast period. Corporate income taxes set a record in FY 2017-18 with \$0.8 billion in revenue; this amount will be exceeded in the next three years. Receipts will grow 22.8 percent to \$1.0 billion in FY 2018-19 before declining moderately to \$0.9 billion in FY 2019-20 and \$0.8 billion in FY 2020-21.

Monthly corporate income tax collections remain strong on high corporate profits and the stimulative effects of federal tax changes. In addition, recent Colorado Supreme Court decisions will contribute to a one-time accounting adjustment adding \$78.1 million, on net, to FY 2018-19 revenue. Resolution of legal cases required the DOR to issue corporate tax refunds totaling \$87.2 million and allowed the state to settle an audit that generated \$162.9 million in collections at the end of the fiscal year. Moving into FY 2019-20, corporate income tax revenue will decline as this one-time tax processing activity does not repeat and corporate profits are squeezed by higher costs for business inputs and labor.

Expectations for corporate income tax revenue increased \$163.2 million FY 2018-19 compared with the March forecast due to strong monthly collections at the end of the fiscal year and one-time tax processing activity. Expectations for corporate income tax collections were also increased \$91.0 million in FY 2019-20 and \$67.7 million in FY 2020-21.

Tobacco Master Settlement Agreement. For FY 2017-18 only, Table 12 includes \$113.3 million in General Fund revenue attributable to the Tobacco Master Settlement Agreement (Tobacco MSA). Colorado receives annual TABOR-exempt Tobacco MSA payments that are generally credited to the Tobacco Litigation Settlement Cash Fund. In early 2018, the Attorney General signed a supplementary agreement under the Tobacco MSA to resolve a backlog of disputes between tobacco manufacturers and the state. The supplementary agreement resulted in a one-time release of previously disputed payments from a privately managed escrow account. Under a preexisting state law, the released payments were credited to the General Fund and not to the Tobacco Litigation Settlement Cash Fund. These funds are exempt from TABOR. No such payments are anticipated to contribute to General Fund revenue in the future.

Table 12
General Fund Revenue Estimates
Dollars in Millions

Category	Actual FY 2017-18	Percent Change	Estimate FY 2018-19	Percent Change	Estimate FY 2019-20	Percent Change	Estimate FY 2020-21	Percent Change
Excise Taxes								
1 Sales	\$2,926.0	7.3	\$3,063.1	4.7	\$3,223.8	5.2	\$3,397.6	5.4
2 Use	\$309.9	19.4	\$340.2	9.8	\$314.9	-7.5	\$305.8	-2.9
3 Retail Marijuana Sales	\$168.2	71.1	\$192.6	14.5	\$214.2	11.2	\$232.6	8.5
4 Cigarette	\$34.6	-5.5	\$33.5	-3.1	\$32.6	-2.7	\$31.8	-2.6
5 Tobacco Products	\$16.4	-22.7	\$22.3	36.2	\$23.4	4.7	\$24.3	3.8
6 Liquor	\$46.5	3.3	\$48.4	4.1	\$50.4	4.2	\$52.4	3.9
7 Total Excise	\$3,501.6	9.8	\$3,700.2	5.7	\$3,859.3	4.3	\$4,044.3	4.8
Income Taxes								
8 Net Individual Income	\$7,577.2	12.1	\$8,271.5	9.2	\$8,617.1	4.2	\$8,882.6	3.1
9 Net Corporate Income	\$781.9	53.5	\$960.6	22.8	\$857.1	-10.8	\$807.7	-5.8
10 Total Income Taxes	\$8,359.1	15.0	\$9,232.0	10.4	\$9,474.2	2.6	\$9,690.3	2.3
11 Less: Portion Diverted to the SEF	-\$617.0	14.3	-\$692.8	12.3	-\$710.6	2.6	-\$726.2	2.2
12 Income Taxes to the General Fund	\$7,742.1	15.0	\$8,539.2	10.3	\$8,763.6	2.6	\$8,964.1	2.3
Other Sources								
13 Estate	\$0.0	NA	\$0.0	NA	\$0.0	NA	\$0.0	NA
14 Insurance	\$303.6	4.5	\$323.4	6.5	\$335.5	3.7	\$347.5	3.6
15 Pari-Mutuel	\$0.5	-10.7	\$0.5	-3.9	\$0.5	-2.4	\$0.5	1.2
16 Investment Income	\$19.5	32.4	\$24.9	27.5	\$27.6	10.8	\$29.0	5.3
17 Court Receipts	\$4.4	7.6	\$4.2	-4.2	\$4.1	-2.4	\$4.1	0.0
18 Tobacco Master Settlement Agreement ¹	\$113.3	NA	\$0.0	NA	\$0.0	NA	\$0.0	NA
19 Other Income	\$38.9	-17.8	\$54.0	38.8	\$39.3	-27.2	\$40.3	2.5
20 Total Other	\$480.2	34.4	\$407.0	-15.3	\$407.0	0.0	\$421.5	3.6
21 Gross General Fund Revenue	\$11,723.9	14.1	\$12,646.4	7.9	\$13,029.9	3.0	\$13,429.9	3.1

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

¹The state received \$113.3 million in April 2018 as part of a supplementary legal agreement signed within the framework of the Tobacco Master Settlement Agreement. This amount represents a release of previously disputed payments and, per statute, is credited to the General Fund. No such revenue is expected in the future. This money is exempt from TABOR as a damage award.

Cash Fund Revenue

Table 13 summarizes the forecast for cash fund revenue subject to TABOR. The largest revenue sources are motor fuel taxes and other transportation-related revenue, 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 \$2.30 billion in FY 2017-18, a decline of \$471.3 million or 17.0 percent from the prior fiscal year. The drop in revenue is attributable to the elimination of the Hospital Provider Fee and the 2.9 percent sales tax on retail marijuana. Under **Senate Bill 17-267**, the Hospital Provider Fee was repealed after FY 2016-17, and hospitals now remit a Healthcare Affordability and Sustainability Fee, which is not subject to TABOR limitations and therefore is not shown in Table 13. In addition, the bill also exempted retail marijuana from the 2.9 percent state sales tax beginning in FY 2017-18. 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 6.4 percent to \$2.45 billion in FY 2018-19. In FY 2019-20, total cash fund revenue is expected to fall slightly as a projected decline in severance tax revenue offsets gains in most other major revenue sources. By 2020-21, total cash fund revenue is expected to increase by 3.4 percent to total \$2.53 billion.

Transportation-related revenue subject to TABOR totaled \$1,275.4 million in FY 2017-18. As the state's population and economy continue to expand, transportation funding will increase 1.9 percent in FY 2018-19 and grow an additional 1.8 percent in FY 2019-20. The forecast for TABOR revenue to transportation-related cash funds is shown in Table 14.

The largest source of revenue into the **Highway Users Tax Fund** (HUTF) is the motor fuel excise tax (22¢ per gallon of gasoline and 20.5¢ per gallon of diesel fuel). After increasing 4.2 percent on strong economic activity, growth in fuel excise tax collections is expected to moderate to 1.2 percent in FY 2018-19 and 1.1 percent in FY 2019-20 on slower economic growth in the state. The HUTF also receives revenue from other sources, including registration fees. In FY 2017-18, total registration fees increased 6.7 percent and are expected to grow at a slower pace of 4.1 percent in FY 2018-19 and 2.6 percent in FY 2019-20. Total HUTF revenue is expected to increase 2.3 percent to \$1,133.1 million in FY 2018-19 and 1.6 percent to \$1,151.3 million in FY 2019-20.

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 allocations, local government matching grants, and interest earnings. Revenue allocated from the HUTF is subject to TABOR when it is originally collected in the HUTF, but it is not counted against the TABOR limit a second time when allocated to the SHF. The two largest sources of revenue directly collected into the fund are local government grants and interest earnings. Local government revenue into the SHF fluctuates based on local budgeting decisions and large annual fluctuations are common. Based on collections year-to-date, SHF revenue subject to TABOR is expected to decline 6.1 percent to \$38.1 million in FY 2018-19, and decline by 1.7 percent in FY 2019-20.

Other transportation cash fund revenue subject to TABOR is expected to total \$128.8 million in FY 2018-19, up 1.1 percent from the previous year, and continue to increase through the forecast period. Other transportation revenue is from sales tax on aviation and jet fuel, certain registration fees, and driving fines.

Revenue to the **Statewide Bridge Enterprise** is not subject to TABOR and is shown as an addendum to Table 14. Revenue to this enterprise is expected to grow 4.1 percent to \$112.5 million in FY 2018-19, and 2.6 percent to \$115.5 million in FY 2019-20. Revenue from the bridge safety surcharge fee typically grows at the same rate as vehicle registrations.

Table 13
Cash Fund Revenue Subject to TABOR
Dollars in Millions

	Actual FY 2017-18	Estimate FY 2018-19	Estimate FY 2019-20	Estimate FY 2020-21	CAAGR*
Transportation-Related Percent Change	\$1,275.4 4.5%	\$1,300.0 1.9%	1,323.4 1.8%	\$1,341.6 1.4%	1.7%
Severance Tax Percent Change	\$143.0 634.3%	\$210.8 47.4%	\$115.1 -45.4%	\$100.7 -12.5%	-11.0%
Gaming Revenue ¹ Percent Change	\$106.8 3.1%	\$105.6 -1.2%	\$107.3 1.6%	\$109.7 2.2%	1.2%
Insurance-Related Percent Change	\$17.8 72.5%	\$18.8 5.5%	\$24.9 32.4%	\$23.9 -4.0%	-1.1%
Regulatory Agencies Percent Change	\$80.5 6.5%	\$78.8 -2.1%	\$80.1 1.7%	\$81.3 1.4%	0.3%
Capital Construction-Related Interest ² Percent Change	\$4.7 1.4%	\$6.8 46.3%	\$6.9 1.2%	\$6.2 -11.00%	9.6%
2.9% Sales Tax on Marijuana ³ Percent Change	\$16.1 -60.6%	\$11.1 -31.2%	\$11.2 1.0%	\$11.2 -0.2%	-11.5%
Other Cash Funds Percent Change	\$660.0 2.1%	\$719.1 9.0%	\$774.2 7.7%	\$852.6 10.1%	7.0%
Total Cash Fund Revenue Subject to the TABOR Limit	2,304.3 -17.0%	\$2,451.0 6.4%	\$2,443.2 -0.3%	\$2,527.1 3.4%	3.1%

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

*CAAGR: Compound average annual growth rate for FY 2017-18 to FY 2020-21.

¹Gaming revenue in this table does not include Amendment 50 revenue, because it is not subject to TABOR.

²Includes interest earnings to the Capital Construction Fund, the Controlled Maintenance Trust Fund, and transfers from certain enterprises.

³Includes revenue from the 2.9 percent sales tax collected from the sale of medical and retail marijuana. This revenue is subject to TABOR.

Table 14
Transportation Revenue by Source
Dollars in Millions

	Actual FY 2017-18	Estimate FY 2018-19	Estimate FY 2019-20	Estimate FY 2020-21	CAAGR*
Highway Users Tax Fund (HUTF)					
Motor and Special Fuel Taxes	\$655.8	\$663.7	\$671.0	\$675.0	1.0%
Percent Change	4.2%	1.2%	1.1%	0.6%	
Total Registrations	\$380.7	\$396.4	\$406.7	\$412.0	2.7%
Percent Change	6.7%	4.1%	2.6%	1.3%	
Registrations	\$227.1	\$236.4	\$242.5	\$245.7	
Road Safety Surcharge	\$132.9	\$138.4	\$142.0	\$143.8	
Late Registration Fees	\$20.8	\$21.6	\$22.2	\$22.5	
Other HUTF Receipts ¹	\$69.9	\$73.0	\$73.7	\$73.3	1.6%
Percent Change	9.4%	3.1%	0.9%	-0.5%	
Total HUTF	\$1,107.3	\$1,133.1	\$1,151.3	\$1,160.3	1.6%
Percent Change	3.9%	2.3%	1.6%	0.8%	
State Highway Fund (SHF) ²	\$40.6	\$38.1	\$35.7	\$40.9	-1.9%
Percent Change	5.9%	-6.1%	-1.7%	14.6%	
Other Transportation Funds	\$127.4	\$128.8	\$136.4	\$140.4	4.2%
Percent Change	10.9%	1.1%	5.9%	3.0%	
Aviation Fund ³	\$29.2	\$33.8	\$39.0	\$42.3	
Law Enforcement-Related ⁴	\$8.8	\$8.5	\$8.6	\$8.7	
Registration-Related ⁵	\$90.9	\$86.6	\$88.8	\$89.4	
Total Transportation Funds	\$1,275.4	\$1,300.0	\$1,323.4	\$1,341.6	2.0%
Percent Change	4.5%	1.9%	1.8%	1.4%	

Totals may not sum due to rounding.

*CAAGR: Compound average annual growth rate for FY 2017-18 to FY 2020-21.

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 POST Board registration fees.

Addendum: TABOR-Exempt FASTER Revenue

	Actual FY 2017-18	Estimate FY 2018-19	Estimate FY 2019-20	Estimate FY 2020-21	CAAGR*
Bridge Safety Surcharge	\$108.1	\$112.5	\$115.5	\$117.0	1.8%
Percent Change	1.7%	4.1%	2.6%	1.3%	

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.

Severance tax revenue, including interest earnings, is expected to total \$210.8 million in FY 2018-19 and \$115.1 million in FY 2019-20. Severance tax revenue is more volatile than other revenue sources because revenue is mostly derived from newly producing wells whose output can change significantly because of economic and noneconomic factors. The forecast for the major components of severance tax revenue is shown in Table 15.

Severance tax collections from **oil and natural gas** are forecast to increase 55.7 percent in FY 2018-19 to \$196.5 million before declining 49.2 percent to \$99.8 million in FY 2019-20. Expectations for oil and gas severance taxes are lower than in March as production data suggest weakening following the fall in oil prices in the fourth quarter of 2018. After averaging about \$60 per barrel in 2018, prices will average slightly above \$50 per barrel in 2019 before increasing to about \$54 per barrel in 2020 and 2021. Lower prices will reduce collections for the next 12 months and are expected to dampen new oil and gas development impacting revenues in FY 2019-20 and FY 2020-21.

Table 15
Severance Tax Revenue Forecast by Source
Dollars in Millions

	Actual FY 2017-18	Estimate FY 2018-19	Estimate FY 2019-20	Estimate FY 2020-21	CAAGR*
Oil and Gas	\$126.2	\$196.5	\$99.8	\$85.6	-12.1%
Percent Change	3035.0%	55.7%	-49.2%	-14.2%	
Coal	\$3.7	\$4.3	\$4.0	\$3.9	0.9%
Percent Change	-10.0%	14.4%	-5.8%	-4.6%	
Molybdenum and Metallics	\$2.9	\$2.4	\$2.4	\$2.4	-5.5%
Percent Change	-2.2%	-16.3%	0.4%	0.4%	
Total Severance Tax Revenue	\$132.8	\$203.2	\$106.2	\$91.9	-11.6%
Percent Change	1094.5%	53.0%	-47.7%	-13.5%	
Interest Earnings	\$10.2	\$7.6	\$8.9	\$8.8	-4.8%
Percent Change	22.1%	-25.7%	17.4%	-1.1%	
Total Severance Tax Fund Revenue	\$143.0	\$210.8	\$115.1	\$100.7	-11.0%
Percent Change	634.3%	47.4%	-45.4%	-12.5%	

*CAAGR: Compound average annual growth rate for FY 2017-18 to FY 2020-21.

Natural gas producers in Colorado received an average price of \$2.68 per thousand cubic feet (Mcf) in 2018 and are expected to average \$2.57 per Mcf in 2019. Producers are able to meet increased demand for electric generation and home heating due to new technologies and existing infrastructure, which have contributed to an abundant supply of natural gas. Prices are expected to average \$2.74 per Mcf in 2020 and \$3.09 per Mcf in 2021 as demand increases further.

Led by higher than expected strength in 2018 fourth quarter payments, **coal severance tax** revenue will increase 14.4 percent to \$4.3 million in FY 2018-19. Power plants are slowly transitioning away from coal to cleaner and cheaper natural gas, which is reflected in the remainder of the forecast period. Coal severance taxes are expected to decline 5.8 percent in FY 2019-20 to \$4.0 million and 4.6 percent to \$3.9 million in FY 2020-21.

Metal and molybdenum mines are expected to pay \$2.4 million in severance taxes on the value of minerals produced in FY 2018-19. Mining activity at the two molybdenum mines in Colorado, the Climax Mine outside Leadville and the Henderson Mine outside Empire, is fairly constant when the

mines are in operation. Based on constant demand, metal and molybdenum severance taxes are expected to be \$2.4 million in each year of the forecast period.

Finally, interest earnings are expected to total \$7.6 million in FY 2018-19 and \$8.9 million in FY 2019-20. Expectations for interest earnings increase throughout the forecast period on the repayment of loans following the completion of water projects.

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 \$106.8 million in FY 2017-18 and is expected to decline 1.2 percent to \$105.6 million in FY 2018-19. Relatively flat tax revenue can be attributed to competition with larger markets like Las Vegas when economic conditions are strong. By statutory formula, gaming tax revenue subject to TABOR cannot grow faster than 3.0 percent annually. Compared with FY 2018-19, gaming revenue is expected to grow at a faster rate, 1.6 percent, during FY 2019-20, and 2.2 percent during FY 2020-21. Casino expansions and gaming town infrastructure projects are expected to be completed in both 2019 and 2020.

Under state law, annual growth in gaming tax revenue that exceeds 3.0 percent is attributed to Amendment 50 and 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 FY 2017-18, gaming tax revenue grew by almost 7 percent, resulting in an approximate \$5 million increase in Amendment 50 revenue revenue—spurring growth of over 30 percent from FY 2016-17. Amendment 50 revenue is expected to remain at this elevated level throughout the forecast period.

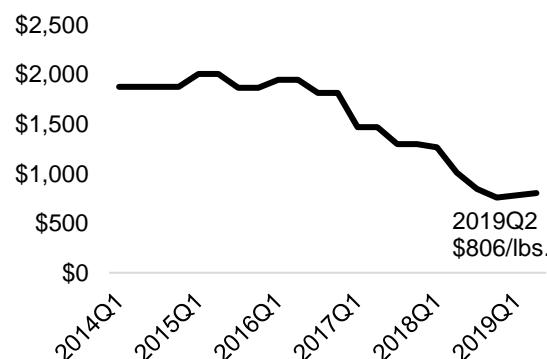
Marijuana tax revenue will total an estimated \$259.5 million in FY 2018-19, a 3.2 percent increase from the prior year and the slowest growth in revenue since sales of adult use marijuana was legalized in 2014. Marijuana tax revenues will continue to grow through the forecast period reaching \$281.5 million in FY 2019-20 and \$300.6 million in FY 2020-21. Slower growth in marijuana tax revenue is a sign of a maturing market five years post-legalization. The majority of the revenue from the marijuana industry is voter-approved revenue exempt from TABOR; however, the 2.9 percent state sales tax is included in the state's revenue limit. Tax revenue from marijuana sales is shown in Table 16.

The special sales tax is the largest marijuana revenue source. The tax equals 15 percent of the retail price of marijuana and is expected to reach \$192.6 million in FY 2018-19 and \$214.2 million in FY 2019-20. The state distributes 10 percent of the special sales tax to local governments and retains the rest to the Marijuana Tax Cash Fund, the General Fund, and the State Public School Fund. The excise tax is the second largest source of marijuana revenue and is dedicated to the BEST Fund for

school construction. The excise tax is expected to generate \$55.8 million in FY 2018-19 and \$56.1 million in FY 2019-20.

The excise tax is based on the calculated or actual wholesale price of marijuana when it is transferred from the cultivator to the retailer. The wholesale price has declined in recent years, as shown in Figure 5, as marijuana cultivation has become more efficient. Cultivators have invested in HVAC and lighting for more productive plants have improved the predictability of their harvest. The falling wholesale price has resulted in less excise tax revenue even with increasing consumption. The excise tax forecast assumes that the slide in wholesale prices has been arrested using evidence from the second quarter of 2019; however, unexpected changes in the wholesale price remain both an upside and downside risk to the forecast.

Figure 5
Calculated Average Marijuana Wholesale Rate



Source: Colorado Department of Revenue.

Table 16
Tax Revenue from the Marijuana Industry
Dollars in Millions

	Actual FY 2017-18	Forecast FY 2018-19	Forecast FY 2019-20	Forecast FY 2020-21	CAAGR*
Proposition AA Taxes					
Special Sales Tax	\$167.2	\$192.6	\$214.2	\$232.6	11.6%
State Share of Sales Tax	\$150.5	\$173.3	\$192.8	\$209.3	
Local Share of Sales Tax	\$16.7	\$19.3	\$21.4	\$23.3	
15% Excise Tax	\$68.2	\$55.8	\$56.1	\$56.9	-5.8%
Total Proposition AA Taxes	\$235.3	\$248.4	\$270.3	\$289.5	7.1%
2.9 Sales Tax (Subject to TABOR)					
2.9% Sales Tax on Medical Marijuana	\$10.6	\$9.4	\$9.4	\$9.4	-4.0%
2.9% Sales Tax on Retail Marijuana	\$5.2	\$1.3	\$1.4	\$1.4	
TABOR Interest	\$0.3	\$0.4	\$0.4	\$0.4	
Total 2.9% Sales Tax	\$16.1	\$11.1	\$11.2	\$11.2	-11.5%
Total Taxes on Marijuana	\$251.4	\$259.5	\$281.5	\$300.6	6.1%

*CAAGR: Compound average annual growth rate for FY 2017-18 to FY 2020-21.

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 remain flat through the forecast period, generating \$9.4 million per year through FY 2020-21. Retail marijuana dispensaries remit the state sales tax on marijuana accessories and are expected to remit between \$1.3 million and \$1.4 million in sales taxes in the next three fiscal years. Revenue from the 2.9 percent sales tax is deposited in the Marijuana Tax Cash Fund and is subject to TABOR.

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 forecast to increase 24.1 percent to \$107.3 million in FY 2018-19 as the state fulfills its obligations for previous payments associated with canceled leases on the Roan Plateau. FML revenue will increase 4.4 percent to \$112.1 million in FY 2019-20 and increase 6.1 percent to \$118.9 million in FY 2020-21.

Forecasts for **Unemployment Insurance (UI) Trust Fund** revenue, benefit payments, and year-end balance are shown in Table 17. Revenue to the UI Trust Fund has not been subject to TABOR since FY 2009-10 and is therefore excluded from Table 13. Revenue to the Employment Support Fund, which receives a portion of the UI premium surcharge, is subject to TABOR and is included in the revenue estimates for other cash funds in Table 13.

Table 17
Unemployment Insurance Trust Fund
Revenues, Benefits Paid, and Fund Balance
Dollars in Millions

	Actual FY 2017-18	Estimate FY 2018-19	Estimate FY 2019-20	Estimate FY 2020-21	CAAGR*
Beginning Balance	\$739.4	\$922.3	\$1,103.8	\$1,327.5	
Plus Income Received					
UI Premium	\$562.8	\$522.5	\$552.1	\$570.0	0.42%
Interest	\$18.3	\$22.9	\$24.4	\$26.5	
Total Revenues	\$581.1	\$545.3	\$576.6	\$596.4	0.87%
Percent Change	-6.8%	-6.2%	5.7%	3.4%	
Less Benefits Paid	\$398.2	\$363.8	\$352.9	\$327.1	-6.35%
Percent Change	-14.5%	-8.6%	-3.0%	-7.3%	
Ending Balance	\$922.3	\$1,103.8	\$1,327.5	\$1,596.9	20.08%
Solvency Ratio					
Fund Balance as a Percent of Total Annual Private Wages	0.77%	0.87%	0.98%	1.11%	

Totals may not sum due to rounding.

*CAAGR: Compound average annual growth rate for FY 2017-18 to FY 2020-21.

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Economic Outlook

The U.S. and Colorado economies have maintained healthy economic fundamentals at the top of the business cycle through the start of 2019. Yet, several leading economic indicators suggest that risks to the ongoing economic expansion are rising. The U.S. and Colorado economies are expected to continue to expand throughout 2019 on the positive momentum of robust growth from the past two years. However, economic growth is expected to slow as an increasingly tight labor market poses a drag on business growth and uncertain international trade policy continues to impact global supply chains.

Economic activity remains elevated in Colorado and the nation as a whole. Labor markets continue to improve, with ongoing employment gains, historically low unemployment rates, and rising wage pressures. Businesses and corporations continue to report elevated incomes and profits, and U.S. energy production continues at historically high levels. Inflationary pressures remain in check, signaling an ongoing balance between global supply and demand.

Yet, several leading indicators have softened in recent months. Manufacturing and business investment have slowed as firms adjust to shifting international trade policy, which has impacted supply chains for U.S. companies and demand for U.S. goods. Tariffs on foreign goods and supply chain disruptions are also raising input costs for some U.S. businesses. Consumer demand has been tepid since the end of 2018, with slower growth in new purchases for durable goods, including automobiles, raising doubts about the health of the largest driver of economic growth—the American consumer. Additionally, employment growth has slowed over the last several months, signaling tighter labor markets and a slowdown in hiring.

In response to these trends, investors have expressed their concerns about the near-term outlook for the U.S. economy by demanding higher interest rates for shorter-term loans and accepting lower interest payments on longer-term bonds. This has created an inverted yield curve, which has historically been a reliable predictor of an impending recession. Navigating a delicate balancing act to maintain economic growth, labor markets, and inflation, the Federal Reserve continues to pursue a wait-and-see approach to monetary policy with the possibility of interest rate decreases on the table. Tables 18 and 19 on pages 61 and 62 present histories and expectations for economic indicators for the U.S. and Colorado, respectively.

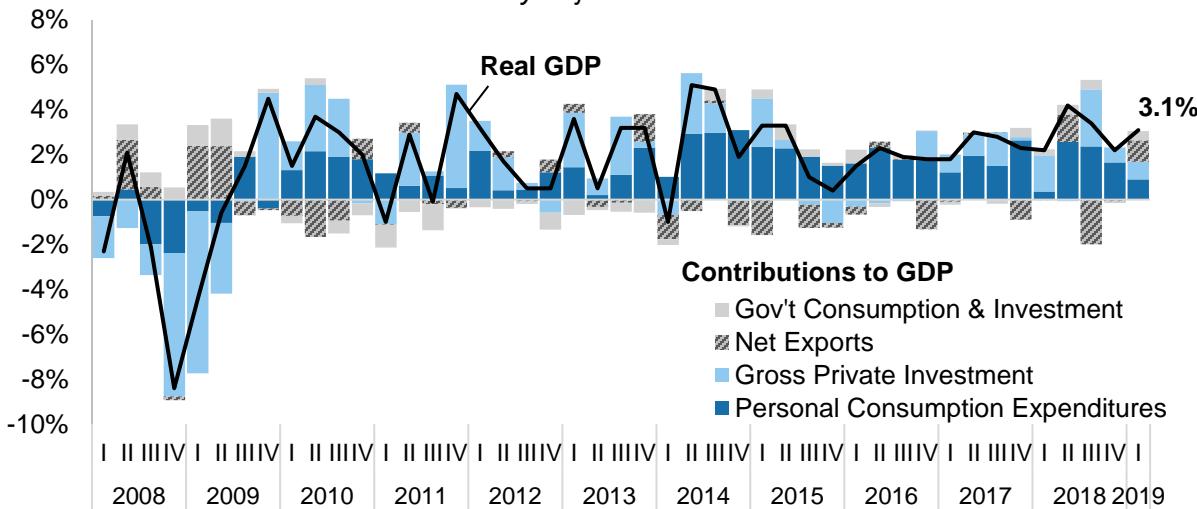
Gross Domestic Product

Real gross domestic product (GDP), an estimate of the inflation-adjusted value of final U.S. goods and services, grew by a healthy, annualized rate of 3.1 percent in the first quarter of 2019 (Figure 6). However, growth was primarily driven by transitory factors, including a buildup in business inventories, and an increase in net exports. While consumer spending and business investment grew in the first quarter, they did so at slower rates compared to recent quarters. Government expenditures also contributed to economic growth in the first quarter of 2019. Colorado's economy continues to be one of the strongest in the nation, growing by an impressive 3.5 percent in 2018. However, recent indicators point to slower growth at the start of 2019.

- Growth in the U.S. and Colorado economies will moderate in 2019 and 2020 as the stimulative impacts of the federal tax cuts fade and a tight labor market constrains growth. Real U.S. GDP is expected to grow 2.4 percent in 2019, before slowing to 1.8 percent in 2020.

U.S. consumer spending increased, but growth slowed at the start of 2019. Consumer spending, as measured by personal consumption expenditures, accounts for more than two-thirds of total economic output. Consumer spending grew at a 1.3 percent annual rate in the first quarter of the year, a slowdown from the 2.6 annual rate in 2018. Consumers pulled back their spending on big ticket items, including motor vehicles and household furnishings. As a result, consumption on durable goods dropped 4.6 percent in the first quarter, partially offsetting gains in spending on services.

Figure 6
Contributions to Real U.S. Gross Domestic Product
Seasonally Adjusted Annual Rates



Source: U.S. Bureau of Economic Analysis.

Note: "Real" GDP is inflation-adjusted. Contributions to percent change and percent change in GDP reflect annualized quarter-over-quarter growth rates.

Business investment remains elevated. Business investment also continued to support economic growth in the first quarter of the year, as gross private domestic investment grew by 4.3 percent, up from 3.7 percent in the previous quarter. This improvement was driven by companies stockpiling inventories and continuing to invest heavily in intellectual property products, such as software and research and development. At an annual rate, businesses invested \$950 billion on intellectual property products in the first quarter of 2019, an increase of \$16 billion from the previous quarter. Residential investment continued to hinder economic growth in the first quarter of 2019, declining by 3.5 percent from the prior quarter, the fifth consecutive quarterly decline.

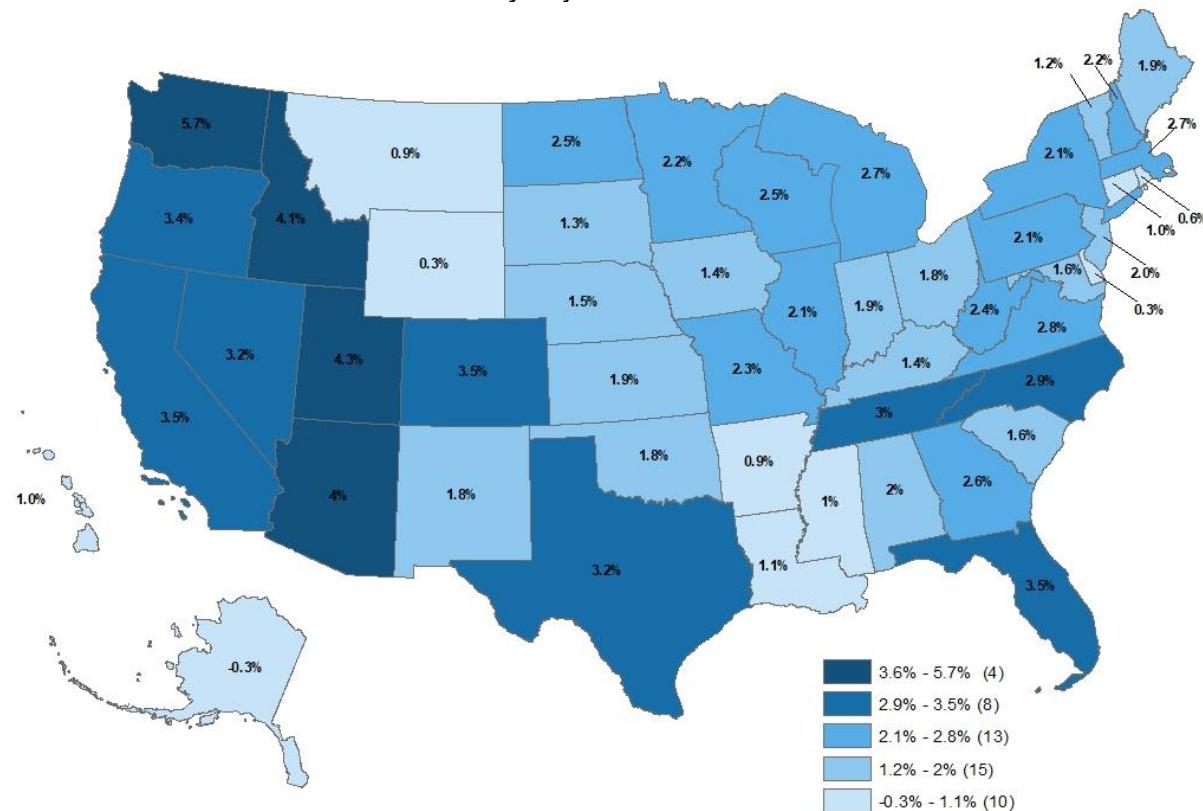
Trade uncertainties continue to distort international markets. U.S. exports of goods and services picked up significantly in the first quarter of the year, while imports, which are subtracted from GDP, were down from the previous quarter. On net, this resulted in a positive boost to GDP. The boost, however, may be transitory as it reflects the recent escalation in trade tensions between the U.S. and major trade partners, including China, Mexico, and Canada, which continue to disrupt global supply chains and global demand for U.S. goods.

Finally, government expenditures were up 2.5 percent from the previous quarter, after declining 0.4 percent in the last quarter of 2018. Growth in state and local government spending more than offset a slight decline in federal government spending in the first quarter of the year.

The U.S. economy is on track to post the longest economic expansion on record. In 2018, the U.S. economy grew at an annual rate of 2.9 percent, the ninth consecutive year of improvement. In July, the U.S. economy will mark ten years of expansion, the longest on record.

Colorado's economy continues to outperform the nation. The Colorado economy continues to be among the top states for economic activity. After growing by a solid 3.1 percent in 2017, the state managed to post a 3.5 percent gain in 2018, tied for the fifth fastest in the nation. As shown in Figure 7, only the economies of Washington State, Utah, Idaho, and Arizona grew at a faster rate in 2018. Contributions to growth continue to be broad-based across most industries, with information and professional, scientific, and technical services posting the largest contributions to the increase in Colorado's GDP in 2018. Colorado's information industry and workforce continue to attract new companies to the state and add new employees; over 4,100 technology companies are located in the Colorado.

Figure 7
Percent Change in Real GDP by State, 2017 over 2018
Seasonally Adjusted Annual Rates



Source: U.S. Bureau of Economic Analysis. Map prepared by Legislative Council Staff.

Households and Consumers

Rising wage pressures under a tight labor market continue to drive growth in income and expenditures among U.S. and Colorado households. While consumer activity remains elevated, demand for durable goods has softened, and consumers are signaling apprehensions about spending on big ticket items and household investments. Overall, household balance sheets remain solid, with savings rates at historical averages. Yet, while mortgage debt remains constrained on low interest rates, consumer debt continues to creep up and delinquency rates for auto, student, and credit card loans continue to rise.

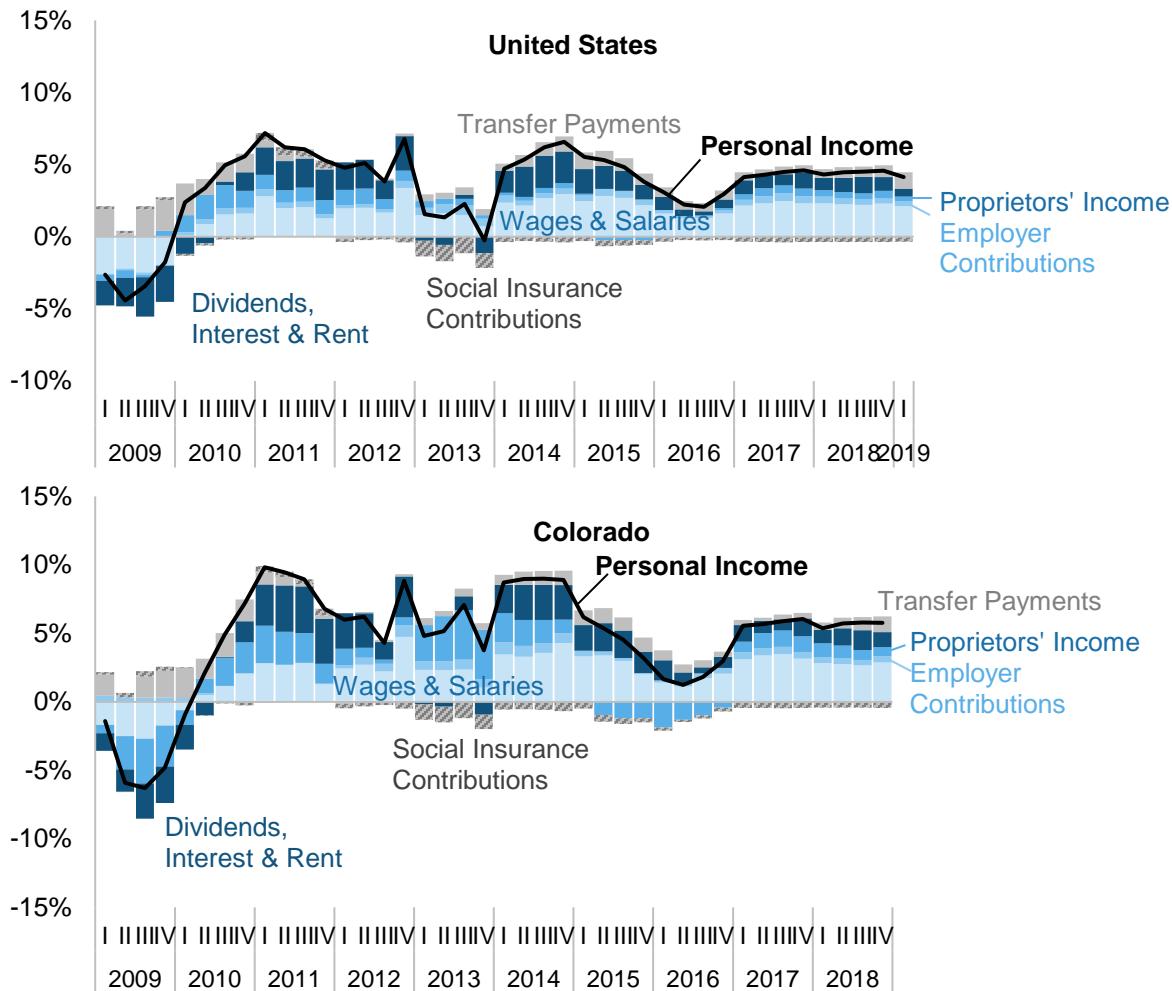
- Led by growth in wages, U.S. personal income is expected to expand 4.3 percent growth in both 2019 and 4.4 percent in 2020. Wage growth will be limited by subdued inflationary pressures.
- Personal income in Colorado is expected to outpace the nation and grow 5.8 percent in 2019 and 5.6 percent in 2020. A tight labor market through the forecast period will drive wages and salaries higher, while the retirement of experienced workers and automation will dampen some of the growth.
- Consumer activity is expected to slow in 2019 and 2020 with moderation in household income growth.

Households are reaping higher incomes from most sources. U.S. personal income ended 2018 up 4.5 percent, representing modest acceleration from the 4.4 percent growth rate posted in 2017. As shown in the top half of Figure 8, U.S. household income growth was broad-based and consistent throughout the year. Wages and salaries, the largest component of personal income, grew 4.5 percent, roughly in line with their increase the year prior. Nonfarm proprietors saw incomes rise 5.5 percent, and investment income from dividends, interest, and rent grew 4.9 percent, with most strength in the interest component after interest rates ticked up. Growth in U.S. personal income slowed in the first quarter of 2019 on more modest gains in dividends, interest, and rent.

Personal income in Colorado increased 5.7 percent in 2018, as shown in the bottom half of Figure 8. The largest components of state personal income all grew more quickly than their national counterparts, with wage and salary income up 5.3 percent, nonfarm business proprietors' income up 9.4 percent, and investment income from dividends, interest, and rent up 5.4 percent.

This forecast anticipates slight acceleration in personal income during 2019, followed by slower rates of growth over the following two years. The outlook for investment income has dimmed as the Federal Reserve has signaled that interest rates will not be hiked at the pace previously expected. Labor market tightening, combined with ongoing employment growth, is expected to maintain upward pressure on wages, the largest component of household income at both the state and national level. Consistent with historical trends, personal income growth in Colorado will remain above the national pace throughout the forecast period.

Figure 8
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.

Wage pressures reflect a tight labor market. Figure 9 presents real average hourly earnings for the state (through April) and nation (through May). Colorado workers earned \$29.36 per hour on average in 2018, relative to an inflation-adjusted \$28.70 in 2017. The 2.3 percent increase in real wages drastically outperformed the nationwide increase, 0.5 percent, and Colorado workers earned hourly pay of \$1.84 more, on average, than their national counterparts. Economists generally attribute strong wage growth during late cycle economic expansions to a tight labor market, when firms face more competition to secure increasingly scarce qualified employees. Preliminary data suggest that wage growth in Colorado is accelerating. Through four months of 2019, Colorado wage earners saw their average hourly earnings increase 4.2 percent on a real basis, or 6.0 percent on a nominal basis, relative to the first four months of 2018.

Average hourly earnings present a picture of worker income in the aggregate; however, this indicator does not reveal the distributional impacts of wages. Wage increases may be reflecting faster increases in compensation for higher-compensated employees instead of more broad-based gains across workers. The state minimum wage increased to \$11.10 in 2019 from \$10.20 in 2018 pursuant to Amendment 70. The minimum wage for tipped employees increased to \$8.08 from \$7.18. These rates of increase – 8.8 percent and 12.5 percent on a nominal basis, respectively – are expected to significantly outpace consumer price inflation over this time period.

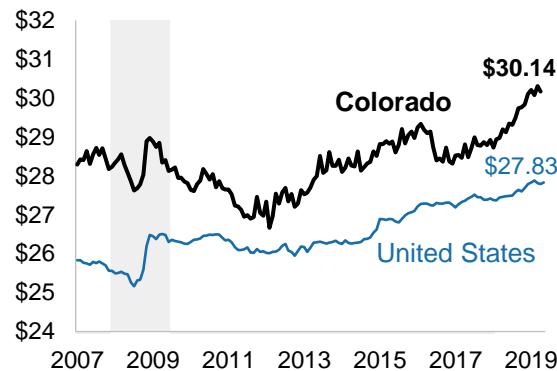
Consumer spending has slowed. After a rocky start to the year, consumer spending picked up in March and April, propped up by ongoing employment gains and rising wages. Personal consumption expenditures in the U.S. rose by 4.3 percent year-over-year in April, up from 3.9 percent in January. Exceeding inflation and population growth slightly, U.S. retail sales are up 3.0 percent year-to-date through April over the same period last year, largely due to strong growth in the single month of March. Spending on durable goods is down in the first quarter on soft demand for cars and lower spending on furniture and appliances as home sales slow. Consumer sentiment remains strong, although it declined in May after news of additional tariffs. With inflation still sluggish and the job market tight, consumer spending should remain relatively strong through the next quarter. However, consumers are signaling apprehension in making large purchases.

Labor Markets

Labor market indicators for both the U.S. and Colorado remain strong, despite signs of growing worker shortages. Employers continue to add employees to their payrolls at a healthy pace, keeping the unemployment rate at historical lows. Job growth remains broad-based and labor force participation has increased. However, hiring in 2019 has slowed and is expected to slow further.

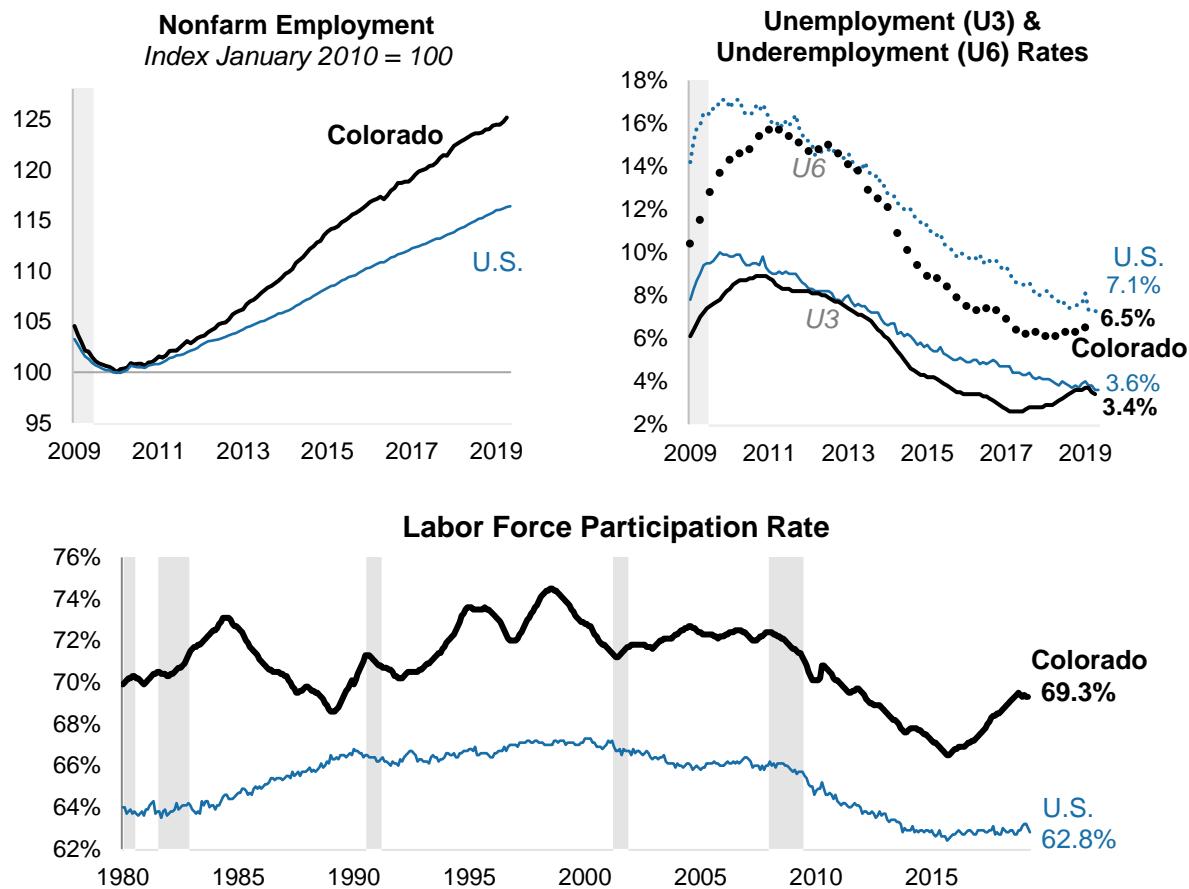
- U.S. nonfarm employment is expected to add jobs at a pace of 1.4 percent in 2017, before moderating to 1.1 percent in 2020 as labor markets grow tighter. The U.S. unemployment rate is expected to average 3.7 percent in 2019 and rise to 3.9 percent in 2020 as an increasing number of workers seek employment.
- In Colorado, nonfarm employment will grow 1.7 percent in 2019 before slowing to grow 1.4 percent in 2020. Rising labor force participation will sustain employment gains at slightly higher rates than the nation as a whole. The Colorado unemployment rate is expected to average 3.5 percent in 2019 and 3.7 percent in 2020.

Figure 9
Real Average Hourly Earnings
2019 Dollars



Sources: U.S. Bureau of Labor Statistics; adjusted for inflation using the consumer price index for all urban areas (CPI-U) to the dollar value of most recent month of data. Data are seasonally adjusted.

Figure 10
Selected U.S. and Colorado Labor Market Indicators



Source: U.S. Bureau of Labor Statistics. Data are seasonally adjusted and are through May 2019 for the U.S. and April 2019 for Colorado.

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

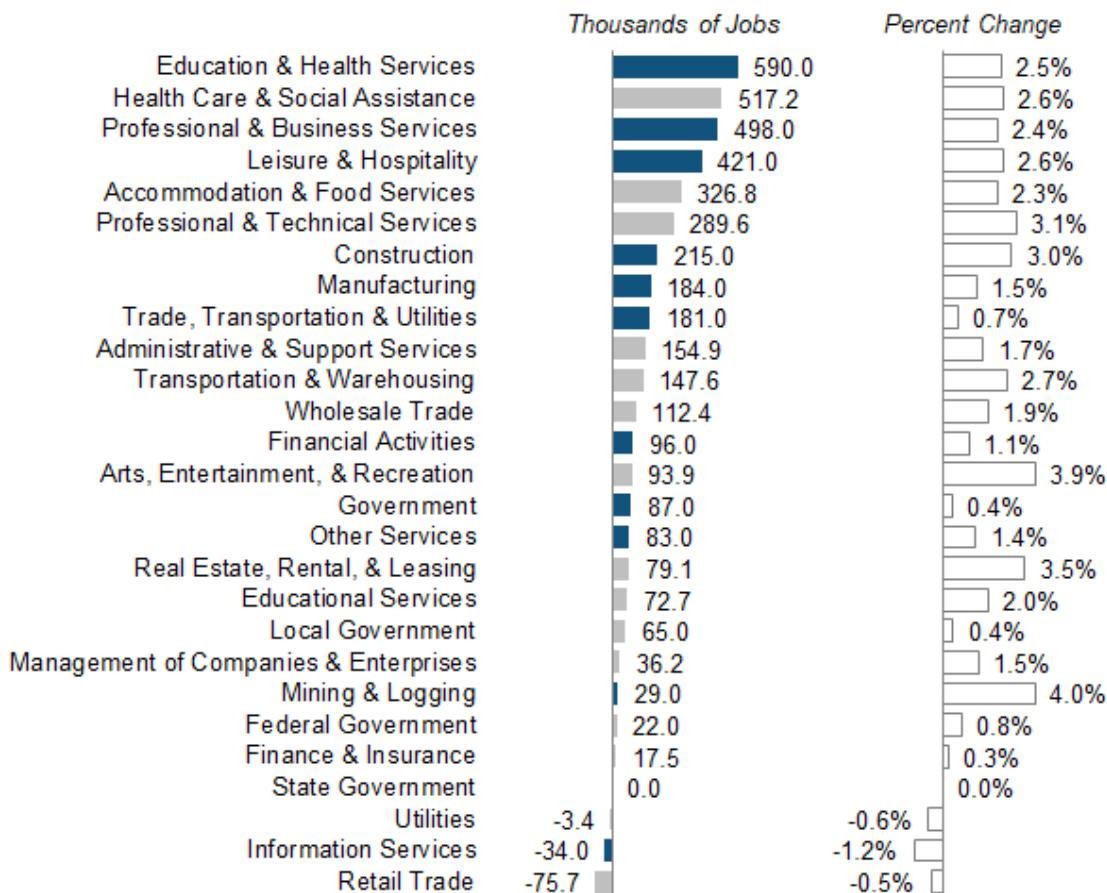
**Labor force participation is calculated as the percent of the civilian population, age 16 and older, who are working or seeking employment.

Strong labor markets are counteracting structural shifts. Colorado's labor force participation rate is climbing despite an accelerating number of annual retirements. As shown in Figure 10 (bottom), labor force participation fell during the first five years of the current expansion, a demographic idiosyncrasy that is inconsistent with the early years of all other recent expansions. Growing labor force participation since 2015 suggests that the tight labor market is now strong enough to counteract demographic and structural shifts toward automation, which have reduced demand for lower-skilled workers in many industries, including manufacturing and information services sectors. Positive trends in the labor force participation rate will sustain employment growth in the near term. While labor force participation has increased across most age groups, contributions have been strong for those ages 55 and older, suggesting that these workers are remaining in or reentering the workforce at higher rates than in the past.

U.S. labor market indicators remain positive, but job gains have slowed. In May, the economy marked the 104th straight month of positive job growth. During this period, the U.S. has added almost 21 million new workers to the labor force, and the unemployment rate has dropped from 9.4 percent

to a near historical low of 3.6 percent. Job growth has remained healthy despite reports of worker shortages and the nation nearing its longest period of economic expansion. Gains have been broad-based, with the largest sectors, professional and business services and education and health services, continuing to drive overall U.S. job growth (Figure 11). Since May 2018, these two supersectors have gained just over one million jobs, accounting for almost half (46.3 percent) of employment gains over the period. Construction and manufacturing industries continue to trend upward, adding 215,000 and 184,000 jobs, respectively, since May 2017. Employers in the information services and retail trade sectors continue to shed jobs from their payrolls.

Figure 11
U.S. Job Gains and Losses by Industry
Year-over-Year Change, May 2019 over May 2018



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

Though the U.S. labor market continues to expand, job growth has been losing momentum through the current year. In May, total job growth increased by 1.6 percent from the same month one year prior, representing a deceleration from 1.7 percent in April. In January, year-over-year job growth was 1.9 percent. Monthly job gains through the year have also been lower, averaging 164,000 new jobs each month compared to the 219,800 monthly average over the same period last year.

Persistently low unemployment rate continues to pull workers back into the labor force. The U.S. unemployment rate has been gradually falling since 2014, reaching near historical lows in May 2019. The low unemployment rate has made employers entice workers back into the labor force. The “underemployment” (U6) rate, a broader measure that captures discouraged workers and those who work part-time but desire full-time work, continued its year-long downward trend in May 2018, falling to 7.1 percent, down from 8.1 percent in January (Figure 10, top right).

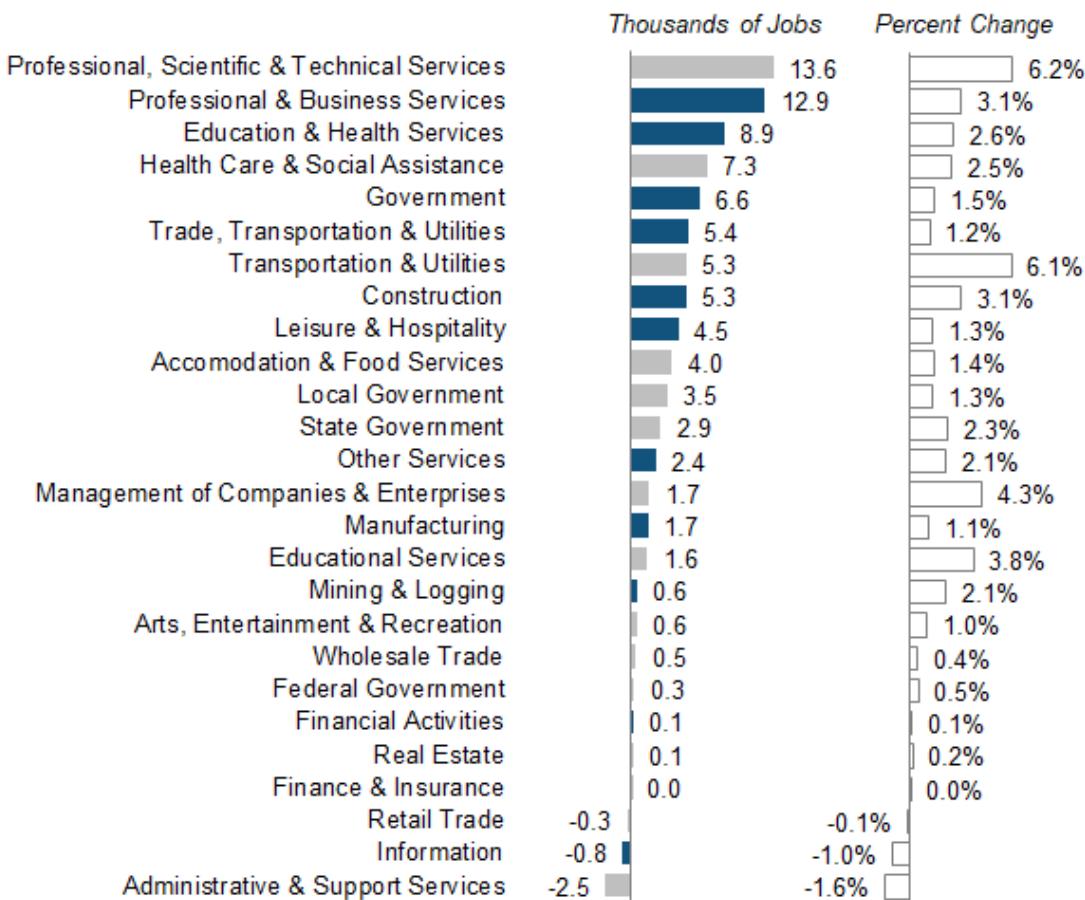
Colorado’s labor market remains strong. Despite concerns about a tightening labor market, Colorado employers continue to add jobs to their payrolls at a healthy pace. In April 2019, the state added almost 10,000 new jobs from the previous month, the largest one-month gain since December 2017. Year-over-year, total nonfarm employment was up 1.8 percent in April, representing an acceleration from February and March’s growth rates of 1.5 percent and 1.6 percent, respectfully. This estimate includes data revisions expected by Legislative Council Staff from the Bureau of Labor Statistics’ annual rebenchmarking process.

Job gains occurred across nearly all sectors in April 2019 from the same month last year (Figure 12). Professional and business services led gains, driven by growth in the professional, scientific and technical sectors. The professional and businesses services supersector is the largest of all private sector jobs, comprising almost 20 percent of statewide employment. Employment in the mining and logging supersector continues to trend upward, although volatility in oil markets may put a drag on hiring in the coming year. Finally, job growth in the retail, information, and administrative and support sectors services was slightly down from the same month last year, in part reflecting ongoing automation- and technology-driven consolidation in publishing and retail sectors.

Labor market tightening is constraining business growth. Colorado’s unemployment rate remains near historic lows, posting a 3.4 percent rate in April 2019. The state unemployment rate has been ticking up slightly since April 2018. While counter-intuitive, these trends reflect ongoing improvements in the state’s labor market. The uptick in the unemployment rate does not reflect layoffs; Colorado claims for unemployment insurance remain at historical lows. Instead, workers who “dropped out” of the workforce or retired are being attracted into the workforce by improvements in job prospects and wages.

While labor force participation has grown, an increasing number of employers are reporting difficulties finding the skilled labor needed to grow their businesses.

Figure 12
Colorado Job Gains and Losses by Industry
Year-over-Year Change, April 2019 over April 2018



Source: U.S. Bureau of Labor Statistics. Data are seasonally adjusted. Blue (dark) shading indicates a supersector, while grey (light) shading indicates a subsector. Nonfarm employment estimates include revisions expected by Legislative Council Staff during the Bureau of Labor Statistics' annual rebenchmarking process.

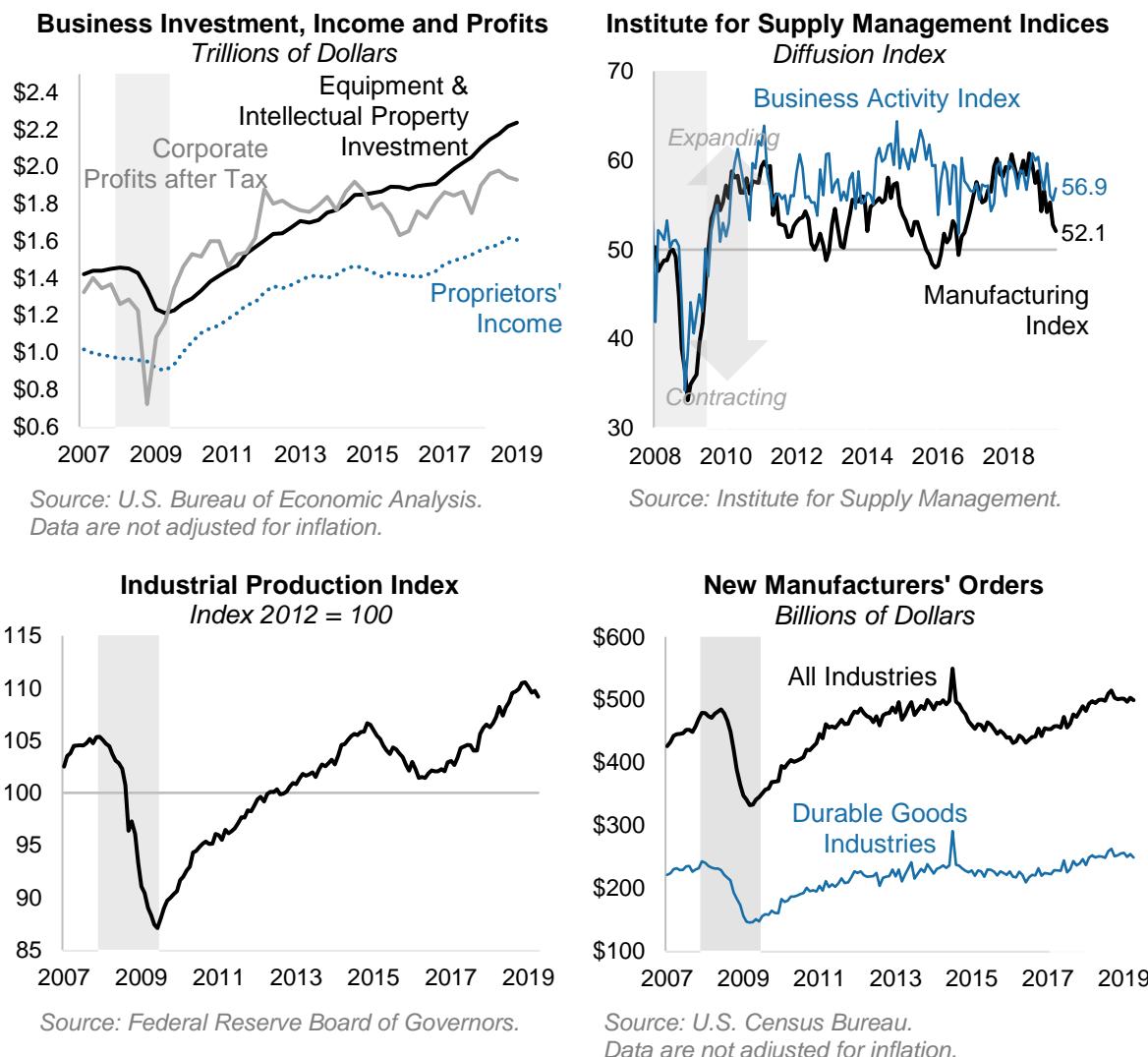
Business Income and Activity

While still at an elevated level, business activity is starting to show signs of weakness as firms report concerns about global trade policy and reduced demand for U.S. goods. Corporate profits and proprietors' income have shown modest declines in recent months and firms are holding back on investment decisions. Manufacturing activity is still growing, but slowly, as firms report waning demand for durable goods and concerns about higher costs from a tight labor market and tariffs on inputs from China. While current activity is stable, surveyed firms report worries about future demand.

Business profits and investments have softened. Figure 13 shows selected measures of business activity. Business investment in software and equipment slowed in the first quarter of 2019, growing 3.6 percent on an average annual basis compared with 8.0 percent growth in 2018. Firms are signaling caution when making new investments due to growing inventories and some signs of weakness in the economy. Corporate profits and proprietors' income both decreased in the first quarter of 2019, as the boost from federal tax reform receded and input costs increased. Nonfarm proprietors' income

decreased 0.7 percent between the fourth quarter of 2018 and the first quarter of 2019. Corporate profits after taxes declined 3.2 percent in the first quarter of 2019, in contrast to the 38.4 percent growth experienced in the first quarter of 2018 immediately following the passage of federal tax cuts.

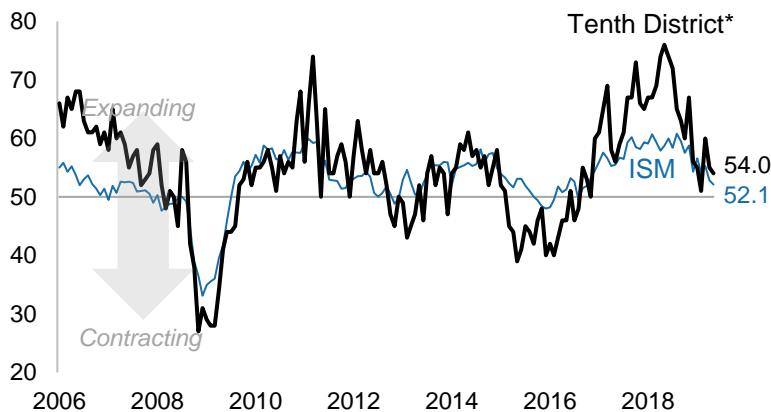
Figure 13
Selected Indicators of U.S. Business Activity



Weak business investment and consumer demand are weighing on manufacturing activity. While both the Institute for Supply Management's (ISM) manufacturing index and its non-manufacturing business activity index indicate expanding business activity (with values above 50), growth has slowed year-to-date. The manufacturing index registered 52.1 in May 2019, the lowest reading since October 2016 when the oil and gas industry was experiencing an industry-specific recession. The non-manufacturing business activity index read 56.9 in May, which is among the weakest readings over the past three years. Survey respondents report strong current business conditions, while U.S. trade policy is weighing down expectations for future orders.

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 registered 54.0 in May, significantly slower than the all-time high of 79.0 in May 2018 as shown in Figure 14. Consistent with nationwide trends, current manufacturing activity remained steady, while firms voiced concern about future price increases from tariffs and a tight labor market.

Figure 14
Business Activity in Tenth Federal Reserve District



Sources: 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.

Fewer orders for automobiles and airplanes. As measured by the Federal Reserve, industrial production (Figure 13, bottom left), decreased 0.5 percent between March and April 2019 and has receded slightly from production in the fourth quarter of 2018. The monthly production declines were a result of a large drop in motor vehicle and parts orders. Manufacturing and industrial production orders (Figure 13, bottom right) have been stable since last summer. Durable goods orders for cars and trucks and commercial aircraft have been weak due to fewer car sales and safety concerns about the Boeing 737 MAX aircraft. Increased orders for oil and gas and mining equipment have mostly offset the declines in transportation orders.

Monetary Policy and Inflation

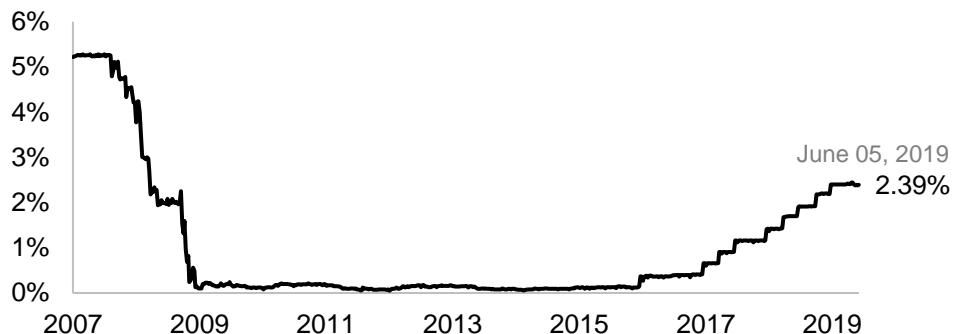
Despite the late cycle economy and tightening labor market, consumer prices continue to increase less quickly than expected. Most national consumer price components show only modest inflation, and indicators for Colorado show weaker price pressures than for the nation as a whole in 2019, bucking historical trends. Subdued inflation and softening in consumer and business activity brought an end to the Federal Reserve's pattern of interest rate increases. The Fed has signaled a wait-and-see approach to future rate hikes, and the possibility of a rate reduction should economic activity soften further.

- Inflationary pressures are expected to remain subdued on relatively low energy prices, and sluggish global demand. Consumer prices for the Denver-Aurora-Lakewood area are expected to

increase 1.5 percent in 2019 and 2.0 percent in 2020. By comparison, the national measure for all urban areas is expected to rise 1.7 percent in 2019 and 2.1 percent in 2020.

The Federal Reserve is pursuing a wait-and-see approach to monetary policy. After eight interest rate hikes over nine quarters entering 2019, the Federal Open Market Committee (FOMC) has signaled an end to this trajectory of increases (Figure 15). At its March meeting, 11 of 17 FOMC participants indicated that they did not anticipate advocating for a change in the target federal funds rate through the end of this year. More recent FOMC member communications have indicated the possibility of one or more rate cuts in 2019 following the release of weaker than expected reports for employment, inflation, and manufacturing activity. Such a move could firm inflationary pressures, and support business and consumer activity. Many Fed watchers are already pricing rate cuts into their expectations for the remainder of the year.

Figure 15
Effective Federal Funds Rate

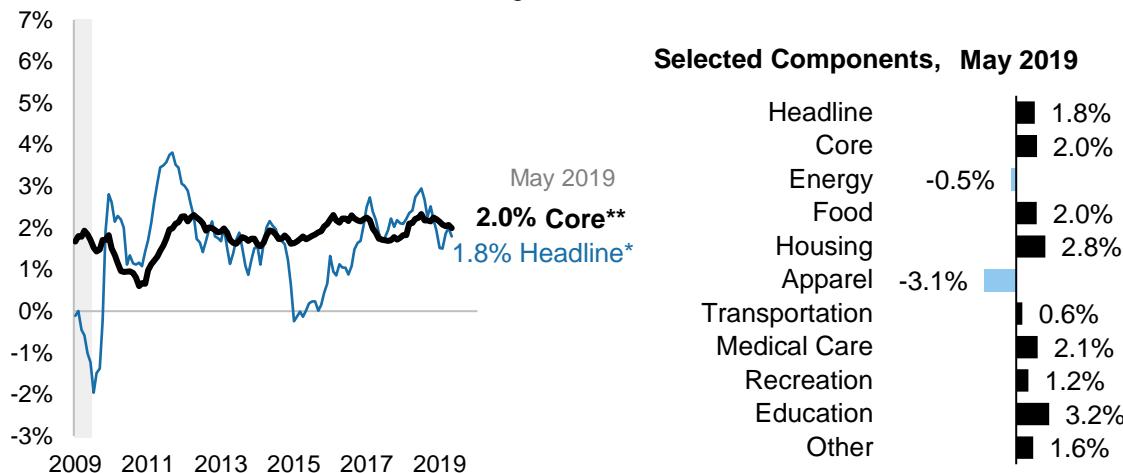


Source: Federal Reserve Board of Governors.

The current target federal funds rate stands between 2.25 percent and 2.50 percent. For comparison, the target federal funds rate stood at about 5.25 percent entering the Great Recession, and at about 6.50 percent entering the 2001 recession. Historically, the Fed has responded to losses of economic momentum with interest rate cuts of several percentage points, prodding economic actors to place more value on spending than saving. If interest rates are not high enough to sustain such large cuts entering the next U.S. recession, the Fed will likely choose from among other policy options, including money supply expansion via a new round of quantitative easing, and/or the use of negative interest rates to stimulate economic activity.

Subdued inflation continues. Inflationary pressures remain subdued on drags from energy prices, and a slowdown in global demand for goods. Headline consumer prices increased at a rate of 2.0 percent between May 2018 and May 2019, slightly outpacing inflation in the Fed's preferred personal consumption expenditure (PCE) measure. Core inflation, excluding volatile food and energy prices, was marginally quicker at 2.1 percent. As shown in the right panel of Figure 16, modest inflationary pressure was the norm across most components of the consumer price index.

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

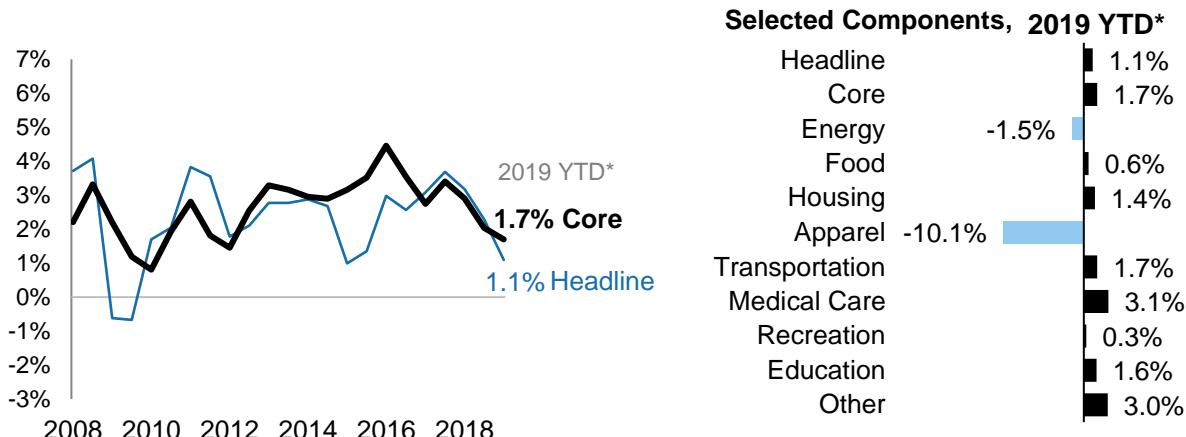


Source: U.S. Bureau of Labor Statistics. Inflation is calculated as the percent change in prices.

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

Colorado consumer prices have slowed with the housing market. Consumer price inflation data for the Denver-Aurora-Lakewood Core Based Statistical Area are presented in Figure 17. In 2018, the U.S. Bureau of Labor Statistics began reporting bi-monthly data in addition to semi-annual reports, allowing for more current analysis of regional inflationary pressures. Data released year-to-date through May suggest easing inflationary pressures in the Denver metro area, with drags from lower energy prices and apparel, and moderation in housing costs in recent months. Year-to-date, headline consumer prices for Denver increased 1.1 percent through May over year-ago levels, versus 1.7 percent inflation based on monthly data through May nationwide.

Figure 17
Denver-Aurora-Lakewood 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.

*Year-to-date inflation averaging prices using bi-monthly data for January, March, and May.

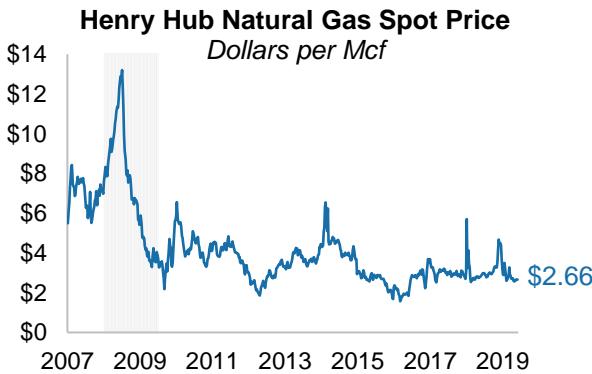
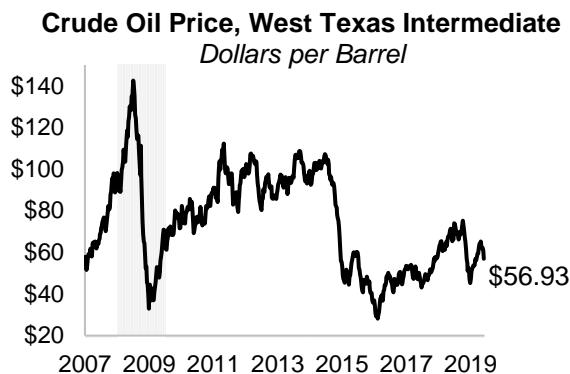
Energy Markets

The U.S. oil and gas industry continues to set new production records, leading to more refining and exports. Improved efficiencies and lower costs allow oil and gas firms to remain profitable even with fluctuations in crude oil prices. Recent increases in domestic oil and natural gas production have exposed supply line constraints, including pipelines and refineries at capacity and labor shortages. As a result, a rising number of drilled wells remain uncompleted. The transformation in electric generation is set to continue, as natural gas and renewable energy replace coal as the dominant source of electric power.

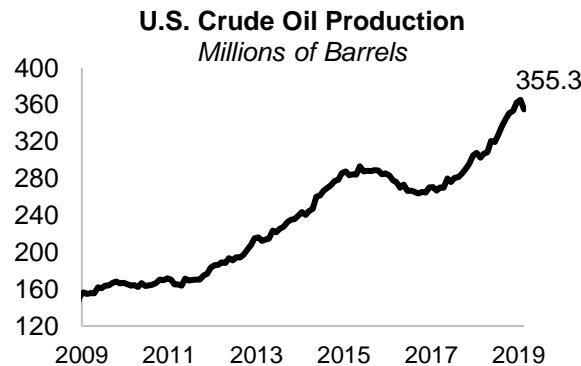
- Energy prices are expected to remain near current levels as domestic supply continues to meet a larger share of demand, insulating prices from shifts in international markets.

Oil companies are in a strong position. Despite volatile crude oil prices, U.S. oil producers set a record for production in 2018 according to the Energy Information Administration (Figure 18, bottom left). Crude oil prices decreased 39.8 percent between the first week of October 2018 from \$75.13 per barrel of oil to \$45.22 in the fourth week of December 2018, and then rebounded to \$65.28 at the end of April. (Figure 18, top left). The increase in oil production has allowed oil exports to set a record in 2018, while also increasing crude oil stocks (Figure 18, bottom right).

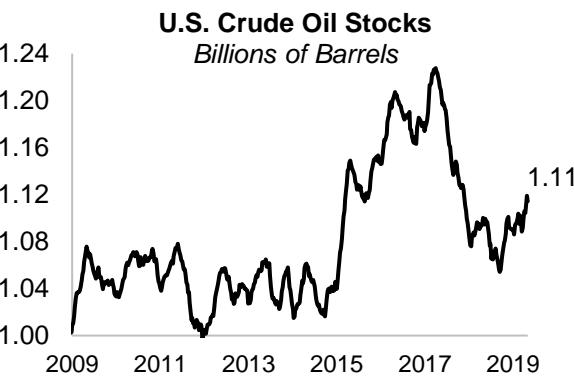
Figure 18
Selected Indicators of Oil and Gas Industry Activity



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.



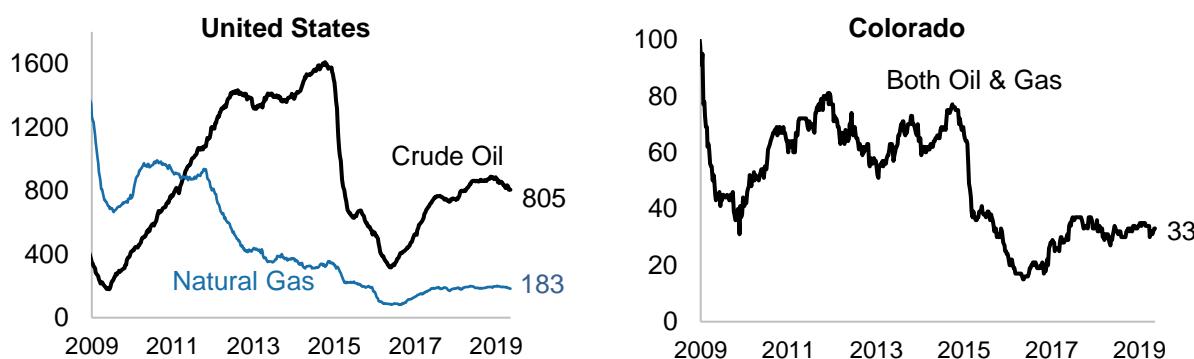
Source: U.S. Energy Information Administration. Data are not seasonally adjusted.

The oil industry cut costs and increased efficiency in 2015 and 2016, leading to cheaper costs of production per barrel of oil. The lower costs of production and higher volume resulted in 2018 being the most profitable year for oil companies since 2013. New technologies and advances in drilling techniques have reduced costs for producing oil in the geology of the Permian Basin in western Texas and eastern New Mexico, which is responsible for most of the new production. These lower production costs will insulate domestic oil producers from future fluctuations in oil prices.

Natural gas benefits from shifts in electric generation. Natural gas production and consumption also set a record in 2018 due to the increased use of natural gas to produce electricity and unseasonable weather. After overtaking coal as the largest source of electricity, the Energy Information Administration estimates that natural gas made up 35 percent of the electricity generated in 2018. Natural gas consumption is also impacted by the weather; natural gas is the dominant fuel for heating buildings and is increasingly used to generate electricity for air conditioning or electric space heaters prevalent in the South. There were colder-than-normal temperatures across most of the country in January 2019 and record highs in the summer of 2018. Domestic natural gas producers were able to meet this demand and natural gas prices have been stable over the past several years. Natural gas prices averaged \$2.66 per thousand cubic feet (Mcf) in the fourth week of May (Figure 19, top right).

Drilling activity has slowed. New drilling activity, as measured by active drilling rigs (Figure 19, left), declined 9.0 percent between the end of 2018 and the second week of May 2019, with a total of 805 oil rigs and 183 natural gas wells. While the number of active drilling rigs declined, new wells may still be coming online. According to the Energy Information Administration, the number of drilled but uncompleted wells has been rising since 2016. These wells have been drilled but still must have casing, cementing, perforating, or hydraulic fracturing performed due to economic reasons including a lack of well completion crews in areas of high demand, inability to transport new production to market, or postponed well completion due to lower energy prices.

Figure 19
Active Rig Counts



Source: Baker Hughes. Data are not seasonally adjusted.

Colorado energy activity. Similar to national energy markets, the Colorado oil and gas industry continues to increase production. The Energy Information Administration estimates that crude oil production per well in the Niobrara formation, which includes Colorado, increased from less than 200 barrels per day in 2010 to nearly 1,200 barrels per day in 2019. New wells are more efficient due to the use of hydraulic fracturing and horizontal drilling.

A survey of oil producers in the Tenth District of the Federal Reserve, which includes Colorado, expects stable production despite the fall in oil prices at the end of 2018. Overall, current production remains flat, but there was an uptick in expectations for future activity as prices increased so far in the second quarter. Even with current activity near its peak, there is room to expect more as most firms expect more pipeline capacity to become available in the next 12 months, and around 20 percent of firms indicated that their number of drilled but uncompleted wells has increased in the past year.

After falling 5.9 percent in 2018, coal production in Colorado increased 5.1 percent in the first four months of 2019 compared with the same period in 2018 according to the Colorado Department of Natural Resources. Nationally, the Energy Information Administration estimates coal production will continue to fall through 2020 due to less demand for coal as electricity production shifts to renewable fuels and natural gas.

Housing & Residential Construction

The national residential real estate market continues to cool down. Growing affordability concerns, stemming from rising construction costs, a shortage of skilled labor, and rising interest rates began to slow residential fixed investment in 2018. Sellers placed their homes on the market in anticipation of future lower prices, and buyers delayed purchasing homes because of these higher costs, which increased inventory and led to slower price appreciation and fewer home sales. However, the Federal Reserve's policy shift on interest rates in late 2018 and a strong labor market have alleviated some concerns in the sector, but market growth is expected to be slow until the gap between what sellers are looking for and buyers are willing to pay narrows. Similar to the nation, Colorado's real estate market began to cool in 2018, particularly in the Metro Denver area. However, the market has been steadily picking up momentum through the first quarter of the year; albeit at a slower pace compared to recent years.

- Following extremely high levels of new activity, Colorado housing permits are expected to fall 16.8 percent in 2019 and then increase 5.2 percent in 2020.
- Home prices in Colorado are expected to stabilize overall, with some softening in the most expensive areas of the state, offsetting home price appreciation in more affordable regions.

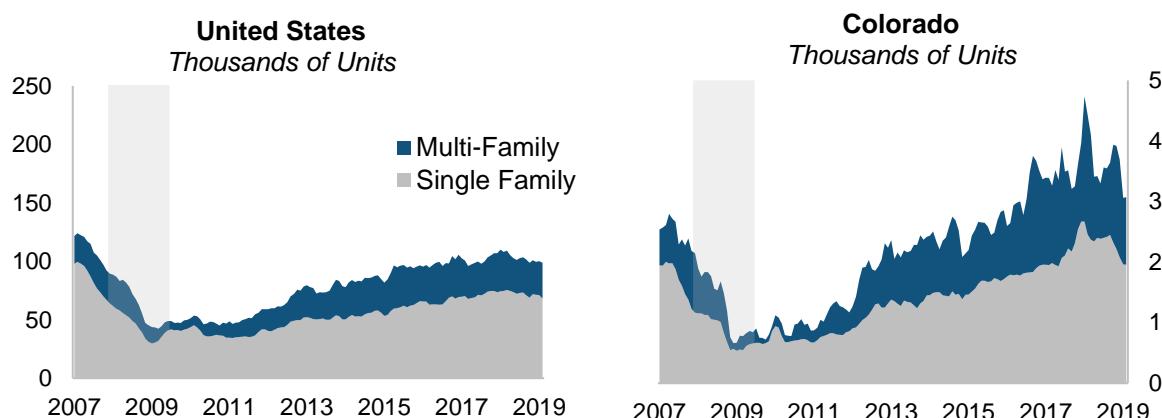
The U.S. housing market has improved after a rough end to 2018. The national residential real estate market softened in the last quarter of 2018 as rising mortgage interest rates added to already growing affordability concerns. In December 2018, the median sales price of houses sold in the country was \$322,800, down from \$337,900 from the same period one year earlier. Homebuilder confidence dampened, housing starts plunged in November and December, and home appreciation slowed in the second half of the year. Since the Federal Reserve's policy shift in late December to holding interest rates steady, mortgage rates have moderated, and builder confidence has rebounded to healthier levels.

In May, the Housing Market Index, a monthly survey designed to take the pulse of residential builder confidence, reported a reading of 66, after declining to 56 and 58 in December and January. A reading above 50 indicates a favorable outlook on home sales, while below 50 indicates a negative outlook. The May reading is at its highest level since October 2018. Lower interest rates, a strong labor market,

and rising wages have contributed to the improvement in the national residential real estate market. Nevertheless, ongoing labor and lot shortages and rising material costs continue to hinder growth.

Supply-demand imbalance continues to hinder growth. Homebuilders continue to report strong demand for new housing fueled by a strong labor market and steady income growth, and thus are continuing to bring new homes onto the market (Figure 20, left). However, most of the building encompasses the move-up and high-end levels, not the entry-level where demand is strongest. High construction costs are making it more difficult to profit on lower-priced homes.

Figure 20
New Residential Construction Housing Starts

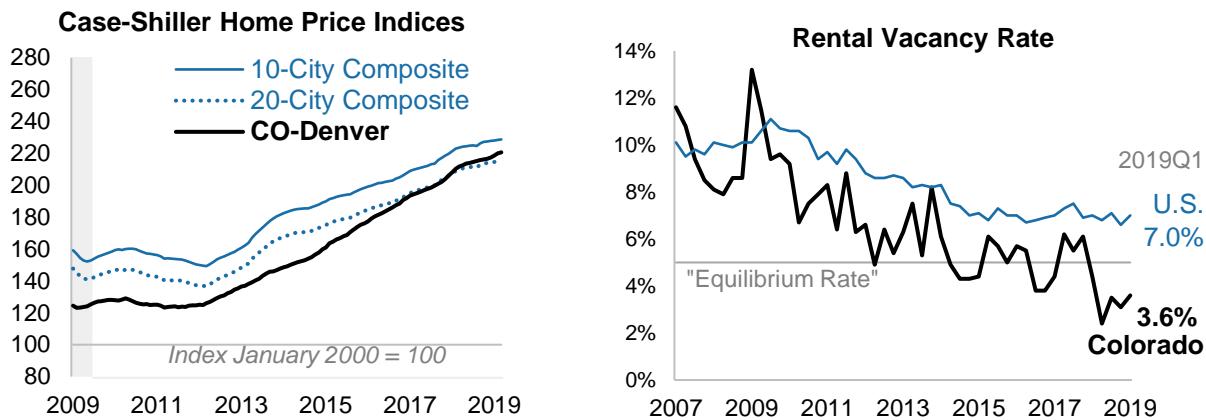


Source: U.S. Census Bureau. Data shown as three-month moving averages. Data are seasonally adjusted.

Colorado's residential market decelerated in 2018. Colorado's residential real estate market started to soften in 2018 after several years of robust growth. The Case-Schiller CO-Denver home price index reported a 4.2 percent price increase in March 2019 relative to the same period last year, representing a deceleration from the 8.5 percent increase posted in March 2018 (Figure 21, left). The steep rise in prices, especially in the Metro Denver region, and higher mortgage rates put many homes out of reach to purchase. As demand waned, new construction activity softened. Through April 2019, total housing permits for the state were down 30 percent from the same period one year ago (Figure 20, right).

Positive market indicators are generating momentum in the Colorado residential real estate market. Lower interest rates, historically low rental vacancy rates (Figure 21, right), moderating price increases, and an increase in supply are leading many buyers back into the Colorado real estate market. In May 2019, the average 30-year fixed mortgage rate dipped below 4 percent, after almost reaching 5 percent earlier this year. In addition, there were 8,789 new listings in May 2019, up 38.1 percent from the previous year, according to the Denver Metro Association of Realtors. The lower borrowing costs and stabilizing price appreciation are making it easier for buyers to purchase a home in most areas of the state. The market is expected to pick up momentum as the home buying season begins; albeit activity will be slower than in recent years.

Figure 21
U.S. and Colorado Shelter Price Indicators



Source: S&P Dow Jones Indices LLC.
Seasonally adjusted. Data through March 2019.

Source: U.S. Census Bureau. Data through the first quarter of 2019.

Nonresidential Construction

U.S. nonresidential construction activity continued at a healthy pace through the first quarter of 2019. While both public and private investments have contributed to improvements, spending on private projects continues to slow. Total U.S. nonresidential construction spending through the first quarter of 2019 was \$2.319 billion, up 5.1 percent from the same period last year. Colorado's nonresidential construction market is also performing at elevated levels, and growth is spreading to most areas of the state. Prior to 2018, growth had been mainly restricted to the Metro Denver and northern regions of the state. Several large projects are scheduled to start in 2019 that will continue to support nonresidential construction activity.

- Coming off of several large scale projects in 2018, nonresidential construction in Colorado is expected to decline 22.3 percent in 2019 before increasing 5.4 percent in 2020. Despite the decline, activity will remain elevated relative to historical levels.

Public sector construction spending has been particularly strong. Nationally, public sector investment has primarily been driving growth in the nonresidential construction market through the first quarter of the year, with the largest year-over-year increases occurring in water supply, conservation and development, office, and commercial projects. A strong U.S. economy has given many states a budget surplus for the first time in years allowing them to invest in more public projects.

Private investment remains near historical levels but has been decelerating. Total investment in private nonresidential projects remain near historical highs, totaling \$1.377 billion through the first quarter of the year, but growing at a slower rate relative to prior years. Investment in communication and commercial projects has declined year-over-year, while transportation and manufacturing projects continue to lift total spending on private projects. Investment in private projects has been recently constrained as private borrowing costs have increased and concerns that some areas in the country are overbuilt or are approaching overbuilt status.

Colorado nonresidential construction is expected to continue at elevated levels. After posting an impressive 23.3 percent year-over-year gain in 2018, total nonresidential construction spending in Colorado was down through the first four months of 2019. Much of the growth in 2018 was attributable to a large capital investment project in Weld County. The Mewbourn 3 natural gas processing plant will be the tenth plant in the Denver-Julesberg basin and will connect to the Front Range pipeline. Other notable project starts in 2018 included phase 1 of the DIA Great Hall Renovation, redevelopment of the National Western Center, and I-70 expansion.

Major nonresidential construction projects scheduled to start in 2019 include the Colorado Convention Center expansion and several building projects on the National Western Center campus. In addition, a total of \$1.5 billion in school district bonds were approved in November 2018, with about one-third expected to appear in the 2019 nonresidential construction numbers.

Price effects suggest downside risk. Players in the nonresidential construction market are monitoring recently imposed tariffs on steel and aluminum that are expected to inflate construction materials prices over the next several months. In addition, wage pressures and rising material costs are putting upward pressure on the price of new construction projects.

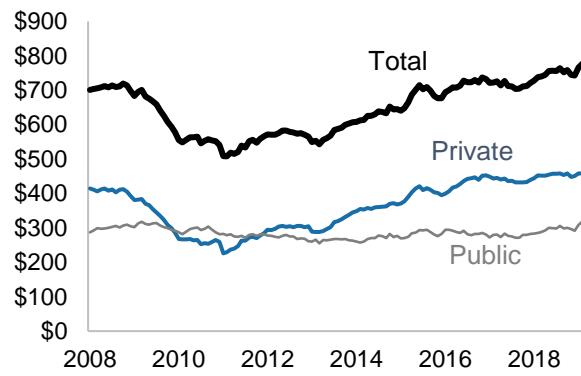
In both the U.S. and Colorado, construction contractors continue to cite labor constraints as a major impediment to growth in the industry. If these costs increase too quickly, momentum in the industry may significantly slow. According to a recent survey from the Associated General Contractors of America, the overwhelming majority of construction firms are having a hard time finding qualified workers. Nearly 92 percent of the 88 construction firms surveyed reported that they needed to hire additional skilled craft workers, while 79 percent said they needed additional salaried office personnel over the coming 12 months.

Global Economy

Following sluggish growth during the second half of 2018, global economic activity is expected to moderate further this year before picking up slightly in 2020. A slowdown in global trade activity and uncertainty about the future of trade relations between the U.S. and its major trade partners continue to pose a downside risk to growth in the near-term. Heightened global uncertainty and relatively high foreign interest rates are buoying the U.S. dollar as a safe haven for investment. Slower growth in China has dampened global growth and trade expectations for 2019 and highlighted the country's extensive networks of trade and investment around the globe.

The U.S. dollar remains high. The relative strength of the U.S. economy has boosted the strength of the U.S. dollar when compared to other major currencies; however, a pause in interest rate increases and weaker domestic and international growth spurred a slight decline in early 2019 (Figure 23, left).

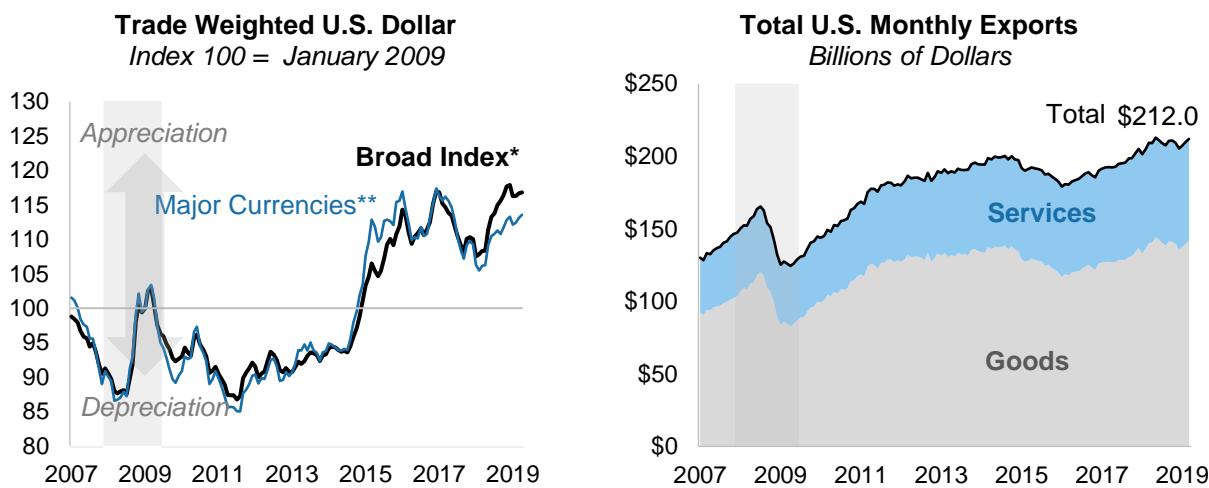
Figure 22
U.S. Nonresidential Construction Spending
Billions of Dollars



Source: U.S. Census Bureau. Monthly data are seasonally adjusted, annualized, and through March 2019.

Ongoing uncertainty about tariffs and trade negotiations have helped to maintain U.S. treasuries as a strong investment option in a climate of elevated volatility in foreign markets. The strong dollar makes U.S. exports more expensive than foreign goods, threatening current export levels (Figure 23, right), while also making imports relatively cheap, resulting in downward inflationary pressures.

Figure 23
Selected Indicators of U.S. Trade Activity



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 not adjusted for inflation.

Near-term global growth projections were revised down. This year's global growth forecasts are gloomier than six month ago on trade headwinds and slowing growth in the U.S. and China. The International Monetary Fund released an updated outlook for the global economy in April, revising the prior forecast of global economic output down for this year by 0.4 percent and by 0.1 percent for 2020. Global growth is now projected at 3.3 percent in 2019 and 3.6 percent in 2020. Risks to the German auto industry, manufacturing sectors across the globe, and lower commodity prices cloud the outlook.

European growth is projected to slow further in 2019. As the Euro area is heavily dependent on exports, lower global demand in 2018 led to a slowdown in growth during the second half of the year. New car emissions standards are shaking up the auto industry in the European Union (EU), with higher costs pushing consumer prices up and threatening demand. Overall EU area growth is forecast to slow to 1.4 percent in 2019, down from 2.0 percent last year. Two of the largest economies in the region, Germany and Italy, are projected to grow by a meager 0.5 percent and 0.1 percent, respectively, in 2019, while projections for both France and the United Kingdom (UK) are estimated at a stronger 1.3 percent this year. Brexit still poses a large downside risk to the EU economy, since a "hard" Brexit remains a possibility, and the shift in power with Prime Minister Theresa May's departure creates added uncertainty to the UK's exit from the EU. With inflation at 1.4 percent through the first quarter and interest rates at zero, the European Central Bank is left with few policy choices to stimulate the area's economy.

Emerging and developing country growth faces new headwinds. The broad range of countries classified as “emerging” and “developing” is projected to grow at a 4.4 percent clip in 2019, a slightly slower pace than the prior year, before ticking up to 4.8 percent in 2020. This growth is largely driven by India and China, with projected growth of 7.3 percent and 6.3 percent respectively in 2019. Several of the largest economies in Latin America are performing poorly, including Argentina, Brazil, and Mexico, and may fare worse if China’s economy were to take a turn for the worse. Brazil’s economy contracted in the first quarter of this year on falling industrial production, a lack of investment, and public spending reforms promised by the new administration that have not come to pass. Mexico’s economy also contracted in the first quarter, and faces further pressure from U.S. tariffs.

China’s economy is showing signs of weakness. China’s economic growth remains strong, projected at between 6.0 and 6.5 percent this year; however, it has slowed from about 12.0 percent at the start of the decade. Ongoing trade tensions with the U.S. have dampened export and manufacturing activity, but the slower growth can also be attributed to a restructuring and maturing of the economy. Uncertainties about trade have shaken business and consumer confidence, causing both consumer spending and business investment to slow this year. China’s official Purchasing Managers’ Index (PMI) for May came in at a contractionary levels of 49.4; however, the private PMI survey came in at 50.2, just above the index’s expansionary threshold of 50. Investors in Chinese equities have reacted to the slowdown by pulling out around \$12 billion from the Chinese market during April and May of this year.

International Trade

Ongoing trade tensions continue to impact U.S. business activity through elevated uncertainty, supply chain disruptions, and weakened demand for some U.S. goods. If favorable terms of trade can be reached, negotiations could generate positive long-term impacts on the U.S. economy. However, resolution of trade tensions is not expected in the near future, and these tensions will continue to pose a downside risk to the U.S. and global economy.

A trade deal with China remains elusive. In May, the U.S. announced that trade negotiations with China had eroded and the U.S. increased tariffs on \$200 billion of Chinese imports from 10 percent to 25 percent, with the prospect of adding tariffs to another \$300 billion of imports in the near term. China retaliated in kind with additional tariffs on U.S. goods, and trade negotiations were halted. Tensions have also moved beyond tariffs to include U.S. restrictions on the Chinese company Huawei, Chinese export restrictions on rare earth metals, and Chinese fines on the Ford Motor Company.

U.S. businesses have moved supply chains in response to tariffs and rising business restrictions, shifting some imports away from China to other East and Southeast Asian export countries, as shown in Figure 24. Vietnam’s manufacturing sector and export infrastructure have been growing over the last decade, while renegotiations of the U.S.-South Korea free trade agreement have helped to bolster U.S. imports there.

Fits and starts for USMCA ratification. The U.S. lifted steel and aluminum tariffs on Canada and Mexico, a sticking point for ratification of the replacement for the North American Free Trade Agreement (NAFTA), known as the United States-Mexico-Canada Agreement (USMCA), which was signed by the three member countries' heads of state on November 30, 2018. Both neighboring countries of the U.S. introduced implementing legislation for the trade deal shortly thereafter; however, progress was temporarily halted when the U.S. administration considered imposing a 5 percent tariff on all Mexican imports in efforts to encourage Mexico to assist in stemming immigration to the U.S. through its borders.

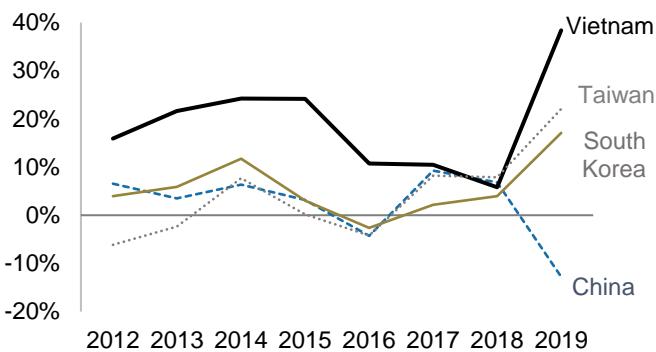
Higher costs from tariffs are being passed on to consumers. A recent study published by the National Bureau of Economic Research (NBER) estimates that U.S. consumers and companies that import foreign goods paid an additional \$3 billion per month in tax costs with the tariffs in place at the end of 2018. The report attributes another \$1.4 billion per month in losses to a decrease in business efficiency. Although the broad consumer price index that measures inflation suggests subdued inflationary pressures, manufacturing, major appliances, and construction materials costs have risen as a result of tariffs, with consumers paying the additional costs.

Colorado export activity. Exports represent 2.3 percent of Colorado's total economic activity, totaling \$8.3 billion in 2018. According to the U.S. Department of Commerce, approximately 40,400 jobs were supported by exports in Colorado in 2016, the latest year with published data, which was about 1.5 percent of total employment in Colorado that year. Colorado exports are down 10.5 percent year-to-date through March this year compared with the same period last year with drags from most major trade partners, including China, Mexico, Canada, and the Eurozone. Agricultural producers saw a decrease in several exports during 2018, including cheese, wheat, and fresh pork; however, these weaknesses will be partially offset by federal trade mitigation program payments.

Agriculture

Escalating trade tensions have exacerbated difficult agricultural industry conditions. For years, the industry has faced persistently low farm income and rising levels of operating loans on an oversupply of crops and low prices. The recent decrease in exports, higher input costs, and shifting supply chains have posed added strain on many agricultural producers. The drought in Colorado has abated thanks to high winter snowfalls; however, subsequent elevated moisture levels have delayed planting and could pose flood risks this summer. The outlook for the agricultural industry remains cloudy on trade policy uncertainty and slower global demand. Conversely, the livestock industry continues to enjoy healthy demand.

Figure 24
U.S. Imports from Select Asian Countries
Year-over-Year Percent Change



Source: WISERTrade. Data for 2019 are year-to-date through April over the same period in 2018.

Impacts of tariffs on the agricultural industry. U.S. agricultural exports have declined month-over-month for six of the last seven months, with the U.S. agricultural trade balance (exports minus imports) reduced by 28 percent over this period. In Colorado agricultural and livestock products subject to tariffs have shown a decline in the value of exports, including pork, cheese, and raw hides and skins. Agricultural equipment, such as balers, tractors, and irrigation systems, increased in price with the steel and aluminum tariffs, putting capital investments further out of reach in a low farm income environment. Partially offsetting industry losses, the federal government intervened with an additional \$16 billion in aid through direct payments to agricultural producers who have lost income due to tariffs.

The livestock industry is benefitting from strong demand. Cattle and calf production in Colorado comprises over 50 percent of the total agricultural industry in the state. Demand for beef is up both domestically and internationally, which has pushed prices up for cattle and calves. Trade has opened up for beef in South Korea and Japan over the past year, which has helped to offset lower exports to China and Mexico. Exports are down almost 5 percent through March; however, fresh and frozen beef exports to South Korea are up 56 percent and 29 percent, respectively.

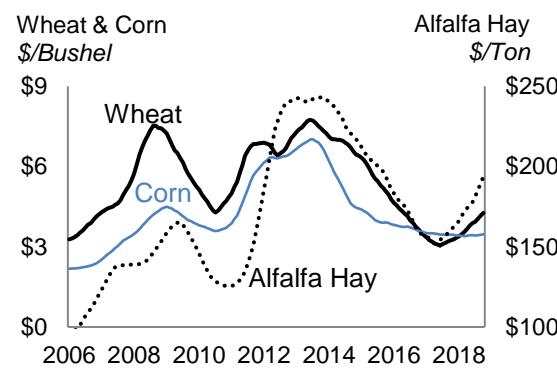
While livestock demand has risen, so have prices for inputs, cutting into industry profits. Hay prices reached their highest level since 2013 at \$220 per bushel in April, and ranchland values over the past year have risen for the first time since 2016. Hog prices are up on a tighter supply of pork from the pervasive African swine flu that has affected hogs in China, the largest consumer of pork globally. This has helped to mitigate lower export levels to Mexico from retaliatory tariffs; however, many producers fear its transmission to North America. Colorado pork exports were down 24.1 percent in 2018, and are down 3.6 percent year-to-date through March this year over the same period last year.

Colorado crop prices are up slightly, but still remain near historic lows. Higher global production and competition combined with stable demand have kept wheat prices near historical lows (Figure 25). Higher demand for beef and a limited supply of hay have put upward pressures on prices, now at the highest level since 2013. Corn prices, however, remain low on weaker global demand from lower feed demand in China. The upside for corn prices is the wet conditions throughout much of the Midwest that may reduce yields and increase prices, which are already nearing \$4.50 per bushel on the futures markets.

Milk prices are up 8 percent through April over the same period last year after falling 7.1 percent year-over-year in 2018. Milk production in the state is up 5.9 percent through the first three months of the year over the same period last year, while U.S. production overall is flat.

Persistently low farm income at further risk. Low crop prices, rising input costs, and weaker global demand have put more downward pressure on farm income (Figure 26, left). The tight labor market

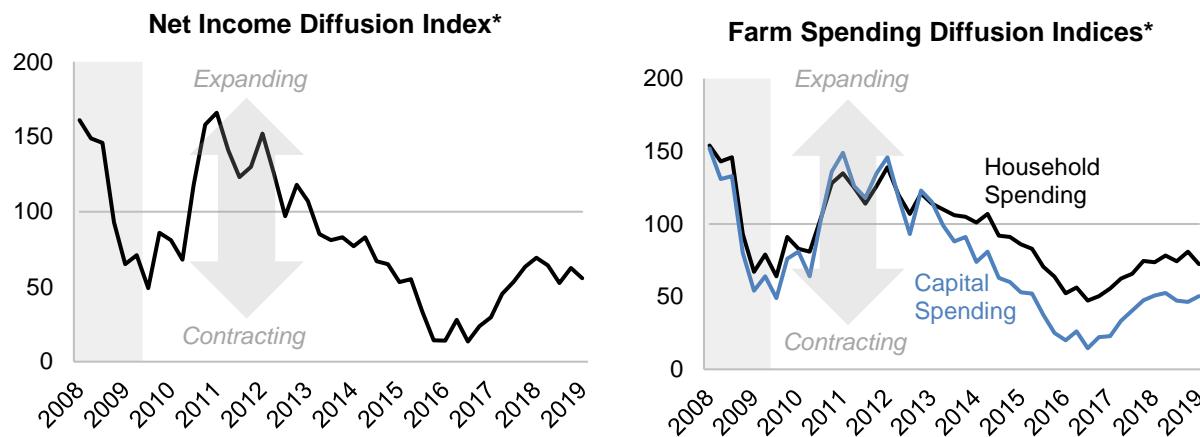
Figure 25
Prices Received for Colorado Crops



Source: U.S. Department of Agriculture, National Agriculture Statistics Service. Data shown as a 12-month moving average through November 2018.

has contributed to a shortage of farm workers and pushed up labor costs for farmers and ranchers. According to data from the Tenth District Agricultural Credit Survey, rising interest rates in 2018 did not slow demand for farm loans, as farm incomes declined further. Both irrigated and nonirrigated cropland values worsened through 2018, while ranchland values ticked up almost one percent. Due to the combination of risks to the agricultural industry, many producers are choosing not to invest in capital goods, and household spending is down as producers tighten their belts (Figure 26, right).

Figure 26
Farm Financial Indices from the Federal Reserve's Tenth District



Source: Federal Reserve Bank of Kansas City, Quarterly Survey of Agricultural Credit Conditions. Data through the first quarter of 2019.

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

Summary

Following healthy growth in 2018, momentum in the U.S. and Colorado economies has continued into the first quarter of 2019. Aided by the stimulative effects of federal tax cuts, the state and national economies continue to post strong growth in the late stages of an expansion. Inflation remains in check and an ever-tighter labor market is helping to bolster personal income growth and consumer activity. The U.S. and Colorado economies are expected to continue to expand through the remainder of 2019 and into 2020, though at a slower pace of growth as labor market tightening constrains business activity, global economic activity slows, and trade tensions persist.

While ongoing growth is expected, several leading economic indicators signal concern for future growth. Factory orders and business investment began to weaken in the first quarter of the year as firms took a wait-and-see approach before committing to capital investments. Consumer demand for automobiles and other durable goods has softened and supply chain disruptions induced by tariffs between the U.S. and its major trade partners pose an ongoing challenge to producers and exporters. Labor scarcity is constraining business activity for an increasing number of industries. In Colorado, higher interest rates have dampened the housing market along the Front Range as homes become less affordable, and manufacturing has slowed due to weaker demand and trade uncertainty.

Risks to the Forecast

Several factors could result in stronger or weaker economic activity than forecast. These risks are viewed as skewed to the downside for the remainder of the forecast period.

Downside. Downside risks include escalating trade tensions that could further disrupt supply chains, suppress demand for U.S. goods, and increase input prices. The duration and/or escalation of these tensions pose rising risks to businesses with foreign exposure the longer they remain in effect. The possibility of tighter monetary policy in response to inflationary pressure could tip the economy into recession. Debt levels at some firms are unsustainable, and a higher interest rate environment could push these businesses into failure in addition to slowing consumer demand. Globally, the risk of Brexit casts a shadow on the European economy. Without a deal to maintain economic relationships, Brexit could cause recessions in both the UK and EU, posing a downside risk to global economic activity. In addition, federal spending and financial markets will be impacted if the federal budget sequestration and debt limit are not raised.

Upside. Over the past ten years, the economy has powered through several periods of tepid growth marked by weak leading indicators. Recent slowing in economic activity may be transitory with stronger growth around the corner. Near-term resolution to trade tensions would end ongoing uncertainties for businesses and consumers, and may give way to stronger economic activity under more favorable trade conditions. Raising wages and low inflation provide strong potential for a continued expansion as households are able to increase consumption or improve their balance sheets with increased savings. Many businesses are well positioned to invest using strong profits from recent years and can still leverage a relatively low interest rate environment. Finally, interest rate cuts could provide a boost to activity by stimulating investor and consumer confidence.

Table 18
National Economic Indicators

Calendar Years	2014	2015	2016	2017	2018	Legislative Council Staff Forecast		
	2019	2020	2021					
Real GDP (<i>Billions</i>) ¹	\$16,900	\$17,387	\$17,659	\$18,051	\$18,566	\$19,012	\$19,354	\$19,645
Percent Change	2.5%	2.9%	1.6%	2.2%	2.9%	2.4%	1.8%	1.5%
Nonfarm Employment (<i>Millions</i>) ²	138.9	141.8	144.3	146.6	149.1	151.2	152.8	154.0
Percent Change	1.9%	2.1%	1.8%	1.6%	1.7%	1.4%	1.1%	0.8%
Unemployment Rate ²	6.2%	5.3%	4.9%	4.4%	3.9%	3.7%	3.9%	4.3%
Personal Income (<i>Billions</i>) ¹	\$14,991.8	\$15,719.5	\$16,125.1	\$16,830.9	\$17,569.6	\$18,325	\$19,131	\$19,839
Percent Change	5.7%	4.9%	2.6%	4.4%	4.4%	4.3%	4.4%	3.7%
Wage and Salary Income (<i>Billions</i>) ¹	\$7,473.2	\$7,854.4	\$8,080.7	\$8,453.8	\$8,821.3	\$9,245	\$9,679	\$10,047
Percent Change	5.1%	5.1%	2.9%	4.6%	4.3%	4.8%	4.7%	3.8%
Inflation ²	1.6%	0.1%	1.3%	2.1%	2.4%	1.7%	2.1%	2.0%

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 19
Colorado Economic Indicators

Calendar Years	2014	2015	2016	2017	2018	Legislative Council Staff Forecast		
	2019	2020	2021					
Population (<i>Thousands, as of July 1</i>) ¹	5,351.2	5,452.1	5,540.9	5,615.9	5,695.6	5,775.3	5,850.4	5,926.4
Percent Change	1.5%	1.9%	1.6%	1.4%	1.4%	1.4%	1.3%	1.3%
Nonfarm Employment (<i>Thousands</i>) ²	2,463.5	2,540.8	2,601.5	2,660.6	2,725.4	2,771.7	2,810.5	2,841.5
Percent Change	3.5%	3.1%	2.4%	2.3%	2.4%	1.7%	1.4%	1.1%
Unemployment Rate ²	5.0%	3.8%	3.2%	2.7%	3.3%	3.5%	3.7%	4.0%
Personal Income (<i>Millions</i>) ³	\$271,101	\$284,143	\$289,621	\$306,411	\$323,767	\$342,546	\$361,728	\$379,815
Percent Change	8.9%	4.8%	1.9%	5.8%	5.7%	5.8%	5.6%	5.0%
Wage and Salary Income (<i>Millions</i>) ³	\$138,585	\$146,487	\$150,977	\$160,372	\$168,828	\$179,127	\$190,412	\$200,694
Percent Change	7.0%	5.7%	3.1%	6.2%	5.3%	6.1%	6.3%	5.4%
Housing Permits (<i>Thousands</i>) ¹	29.3	30.5	37.1	41.1	45.5	37.8	39.8	40.4
Percent Change	7.3%	4.2%	21.5%	10.9%	10.7%	-16.8%	5.2%	1.4%
Nonresidential Building (<i>Millions</i>) ⁴	\$4,351	\$4,991	\$5,992	\$6,174	\$7,943	\$6,172	\$6,499	\$6,720
Percent Change	20.1%	14.7%	20.1%	3.0%	28.7%	-22.3%	5.3%	3.4%
Denver-Aurora-Lakewood Inflation ⁵	2.8%	1.2%	2.8%	3.4%	2.7%	1.5%	2.0%	2.1%

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.

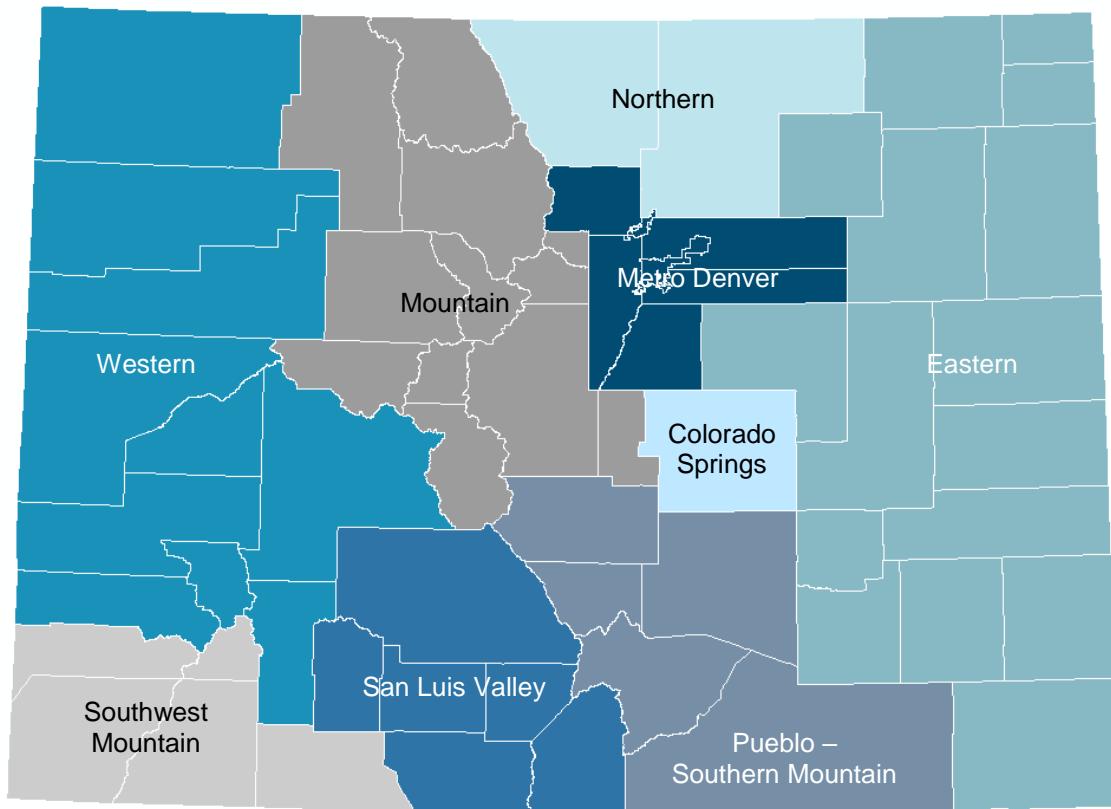
³U.S. Bureau of Economic Analysis. Personal income and wages and salaries not adjusted for inflation.

⁴F.W. Dodge.

⁵U.S. Bureau of Labor Statistics. Inflation shown as the year-over-year change in the consumer price index.

Note: Legislative Council Staff has discontinued the Colorado retail trade forecast due to data limitations.

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.

Like the employment data, residential housing permits and agriculture data are also based on surveys. These data are revised periodically. 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

Colorado's largest regional economy, the seven-county metro Denver region, continues to expand in spite of growing labor shortages and a slowdown in nonresidential construction activity. The region is characterized by a strong, diversified economy, with growing sector concentrations in information technology and finance. Area employment growth accelerated in 2018, and residential construction activity remains elevated. Housing demand continues to overwhelm supply, maintaining upward pressure on residential construction activity. However, higher interest rates and the relatively high cost of living in the area have cooled real estate markets in many of the region's neighborhoods. Economic indicators for the region are summarized in Table 20.



Table 20
Metro Denver Region Economic Indicators
Adams, Arapahoe, Broomfield, Boulder, Denver, Douglas, and Jefferson Counties

	2015	2016	2017	2018	YTD 2019
Employment Growth ¹	3.1%	2.3%	1.9%	2.4%	1.7%
Unemployment Rate ²	3.6%	3.0%	2.6%	3.1%	3.2%
Housing Permit Growth ³					
Denver-Aurora MSA Single Family	17.8%	12.2%	3.8%	24.2%	-21.7%
Boulder MSA Single Family	74.2%	10.2%	-4.3%	33.5%	-23.5%
Nonresidential Construction Growth ⁴					
Value of Projects	25.6%	27.6%	-10.4%	41.4%	-9.3%
Square Footage of Projects Level (Millions)	43.6%	6.9%	-13.4%	-19.5%	-18.9%
Number of Projects Level	21,170	22,624	19,596	15,766	3,841
	20.7%	9.8%	-23.9%	-20.8%	-41.6%
	1,130	1,241	944	748	156

MSA = Metropolitan statistical area.

¹U.S. Bureau of Labor Statistics, CES (establishment survey). Seasonally adjusted. Data through April 2019.

²U.S. Bureau of Labor Statistics, LAUS (household survey). Data prior to 2010 adjusted by Legislative Council Staff. Seasonally adjusted. Data through March 2019.

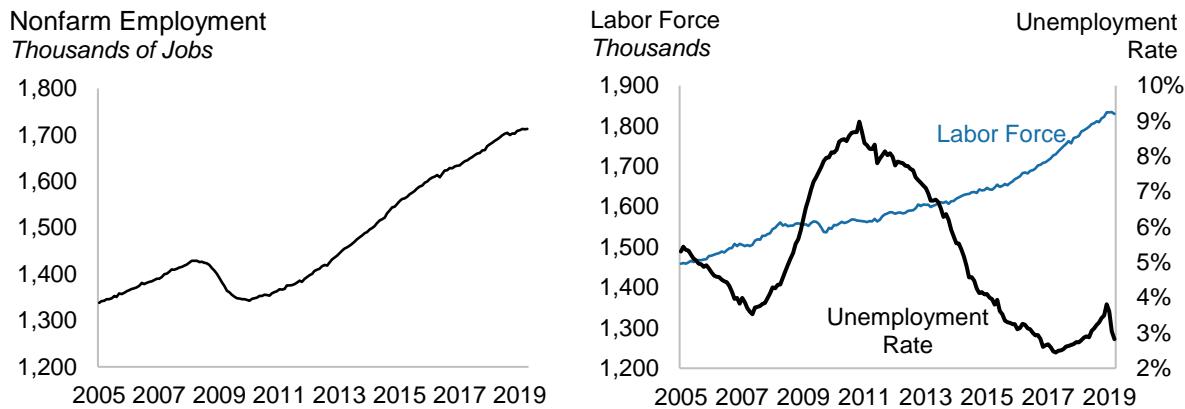
³U.S. Census. Growth in the number of residential building permits. Data through March 2019.

⁴F.W. Dodge. Data through April 2019.

Labor market. Published data for the metro Denver region suggest that regional employment has risen 1.7 percent through the first four months of 2019 compared to the same period one year prior (Figure 27, left). The metro Denver labor market continues to tighten on slowing net migration and a shortage of skilled labor. The area unemployment rate has averaged 3.2 percent through April 2019, slightly up from the 2018 region average (Figure 27, right).

Housing. While still at an elevated level, growth in regional residential construction activity has cooled with rising interest rates and a slowdown in net migration to the area (Figure 28, left). The relatively high cost of housing in the metro Denver region has dampened interest among possible buyers, leading to a higher inventory of homes for sale, homes spending a longer time on the market, and seller concessions becoming common in many neighborhoods.

Figure 27
Metro Denver Region Labor Market Activity

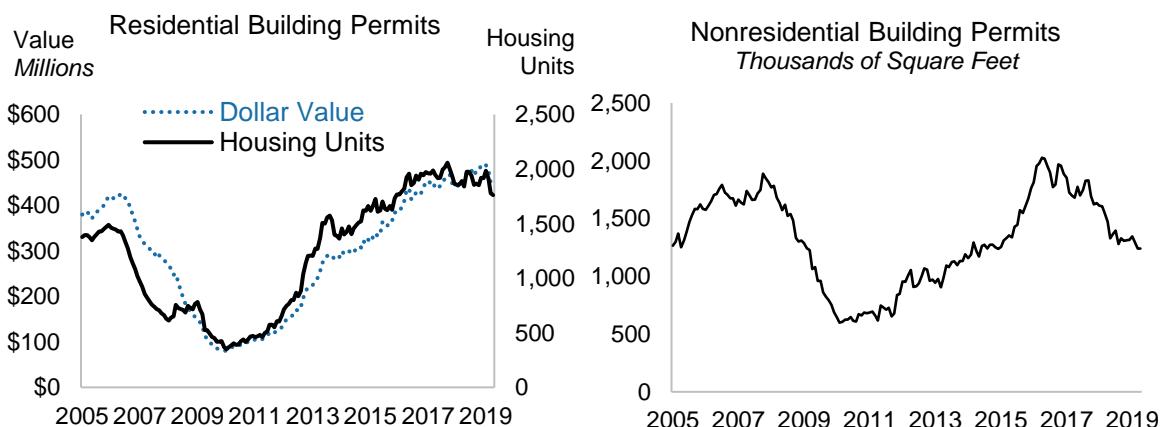


Source: U.S. Bureau of Labor Statistics; CES (left), and LAUS (right). Data are through April 2019 and are seasonally adjusted. Data prior to 2010 adjusted by Legislative Council Staff.

Following the boom in activity over the past several years, the region's residential construction activity has cooled (Figure 28, left). The number of new single family permits pulled by developers through April 2019 is down for both the Denver and Boulder Metropolitan Statistical Areas. However, the inventory of homes for sale increased 9.5 percent in May 2019 compared to the same month last year, after years of a shortage of available homes.

Nonresidential construction. After peaking in 2016, metro Denver nonresidential building activity continues to moderate. The square footage and number of projects (Figure 28, right) have fallen at double-digit rates through April 2019, from the prior year. The value of construction jumped in 2018 primarily from several large projects that started in the year, such as the Denver International Airport concourse expansion project and the National Western Stock Show redevelopment.

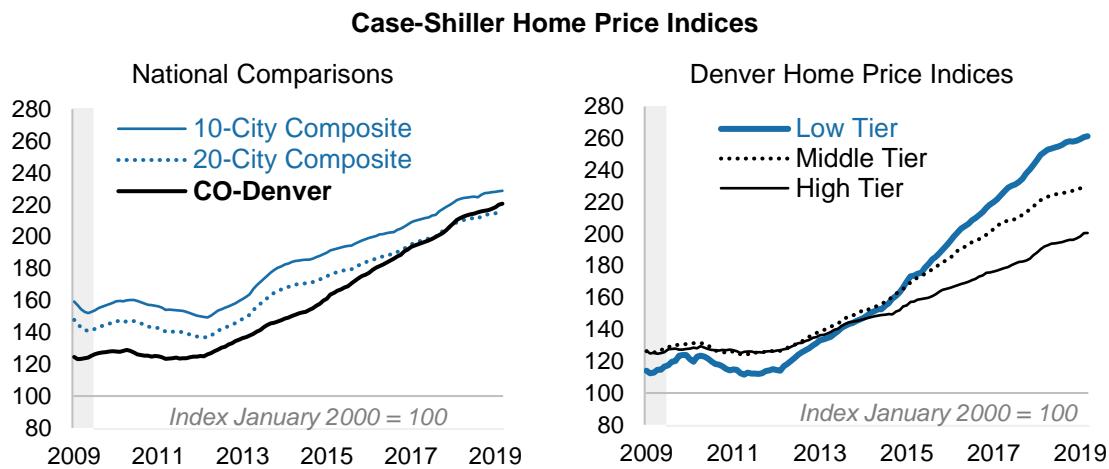
Figure 28
Metro Denver Region Construction Activity



Source: F.W. Dodge. Data shown as twelve-month moving averages. Data are not seasonally adjusted and are through December 2018.

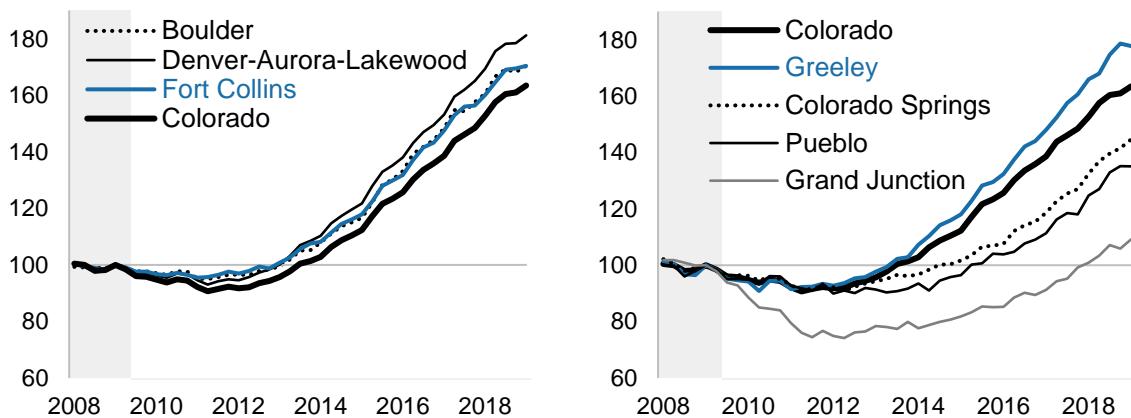
Regional home prices. Figure 29 compares growth in home price indices for Colorado, the U.S., and major Colorado metropolitan areas. Home price appreciation has moderated in recent months in the metro Denver area as interest rates have cooled the appetite for mortgages and buyers are establishing price ceilings by walking away from potential purchases (Figure 29, right and left). Through March of 2019, quarter-over-quarter gains slowed to a crawl in the higher cost areas of the state, including Denver, Boulder, and Fort Collins metro areas, while other more affordable areas of the state, including Greeley, Colorado Springs, and Pueblo metro areas, continue to rise (Figure 29, bottom).

Figure 29
Metro Denver Region Home Price Indices



Source: S&P Dow Jones Indices LLC (Case-Shiller Home Price Index). Data are seasonally adjusted and through March 2019.

FHFA Home Price Indices: Regional Comparisons



Source: U.S. Federal Housing Finance Agency (FHFA). Data are through the first quarter of 2019.

Northern Region

The northern region includes two of the best performing economies in the state: those of Weld and Larimer counties. Several years of strong growth has led to steady increases in the number of employees and a stable unemployment rate. The rebound in the energy sector is adding momentum to the Weld County economy, while momentum in Larimer County remains strong based on population growth in the region. Population growth and a strong labor market have boosted demand for housing, while nonresidential real estate has taken a pause after robust growth in 2018. Table 21 shows economic indicators for the northern region.



Table 21
Northern Region Economic Indicators
Weld and Larimer Counties

	2015	2016	2017	2018	YTD 2019
Employment Growth¹					
Fort Collins-Loveland MSA	4.0%	3.8%	3.7%	2.7%	3.2%
Greeley MSA	-0.2%	-0.3%	-0.4%	2.4%	2.9%
Unemployment Rate²					
Fort Collins-Loveland MSA	3.3%	2.8%	2.3%	2.8%	2.9%
Greeley MSA	3.8%	3.3%	2.6%	3.0%	3.0%
State Cattle and Calf Inventory Growth³					
State Cattle and Calf Inventory Growth ³	-4.4%	1.0%	6.7%	2.6%	7.6%
Natural Gas Production Growth⁴					
Natural Gas Production Growth ⁴	44.3%	14.6%	5.6%	18.9%	-
Oil Production Growth⁴					
Oil Production Growth ⁴	39.4%	-7.3%	13.5%	36.0%	-
Housing Permit Growth⁵					
Fort Collins-Loveland MSA Total	-8.1%	47.9%	-44.4%	-1.5%	190.0%
Fort Collins-Loveland MSA Single Family	1.3%	-2.9%	78.0%	21.3%	28.2%
Greeley MSA Total	-3.5%	-7.8%	-11.8%	47.0%	-27.2%
Greeley MSA Single Family	3.8%	-9.9%	62.5%	38.2%	25.8%
Nonresidential Construction Growth⁶					
Value of Projects	32.7%	1.8%	29.2%	65.2%	-89.5%
Square Footage of Projects Level (Thousands)	19.8% 3,983	-14.8% 3,393	17.8% 3,996	-26.4% 2,941	-45.2% 560
Number of Projects Level	-3.9% 248	11.7% 277	2.5% 284	12.0% 318	2.4% 85

MSA = Metropolitan statistical area. N/A=Not Available.

¹U.S. Bureau of Labor Statistics, CES (establishment survey). Seasonally adjusted. Data through April 2019.

²U.S. Bureau of Labor Statistics, LAUS (household survey). Seasonally adjusted. Data through March 2019.

³National Agricultural Statistics Service. Cattle and calves on feed through March 2019.

⁴Colorado Oil and Gas Conservation Commission. Data through December 2018.

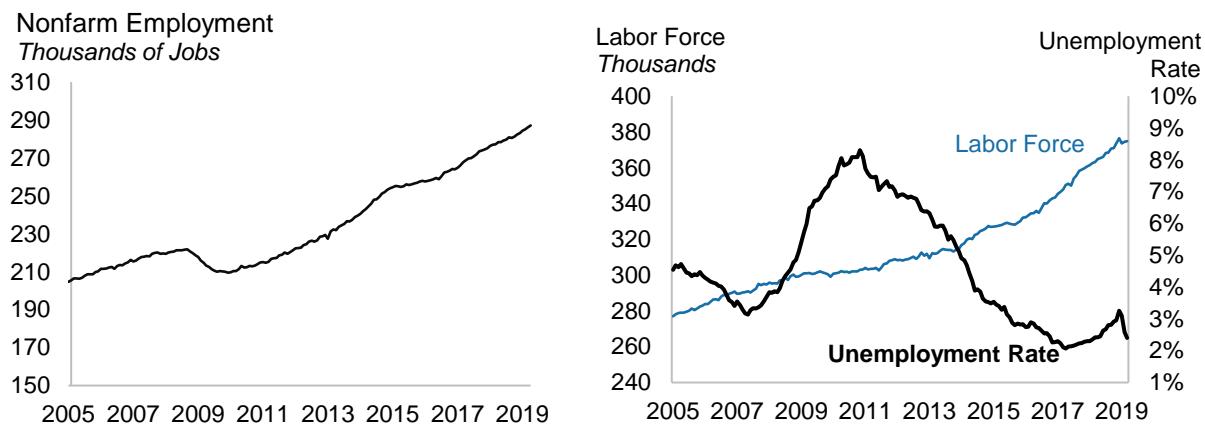
⁵U.S. Census Bureau. Growth in the number of residential building permits. Data through March 2019.

⁶F.W. Dodge. Data through April 2019.

Labor market. The region's labor market continues to grow faster than the state as a whole, with accelerating employment growth and a stable unemployment rate. The region's two metropolitan statistical areas (MSAs), Fort Collins-Loveland and Greeley, experienced employment growth of 3.2 percent and 2.9 percent, respectively. Employment growth in the Greeley MSA has recovered since 2017 due increased oil prices and the resulting rebound in the energy sector. Employment

growth in the Fort Collins-Loveland MSA continues to expand with population and a strong regional economy. Area unemployment is stable as employment gains keep pace with growth in the labor force. Figure 30 shows employment trends for the northern region metro areas.

Figure 30
Northern Region Labor Market Activity

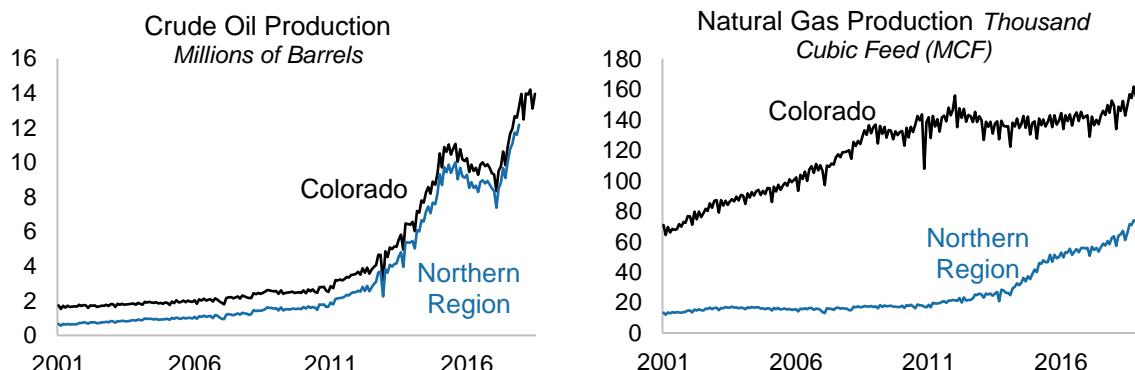


Source: U.S. Bureau of Labor Statistics; CES. Data are seasonally adjusted and are through April 2019.

Agriculture. The northern region produces about a quarter of the value of Colorado's agricultural products due in large part to the livestock industry in Weld County. Despite tariffs on agricultural commodities and the reshuffling of global supply chains, the number of cattle and calves on feed increased 7.6 percent year-to-date through March 2019 over year-ago levels. Drought conditions in 2018 reduced forage on grazing land, increasing the demand for hay to feed cattle herds. In Colorado, the price of a ton of alfalfa hay was \$240.00 in March 2019, a \$50.00 increase in price since March 2018.

Energy sector. Oil production in the northern region, particularly in Weld County, has dominated statewide production for over a decade (Figure 31, left). Oil production continues to climb, increasing 36.0 percent in 2018. This represents a 204.5 percent increase in production since 2013 due to the intensive exploration and development in the Denver-Julesburg Basin. Natural gas production in the northern region continues to increase as the natural gas produced in conjunction with oil wells is captured and sold on the market; natural gas in the northern region increased 18.9 percent in 2018 (Figure 31, right).

Figure 31
Colorado Energy Production

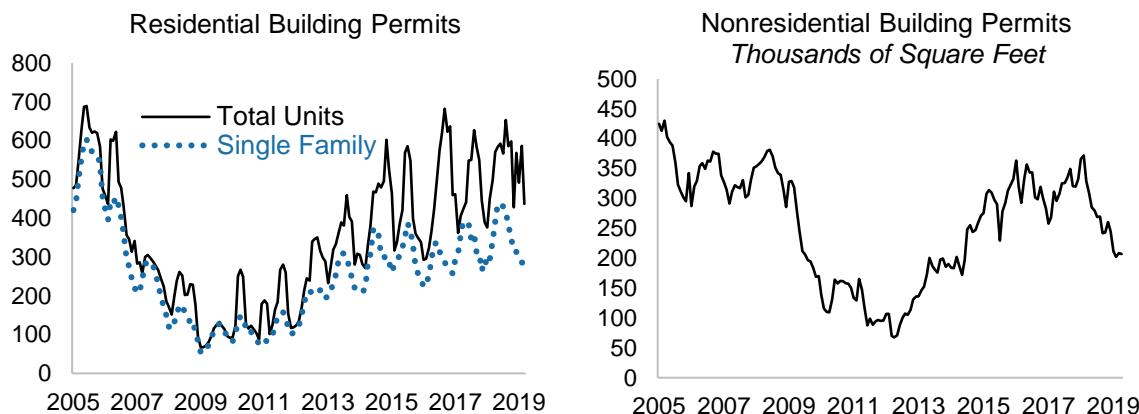


Source: Colorado Oil and Gas Conservation Commission. Monthly data through December 2018.

Housing. The housing markets in Larimer and Weld counties have distinct patterns driven primarily by the specific economic conditions in the cities of Fort Collins and Greeley. Residential construction in Larimer County has been hampered by a limited supply of buildable lots in the last several years. In response to limited supply, a number of new developments have gone through the planning process recently, opening up agricultural land to new home construction, resulting in a 28.2 percent increase in single-family residential permits issued year-to-date through March 2019 compared with the same period in 2018 (Figure 32, left). Total residential construction permits increased by a robust 190.0 percent due to several large apartment complexes breaking ground. Residential construction has been stronger in Weld County, as the recovered oil industry and more available land has allowed single family permits to increase 25.8 percent in the first three months of 2019. Following strong activity in 2018, multi-family permits fell, leading to a 27.2 percent decline in total residential construction permits between January and March of 2019 compared with the same period in 2018.

Nonresidential construction. Activity in the nonresidential construction industry is also tied to the oil and gas industry. The value of nonresidential construction projects increased 65.2 percent in 2018 due to the construction of a new oil and gas processing facility. Year-to-date in 2019, the value of nonresidential construction projects declined 89.5 percent from the high base in 2018 (Figure 32, right). Nonresidential construction activity is volatile and will likely receive a boost as there are several large hotels planned in Fort Collins that are just beginning the permitting process, which will likely be reflected in 2019 permitting activity.

Figure 32
Northern Region Construction Activity



Source: U.S. Census Bureau. Data shown as three-month moving averages. Data are not seasonally adjusted and are through March 2019.

Source: F.W. Dodge. Data shown as twelve-month moving averages. Data are not seasonally adjusted and are through April 2019.

Pueblo – Southern Mountains Region

The Pueblo – Southern Mountains region includes five southern Front Range counties surrounding the City of Pueblo. After two years of solid growth, the region's labor market activity slowed in 2018 and has slowed further in 2019. However, the region's relatively affordable housing continues to attract people to the area, assisting the residential real estate market. The City of Pueblo's convention center expansion is expected to support economic activity in the region this year. In addition, recent successes in attracting new, high tech industries to the region are expected to contribute to economic growth. Indicators for the regional economy are presented in Table 22.

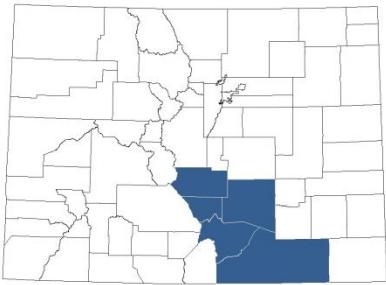


Table 22
Pueblo Region Economic Indicators
Custer, Fremont, Huerfano, Las Animas, and Pueblo Counties

	2015	2016	2017	2018	YTD 2019
Employment Growth					
Pueblo Region ¹	0.9%	2.8%	2.7%	1.0%	0.6%
Pueblo MSA ²	2.0%	1.8%	1.1%	0.1%	-0.2%
Unemployment Rate ¹	5.7%	4.8%	4.1%	5.0%	5.1%
Housing Permit Growth ³					
Pueblo MSA Total	69.4%	6.0%	9.2%	69.8%	-20.3%
Pueblo MSA Single Family	29.9%	29.9%	22.3%	61.4%	-20.3%
Nonresidential Construction Growth ⁴					
Value of Projects	2.6%	-22.6%	-64.5%	263.7%	-86.4%
Square Footage of Projects	14.6%	-3.8%	-52.6%	182.3%	-97.9%
Level (<i>Thousands</i>)	355	341	162	457	7
Number of Projects	-18.6%	50.0%	-72.2%	65.0%	-57.1%
Level	48	72	20	33	6

MSA = Metropolitan statistical area (Pueblo County only).

¹U.S. Bureau of Labor Statistics, CES (establishment survey). Seasonally adjusted. Data through April 2019.

²U.S. Bureau of Labor Statistics, LAUS (household survey). Seasonally adjusted. Data through March 2019.

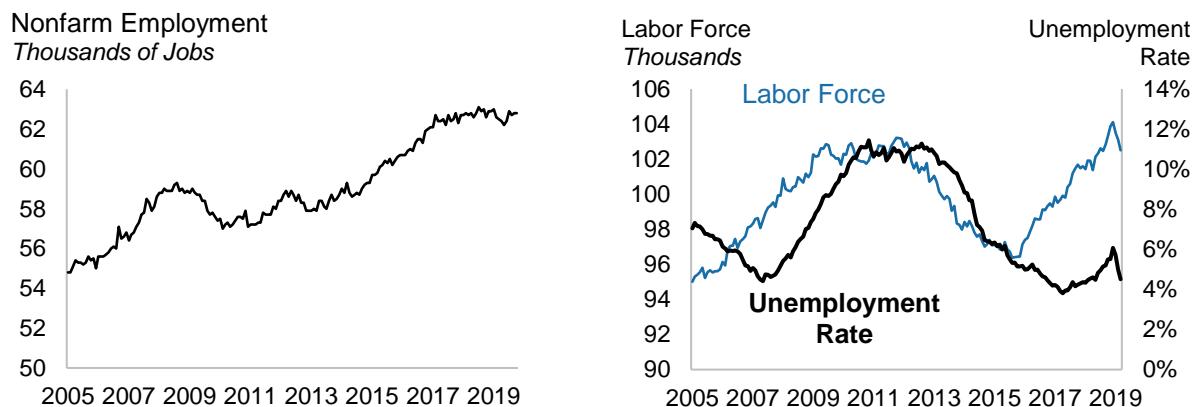
³U.S. Census. Growth in the number of residential building permits. Data through March 2019.

⁴F.W. Dodge. Data through April 2019.

Labor market. After strong gains in 2016 and 2017, the region's labor market decelerated in 2018. Recent closures of several retailers hindered employment growth and pushed up the region's unemployment rate. In 2018, the Pueblo region added almost 1,000 new jobs, a slight increase of 1.0 percent, but lower than the 2.7 percent improvement from the year prior. Job growth in region is up slightly at 0.6 percent through the first three months of this year compared to the same period one year prior. In the Pueblo Metropolitan Statistical Area, which only includes Pueblo County, job gains were relatively flat in 2018, and have declined slightly through the first four months of the year. Government, health services, and retail continue to be the top-three sources of jobs in the county. Several planned projects are expected to support labor market activity in the current year. EVRAZ, a producer of engineered steel products, is considering a \$500 million expansion and modernization of its Pueblo steel mill, and Xcel Energy has plans to convert its Comanche coal fired power plant to include large solar farms.

The collapse of the Pueblo steel industry in the 1980s has left a long legacy for the region's economy. In the wake of industry collapse, the regional economy has diversified slowly, but a void remains unfilled. Public sector jobs comprise a significant share of area employment. Additionally, health care providers, institutions of higher education, and state correction facilities offer work for many area residents. The area economy has experienced steady improvements in labor market activity since 2014 (Figure 33). Yet, the area employment to population ratio remains low and the regional unemployment rate remains elevated relative to the statewide average. Through April 2019, the unemployment rate averaged 5.1 percent, while the statewide rate averaged 3.5 percent over the same period.

Figure 33
Pueblo Region Labor Market Trends

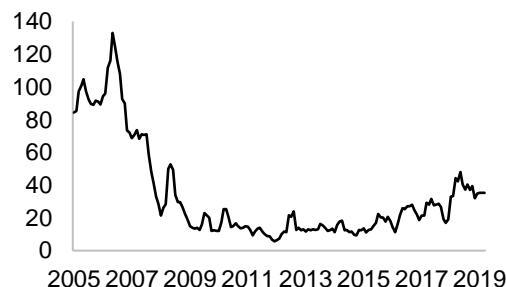


Source: U.S. Bureau of Labor Statistics; LAUS. Data prior to 2010 adjusted by Legislative Council Staff. Data are seasonally adjusted and are through March 2019.

Housing. The Pueblo County residential real estate market has cooled through the first four months of the year after posting strong gains in 2017 and 2018 (Figure 34). Total housing permits were down 20.3 percent through March 2019 from the same period one year prior. The slowdown in the Pueblo housing market parallels the state and other regions. Rising mortgage interest rates in the last quarter of 2018 and weather conditions have contributed to the slowdown in the market. However, a relatively affordable housing market compared with the northern and metro Denver regions should continue to boost demand for housing permits in the region. The April 2019 single family median sales price in Pueblo County was \$199,000, compared to \$505,250 in the Metro Denver region, according to data from the Colorado Association of Realtors.

Nonresidential construction. Following two years of mixed data in 2016 and 2017, nonresidential construction activity increased considerably in 2018. Amusement and public improvement-related projects have provided most of the lift for the region. The City of Pueblo has started construction on a convention center expansion along the Historic Arkansas Riverwalk. Through this project, the city is adding a large exhibit hall and Professional Bull Riders-anchored sports performance center to the

Figure 34
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 March 2019.

Pueblo Convention Center, a three-story parking garage across the street from the convention center, and a Gateway Plaza outdoor space. The total cost for the improvements is projected to top \$30 million. The bulk of the project will be paid for by state sales taxes under the state Regional Tourism Act program and state and federal grants. Nonresidential construction is down through April 2019 compared to the same period in 2018. The decline is primarily from coming off high levels from the same period one year prior.

Colorado Springs Region

The vibrant Colorado Springs economy continues to benefit from a virtuous cycle of economic activity and job growth. After robust growth in 2018, construction activity has slowed at the start of 2019, but is expected to remain at elevated levels. The attraction of a strong job market, outdoor recreation, and comparatively lower real estate prices than the northern Front Range continue to bring young professionals into the area labor force. The regional economy, which includes all of El Paso County, has a large public sector presence, supporting area defense operations, higher education institutions, and health care facilities. Increasingly diverse private sector growth also continues to support the area economy. Indicators for the regional economy are presented in Table 31.



Table 31
Colorado Springs Region Economic Indicators
El Paso County

	2015	2016	2017	2018	YTD 2019
Employment Growth ¹					
Colorado Springs MSA	3.3%	2.9%	1.8%	2.2%	1.6%
Unemployment Rate ²	4.6%	3.7%	3.1%	4.0%	4.0%
Housing Permit Growth ³					
Total	-0.4%	41.3%	-3.9%	34.2%	-8.7%
Single Family	13.3%	19.7%	6.7%	25.9%	-26.0%
Nonresidential Construction Growth ⁴					
Value of Projects	-1.0%	48.9%	-22.6%	13.9%	-47.6%
Square Footage of Projects Level (Thousands)	-0.2%	26.1%	10.5%	4.9%	-36.9%
Number of Projects Level	1,865	2,353	2,599	2,725	387
	13.5%	11.6%	30.0%	-2.4%	-19.2%
	379	423	550	537	122

MSA = Metropolitan statistical area.

¹U.S. Bureau of Labor Statistics, CES (establishment survey). Seasonally adjusted. Data through April 2019.

²U.S. Bureau of Labor Statistics, LAUS (household survey). Seasonally adjusted. Data through March 2019.

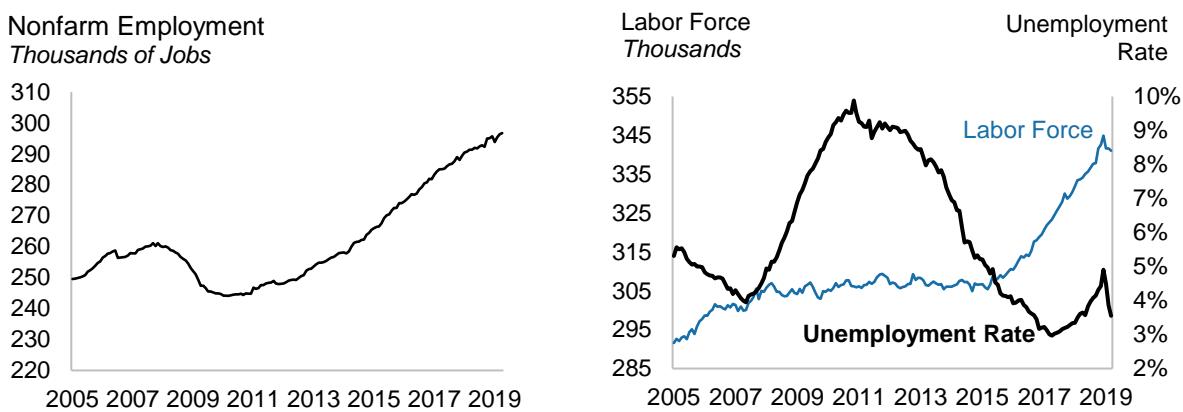
³U.S. Census. Growth in the number of residential building permits. Data through March 2019.

⁴F.W. Dodge. Data through April 2019.

Labor market. The Colorado Springs labor market continues to add jobs through the first four months of the year after posting a solid 2.2 percent increase in 2018 (Figure 35, left). Job growth has been broad-based across industries, with population in-migration supporting demand for new construction, retail trade activity, and jobs in leisure and hospitality. Relatively affordable housing continues to boost in-migration to the region, which has brought new workers into the labor force over the past two years (Figure 35, right). The region's unemployment rate ticked up slightly to 4.0 percent in 2018, as the region's labor force increased. Through the first three months of this year, the region's unemployment rate has averaged 4.0 percent but has been steadily declining since the beginning of the year.

Tax collections. The strong labor market, in-migration, and tourism have supported growth in retail sales in the region. According to reports released by the City of Colorado Springs, revenue from the city's general sales and use tax has increased 5.0 percent through April over the prior year. Tax statistics point to strong contributions from auto sales and tourism-related activity, including hotel, retail, and restaurant sales.

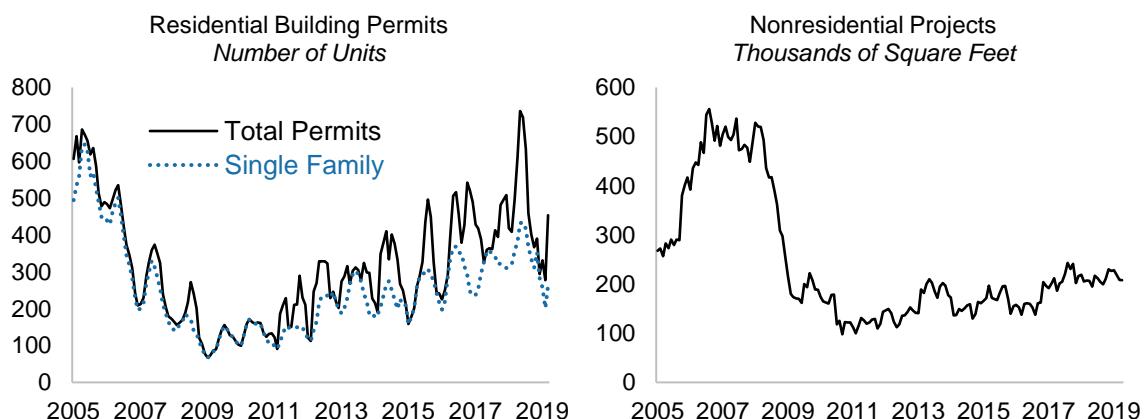
Figure 35
Colorado Springs Labor Market Activity



Source: U.S. Bureau of Labor Statistics; CES data (left) are through April, LAUS data (right) are through March. Data are seasonally adjusted.

Housing. The Colorado Springs residential real estate market conditions remain strong through the first quarter of the year. However, the region's healthy economy and several years of robust home price gains have pushed the cost of living higher and affordable housing is becoming a concern. In April, the median sales price for a single family home in the region was \$329,500, up 8.0 percent from the previous year. The inventory of homes for sale in the region was down 14.6 percent in April, according to the Colorado Association of Realtors. Year-to-date, the number of residential permits issued in the region was 1,359, down 8.7 percent from the same period last year. However, the region is coming off a banner year in which the total amount of building permits issued increased by a robust 34.2 percent from 2017. Of the 1,359 permits issued, single family permits made up 58 percent of these construction applications (Figure 36, left). While still more affordable than real estate in the Denver metro region, Colorado Springs home prices continue to rise at solid rates as demand continues to outstrip supply. According to U.S. News & World Report, Colorado Springs was ranked as the nation's most desirable place to live in 2018.

Figure 36
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 March 2019.

Source: F.W. Dodge. Data shown as twelve-month moving averages. Data are not seasonally adjusted and are through April 2019.

Nonresidential construction. Relative to pre-recessionary levels, demand for new nonresidential construction has remained subdued throughout the recovery and expansion period, with a slow general upward trend (Figure 36, right). However, investment in nonresidential projects in the region gained momentum in 2018 and is expected to continue through 2019. The region is preparing to break ground on several projects at the U.S Olympic Museum, Air Force Academy Visitors Center, Hybl Center for Sports Medicine and Downtown Sports and Events Center. The new Olympic Museum in downtown Colorado Springs continues to take shape and is expected to open in 2020. Other major projects announced in the region and expected to start construction soon include the Weidner Field at Switchbacks Stadium, Robson Arena at Colorado College, and several new hotels in the downtown area of Colorado Springs.

San Luis Valley Region

Among the nine economic regions of the state identified in this forecast, the San Luis Valley has the state's smallest and oldest population, as well as its lowest household incomes. The economy of the region's six counties is largely agricultural. Nonfarm employers include commercial, health, and government services, as well as a small but resilient tourism sector. Economic data for the region are sparse, but those available suggest that the regional construction activity and employment growth has slowed in 2019. Economic indicators for the region are summarized in Table 32.



Table 32
San Luis Valley Region Economic Indicators
Alamosa, Conejos, Costilla, Mineral, Rio Grande, and Saguache Counties

	2015	2016	2017	2018	YTD 2019
Employment Growth ¹	4.0%	6.2%	4.5%	3.7%	0.7%
Unemployment Rate ¹	5.7%	4.5%	3.7%	4.4%	4.7%
San Luis Valley Agriculture District ²					
Barley					
Acres Harvested	52,100	NA	NA	NA	NA
Crop Value (\$/Acre)	\$879	NA	NA	NA	NA
Potatoes					
Acres Harvested	51,800	51,500	51,700	NA	NA
Crop Value (\$/Acre)	\$3,234	NA	NA	NA	NA
Housing Permit Growth ³	21.5%	-1.1%	16.8%	16.3%	-21.1%

NA = Not available.

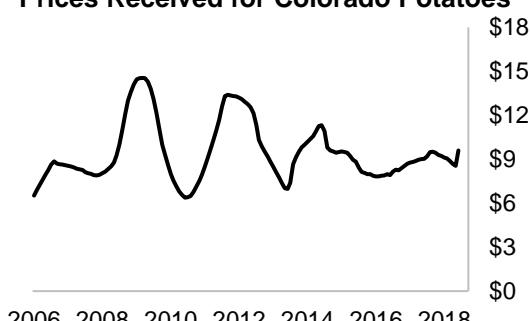
¹U.S. Bureau of Labor Statistics, LAUS (household survey). Seasonally adjusted. Data through March 2019.

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

³F.W. Dodge. Data through April 2019.

Agricultural industry. The San Luis Valley's agricultural sector relies mostly on the production of potatoes, and secondarily on barley. Drought in the state has abated, including in the San Luis Valley, which was consistently one of the driest regions in the state. Potato planting is on schedule through the end of May, but potato emergence is slightly behind due to colder conditions. Total potato shipments from the region are up 5 percent year-to-date over the same period last year, with shipment growth of about 28 percent in May alone over May 2018 (Figure 37). Demand has been down slightly, which may eventually push prices lower if yields are high this year. Barley emergence in the last week of May was at 95 percent, on track with last year. Barley prices are up slightly in April year-over-year, at \$4.66 per bushel, but Colorado prices remain lower than the nationwide average.

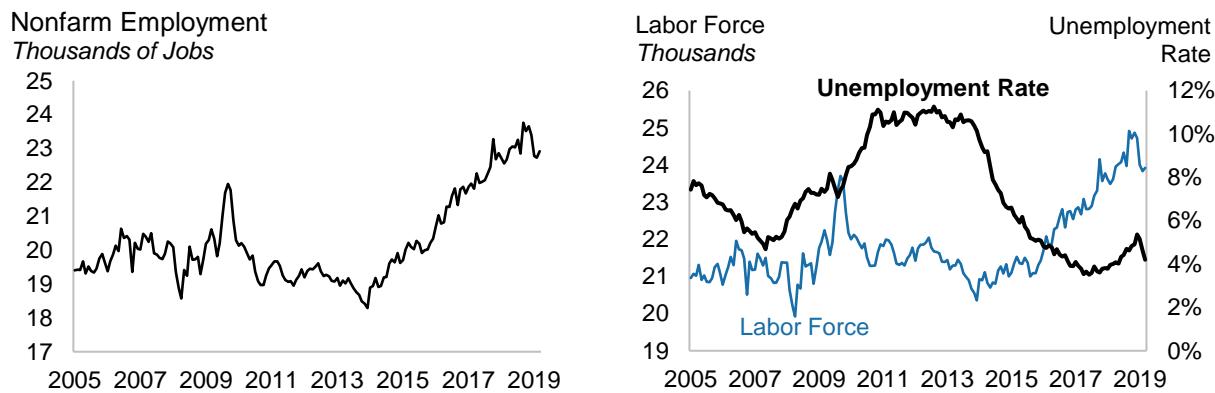
Figure 37
Prices Received for Colorado Potatoes



Source: National Agricultural Statistics Service. Data shown as twelve-month moving averages. Data through June 2018.

Labor market. In addition to the agricultural industry, tourism, a large retirement community, and government services, including Adams State University, support the San Luis Valley economy. Employment conditions in the region have cooled off from the frenetic pace over the last few years. Following employment growth of 3.7 percent in 2018, job growth in the first quarter of 2019 slowed to 0.7 percent and unemployment increase to 4.7 percent (Figure 38, left). While these figures suggest a slowdown in labor market activity, employment figures are more volatile in smaller regions such as the San Luis Valley and are subject to data revisions.

Figure 38
San Luis Valley 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 March 2019.

Housing and population growth. Housing permits issued in the San Luis Valley have declined by 21.1 percent through April this year after experiencing strong growth in 2017 and 2018. Population growth in the region is mixed, with Alamosa, Costilla, Mineral, and Saguache counties are projected to experience mostly positive net migration and natural population increases over the next few years, while Conejos and Rio Grande counties are expected to see declines in both migration and population growth, according to the Colorado State Demography Office. Single family home prices in Alamosa County rose over 18 percent year-over-year through April, but remain at about half of the statewide average, according to the Colorado Association of Realtors.

Tourism. Visits to the Great Sand Dunes National Park and Preserve have increased every year since 2013. Park visits are down about 4 percent year-over-year through April; however, this decrease is likely due to inclement weather in the earlier months of the year and may pick back up in the busier summer season. National forest land, recreation areas, and wetlands surround the national park, making the area close to Alamosa a destination for outdoor enthusiasts. Additionally, the Cumbres and Toltec Railroad, which leaves from Antonito, a town just south of Alamosa, attracts a large number of tourists during the summer season, bringing in millions of dollars to the remote region.

Southwest Mountain Region

The southwest mountain region comprises five counties in the southwest corner of the state. This area boasts a diverse economy, with significant contributions from agriculture, tourism, and natural gas extraction as well as typical regional services like health care and education. The region is coming off of three strong years of employment growth and two strong years of homebuilding, and now appears to have entered a period of slower growth consistent with a mature economic expansion. While the tourism industry took a hit with last year's fires and this year's federal government shutdown, the region was fortunate to have received tremendous snowfall during the winter, partially ameliorating years of pervasive drought. Economic indicators for the region are summarized in Table 33.

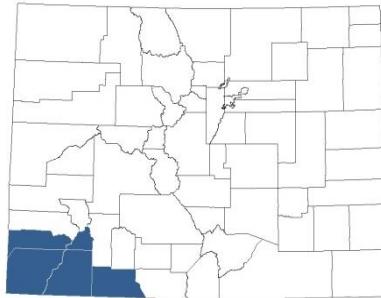


Table 33
Southwest Mountain Region Economic Indicators
Archuleta, Dolores, La Plata, Montezuma, and San Juan Counties

	2015	2016	2017	2018	YTD 2019
Employment Growth ¹	0.7%	3.9%	2.4%	2.0%	0.9%
Unemployment Rate ¹	4.0%	3.4%	2.8%	3.5%	3.8%
Housing Permit Growth ²	17.6%	-4.6%	29.8%	24.1%	-63.9%
National Park Recreation Visits ³	10.2%	7.5%	4.4%	-7.6%	-28.4%

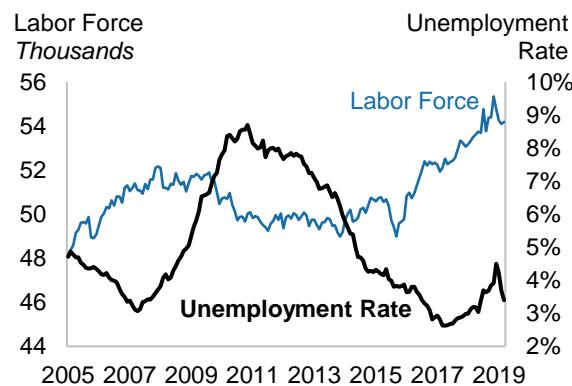
¹U.S. Bureau of Labor Statistics, LAUS (household survey). Seasonally adjusted. Data through March 2019.

²F.W. Dodge. Data through April 2019.

³National Park Service. Data through April 2019. Recreation visits for Mesa Verde National Park and Hovenweep National Monument.

Labor market. Even after years of expansion, the regional job market is still motivating more workers to enter the labor force. At the close of 2018, regional employers had hired about 800 more workers than were employed in late 2017, boosting employment by about 2.0 percent as shown in Figure 39. The rate of employment growth just exceeded the region's 1.9 percent population growth rate. However, the regional unemployment rate climbed as payroll increases failed to match the pace of growth in the regional labor force, 2.7 percent. These trends suggest that the regional job market is still absorbing some labor market slack, even though job growth is now occurring at post-peak growth rates.

Figure 39
Southwest Mountain Region Labor Market



Source: U.S. Bureau of Labor Statistics; LAUS. Data prior to 2010 adjusted by Legislative Council Staff. Data are seasonally adjusted and are through March 2019.

To date in 2019, employment growth has slowed to 0.9 percent and the unemployment rate has ticked up further, from 3.5 percent to 3.8 percent. However, household survey data for a region of this size are subject to significant revisions in the months immediately following their release. The State

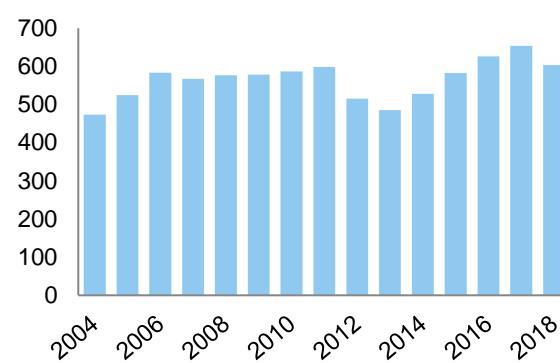
Demography Office projects that the regional population will top 100,000 people for the first time ever this year, and that elevated rates of net migration – between 1,500 and 2,000 residents per year – will sustain population growth at rates faster than those for the state. Net migration is expected to provide the greatest boost to La Plata County (roughly 1,000 per year), followed by Montezuma County (450 per year) and Archuleta County (250 per year).

Housing. The outlook for regional residential construction brightened significantly over the past two years, as the number of residences permitted by local authorities increased by about 30 percent in 2017 and by an additional 24 percent in 2018. Housing developers obtained permits for 771 residential units in 2018, the most since 2006. As shown in Table 33, the number of housing permits issued through April declined by nearly two-thirds relative to the number of housing permits issued between January and April 2018. However, the difference is largely attributable to a single residential development that was permitted last February, causing that month to post the highest-ever number of permitted residential units in the region.

Tourism. After a rough showing in 2018, the regional tourism industry is poised for a recovery. Last year's regional tourism performance was marred by a devastating summer fire season and associated closures. Figure 40 shows visitations to Mesa Verde National Park and Hovenweep National Monument, which were depressed last year as a result of closures elsewhere despite not closing themselves. National park visitations struggled again in the early months of this year as a result of closures associated with the federal government shutdown in January. However, the outlook for the region is positive. Fortuitous winter weather should support tourism and suppress fires, and regional tourism operators should expect a rebound.

A bounty of winter snowfall has remedied years of severe drought in the region. Peak winter snowpack in the San Miguel, Dolores, Animas, and San Juan River Basins reached 154 percent of median, the most exceptional showing among basins statewide. High snowpack levels entail isolated flooding concerns while also promising surplus water in most of the region's rivers and streams, a boon to agricultural, industrial, and recreational users alike. Lusher forests also promise reduced fire danger, a welcome reprieve after last year's disastrous fire season.

Figure 40
Southwest Mountain National Park Visits
Thousands



Source: National Park Service. Data through December 2018.

Western Region

The western region has a diverse economy. Key industries in the northern counties of Mesa, Garfield, Moffat, Rio Blanco, and Routt include 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. In 2019, the region's economy continued to build on momentum from 2017 and 2018 as the area offers a more affordable option than the Front Range. Relatively affordable housing, recreation opportunities, 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 34.

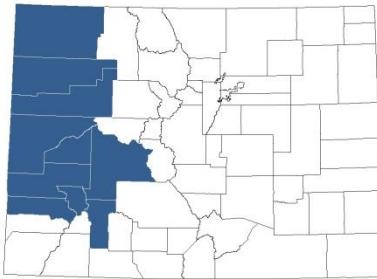


Table 34
Western Region Economic Indicators

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

	2015	2016	2017	2018	YTD 2019
Employment Growth					
Western Region ¹	-0.3%	2.1%	3.7%	3.0%	2.5%
Grand Junction MSA ²	-0.2%	-0.3%	-0.4%	2.4%	2.9%
Unemployment Rate ¹	4.9%	4.4%	3.3%	3.7%	3.8%
Natural Gas Production Growth ³	-12.8%	-6.7%	-2.1%	1.3%	NA
Housing Permit Growth ⁴	24.7%	6.7%	42.8%	15.5%	-16.7%
Nonresidential Construction Growth ⁴					
Value of Projects	-37.8%	16.4%	-33.4%	-2.2%	1,017.5%
Square Footage of Projects Level (<i>Thousands</i>)	-41.0%	-3.9%	-18.2%	49.6%	221.2%
Number of Projects Level	602	579	474	53	170
	-16.4%	41.1%	-38.0%	20.4%	7.1%
	56	79	49	14	15

MSA = Metropolitan statistical area. NA = Not Available.

¹U.S. Bureau of Labor Statistics, LAUS (household survey). Seasonally adjusted. Data through March 2019.

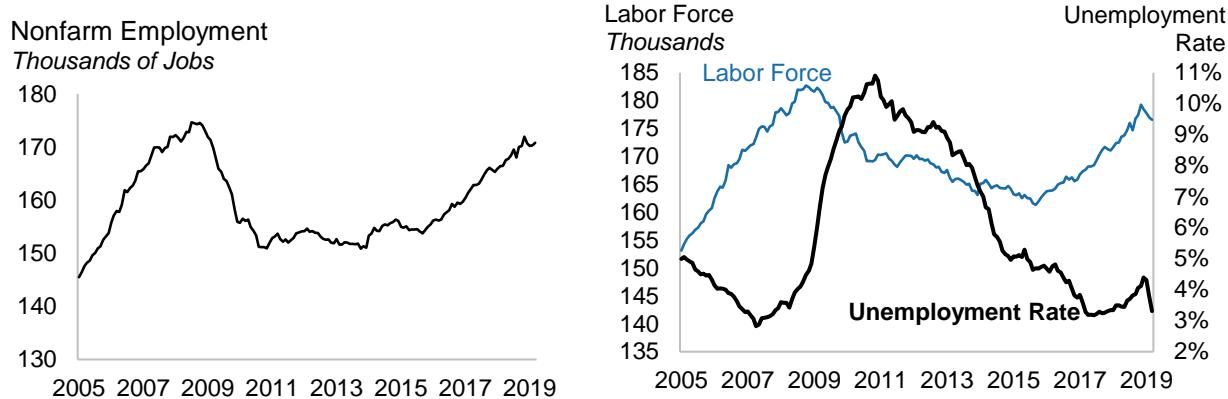
²U.S. Bureau of Labor Statistics, CES (establishment survey). Seasonally adjusted. Data through April 2019.

³Colorado Oil and Gas Conservation Commission. Data through December 2018.

⁴F.W. Dodge. Data through April 2019.

Labor market. The region's labor market continued to add jobs through the first three months of 2019 and the unemployment rate held steady. Compared with the same period in the previous year, employment increased 2.5 percent across the region in the first quarter of 2019 and 2.9 percent in Grand Junction, the largest city in the region. The region's unemployment rate began to rise at the end of 2018 and averaged 3.8 percent in the first three months of 2019. Despite healthy employment growth, new entrants into the labor force slightly outpaced the new jobs. State and local governments and hospitals are some of the largest employers in the region. Figure 41 shows labor market activity in the western region.

Figure 41
Western Region Labor Market Activity



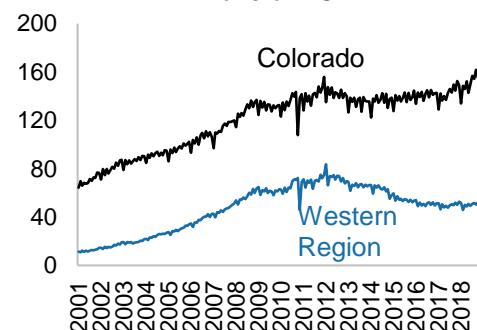
Source: U.S. Bureau of Labor Statistics; LAUS. Data prior to 2010 adjusted by Legislative Council Staff. Data are seasonally adjusted and are through March 2019.

Construction. Residential construction activity declined 16.7 percent in the first three months of 2019 due to wet winter weather. Housing starts will likely pick up as demand for housing remains strong in Grand Junction and the rest of the western region due to a lower cost of living compared to many other areas of the state. The region's nonresidential construction sector received a boost in March 2019 from two large projects: a new dorm building at Colorado Mesa University and a new nursing home in Rifle. While these large projects are unlikely to be repeated, they point to continued demand for nonresidential construction from a growing population in the western region.

Energy sector. 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 in the region increased 1.3 percent in 2018, showing signs of growth for the first time in five years (Figure 42). The recent uptick in production has gone to power plants as natural gas continues to be an attractive fuel to replace coal for electricity generation. The approval of the Jordan Cove liquefied natural gas export facility in Oregon may provide a long-term market for Piceance Basin natural gas; however, any exports are several years off. New exploration and development of natural gas resources may increase following construction of the facility and supporting infrastructure.

National park visitors. The number of people that visited the Black Canyon of the Gunnison National Park declined 0.6 percent in 2018 and declined 33.6 percent in the first four months of 2019 compared with the same period last year. The federal government shutdown through January 2019 closed the park and led to the drop in visitation to the park year-to-date in 2019. Visitations to the Colorado National Monument near Grand Junction increased 0.1 percent in 2018 and increased 2.5 percent in the first four months of 2019 despite the government shutdown. Road construction in the park hampered visitation in the first half of 2018 as the third phase of construction on Rim Rock Drive was completed on June 28, 2018.

Figure 42
Natural Gas Production
Millions of BCF



Source: Colorado Oil and Gas Conservation Commission. Data through December 2018.
BCF = Billion cubic feet.

Mountain Region

The mountain region comprises twelve counties stretching from Poncha Pass north to the Wyoming border. The region is dependent on a robust tourism industry, yet smaller economic contributors – including mining and agricultural producers – make important contributions as well. A snowy winter season supported strong ski tourism, buoying the mountain economy at the start of the year. Survey responses for the early months of 2019 suggest that the regional labor market has matured, and construction has sagged a bit from prior year highs. Economic indicators for the mountain region are presented in Table 35.



Table 35
Mountain Region Economic Indicators

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

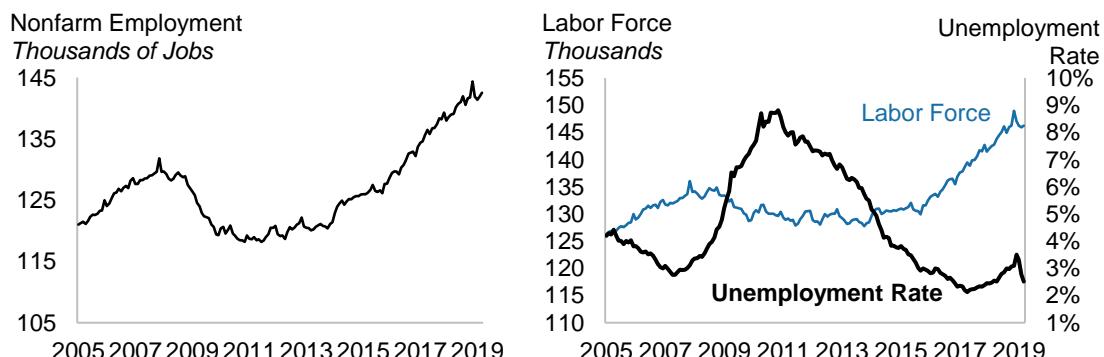
	2015	2016	2017	2018	YTD 2019
Employment Growth ¹	1.6%	3.5%	4.2%	3.0%	2.2%
Unemployment Rate ¹	3.3%	2.7%	2.3%	2.8%	2.9%
Housing Permit Growth ²	-7.6%	29.0%	-10.7%	73.9%	-39.7%
Nonresidential Construction Growth ²					
Value of Projects	44.0%	-31.3%	315.9%	-77.4%	-83.2%
Square Footage of Projects	-62.0%	18.7%	254.7%	-64.2%	-72.5%
Level (<i>Thousands</i>)	514	609	2,162	774	79
Number of Projects	-33.3%	52.5%	1.6%	16.1%	-81.0%
Level	40	61	62	72	4

¹U.S. Bureau of Labor Statistics. LAUS (household) survey. Seasonally adjusted. Data through March 2019.

²F.W. Dodge. Data through April 2019.

Labor market. Surveys of the region's households suggest that growth in regional nonfarm employment has decelerated since peaking in 2017 (Figure 43, left). The mature labor market is absorbing less labor market slack than previously (Figure 43, right), leading to stabilization in the region's state-low unemployment rate. Continued deceleration in employment growth is expected, consistent with statewide trends, dissipating labor market slack, and contributing to higher wage pressures in the region's highly service-oriented and often costly economy.

Figure 43
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 March 2019.

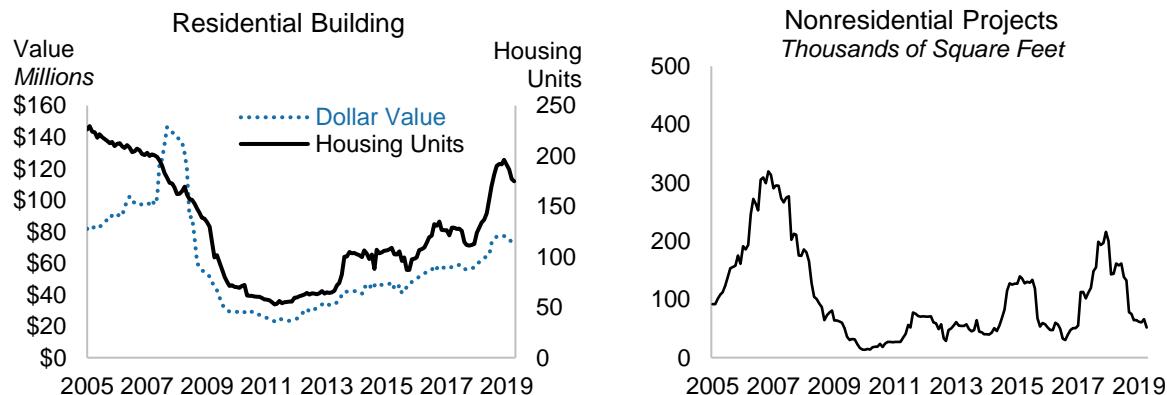
Tourism. The region's ski industry benefited from healthy winter snowfall, leading to positive downstream effects for lodging and retail establishments. The *Aspen Daily News* reported in May that Aspen's nominal retail sales figure increased 7.9 percent in March 2019 compared with March 2018, to reach an all-time record for the busy winter month. Ski season lodging occupancy likewise reached an all-time high at Pitkin county resorts in Aspen and Snowmass. Persistently high snowpack and heavy spring precipitation is expected to limit summer fire danger and offer benefits to agricultural and recreational water users through autumn.

Housing. The number of permits issued for regional residential construction soared in 2018, easily the strongest year for homebuilding during the present expansion. Through April, the number of permitted residential projects has sunk nearly 40 percent in 2019 compared with the same period in 2018, which may suggest that regional homebuilding, tracked in the left panel of Figure 44, has already peaked. Housing permit data from rural counties like those in the mountain region are often inconsistent, and another large development could swing the trajectory of the regional housing stock this year.

Housing requirements are driven both by demographic trends and demand for vacation properties in resort areas. While the region's population is growing at a rate similar to the states, variance from county to county is significant. Data from the State Demography Office (SDO) indicate that Teller and Chaffee counties – the region's fourth and fifth most populous, respectively – attracted the most new residents on net last year, beating the larger, higher-cost communities in Eagle, Summit, and Routt counties. The SDO also estimates that Pitkin County, the state's most expensive, has posted three years of net out-migration, a trend expected to continue through 2019 and into 2020.

Nonresidential construction. The right panel of Figure 44 presents the trajectory of permits issued for nonresidential construction projects, measured by their square footage. Regional commercial construction has sagged since 2017, when permits were issued for the large Monarch Casino Black Hawk expansion project set to be completed later this year. Only four nonresidential projects were permitted between January and April, a significant contraction in development from the pace set in prior years. That said, the timing of permit issuances is often inconsistent and additional data may confirm or contradict the recent, sudden deceleration.

Figure 44
Mountain Region Construction Activity



Source: F.W. Dodge. Data shown as twelve-month moving averages. Data are not seasonally adjusted and are through April 2019.

Eastern Region

The eastern region includes Colorado's 16 rural plains counties. Agriculture is the primary industry in the region with retailers, other locally-focused businesses, and government operations supporting area farming and ranching communities. A tight labor market and ongoing pressure on agricultural producers have slowed employment growth in the first quarter of the year. Crop prices have been on the upswing over the last few months, and cattle production is increasingly robust. Economic indicators for the region are presented in Table 36.

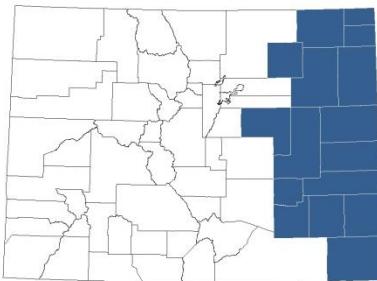


Table 36
Eastern Region Economic Indicators

Baca, Bent, Logan, Cheyenne, Crowley, Elbert, Kiowa, Kit Carson, Lincoln, Morgan, Otero, Phillips, Prowers, Sedgwick, Washington, and Yuma Counties

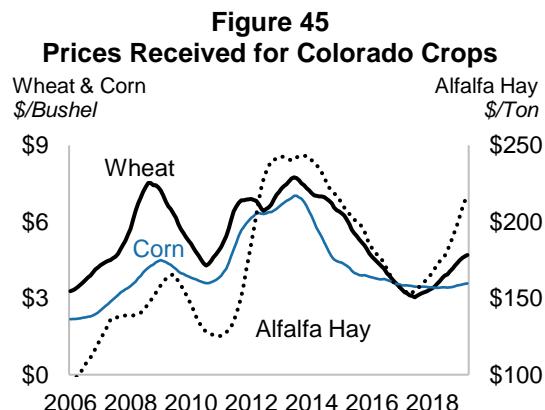
	2015	2016	2017	2018	YTD 2019
Employment Growth ¹	2.2%	4.1%	3.4%	3.5%	1.0%
Unemployment Rate ¹	3.5%	2.9%	2.3%	2.9%	3.0%
Crop Price Changes ²					
Wheat (\$/Bushel)	-25.6%	-27.9%	-2.9%	34.6%	20.6%
Corn (\$/Bushel)	-13.1%	-7.7%	-3.4%	2.8%	6.8%
Alfalfa Hay (Baled, \$/Ton)	-13.9%	-15.5%	4.8%	23.8%	30.9%
Livestock ²					
State Cattle and Calf Inventory Growth	-4.4%	1.0%	6.7%	2.6%	7.6%
Milk Production	3.9%	5.2%	6.7%	8.8%	5.8%

¹U.S. Bureau of Labor Statistics, LAUS (household survey). Data through March 2019.

²National Agricultural Statistics Service. Data through March 2019.

Agriculture and livestock. The drought in the state has officially ended; however, the high levels of moisture and late season snow present different challenges to producers, including delayed planting and crop emergence as well as freeze damage. The deepening trade war continues to impact farmers' supply chains and eat into farm profits, even with the subsidies announced by the federal government. Colorado beef exports are up over the last 12 months through March, with stronger demand from South Korea offsetting declines to Canada and Mexico.

Prices received for Colorado crops can be found in Figure 45. Corn prices remain relatively flat through the first quarter; however, futures are up to their highest levels in three years, as forecasts for ongoing wet conditions may limit acres harvested across the country this season. Alfalfa hay prices reached their highest prices received since 2013 at \$240 per ton from January through March. Demand remains elevated due to cattle and calf inventory growth, at 7.6 percent through the first quarter this year, on higher domestic and foreign demand for beef. Wheat prices have fluctuated within a small band, between

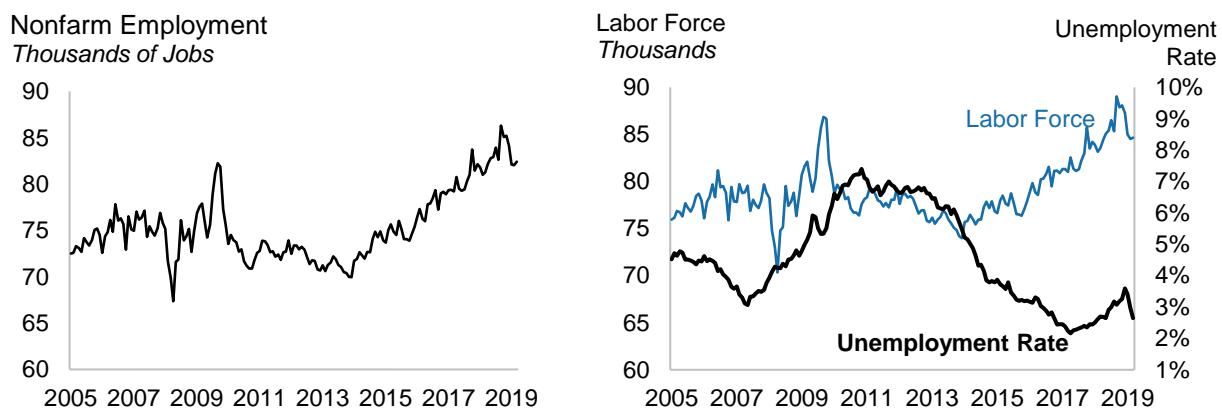


Source: National Agricultural Statistics Service. Data shown as twelve-month moving averages. Data through March 2019.

\$4 and \$5 per bushel, over the past year. Wheat stocks are higher going into this season and winter wheat yields are strong, creating an oversupply as demand has not kept pace.

Labor market. Over the last several years, much of the region has suffered from persistent out-migration and natural population decline, as younger families gravitate more towards urban areas, birth rates decline, and the remaining population ages. This has taken a toll on the labor force by squeezing an already tight labor market, putting upward pressure on wages, and leaving some agricultural producers without workers. Employment growth during the first quarter of 2019 shows slower growth at just 1 percent, continuing the moderation from the fourth quarter of 2018. Unemployment ticked up slightly to 3.0 percent during the first quarter. Labor market activity for the eastern region can be found in Figure 46.

Figure 46
Eastern 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 March 2019.

Housing. Despite the contraction of many rural community populations, counties bordering the northern region and the Front Range are seeing population growth, as former residents of larger, more expensive metro areas leave in search of more affordable housing. The median sales price for a home in Elbert County has risen from about \$330,000 in 2014 to almost \$500,000 in 2019, according to the Colorado Association of Realtors. Single family home prices in Morgan County began their ascent around mid-2017, rising from about \$145,000 in 2014 to almost \$250,000 in 2019, still well below the statewide median. The number of new listings are up about 24 percent year-to-date in 2019 compared to the same period last year, while Elbert County's new listings have decreased from last year.

Appendix: Historical Data

National Economic Indicators

Calendar Years	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018
GDP (\$ Billions) ¹	\$12,213.7	\$13,036.6	\$13,814.6	\$14,451.9	\$14,712.8	\$14,448.9	\$14,992.1	\$15,542.6	\$16,197.0	\$16,784.9	\$17,521.7	\$18,219.3	\$18,707.2	\$19,485.4	\$20,494.1
Percent Change	6.6%	6.7%	6.0%	4.6%	1.8%	-1.8%	3.8%	3.7%	4.2%	3.6%	4.4%	4.0%	2.7%	4.2%	5.2%
Real GDP (\$ Billions) ¹	\$14,406.4	\$14,912.5	\$15,338.3	\$15,626.0	\$15,604.7	\$15,208.8	\$15,598.8	\$15,840.7	\$16,197.0	\$16,495.4	\$16,899.8	\$17,386.7	\$17,659.2	\$18,050.7	\$18,566.4
Percent Change	3.8%	3.5%	2.9%	1.9%	-0.1%	-2.5%	2.6%	1.6%	2.2%	1.8%	2.5%	2.9%	1.6%	2.2%	2.9%
Unemployment Rate ²	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%	3.9%
Inflation ²	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%	2.4%
10-Year Treasury Note ³	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%	2.9%
Personal Income (\$ Billions) ¹	\$10,035.1	\$10,598.2	\$11,381.7	\$12,007.8	\$12,442.2	\$12,059.1	\$12,551.6	\$13,326.8	\$14,010.1	\$14,181.1	\$14,991.8	\$15,719.5	\$16,125.1	\$16,830.9	\$17,569.6
Percent Change	5.8%	5.6%	7.4%	5.5%	3.6%	-3.1%	4.1%	6.2%	5.1%	1.2%	5.7%	4.9%	2.6%	4.4%	4.4%
Wage & Salaries (\$ Billions) ¹	\$5,421.6	\$5,691.9	\$6,057.0	\$6,396.8	\$6,534.3	\$6,248.6	\$6,372.1	\$6,625.9	\$6,927.5	\$7,113.2	\$7,473.2	\$7,854.4	\$8,080.7	\$8,453.8	\$8,821.3
Percent Change	5.5%	5.0%	6.4%	5.6%	2.1%	-4.4%	2.0%	4.0%	4.6%	2.7%	5.1%	5.1%	2.9%	4.6%	4.3%
Nonfarm Employment (Millions) ²	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	149.1
Percent Change	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%	1.7%

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	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018
Nonfarm Employment (<i>Thousands</i>) ¹	2,225.1	2,278.7	2,330.3	2,349.6	2,244.2	2,220.9	2,257.7	2,311.8	2,380.3	2,463.5	2,540.8	2,601.5	2,660.6	2,725.4
Percent Change	2.1%	2.4%	2.3%	0.8%	-4.5%	-1.0%	1.7%	2.4%	3.0%	3.5%	3.1%	2.4%	2.3%	2.4%
Unemployment Rate ¹	5.0%	4.3%	3.7%	4.9%	7.3%	8.7%	8.4%	7.9%	6.9%	5.0%	3.8%	3.2%	2.7%	3.3%
Personal Income (\$ Millions) ²	\$174,772	\$188,803	\$201,227	\$207,773	\$198,147	\$204,692	\$222,572	\$236,687	\$248,959	\$271,101	\$284,143	\$289,621	\$306,411	\$323,767
Percent Change	6.9%	8.0%	6.6%	3.3%	-4.6%	3.3%	8.7%	6.3%	5.2%	8.9%	4.8%	1.9%	5.8%	5.7%
Per Capita Personal Income (\$) ²	\$37,732	\$39,997	\$41,889	\$42,492	\$39,851	\$40,549	\$43,502	\$45,637	\$47,308	\$50,746	\$52,228	\$52,372	\$54,646	\$56,846
Percent Change	5.6%	6.0%	4.7%	1.4%	-6.2%	1.8%	7.3%	4.9%	3.7%	7.3%	2.9%	0.3%	4.3%	4.0%
Wage & Salary Income (\$ Millions) ²	\$98,774	\$105,649	\$112,526	\$116,710	\$112,228	\$113,670	\$118,414	\$124,947	\$129,521	\$138,585	\$146,487	\$150,977	\$160,372	\$168,828
Percent Change	5.6%	7.0%	6.5%	3.7%	-3.8%	1.3%	4.2%	5.5%	3.7%	7.0%	5.7%	3.1%	6.2%	5.3%
Retail Trade Sales (\$ Millions) ³	\$65,492	\$70,437	\$75,329	\$74,760	\$66,345	\$70,738	\$75,548	\$80,073	\$83,569	\$90,653	\$94,920	NA	NA	NA
Percent Change	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	45,422	39,211	30,149	19,507	9,385	11,530	13,386	21,329	27,270	29,266	30,506	37,069	41,096	45,481
Percent Change	1.3%	-13.7%	-23.1%	-35.3%	-51.9%	22.8%	16.1%	59.3%	27.9%	7.3%	4.2%	21.5%	10.9%	10.7%
Nonresidential Construction (\$ Millions) ⁵	\$4,275	\$4,641	\$5,259	\$4,114	\$3,354	\$3,147	\$3,923	\$3,695	\$3,624	\$4,351	\$4,991	\$5,992	\$6,174	\$7,943
Percent Change	31.7%	8.6%	13.3%	-21.8%	-18.5%	-6.2%	24.7%	-5.8%	-1.9%	20.1%	14.7%	20.1%	3.0%	28.7%
Denver-Aurora-Lakewood Inflation 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%	2.7%
Population (<i>Thousands</i> , July 1) ⁴	4,632	4,720	4,804	4,890	4,972	5,048	5,122	5,194	5,270	5,351	5,452	5,541	5,616	5,696
Percent Change	1.2%	1.9%	1.8%	1.8%	1.7%	1.5%	1.5%	1.4%	1.5%	1.5%	1.9%	1.6%	1.4%	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-Aurora-Lakewood metro area.

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

³Colorado Department of Revenue. Data are not available after 2015.

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

⁵F.W. Dodge.