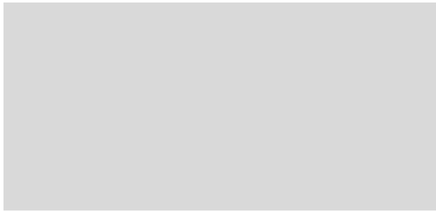
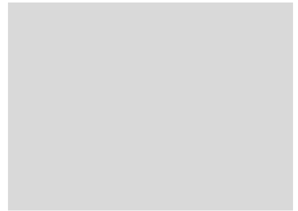
Colorado Legislative Council Staff

March 2019 | Economic & Revenue Forecast





March 15, 2019

Contents

Executive Summary 3
General Fund Budget Overview 5
TABOR Outlook 13
General Fund Revenue 17
Cash Fund Revenue 23
Economic Outlook 31
Colorado Economic Regions 57
Appendix: Historical Data 78

Contributors

Kate Watkins, Chief Economist
Marc Carey
Larson Silbaugh
Louis Pino
Greg Sobetski
Meredith Moon
Debbie Grunlien

Special thanks to Jerry Schierkolk, David Williams, Suzanne Keim, Kori Donaldson, Cathy Eslinger, and Todd Herreid. Cover photos of the Colorado State Capitol, courtesy of Suzanne Keim.

Legislative Council Staff • State Capitol Building • Denver, Colorado 80203
(303) 866-3521 • LCS.Economist@state.co.us • http://leg.colorado.gov/EconomicForecasts
Legislative Council Staff is the nonpartisan service agency of the Colorado General Assembly.

Executive Summary

This report presents the budget outlook based on current law and the March 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 2017-18

The General Fund ended the year with a $1.37 billion reserve, equal to 13.1 percent of General Fund operating appropriations according to the Comprehensive Annual Financial Report for FY 2017-18. This amount is $691.1 million above the required 6.5 percent reserve. Revenue subject to TABOR exceeded the Referendum C cap by $18.5 million, which will require a TABOR refund in FY 2018-19 equal to $39.8 million. This amount includes $21.3 million carried over from the FY 2014-15 TABOR refund obligation and will be refunded via reimbursements to local governments for the senior homestead and disabled veteran property tax exemptions.

FY 2018-19

In FY 2018-19, the General Fund is expected to end the year with a 10.6 percent reserve, $372.7 million above the 7.25 percent statutory reserve. Revenue subject to TABOR is expected to exceed the Referendum C cap by $64.8 million, resulting in a TABOR refund in FY 2019-20. The TABOR refund obligation is expected to be refunded via reimbursements to local governments for property tax exemptions.

FY 2019-20 Unbudgeted

The General Assembly is projected to have $1.18 billion, or 9.5 percent, more to spend or save in the General Fund than what is budgeted to be spent and saved in FY 2018-19. Any changes to revenue or expenditures in FY 2018-19 will change this amount. Revenue is expected to come in $69.5 million below the Referendum C cap.

Elevated forecast uncertainty. Forecast revenue estimates are subject to a higher margin of error than usual due to recent changes in federal tax law. Unusual shifts in taxpayer behavior occurred as a result of the passage of the federal Tax Cuts and Jobs Act. These shifts have impacted both FY 2017-18 and FY 2018-19 collections. Ongoing shifts in taxpayer behavior are expected into next fiscal year as taxpayers continue to adjust to the changes, posing both upside and downside risks.

The recent U.S. Supreme Court ruling in *South Dakota* v. *Wayfair, Inc.* poses an upside risk to the sales tax revenue forecast, as the ruling may allow states to require that out-of-state (including online) retailers collect and remit sales taxes. The ruling and subsequent state administrative rule changes are expected to result in an estimated $47 million to $72 million in additional sales tax collections per year when fully implemented in FY 2019-20. This would boost existing sales tax collections by up to 2.2 percent, and boost General Fund revenue by up to 0.6 percent. In the current FY 2018-19, additional collections resulting from the rule changes are expected to generate up to $14 million in additional sales tax revenue.

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 by 6.2 percent to total $2.45 billion in FY 2018-19, and will increase by 0.3 percent to $2.45 billion in FY 2019-20, as increases in most major revenue sources is expected to offset declines in severance tax collections. By 2020-21, total cash fund revenue is expected to increase to $2.49 billion, a 1.4 percent increase from the prior year.

Economic Outlook

While the U.S. and Colorado economies will continue to expand in 2019 and 2020, momentum is expected to slow due to the global economic slowdown and stronger headwinds from tightening labor markets. Improved job opportunities and rising wages have lured additional workers into the labor force and supported growth in consumption. However, labor shortages continue to hamper certain industries, which will erode business profits as wages rise further. As the stimulative impacts of the federal tax cuts wear off, growth in business investment and consumer activity is expected to moderate but remain at elevated levels.

Higher housing costs and rising interest rates have cooled housing markets in many regions of the U.S., contributing to a decline in residential construction activity. Within Colorado, construction activity remains robust but has shifted from the metro Denver and northern Front Range areas to more affordable areas of the state. A higher cost of living in a growing number of areas in Colorado will put downward pressure on consumer activity unless wage growth can keep pace with rising housing costs.

Risks to the forecast remain skewed to the downside on an aging economic expansion and elevated geopolitical risks. International trade policy uncertainty continues to cloud the outlook for businesses, and will contribute to put upward pressure on prices for consumers and businesses until trade tensions ease. This uncertainty poses near-term downside risks to the forecast, while ratification of new trade policies pose upside longer-term risks. Discussion of the economic outlook begins on page 31, and summaries of expectations for the U.S. and Colorado economies are respectively presented in Tables 14 and 15 on pages 55 and 56.

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:

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

FY 2017-18

Based on the FY 2017-18 Comprehensive Annual Financial Report, the General Fund ended the year with a 13.1 percent reserve, $691.1 million above the required 6.5 percent statutory reserve, as shown in Table 1 (line 20). Revenue subject to TABOR exceeded the Referendum C cap by $18.5 million, requiring a $39.8 million TABOR refund in FY 2018-19. This amount includes $21.3 million carried over from the FY 2014-15 refund obligation and will be refunded in FY 2018-19 via reimbursements to local governments for the senior homestead and disabled veterans property tax exemptions.

FY 2018-19

The General Fund is expected to end the year with a 10.6 percent reserve, $372.7 million higher than the budgeted 7.25 percent reserve (line 20). Revenue is expected to exceed the Referendum C cap by $64.8 million, resulting in a TABOR refund for tax year 2019. The TABOR refund obligation will be refunded in FY 2019-20 via local government reimbursements for the senior homestead and disabled veteran property tax exemptions.

The General Fund excess reserve (line 20) is expected to be $76.0 million higher than projected in December 2018, reflecting a reduction in General Fund appropriations of $19.3 million under the 2019 supplemental package, $13.7 million in TABOR exempt payments from the Wells Fargo settlement, and a smaller TABOR refund obligation due to reduced expectations for cash fund revenue subject to TABOR. Relative to the December 2018 forecast, cash fund revenue expectations were reduced $41.7 million on lower expectations for severance tax revenue. Gross General Fund revenue expectations were also reduced; however, the General Fund budget situation was not impacted, because the reduction in General Fund revenue is offset by an equal reduction in the TABOR refund obligation.

FY 2019-20 (Unbudgeted)

Because a budget has not yet been enacted for FY 2019-20, Table 1 (line 22) shows the amount of revenue available in FY 2019-20 relative to the amount budgeted to be spent or saved in FY 2018-19. Based on this forecast, the General Assembly will have $1.18 billion, or 9.5 percent, more to spend or save in the General Fund than what is budgeted for FY 2018-19. This amount assumes current law, and is largely attributable to the FY 2018-19 excess reserve carrying into the FY 2019-20 beginning balance, year-over-year growth in General Fund revenue, and smaller transfers from the General Fund in FY 2019-20 (lines 10 through 13). Relative to the December 2018 forecast, General Fund revenue expectations were reduced by $249.4 million on slower expectations for economic activity. Expectations for cash fund revenue subject to TABOR were reduced by $52.6 million. As a result, revenue subject to TABOR is now expected to fall short of the Referendum C cap by $69.5 million in FY 2019-20.

Table 1
General Fund Overview
Dollars in Millions

	Funds Available	FY 2017-18 Actual	FY 2018-19 Estimate	FY 2019-20 Estimate	FY 2020-21 Estimate
1	Beginning Reserve	$614.5	$1,366.0	$1,184.5	*
2	General Fund Revenue	$11,723.9	$12,187.0	$12,641.3	$12,991.0
3	Transfers from Other Funds *(Table 5)*	$98.6	$38.7	$18.0	$18.6
4	**Total Funds Available**	**$12,436.9**	**$13,591.7**	**$13,843.8**	*
5	Percent Change	14.8%	9.3%	1.9%	*
	Expenditures	**Actual**	**Budgeted**	**Estimate**	**Estimate**
6	General Fund Appropriations Subject to Limit[1]	$10,430.9	$11,198.4	*	*
7	Adjustments to Appropriations[2]	$29.0	*	*	*
8	TABOR Refund Obligation Under Art. X, §20, (7)(d)[3]	$39.8	$64.8	$0.0	$0.0
9	Rebates and Expenditures *(Table 4)*	$290.7	$245.1	$219.4	$293.0
10	Transfers to Other Funds *(Table 5)*	$208.6	$198.4	$172.0	$186.5
11	Transfers to the State Education Fund Pursuant to SB 13-234	$25.3	$25.0	NA	NA
12	Transfers to Transportation Fund *(Table 2)*	$79.0	$495.0	$200.0	$50.0
13	Transfers to Capital Construction Funds *(Table 2)*	$112.1	$180.5	$60.0	$0.0
14	**Total Expenditures**	**$11,215.4**	**$12,407.2**	*	*
15	Percent Change	7.6%	10.6%	*	*
16	Accounting Adjustments[4]	144.4	*	*	*
	Reserve	**Actual**	**Budgeted**	**Estimate**	**Estimate**
17	Year-End General Fund Reserve	$1,366.0	$1,184.5	*	*
18	Year-End Reserve as a Percent of Appropriations	13.1%	10.6%	*	*
19	Statutorily Required Reserve[5]	$674.9	$811.9	*	*
20	**Amount in Excess or (Deficit) of Statutory Reserve**	**$691.1**	**$372.7**	*	*
21	Excess Reserve as a Percent of Expenditures	6.2%	3.0%	*	*
	Perspective on FY 2019-20 (Unbudgeted Year)			**Estimate**	**Estimate**
	Amount Available in FY 2019-20 Relative to FY 2018-19 Expenditures[6]				
22	Amount in Excess or (Deficit) of 7.25% Statutory Reserve			$1,182.2	*
23	As a Percent of Prior-Year Expenditures			9.5%	*
	Addendum	**Actual**	**Estimate**	**Estimate**	**Estimate**
24	Percent Change in General Fund Appropriations	6.9%	7.1%	*	*
25	5% of Colorado Personal Income Appropriations Limit	$14,207.1	$14,481.0	$15,320.6	$16,147.9
26	Transfers to State Education Fund Per Amendment 23	$617.0	$656.7	$681.5	$699.6

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

[1]FY 2018-19 amounts include the January 2019 supplemental package and the first report of the Conference Committee for SB 19-128 (the mid-year School Finance adjustment). FY 2018-19 also includes $225 million in PERA disbursements pursuant to SB 18-200.

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

[3]Pursuant to Section 24-75-20 (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.

[4]Includes a $21.3 million adjustment to the FY 2017-18 TABOR refund obligation that is carried forward from the FY 2014-15 refund obligation; this amount is already restricted in the fund balance.

[5]The 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.

[6]This scenario holds appropriations in FY 2019-20 equal to appropriations in FY 2018-19 (line 6) to determine the total amount of money available relative to FY 2018-19 expenditures, net of the obligations in lines 8 through 13.

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.* and subsequent administrative rule changes adopted by the Colorado Department of Revenue 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 between $47 million and $72 million when fully implemented in FY 2019-20.

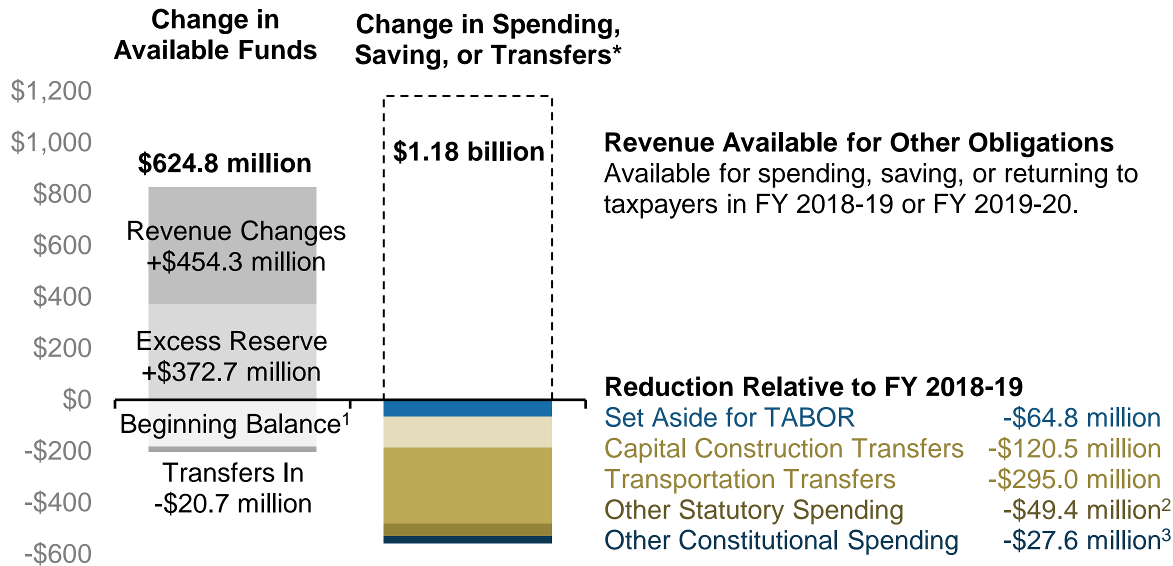
Comparing the Current and Next Year's Budget Situation

Figure 1 illustrates the change in the General Fund budget situation between the current FY 2018-19 and next FY 2019-20. These amounts reflect legislation adopted to date, including the FY 2018-19 supplemental package and mid-year school finance adjustment (Senate Bill 19-128).

Additional **revenue** to the General Fund is shown in the grey bars on the left side of Figure 1. Relative to FY 2018-19, $624.8 million in additional revenue is expected to be available in FY 2019-20. In addition to year-over-year growth across the revenue streams to the General Fund, this amount includes the excess reserve from the prior year, the year-over-year change in the beginning fund balance, and the year-over-year change in transfers to the General Fund.

The right side of Figure 1 illustrates changes in General Fund **spending and transfer obligations** based on current law. These amounts hold appropriations constant across FY 2018-19 and FY 2019-20 since a FY 2019-20 budget has not yet been adopted. With more funds available and smaller General Fund obligations under current law, the General Assembly is expected to have $1.18 billion more to spend, save in the General Fund reserve, or return to taxpayers (e.g., through tax cuts or tax expenditures) in FY 2019-20 relative to the current year.

Figure 1
Change in the General Fund Budget Situation between FY 2018-19 and FY 2019-20



** Changes required by current law, including FY 2018-19 supplementals. Amounts exclude changes in the General Fund operating or capital budgets in FY 2019-20 because they have not yet been adopted.*
[1] The General Fund beginning balance is projected to be $181.5 million lower in FY 2019-20 than in FY 2018-19 owning to a smaller excess reserve in the prior year.
[2] Includes other statutory transfers and changes to rebates and expenditures.
[3] Includes the Old Age Pension program and the senior and veterans property tax exemptions.

General Fund Transfers to Transportation and Capital Construction

Statutory transfers from the General Fund to transportation and capital construction funds are shown in Table 2. 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.

Transportation transfers. 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 2.

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. The amount of the transfers is set at $50 million per year. Table 2 assumes a transportation transfer amount of $200 million for FY 2019-20, including the $150 million one-time transfer and a $50 million ongoing annual transfer.

Table 2
Infrastructure Transfers from the General Fund
Dollars in Millions

Capital Construction Funds	2017-18	2018-19	2019-20	2020-21
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		
Total	**$112.1**	**$180.5**	**$60.0**	**$0.0**

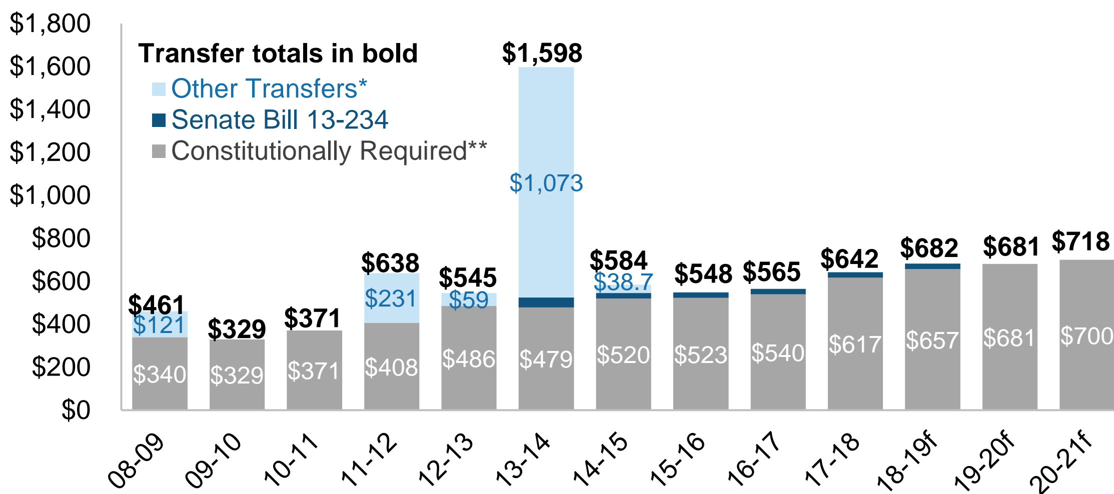
Transportation Funds	2017-18	2018-19	2019-20	2020-21
SB 17-262	$79.0			
SB 18-001*		$495.0	$200.0	$50.0
Total	**$79.0**	**$495.0**	**$200.0**	**$50.0**

**Pursuant to SB 18-001, transfers for FY 2019-20 and subsequent years depend on the outcome of a referred ballot measure at the 2019 election. The amounts shown assume current law and exclude provisions that take effect if the ballot measure is adopted.*

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 2 shows a history and forecast for revenue sources to the State Education Fund through the end of the forecast period.

Figure 2
Revenue to the State Education Fund
Dollars in Millions



Source: Colorado State Controller's Office and Legislative Council Staff forecast (f).
**Includes transfers under SB 09-260 for FY 2008-09, SB 11-183 and SB 11-156 for FY 2011-12, HB 12-1338 for FY 2012-13 and FY 2013-14, and HB 14-1342 for FY 2014-15.*
***One-third of 1 percent of federal taxable income is required be dedicated to the State Education Fund under Article IX, Section 17 of the Colorado Constitution.*

General Fund transfers to the State Education Fund pursuant to Senate Bill 13-234, which have occurred annually since FY 2013-14, are scheduled to end after FY 2018-19. In FY 2018-19, the State Education Fund is expected to receive $681.7 million, with higher amounts in the following year resulting from growth in taxable income among Colorado taxpayers.

Tax Policies Dependent on Revenue Conditions

Two state tax expenditures are "triggered" by certain state revenue conditions. Table 3 summarizes the availability of these tax policies, each of which is described in greater detail below.

- **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 year 2019.** 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 will be partially refundable in tax year 2018. This forecast expects a TABOR surplus in FY 2018-19. If a surplus occurs, partial refundablility of the credit will be available in tax year 2019.

Table 3
Availability of Tax Policies Dependent on Revenue Conditions

Tax Policy	Availability Criteria	Availability
Historic Property Preservation Income Tax Credit (Section 39-22-514, C.R.S.) *Revenue reduction of less than $1.0 million per tax year**	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.) *Revenue reduction of about $5.0 million per tax year**	TABOR surplus.	Available in tax year 2018 due to the FY 2017-18 TABOR surplus. Expected to be available in tax year 2019, and unavailable in 2020 and 2021.

**Estimates may differ in future analyses.*

Table 4
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%	$140.7	6.4%	$140.8	0.1%	$149.5	6.2%
TABOR Refund Mechanism[1]	NA		-$39.5		-$64.8		$0.0	
Cigarette Rebate	$9.7	-5.6%	$9.8	1.2%	$9.6	-2.2%	$9.5	-1.9%
Old Age Pension Fund	$91.3	-5.4%	$86.5	-5.2%	$84.2	-2.7%	$82.8	-1.6%
Aged Property Tax and Heating Credit	$4.9	-43.3%	$5.5	12.1%	$5.3	-2.8%	$5.2	-1.9%
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	-1.8%	$0.8	-1.3%	$0.8	-0.9%
Marijuana Sales Tax Transfer to Local Governments	$17.3	17.2%	$19.6	13.2%	$21.6	10.7%	$23.6	8.9%
Total Rebates and Expenditures	**$290.7**	**2.0%**	**$245.1**	**-15.7%**	**$219.4**	**-10.5%**	**$293.0**	**33.6%**

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

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

[2]Pursuant 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 5
Cash Fund Transfers
Dollars in Millions

Transfers to the General Fund		2017-18	2018-19	2019-20	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	$17.1	$17.2	$17.8
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	State Employee Reserve Fund	$26.3			
HB 18-1338	Reduced Revenue Severance Tax Transfers	$20.2	$20.78		
Total Transfers to the General Fund		**$98.6**	**$38.7**	**$18.0**	**$18.6**

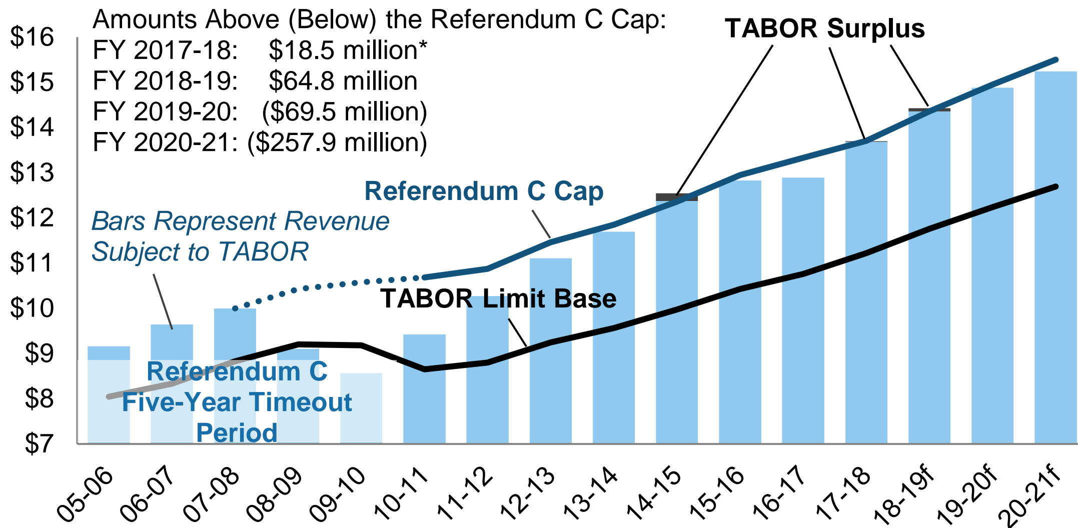
Transfers from the General Fund		2017-18	2018-19	2019-20	2020-21
SB 11-047	Bioscience Income Tax Transfer to OEDIT	$4.4	$4.6	$4.8	$4.9
HB 13-1193	Advanced Industries Export Acceleration Fund	$0.3			
SB 14-215	Marijuana Tax Cash Fund	$108.8	$126.4	$139.9	$152.3
HB 14-1016[1]	Procurement Technical Assistance Cash Fund	$0.2	$0.2	$0.2	
SB 15-244 & SB 17-267	State Public School Fund	$37.8	$22.2	$24.5	$26.7
SB 15-245	Natural Hazard Mapping Fund	$0.7			
HB 16-1161[2]	Veterans Grant Program Fund *(conditional)*	$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		$20.0		
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		
Total Transfers from the General Fund		**$208.6**	**$198.4**	**$172.0**	**$186.5**
Net General Fund Impact		**($109.9)**	**($159.7)**	**($154.0)**	**($167.9)**

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

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 7 on page 16 and illustrated in Figure 3, which provides a 13-year history of the TABOR limit base and the Referendum C cap.

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



Source: Office of the State Controller and Legislative Council Staff. 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. The surplus triggers a **TABOR refund in the current FY 2018-19.** The state is required to refund a total of **$39.8 million**, including the $18.5 million surplus and an outstanding $21.3 million from the FY 2014-15 refund obligation. These amounts have been set aside in the General Fund and do not require the expenditure of revenue collected in the current fiscal year. From the TABOR obligation, $39.5 million will be refunded to taxpayers via reimbursements paid to county governments for property tax exemptions allowed to seniors and disabled veterans, correspondingly reducing FY 2018-19 General Fund expenditures for these reimbursements. Additionally, about $0.3 million of the refund amount set aside in FY 2017-18 will be paid to taxpayers claiming TABOR refunds for FY 2014-15 on amended or overdue 2015 income tax returns filed during FY 2018-19 and subsequent fiscal years.

FY 2018-19. State revenue subject to TABOR is expected to exceed the Referendum C cap by **$64.8 million**, triggering an equivalent **TABOR refund in FY 2019-20**. Expectations for the TABOR surplus amount have decreased relative to the December 2018 forecast because of downward revisions to the General Fund and cash fund revenue forecasts. The entire FY 2018-19 surplus is now expected to be refunded via FY 2019-20 reimbursements for property tax expenditures, with a corresponding reduction in FY 2019-20 General Fund expenditures for these reimbursements. The state is not expected to administer TABOR refunds using income tax returns for 2019.

FY 2019-20. State revenue subject to TABOR is expected to fall short of the Referendum C cap by $69.5 million in FY 2019-20. Expectations for state revenue subject to TABOR were reduced by $301.6 million relative to the December 2018 forecast, more than offsetting reduced expectations for the Referendum C cap and the TABOR surplus anticipated in the December 2018 forecast. If no TABOR surplus is collected, the state will not be required to issue TABOR refunds in FY 2020-21.

FY 2020-21. State revenue subject to TABOR is expected to fall short of the Referendum C cap by $257.9 million in FY 2020-21. If no TABOR surplus is collected, the state will not be required to issue TABOR refunds in FY 2021-22.

Table 6 compares forecast expectations for revenue subject to TABOR between the December 2018 forecast and this March 2019 forecast.

Table 6
Change in TABOR Estimates, December 2018 to March 2019
Dollars in Millions

FY 2018-19	March	December	Change
TABOR Revenue	**$14,424.9**	**$14,740.4**	**($315.6)**
General Fund*	$11,977.8	$12,251.7	($273.9)
Cash Funds*	$2,447.1	$2,488.8	($41.7)
Referendum C Cap	**$14,360.1**	**$14,360.1**	**$0.0**
Revenue Above (Below) Ref C Cap	**$64.8**	**$380.4**	**($315.6)**

FY 2019-20	March	December	Change
TABOR Revenue	**$14,879.4**	**$15,180.9**	**($301.6)**
General Fund*	$12,424.9	$12,673.9	($249.0)
Cash Funds*	$2,454.4	$2,507.0	($52.6)
Referendum C Cap	**$14,948.8**	**$14,991.9**	**($43.1)**
Revenue Above (Below) Ref C Cap	**($69.5)**	**$189.0**	**($258.5)**

FY 2020-21	March	December	Change
TABOR Revenue	**$15,244.0**	**$15,395.7**	**($151.6)**
General Fund*	$12,755.5	$12,923.7	($168.2)
Cash Funds*	$2,488.6	$2,472.0	$16.6
Referendum C Cap	**$15,502.0**	**$15,606.6**	**($104.6)**
Revenue Above (Below) Ref C Cap	**($257.9)**	**($210.9)**	**($47.0)**

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

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

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.

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.

State law requires adjustments to the refund amount based on over-refunds or under-refunds of previous TABOR surpluses. Most recently, revenue exceeded the Referendum C cap in FY 2014-15, prompting TABOR refunds on 2015 tax returns. The amount of the FY 2014-15 refund obligation is now estimated to have been $159.1 million, adjusting for accounting errors discovered after refunds were issued. Through FY 2017-18, the state had refunded $137.8 million of this obligation. The remaining $21.3 million is required to be refunded with the FY 2017-18 TABOR surplus.

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

TABOR refund mechanisms. The FY 2017-18 and FY 2018-19 TABOR refund obligations will be 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 4 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.

Current law includes two other TABOR refund mechanisms, the six-tier sales tax refund and the temporary income tax rate reduction. These mechanisms are triggered when the state TABOR surplus exceeds the amount required to reimburse local governments for the senior and veteran property tax exemptions, which is not expected to occur during the current forecast period. However, TABOR surpluses that exceed expectations would be refunded on state income tax forms using these refund mechanisms.

Table 7
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	$11,977.8	$12,424.9	$12,755.5
2	Cash Funds[1]	$2,304.2	$2,447.1	$2,454.4	$2,488.6
3	**Total TABOR Revenue**	**$13,720.9**	**$14,424.9**	**$14,879.4**	**$15,244.0**
	Revenue Limit				
4	Allowable TABOR Growth Rate	4.5%	4.8%	4.1%	3.7%
5	Inflation (*from Prior Calendar Year*)	2.8%	3.4%	2.7%	2.3%
6	Population Growth (*from Prior Calendar Year*)	1.7%	1.4%	1.4%	1.4%
7	TABOR Limit Base	$11,220.7	$11,759.3	$12,241.5	$12,694.4
8	Voter Approved Revenue Change (Referendum C)	$2,481.6	$2,600.7	$2,637.9	$2,549.6
9	Total TABOR Limit / Referendum C Cap	$13,702.4	$14,360.1	$14,948.8	$15,502.0
10	**TABOR Revenue Above (Below) Referendum C Cap**	**$18.5**	**$64.8**	**($69.5)**	**($257.9)**
	Retained/Refunded Revenue				
11	Revenue Retained under Referendum C[2]	$2,481.6	$2,600.7	$2,637.9	$2,549.6
12	Fiscal Year Spending *(revenue available to be spent or saved)*	$13,702.4	$14,360.1	$14,879.4	$15,244.0
13	Outstanding Underrefund Amount[3]	$21.3			
14	**Revenue Refunded to Taxpayers[4]**	**$39.8**	**$64.8**	**$0.0**	**$0.0**
15	TABOR Reserve Requirement	$411.1	$430.8	$446.4	$457.3

Totals may not sum due to rounding.

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

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

[3]This 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.

[4]Pursuant 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 8 on page 21 summarizes General Fund revenue collections for FY 2017-18 and projections for FY 2018-19 through FY 2020-21.

FY 2017-18. Net of the diversion of the State Education Fund required under Amendment 23, General Fund revenue totaled $11.7 billion for FY 2017-18. Revenue increased $1.4 billion, or 14.1 percent, relative to FY 2016-17, the fastest growth rate since FY 1997-98. The strong growth was attributable to the rebound in manufacturing and energy activity, taxpayers shifting income into 2017 to take advantage of income tax deductions repealed under the federal Tax Cuts and Jobs Act (TCJA) beginning in 2018, and a one-time Tobacco Master Settlement Agreement (MSA) payment of $113.3 million.

Forecast for FY 2018-19 through FY 2020-21. General Fund revenue is expected to grow at a modest-to-moderate pace of 4.0 percent in FY 2018-19 before slowing to grow 3.7 percent in FY 2019-20 and 2.8 percent in FY 2020-21. Relative to the December 2018 forecast, expectations were revised downward in each of FY 2018-19 (decreased $260.4 million, or 2.1 percent), FY 2019-20 (decreased $249.4 million, or 1.9 percent), and FY 2020-21 (decreased $168.9 million, or 1.3 percent).

Downward revisions to the current year forecast primarily reflect a more subdued outlook for individual income tax collections. Collections data to date suggest that the TCJA accelerated revenue from FY 2018-19 into FY 2017-18 to a greater extent than previously thought, boosting last year's tax revenue growth rate partially at the expense of growth this year. Additionally, softer capital gains and equity earnings have detracted from income tax receipts. Expectations for corporate income and sales tax revenue have been revised downward on dampened outlooks for corporate profits and consumer spending.

Consistent with the economic outlook presented beginning on page 31, growth in General Fund revenue is expected to decelerate through the forecast period as increases in consumer spending and business and investment income slow. More earnest growth in wage and salary incomes is expected to buoy growth in revenue even as other contributors, including corporate income tax and use tax, fall off.

Risks to the forecast. This forecast contains both upside and downside risk due to the late stage of the economic expansion and uncertainty surrounding taxpayer behavior in response to the TCJA. Significant shifts in taxpayer behavior occurred in anticipation of and following the passage of the TCJA, resulting in unusual income tax collection patterns that cannot easily be isolated from underlying economic conditions. Considering these factors, revenue estimates in this forecast carry a higher-than-usual margin of error. Risks are weighted to the upside in the near term and to the downside late in the forecast period.

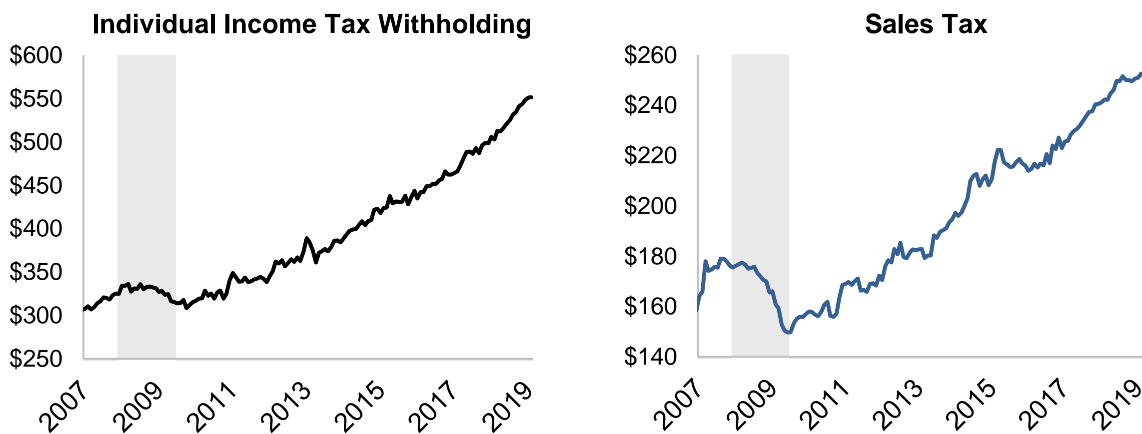
Expiring tax expenditures. This forecast estimates state revenue under current state and federal law. Under current state law, certain tax expenditures available now are scheduled to expire within the forecast period. The forecast includes upward adjustments to revenue projections to account for the 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. Payers of the 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. Income tax revenue diverted to the SEF is exempt from the TABOR limit as a voter-approved revenue change under Amendment 23.

Growth in individual income tax revenue is now expected to slow significantly during FY 2018-19, decelerating to 4.7 percent growth after increasing 12.1 percent last year. The outlook for current year individual income tax revenue has been revised downward by $220.1 million relative to the December forecast. Reduced expectations primarily reflect estimated income tax payments received in December 2018 and January 2019, which fell by $291 million relative to combined collections for December 2017 and January 2018.

While estimated payments received at the end of 2017 and beginning of 2018 were thought to be elevated due to distortions in taxpayer behavior immediately preceding and following passage of the TCJA, subsequent data suggest that the surge in tax receipts during FY 2017-18 borrowed from FY 2018-19 collections to a greater extent than was previously expected. Estimated payments are now expected to fall $184 million, or 11.1 percent, on a cash accounting basis in FY 2018-19. However, ongoing gains in income tax withholding are expected to be sufficient to more than offset the decline in estimated payments. The withholding component of individual income tax collections is now expected to increase $521 million, or 8.6 percent, in FY 2018-19 (see Figure 4, left).

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



Source: Colorado 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 February 2019. February 2019 data are preliminary.

Despite eight months of collections already being in the books, significant forecast uncertainty remains for FY 2018-19. Income tax returns remitted during March and April play an outsized role in annual

collections, and higher-than-normal tax payments and refunds are expected to result from TCJA-related distortions as taxpayers true up their withholdings and estimated payments to meet their actual 2018 tax liabilities.

Individual income tax collections are expected to grow 4.7 percent in FY 2019-20, a below-trend pace similar to that expected for the current year. In FY 2020-21, growth is projected to slow to 3.3 percent. Wage withholding expectations remain moderate-to-strong based on the outlook for wage and salary income growth, which lags most other economic conditions. However, a slowing economy and uncertain business income outlook pose headwinds for estimated payments, and tax refunds are expected to rise consistent with the late years of the business cycle.

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 slowing to growth of 4.6 percent in FY 2019-20 and 2.7 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 is moderating, as the stimulative effects of the TCJA have worn off and uncertainty surrounding future economic conditions has rattled consumer confidence for some. Growth in sales tax collections is also expected to moderate in part as inflationary pressures for retail goods remain subdued.

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. Based on these administrative rule changes, the DOR will collect sales tax from out-of-state retailers with a significant economic nexus in Colorado for the state, 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.

Many of the largest businesses that sell online already collect sales tax in Colorado. As a result of the DOR's changes to administrative rules following the *Wayfair* decision, the state is expected to collect up to an additional $14 million during FY 2018-19, an additional $47 million to $72 million during FY 2019-20, and $54 million to $80 million during FY 2020-21 in sales taxes from online transactions. The estimate for this fiscal year was revised downward to reflect the deadline extension, although some retailers are voluntarily complying already. Estimates are subject to change as data remain limited on out-of-state retailers doing business in Colorado. As more companies comply with the new requirement and as e-commerce sales continue to grow as a share of total retail sales, the amount

collected will increase. Additionally, if third-party marketplace vendors are required to collect and remit sales tax, total sales tax collections in Colorado will increase correspondingly.

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 12.8 percent during FY 2018-19 before declining by 6.2 percent in FY 2019-20 and by 1.4 percent in FY 2020-21. Oil prices have decreased over recent months and are expected to remain lower due to subdued global demand, which will slow oil industry capital expenditures in the state. Additionally, the rules promulgated by the Department of Revenue to collect out-of-state retail sales tax will gradually convert retail use tax collections, around 7 percent of total use tax collections in 2018, to sales tax.

Corporate income taxes. Corporate tax collections accelerated at the end of FY 2017-18, totaling $781.9 million, an increase of 53.5 percent from the previous year. Corporate profits will remain elevated in FY 2018-19, driving corporate income tax revenue to increase 2.0 percent and reach $797.4 million. However, corporate income tax collections weakened in recent months following strong year-over-year increases in the immediate wake of the passage of the TCJA. The weakness in growth in recent months reflects both a higher revenue base and cooling corporate profits. Moving into FY 2019-20, corporate income tax revenue will decline as one-time tax filing activity subsides and corporate profits decline due to higher costs for business inputs and a weaker global economy. Because of anticipated weakening in corporate profits, corporate income tax revenue will decline 3.9 percent in FY 2019-20 to $766.1 million and decline a further 3.4 percent in FY 2020-21 to $740.0 million.

Expectations for corporate income tax revenue were reduced $21.2 million (2.6 percent) in FY 2018-19 compared with the December 2018 forecast due to lower than expected collections in December 2018 through February 2019, the most recent data available. Expectations for FY 2019-20 corporate income tax collections were also reduced $13.3 million (1.7 percent), and expectations for FY 2020-21 were increased $17.2 million.

Tobacco Master Settlement Agreement. For FY 2017-18 only, Table 4 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.

Wells Fargo settlement. For FY 2018-19 only, line 19 of Table 8 includes $13.7 million in General Fund revenue received in January 2019 as the result of a legal settlement between the state and Wells Fargo. This amount is expected to be accounted as exempt from the TABOR limit and is excluded from FY 2018-19 General Fund revenue subject to TABOR for the purposes of Table 7 on page 16.

Table 8
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	$3,062.4	4.7	$3,202.5	4.6	$3,290.5	2.7
2	Use	$309.9	19.4	$349.4	12.8	$327.7	-6.2	$323.1	-1.4
3	Retail Marijuana Sales	$168.2	71.1	$195.5	16.2	$216.4	10.7	$235.5	8.9
4	Cigarette	$34.6	-5.5	$33.7	-2.7	$32.9	-2.2	$32.3	-1.9
5	Tobacco Products	$16.4	-22.7	$22.5	37.1	$23.3	3.5	$24.1	3.4
6	Liquor	$46.5	3.3	$49.0	5.4	$50.6	3.2	$52.3	3.4
7	**Total Excise**	$3,501.6	9.8	$3,712.5	6.0	$3,853.3	3.8	$3,957.8	2.7
	Income Taxes								
8	Net Individual Income	$7,577.2	12.1	$7,933.1	4.7	$8,303.0	4.7	$8,580.8	3.3
9	Net Corporate Income	$781.9	53.5	$797.4	2.0	$766.1	-3.9	$740.0	-3.4
10	Total Income Taxes	$8,359.1	15.0	$8,730.4	4.4	$9,069.1	3.9	$9,320.8	2.8
11	Less: Portion Diverted to the SEF	-$617.0	14.3	-$656.7	6.4	-$681.5	3.8	-$699.6	2.7
12	**Income Taxes to the General Fund**	$7,742.1	15.0	$8,073.8	4.3	$8,387.6	3.9	$8,621.2	2.8
	Other Sources								
13	Estate	$0.0	NA	$0.0	NA	$0.0	NA	$0.0	NA
14	Insurance	$303.6	4.5	$321.5	5.9	$329.7	2.5	$338.6	2.7
15	Pari-Mutuel	$0.5	-10.7	$0.5	-6.0	$0.5	-4.6	$0.5	1.2
16	Investment Income	$19.5	32.4	$24.8	27.1	$29.0	16.9	$31.0	6.9
17	Court Receipts	$4.4	7.6	$3.9	-11.7	$4.1	5.9	$3.8	-7.3
18	Tobacco Master Settlement Agreement[1]	$113.3	NA	$0.0	NA	$0.0	NA	$0.0	NA
19	Other Income[2]	$38.9	-17.8	$50.0	28.6	$37.1	-25.8	$38.1	2.7
20	**Total Other**	$480.2	34.4	$400.8	-16.6	$400.4	-0.1	$412.0	2.9
21	**Gross General Fund Revenue**	**$11,723.9**	**14.1**	**$12,187.0**	**4.0**	**$12,641.3**	**3.7**	**$12,991.0**	**2.8**

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

[1]The 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.

[2]For FY 2018-19, this amount includes $13.7 million received in January 2019 from a legal settlement between the state and Wells Fargo. This amount is exempt from TABOR as a damage award.

Cash Fund Revenue

Table 9 summarizes the forecast for cash fund revenue subject to TABOR. The largest revenue sources are motor fuel taxes and other transportation-related revenue, 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.

FY 2017-18. 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 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 the state TABOR limit and therefore is not shown in Table 9. In addition, the bill 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 comparatively minimal.

Forecasts for FY 2018-19 and FY 2019-20. Total cash fund revenue subject to TABOR will rebound from this lower level by 6.2 percent to $2.45 billion in FY 2018-19, and increase slightly by 0.3 percent to total $2.45 billion in FY 2019-20, as a rise in most major revenue sources more than offsets a projected decline in severance tax revenue. Total cash fund revenue is expected to increase by 1.4 percent to total $2.49 billion in FY 2020-21.

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 1.1 percent in FY 2018-19 and grow an additional 1.2 percent in FY 2019-20. The forecast for TABOR revenue to transportation-related cash funds is shown in Table 10.

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 0.9 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 0.8 percent in FY 2018-19 and 0.6 percent in FY 2019-20. Total HUTF revenue is expected to increase 1.1 percent to $1,119.4 million in FY 2018-19 and 0.8 percent to $1,128.3 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 10.1 percent to $36.5 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 $133.4 million in FY 2018-19, up 4.7 percent from the previous year, and continue to increase through the forecast period. Other transportation revenue is from the sale of 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 10. Revenue to this enterprise is expected to grow 0.8 percent to $109.0 million in FY 2018-19, and 0.6 percent to $109.6 million in FY 2019-20. Revenue from the bridge safety surcharge fee typically grows at the same rate as vehicle registrations.

Table 9
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	$1,275.4	$1,289.3	$1,305.3	$1,321.7	
Percent Change	4.5%	1.1%	1.2%	1.3%	1.2%
Severance Tax	$143.0	$214.6	$154.2	$129.0	
Percent Change	634.3%	50.0%	-28.2%	-16.3%	-3.4%
Gaming Revenue[1]	$106.8	$106.6	$108.2	$110.8	
Percent Change	3.0%	-0.2%	1.5%	2.4%	1.2%
Insurance-Related	$17.8	$22.4	$19.4	$18.4	
Percent Change	72.5%	25.7%	-13.4%	-5.2%	1.1%
Regulatory Agencies	$80.5	$77.4	$79.2	$80.4	
Percent Change	6.5%	-3.8%	2.3%	1.5%	0.0%
Capital Construction-Related Interest[2]	$4.7	$6.6	$6.8	$6.7	
Percent Change	1.4%	40.4%	3.6%	-1.7%	12.6%
2.9% Sales Tax on Marijuana[3]	$16.1	$12.3	$12.5	$12.5	
Percent Change	-60.6%	-23.5%	1.4%	0.2%	-8.0%
Other Cash Funds	$660.0	$717.9	$768.9	$809.1	
Percent Change	2.1%	8.8%	7.1%	5.2%	7.0%
Total Cash Fund Revenue	**2,304.2**	**$2,447.1**	**$2,454.4**	**$2,488.6**	
Subject to the TABOR Limit	-17.0%	6.2%	0.3%	1.4%	2.6%

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

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

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

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

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

Table 10
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	$669.6	$677.0	1.1%
Percent Change	4.2%	1.2%	0.9%	1.1%	
Total Registrations	$380.7	$383.7	$386.0	$389.7	0.8%
Percent Change	6.7%	0.8%	0.6%	1.0%	
Registrations	*$227.1*	*$228.9*	*$230.3*	*$232.6*	
Road Safety Surcharge	*$132.9*	*$134.0*	*$134.8*	*$136.1*	
Late Registration Fees	*$20.8*	*$20.8*	*$20.9*	*$21.0*	
Other HUTF Receipts[1]	$69.9	$72.1	$72.7	$72.4	1.2%
Percent Change	9.4%	3.1%	0.9%	-0.5%	
Total HUTF	$1,107.3	$1,119.4	$1,128.3	$1,139.1	0.9%
Percent Change	3.9%	1.1%	0.8%	1.0%	
State Highway Fund (SHF)[2]	$40.6	$36.5	$35.9	$38.3	-1.9%
Percent Change	5.9%	-10.1%	-1.7%	6.7%	
Other Transportation Funds	$127.4	$133.4	$141.1	$144.3	4.2%
Percent Change	10.9%	4.7%	5.8%	2.3%	
Aviation Fund[3]	*$29.2*	*$38.3*	*$43.4*	*$45.6*	
Law Enforcement-Related[4]	*$8.8*	*$8.6*	*$8.4*	*$8.4*	
Registration-Related[5]	*$90.9*	*$86.6*	*$89.2*	*$90.3*	
Total Transportation Funds	$1,275.4	$1,289.3	$1,305.3	$1,321.7	2.0%
Percent Change	4.5%	1.1%	1.2%	1.3%	

Totals may not sum due to rounding.

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

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

[2]Includes only SHF revenue subject the TABOR limit.

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

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

[5]Includes 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

	Estimate FY 2017-18	Estimate FY 2018-19	Estimate FY 2019-20	Estimate FY 2020-21	CAAGR*
Bridge Safety Surcharge	$108.1	$109.0	$109.6	$110.9	0.7%
Percent Change	1.7%	0.8%	0.6%	1.2%	

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 $214.6 million in FY 2018-19 and $154.2 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 11.

Severance tax collections from **oil and natural gas** are forecast to increase 59.4 percent in FY 2018-19 to $201.2 million. Severance tax revenue on oil and gas production will decline 30.6 percent to $139.7 million in FY 2019-20. Expectations for oil and gas severance taxes are lower than in December 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 $55 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 11
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	$201.2	$139.7	$111.9	-3.9%
Percent Change	3035.0%	59.4%	-30.6%	-19.9%	
Coal	$3.7	$4.1	$4.0	$3.8	0.9%
Percent Change	-10.0%	10.3%	-2.9%	-4.0%	
Molybdenum and Metallics	$2.9	$2.4	$2.4	$2.4	-5.6%
Percent Change	-2.2%	-16.3%	0.3%	0.3%	
Total Severance Tax Revenue	$132.8	$207.7	$146.1	$118.2	-3.8%
Percent Change	1094.5%	56.4%	-29.7%	-19.1%	
Interest Earnings	$10.2	$6.8	$8.0	$10.9	2.1%
Percent Change	22.1%	-32.9%	17.3%	35.2%	
Total Severance Tax Fund Revenue	$143.0	$214.6	$154.2	$129.0	-3.4%
Percent Change	634.3%	50.0%	-28.2%	-16.3%	

**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 $3.07 per Mcf in 2019 due to increased demand for household use due to winter storms. Producers are able to meet increased demand due to new technologies and existing infrastructure, which have contributed to an abundant supply of natural gas. Prices are expected to average $3.14 per Mcf in 2020 and fall to $3.01 per Mcf in 2021.

Led by higher than expected strength in 2018 fourth quarter payments, **coal severance tax** revenue will increase 10.3 percent to $4.1 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 2.9 percent in FY 2019-20 to $4.0 million and 4.0 percent to $3.8 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 $6.8 million in FY 2018-19 and $8.0 million in FY 2019-20. The forecast for interest earnings increases through the forecast period on higher interest rates on deposits and 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 0.2 percent to $106.6 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, but growth in tax revenue is expected to be supplemented by higher fee and interest earnings. Compared with FY 2018-19, gaming revenue is expected to grow at a faster rate, 1.5 percent, during FY 2019-20, and 2.4 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.

Total **marijuana tax revenue** equaled $251.4 million in FY 2017-18 and is expected to increase throughout the forecast period. Marijuana tax revenue will total $272.2 million in FY 2018-19 and $291.4 million in FY 2019-20. 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 12.

The special sales tax is the largest marijuana tax revenue source and equals 15 percent of the retail price of marijuana. The state share of special sales tax is expected to reach $176.0 million in FY 2018-19 and $194.7 million in FY 2019-20. The state distributes 10 percent of the special sales tax to local governments and retains the rest to be used in 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, with the greater of 90 percent or $40 million per year dedicated to the BEST Fund for public school construction. The excise tax is expected to generate $64.3 million in FY 2018-19 and $62.5 million in FY 2019-20.

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 $10.7 million per year through FY 2020-21. Retail marijuana dispensaries will 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.

Table 12
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	$167.6	$195.5	$216.4	$235.5	12.0%
State Share of Sales Tax	$150.5	$176.0	$194.7	$212.0	
Local Share of Sales Tax	$16.7	$19.6	$21.6	$23.6	
15% Excise Tax	$68.2	$64.3	$62.5	$59.4	-4.5%
Total Proposition AA Taxes	**$235.3**	**$259.9**	**$278.9**	**$294.9**	**7.8%**
2.9 Sales Tax (Subject to TABOR)					
2.9% Sales Tax on Medical Marijuana	$10.6	$10.7	$10.7	$10.7	0.4%
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**	**$12.3**	**$12.5**	**$12.5**	-8.0%
Total Taxes on Marijuana	**$251.4**	**$272.2**	**$291.4**	**$307.4**	**6.9%**

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

Federal Mineral Lease (FML) revenue is the state's portion of the money the federal government collects from mineral production on federal lands in Colorado. Collections are mostly determined by the value of mineral production on these lands. 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 totaled $86.5 million in FY 2017-18. FML revenue is forecast to increase 19.9 percent in FY 2018-19 to $103.7 million as the state fulfills its obligations for previous payments associated with canceled leases on the Roan Plateau. FML revenue will decrease 1.5 percent in FY 2019-20 to $102.1 million and increase 1.2 percent to $103.4 million in FY 2020-21.

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

The ending balance for the state’s UI Trust Fund was $922.3 million in FY 2017-18, up 24.7 percent from the previous fiscal year. The fund has benefited from the state’s healthy labor market and historically low unemployment rates. In FY 2017-18, the total amount of benefits paid from the fund dropped to $398.2 million, the seventh consecutive year the amount has declined and the lowest level

in ten years. Premium contributions continued to tick down slightly in FY 2017-18. Employers shift to a lower premium rate schedule when the trust fund ending balance reaches certain solvency levels, which reduces the amount of UI contributions they are required to pay for each employee.

The UI Trust Fund balance is expected to continue to improve throughout the forecast period. The amount of benefits paid from the fund is expected to continue to gradually fall through the forecast period as a strong labor market continues to absorb the number of people actively seeking employment. In addition, an increasing employee chargeable wage base will support the fund. The chargeable wage is indexed annually to the average weekly wage growth. Since 2011, the chargeable wage base has increased by $3,100 per employee.

Table 13
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	$1,110.0	$1,337.2	
Plus Income Received					
UI Premium	$562.8	$532.8	$559.5	$577.4	0.9%
Interest	$18.3	$23.1	$24.9	$27.0	
Total Revenues	**$581.1**	**$555.9**	**$584.4**	**$604.3**	1.3%
Percent Change	-6.8%	-4.3%	5.1%	3.4%	
Less Benefits Paid	$398.2	$368.2	$357.2	$331.1	6.0%
Percent Change	-14.5%	-7.5%	-3.0%	-7.3%	
Ending Balance	**$922.3**	**$1,110.0**	**$1,337.2**	**$1,610.5**	20.4%
Solvency Ratio					
Fund Balance as a Percent of Total Annual Private Wages	0.77%	0.86%	0.98%	1.10%	

Totals may not sum due to rounding.
**CAAGR: Compound average annual growth rate for FY 2017-18 to FY 2020-21.*

This page intentionally left blank.

Economic Outlook

Economic growth in the U.S. and Colorado has moderated, and is expected to slow further over the next two years as the economy shifts out of high gear. The nation is just a few months away from the longest economic expansion in U.S. history, but momentum has slowed for business investment and consumer spending, the primary drivers of economic activity. Lower crude oil prices and a slowdown in global economic growth, coupled with decelerating energy, manufacturing, and export industry activity is also creating headwinds. Additionally, the stimulus of the federal Tax Cuts and Jobs Act is wearing off, leading to a normalized state of growth. Attentive to the rising risks of recession, the Federal Reserve has put interest rate hikes on hold so as not to create additional impediments.

U.S. and Colorado labor markets continue to improve, spurring wage growth and luring workers back into the labor force. These factors will maintain growth in consumer activity. However, labor shortages and the higher cost of labor are expected to constrain business growth.

Nationally, the real estate market has softened, prompting declines in residential construction activity. In Colorado, home price appreciation along the northern Front Range has cooled with rising interest rates, while other, more affordable Colorado metro areas continue to see housing costs accelerate. Housing affordability continues to be a major contributor to net migration across the state, impacting labor markets, demand for housing, and the regional distribution of construction activity. These trends are expected to continue through 2019 and into 2020. Tables 14 and 15 on pages 55 and 56 present histories and expectations for economic indicators for the U.S. and Colorado, respectively.

Gross Domestic Product

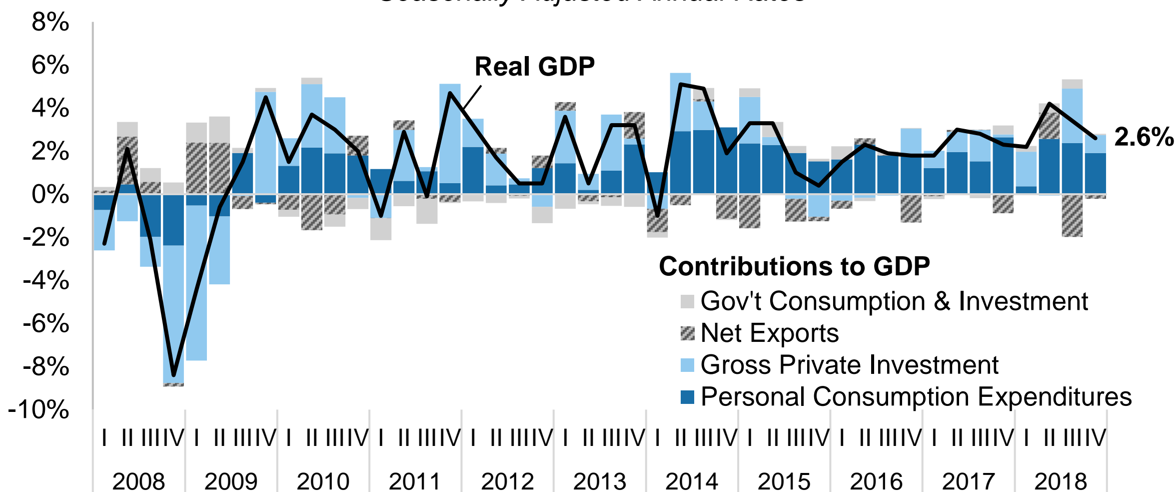
In 2018, U.S. economic activity accelerated, growing 2.9 percent over the prior year and marking the ninth consecutive year of improvement following the Great Recession. Strong consumer confidence and robust business spending continued to keep the nation's economy on track to record its longest expansion ever. The federal Tax Cuts and Jobs Act provided a boost to activity in 2018 by reducing the federal corporate income tax rate, incentivizing the repatriation of foreign income back to the U.S., and supporting household spending through individual income tax cuts for many households. Slower global economic activity, ongoing trade uncertainties, and a softening residential real estate market continue to pose challenges. Colorado's economy continues to grow at a healthy pace, but after years of outpacing the nation, the state's growth is converging with the nation's rate of economic expansion.

- The U.S. and Colorado economies are expected to continue to grow in 2019 and 2020; however, the pace of expansion is expected to slow as the stimulative impacts of federal tax cuts fade and labor shortages and a slowing global economy constrain growth. U.S. real gross domestic product (GDP) is expected to grow 2.3 percent in 2019, before slowing to 1.1 percent in 2020.

Recent GDP growth across major components. The U.S. economy slowed in the final quarter of 2018 as international trade uncertainty, signs of a softening global economy, and higher interest rates hindered growth (Figure 5). Real gross domestic product (GDP), an estimate of the inflation-adjusted value of final U.S. goods and services, grew at an annual rate of 2.6 percent in the fourth quarter of

2018, down from 3.4 percent growth in the third quarter. **Consumer spending**, which accounts for more than two-thirds of total economic output, grew at a solid 2.8 percent annual rate in the last quarter of 2018. Household consumption of health care and spending on housing services were strong drivers of consumer expenditures in the final quarter of the year.

Figure 5
Contributions to Real 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 increased by 4.6 percent in the final quarter of 2018, after growing by a robust 15.2 percent in the prior quarter. Companies continue to invest heavily in intellectual property products such as software and research and development. In 2018, businesses invested over $900 billion on intellectual products. Residential investment continued to hinder economic growth in the final quarter of 2018, declining by 3.5 percent from the prior quarter. Real estate spending softened in 2018, declining by 0.2 percent from the prior year. Investment in nonresidential construction also fell in the second half of the year.

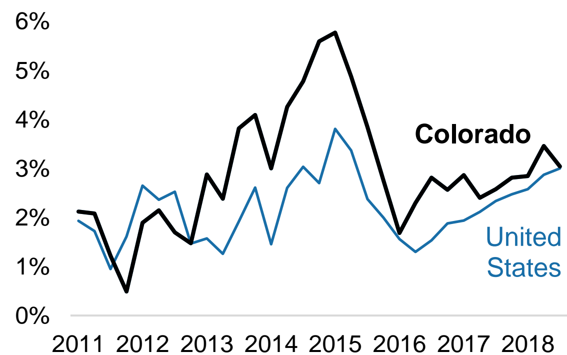
U.S. exports were up marginally in the last quarter of the year after declining in the third quarter. In 2018, total **exports** were up 3.9 percent from the prior year. Looming tariffs pushed U.S. export growth in the second quarter to its highest level in almost five years, increasing by 9.1 percent. Many U.S.-based businesses, particularly soybean growers, accelerated their shipments to beat Chinese tariffs that took effect in July. While exports rose, **imports** increased at an even greater pace, contributing to a net reduction in the final quarter of 2018. U.S. imports increased 4.6 percent in 2018 as businesses stepped up their efforts to import more goods before January, when U.S. tariffs on imports were expected to jump from 10 percent to 25 percent.

Government expenditures were relatively flat in the fourth quarter, increasing by 0.4 percent. For the year, government spending increased by 1.5 percent in 2018, after falling by 0.1 percent in 2017.

Colorado's economy remains strong. In the third quarter of 2018, the most recent data available, Colorado's real GDP expanded by a healthy 3.1 percent from the same quarter one year prior. 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 real GDP in the third quarter. Colorado's strong information industry and skilled workforce continue to attract new companies to the state and add new employees. Over 4,100 technology companies are located in the state, including Arrow Electronics, Home Advisor, and Google.

U.S and Colorado economic growth rates have converged. Economic growth in Colorado remains healthy but has moderated, such that the pace of growth now more closely resembles the nation's at large (Figure 6). The state's economy began to consistently outpace the nation in 2013, and by the first quarter of 2015, the state's economy was growing by a robust 5.8 percent, about two percentage points higher than the nation. A slowdown in global economic activity and a sharp drop in oil prices beginning in the second half of 2015 slowed both the U.S. and Colorado economies. Colorado's economy picked up momentum again in late 2016, with growth exceeding that of the nation's. In the third quarter of 2018, Colorado's economic activity remains strong but growth has converged with the national rate.

Figure 6
Year-over-Year Change in Real GDP



Source: U.S. Bureau of Economic Analysis. Data are seasonally adjusted. Real GDP is inflation adjusted.

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 December U.S. retail sales fell flat, consumer activity and sentiment rebounded at the start of 2019. Overall, household balance sheets remain solid, though savings rates have fallen slightly below historical averages, and the amounts and delinquency rates for auto, student, and credit card loans continue to rise.

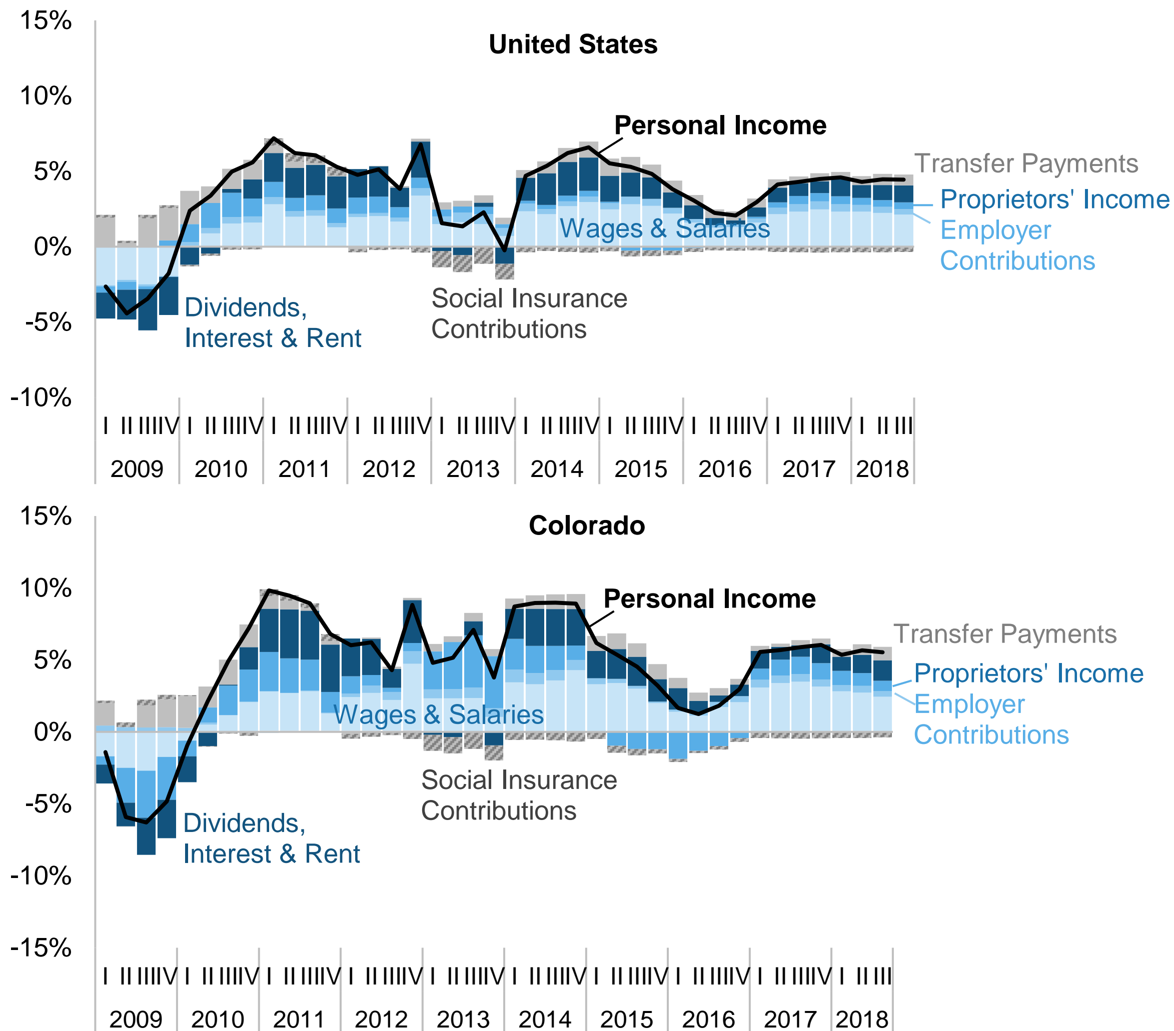
- Led by growth in wages, U.S. personal income is expected to expand 4.5 percent growth in 2019, before growing 4.1 percent with slower economic activity in 2020.

- Personal income in Colorado is expected to grow 5.3 percent in 2019, and 5.1 percent in 2020. Rising wages and salaries will drive expansion through 2019 and into 2020, as a tight labor market necessitates higher compensation for the state's workforce. Wage and salary growth will continue to be dampened by demographic factors and automation. Wage growth is expected to be sufficient to offset deceleration in business proprietors' income, as input costs increase, and property lessor income moderates as rent pressures deflate.

- Consumer activity is expected to decelerate in 2019 and 2020 with moderation in household income growth, and as auto sales remain soft and demand eases for light-weight trucks.

Personal income continues to rise, led by wage growth. As shown in the top half of Figure 7, U.S. personal income grew 4.6 percent in the third quarter of 2018 compared with the same quarter last year. A tight national labor market and the arrival of higher interest rates put U.S. households on track for their best year of income growth since 2015. Personal income in Colorado increased 5.5 percent over the first three quarters of 2018 compared with the first three quarters of 2017, as shown in the bottom half of Figure 7. Personal income growth in the state has outpaced national gains over the course of the economic expansion.

Figure 7
Personal Income and Its Components
Contributions to Percent Change, Year-over-Year

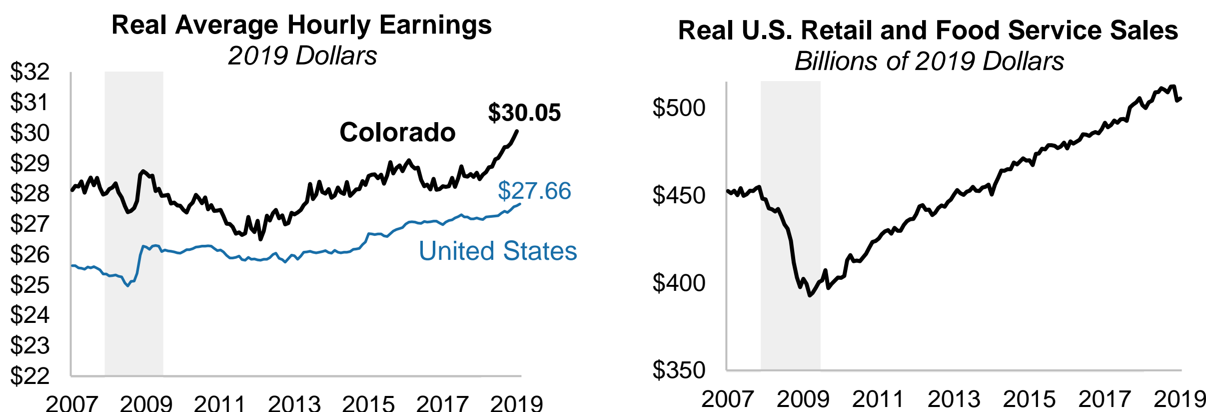


Source: U.S. Bureau of Economic Analysis with Legislative Council Staff calculations. Data are not adjusted for inflation.

Wage and salary earnings are driving broader personal income growth. This increase in wages and salaries is now attributable to wage inflation rather than increasing employment, a sign that the tight labor market is finally delivering on its promise to wage earners. Average hourly earnings increased at a rate of 3.2 percent between January 2018 and January 2019, setting a new high point for wage

growth during the current business cycle (Figure 8, left). Higher wages offer particularly high returns elsewhere in the economy, as they represent the largest component of household income and frequently magnify consumer spending.

Figure 8
Selected Inflation-Adjusted Earnings and Spending Indicators



Sources: U.S. Bureau of Labor Statistics (left) and U.S. Census Bureau (right); 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.

While employee compensation has been rejuvenated over the past year, wage and salary growth is weighed down by demographic factors. On an inflation-adjusted, per-worker basis, wages and salaries fell during both 2016 and 2017. Many economists attribute this phenomenon to the retirement of long-tenured veteran employees, who earned relatively high wages and salaries, and their replacement by younger, less-experienced employees who earn less. This demographic skew may dissipate if remaining employees receive wage increases commensurate with the responsibility they assume as their retiring coworkers depart. In addition to the aging population, technological advances and automation continue to dampen wage growth by competing with or replacing many lower-skilled jobs.

Investment income is expected to moderate with interest rate hikes on hold. Income contributions from dividends, interest, and rent rose a robust 5.7 percent through the third quarter of 2018 compared with the same period in 2017. However, reduced expectations for interest rates, slowing rental demands, and recent equity market doldrums are expected to moderate gains through the remainder of the forecast period.

Consumer confidence has dipped in recent months. Despite a strong labor market and improving wage gains, consumer confidence was shaken in December and January. The end of 2018 and start of the new year included stock market volatility, uncertainty around international trade negotiations, and the beginning of a 35-day federal government shutdown, all of which dampened consumer sentiment. On an inflation-adjusted basis, retail sales in January 2019 rose a meager 0.7 percent relative to year-ago levels, reflecting a dip in activity in December (Figure 8, right). The broader indicator of consumer spending, personal consumption expenditures, shows that consumers continue to be the primary driver of economic activity, though their contribution has moderated over the past

three quarters. Inflation-adjusted U.S. personal consumption expenditures rose at an annualized rate of 2.8 percent in the third quarter on 2018 over the prior quarter.

Labor Markets

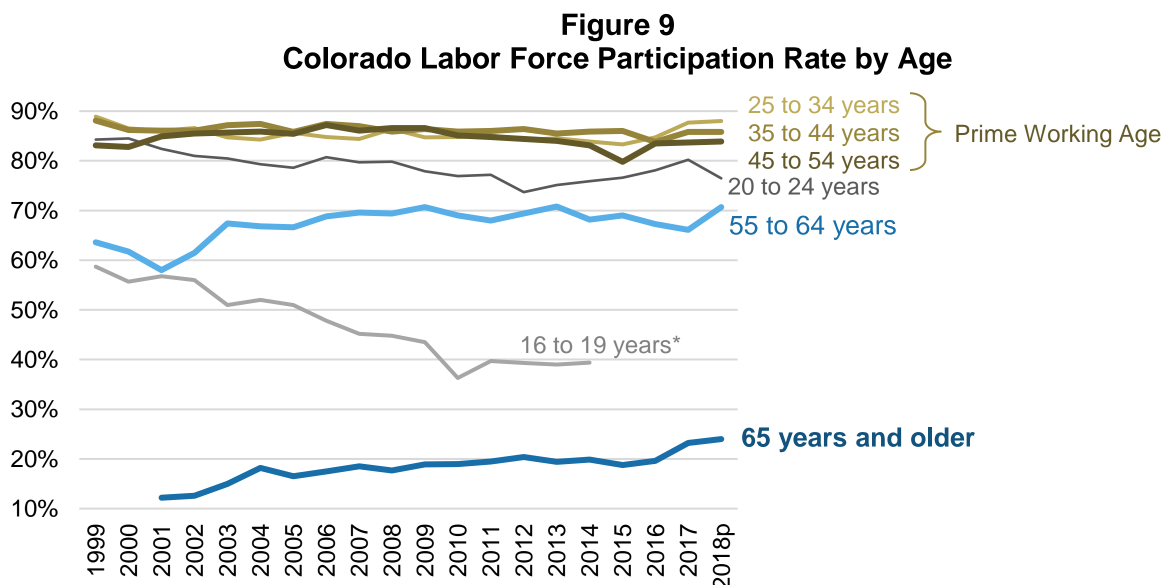
Labor market indicators for both the U.S. and Colorado finished 2018 on a strong note despite signs of growing worker shortages. After growing by 1.6 percent in 2017, national job growth picked up slightly in 2018, increasing by 1.7 percent. In February 2019, the nation posted its 101st consecutive month of job growth, and the unemployment rate remained near historical lows at 3.8 percent. Similarly, labor market activity in Colorado remained strong into the start of 2019, as most sectors added workers to their payrolls.

- U.S. nonfarm employment is expected to add jobs at a pace of 1.4 percent in 2017, before moderating to 0.9 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 4.0 percent in 2020 as an increasing number of workers seek employment.

- In Colorado, nonfarm employment will grow 2.1 percent in 2019 before slowing to grow 1.5 percent in 2020. Rising labor force participation will sustain employment gains. The Colorado unemployment rate is expected to average 3.6 percent in 2019 and 3.9 percent in 2020.

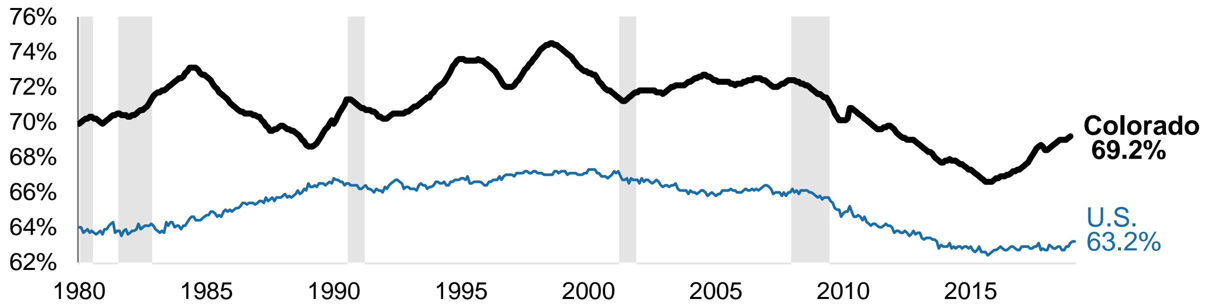
Strong labor markets are counteracting structural shifts. Colorado's labor force participation rate is climbing despite the aging of the state population. Growing labor force participation since 2015 suggests that improved job opportunities are strong enough to offset demographic change and structural shifts toward automation, which have reduced demand for lower-skilled workers in many industries. Over the last two years, those over the age of 65 have shown some of the strongest growth in labor force participation in Colorado among age cohorts (Figure 9). Figure 10 compares U.S. and Colorado labor force participation rates.

Figure 9
Colorado Labor Force Participation Rate by Age



Source: U.S. Bureau of Labor Statistics. p = Preliminary.
**Data are not available after 2014 for those aged 16 to 19 years.*

Figure 10
Labor Force Participation Rate Comparisons

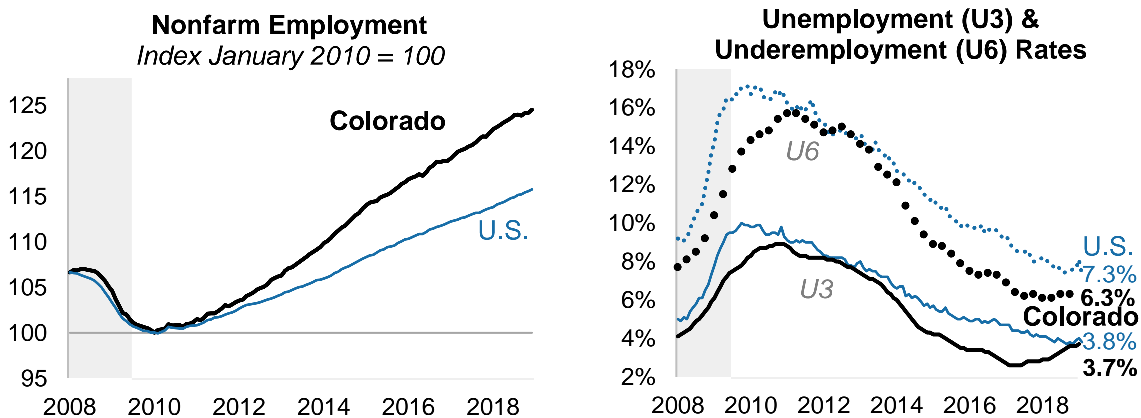


Source: U.S. Bureau of Labor Statistics. Data are seasonally adjusted and are through February 2019 for the U.S. and January 2019 for Colorado.
***Labor force participation is calculated as the percent of the civilian population, age 16 and older, who are working or seeking employment.*

U.S. job growth continues despite worker shortages. The U.S. labor market posted its eighth consecutive year of job growth in 2018 (Figure 11, left). Monthly job gains strengthened slightly over the year, averaging 223,300 new jobs each month in 2018 compared to the 179,400 monthly average in 2017. Year-over-year gains remained broad-based at the start of 2019, with the largest sectors, professional and business services and health services sectors, driving overall U.S. job growth (Figure 12). Despite slowdowns in the national real estate market and oil and gas industry, construction and mining employment remain elevated over 2018 levels. Consistent with two years of subpar job gains, the utility and retail sectors continue to show weakness because of industry restructuring.

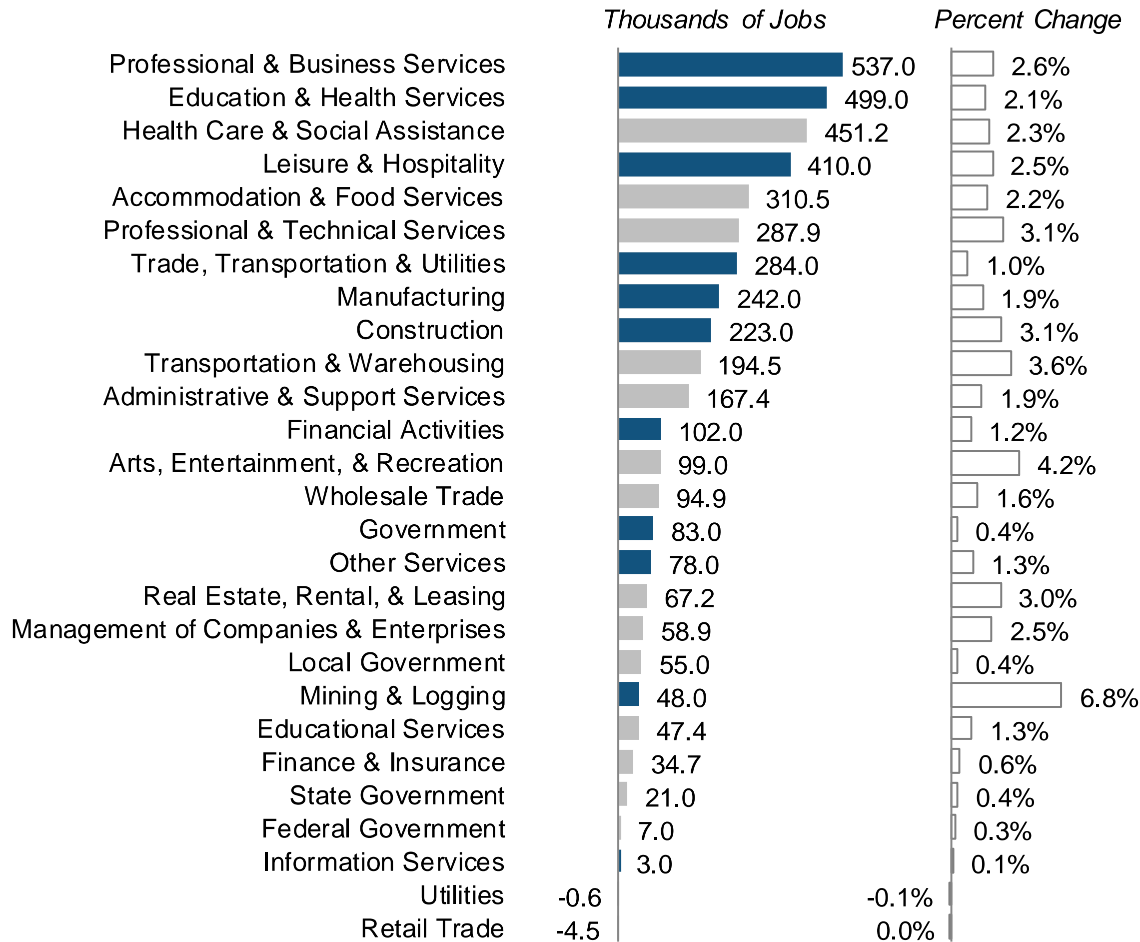
The U.S. labor market continues to tighten with an increasing number of industries reporting worker shortages. The U.S. unemployment rate (U3) remains at historical lows, at 3.8 percent as of February (Figure 11, right). The "underemployment" (U6) rate, a broader measure capturing discouraged workers and those who work part-time but desire full-time work, fell to 7.3 percent in February.

Figure 11
Selected U.S. and Colorado Labor Market Indicators



Source: U.S. Bureau of Labor Statistics. Data are seasonally adjusted and are through February 2019 for the U.S. and December 2018 for Colorado.
**Underemployment rates for Colorado are shown as four-quarter averages, while data for the U.S. are monthly.*

Figure 12
U.S. Job Gains and Losses by Industry
Year-over-Year Change, February 2019 over February 2018

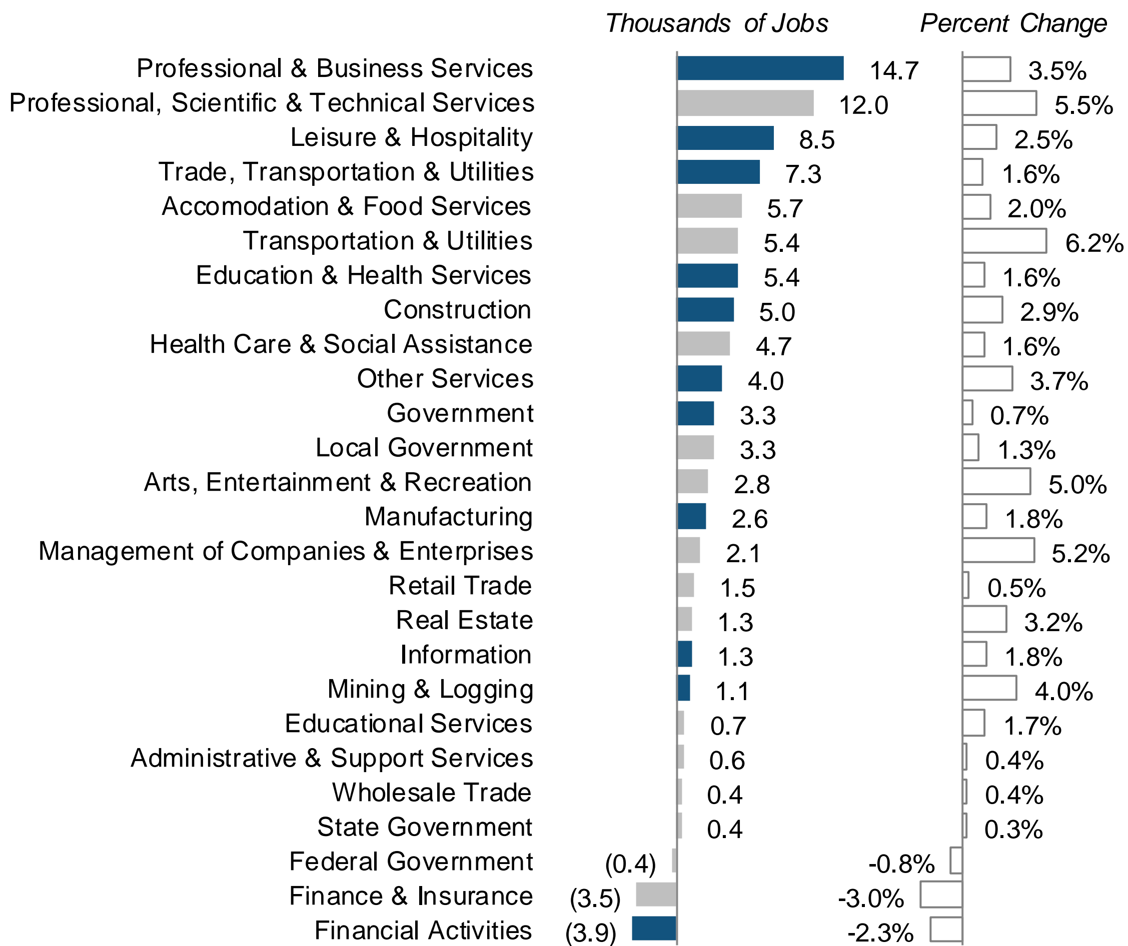


Source: U.S. Bureau of Labor Statistics. Data are seasonally adjusted. Blue (dark) shading indicates a supersector while grey (light) shading indicates a subsector.

Colorado's labor market remains tight. The Colorado labor market remains one of the strongest in the country, posting a 1.8 percent employment gain in January. The state added roughly 5,400 new jobs each month in 2018 for a total of 64,800 jobs for the year. As of the start of the year, job gains have continued across most sectors (Figure 13), with professional and business services posting the largest gains relative to levels in January 2018. Employment in the mining and logging supersector continues to trend upward, although volatility in oil markets may put a drag on hiring in 2019. Employment in federal government and finance and insurance sectors was down slightly from the same month last year.

Colorado's unemployment rate remains near its historic low, starting the year at 3.7 percent. The state unemployment rate has been ticking up slightly since July 2017 due to a growing labor force. In 2018, the state added over 102,000 people to its labor force, a 3.4 percent increase from 2017. In spite of the increase in labor force participation, many employers are reporting that it is becoming increasingly difficult to find the talent and skilled labor needed to grow their businesses.

Figure 13
Colorado Job Gains and Losses by Industry
Year-over-Year Change, January 2019 over January 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.

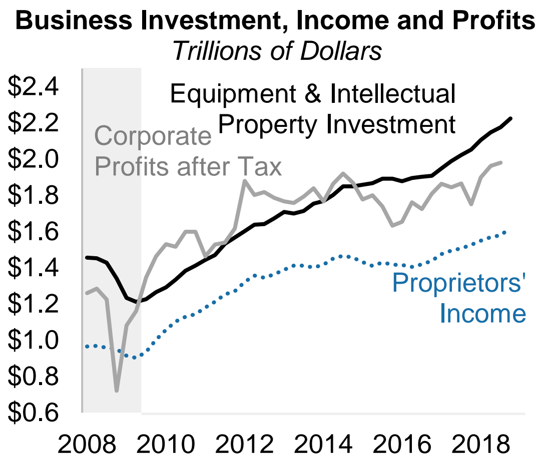
Business Income and Activity

Heading into 2019, business activity, which remains elevated, has shown signs of slowing. Proprietors' income and investment increased at a moderate pace through 2018, signaling ongoing economic health in the business community. Corporate profits experienced robust growth in the first half of 2018 following passage of the federal tax law, though the pace of improvement slowed in the second half of the year. U.S. corporate debt levels are elevated, posing a risk to overleverage businesses in a higher interest rate environment. At the start of 2019, industrial production and manufacturing activity moderated on weak auto orders and lower values for finished petroleum products. Momentum in business activity is expected to moderate in 2019 and 2020 as the jolt from the federal tax cuts eases, and slower global economic activity and tighter labor markets constrain business prospects.

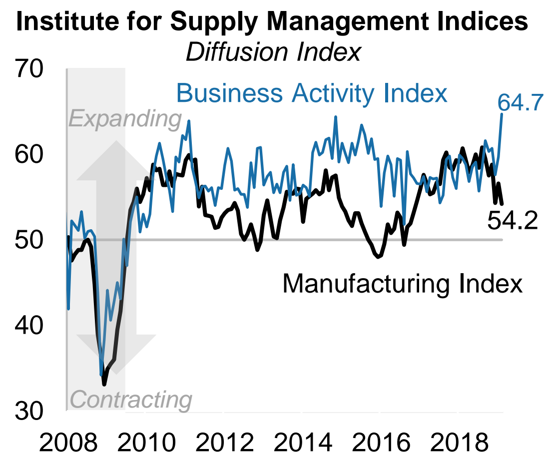
Business income and investment continues to rise, along with debt levels. Business investment in software and equipment increased 7.7 percent in the third quarter of 2018 compared with the same

period in 2017. Proprietors' income increased 4.8 percent in the first three quarters of 2018. On a quarter-over-quarter basis, growth in corporate profits after taxes has gradually slowed since the passage of the federal Tax Cuts and Jobs Act; from 38.4 percent in the first quarter of 2018, to 14.0 percent in the second quarter, to 3.7 percent in the third quarter of 2018. Many businesses have taken advantage of the low interest rate environment, giving rise to corporate debt levels. Overleveraged companies face rising risks amid higher interest rates and a slowing economy.

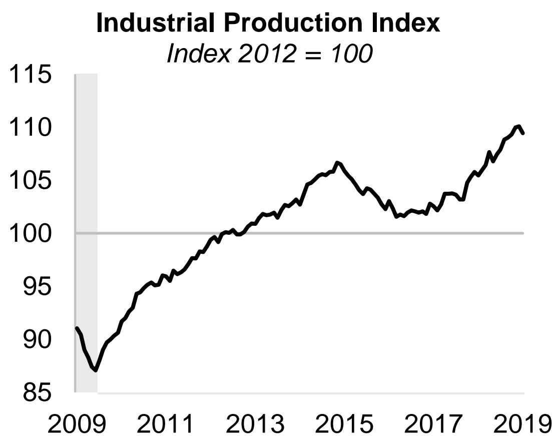
Figure 14
Selected Indicators of U.S. Business Activity



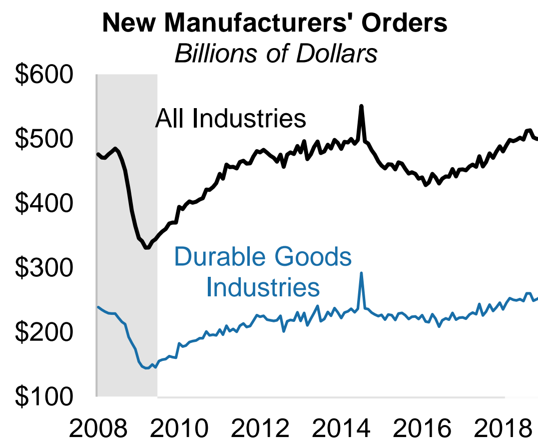
Source: U.S. Bureau of Economic Analysis.



Source: Institute for Supply Management.



Source: Federal Reserve Board of Governors.



Source: U.S. Census Bureau.

Manufacturing activity has slowed on weaker global demand and lower crude oil prices. Both the Institute for Supply Management's (ISM) manufacturing index and its nonmanufacturing business activity index continue to indicate expanding business activity as firms fill new orders for goods (Figure 14, top right). However, the manufacturing index shows a significant slowdown in momentum attributable in part to slower economic activity and the drop in crude oil prices at the end of 2018. Despite the slowdown, the manufacturing index remains in expansionary territory (with values above 50), reading 54.2 in January. The nonmanufacturing business activity index

jumped to 64.7 in February, reflecting a rise in demand for services and an increase in optimism for a trade deal between the U.S. and China.

The Federal Reserve Bank of Kansas City produces a manufacturing index similar to the ISM index within its region, which includes Colorado and six other nearby states. The Kansas City Fed index registered 51.0 in February, indicating very slight growth. Survey respondents cited low commoditiy prices, labor shortages, and supply chain and price disruptions resulting from tariffs and ongoing trade policy uncertainty as constraints to growth.

Industrial production remains elevated. As measured by the Federal Reserve, industrial production (Figure 14, bottom left) decreased 0.6 percent between December 2018 and January 2019. The monthly production declines resulted from a large drop in motor vehicle and parts orders while the performance of other industrial producers remained unchanged. Manufacturing and industrial production orders (Figure 14, bottom right), experienced slight declines between September and November 2018. Part of this decline is attributable to the fall in the value of finished petroleum products in the fourth quarter of 2018. Transportation activity was mixed with increased deliveries of finished orders offset by a decline in new orders. In spite of the dip in Janaury, industrial production remains at an elevated level.

Monetary Policy and Inflation

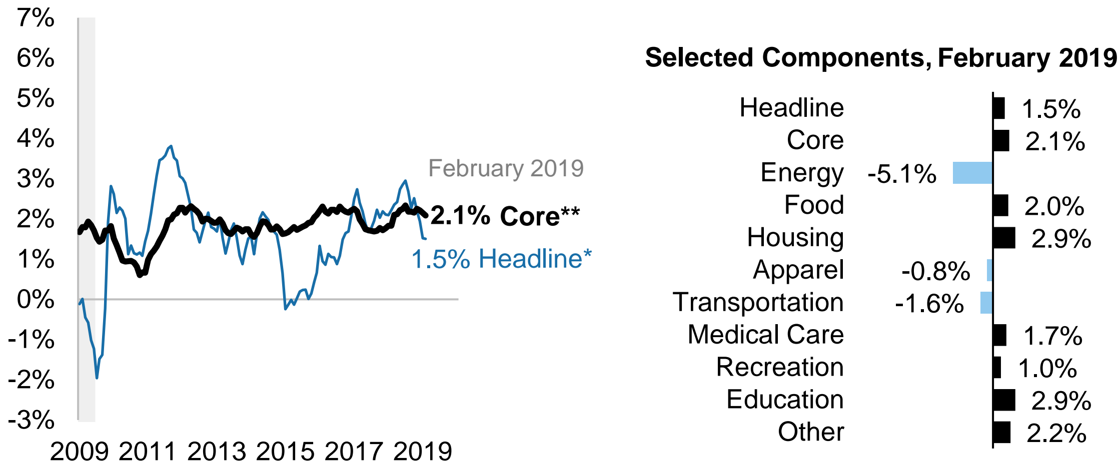
Given the recent drop in crude oil prices and slow global economic growth, national rates of inflation have fallen short of expectations, prompting the Federal Reserve to back away from its schedule of interest rate hikes. Year-over-year headline inflation sagged to 1.5 percent in February 2019, dragged down significantly by falling fuel prices and attendant deflation in the transportation component. Core inflation, which excludes volatile food and energy prices, was stronger at 2.1 percent. Figure 15 presents consumer price indicators for all U.S. urban areas through January.

- Consumer prices for the Denver-Aurora-Lakewood area are expected to increase 2.3 percent in 2019 and 2.2 percent in 2020. By comparison, the national measure for all urban areas is expected to rise 1.9 percent in both 2019 and 2020.

The outlook for interest rates has eased. Recent statements from the Federal Open Market Committee (FOMC) emphasize the importance of inflation tracking relative to target for the purpose of the committee's monetary policy decision-making. Relative to its posture in December, the FOMC has backed away from its hiking schedule, signaling that it will not act to increase the target federal funds rate at its March meeting and is unlikely to do so in June as well.

The outlook for consumer prices in 2019 is now less inflationary than in December 2018. Thawing trade tensions have mitigated expectations for trade-driven inflation in goods prices, though these effects are expected to be offset by rising pharmaceutical prices, the collection of state sales taxes on remote purchases, and increased service costs consistent with rising labor prices. Slowing the pace of interest rate hikes represents a significant deviation from the FOMC's trajectory over the past three years, when it raised interest rates in eight of nine quarters. The effective federal funds rate now stands at 2.40 percent, up from the historical lows of 0.1 percent to 0.2 percent that lasted from the end of 2008 through the end of 2015.

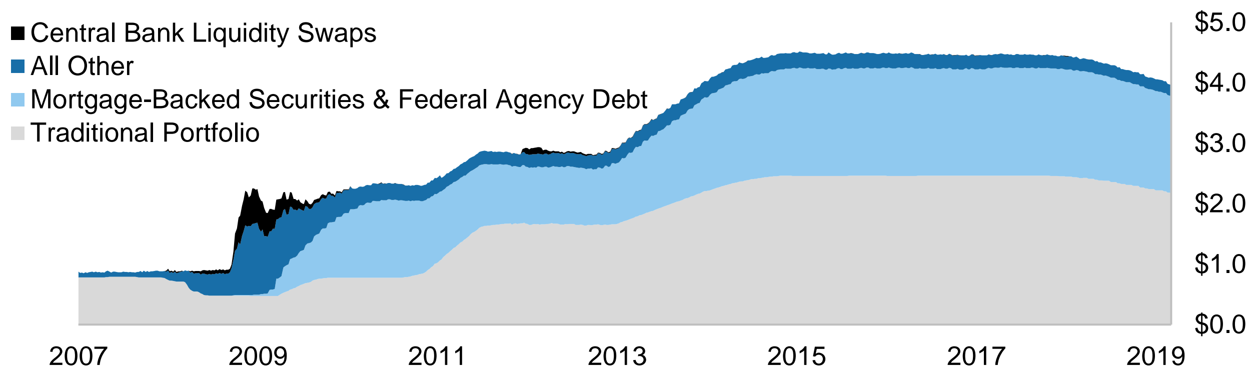
Figure 15
Consumer Price Index Inflation for All Urban Areas in the U.S.
Percent Change in Prices, Year-over-Year



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.*

The Fed is expected to end its quantitative tightening program. In his February testimony before Congress, Federal Reserve Chairman Jerome Powell signaled that the FOMC will soon announce an end to the balance sheet runoff that it began in late 2017. The Federal Reserve manages the money supply by purchasing or selling federal debt and other securities. Expanding the Fed's portfolio ("quantitative easing") increases the money supply and stimulates the economy, while allowing assets to mature without replacement ("quantitative tightening") reins in growth and controls inflation. The trajectory of the Fed's asset portfolio since 2007 is presented in Figure 16. While a schedule has not yet been announced, asset runoff is expected to continue into the fall but conclude before 2020. Through February 2019, balance sheet normalization had reduced the Fed's total portfolio from a peak value of $4.5 trillion after the three rounds of post-recessionary quantitative easing to just over $4.0 trillion, a decrease of 11 percent.

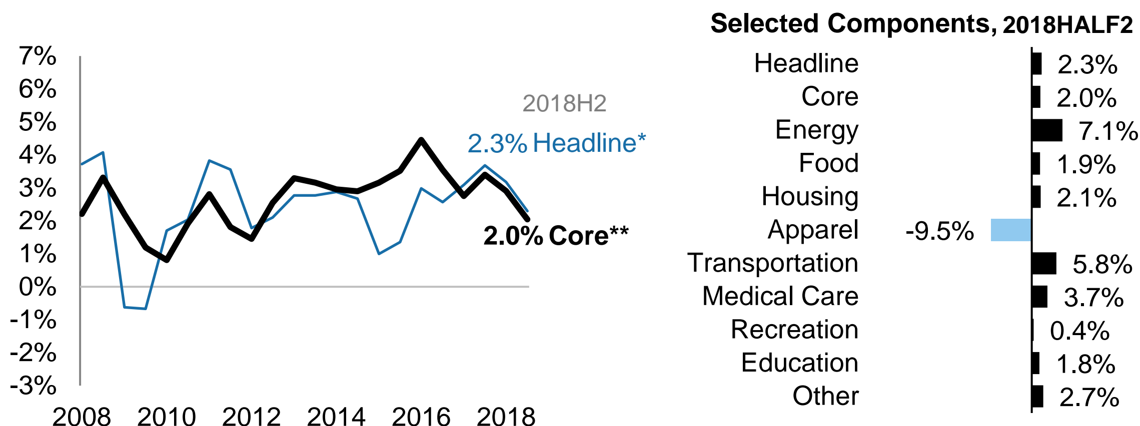
Figure 16
Federal Reserve Balance Sheet
Trillions of Dollars



Source: Federal Reserve Board of Governors.

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. The data shown present the change in prices between the second half of 2017 and the second half of 2018, and as such do not capture the full effect of energy price slackening that has occurred since. Relative to previous releases, consumer price inflation for the Denver metro area has slowed with the Denver housing market, and now more closely resembles the national trend. Year-end data for 2018 show that headline consumer prices for Denver increased 2.7 percent during 2018, versus 2.4 percent inflation nationwide.

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



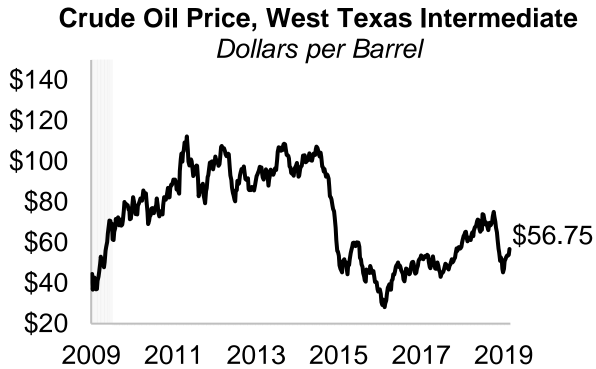
Source: U.S. Bureau of Labor Statistics. Inflation is calculated as the percent change in prices.
**Headline inflation includes all products and services. **Core inflation excludes food and energy prices.*

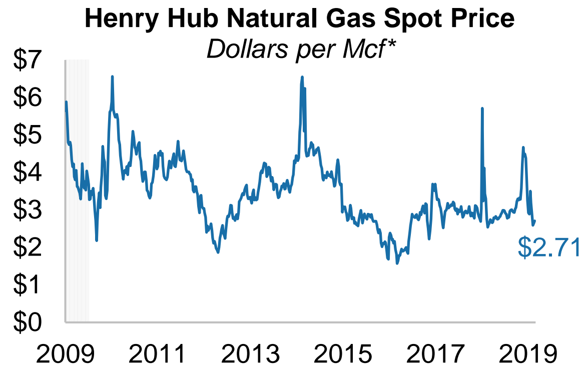
Energy Markets

Price declines in the fourth quarter of 2018 took a bite out of the oil and gas industry, but production remains high and the financial position of the industry remains relatively healthy. Oil prices fell as global demand waned due to a weakening global economy, while domestic oil production increased due to recent development activity. Crude oil prices are expected to rise slowly in 2019 and 2020 as members of the Organization of Petroleum Exporting Countries (OPEC) maintain current production levels. Prices for crude oil produced in Colorado are expected to rise from about $50 per barrel in 2019 to about $55 per barrel in 2020 and 2021. Coal production remains steady following the coal industry reorganization in 2016 and is expected to remain stable into 2019 and 2020 in spite of low demand.

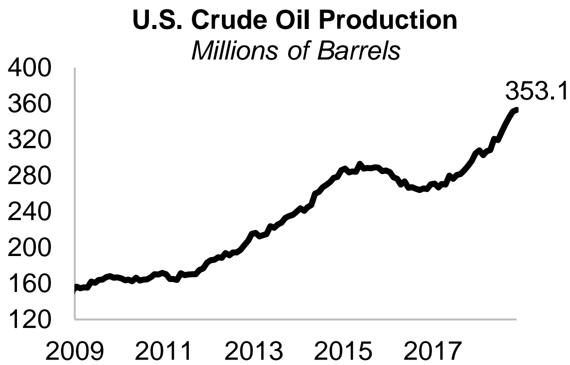
Crude oil prices are rising on global production cuts. Crude oil prices decreased 39.8 percent between the first week of October 2018 and the last week of December 2018, falling from $75.13 to $45.22 per barrel (Figure 18, top left). The decline in oil prices was spurred by fears of a weak global economy and an increase in U.S. crude oil stocks (Figure 18, middle right). Prices stabilized and have rebounded modestly to $53.53 per barrel as of the second week of February 2019 as OPEC maintained lower production targets in an attempt to see inventories fall to their five-year average.

Figure 18
Selected Indicators of Oil and Gas Industry Activity

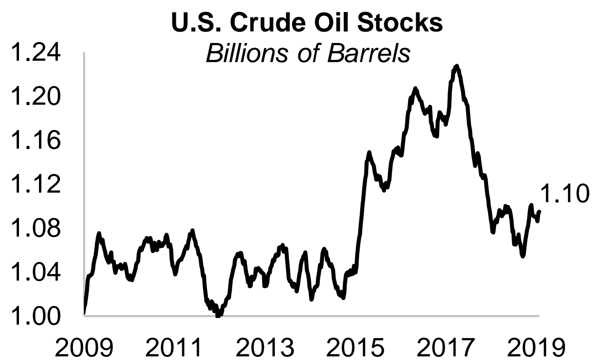




Source: U.S. Energy Information Administration. Weekly average prices. Data are not seasonally adjusted.
**Mcf = One thousand cubic feet.*

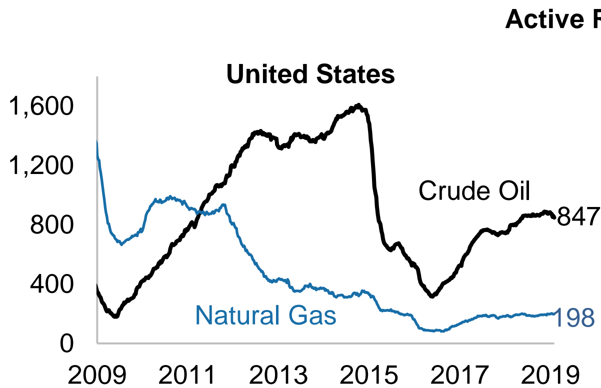


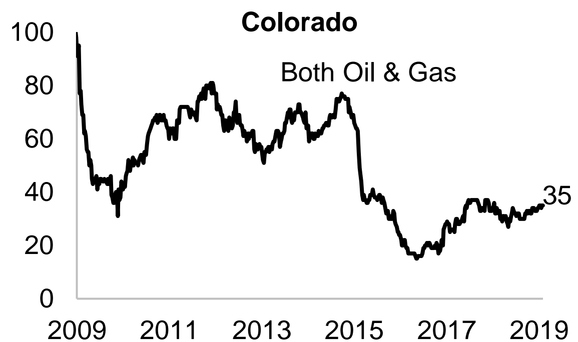
Source: U.S. Energy Information Administration. Data are shown as a three-month moving average and are not seasonally adjusted.



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

Active Rig Counts





Source: Baker Hughes. Data are not seasonally adjusted.

Despite the fall in prices, domestic energy production continued to increase through the fourth quarter of 2018. The U.S. Energy Information Administration expects domestic crude oil production to set a new record for production, averaging 11.0 million barrels per day in 2018 and 12.4 million barrels per day in 2019. Much of this continued growth is due to technological advancements and favorable geology in the Permian basin in western Texas and eastern New Mexico and 19 new offshore projects

in the planning process. U.S. crude oil production increased through the summer, rising to 353.1 million barrels of crude oil in November 2018 (Figure 18, middle left), a 2.4 percent increase from September 2018 (before the price of oil fell) and a 19.2 percent increase from November 2017.

Natural gas prices. Natural gas prices averaged $2.59 per thousand cubic feet (Mcf) in the second week of February (Figure 18, top right). Natural gas prices fell 44.5 percent since the fourth week of November when prices spiked at the start of cold winter weather. The U.S. Energy Information Administration estimates that natural gas consumption will remain strong due to cold weather in the Midwest and the shift to natural gas as a fuel source for power generation. Spot prices for natural gas are expected to remain stable as increased domestic natural gas production will fill the increased demand for natural gas production (Figure 18, top right).

Energy exploration has held steady. New drilling activity, as measured by active drilling rigs (Figure 18, bottom left), remained stable in the fourth quarter of 2018 and into 2019, reaching a total of 847 oil rigs and 198 natural gas wells in the first week of February. Drilling activity remained constant in the fourth quarter despite the decline in oil and natural gas prices.

Colorado energy activity. Similar to national energy markets, the Colorado oil and gas industry continues to increase production from more efficient wells. 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, reported that the fall in prices in the fourth quarter reduced total revenues, total profits and access to credit. Despite the decline in oil prices, nearly 36 percent of firms plan to increase investments in 2019 over 2018 levels, 40 percent of firms will decrease investments, and 24 percent don't know or will invest about the same amount in 2018 and 2019.

According to the Colorado Department of Natural Resources, coal production in Colorado decreased 5.2 percent in the first 10 months of 2018 compared with the same period in 2017. This is similar to national data. The Energy Information Administration estimates coal production will fall 4.0 percent between 2017 and 2018 to 691 million short tons, the lowest coal production since 1979. Coal mines are in the midst of a long-run decline due to less demand for coal as electricity production is shifting to renewable sources and natural gas. The number of active coal mines nationally declined from 1,435 mines in 2008 to 671 mines in 2017.

Housing & Residential Construction

The national residential real estate market cooled in 2018. Growing affordability concerns stemming from rising construction costs, a shortage of skilled labor, and rising interest rates slowed residential fixed investment. However, the Federal Reserve's policy shift on interest rates and a strong labor market have alleviated some concerns in the sector, as market indicators have been generally positive through the first two months of the year. In Colorado, after years of rapid home price increases, the housing market is showing signs of braking in the metro Denver area and northern Front Range.

Other, more affordable areas in the state continue to experience strong growth in home prices and construction activity.

- From elevated levels of new activity, Colorado housing permits are expected to grow 4.7 percent in 2019, with slower rates of growth in subsequent years on labor shortages and as supply begins to meet demand for new homes.

- 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 national housing market is stabilizing 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. Homebuilder confidence dampened and housing starts plunged in November and December (Figure 19, bottom left) and home appreciation slowed in the second of the year (Figure 19, top left). Since the Federal Reserve's policy shift in late December, mortgage rates have moderated and builder confidence has rebounded to healthier levels in the first two months of the year. In February, the Housing Market Index, a monthly survey designed to take the pulse of residential builder confidence, reported a reading of 62, after declining to 56 and 58 in December and January, respectively. A reading above 50 indicates a favorable outlook on home sales, while a reading below 50 indicates a negative outlook. Also evidencing nascent improvement, The Conference Board's consumer confidence index component on consumer plans to purchase a home spiked in January.

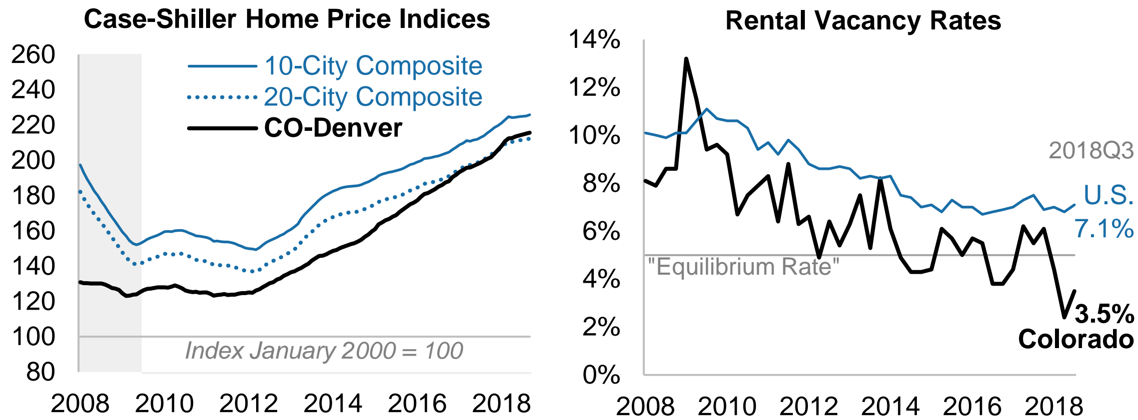
The U.S. housing market has tilted towards buyers. In many areas of the U.S., housing inventories have been steadily increasing throughout 2018 and into 2019, which has slowed home price appreciation and provided buyers with additional options. In October, the number of active listing counts was up 4 percent from that same period last year. The month's supply of homes has been trending upwards over the last six months. Additionally, real estate agents are reporting that fewer buyers are waiving contingencies and fewer homes are selling over their list price. The Case-Shiller 20-city composite home index increased 5.2 percent through September 2018 relative to the same period last year, representing a deceleration from the 6.2 percent increase posted in 2017 (Figure 19, top left). As demand has waned, new construction activity has softened (Figure 19, bottom left).

Colorado residential market indicators remain strong. Overall, Colorado's real estate market remains one of the hottest in the country, with the number of residential permits issued in the state well outpacing the national market. However, the regional distribution of sale and construction activity and appreciation in home prices has shifted from the Denver, Boulder, and Fort Collins-Loveland metro areas to more affordable metro areas of the state, including Greeley, Colorado Springs, and Grand Junction. For additional information on these regional distributions, see the regional sections beginning on page 58.

Historically low rental vacancy rates (Figure 19, top left) have kept demand for new residential construction in Colorado at high levels. Statewide vacancy rates continue to tick lower, suggesting that demand remains high for new construction. In 2018, total permits for new residential construction in Colorado were up 13.7 percent from the same period one year ago. Growth has been

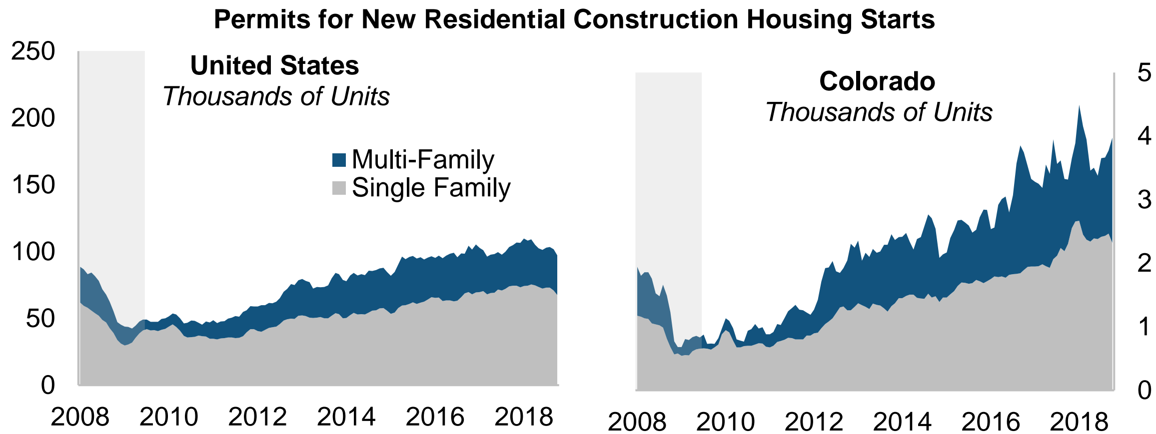
driven primarily by single family permits, which increased by almost 17.0 percent (Figure 19, bottom right). Multi-family permits also showed strong growth, growing 8.5 percent over 2017 levels, owing in large part to strong December activity.

Figure 19
Selected Housing Indicators



Source: S&P Dow Jones Indices LLC. Seasonally adjusted. Data through December 2018.

Source: U.S. Census Bureau. Data through the third quarter of 2018.



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

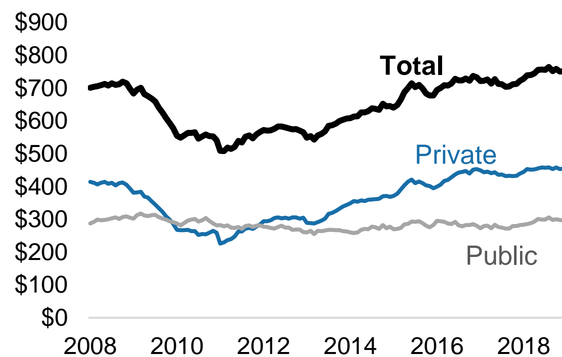
Nonresidential Construction

Nonresidential construction activity continued at elevated levels in 2018, though with some signs of moderation toward the end of the year. Though year-end growth was up 4.0 percent nationally, growth in the value of both public and private sector investments slowed in the last quarter of 2018. Colorado's nonresidential construction also remains elevated on broader growth geographically. Several large projects in the state are scheduled to start in 2019 and continue to support an elevated level of activity. Both U.S. and Colorado construction contractors continue to cite labor constraints as the major impediment to growth in the industry.

- Nonresidential construction in Colorado is expected to decline 8.3 percent in 2019 from 2018 highs that in part reflect the expansion of Denver International Airport. Nonresidential construction activity is expected to decline slightly in 2020 and 2021 as the economic expansion matures, and labor shortages constrain growth.

U.S. nonresidential activity remains at elevated levels. Nationally, investment in public nonresidential projects accelerated in 2018, though activity softened slightly in the last three months of the year (Figure 20). Relative to 2017 levels, spending is up in 12 of 13 public construction sectors, with large components such as sewage and waste disposal, transportation, and conservation development projects experiencing strong growth from one year prior totals. A strong U.S. economy and rising tax revenues have given many states a budget surplus for the first time in years, allowing for investments in public projects.

Figure 20
U.S. Nonresidential Construction Spending
Billions of Dollars



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

Relative to public sector spending, private nonresidential spending also improved in 2018, but at slower rates compared to prior years. Investment in public projects is decelerating on rising private borrowing costs and concerns that some areas of the country already are, or soon will be, overbuilt.

Colorado nonresidential construction remains strong. After two years of solid gains, total nonresidential construction spending in Colorado increased by an impressive 23.3 percent in 2018, a total value of nearly $7.6 billion. Though spending was strong on projects such as schools, libraries, public buildings, and various infrastructure projects, much of this growth was attributable to a large capital investment project in Weld County. The Mewbourn 3 natural gas processing plant with be the tenth plant in the Denver-Julesberg basin and will connect to the Front Range pipeline. In addition, 2018 construction spending included phase 1 of the Denver International Airport Great Hall Renovation and redevelopment of the National Western Center. Finally, construction spending on retail, office, hospital, and hotel projects was down from the previous year.

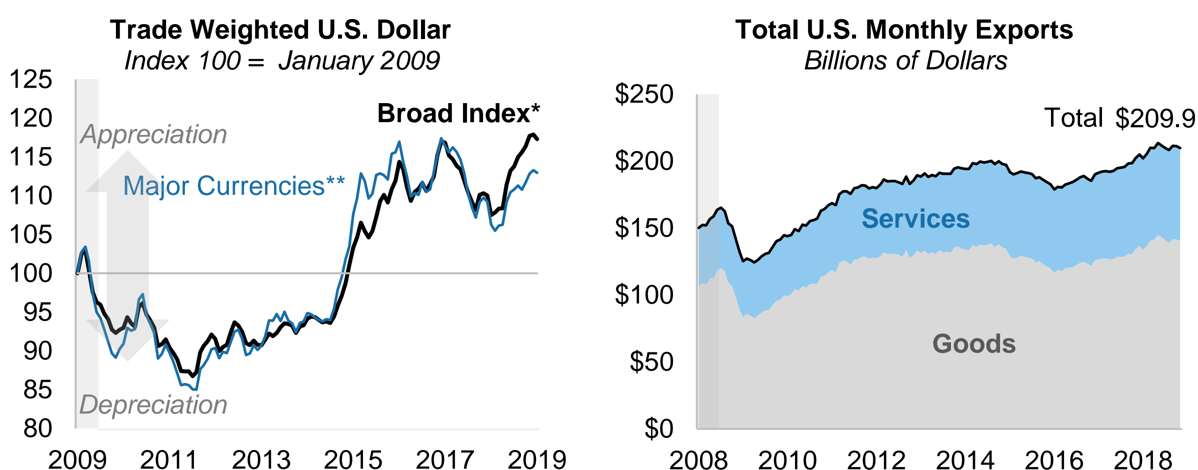
Price effects suggest downside risk. Tariffs on steel and aluminum imposed last year have contributed to a rise in the cost of construction materials. In addition, rising interest rates and wage pressures are putting upward pressure on the price of new construction projects. If these costs increase too quickly, momentum in the industry may slow significantly. U.S. and Colorado construction contractors continue to report that worker shortages are the main factor restricting growth in the industry. 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

Global economic activity continues to slow, posing a downward drag for state and national economic activity. The U.S. dollar remains strong relative to foreign currencies, tempering inflationary risk from the purchase of foreign goods and foreign tariffs while adversely impacting some emerging and developing economies. Slower growth in China has dampened global growth and trade expectations for 2019, reflecting the country's extensive networks of trade and investment around the globe. Trade tensions continue to pose a downside risk to the global outlook, as do tighter financial conditions among advanced economies and ongoing geopolitical tensions.

The U.S. dollar remains high despite some volatility. The relative strength of the U.S. economy has boosted the strength of the 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 21, left). A strong dollar makes U.S. exports more expensive, threatening current export levels (Figure 21, right), while also making imports relatively cheap.

Figure 21
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.

Economists continue to downgrade global growth projections. The International Monetary Fund (IMF) released an updated outlook for the global economy in January, revising the prior forecast of global economic output down for this year and next by 0.2 percent and 0.1 percent, respectively. Global growth is now projected at 3.5 percent in 2019 and 3.6 percent in 2020. This is the second consecutive downward revision caused by recent economic indicators pointing to a slowdown in global economic activity, as well as international trade tensions. Risks to global growth remain on the downside.

Growth has slowed in many advanced economies. According to the IMF, growth among advanced economies is projected to slow from 2.3 percent in 2018 to 2.0 percent in 2019 and 1.7 percent in 2020.

The outlook for economic activity in the Euro area continues to be downgraded. The area's three largest economies, Germany, France, and Italy, are all projected to slow this year. As monetary policy shifts further into easing, interest rates in the Eurozone currently hover around 0.0 percent, and the European Central Bank is forecasting inflation of 1.5 percent for 2019. Economic activity in Italy is forecast at a meager 0.2 percent growth on ongoing financial woes. Political instability remains in France and Germany, while the Brexit deadline looms large. After contracting by 2.6 percent in the third quarter of 2018, Japan's economy rebounded in the fourth quarter to grow at a 1.4 percent annualized rate on the shoulders of higher domestic demand. Risks, however, are on the downside for Japan's economy because of significant exposure to China.

Brexit negotiations pose downside risk to both the UK and continental Europe. As of the date of this publication, the Brexit agreement reached by leaders on both sides has not been palatable to either citizens or Parliament in the United Kingdom (UK). The IMF projects that a "hard" Brexit, one in which the European Union (EU) and UK do not reach an agreement by their March 29 deadline, could mean a cumulative loss of GDP of almost 4 percent in the UK and Ireland by 2030 and a 1.5 percent loss across the EU. Ongoing uncertainty surrounding the outcome of a UK-EU deal has hurt consumer sales, business investment, and the UK's GDP growth.

Growth is mixed among emerging and developing counties. The broad range of countries classified as "emerging" and "developing" is projected to grow at a 4.5 percent clip in 2019, a slightly slower pace than the prior year. Latin America's two largest economies, Mexico and Brazil, show mixed signs under new reform-driven, populist presidents. Brazil's economy is forecast to grow 2.4 percent in 2019, up from 1.4 percent in 2018; however, fiscal challenges loom large. The country has benefitted from trade tensions between China and the U.S., since China looked to Brazil to fill the soy export void the U.S. left when China imposed retaliatory tariffs on U.S. soybeans. On the upside, strong growth is projected in Asia's emerging and developing economies, with India leading the way at over 7.5 percent growth for this year and next.

The slowdown in the Chinese economy has roiled markets. Growth in China's GDP is projected to slow from 6.6 percent growth in 2018, the lowest growth rate posted since 1990, to 6.2 percent growth in 2019. While the pace of growth is still high for such a large economy, slower internal demand and production are affecting the country's many trade partners. In addition to softer consumer demand, uncertainty around government regulations of the private sector and structural reforms in its financial sector have disrupted growth prospects. High levels of state-owned enterprise and private corporate debt are catching up to the financial sector as well, with some firms defaulting on their loans. The potential for a trade deal with the U.S. could spark an uptick in confidence in the coming months; however, the effects of the tariffs on China are only one driver of slower economic expansion.

International Trade

As negotiations to resolve the U.S.–China trade tensions near a possible conclusion, risks to the international trade landscape remain on the horizon. The U.S.-Mexico-Canada Agreement (USMCA), remains under consideration by national legislatures. Additionally, EU retaliatory tariffs persist as a result of U.S. steel and aluminum tariffs. The outlook for a near-term deal with China appears positive, while uncertainty clouds the resolution of the remainder of the tariffs. The prospect of

ratifying deals favorable to the U.S. poses long-term upside risk to economic activity, while ongoing uncertainty surrounding trade negotiations poses near-term downside risk.

USMCA adoption is in a holding pattern. The replacement for the North American Free Trade Agreement (NAFTA), known as the USMCA, was signed by the three member countries' heads of state on November 30, 2018. The major changes to the new deal include:

- country rules of origin for vehicles increased from 62.5 percent to 75 percent;
- improved worker protections and higher wages for automotive factory workers, particularly in Mexico;
- the opening of the Canadian market to U.S. dairy imports; and
- a 16-year sunset clause and reviews of the agreement every 6 years.

As a result of the vehicle rules of origin increase and higher auto worker wages, car prices are projected to increase on higher input costs. Additionally, if auto manufacturers do not comply with the new rules, a 2.5 percent tariff will be levied on the vehicles sold across international boundaries. The new agreement has had no effect on the retaliatory tariffs imposed by Canada and Mexico on U.S. exports. Canada and Mexico have signaled that they will lift these retaliatory tariffs if the U.S. lifts its steel and aluminum tariffs. The risks surrounding USMCA's final passage remain elevated as the agreement must still be ratified by national legislatures in all countries to take effect. Formal discussion has yet to commence in this year's U.S. Congress. Both neighboring countries have asked that steel and aluminum tariffs be lifted before they ratify the new agreement. To date, the U.S. has not indicated an intent to lift these tariffs.

The U.S. and China appear to be nearing a trade agreement. Negotiations between the U.S. and China regarding some of the stickier points of their trade relationship, including intellectual property theft, auto tariffs on U.S. imports, and narrowing the U.S. trade deficit, are reportedly close to an initial deal. The March 1, 2019 deadline to reach a deal was put on hold, meaning the U.S. will not increase tariffs from 10 percent to 25 percent on $200 billion of Chinese imports at this time. Any agreement reached will likely be preliminary and its provisions monitored over time to ensure compliance.

Tariffs continue to impact U.S. business activity. While the impacts of tariffs are difficult to disaggregate from economic activity in the data, industry reports point to supply disruptions and input price increases for many industries. These impacts have reduced profit margins or resulted in increased costs for consumers. Many larger companies have been able to negotiate down prices with suppliers abroad, while smaller firms lack this leverage due to their size. Additionally, many firms purchased excess goods in advance of tariffs to mitigate the impacts of higher prices. These efforts have staved off stronger price appreciation. However, the longer tariffs remain in effect, the more U.S. businesses and consumers will be impacted.

According to the U.S. Department of the Treasury, tariffs collected from October through December were up 88.7 percent year to date, to $17.8 billion, when compared to the same period last year. More than half of the tariffs came from Chinese imports. As the agricultural industry is among those most exposed to retaliatory tariffs, the U.S. Department of Agriculture launched the Market Facilitation Program, which provides mitigation payments to agricultural producers adversely affected by the

tariffs. Up to $12 billion was authorized for this program; $838 million was distributed in 2018, and $9.6 billion in payments is scheduled to be allocated in 2019.

Impacts of tariffs in Colorado. Several Colorado companies, including those in agricultural, beer, and print industries, have voiced concerns over supply chain disruptions and price increases resulting from higher tariffs. While Colorado exports grew 3.3 percent in 2018 over prior year levels, activity fell off at the end of the year. Exports to China and Mexico, two of Colorado's largest trading partners, posed the largest drags, down 20.5 percent and 12.2 percent, respectively, in the fourth quarter over year-ago levels. Exports to Canada fell 0.8 percent in the final quarter of the year.

Agriculture

The agricultural sector's performance has been mixed, with the crop sector still suffering from oversupply, while livestock producers are enjoying strong demand. Although some crop prices have risen from 2017 lows, prices remain low with respect to rising operational costs. Both crop and animal producers continue to face elevated tariffs with the nation's largest trading partners. The prospect of trade deals with China, Canada, and Mexico may increase export activity if ratified. The industry is expected to continue to feel the weight of low commodity prices and trade uncertainty in 2019. In Colorado, drought across most of the state persists despite above average snowfall to date this winter.

Impact of tariffs on the agricultural industry. Despite overall U.S. agricultural exports remaining flat through November 2018, agricultural and livestock products subject to tariffs have shown a decline in the value of exports in 2018. These products include hides and skins, wheat, and soybeans. In Colorado, pork and cheese exports, both subject to tariffs, declined 24.9 percent and 18.2 percent, respectively, through November compared to the same period last year. Hides and skins exports were down about 25.3 percent over the same period. The U.S. Department of Agriculture announced an aid package worth $12 billion for agricultural producers affected by the tariffs. As of the end of October 2018, $356 million had been disbursed nationwide, with $1.76 million distributed in Colorado to about 1,200 producers. To date, Colorado's dairy sector has received the largest share of aid. Nationally, the largest share has gone to soybean farmers.

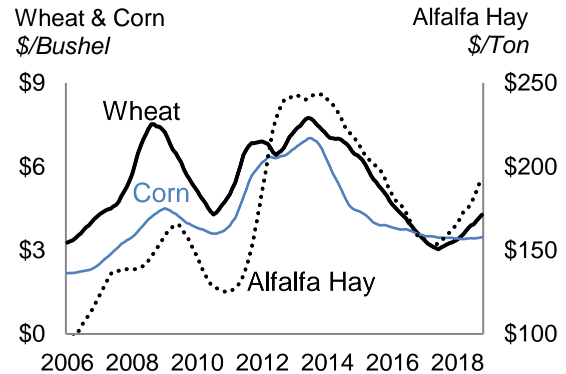
Colorado crop prices are up slightly, but still remain near historic lows. Relative to a year ago, December 2018 wheat prices in Colorado increased almost 40 percent due to a lower supply of the crop (Figure 22). With Colorado drought conditions hurting pasture and range lands, a limited supply of hay has converged with demand, putting upward pressures on prices. Corn prices, however, remain low and currently fail to cover operational costs for farmers.

Milk prices declined toward the end of the year on higher production levels in the state, which were up 6.9 percent in December from last year. U.S. beef production increased almost 3 percent in 2018 and is expected to increase by up to 2 percent in 2019, and both domestic and international demand have kept prices stable; however, higher feed costs offset some of the gains in 2018.

Loan demand continues to rise on higher input costs and lower farm incomes. Compounding low crop prices, and rising input costs, the tight labor market 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.

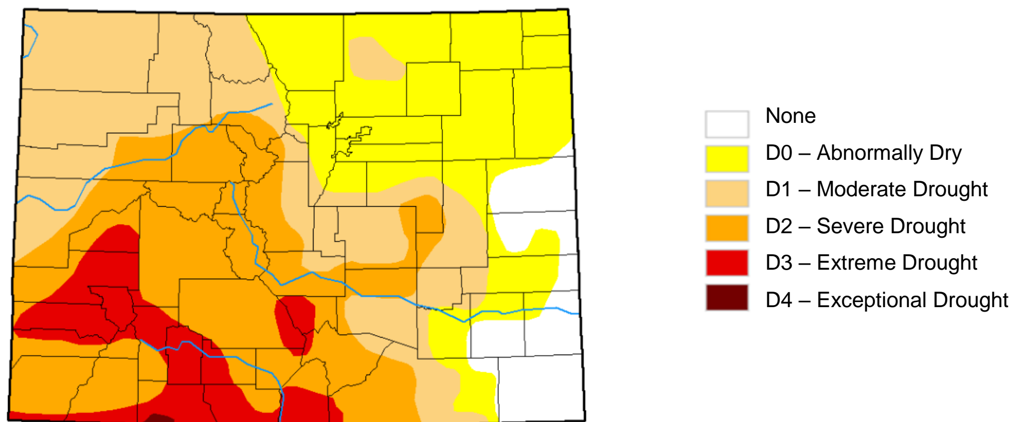
Figure 22
Prices Received for Colorado Crops



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

Drought conditions showing moderate improvements. As of the third week of February, 91.9 percent of the state is experiencing at least some dryness, while 67.2 percent of the state is in a drought, with the southwest corner of the state the hardest hit (Figure 23). Winter precipitation in the southeast and southcentral areas has improved drought conditions; however, reservoir levels remain low. The abnormally dry part of the northeastern region worsened, compared to December's report, and additional snowfall is needed to prepare the region for the spring planting season.

Figure 23
Colorado Drought Monitor Map



Source: The U.S. Drought Monitor is jointly produced by the national Drought Mitigation Center at the University of Nebraska-Lincoln, the United States Department of Agriculture, and the National Oceanic and Atmospheric Administration. Map courtesy of NDMC-UNL, current as of February 21, 2019.

Summary

While the U.S. and Colorado economies will continue to expand in 2019 and 2020, momentum is expected to slow due to decelerating global economic growth and stronger headwinds from tightening labor markets. Improved job opportunities and rising wages have lured additional workers into the labor force, supporting further growth in consumption. However, labor shortages continue to hamper

certain industries. As the stimulative impacts of federal tax cuts wear off, growth in business investment and consumer activity are expected to moderate but remain at elevated levels.

Higher housing costs and rising interest rates have cooled housing markets in many regions of the U.S., contributing to a decline in residential construction activity. Within Colorado, construction activity remains robust but has shifted from the metro Denver and northern Front Range areas to more affordable areas of the state. A higher cost of living in a growing number of areas in Colorado will put downward pressure on consumer activity unless wage growth can keep pace with rising housing costs.

International trade policy uncertainty continues to cloud the outlook for businesses, and will contribute to upward pressure on prices for consumers and businesses until trade tensions ease. This uncertainty poses near-term downside risks to the forecast, while ratification of new trade policy poses upside longer-term risk.

Risks to the Forecast

Several factors could result in stronger or weaker economic activity than forecast. These risks are viewed as balanced in the first half of 2019, and skewed to the downside for the remainder of the forecast period.

Downside. This forecast assumes a global economic slowdown, marked by weak growth in the Eurozone, Japan, and China. If the slowdown is more severe than expected, contagion effects could pose a stronger drag on U.S. economic activity. Relatedly, trade policy risks cloud the outlook. Ongoing trade policy uncertainty could pose more adverse impacts on U.S. businesses and consumers than expected.

Domestically, the combined fiscal stimulus of federal tax cuts and a larger federal budget has contributed to a growing federal budget deficit, which could impact financial markets if not deterred by future increases in tax revenue or reductions in federal government spending. With the maturing economic expansion, the Federal Reserve walks a fine line between countering inflationary pressures and raising rates too quickly and prematurely putting the brakes on the economy. Higher interest rates and slower economic growth could tip overleveraged companies into bankruptcy.

If crude oil prices fall further or remain depressed, energy, manufacturing, and production activity could weaken by more than expected, posing a drag on business activity or industry-specific recession.

Upside. Over the last two years, consumer and business activity have surprised on the upside. The economy may be further from capacity than expected. A sustained virtuous cycle could continue to lure workers into the workforce, fueling business growth at a stronger pace than expected.

Near-term resolution of ongoing trade negotiations could put U.S. businesses in a stronger position with foreign trade partners. Improved trade relations could also result in stronger than expected global economic activity. Similarly, agreement in the Brexit negotiations would lift significant pressure from European economies that may in turn stimulate global economic activity.

Table 14
National Economic Indicators

Calendar Years	2014	2015	2016	2017	2018	Legislative Council Staff Forecast 2019	2020	2021
Real GDP (*Billions*)[1]	$16,900	$17,387	$17,659	$18,051	$18,571	$18,998	$19,207	$19,380
Percent Change	2.5%	2.9%	1.6%	2.2%	2.9%	2.3%	1.1%	0.9%
Nonfarm Employment (*Millions*)[2]	138.9	141.8	144.3	146.6	149.1	151.2	152.5	153.4
Percent Change	1.9%	2.1%	1.8%	1.6%	1.7%	1.4%	0.9%	0.6%
Unemployment Rate[2]	6.2%	5.3%	4.9%	4.4%	3.9%	3.7%	4.0%	4.3%
Personal Income (*Billions*)[1]	$14,991.8	$15,719.5	$16,125.1	$16,830.9	$17,581.4	$18,373	$19,126	$19,833
Percent Change	5.7%	4.9%	2.6%	4.4%	4.5%	4.5%	4.1%	3.7%
Wage and Salary Income (*Billions*)[1]	$7,473.2	$7,854.4	$8,080.7	$8,453.8	$8,834.7	$9,259	$9,657	$10,024
Percent Change	5.1%	5.1%	2.9%	4.6%	4.5%	4.8%	4.3%	3.8%
Inflation[2]	1.6%	0.1%	1.3%	2.1%	2.4%	1.9%	1.9%	1.8%

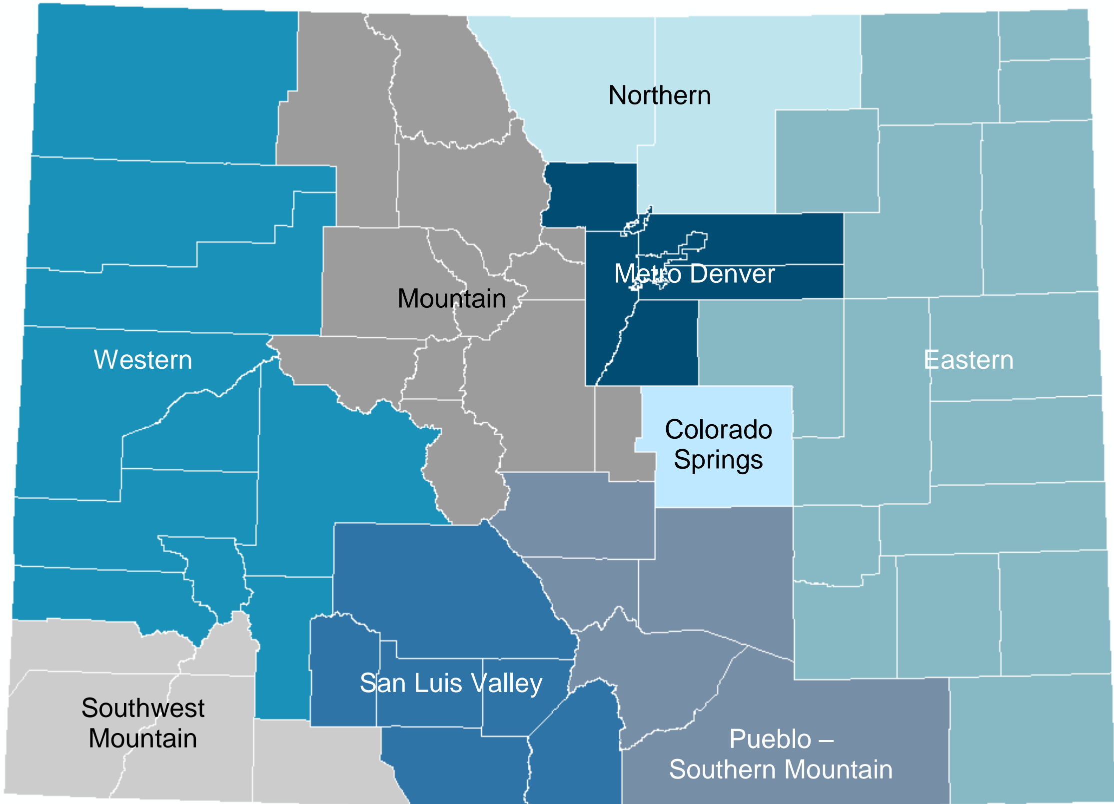
Sources
[1]*U.S. Bureau of Economic Analysis. Real gross domestic product (GDP) is adjusted for inflation. Personal income and wages and salaries not adjusted for inflation.*
[2]*U.S. Bureau of Labor Statistics. Inflation shown as the year-over-year change in the consumer price index for all urban areas (CPI-U).*

Table 15
Colorado Economic Indicators

Calendar Years	2014	2015	2016	2017	2018	Legislative Council Staff Forecast 2019	2020	2021
Population (*Thousands, as of July 1*)[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 (*Thousands*)[2]	2,463.5	2,540.8	2,601.5	2,660.6	2,725.4	2,782.6	2,824.4	2,855.4
Percent Change	3.5%	3.1%	2.4%	2.3%	2.4%	2.1%	1.5%	1.1%
Unemployment Rate[2]	5.0%	3.8%	3.2%	2.7%	3.3%	3.6%	3.9%	4.2%
Personal Income (*Millions*)[3]	$271,101	$284,143	$289,621	$306,411	$322,957	$340,074	$357,418	$373,144
Percent Change	8.9%	4.8%	1.9%	5.8%	5.4%	5.3%	5.1%	4.4%
Wage and Salary Income (*Millions*)[3]	$138,585	$146,487	$150,977	$160,372	$169,192	$179,344	$188,490	$196,972
Percent Change	7.0%	5.7%	3.1%	6.2%	5.5%	6.0%	5.1%	4.5%
Housing Permits (*Thousands*)[1]	29.3	30.5	37.1	41.1	46.7	48.9	50.5	51.5
Percent Change	7.3%	4.2%	21.5%	10.9%	13.7%	4.7%	3.2%	1.9%
Nonresidential Building (*Millions*)[4]	$4,351	$4,988	$5,990	$6,169	$7,612	$6,980	$6,624	$6,419
Percent Change	20.1%	14.6%	20.1%	3.0%	23.4%	-8.3%	-5.1%	-3.1%
Denver-Boulder-Greeley Inflation[5]	2.8%	1.2%	2.8%	3.4%	2.7%	2.3%	2.2%	2.2%

Sources
[1]U.S. Census Bureau. Residential housing permits are the number of new single and multi-family housing units permitted for building. Forecast begins in 2018.
[2]U.S. Bureau of Labor Statistics.
[3]U.S. Bureau of Economic Analysis. Personal income and wages and salaries not adjusted for inflation. Forecast begins in 2018.
[4]F.W. Dodge.
[5]U.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 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 16.

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

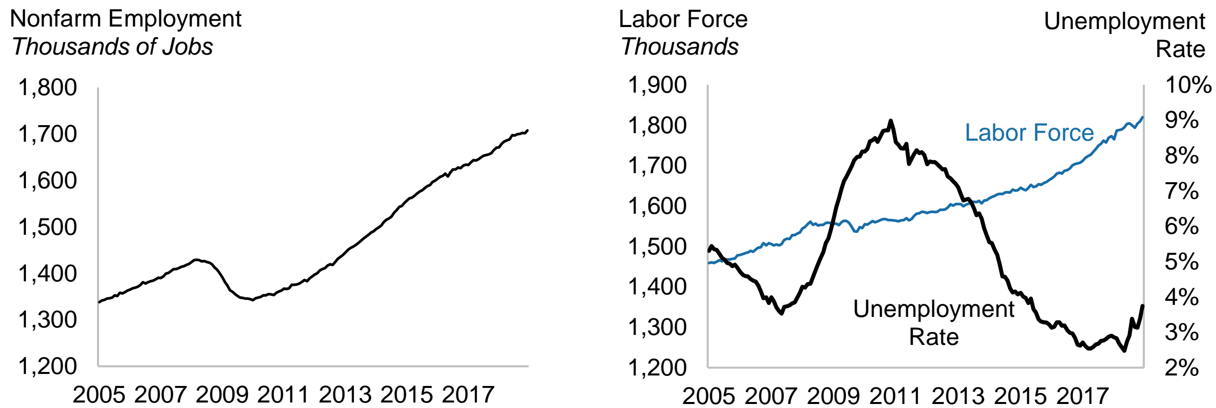
	2014	2015	2016	2017	YTD 2018
Employment Growth[1]	3.7%	3.6%	2.6%	1.9%	2.5%
Unemployment Rate[2]	4.7%	3.6%	3.0%	2.7%	3.0%
Housing Permit Growth[3]					
Denver-Aurora MSA Single Family	16.3%	17.8%	12.2%	3.8%	11.2%
Boulder MSA Single Family	17.7%	74.2%	10.2%	-4.3%	13.5%
Nonresidential Construction Growth[4]					
Value of Projects	10.5%	25.6%	27.6%	-10.6%	33.5%
Square Footage of Projects	3.9%	43.6%	6.8%	-14.0%	-25.9%
Level (*Millions*)	14,745	21,170	22,611	19,452	14,418
Number of Projects	25.1%	20.7%	9.6%	-24.1%	-23.4%
Level	936	1,130	1,239	940	720

MSA = Metropolitan statistical area. NA = Not available.
[1]U.S. Bureau of Labor Statistics, CES (establishment survey). Seasonally adjusted. Data through December 2018.
[2]U.S. Bureau of Labor Statistics, LAUS (household survey). Data prior to 2010 adjusted by Legislative Council Staff. Seasonally adjusted. Data through December 2018.
[3]U.S. Census. Growth in the number of residential building permits. Data through November 2018.
[4]F.W. Dodge. Data through December 2018.

Labor market. Published data for the metro Denver region suggest that regional employment rose 2.5 percent in 2018 over year-ago levels (Figure 24, left). However, estimates published by the Colorado Department of Labor and Employment expect downward revisions to published estimates, with growth closer to that experienced in 2017. The metro Denver labor market continues to tighten on slowing net migration and a shortage of skilled labor. Early data suggest that growth in the area labor force has slowed (Figure 24, right). The area unemployment rate has ticked up slightly, averaging 3.0 percent in 2018, compared to a statewide average of 3.3 percent.

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 25, 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 sales, homes spending a longer time on the market, and seller concessions becoming a common condition of a sale in many neighborhoods.

Figure 24
Metro Denver Region Labor Market Activity

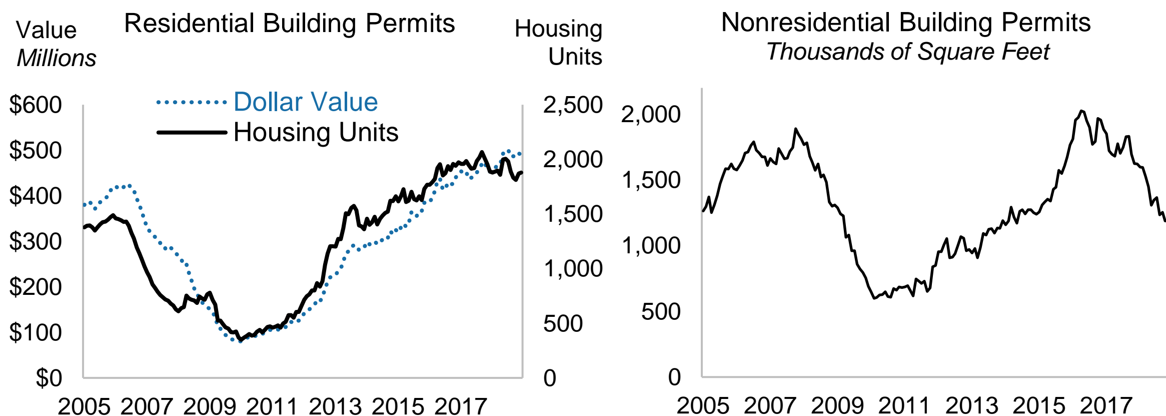


Source: U.S. Bureau of Labor Statistics; CES (left), and LAUS (right). Data are through December 2018 and are seasonally adjusted. Data prior to 2010 adjusted by Legislative Council Staff.

Following the boom in activity over the past several years, regional multi-family residential construction has slowed, while construction of single family homes continues to rise. The City and County of Denver dominated growth in multi-family construction in recent years. This activity spiked in 2017 with the ground breaking of several large projects. While activity has abated in the City and County of Denver, multi-family construction has picked up year-to-date in other surrounding metro Denver counties, including Adams, Douglas, and Boulder. Single family construction, meanwhile, continues to experience solid growth, up 11.2 percent in the first eleven months of 2018 for the Denver MSA over the same period last year. Over the same period, multi-family permits in the Denver MSA fell 16.2 percent. In the Boulder MSA, single family permits rose 13.5 percent, while multi-family permits more than doubled, growing 126.5 percent over levels in 2017.

Nonresidential construction. After peaking in 2016, metro Denver nonresidential building activity continues to moderate. The square footage (Figure 25, right) and number of projects fell at double-digit rates in 2018 over year-ago levels, while the value of construction reversed declines from the prior year. The rise in the value of construction is attributable to the Denver International Airport concourse expansion project.

Figure 25
Metro Denver Region Construction Activity

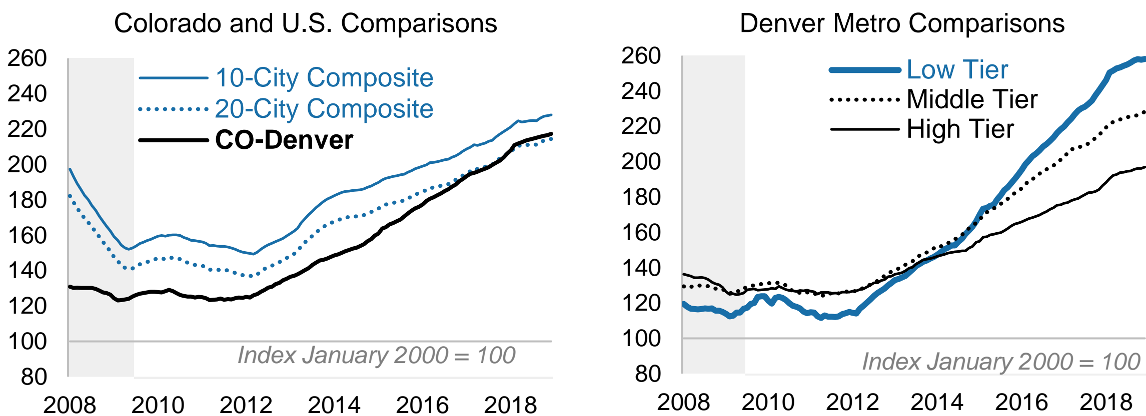


Source: F.W. Dodge. Data shown as twelve-month moving averages. Data are not seasonally adjusted and are through December 2018.

Regional home prices. Home price appreciation has moderated in recent months in the metro Denver area as interest rates have cooled the appetite for a mortgage and buyers are establishing a price ceilings by walking away from potential purchases (Figure 26, top). At the end of 2018, 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 26, bottom). Figure 26 compares growth in home price indices for Colorado, the U.S., and major Colorado metropolitan areas.

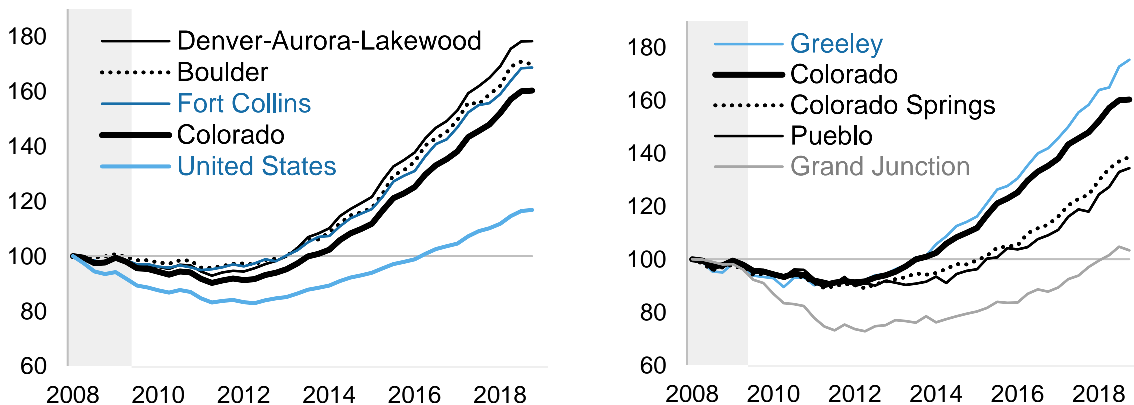
Figure 26
Regional Home Price Index Comparisons

Case-Shiller Home Price Indices



Source: S&P Dow Jones Indices LLC (Case-Shiller Home Price Index). Data are seasonally adjusted and through September 2018.

FHFA Home Price Indices: Regional Comparisons



Source: U.S. Federal Housing Finance Agency (FHFA). Data are through the third quarter of 2018.

Northern Region

The northern region includes two of the best performing economies in the state: those of Weld and Larimer counties. The Weld County economy is rebounding on the strength of oil and gas development, while momentum in Larimer County remains strong based on robust growth in the past several years. The region continues to add jobs at a faster rate than the state as a whole, and the unemployment rate continues to hover near historical lows. Population growth and a strong labor market have boosted demand for housing and nonresidential real estate. Table 17 shows economic indicators for the northern region.

Table 17
Northern Region Economic Indicators
Weld and Larimer Counties

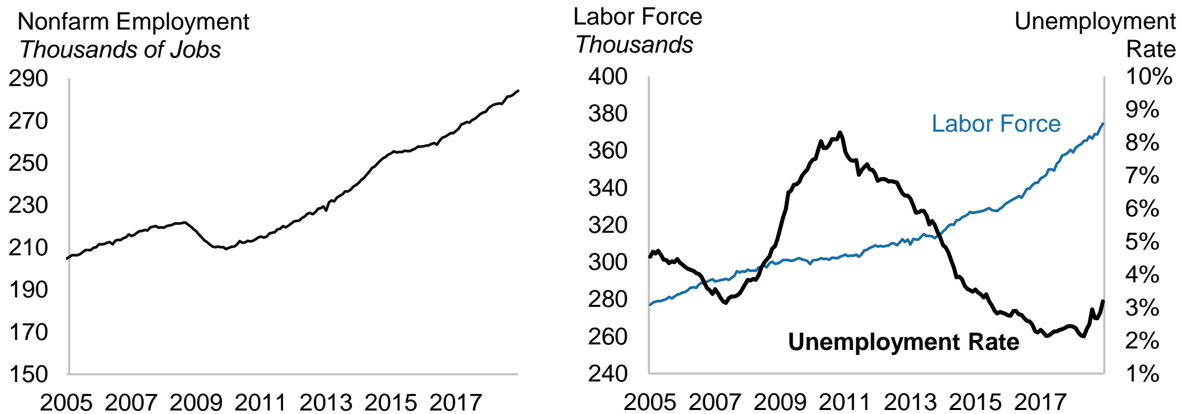
	2014	2015	2016	2017	YTD 2018
Employment Growth[1]					
Fort Collins-Loveland MSA	3.4%	4.0%	3.8%	3.7%	3.1%
Greeley MSA	9.0%	2.4%	-1.3%	3.3%	4.4%
Unemployment Rate[2]					
Fort Collins-Loveland MSA	4.2%	3.3%	2.8%	2.4%	2.7%
Greeley MSA	4.4%	3.8%	3.4%	2.7%	2.9%
State Cattle and Calf Inventory Growth[3]	-4.2%	-4.4%	1.0%	6.7%	2.7%
Natural Gas Production Growth[4]	27.0%	44.3%	14.6%	5.6%	15.0%
Oil Production Growth[4]	52.4%	39.4%	-7.3%	13.5%	32.9%
Housing Permit Growth[5]					
Fort Collins-Loveland MSA Total	8.7%	-8.1%	47.9%	-44.4%	-19.5%
Fort Collins-Loveland MSA Single Family	10.2%	1.3%	-2.9%	78.0%	-1.6%
Greeley MSA Total	41.1%	-3.5%	-7.8%	-11.8%	31.8%
Greeley MSA Single Family	18.5%	3.8%	-9.9%	62.5%	23.2%
Nonresidential Construction Growth[6]					
Value of Projects	31.1%	32.7%	1.8%	29.4%	63.2%
Square Footage of Projects	45.5%	19.8%	-14.8%	17.8%	-30.7%
Level (*Thousands*)	3,326	3,983	3,393	3,996	2,767
Number of Projects	66.5%	-3.9%	11.7%	2.9%	8.4%
Level	258	248	277	285	309

MSA = Metropolitan statistical area.
[1]U.S. Bureau of Labor Statistics, CES (establishment survey). Seasonally adjusted. Data through December 2018.
[2]U.S. Bureau of Labor Statistics, LAUS (household survey). Seasonally adjusted. Data through December 2018.
[3]National Agricultural Statistics Service. Cattle and calves on feed through November 2018.
[4]Colorado Oil and Gas Conservation Commission. Data through September 2018.
[5]U.S. Census Bureau. Growth in the number of residential building permits. Data through November 2018.
[6]F.W. Dodge. Data through December 2018.

Labor market. The labor market in the northern region is among the strongest in the state and continues to improve. The region's two metropolitan statistical areas (MSAs), Fort Collins-Loveland and Greeley, posted strong job growth over prior-year levels in 2018, increasing 3.1 percent and 4.4 percent, respectively. The Greeley MSA is the epicenter of the oil industry in Colorado, and employment growth accelerated in 2018 as oil production reached unprecedented levels.

Employment growth in the Fort Collins-Loveland MSA has slowed in 2018 compared with prior year growth as the low unemployment rate makes it harder to find new employees. Area unemployment is stable as employment gains keep pace with growth in the labor force. The Fort Collins-Loveland unemployment rate averaged 2.7 percent, while Greeley averaged 2.9 percent in 2018. Figure 27 shows employment trends for the northern region metro areas.

Figure 27
Northern Region Labor Market Activity

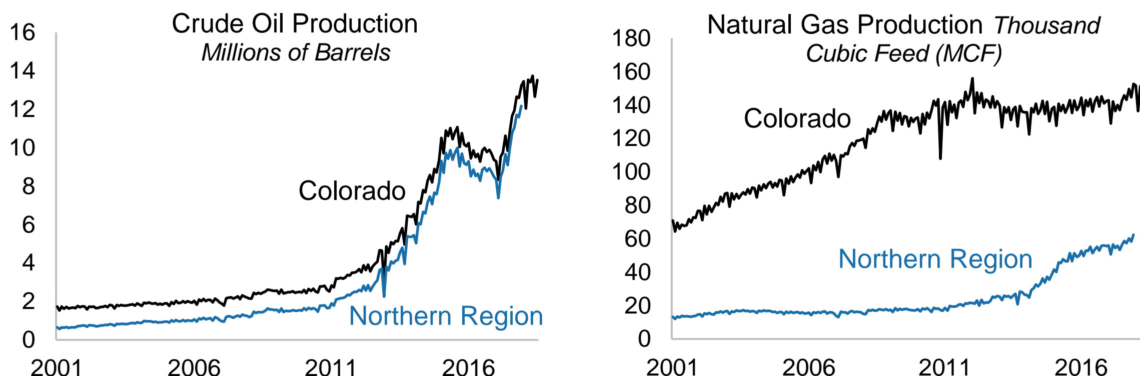


Source: U.S. Bureau of Labor Statistics; CES (left), and LAUS (right). Data are seasonally adjusted and are through December 2018.

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 4.0 percent between January 2018 and January 2019. 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 $225 in November 2018, a $55 increase in price since November 2017.

Energy sector. Oil production in the northern region, particularly in Weld County, has dominated statewide production for over a decade (Figure 28). Oil production increased 13.5 percent in 2017 and accelerated to 32.9 percent growth through the first nine months of 2018 over year-ago levels. Oil and gas production increased in the first nine months of the year due to increasing prices. Between October and December, the price of oil dropped 39.8 percent, which may slow production in the fourth quarter of the year. Despite the uncertainty around prices, there were 35 active drilling rigs in Colorado in the first week of February, a slight increase from the average number of rigs in operation in the fourth quarter of 2018. 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.

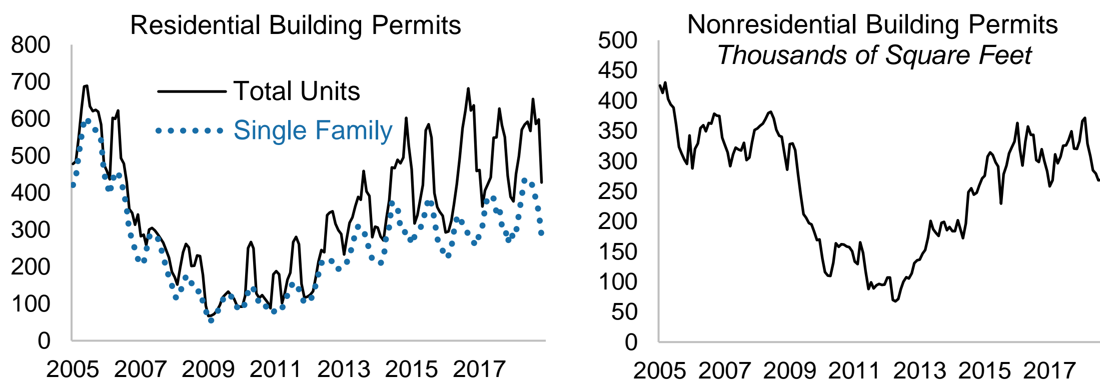
Figure 28
Colorado Energy Production



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 by the specific economic conditions in Fort Collins and Greeley. A strong labor market, high net in-migration to the region, and the availability of land for development have supported strong growth in new residential construction activity in recent years (Figure 29, left). Yet, the Fort Collins-Loveland MSA now has fewer buildable lots and a scarcity of skilled construction labor. Single family construction declined 1.6 percent through the first 11 months of 2018 over year-ago levels. Multi-family permits are also lower than in 2017. Residential construction has been stronger in Weld County, as the recovered oil industry and more available land allowed single family permits to increase 23.2 percent and total residential construction permits increased 31.8 percent in the first 11 months of 2018.

Figure 29
Northern Region Construction Activity



Source: U.S. Census Bureau. Data shown as three-month moving averages. Data are not seasonally adjusted and are through November 2018.

Source: F.W. Dodge. Data shown as twelve-month moving averages. Data are not seasonally adjusted and are through December 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 63.2 percent in 2018, while the square footage of those projects declined 30.7 percent. The oil and gas industry has been developing new infrastructure for transportation and the processing of oil and natural gas, which has considerable value but does not result in additional square footage of retail or commercial property (Figure 29, right). Additionally, 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.

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. 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. Indicators for the regional economy are presented in Table 18.

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

	2014	2015	2016	2017	YTD 2018
Employment Growth					
Pueblo Region[1]	1.0%	0.9%	2.8%	2.6%	1.2%
Pueblo MSA[2]	1.5%	2.0%	1.8%	1.1%	0.4%
Unemployment Rate[1]	7.4%	5.7%	4.8%	4.3%	4.7%
Housing Permit Growth[3]					
Pueblo MSA Total	-0.6%	69.4%	6.0%	9.2%	55.0%
Pueblo MSA Single Family	-0.6%	29.9%	29.9%	22.3%	46.6%
Nonresidential Construction Growth[4]					
Value of Projects	197.9%	2.6%	-22.6%	-63.4%	249.1%
Square Footage of Projects	192.7%	14.6%	-3.8%	-52.6%	180.7%
Level (*Thousands*)	309	355	341	162	454
Number of Projects	96.7%	-18.6%	50.0%	-70.8%	52.4%
Level	59	48	72	21	32

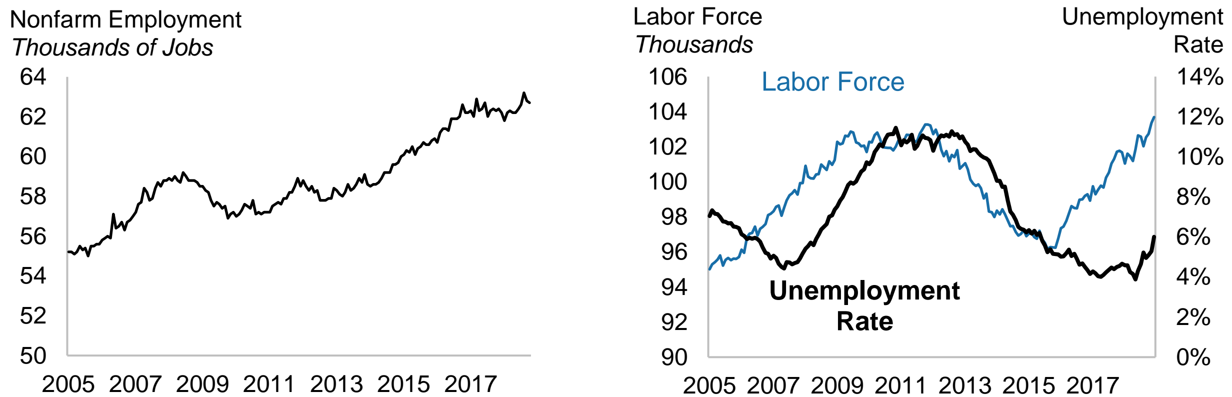
MSA = Metropolitan statistical area. NA = Not available.
[1]U.S. Bureau of Labor Statistics, CES (establishment survey). Seasonally adjusted. Data through December 2018.
[2]U.S. Bureau of Labor Statistics, LAUS (household survey). Seasonally adjusted. Data through December 2018.
[3]U.S. Census. Growth in the number of residential building permits. Data through November 2018.
[4]F.W. Dodge. Data through December 2018.

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 about 300 new jobs, an increase of 1.2 percent, but lower than the 2.6 percent improvement from the year prior. 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 30). Yet, the area employment to population ratio remains low and the regional

unemployment rate remains elevated relative to the statewide average. In 2018, the unemployment rate averaged 4.7 percent, while the statewide rate averaged 3.3 percent over the same period.

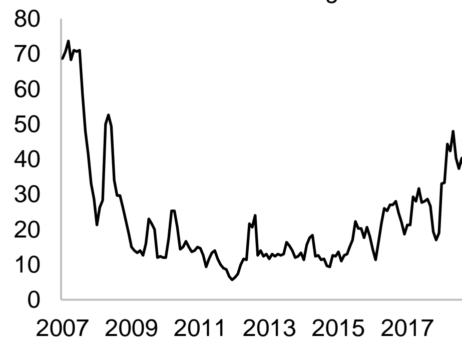
Figure 30
Pueblo Region Labor Market Trends



Source: U.S. Bureau of Labor Statistics; LAUS. Data prior to 2010 adjusted by Legislative Council Staff. Data are seasonally adjusted and are through December 2018.

Housing. A relatively affordable housing market compared with the northern and metro Denver regions and an improving labor market have boosted demand for housing permits in the region. Though the number of single family permits pulled by residential developers has slowed, residential construction activity remains high, supported by in-migration to the area, as shown in Figure 31. Both single and multi-family housing permits rose at a double-digit pace through November relative to the same period last year. Throughout the recovery and expansion from the 2007-09 recession, home price appreciation in the Pueblo metro area lagged other regions of the state. However, home prices have accelerated over the past two years, reflecting firmer demand for housing. The January 2019 single family median sales price in Pueblo County was $195,000, up 8.3 percent from the previous year. Townhouse and condo prices increased 40.7 percent to $220,000 during the same period, according to data from the Colorado Association of Realtors.

Figure 31
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 November 2018.

Nonresidential construction. Following two years of mixed data in 2016 and 2017, nonresidential construction activity was up 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. The city is adding a large exhibit hall and Professional Bull Riders-anchored sports performance center to the 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.

Colorado Springs Region

The vibrant Colorado Springs economy continues to benefit from a virtuous cycle of economic activity and job growth. 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 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 19.

Table 19
Colorado Springs Region Economic Indicators
El Paso County

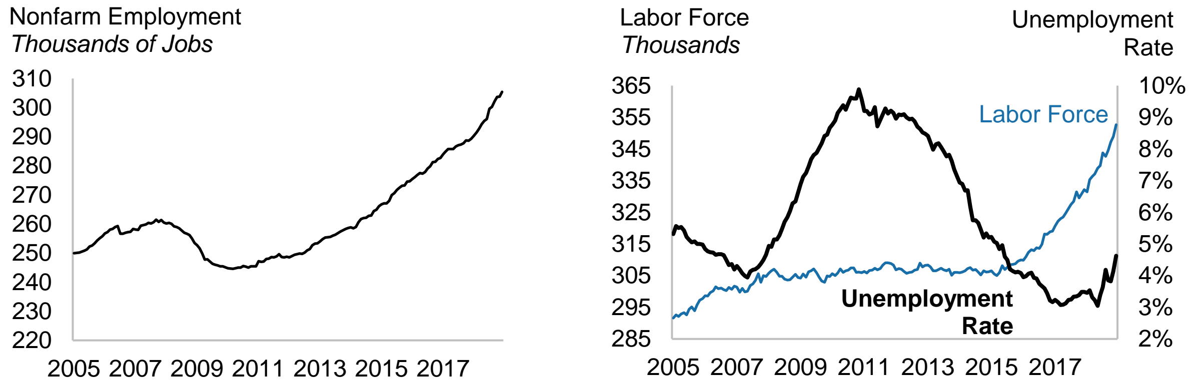
	2014	2015	2016	2017	YTD 2018
Employment Growth[1]					
Colorado Springs MSA	2.2%	3.3%	2.9%	1.8%	3.9%
Unemployment Rate[2]	6.0%	4.6%	3.7%	3.3%	3.7%
Housing Permit Growth[3]					
Total	3.8%	-0.4%	41.3%	-3.9%	22.0%
Single Family	-7.7%	13.3%	19.7%	6.7%	15.8%
Nonresidential Construction Growth[4]					
Value of Projects	-4.2%	-1.0%	48.9%	-22.6%	8.7%
Square Footage of Projects	-12.0%	-0.2%	26.1%	10.4%	2.1%
Level (*Thousands*)	1,870	1,865	2,353	2,598	2,652
Number of Projects	-5.9%	13.5%	11.6%	30.0%	-3.6%
Level	334	379	423	550	530
Retail Trade Sales Growth[5]	4.1%	5.8%	NA	NA	NA

MSA = Metropolitan statistical area. NA = Not available.
[1]U.S. Bureau of Labor Statistics, CES (establishment survey). Seasonally adjusted. Data through December 2018.
[2]U.S. Bureau of Labor Statistics, LAUS (household survey). Seasonally adjusted. Data through December 2018.
[3]U.S. Census. Growth in the number of residential building permits. Data through November 2018.
[4]F.W. Dodge. Data through December 2018.
[5]Colorado Department of Revenue. Data through December 2015.

Labor market. The Colorado Springs labor market continued to gain strong momentum in 2018 (Figure 32, left). The region added about 16,800 new jobs in 2018, a 3.9 percent increase from last year. 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 32, right). The vast majority of new job seekers have found work, maintaining downward pressure on the unemployment rate. The region's unemployment rate declined for the seventh consecutive year in 2018, averaging 3.7 percent for 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 increased 7.2 percent in 2018 over the prior year. Tax statistics point to strong contributions from auto sales and tourism-related activity, including hotel, retail, and restaurant sales.

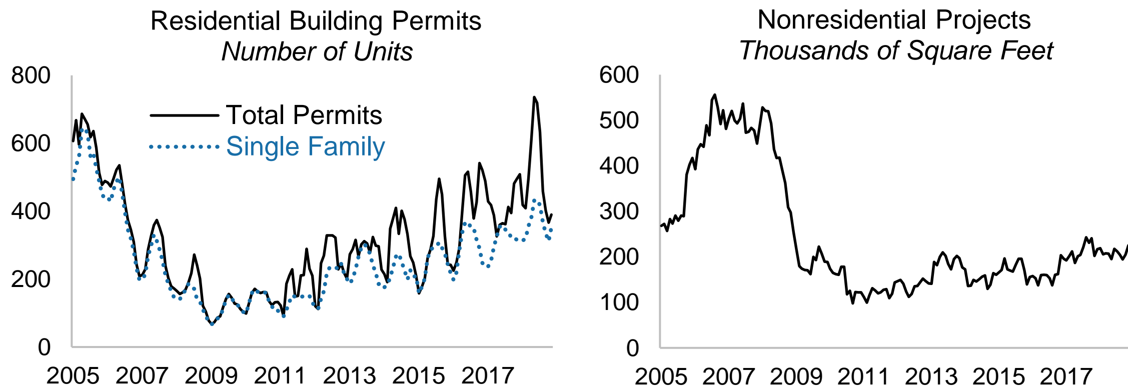
Figure 32
Colorado Springs Labor Market Activity



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

Housing. Colorado Springs construction activity continued to pick up momentum through November 2018. Year-to-date, residential developers in the region have pulled 5,609 total permits, up 22 percent from the year prior. Single family permits made up 82 percent of these construction applications (Figure 33, left). Growth in multi-family housing permits continues to be strong, increasing by 43 percent from the same period last year. The number of permits for multi-family units was second only to the City and County of Denver. While still more affordable than real estate in the Denver metro region, Colorado Springs home prices continue to rise at double-digit rates as demand continues to outstrip supply. According to data published by the National Association of Realtors, home prices increased 35 percent in January 2019 over the same month a year prior.

Figure 33
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 November 2018.

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

Nonresidential construction. Relative to pre-recessionary levels, demand for new nonresidential construction has remained subdued throughout the recovery and expansion, with a slow general upward trend (Figure 33, right). In-migration to the area and strong business activity, however, are expected to limit office and commercial vacancies, spurring additional development in coming years.

San Luis Valley Region

The San Luis Valley has the state's smallest and oldest population, as well as its lowest household incomes. The economy of 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 housing market is growing and the nonfarm job market continues to improve. Economic indicators for the region are summarized in Table 20.

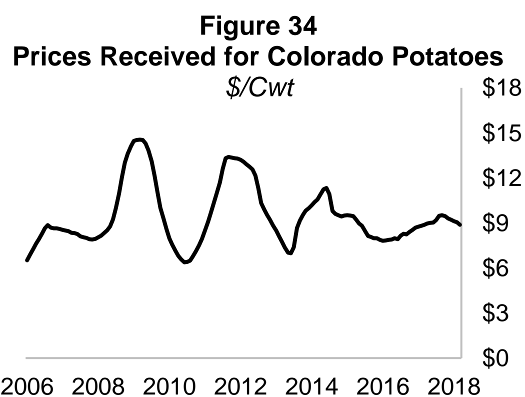
Table 20
San Luis Valley Region Economic Indicators
Alamosa, Conejos, Costilla, Mineral, Rio Grande, and Saguache Counties

	2014	2015	2016	2017	2018
Employment Growth[1]	2.5%	3.9%	6.2%	5.0%	4.1%
Unemployment Rate[1]	8.0%	5.7%	4.5%	3.9%	4.2%
San Luis Valley Agriculture District[2]					
Barley					
Acres Harvested	42,900	52,100	NA	NA	NA
Crop Value ($/Acre)	$730	$879	NA	NA	NA
Potatoes					
Acres Harvested	53,900	51,800	51,500	51,700	NA
Crop Value ($/Acre)	$3,2108	$3,234	NA	NA	NA
Housing Permit Growth[3]	-25.0%	21.5%	-1.1%	16.8%	16.3%

NA = Not available.
[1]U.S. Bureau of Labor Statistics, LAUS (household survey). Seasonally adjusted. Data through December 2018.
[2]National Agricultural Statistics Service. Potato harvest data through 2017; others through 2015.
[3]F.W. Dodge. Data through December 2018.

Agricultural industry. The San Luis Valley's agricultural sector relies mostly on the production of potatoes, and secondarily on barley. Drought conditions in the region have been some of the worst across the state; however, the San Luis Valley's total 2018 potato shipments remained at the same levels as 2017. Shipments in January 2019 are down over 10 percent compared to January 2018 on weak demand. Snowfall is close to average in the region, yet reservoir storages in the region are among the lowest in the state. Above average precipitation is needed to restore water conditions to levels that can manage further drought. Overall, barley production is down 16 percent in 2018 relative to year-ago levels. Total acres planted decreased 17 percent, while yield per acre is up almost 10 percent. Barley prices fluctuated between $4 and $5 per bushel in 2018 and are projected to continue their upward trend in 2019. Prices received for Colorado potatoes can be found in Figure 34.

Figure 34
Prices Received for Colorado Potatoes

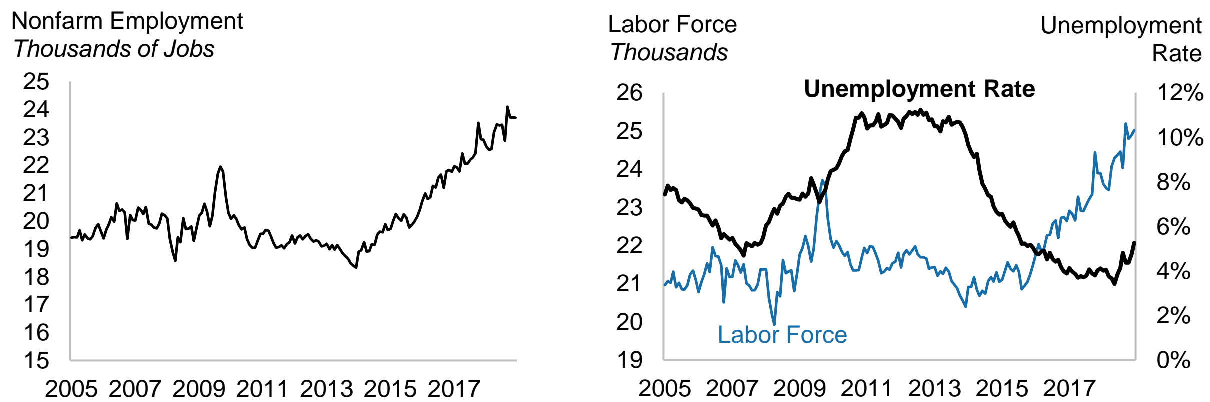


Source: National Agricultural Statistics Service. Data shown as twelve-month moving averages. Data through June 2018.

The federal Farm Bill, which was passed in December 2018, included a provision to make hemp production legal nationally. The San Luis Valley has had success in cultivating hemp due to its climate and hemp's resiliency to dry conditions. Approximately 31,000 acres of hemp were registered with the state and the Department of Agriculture expects that to increase to 50,000 acres in 2019, growth of over 60 percent.

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 slightly from 2017's growth rate. Through December, the unemployment rate averaged 4.2 percent, up from the average annual rate of 3.9 percent in 2017 (Figure 35, right). Employment rose 4.1 percent in 2018, indicating that labor market growth in the region has moderated but remains strong (Figure 35, left).

Figure 35
San Luis Valley Labor Market Activity

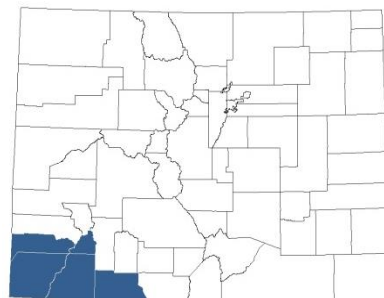


Source: U.S. Bureau of Labor Statistics; LAUS. Data prior to 2010 adjusted by Legislative Council Staff. Data are seasonally adjusted and are through December 2018.

Housing and population growth. The housing market in San Luis Valley continues to expand. Growth in the number of housing permits issued rose 16.3 percent in 2018, compared to the year prior, marking the second consecutive year of double-digit growth. Population growth in the region is mixed, with Alamosa, Costilla, Mineral, and Saguache Counties 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.

Tourism. Visits to the Great Sand Dunes National Park and Preserve have increased every year since 2013. In January 2019, the trend continues, with visits to the park up 24 percent compared to January last year. 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 regional housing stock is on the upswing, and the local labor market has matured. The region suffered an economic hit from forest fires during the summer months of 2018, but good snowfall conditions may have the tourism industry back on track. Economic indicators for the region are summarized in Table 21.

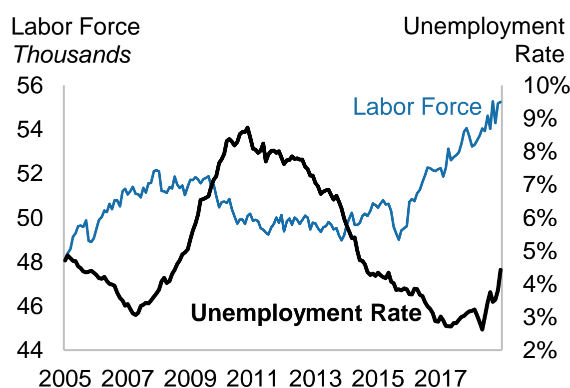
Table 21
Southwest Mountain Region Economic Indicators
Archuleta, Dolores, La Plata, Montezuma, and San Juan Counties

	2014	2015	2016	2017	2018
Employment Growth[1]	3.1%	0.7%	3.9%	3.2%	1.8%
Unemployment Rate[1]	4.9%	4.0%	3.4%	2.9%	3.4%
Housing Permit Growth[2]	14.2%	17.6%	-4.6%	29.8%	24.6%
National Park Recreation Visits[3]	8.9%	10.2%	7.5%	4.4%	-7.6%

[1]U.S. Bureau of Labor Statistics, LAUS (household survey). Seasonally adjusted. Data through December 2018.
[2]F.W. Dodge. Data through December 2018.
[3]National Park Service. Data through December 2018. Recreation visits for Mesa Verde National Park and Hovenweep National Monument.

Labor market. Preliminary data from household surveys indicate labor market maturity, marked by post-peak job growth and an uptick in the regional unemployment rate. Survey respondents reported job growth of 1.8 percent in 2018, representing moderate deceleration from the growth rates posted during the two years prior. As shown in Figure 36, labor force growth has continued apace even as the number of job offerings has tapered off, pushing up the regional unemployment rate. However, household survey data will be revised in the coming months. Additionally, these data are subject to higher margins of error than surveys of establishments, and error rates are particularly pronounced in less populous areas like the southwest mountain region.

Figure 36
Southwest Mountain Region Labor Market



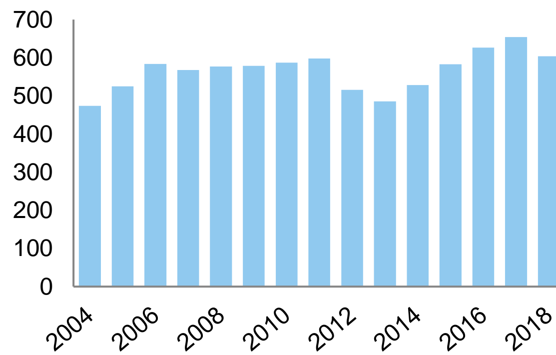
Source: U.S. Bureau of Labor Statistics; LAUS. Data prior to 2010 adjusted by Legislative Council Staff. Data are seasonally adjusted and are through December 2018.

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 25 percent in 2018. Housing developers obtained permits for 771 residential

units in 2018, the most since 2006. Housing supply constraints and market dynamics introduced by online short-term rentals have conspired to drive up home prices in Durango, Pagosa Springs, and Silverton, but these pressures have not materialized in Cortez and other localities situated west of the mountains.

Tourism. Visitation to the southwest mountain region was marred by a devastating summer fire season and associated closures. In particular, closure of wide swaths of San Juan National Forest, U.S. Highway 550, and the Durango & Silverton Narrow Gauge Railroad suppressed summer tourism activity. Visits to Mesa Verde National Park and Hovenweep National Monument fell 7.6 percent in 2018 (Figure 37) despite not being closed themselves, likely reflecting reduced regional tourism overall.

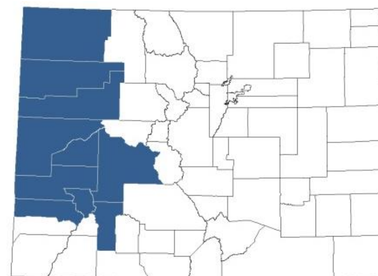
Figure 37
Southwest Mountain National Park Visits
Thousands



Source: National Park Service. Data through December 2018.

Heavy snowfall during the current ski season may be boosting tourism-driven business activity in San Juan, La Plata, and Archuleta counties. The U.S. Department of Agriculture's SNOTEL system showed snowfall in the combined Colorado portions of the San Miguel, Dolores, Animas, and San Juan River Basins at 122 percent of average between October 1, 2018, and early March 2019. Above-average snowfall is a welcome reversal from climate trends in recent years, when low winter snowfall statewide disproportionately affected the southwest mountain region. Elevated snowpack may also benefit agricultural producers downstream come this year's growing season.

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. The region's economy accelerated in 2017 and growth has continued into 2018 as the area offers a more affordable option than the Front Range. Relatively affordable housing and an improving labor market are attracting people from Denver and other areas of the state and country. Economic indicators for the region are summarized in Table 22.

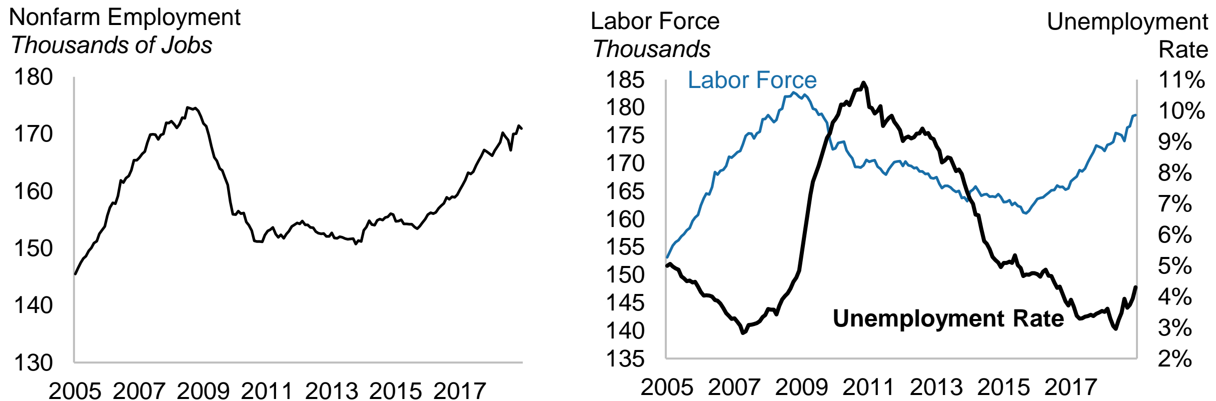
Table 22
Western Region Economic Indicators
Delta, Garfield, Gunnison, Hinsdale, Mesa, Moffat, Montrose, Ouray, Rio Blanco, and San Miguel Counties

	2014	2015	2016	2017	YTD 2018
Employment Growth					
Western Region[1]	2.1%	-0.3%	2.1%	4.1%	3.0%
Grand Junction MSA[2]	2.5%	-0.2%	-0.3%	-0.4%	2.1%
Unemployment Rate[1]	5.9%	4.9%	4.4%	3.5%	3.6%
Natural Gas Production Growth[3]	-5.3%	-12.8%	-6.7%	-2.1%	4.6%
Housing Permit Growth[4]	7.9%	24.7%	6.7%	42.8%	16.7%
Nonresidential Construction Growth[4]					
Value of Projects	221.9%	-37.8%	16.4%	-33.4%	10.8%
Square Footage of Projects	157.9%	-41.0%	-3.9%	-18.2%	7.3%
Level (*Thousands*)	1,021	602	579	474	508
Number of Projects	21.8%	-16.4%	41.1%	-38.0%	22.4%
Level	67	56	79	49	60

MSA = Metropolitan statistical area. NA = Not available.
[1]U.S. Bureau of Labor Statistics, LAUS (household survey). Seasonally adjusted. Data through December 2018.
[2]U.S. Bureau of Labor Statistics, CES (establishment survey). Seasonally adjusted. Data through December 2018.
[3]Colorado Oil and Gas Conservation Commission. Data through September 2018.
[4]F.W. Dodge. Data through December 2018.

Labor market. The region's labor market improved through 2017 and into 2018 despite slow natural gas production and a struggling coal industry. Employment increased for the third consecutive year, increasing 3.0 percent in 2018 compared with 2017. The region's unemployment rate averaged 3.6 percent in 2018, as new entrants into the labor force filled the new jobs. State and local governments and hospitals are some of the largest employers in the region. Employment in Grand Junction, the region's largest city, increased 2.1 percent in 2018, reversing modest employment declines over the past three years. Figure 38 shows labor market activity in the western region.

Figure 38
Western Region Labor Market Activity

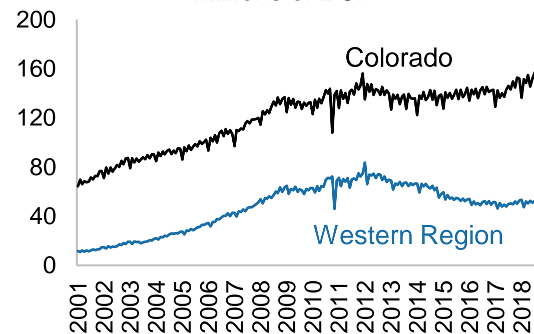


Source: U.S. Bureau of Labor Statistics; LAUS. Data prior to 2010 adjusted by Legislative Council Staff. Data are seasonally adjusted and are through December 2018.

Construction. After years of subpar growth, the region's residential construction market has gained momentum as the western region of the state offers a lower cost of living compared to many other areas of the state. In 2017, the region's planning departments issued permits for almost 1,300 residential units, up 42.8 percent from the prior year. In 2018, the construction industry has increased activity above already high levels, growing 16.7 percent. The region's nonresidential construction sector began picking up momentum in the summer. The total value of nonresidential construction projects increased 10.8 percent in 2018 while the number of projects increased 22.4 percent.

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 has declined for five consecutive years between 2013 and 2017 due to persistently low natural gas prices and a lack of investment from energy firms in the western region of the state (Figure 39). There been a slight increase in natural gas production in the first nine months of 2018, increasing 4.6 percent year-to-date. The recent uptick has gone to power plants as natural gas continues to be an attractive fuel to replace coal for electricity generation.

Figure 39
Natural Gas Production
Millions of BCF



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

National park visitors. The number of people that visited the Black Canyon of the Gunnison National Park increased 0.6 percent in 2018 relative to the prior year. Visitation to the park in 2018 was a sixth consecutive record year for the Black Canyon of the Gunnison. While it is not far from the struggling coal city of Somerset, most visitors to the park visit the south rim of the canyon and patronize businesses in the gateway communities of Montrose and Gunnison. Visitations to the Colorado National Monument near Grand Junction increased 0.1 percent in 2018. Road construction in the park hampered visitation in the first half of the year as the third phase of construction on Rim Rock Drive was completed on June 28, 2018.

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 forestry firms and agricultural producers – make important contributions as well. Wet winter weather conditions have supported ski tourism, boosting the economy during the winter months. Employers are adding more workers on average than their counterparts elsewhere in the state, and homebuilders obtained permits to expand the region's tight housing supply. Economic indicators for the mountain region are presented in Table 23.

Table 23
Mountain Region Economic Indicators
Chaffee, Clear Creek, Eagle, Gilpin, Grand, Jackson, Lake, Park, Pitkin, Routt, Summit, and Teller Counties

	2014	2015	2016	2017	2018
Employment Growth[1]	3.3%	1.5%	3.5%	4.3%	3.2%
Unemployment Rate[1]	4.3%	3.3%	2.7%	2.4%	2.7%
Housing Permit Growth[2]	2.2%	-7.6%	29.0%	-10.7%	73.8%
Nonresidential Construction Growth[2]					
Value of Projects	84.8%	44.0%	-31.3%	315.9%	-77.8%
Square Footage of Projects	206.5%	-62.0%	18.7%	254.7%	-65.5%
Level (*Thousands*)	1,352	514	609	2,162	745
Number of Projects	20.0%	-33.3%	52.5%	1.6%	12.9%
Level	60	40	61	62	70

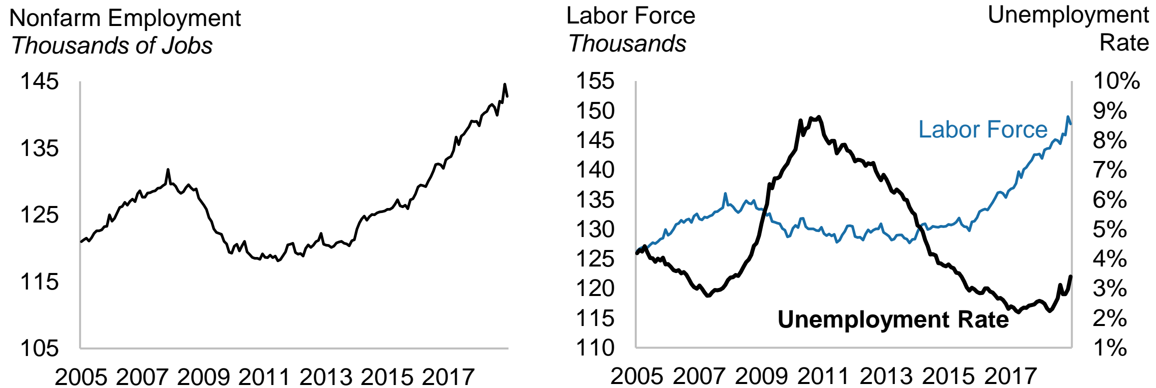
NA = Not available.
[1]U.S. Bureau of Labor Statistics. LAUS (household) survey. Seasonally adjusted. Data through December 2018.
[2]F.W. Dodge. Data through December 2018.

Winter weather. Autumn 2018 predictions for above-normal winter snowfall were borne out. The U.S. Department of Agriculture's SNOTEL service measures year-to-date precipitation relative to the average water year, which begins on October 1. Through early March, SNOTEL data for every river basin in the state was above average, including the principal mountain region ski destinations in the Upper Colorado River Basin (125 percent of average) and the Yampa-White River Basin (113 percent of average). The February seasonal forecast from the National Oceanic and Atmospheric Administration Climate Prediction Center indicates an elevated probability of above-normal precipitation throughout Colorado through May. The probability of above-normal precipitation is estimated between 33 percent and 40 percent. Snowfall projections remain more favorable for Colorado than for competitor ski destinations in California and the northern Rockies, and similar to those for Utah.

Labor market. Surveys of the region's households suggest that growth in regional nonfarm employment decelerated in 2018 after peaking the year prior (Figure 40, left). Even so, the region's 3.2 percent job growth rate remains among the state's strongest. The tight job market is coaxing mountain residents into the labor force (Figure 40, right), contributing to a small uptick in the region's state-low unemployment rate. The labor force continues to outstrip regional population growth, indicating that the increase is attributable to factors other than migration into the region. This may

indicate that working-age adults are choosing employment over education or homemaking, or that older adults are delaying retirement or reentering the workforce.

Figure 40
Mountain Region Labor Market Activity

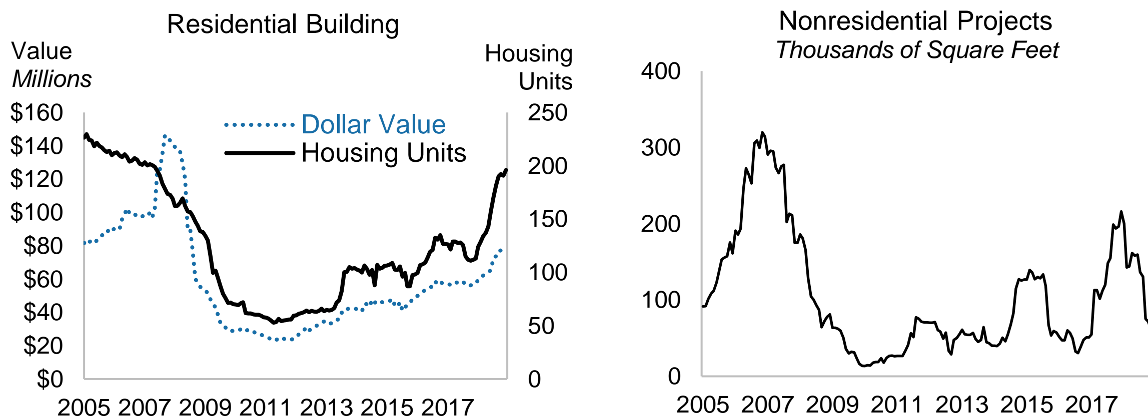


Source: U.S. Bureau of Labor Statistics; LAUS. Data prior to 2010 adjusted by Legislative Council Staff. Data are seasonally adjusted and are through December 2018.

Housing. The regional housing market is hot, with robust demand supporting rising prices and abundant construction. Housing permit issuances ended 2018 up 73.8 percent. As shown in the left panel of Figure 41, the value of permitted residences has increased less quickly than the number of permits, suggesting that builders are responding to demand for lower-cost housing among full-time regional residents, rather than catering solely to purchasers seeking second homes or vacation rentals.

Nonresidential construction. The large 2018 declines in nonresidential construction value and square footage (Figure 41, right) are skewed by approval of the Monarch Casino Black Hawk expansion project in 2017, the largest nonresidential project ever permitted in the region. Local authorities permitted 70 nonresidential projects in 2018, up 8 projects from permits issued during the year prior.

Figure 41
Mountain Region Construction Activity



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

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. Crop prices have been on the upswing over the last few months; however, they are offset by rising labor costs, tariffs on agricultural exports, and increasing interest rates. Colorado's cattle and dairy sectors showed mixed performance during 2018, with the same aforementioned pressures facing producers. Economic indicators for the region are presented in Table 24.

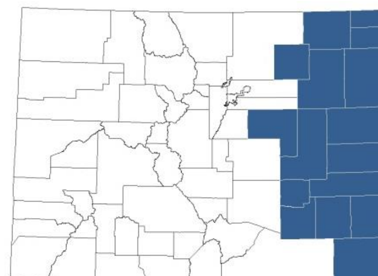


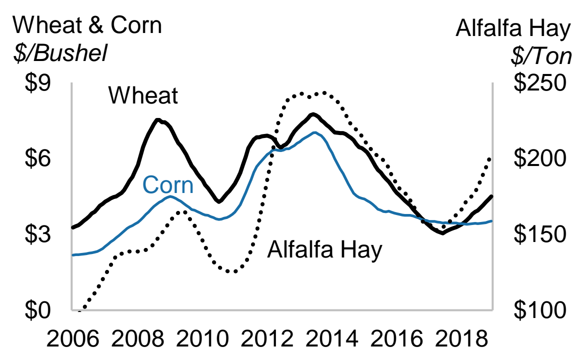
Table 24
Eastern Region Economic Indicators
Baca, Bent, Logan, Cheyenne, Crowley, Elbert, Kiowa, Kit Carson, Lincoln, Morgan, Otero, Phillips, Prowers, Sedgwick, Washington, and Yuma Counties

	2014	2015	2016	2017	YTD 2018
Employment Growth[1]	3.0%	2.1%	4.1%	4.2%	3.2%
Unemployment Rate[1]	4.4%	3.5%	2.9%	2.4%	2.8%
Crop Price Changes[2]					
Wheat ($/Bushel)	-11.5%	-25.6%	-27.9%	-2.9%	34.6%
Corn ($/Bushel)	-31.0%	-13.1%	-7.7%	-3.4%	2.8%
Alfalfa Hay (Baled, $/Ton)	-11.3%	-13.9%	-15.5%	4.8%	23.8%
Livestock[2]					
State Cattle and Calf Inventory Growth	-4.2%	-4.4%	1.0%	6.7%	2.7%
Milk Production	7.9%	3.9%	5.2%	6.7%	9.1%

NA = Not available.
[1]U.S. Bureau of Labor Statistics, LAUS (household survey. Data through December 2018.
[2]National Agricultural Statistics Service. Data through November 2018.

Agriculture and livestock. The agricultural industry in the eastern region is performing relatively well compared to other agricultural areas of the U.S. The drought afflicting much of the state has not been as severe on the eastern plains. Snowfall is above average levels for most of the region this winter, which should lead to more favorable conditions for spring crops and pastureland. Crop prices rebounded in 2018, with wheat and hay seeing double-digit increases. Wheat prices were up 34.6 percent in 2018, as the prior year's low prices induced producers to plant fewer acres this season, pushing prices up.

Figure 42
Prices Received for Colorado Crops



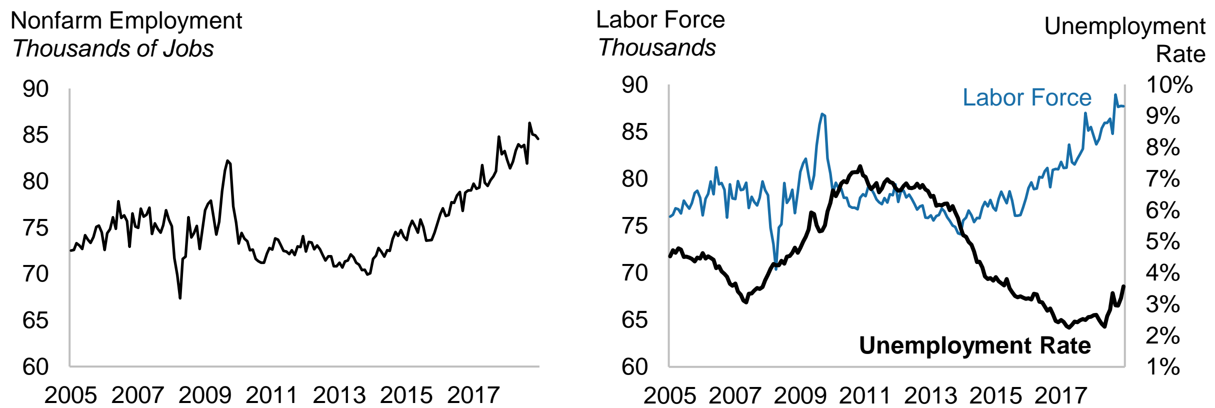
Source: National Agricultural Statistics Service. Data shown as twelve-month moving averages. Data through December 2018.

Prices received for Colorado crops can be found in Figure 42. Range and pasture conditions across the state have suffered from the drought, causing hay prices to rise from higher demand, up 23.8 percent in 2018. Cattle inventory growth is down

year-over-year, likely due to high domestic and international demand for beef, and poor range and pasture conditions leading to higher feed costs. Colorado's dairy industry has enjoyed above average prices for milk this year, and hence increased production. The potential opening of Canada's market to U.S. dairy imports with the renegotiation of the North America Free Trade Agreement (NAFTA) to the U.S.-Mexico-Canada Agreement (USMCA) may provide a brighter outlook for the coming year.

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. During 2018, total employment grew by 3.2 percent, while the unemployment rate averaged 2.8 percent through the same period, lower than the statewide rate. The fourth quarter of the year saw more moderated employment growth and relatively flat unemployment, which may be a sign of the tight labor force and a slowing economy. Labor market activity for the eastern region can be found in Figure 43 below.

Figure 43
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 December 2018.

Housing. Despite the contraction of many rural community populations, Elbert County continues to see population growth, as former residents of the Denver Metro area leave in search of more affordable housing. A new housing development in the region with close to 1,000 homes is set to break ground in 2019. Home prices will be well below Metro Denver's average home price, starting in the $300,000 range. The Colorado State Demographer's Office projects that net migration to the county will double in 2018 relative to 2017 estimates before it tapers off slightly after 2020.

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	$20,500.6
Percent Change	6.6%	6.7%	6.0%	4.6%	1.8%	-1.8%	3.8%	3.7%	4.2%	3.6%	4.4%	4.0%	2.7%	4.2%	5.2%
Real GDP ($ *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	$18,571.3
Percent Change	3.8%	3.5%	2.9%	1.9%	-0.1%	-2.5%	2.6%	1.6%	2.2%	1.8%	2.5%	2.9%	1.6%	2.2%	2.9%
Unemployment Rate[2]	5.5%	5.1%	4.6%	4.6%	5.8%	9.3%	9.6%	8.9%	8.1%	7.4%	6.2%	5.3%	4.9%	4.4%	3.9%
Inflation[2]	2.7%	3.4%	3.2%	2.9%	3.8%	-0.3%	1.6%	3.1%	2.1%	1.5%	1.6%	0.1%	1.3%	2.1%	2.4%
10-Year Treasury Note[3]	4.3%	4.3%	4.8%	4.6%	3.7%	3.3%	3.2%	2.8%	1.8%	2.4%	2.5%	2.1%	1.8%	2.3%	2.9%
Personal Income ($ *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	$17,581.4
Percent Change	5.8%	5.6%	7.4%	5.5%	3.6%	-3.1%	4.1%	6.2%	5.1%	1.2%	5.7%	4.9%	2.6%	4.4%	4.5%
Wage & Salaries ($ *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	$8,834.7
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%	4.5%
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
[1]U.S. Bureau of Economic Analysis. Real gross domestic product (GDP) is adjusted for inflation. Personal income and wages and salaries not adjusted for inflation.
[2]U.S. Bureau of Labor Statistics. Inflation shown as the year-over-year change in the consumer price index for all urban areas (CPI-U).
[3]Federal 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 (*Thousands*)[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	$306,411	NA
Percent Change	6.9%	8.0%	6.6%	3.3%	-4.6%	3.3%	8.7%	6.3%	5.2%	8.9%	4.8%	1.9%	5.8%	
Per Capita Personal Income ($)[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	$54,646	NA
Percent Change	5.6%	6.0%	4.7%	1.4%	-6.2%	1.8%	7.3%	4.9%	3.7%	7.3%	2.9%	0.3%	4.3%	
Wage & Salary Income ($ *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	$160,372	NA
Percent Change	5.6%	7.0%	6.5%	3.7%	-3.8%	1.3%	4.2%	5.5%	3.7%	7.0%	5.7%	3.1%	6.2%	
Retail Trade Sales ($ *Millions*)[3]	$65,492	$70,437	$75,329	$74,760	$66,345	$70,738	$75,548	$80,073	$83,569	$90,653	$94,920	NA	NA	NA
Percent Change	5.1%	7.5%	6.9%	-0.8%	-11.3%	6.6%	6.8%	6.0%	4.4%	8.5%	4.7%			
Residential Housing Permits[4]	45,422	39,211	30,149	19,507	9,385	11,530	13,386	21,329	27,270	29,266	30,506	37,069	41,096	46,742
Percent Change	1.3%	-13.7%	-23.1%	-35.3%	-51.9%	22.8%	16.1%	59.3%	27.9%	7.3%	4.2%	21.5%	10.9%	13.7%
Nonresidential Construction ($ *Millions*)[5]	$4,275	$4,641	$5,259	$4,114	$3,354	$3,147	$3,923	$3,695	$3,624	$4,351	$4,988	$5,990	$6,169	$7,612
Percent Change	31.7%	8.6%	13.3%	-21.8%	-18.5%	-6.2%	24.7%	-5.8%	-1.9%	20.1%	14.6%	20.1%	3.0%	23.4%
Denver-Boulder-Greeley 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 (*Thousands, 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.
[1]U.S. Bureau of Labor Statistics. Inflation shown as the year-over-year change in the consumer price index for Denver-Aurora-Lakewood metro area.
[2]U.S. Bureau of Economic Analysis. Personal income and wages and salaries not adjusted for inflation.
[3]Colorado Department of Revenue. Data are not available after 2015.
[4]U.S. Census Bureau. Residential housing permits are the number of new single and multi-family housing units permitted for building.
[5]F.W. Dodge.