Colorado Legislative Council Staff

September 2018 | Economic & Revenue Forecast

September 20, 2018

Contents

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Executive Summary

This report presents the budget outlook based on current law and the September 2018 General Fund revenue, cash fund revenue, and TABOR forecasts. It also 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

Based on preliminary data, the General Fund ended FY 2017-18 with a $1.27 billion reserve, equal to 12.3 percent of General Fund operating appropriations. This amount is $599.5 million above the required 6.5 percent reserve. Revenue subject to TABOR exceeded the Referendum C cap by $16.2 million, which will require a TABOR refund in tax year 2018 equal to $37.5 million. This amount includes $21.3 million carried over from the FY 2014-15 TABOR refund obligation and will be refunded via the reimbursements to local governments for the senior homestead and disabled veterans property tax exemptions. The year-end General Fund reserve is $55.1 million higher than expected in June 2018, primarily reflecting higher than expected collections from each of the major revenue streams.

FY 2018-19

In FY 2018-19, the General Fund is expected to end the year with a 9.3 percent reserve, $229.5 million above the 7.25 percent statutory reserve. Revenue subject to TABOR is expected to exceed the Referendum C cap by $209.4 million, resulting in a TABOR refund in tax year 2019. The TABOR refund obligation is expected to be refunded via reimbursements to local governments for the property tax exemptions, with the remaining balance refunded through the six-tier sales tax refund mechanism.

FY 2019-20 Unbudgeted

The General Assembly is projected to have $1.16 billion, or 9.2 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 exceed the Referendum C cap by $174.8 million, resulting in a FY 2020-21 TABOR refund of the same amount.

Higher than usual forecast uncertainty. Forecast estimates are subjected 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. Income tax collections were boosted in FY 2017-18 as taxpayers rushed to claim deductions set to expire and business activity increased on the fiscal stimulus of federal tax cuts. While risks for the current fiscal year forecast are skewed to the upside, the longer-term impacts of these federal tax policy changes are yet to be seen with risks skewed to the downside.

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 or legislative changes could result in an estimated maximum of $110 million in additional sales tax collections per year. However, it is likely that collections will come in lower than this amount in the near term.

School Finance Outlook

The September forecast includes a brief update on school finance funding for FY 2019-20, based on updated expectations for inflation, General Fund diversions required to the State Education Fund, and Federal Mineral Lease payments. Relative to budgeted amounts for FY 2018-19, the **state aid requirement** is expected to increase by $186 million in FY 2019-20. While the local share is also projected to increase by $109 million based on higher property values, the overall total program requirement is expected to increase by $295 million due to inflation and enrollment growth. In FY 2019-20, the **State Education Fund**'s contribution to school funding is expected to fall $62 million relative to the current budget year. This amount assumes a constant budget stabilization factor and State Education Fund ending balance of $100 million in FY 2019-20.

Cash Fund Revenue

In FY 2017-18, preliminary collections data suggest that cash fund revenue subject to TABOR fell 17.1 percent to $2.30 billion year-over-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 pursuant to Senate Bill 17-267. These reductions more than offset expected increases in transportation-related and severance tax revenue. Cash fund revenue subject to TABOR will rebound from this lower level, growing by 7.1 percent to $2.46 billion in FY 2018-19. Cash fund collections will increase an additional 2.2 percent to $2.52 billion in FY 2019-20 as most revenue sources are projected to rise.

Economic Outlook

The U.S. and Colorado economies are firing on all cylinders and near-term growth prospects through the remainder of the decade remain bright. The nation is on track to post the longest economic expansion in U.S. history. Healthy levels of job creation, robust consumer spending, rising incomes, and solid business activity are propelling the U.S. and Colorado economies, even as global trade uncertainties create headwinds. Favorable tax treatment under the federal Tax Cuts and Jobs Act is strengthening business activity beyond what would otherwise be expected at this stage of the business cycle. The tax policy change is accelerating short-term growth, but may be borrowing against future investment. The expansion of the Colorado economy continues to outpace that of the nation. The upswing in energy prices is proving a boon to Colorado producers, reigniting the state's oil and gas industry.

Driven by a continued increase in consumer spending and robust business investment, the U.S. and Colorado economies are expected to accelerate in 2018. The economies will continue to expand in 2019 and 2020, although at slower rates as the economic expansion matures.

While risks to the economic outlook in 2018 remain skewed to the upside, downside risks threaten longer-term economic activity as international trade disputes continue to escalate, risks in global markets continue to mount, and the U.S. expansion grows old. Discussion of the economic outlook begins on page 35, and summaries of expectations for the U.S. and Colorado economies are respectively presented in Tables 19 and 20 on pages 67 and 68.

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 preliminary collections data, the General Fund ended the year with a 12.3 percent reserve, $599.5 million above the required 6.5 percent statutory reserve, as shown in Table 1 (line 19). Relative to June forecast expectations, General Fund revenue came in $103.7 million higher on stronger than expected sales, individual income, and corporate income tax collections. Revenue subject to TABOR exceeded the Referendum C cap by $16.2 million, requiring a $37.5 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 9.3 percent reserve, $229.5 million higher than the budgeted 7.25 percent reserve. Revenue is expected to exceed the Referendum C cap by $209.4 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, and the remaining balance above the required reimbursements will be refunded via the six-tier sales tax refund mechanism to taxpayers for the 2019 tax year.

Relative to the June 2018 forecast, expectations were increased on higher than expected revenue collections in FY 2017-18 that carry forward into the current year through the beginning balance, as well as a slight increase in forecast expectations for FY 2018-19.

FY 2019-20 (Unbudgeted)

Because a budget has not yet been enacted for FY 2019-20, Table 1 (lines 21 and 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 $1.16 billion, or 9.2 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 2017-18 and FY 2018-19 excess reserves carrying into subsequent years, and increased General Fund revenue expectations. This amount will change when the General Assembly enacts changes that impact revenue or expenditures in FY 2018-19 and with changes in revenue expectations through FY 2019-20.

Table 1
General Fund Overview
Dollars in Millions

	Funds Available	**FY 2017-18 Preliminary**	**FY 2018-19 Estimate**	**FY 2019-20 Estimate**	**FY 2020-21 Estimate**
1	Beginning Reserve	$614.5	$1,274.4	$1,042.8	*
2	General Fund Revenue	$11,723.2	$12,296.2	$12,872.0	$13,232.2
3	Transfers from Other Funds *(Table 5)*	$98.8	$40.2	$19.8	$19.7
4	**Total Funds Available**	**$12,436.5**	**$13,610.8**	**$13,934.6**	*****
5	Percent Change	14.8%	9.4%	2.4%	*
	Expenditures	Preliminary	Budgeted	Estimate	Estimate
6	General Fund Appropriations Subject to Limit[1]	$10,430.9	$11,217.7	*	*
7	TABOR Refund Obligation Under Art. X, §20, (7)(d)[2]	$37.5	$209.4	$174.8	$0.0
8	Rebates and Expenditures *(Table 4)*	$290.6	$245.4	$141.3	$138.6
9	Transfers to Other Funds *(Table 5)*	$207.9	$195.1	$166.0	$177.7
10	Transfers to the State Education Fund Pursuant to SB 13-234	$25.3	$25.0	NA	NA
11	Transfers to Transportation Fund *(Table 2)*	$79.0	$495.0	$200.0	$50.0
12	Transfers to Capital Construction Funds *(Table 2)*	$112.1	$180.5	$60.0	$0.0
13	**Total Expenditures**	**$11,183.4**	**$12,568.0**	*	*
14	Percent Change	7.3%	12.4%	*	*
15	Accounting Adjustments[3]	21.3	*	*	*
	Reserve	Preliminary	Budgeted	Estimate	Estimate
16	Year-End General Fund Reserve	$1,274.4	$1,042.8	*	*
17	Year-End Reserve as a Percent of Appropriations	12.3%	9.3%	*	*
18	Statutorily Required Reserve[4]	$674.9	$813.3	*	*
19	**Amount in Excess or (Deficit) of Statutory Reserve**	**$599.5**	**$229.5**	*	*
20	Excess Reserve as a Percent of Expenditures	5.4%	1.8%	*	*
	Perspective on FY 2019-20 (Unbudgeted Year)				Estimate
	Amount Available in FY 2019-20 Relative to FY 2018-19 Expenditures[5]				
21	Amount in Excess or (Deficit) of 7.25% Statutory Reserve			$1,161.6	*
22	As a Percent of Prior-Year Expenditures			9.2%	*
	Addendum	Preliminary	Estimate	Estimate	Estimate
23	Percent Change in General Fund Appropriations	6.6%	7.5%	*	*
24	5% of Colorado Personal Income Appropriations Limit	$14,133.3	$14,405.2	$14,983.8	$15,852.9
25	Transfers to State Education Fund Per Amendment 23	$617.0	$660.2	$689.7	$706.5

*Totals may not sum due to rounding. *Not estimated. NA = Not available.*

[1]Includes the FY 2018-19 budget package adopted during the 2018 legislative session. FY 2018-19 includes $225 million in PERA disbursements pursuant to SB 18-200.

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

[3]The $21.3 million adjustment in FY 2017-18 represents 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.

[4]The required reserve is calculated as a percent of operating appropriations, and is required to equal to 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.

[5]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 7 through 12.

Higher than Usual Forecast Uncertainty

Significant shifts in taxpayer behavior occurred in anticipation of and following the passage of the Federal Tax Cuts and Jobs Act, resulting in unusual income tax collection patterns at the end of calendar year 2017 and start of 2018 that cannot easily be isolated from underlying economic conditions. The federal tax bill enacts changes starting in the 2018 tax year, data for which will not be available until next year. Even with collections data, the revenue impact of the federal tax changes cannot be isolated from economic processes or underlying taxpayer behavior. Considering these factors, revenue estimates in this forecast are subject to a higher than usual margin of error.

The recent U.S. Supreme Court ruling in *South Dakota* v. *Wayfair, Inc.* poses a modest 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 state taxes. As many of the largest online retailers already collect and remit Colorado sales tax, the impact of this ruling and/or subsequent legislative or administrative requirements for out-of-state retailers are expected to increase state collections by an estimated maximum of $110 million per year. It is likely that collections will come in lower than this amount in the near term.

General Fund Transfers to Transportation and Capital Construction

Table 2 shows statutory transfers from the General Fund to transportation and capital construction funds. Transfers in Table 2 are also shown in lines 11 and 12 of Table 1. Other non-infrastructure-related transfers to and from the General Fund are summarized in Table 5.

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 ballot measure outcomes during the 2018 and/or 2019 elections. The amounts shown assume current law and exclude provisions under the adoption of ballot measures.*

Transportation transfers. Senate Bill 17-267, which authorized up to $1.88 billion in certificates of participation (COPs) for transportation projects, repealed transfers from the General Fund to the Highway Users Tax Fund previously specified by Senate Bill 17-262 and 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. Unless voters approve one or more transportation funding ballot measures, 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. Depending on ballot outcomes, the amounts annually transferred under SB 18-001 could be $122.6 million or be eliminated. In these scenarios, the last three years of lease-purchase agreements under SB 17-267 would also be repealed and the state would instead issue transportation revenue bonds.

Tax Policies Dependent on Revenue Conditions

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

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

- **Low-income child care expenses tax credit unavailable in tax year 2017.** The low-income child care expenses income tax credit was extended for three years under House Bill 17-1002. Based on the June 2017 forecast, this credit was unavailable in 2017, but will be available for tax years 2018 through 2020.

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

Table 3
Availability of Tax Policies Dependent on Revenue Conditions

Tax Policy	Availability Criteria	Availability
Historic Property Preservation Income Tax Credit (Section 39-22-514, C.R.S.) *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 2013 through 2015. Not available in tax years 2016 and 2017. Available in tax year 2018 and expected to be available in tax year 2019. Repealed tax year 2020.
Low-Income Child Care Expenses Tax Credit (Section 39-22-119.5, C.R.S) *Revenue reduction of at least $6.0 million per tax year**	June 2017 forecast predicting sufficient General Fund surplus to fund the tax credit.	Available in tax years 2014 through 2016. Not available in tax year 2017. Available in tax years 2018 to 2020. Repealed tax year 2021.
Conservation Easement Tax Credit Partial Refundability (Section 39-22-522 (5)(b)(II), C.R.S.) *Revenue reduction of at least $5.0 million per tax year**	TABOR surplus.	Available in tax year 2018 due to the FY 2017-18 TABOR surplus. Unavailable in tax years 2016, 2017. Expected to be available in tax years 2019 and 2020, and unavailable in 2021.

**Estimates may differ in future analyses.*

Table 4
General Fund Rebates and Expenditures
Dollars in Millions

Category	Preliminary 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	$139.5	5.5	$147.0	5.3	$154.6	5.2
TABOR Refund Mechanism[1]	NA		-$37.5		-$147.0		-$154.6	
Cigarette Rebate	$9.7	-5.6	$9.9	1.6	$9.7	-2.4	$9.4	-2.4
Old-Age Pension Fund	$91.3	-5.4	$86.1	-5.6	$80.8	-6.2	$75.7	-6.4
Aged Property Tax and Heating Credit	$4.9	-43.3	$5.6	14.3	$5.5	-1.8	$5.4	-1.2
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	48.7	$9.2	24.3	$10.4	12.2
Firefighter Pensions	$4.4	3.5	$4.4	0.9	$4.4	1.1	$4.5	0.9
Amendment 35 Distributions	$0.8	-3.8	$0.8	-1.0	$0.8	-1.0	$0.8	-0.9
Marijuana Sales Tax Transfer to Local Governments	$17.3	17.2	$19.1	10.6	$20.8	9.0	$22.4	7.5
Total Rebates and Expenditures	**$290.6**	**2.0**	**$245.4**	**-15.6**	**$141.3**	**-42.4**	**$138.6**	**-1.9**

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	$17.2	$18.6	$19.0	$18.9
SB 15-249 & HB 16-1418	Marijuana Tax Cash Fund	$0.04			
HB 16-1413	Water Quality Improvement Fund				
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	$20.8		
Total Transfers to the General Fund		**$98.8**	**$40.2**	**$19.8**	**$19.7**

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	$4.9	$5.0
HB 13-1193	Advanced Industries Export Acceleration Fund	$0.3			
SB 14-215	Marijuana Tax Cash Fund	$108.1	$123.6	$134.7	$144.8
HB 14-1016[1]	Procurement Technical Assistance Cash Fund	$0.2	$0.2	$0.2	
SB 15-244 & SB 17-267	State Public School Fund	$37.8	$21.6	$23.6	$25.4
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		**$207.9**	**$195.1**	**$166.0**	**$177.7**
Net General Fund Impact		**($109.1)**	**($154.9)**	**($146.2)**	**($158.0)**

[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.

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School Finance Outlook

This section presents information on the outlook for school finance from a state budgetary perspective for the coming budget year (FY 2019-20) and incorporates new information from the September 2018 forecast for income tax diversions to the State Education Fund, Federal Mineral Lease payments, and changes in inflation expectations. No new information is available for FY 2018-19 school finance funding, which was initially determined through passage of the 2018 Long Bill (House Bill 18-1322) and the 2018 School Finance Act (House Bill 18-1379).

Figure 1 illustrates budgeted and expected state aid and local shares for school funding for FY 2018-19 and FY 2019-20. For FY 2019-20, the **state aid requirement** is expected to increase by $186 million on a year-over-year basis due to the factors described below.

- **Total program requirements** will increase by $295 million. The estimated funded pupil count is expected to increase by about 5,250 pupils on a year-over-year basis. In addition, inflation expectations for 2018 have increased since the March forecast from 2.9 percent to 3.2 percent.

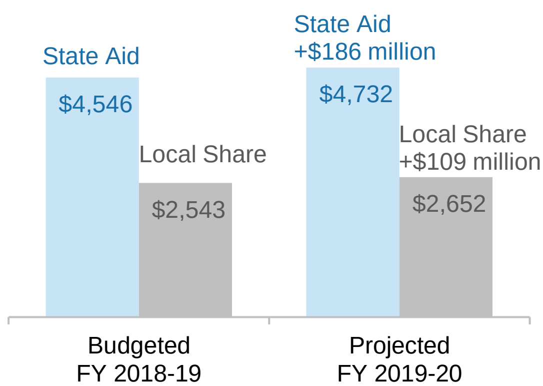
- Revenue available for the **local share** will increase by $109 million, as assessed values are projected to grow by 3.9 percent in FY 2019-20 on a year-over-year basis.

How is state aid determined?

Subject to available budgetary resources, the difference between total program funding requirements and the local share is the amount the state must cover through state equalization payments, or state aid.

FY 2019-20 estimates are based on the December 2017 Legislative Council Staff forecasts for K-12 enrollment and assessed values, which will be updated in December 2018. Enrollment is a major determinant of required formula funding (total program), since funding is allocated on a per pupil basis. Similarly, assessed values on real property determine a school district's property tax base, which, along with a school district's total program mill levy, is the major determinant of the local share of school district funding.

Figure 1
Expectations for School Finance Funding
Dollars in Millions



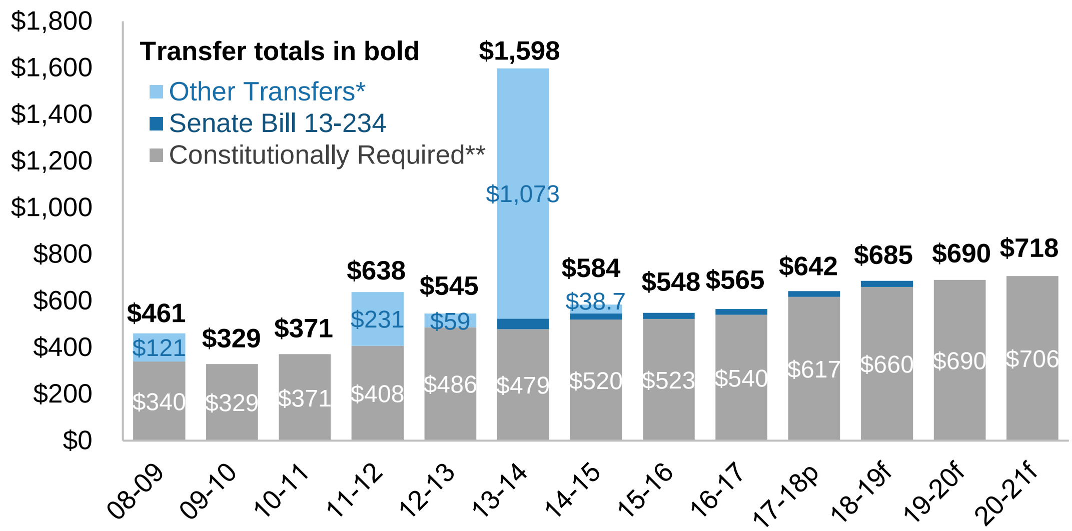
Appropriations are subject to change. The final appropriation for state aid in FY 2018-19 will be made through passage of the mid-year supplemental bill for the Colorado Department of Education. The initial appropriation for state aid in FY 2019-20 will be made through passage of the 2019 Long Bill and the 2019 School Finance Act.

State Education Fund. For FY 2019-20, the available contribution for school finance from the State Education Fund is expected to fall by $62 million, meaning that the General Fund requirement will increase by $124 million on a year-over-year basis. These estimates assume a $100 million ending balance for the State Education Fund in FY 2019-20, and the budget stabilization factor is maintained at its current level of $672.4 million.

The Colorado Constitution requires the State Education Fund to receive one-third of one percent of taxable income (see Table 1, line 25). In addition, the General Assembly has at different times authorized the transfer of additional moneys from the General Fund to the State Education Fund. Money in the State Education Fund is required to be used to fund kindergarten through twelfth grade public education. Figure 2 shows a history and forecast for revenue sources to the State Education Fund through the end of the forecast period.

General Fund transfers to the State Education Fund pursuant to Senate Bill 13-234, which have occurred annually since FY 2013-14, are scheduled to end after FY 2018-19. In FY 2018-19, the State Education Fund is expected to receive $685.2 million, with higher amounts in the following year resulting from growth in taxable income among Colorado taxpayers.

Figure 2
Revenue to the State Education Fund
Dollars in Millions

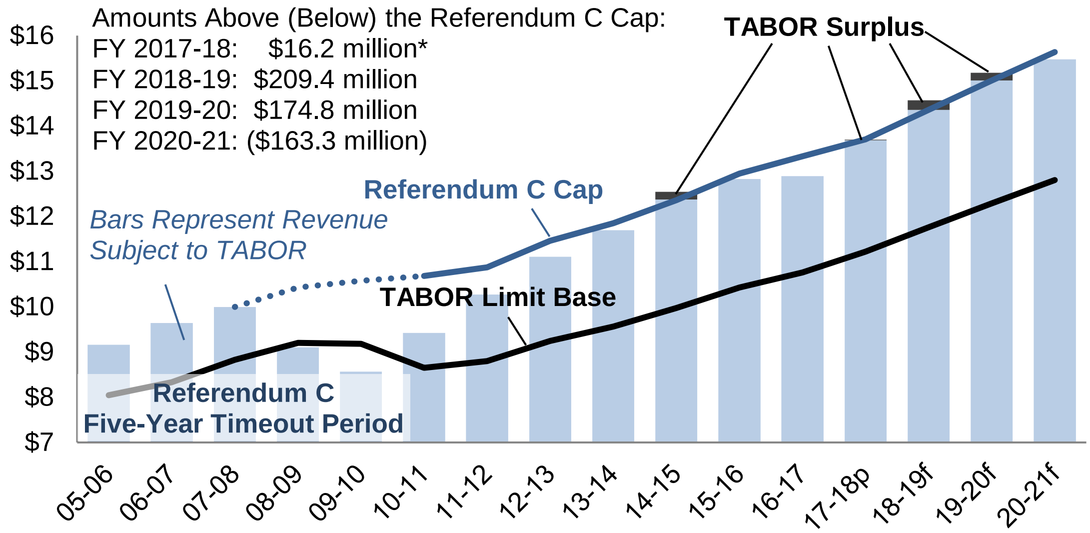


Source: Colorado State Controller's Office and Legislative Council Staff forecast (f).
** Includes transfers under SB 09-260 for FY 2008-09, SB 11-183 and SB 11-156 for FY 2011-12, HB 12-1338 for FY 2012-13 and FY 2013-14, and HB 14-1342 for FY 2014-15.*
***One-third of one percent of federal taxable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

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 8 on page 19 and illustrated in Figure 3, which also 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.
**The refund amount for FY 2017-18 differs from the surplus amount because it includes under-refunds and other adjustments to previous TABOR surpluses.*

FY 2017-18. Preliminary, unaudited figures indicate that state revenue subject to TABOR **exceeded the Referendum C cap** by $16.2 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 **$37.5 million**, including the $16.2 million surplus FY 2017-18 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 new revenue collected in the current fiscal year. Pursuant to state law enacted in Senate Bill 17-267, the TABOR obligation will be refunded to taxpayers via reimbursements paid to county governments for property tax exemptions allowed to seniors and disabled veterans.

State revenue subject to TABOR exceeded June forecast expectations by $122.6 million, as shown in Table 6. Both General Fund and cash fund revenue subject to TABOR came in higher than anticipated. The most significant discrepancies were attributable to corporate income tax revenue, which was $66.9 million higher than anticipated, and individual income tax revenue, which was $53.0 million higher than anticipated.

FY 2018-19. State revenue subject to TABOR is expected to exceed the Referendum C cap by **$209.4 million**, triggering an equivalent TABOR refund obligation in FY 2019-20. Expectations for the TABOR surplus amount have increased relative to the June forecast because of upward revisions to the General Fund revenue forecast. Shown in Figure 4, the FY 2018-19 surplus is expected to exceed the amount that can be refunded via FY 2019-20 reimbursements for property tax expenditures, triggering a **six-tier sales tax refund** on 2019 tax forms to be filed in early 2020.

FY 2019-20. State revenue subject to TABOR is expected to exceed the Referendum C cap by **$174.8 million**, triggering an equivalent TABOR refund obligation in FY 2020-21. The surplus amount is projected to be smaller than that estimated for FY 2018-19 because state revenue subject to TABOR is expected to grow less quickly than the Referendum C cap. Like the estimated FY 2018-19 surplus, this surplus would be refunded via both property tax exemption reimbursements and a sales tax refund to all full-year resident Colorado taxpayers.

FY 2020-21. State revenue subject to TABOR is expected to fall short of the Referendum C cap by $163.3 million in FY 2020-21 as the economy slows. If no TABOR surplus is collected, the state will not be required to issue TABOR refunds in FY 2021-22.

Table 6
Change in TABOR Estimates, June 2018 to September 2018
Dollars in Millions

FY 2017-18	September	June	Change
TABOR Revenue	**$13,718.6**	**$13,596.0**	**$122.6**
General Fund[1]	$11,416.6	$11,323.3	$93.3
Cash Funds[1]	$2,302.0	$2,272.6	$29.4
Referendum C Cap	**$13,702.4**	**$13,689.0**	**$13.4**
Revenue Above (Below) Ref C Cap	**$16.2**	**($93.0)**	**$109.2**

FY 2018-19	September	June	Change
TABOR Revenue	**$14,569.5**	**$14,472.2**	**$97.3**
General Fund[1]	$12,105.2	$12,010.7	$94.5
Cash Funds[1]	$2,464.3	$2,461.6	$2.7
Referendum C Cap	**$14,360.1**	**$14,346.0**	**$14.1**
Revenue Above (Below) Ref C Cap	**$209.4**	**$126.2**	**$83.2**

FY 2019-20	September	June	Change
TABOR Revenue	**$15,181.1**	**$15,081.4**	**$99.7**
General Fund[1]	$12,663.7	$12,591.2	$72.5
Cash Funds[1]	$2,517.3	$2,490.2	$27.1
Referendum C Cap	**$15,006.3**	**$14,977.3**	**$29.0**
Revenue Above (Below) Ref C Cap	**$174.8**	**$104.1**	**$70.7**

[1]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.

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

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

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.

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

TABOR refund mechanisms. Figure 4 shows the mechanisms that will be used to issue TABOR refunds during the forecast period. The FY 2017-18 TABOR refund obligation 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 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 7, 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 8.

Because the FY 2018-19 and FY 2019-20 TABOR surpluses are expected to exceed the respective amounts of FY 2019-20 and FY 2020-21 property tax reimbursements, the amount by which the surplus exceeds the reimbursement in each year will be refunded via the **sales tax refund mechanism**. Table 7 shows the amounts that will be disbursed to taxpayers of different incomes via the sales tax mechanism. In tax year 2019, the amount refunded via the sales tax refund mechanism is expected to exceed $15 per full-year resident taxpayer. In this case, statute requires that revenue be distributed in six tiers according to a taxpayer's adjusted gross income. In tax year 2020, the amount refunded via the sales tax refund mechanism is expected to be less than $15 per taxpayer, requiring equal refunds to all taxpayers. In any case, taxpayers filing jointly receive twice the amount refunded to single tax filers.

Figure 4
TABOR Refund Mechanisms
Dollars in Millions

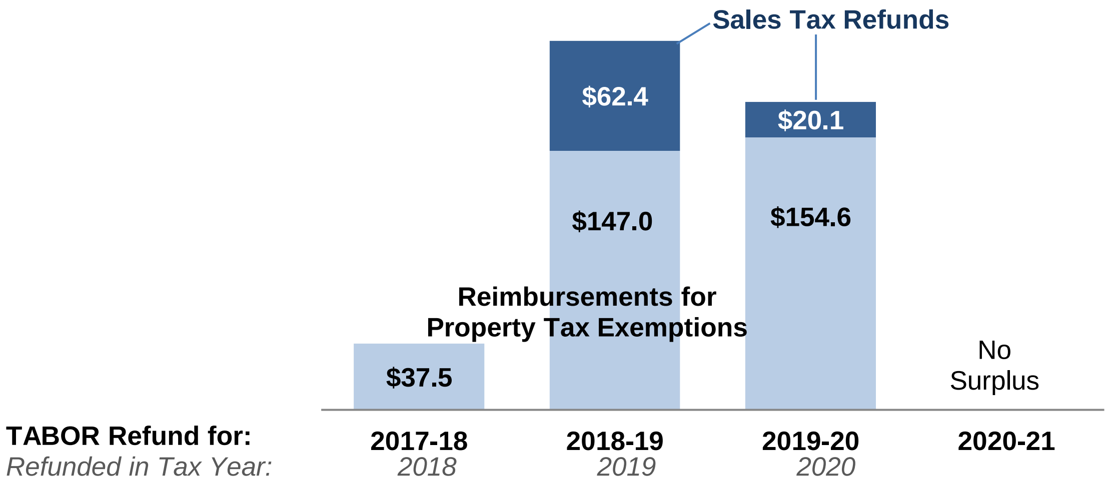


Table 7
Average Taxpayer TABOR Refunds
Via the Six-Tier Sales Tax Refund Mechanism

FY 2018-19 Refund Obligation, Tax Year 2019 Forecast

Adjusted Gross Income			Single Filers	Joint Filers
Up	to	$40,600	$12	$24
$40,600	to	$86,900	$15	$30
$86,900	to	$135,400	$18	$36
$135,400	to	$183,900	$20	$40
$183,900	to	$230,100	$22	$44
$230,100	and Up		$35	$70

FY 2019-20 Refund Obligation, Tax Year 2020 Forecast

Adjusted Gross Income			Single Filers	Joint Filers
Up	to	$41,400	$6	$12
$41,400	to	$88,500	$6	$12
$88,500	to	$137,900	$6	$12
$137,900	to	$187,300	$6	$12
$187,300	to	$234,400	$6	$12
$234,400	and Up		$6	$12

Table 8
TABOR Limit and Retained Revenue
Dollars in Millions

		Preliminary FY 2017-18	Estimate FY 2018-19	Estimate FY 2019-20	Estimate FY 2020-21
	TABOR Revenue				
1	General Fund[1]	$11,416.6	$12,105.2	$12,663.7	$13,008.3
2	Cash Funds[1]	$2,302.0	$2,464.3	$2,517.3	$2,465.0
3	**Total TABOR Revenue**	**$13,718.6**	**$14,569.5**	**$15,181.1**	**$15,473.3**
	Revenue Limit				
4	Allowable TABOR Growth Rate	4.5%	4.8%	4.5%	4.2%
5	Inflation (*from Prior Calendar Year*)	2.8%	3.4%	3.2%	2.9%
6	Population Growth (*from Prior Calendar Year*)	1.7%	1.4%	1.3%	1.3%
7	TABOR Limit Base	$11,220.7	$11,759.3	$12,288.5	$12,804.6
8	Voter Approved Revenue Change (Referendum C)	$2,481.6	$2,600.7	$2,717.8	$2,668.6
9	Total TABOR Limit / Referendum C Cap	$13,702.4	$14,360.1	$15,006.3	$15,636.6
10	**TABOR Revenue Above (Below) Referendum C Cap**	**$16.2**	**$209.4**	**$174.8**	**($163.3)**
	Retained/Refunded Revenue				
11	Revenue Retained under Referendum C[2]	$2,481.6	$2,600.7	$2,717.8	$2,668.6
12	Fiscal Year Spending *(revenue available to be spent or saved)*	$13,702.4	$14,360.1	$15,006.3	$15,473.3
13	Outstanding Underrefund Amount[3]	$21.3			
14	**Revenue Refunded to Taxpayers**[4]	**$37.5**	**$209.4**	**$174.8**	**$0.0**
15	TABOR Reserve Requirement	$411.1	$430.8	$450.2	$464.2

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 a 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 10 on page 26 summarizes preliminary, unaudited 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 according to preliminary figures published for FY 2017-18. Revenue increased $1.4 billion, or 14.1 percent, relative to FY 2016-17 and came in $130.1 million, or 1.1 percent, higher than projected in the June 2018 Legislative Council Staff forecast.

General Fund revenue grew at its fastest rate since FY 1997-98. In dollar terms, the $1.4 billion increase was the largest ever. While the extraordinary increase was attributable to a number of factors, the two most important were a robust late-cycle economy marked by the reacceleration of the energy and manufacturing industries, and boosted income tax payments as a result of the federal Tax Cuts and Jobs Act (TCJA). Contributions from households (up 12.1 percent for individual income tax revenue, and up 7.3 percent for sales tax revenue) and businesses (up 53.5 percent for corporate income tax revenue, and up 19.4 percent for use tax revenue) indicate very strong economic conditions alongside federal tax policy shifts favorable to the state. The General Fund also received a one-time bump from a legal arrangement negotiated in the framework of the Tobacco Master Settlement Agreement (MSA), which added $113.3 million in TABOR-exempt General Fund revenue.

Forecast for FY 2018-19 through FY 2020-21. Both economic performance and tax policy are expected to drive above-trend revenue growth in FY 2018-19, with diminishing impacts in FY 2019-20 and especially FY 2020-21 as the expansion wanes. Revenue is expected to increase 4.9 percent in the current FY 2018-19, or 5.9 percent netting out the effects of the one-time Tobacco MSA contribution. The pace of General Fund revenue growth is expected to slow to 4.7 percent in FY 2019-20 and 2.8 percent in FY 2020-21. Relative to the June forecast, expectations were revised upward moderately for both FY 2018-19 (increased $103.7 million, or 0.9 percent) and FY 2019-20 (increased $82.7 million, or 0.6 percent). A forecast for FY 2020-21 General Fund revenue was not published in June.

The forecast for General Fund revenue is consistent with the economic outlook presented beginning on page 35, including expectations for continued employment growth and moderate increases in consumer spending. Largely as a result of the temporary distortions caused by the TCJA, General Fund revenue growth is unlikely to outpace its FY 2017-18 rate during the current business cycle.

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 toward the end of the forecast period.

Table 9
2018 Legislation Affecting General Fund Revenue
Dollars in Millions

Major Legislation Passed in 2018	FY 2017-18	FY 2018-19	FY 2019-20
Income Tax			
HB 18-1004: Continue Child Care Contribution Tax Credit			-$16.2
HB 18-1060: Income Tax Deduction for Military Retirement Benefits		-$1.1	-$2.9
HB 18-1185: Market Sourcing For Bus Inc. Tax Apportionment		-$2.9 to $8.6	-$6.1 to $18.3
HB 18-1190: Modify Job Creation Main Street Revitalization Act		*Impacts begin in FY 2020-21*	
HB 18-1202: Income Tax Credit Leave Of Absence Organ Donation			-$0.06
HB 18-1208: Expand Child Care Expenses Income Tax Credit		-$1.9	-$3.7
HB 18-1217: Income Tax Credit For Employer 529 Contributions		-$0.03	-$0.05
HB 18-1267: Income Tax Credit For Retrofitting Home For Health		-$0.1	-$0.3
SB 18-007: Affordable Housing Tax Credit		*Impacts begin in FY 2020-21*	
SB 18-200: Modifications to PERA to Eliminate Unfunded Liability	-$2.1	-$4.3	-$3.2
Total Income Tax Impact	-$2.1	-$10.3	-$32.5
Sales and Use Tax			
HB 18-1218: Definition Of Veterans' Orgs For Sales & Use Tax		-$0.06	-$0.06
HB 18-1315: Manufactured Home Sales Tax Exemption			-$0.81
HB 18-1350: Machine Tool Sales Tax Exemption For Scrap Metal		-$0.04	-$0.08
Total Sales and Use Tax Impact	$0.0	-$0.10	-$0.95
Other Miscellaneous Revenue			
SB 18-056: Civil Jurisdiction Of County Courts And Filing Fees		$0.01	$0.03
SB 18-234: Human Remains Disposition Sale Businesses		<$0.05	<$0.05
HB 18-1154: Protect Consumer Solicit Public Record Copy For Fee		<$0.02	<$0.02
Other Miscellaneous Revenue Impact	$0.0	<$0.08	<$0.10
Revenue Impact of 2018 Legislation	**-$2.1**	**-$10.3**	**-$33.4**

Note: Bills with minimal impacts (less than $5,000) are excluded.

Legislative impacts. Table 9 presents the General Fund revenue impacts of laws enacted during the 2018 legislative session. Legislation expected to change General Fund revenue by less than $5,000 is omitted.

Certain tax expenditures are made available or unavailable depending on revenue conditions. For information on these expenditures, see Table 3.

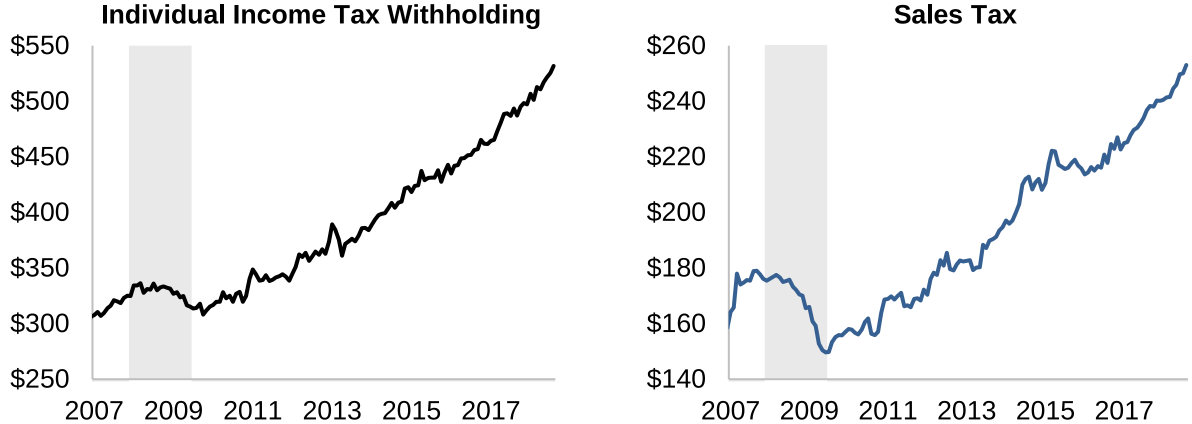
Expiring tax expenditures. This forecast estimates state revenue under current state and federal law. Under current state law, certain tax expenditures available now are scheduled to expire in future years. The forecast includes upward adjustments to revenue projections to account for the expiration 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, fiduciaries, estates, and trusts. Most revenue from the tax is credited to the General Fund, though an amount of revenue representing one-third of one 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.

Individual income tax revenue surged in FY 2017-18, increasing 12.1 percent on an accrual accounting basis relative to FY 2016-17 collections. Preliminary figures for FY 2017-18 indicate that revenue exceeded June forecast expectations by $53.0 million, or 0.7 percent. The state benefitted from a confluence of favorable conditions. The robust economy supported employment growth, wage and salary appreciation, investment income gains, and improved earnings for non-corporate businesses. Additionally, more taxpayers saw their state tax burden increase than decrease as a result of how federal tax cuts were structured in the TCJA, leading to an uptick in both state tax withholding from wages and estimated state tax payments by investors. The policy generally lowered federal tax rates while expanding the amount of income to which they apply, reducing most taxpayers' federal tax liability on net. A history of seasonally adjusted individual income tax withholding is presented in the left panel of Figure 5.

Individual income tax revenue will increase 5.9 percent to just over $8.0 billion in the current FY 2018-19 before decelerating to grow 5.4 percent in FY 2019-20 and 3.1 percent in FY 2020-21. Expectations have improved modestly relative to those published in June. Growth in withholding and estimated payments attributable to the TCJA is expected to fall off after tax year 2018, but the economic expansion will sustain growth in household incomes, and thus state tax revenue, through the forecast period. The forecast anticipates slowing income tax receipts in 2020 and 2021 as the capacity for expansion thins.

Figure 5
Selected Sources of General Fund Revenue
Millions of Dollars Collected per Month



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

Short-term risks to the forecast are skewed to the upside if the economy continues to excel and tax reform impacts continue to manifest. The forecast carries more downside risk toward the end of the forecast period as the economic outlook grows less certain.

Sales taxes. The 2.9 percent states 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 6.4 percent to total $3.1 billion during the current FY 2018-19 before slowing to grow 4.9 percent in FY 2019-20 and 3.6 percent in FY 2020-21. Sales tax collections have grown quickly thus far in 2018 (Figure 5, right), reflecting higher household incomes and strong consumer confidence. The TCJA, the tight labor market, and rising wages have boosted consumers' after-tax income and motivated consumption thus far this year. Growth in sales collections is expected to moderate slightly but continue to outpace changes in prices and population, in part because prices for retail goods will inflate less quickly than those for other consumer goods and services.

Taxing out-of-state (online) sales. In June after the forecast was published, the U.S. Supreme Court issued a decision in the *South Dakota v. Wayfair* case that changes how out of-state (including online) retail sales are taxed. In light of this ruling, the Department of Revenue announced in September that it will require out-of-state retailers to collect and remit sales tax on sales to Colorado consumers beginning December 1, 2018. Retailers that have less than $100,000 in sales to Colorado consumers, or fewer than 200 transactions with Colorado consumers, are exempt from the remittance requirement.

Many of the largest companies that sell online already collect Colorado sales tax. Sales tax remitted by retailers that had not previously collected tax are expected to contribute between $70 million and $110 million for a full fiscal year during the current forecast period. However, data deficiencies add uncertainty to these estimates, as do questions of administration and compliance. As more companies comply with the new requirement and as online sales continue to grow as a share of total retail sales, this amount will increase.

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, rising 19.4 percent over the year prior, on the strength of a recovering energy industry. Revenue is expected to continue to grow during the next two fiscal years, increasing about 9.8 percent in the current FY 2018-19 before adding 4.2 percent in FY 2019-20. In FY 2020-21, use tax revenue is expected to decline slightly on expectations that oil and gas prices do not increase sufficiently to spur additional investment in the state. The forecast represents slight downward revisions to June expectations due in part to downside risks to the economy and capital expenditures.

Corporate income taxes. Corporate income tax collections accelerated at the end of the year and totaled $781.9 million in FY 2017-18, a year-over-year increase of 53.5 percent. Corporate profits will remain strong through FY 2018-19 and are expected to increase 2.8 percent over year-ago levels to reach $803.5 million. As the stimulus from the federal tax law recedes, corporate income tax revenue will decline 3.1 percent in FY 2019-20 to $778.7 million and decline a further 3.4 percent in FY 2020-21 to $752.3 million.

Corporate income tax revenue in FY 2017-18 exceeded the June forecast by $66.9 million. The economy and corporate profits were stronger than anticipated in the spring of 2018; however, expectations for future corporate income tax revenue are similar to those that underlie the June forecast. Compared with the June forecast, expectations for corporate income tax revenue have been increased by $0.1 million in FY 2018-19 and $7.3 million in FY 2019-20.

Tobacco Master Settlement Agreement. For FY 2017-18 only, Table 10 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. This spring after publication of the March forecast, 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 as a damage award.

No such payments are anticipated to contribute to General Fund revenue in the future.

Table 10
General Fund Revenue Estimates
Dollars in Millions

	Category	Preliminary 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	$3,113.3	6.4	$3,264.9	4.9	$3,382.2	3.6
2	Use	$309.9	19.4	$340.4	9.8	$354.7	4.2	$352.2	-0.7
3	Retail Marijuana Sales	$167.6	70.5	$191.1	14.0	$208.3	9.0	$223.9	7.5
4	Cigarette	$34.6	-5.5	$33.8	-2.3	$33.0	-2.4	$32.2	-2.4
5	Tobacco Products	$16.4	-22.7	$23.5	43.3	$24.8	5.6	$26.3	6.1
6	Liquor	$46.5	3.3	$48.2	3.6	$50.2	4.3	$52.0	3.5
7	**Total Excise**	**$3,501.0**	**9.8**	**$3,750.2**	**7.1**	**$3,936.0**	**5.0**	**$4,068.8**	**3.4**
	Income Taxes								
8	Net Individual Income	$7,577.2	12.1	$8,021.8	5.9	$8,451.0	5.4	$8,710.1	3.1
9	Net Corporate Income	$781.9	53.5	$803.5	2.8	$778.7	-3.1	$752.3	-3.4
10	Total Income Taxes	$8,359.1	15.0	$8,825.2	5.6	$9,229.7	4.6	$9,462.4	2.5
11	Less: Portion Diverted to the SEF	-$617.0	14.3	-$660.2	7.0	-$689.7	4.5	-$706.5	2.4
12	**Income Taxes to the General Fund**	**$7,742.1**	**15.0**	**$8,165.0**	**5.5**	**$8,539.9**	**4.6**	**$8,755.9**	**2.5**
	Other Sources								
13	Estate	$0.0	NA	$0.0	NA	$0.0	NA	$0.0	NA
14	Insurance	$303.6	4.5	$315.0	3.8	$324.8	3.1	$334.0	2.8
15	Pari-Mutuel	$0.5	-10.7	$0.5	-8.2	$0.4	-6.4	$0.4	-5.1
16	Investment Income	$19.5	32.4	$25.1	28.5	$30.0	19.7	$30.8	2.5
17	Court Receipts	$4.4	7.6	$4.7	6.8	$4.9	5.2	$5.1	4.1
18	Tobacco Master Settlement Agreement[1]	$113.3	NA	$0.0	NA	$0.0	NA	$0.0	NA
19	Other Income	$38.9	-17.9	$35.8	-7.9	$35.9	0.3	$37.1	3.4
20	**Total Other**	$480.2	34.4	$381.1	-20.6	$396.1	4.0	$407.5	2.9
21	**Gross General Fund Revenue**	**$11,723.2**	**14.1**	**$12,296.2**	**4.9**	**$12,872.0**	**4.7**	**$13,232.2**	**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.

Cash Fund Revenue

Table 11 summarizes the forecast for cash fund revenue subject to TABOR. The largest revenue sources are motor fuel taxes and other transportation-related revenue, gaming taxes, and severance taxes. The end of this section also presents the forecasts for marijuana sales and excise tax, Federal Mineral Lease, and unemployment insurance revenue. These forecasts are presented separately because they are not subject to TABOR limitations.

Cash fund revenue subject to TABOR totaled $2.30 billion in FY 2017-18, a decline of $473.7 million or 17.1 percent from the prior fiscal year. The drop in revenue is attributable to the elimination of the Hospital Provider Fee and the 2.9 percent sales tax on retail marijuana. Under Senate Bill 17-267, the Hospital Provider Fee was repealed after FY 2016-17, and hospitals now remit a Healthcare Affordability and Sustainability Fee, which is not subject to TABOR limitations and therefore is not shown in Table 4. In addition, the bill also exempted retail marijuana from the 2.9 percent state sales tax beginning in FY 2017-18. These reductions more than offset expected increases in transportation-related and severance tax revenue. Year-over-year changes in other cash fund categories are relatively minimal.

Total cash fund revenue subject to TABOR will rebound from this lower level by 7.1 percent to $2.46 billion in FY 2018-19, and will increase 2.2 percent to $2.52 billion in FY 2019-20, as most major revenue sources are projected to rise. By 2020-21, total cash fund revenue is expected to decline slightly relative to the prior year. This decline is attributable to lower severance tax revenue on the expectation that oil and gas producers will claim a large amount of ad valorem property tax credits based on the current expansion of oil and gas activity.

Transportation-related revenue subject to TABOR totaled $1,274.8 million in FY 2017-18. As the state's population and economy continue to expand, transportation funding will increase 2.8 percent in FY 2018-19 and will grow an additional 2.1 percent in FY 2019-20. The forecast for TABOR revenue to transportation-related cash funds is shown in Table 12 on page 29.

The largest source of revenue into the **Highway Users Tax Fund** (HUTF) is motor fuel excise tax (22¢ per gallon of gasoline and 20.5¢ per gallon of diesel fuel). Preliminary data suggest that fuel excise tax collections increased 4.1 percent in FY 2017-18 to $654.9 million. Growth in fuel excise tax collections is expected to moderate over the remainder of the forecast period, growing 3.0 percent in FY 2018-19, and 2.5 percent in FY 2019-20. The HUTF also receives revenue from other sources, including registration fees. In FY 2017-18 total registration fees equaled $380.5 million and they are expected to increase 2.0 percent FY 2018-19 and 1.7 percent in FY 2019-20 at a rate slightly faster than statewide population growth. Total HUTF revenue is expected to increase 2.5 percent to $1,132.7 million in FY 2018-19 and 2.2 percent to $1,158.1 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. The HUTF revenue is subject to TABOR when it is originally collected by the state but the allocations are not. The two largest sources of TABOR revenue 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. SHF revenue subject to TABOR is expected to decline 2.0 percent to $39.8 million in FY 2018-19 and remain relatively flat in FY 2019-20.

Other transportation cash fund revenue subject to TABOR is expected to total $128.8 million in FY 2018-19, relatively flat from the previous year, and grow at a slower pace 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 __. Revenue to this enterprise is expected to grow at a rate slightly faster than statewide population growth, rising 1.9 percent to $111.2 million in FY 2018-19 and 1.7 percent to $113.1 million in FY 2019-20. The bridge safety surcharge fee collections typically grow at the same rate as vehicle registrations.

Table 11
Cash Fund Revenue Subject to TABOR
Dollars in Millions

	Preliminary FY 2017-18	Estimate FY 2018-19	Estimate FY 2019-20	Estimate FY 2020-21	CAAGR*
Transportation-Related	$1,274.8	$1,301.4	$1,329.2	$1,343.8	
Percent Change	4.5%	2.1%	2.1%	1.1%	1.8%
Severance Tax	$142.6	$217.5	$188.0	$73.9	
Percent Change	632.2%	52.5%	-13.6%	-60.7%	-19.7%
Gaming Revenue[1]	$106.8	$110.1	$112.3	$112.8	
Percent Change	3.0%	3.1%	2.0%	0.5%	1.8%
Insurance-Related	$17.8	$19.0	$17.6	$16.9	
Percent Change	72.5%	6.6%	-7.0%	0.0%	-1.7%
Regulatory Agencies	$80.5	$77.2	$78.6	$79.6	
Percent Change	6.5%	-4.0%	1.8%	1.3%	-0.4%
Capital Construction Related – Interest[2]	$4.7	$6.9	$7.2	$6.8	
Percent Change	1.4%	47.4%	4.7%	-5.7%	13.3%
2.9% Sales Tax on Marijuana[3]	$16.1	$12.3	$12.5	$12.5	
Percent Change	-60.6%	-23.6%	1.3%	0.0%	-8.2%
Other Cash Funds	$658.7	$720.0	$771.9	$818.6	
Percent Change	1.9%	9.3%	7.2%	6.0%	7.5%
Total Cash Fund Revenue	**$2,302.0**	**$2,464.3**	**$2,517.3**	**$2,465.0**	
Subject to the TABOR Limit	-17.1%	7.1%	2.2%	-2.1%	2.3%

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 12
Transportation Revenue by Source
Dollars in Millions

	Preliminary 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	$654.9	$674.5	$691.4	$701.3	2.3%
Percent Change	4.1%	3.0%	2.5%	1.4%	
Total Registrations	$380.5	$387.9	$394.6	$401.1	1.8%
Percent Change	3.1%	2.0%	1.7%	1.6%	
Registrations	*$226.8*	*$231.1*	*$235.0*	*$238.8*	
Road Safety Surcharge	*$132.9*	*$135.4*	*$137.7*	*$140.0*	
Late Registration Fees	*$20.8*	*$21.4*	*$21.9*	*$22.3*	
Other HUTF Receipts[1]	$69.9	$70.3	$72.1	$72.3	2.4%
Percent Change	4.3%	0.6%	2.6%	0.2%	
Total HUTF	$1,105.3	$1,132.7	$1,158.1	$1,174.6	2.0%
Percent Change	3.7%	2.5%	2.2%	1.4%	
State Highway Fund (SHF)[2]	$40.6	$39.8	$39.4	$40.4	-0.2%
Percent Change	-1.6%	-2.1%	-1.0%	2.5%	
Other Transportation Funds	$128.9	$128.8	$131.7	$128.8	0.0%
Percent Change	12.2%	0.0%	2.2%	-2.2%	
Aviation Fund[3]	*$29.2*	*$33.5*	*$34.5*	*$30.0*	
Law Enforcement-Related[4]	*$8.8*	*$8.7*	*$8.8*	*$9.0*	
Registration-Related[5]	*$90.9*	*$86.6*	*$88.4*	*$89.8*	
Total Transportation Funds	**$1,274.8**	**$1,301.4**	**$1,329.2**	**$1,343.8**	2.0%
Percent Change	4.5%	2.1%	2.1%	1.1%	

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 to Article X, Section 20, of the Colorado Constitution (TABOR).

[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 P.O.S.T. Board registration fees.

Addendum: TABOR-Exempt FASTER Revenue

	Preliminary FY 2017-18	Estimate FY 2018-19	Estimate FY 2019-20	Estimate FY 2020-21	CAAGR*
Bridge Safety Surcharge	$109.1	$111.2	$113.1	$115.0	**1.4%**
Percent Change	1.7%	1.9%	1.7%	1.7%	

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.

As shown in Table 13, **severance tax revenue** including interest earnings totaled $142.6 million in FY 2017-18. Severance tax revenue is expected to total $217.5 million in FY 2018-19 and $188.0 million in FY 2020-21. Severance tax revenue is more volatile than other revenue sources because it is based the volatile oil and gas industry and most of the severance tax revenue is paid on newly producing wells. Additionally, the ad valorem property tax credit can exacerbate collections volatility.

Severance taxes from **oil and natural gas** are forecast to increase 63.4 percent in FY 2018-19 to $205.6 million. Severance tax revenue on oil and gas production will decline 14.4 percent to $176.0 million in FY 2019-20. Oil and gas production is expected to level off between 2018 and 2019 but the severance tax revenue will decline because of the ad valorem tax credit. The 2019 credit is based on current extraction activity, which will reduce 2019 severance taxes by an amount equal to 87.5 percent of property taxes paid in 2019.

Table 13
Severance Tax Revenue Forecast by Source
Dollars in Millions

	Preliminary 2017-18	Estimate 2018-19	Estimate 2019-20	Estimate 2020-21	CAAGR*
Oil and Gas	$125.8	$205.6	$176.0	$61.6	-21.2%
Percent Change	3025.1%	63.4%	-14.4%	-65.0%	
Coal	$3.7	$3.5	$3.3	$3.0	-6.8%
Percent Change	-10.0%	-5.9%	-7.0%	-7.7%	
Molybdenum and Metallics	$2.9	$2.4	$2.4	$2.4	-5.4%
Percent Change	-2.2%	-16.2%	0.5%	0.5%	
Total Severance Tax Revenue	$132.4	$211.5	$181.7	$67.1	-20.2%
Percent Change	1086.6%	60.3%	-14.1%	-63.1%	
Interest Earnings	$10.2	$6.0	$6.3	$6.8	-12.5%
Percent Change	22.1%	-41.2%	5.3%	8.2%	
Total Severance Tax Fund Revenue	$142.6	$217.5	$188.0	$73.9	-19.6%
Percent Change	629.8%	53.0%	-13.6%	-60.7%	

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

Oil prices in Colorado averaged $65.78 per barrel in August 2018, which is expected to be near the peak oil price during the forecast period. The price of oil rose in the spring of 2018 as the global economy improved and higher demand reduced the level of global oil stocks. Domestic oil prices are constrained because small price increases generate new production, thereby keeping the supply and demand for oil in balance. Given these expectations, the price of oil received by Colorado producers are expected to average $61.02 per barrel in 2018, $60.40 per barrel in 2019, and $55.68 per barrel in 2020.

Natural gas producers in Colorado have received an average price of $1.95 per thousand cubic feet (Mcf) in August 2018 and are expected to average $2.62 per Mcf in 2018. Natural gas producers are able to quickly place natural gas on the market due to new technologies and existing infrastructure, which will keep natural gas prices below $3.50 throughout the forecast period. Prices are expected to average $3.11 per Mcf in 2019 and rise to $3.15 per Mcf in 2020.

Coal has historically been the second largest mineral source of severance taxes in Colorado after oil and natural gas. Coal severance tax revenue totaled $3.7 million in FY 2017-18. Power plants are slowly transitioning away from coal to cleaner and cheaper natural gas, which is reflected in the revenue forecast. Coal severance taxes are expected to decline 5.9 percent in FY 2018-19 to $3.5 million and 7.0 percent to $3.3 million in FY 2019-20.

Metal and molybdenum mines will pay $2.4 million in severance taxes on the value of minerals produced in FY 2018-19. International demand for steel has increased mining activity at the two molybdenum mines in Colorado, the Climax Mine outside Leadville and the Henderson Mine outside Empire. Based on constant demand, metal and molybdenum severance taxes are expected to be $2.4 million in each year of the forecast period.

Finally, interest earnings on severance tax collections are expected total $6.0 million in FY 2018-19 and $6.3 million in FY 2018-19.

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 grow 3.1 percent to $110.1 million in FY 2018-19. Increased tax revenue can be attributed to strong consumer spending, rising wages, and ongoing consolidation in the gaming industry, placing more casinos in the highest tax bracket. By statutory formula, gaming tax revenue subject to TABOR cannot grow faster than 3.0 percent annually, but growth in tax revenue is expected to be supplemented by higher fee and interest earnings. Gaming revenue is expected to grow at slower rates through the remainder of the forecast period.

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—a 30 percent jump relative to 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 $268.7 million in FY 2018-19 and $284.8 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 14.

The special sales tax is the largest marijuana revenue source and equals 15 percent of the sale price of retail marijuana. The special sales tax is expected to reach $172.0 million in FY 2018-19 and $187.5 million in FY 2019-20. The state distributes 10 percent of the special sales tax to local governments and retains the rest in the Marijuana Tax Cash Fund, the General Fund, and the State Public School Fund based on a statutory formula. The excise tax is the second largest source of marijuana revenue with the first $40 million per year constitutionally dedicated to the BEST Fund for school construction. The excise tax is expected to generate $65.4 million in FY 2018-19 and $64.0 million in FY 2019-20. The decline in the revenue forecast of the marijuana excise tax is due to the falling wholesale price of marijuana, which is the basis for the tax. According to the Department of Revenue, the calculated wholesale rate for a pound of marijuana flower has declined from $1,876 per pound in January 2014 to $846 per pound in July 2018 as shown in Figure 6.

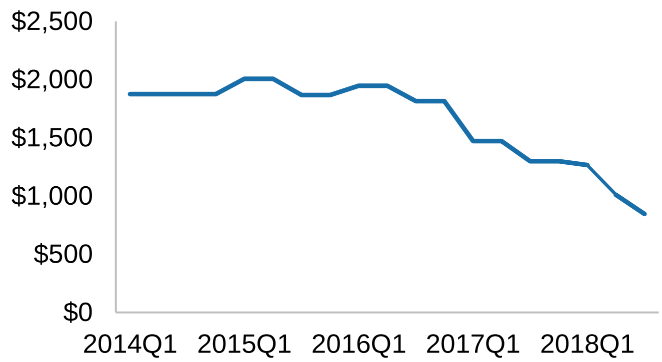
Table 14
Tax Revenue from the Marijuana Industry
Dollars in Millions

	Preliminary 2017-18	Estimate 2018-19	Estimate 2019-20	Estimate 2020-21	CAAGR*
Proposition AA Taxes					
Special Sales Tax	$167.2	$191.1	$208.3	$223.9	10.2%
State Share of Sales Tax	$150.5	$172.0	$187.5	$201.5	
Local Share of Sales Tax	$16.7	$19.1	$20.8	$22.4	
15% Excise Tax	$68.2	$65.4	$64.0	$61.6	-3.3%
Total Proposition AA Taxes	**$235.3**	**$256.4**	**$272.3**	**$285.5**	**6.7%**
2.9 Sales Tax (Subject to TABOR)					
2.9% Sales Tax on Medical Marijuana	$10.6	$10.6	$10.7	$10.7	0.3%
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	-8.2%
Total Taxes on Marijuana	**$251.4**	**$268.7**	**$284.8**	**$298.0**	**5.8%**

**CAAGR: Compound average annual growth rate for FY 2016-17 to 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 between $10.6 million and $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.

Figure 6
Calculated Wholesale Rate of Marijuana Flower
Price per Pound



Source: Colorado Department of Revenue.

Federal Mineral Lease (FML) revenue is the state's portion of the money the federal government collects from mineral production on federal lands. Collections are mostly determined by the value of mineral production. Since FML revenue is not deposited into the General Fund and is exempt from TABOR, the forecast is presented separately from other sources of state revenue.

FML revenue totaled $86.5 million in FY 2017-18. FML revenue is forecast to increase 14.0 percent in FY 2018-19 to $98.6 million as the state fulfills its obligations for previous payments associated with canceled leases on the Roan Plateau. FML revenue will increase 3.3 percent in FY 2019-20 to $101.8 million and 1.3 percent to $103.1 million in FY 2020-21.

Forecasts for **Unemployment Insurance (UI) Trust Fund** revenue, benefit payments, and year-end balance are shown in Table 15. Revenue to the UI Trust Fund has not been subject to TABOR since FY 2009-10 and is therefore excluded from Table 11. 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 11.

The ending balance for the state's UI Trust Fund was $922.2 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 higher 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 $2,600 per employee.

Table 15
Unemployment Insurance Trust Fund
Revenues, Benefits Paid, and Fund Balance
Dollars in Millions

	Preliminary FY 2017-18	Estimate FY 2018-19	Estimate FY 2019-20	Estimate FY 2020-21	CAAGR*
Beginning Balance	$739.4	$922.3	$1,113.5	$1,324.8	
Plus Income Received					
UI Premium	$562.8	$550.7	$557.6	$575.6	0.75%
Interest	$18.3	$21.1	$22.8	$24.7	
Total Revenues	$581.1	$571.7	$580.4	$600.2	1.09%
Percent Change	-6.8%	-1.6%	1.5%	3.4%	
Less Benefits Paid	$398.2	$380.5	$369.1	$342.2	-4.92%
Percent Change	-14.5%	-4.4%	-3.0%	-7.3%	
Ending Balance	$922.3	$1,113.5	$1,324.8	$1,582.8	19.73%
Solvency Ratio					
Fund Balance as a Percent of Total Annual Private Wages	0.77%	0.87%	0.97%	1.09%	

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

Economic Outlook

The U.S. and Colorado economies are firing on all cylinders and near-term growth prospects through the remainder of the decade look good. The nation is on track to post the longest economic expansion in U.S. history. Healthy levels of job creation, robust consumer spending, rising incomes, and solid business activity are propelling the U.S. and Colorado economies, even as global trade uncertainties create headwinds. Favorable tax treatment under the federal Tax Cuts and Jobs Act is strengthening business activity beyond what would otherwise be expected at this stage of the business cycle. The policy change is accelerating short-term growth, but may be borrowing against future investment. The expansion of the Colorado economy continues to outpace that of the nation. The upswing in energy prices is proving a boon to Colorado producers, reigniting the state's oil and gas industry.

The economic expansion is expected to weaken throughout the course of the forecast period as the economy enters the late stages of the business cycle. The Federal Reserve has already begun to apply the brakes this year, raising interest rates to rein in rising inflationary pressures. As interest rates rise, households are expected to reprioritize savings at the expense of some spending, which will reduce growth capacity. Employers are already constrained by labor shortages, which will be exacerbated as many workers age out of the labor force. These constraints are cyclical certainties that are expected to pose increasing headwinds against continued expansion in 2019 and 2020.

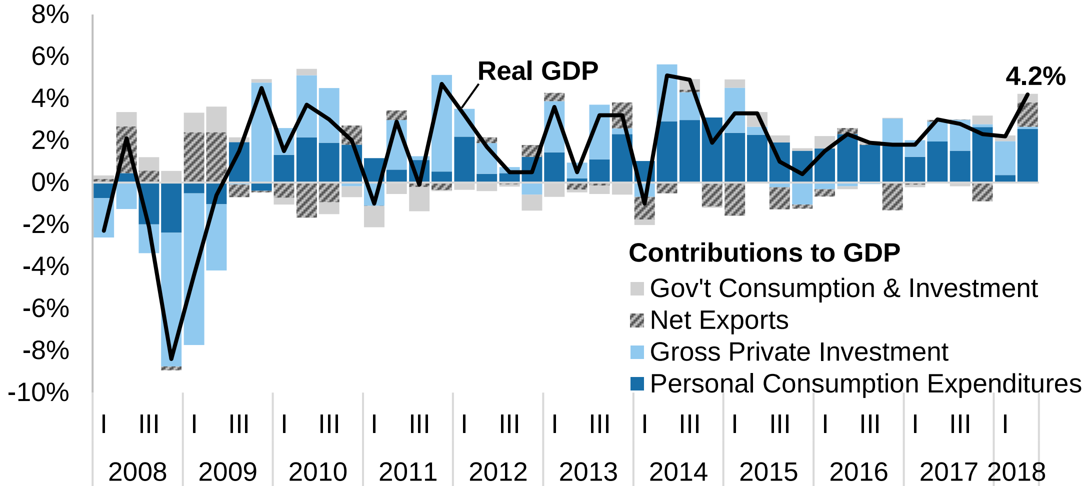
Amid a strong near-term outlook for the U.S. economy, risks to the economic outlook remain sizeable. Rising trade tensions and uncertainty with key trade partners have threatened to disrupt global supply chains. The Federal Reserve faces a delicate balance of not raising interest rates too fast at risk of shortening the economic expansion, or lifting rates too slowly thereby risking an overheating economy. In Colorado, the housing market poses challenges to further economic growth in the state. The elevated cost of living is pricing out many buyers, contributing to slower anticipated population growth, and crimping consumer expenditures elsewhere in the economy.

Tables 19 and 20 on pages 67 and 68 present histories and expectations for economic indicators for the U.S. and Colorado, respectively.

Gross Domestic Product

The economic expansion is broad-based and long-lived. Strong consumer confidence and persistent gains in business investment have put the nation's economy on track to record its longest expansion ever. 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 3.2 percent in the first half of 2018 following a strong end to 2017. Growth has been broad-based across the four major components of GDP. In Colorado, a strong labor market continues to drive the economy and outpace the nation. U.S. and Colorado GDP is expected to continue to grow in 2018 and 2019 with the federal Tax Cuts and Jobs Act providing a near term boost to consumer spending and business activity. The tax cuts, however, pose a risk of pulling future activity forward at the expense of longer term growth.

Figure 7
Contributions to Real U.S. Gross Domestic Product
Seasonally Adjusted Annual Rates



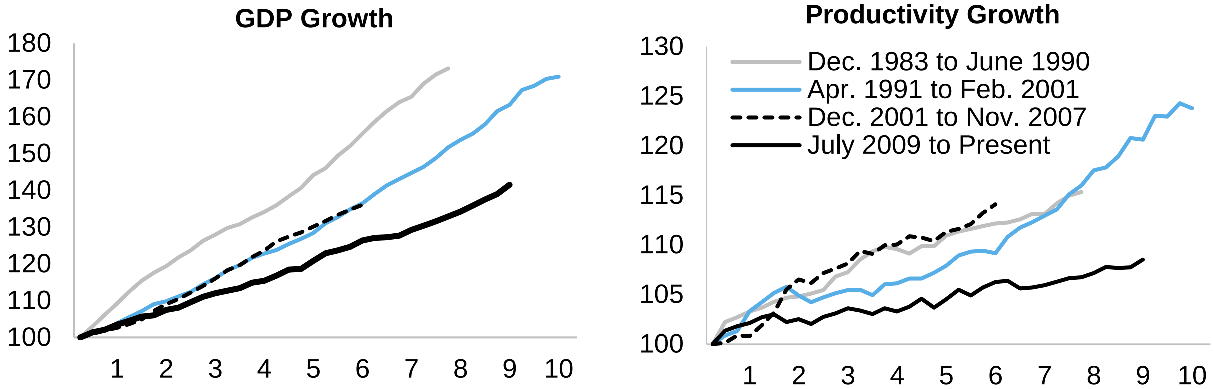
Source: U.S. Bureau of Economic Analysis. Real GDP is inflation-adjusted. Percent change and contributions to percent change in GDP reflect annualized quarter-over-quarter growth.

The nation's economy grew at an annual rate of 4.2 percent in the second quarter of 2018, the strongest pace of growth in nearly four years. Robust consumer spending, which accounts for more than two-thirds of total economic output, grew at a solid 3.8 percent annual rate in the second quarter. Business investment in nonresidential projects offset a softening residential real estate market by growing at an annual rate of 8.5 percent. Businesses investment in intellectual property was particularly strong in the second quarter; investment rose by 11.0 percent after growing by an annual rate of 14.1 percent in the prior quarter. Looming tariffs pushed U.S. export growth in the second quarter to its highest level in almost 5 years, increasing by 9.1 percent. Many U.S.-based businesses, particularly soybean growers, front-loaded their shipments to beat Chinese tariffs that took effect in July. U.S. imports were down slightly, and government expenditures were up 2.3 percent from the first quarter of 2018, the strongest gain in almost three years. Figure 7 presents the annualized change in real U.S. GDP and contributions from its four major components.

The current expansion is weaker than prior expansions. The present-day economic expansion surpassed the 1960s expansion to become the second longest on record in U.S. history. Only the 1990s expansion endured longer, lasting 120 months relative to the 112 months of the current expansion through September of this year. However, this expansion remains weaker than the 1990s expansion and other recent periods of economic growth, as shown in Figure 8.

Many factors have contributed to slower growth. The most significant is demographic change, which has slowed population growth, weakened consumer activity, and modified spending patterns as a higher share of the population enters retirement. Structural changes in the economy, including technological change and shifts toward automation, have slowed growth in labor productivity and wages, causing negative downstream impacts on consumption and shifting business spending toward cost-saving, capital-intensive investments. Wage growth has sprung to life in recent months, and business investment has accelerated, offering positive signs for business and consumer activity.

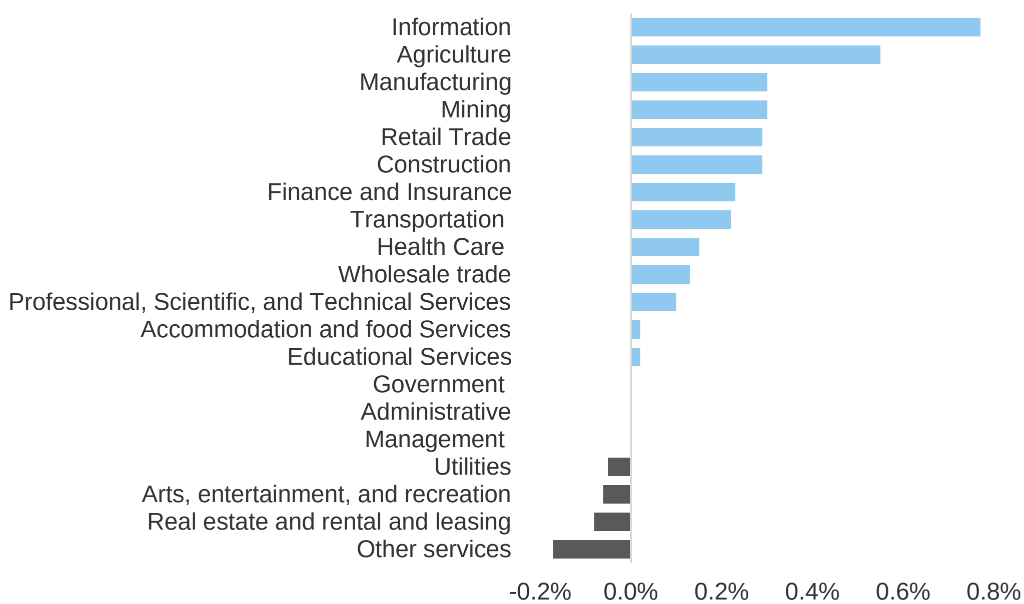
Figure 8
U.S. Economic Growth in Recovery and Expansion
Index of Quarterly Growth since the Start of the Past Four Recoveries



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

Colorado's economy is among the nation's strongest. Colorado's economy remains among the nation's strongest. The state's GDP expanded by 3.0 percent in the first quarter of 2018, the fourth highest in the country. Contributions to growth were broad-based across most industries, with information and agriculture posting the largest contributions (Figure 9). Colorado's information industry has received a boost from strong growth in software application ("app") development. The state's educated and growing workforce continues to attract new companies. Google, which has two main locations in the state, and the Amazon office in downtown Boulder, continue to add new employees to their payrolls. The agricultural component of state GDP has benefited from the marijuana industry, which is captured under the support services sector of agriculture.

Figure 9
Contributions to Real Colorado Gross Domestic Product, 2018Q1
Seasonally Adjusted Annual Rates



Source: U.S. Bureau of Economic Analysis. Real GDP is inflation adjusted. Contributions to percent change in GDP reflect annualized quarter-over-quarter growth.

- Real U.S. GDP is expected to increase 3.0 percent in 2018 and 2.7 percent in 2019. Near-term stimulus to business investment and consumer spending from the federal Tax Cuts and Jobs Act will provide a short-term boost to GDP growth.

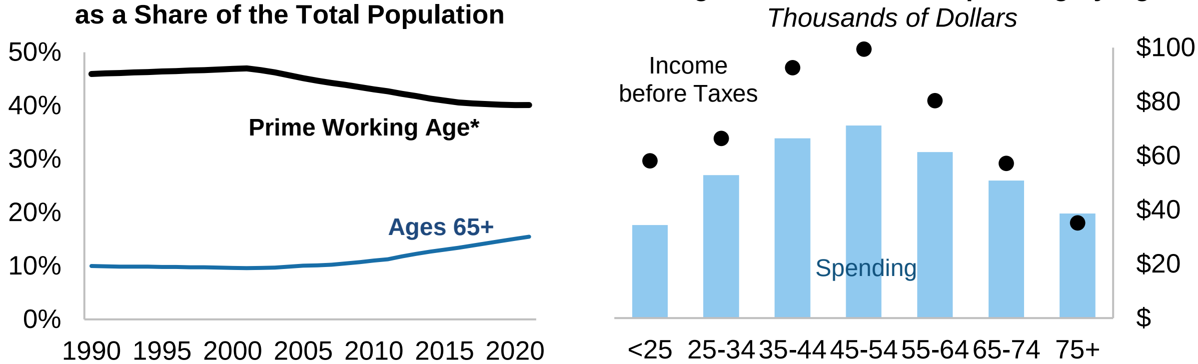
Demographics

Population growth has slowed. Data published by the U.S. Census Bureau in December show a slowdown in Colorado population growth attributable primarily to slower net migration. Slower population growth will contribute to an even tighter labor market in the state. Other locations are proving more affordable to many would-be residents of Colorado as housing costs continue to rise. Several other factors are also contributing to the slowdown net migration and population growth. Economic growth has improved in many areas of the U.S., offering encouraging job prospects in less expensive areas. Additionally, international migration to Colorado has also slowed due to changes in federal immigration policy and improved economic prospects abroad. In addition to the slowdown in net migration, birth rates have also fallen, contributing to slower population growth.

The aging population is slowing economic activity. Demographic change actively affects economic performance across the U.S. and in Colorado, influencing the supply of labor, income, consumption, and inflation. An increasing share of the baby boomer generation — those born between 1946 and 1964 — is retiring, causing labor force participation to decline and slowing income and consumption growth over the long run. Based on projections released by the State Demography Office, Colorado's prime working age population, comprising persons between ages 25 and 54, is projected to fall from a high of 47 percent of the population in 2001 to 41 percent by 2020 (Figure 10, left). The share of those aged 65 and older is expected to rise from a historical average of about 10 percent to nearly 15 percent by 2020.

Figure 10
Selected Demographic Indicators

Selected Populations as a Share of the Total Population | **Average U.S. Income and Spending by Age** *Thousands of Dollars*



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

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

Income and consumption rise and fall with age (Figure 10, right). In particular, the average earning and consumption levels peak between ages 45 and 54 and decline steadily thereafter. As the baby boomer generation reached their 40s and 50s, the U.S. enjoyed a "demographic dividend," marked by strong economic growth in the 1990s and 2000s.

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

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

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

Business Income and Activity

Buoyed by a strong economy and federal tax cuts, business activity and profits were extremely strong in the first half of 2018. Business activity has increased in response to a strong consumer sector and business investments as firms rebuild their inventory after solid economic growth in 2017. The federal government cut the corporate tax rate at the end of 2017, accelerating business profits in the first two quarters of 2018. As the stimulus of the tax cuts wanes later in the year, business income and investments will continue to grow, but at a slower rate than in the first half of the year.

Figure 11 shows selected measures of business activity. Business investment in software and equipment increased 8.1 percent in the first half of 2018 compared with the same period in 2017 as firms continue to invest in anticipation of strong demand into the future. Proprietors' income increased 5.1 percent in the first half of the year. Corporate profits after tax increased $159.1 billion, a 4.3 percent in the first half of the year, boosted by the cuts to the federal corporate tax rate. During this same period, corporate tax receipts fell by $47.9 billion, according to the U.S. Department of the Treasury.

Due to a strong economy, both the Institute for Supply Management's (ISM) manufacturing index and its non-manufacturing business activity index indicate expanding business activity. The manufacturing index has been in expansionary territory (with values above 50) for the past 24 months, reading 58.1 in July. The non-manufacturing business activity index reading 55.7 in July and has shown increasing business activity since the end of the recession. The recent increase in the manufacturing index reflects the increased value in refined oil products recovering from the 2015 oil prices collapse.

The Federal Reserve Bank of Kansas City produces a manufacturing index similar to the ISM index for businesses within its region, which includes Colorado in addition to six other surrounding states. The Kansas City Fed index registered 73.0 in July, continuing to outpace the national index, as shown in Figure 12. Despite strong demand for products, businesses report concern that the impact of tariffs and higher input costs will force them to raise prices, which may decrease their production.

As measured by the Federal Reserve, industrial production (Figure 11, bottom left), increased 4.2 percent in July over the same period last year. Production of consumer goods has remained constant, while buiness equipment has accelerated year-to-date. The Federal Reserve reports that capital utilization in the manufacturing sector was 78.1 percent in July, 1.7 percentage points below its long-run average. Manufacturing and industrial production orders (Figure 11, bottom right) continue to increase as businesses rebuild inventories that have been reduced by strong consumer demand. Total new manufacturing orders increased 7.8 percent in the first six months of 2018 compared with the same period in 2017, and new orders for durable goods increased 8.1 percent.

Figure 11
Selected Indicators of U.S. Business Activity

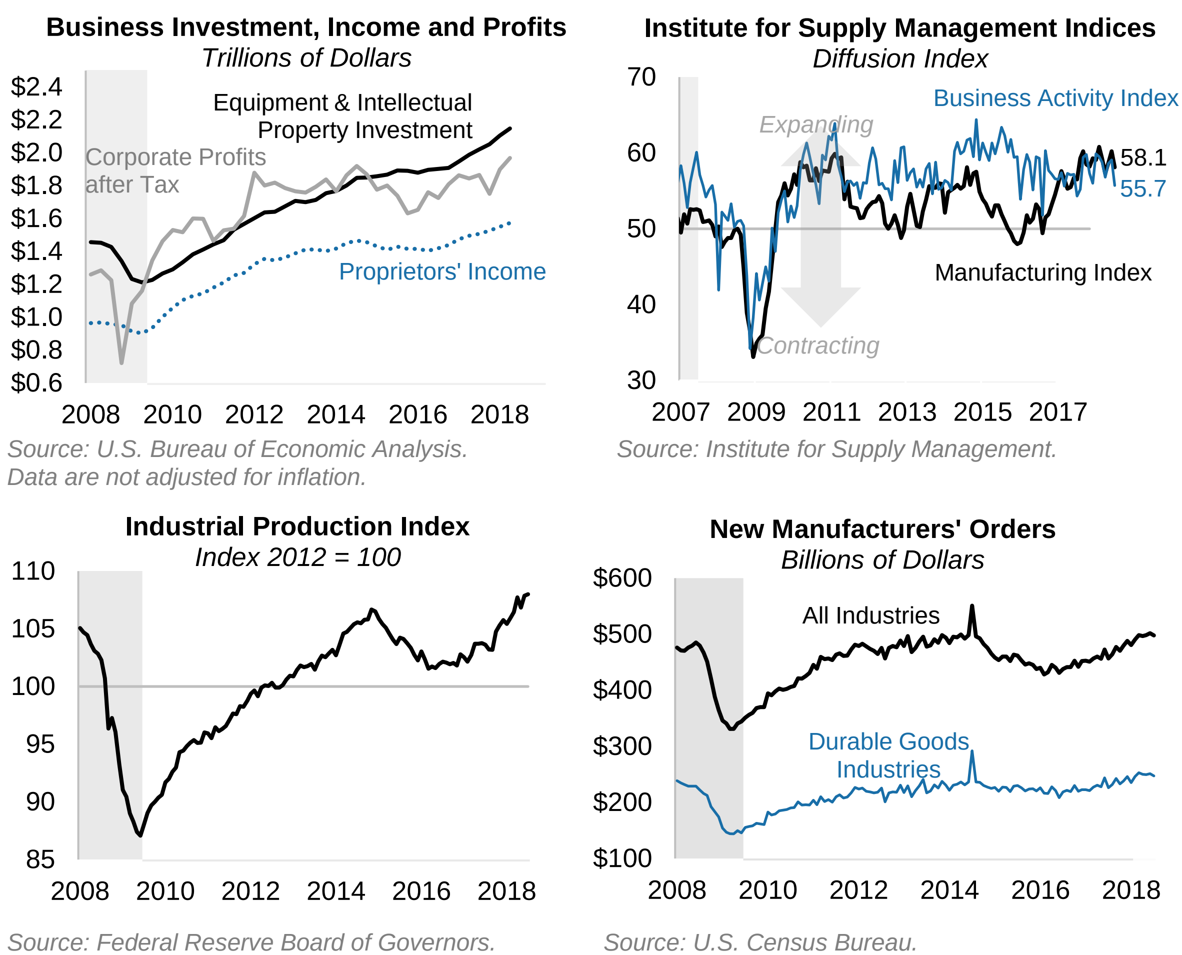
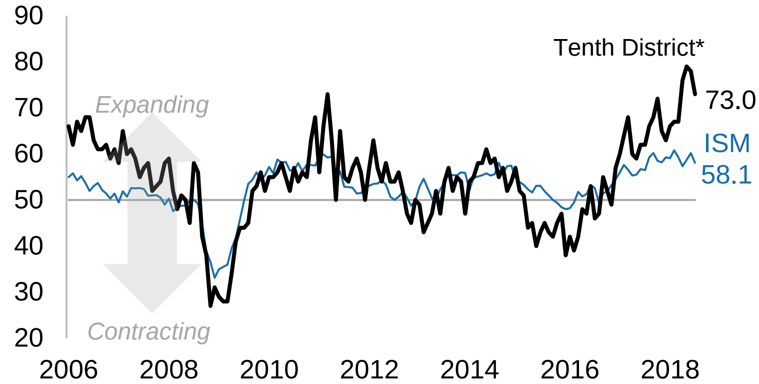


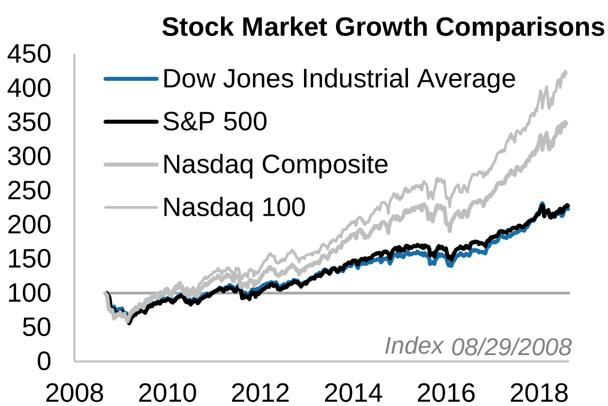
Figure 12
Manufacturing Activity in the U.S. and Federal Reserve Tenth District



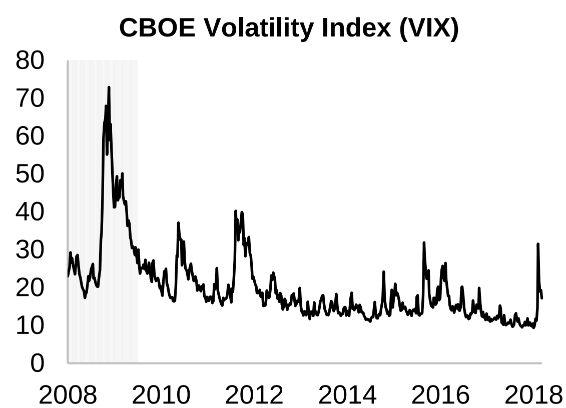
Source: Institute for Supply Management (ISM) and Federal Reserve Bank of Kansas City.
**The Tenth District composite index is adjusted to the ISM scale. The Tenth District includes Colorado, Nebraska, Oklahoma, Kansas, Wyoming, and portions of New Mexico and Missouri.*

Major U.S. stock market indices extended gains through the third quarter of 2018, though growth has been slower relative to recent years, as most stock movements have traded in a range-bound market for most of the year. Trade worries have added uncertainty and volitality to the markets, but strong economic data and robust corporate earnings have offset some of these concerns. Passage of the federal Tax Cuts and Jobs Act and the strong economy have helped to boost corporate earnings and corresponding stock prices (Figure 13, left). Volatility indicators were up slightly through mid-September. While September has historically been the rockiest month of the year for stocks, the index still hovered near its three year average. The Chicago Board Options Exchange (CBOE) Volatility Index is based on S&P 500 option prices. When the index goes up, it indicates near-term expectations for market volatility, as illustrated in Figure 13 (right).

Figure 13
Selected Indicators of Stock Market Activity



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



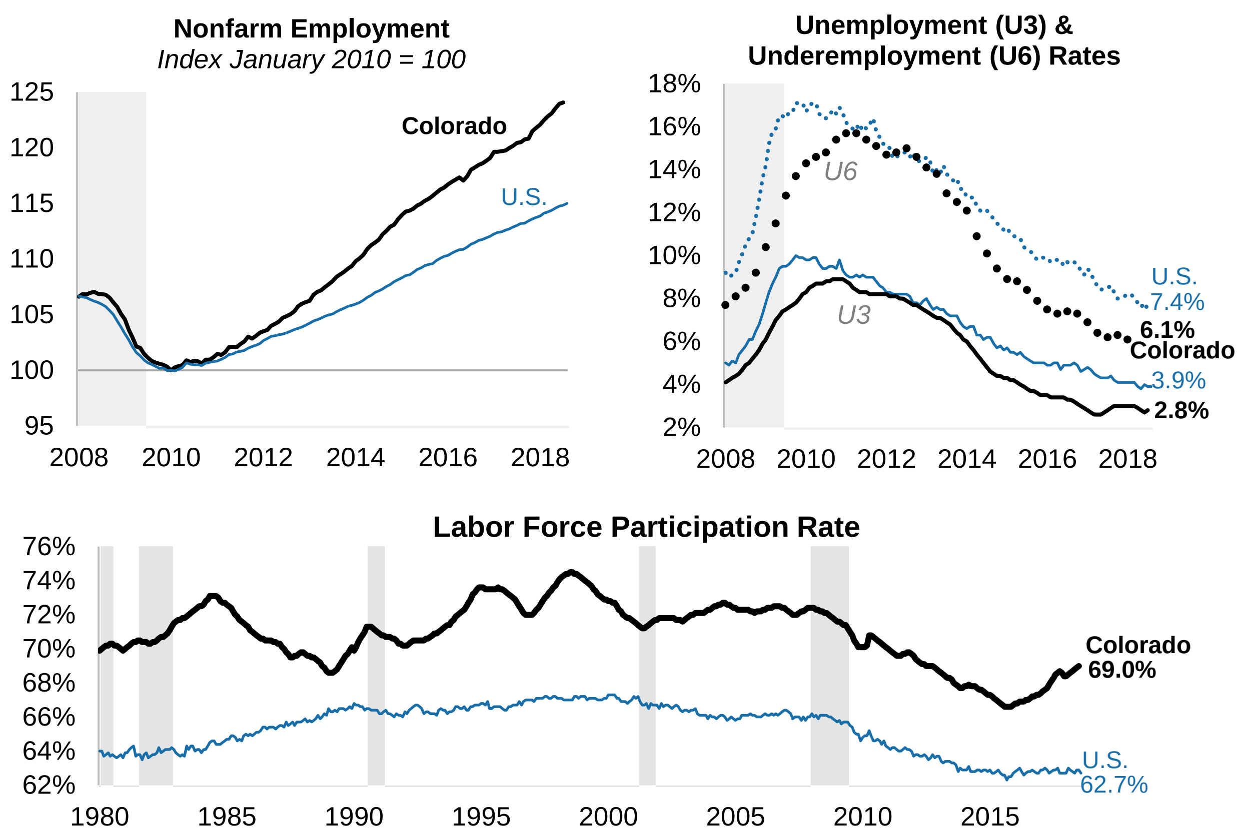
Source: Chicago Board Options Exchange (CBOE).

Labor Markets

U.S. and Colorado labor market indicators remained strong through August 2018. U.S. employers continue to add new employees to their payrolls at a heathy rate despite signs of growing worker shortages, including historically low unemployment rates and the number of unemployed workers hovering near historical lows. Colorado's labor market activity continues to outpace that of the nation as a whole, and the state unemployment rate remains among the lowest in the country. Figure 14 compares labor market activity for the U.S. and Colorado.

Strong labor markets are counteracting structural shifts. Colorado's labor force participation rate is climbing in spite of an accelerating number of annual retirements. As shown in the bottom panel of Figure 14, labor force participation fell during the first five years of the current expansion, a demographic idiosyncrasy that is inconsistent with the early years of all other recent expansions. Growing labor force participation since 2015 suggests that the tight labor market is now strong enough to counteract demographic and structural shifts toward automation, which have reduced demand for lower-skilled workers in many industries, including manufacturing and information services sectors. Positive trends in the labor force participation rate will sustain employment growth through the forecast period.

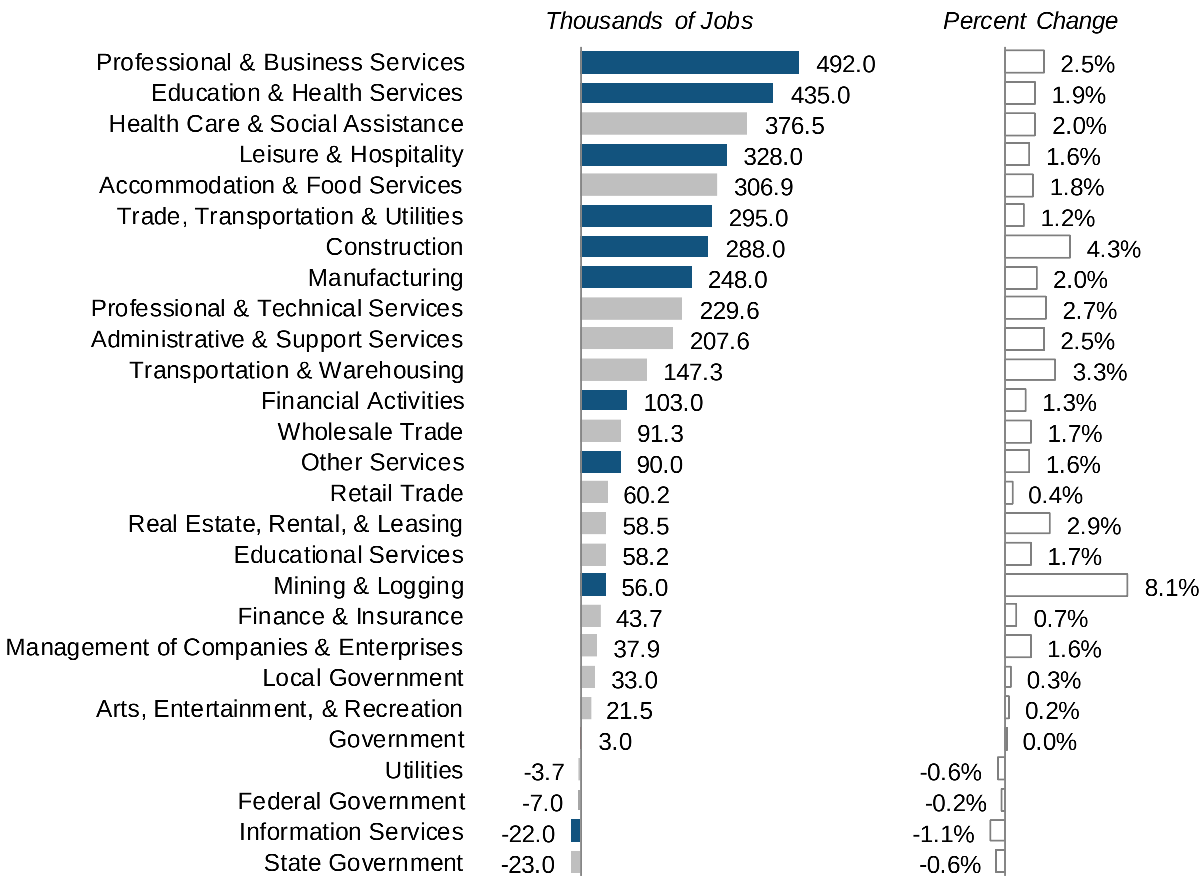
Figure 14
Selected U.S. and Colorado Labor Market Indicators



Source: U.S. Bureau of Labor Statistics. Data are seasonally adjusted and are through August 2018 for the U.S. and July 2018 for Colorado.
**Underemployment rates for Colorado are shown as four-quarter averages, while data for the U.S. are monthly.*
***Labor force participation is calculated as the percent of the civilian population, age 16 and older, who are working or seeking employment.*

U.S. job growth remains steady. U.S. employers continue to add employees to their payrolls at a healthy pace. Through August of this year, employers have added about 207,000 new jobs each month on average, faster than the 182,000 monthly average last year. August 2018 monthly job gains marked the 95th consecutive month of growth since October 2010. Hiring has been broad-based, with the largest sectors, professional and business services and education and health services, driving overall U.S. job growth (Figure 15). The construction and manufacturing industries continue to trend upward, adding 288,000 and 240,000 jobs, respectively, since August 2017. A contraction in federal and state government employees has slowed employment growth in the government sector from the same month one year prior.

Figure 15
U.S. Job Gains and Losses by Industry
Year-over-Year Change, August 2018 over August 2017

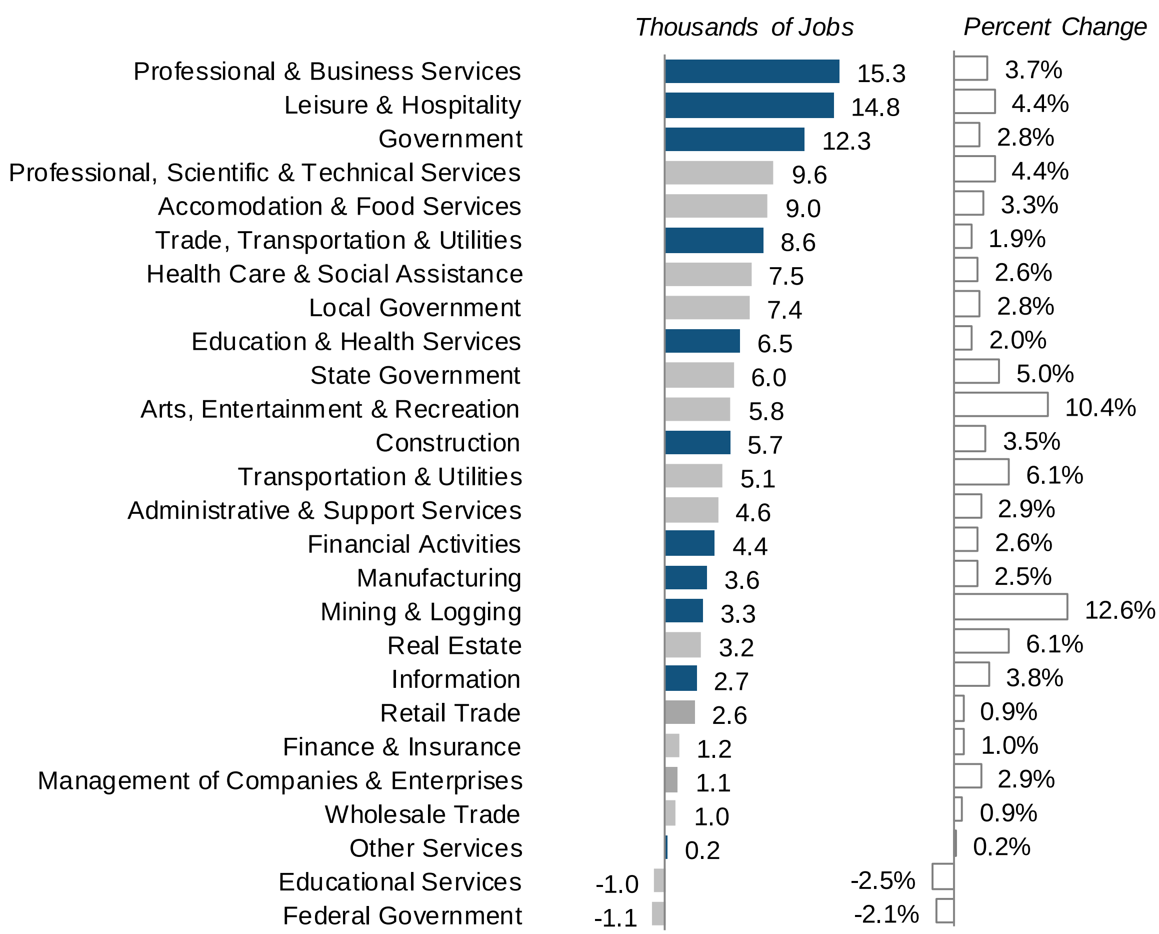


Source: U.S. Bureau of Labor Statistics. Data are seasonally adjusted. Blue (dark) shading indicates a supersector, while grey (light) shading indicates a subsector.

The U.S. unemployment rate held steady at 3.9 percent in July and August 2018, after falling to an 18-year low of 3.8 percent in May 2018. The nation's unemployment rate has been averaging about 4.0 percent through the year, down from 4.5 percent from the same period a year ago. The "underemployment" (U6) rate, a broader measure that captures discouraged workers and those who work part-time but desire full-time work, continued its year-long downward trend in August 2018, falling to 7.4 percent, the lowest rate since April 2001 (Figure 14, top right).

Colorado's labor market is even tighter. The Colorado labor market remains one of the strongest in the country. After signaling a slowdown in 2017, employment indicators through the first seven months of the year remain encouraging. Colorado employment rose 2.9 percent through July over year-ago levels, and gains occurred across nearly all sectors (Figure 16). This estimate include revisions expected by Legislative Council Staff during the Bureau of Labor Statistics' annual rebenchmarking process. Driving growth, professional and business services, one of the largest sectors in the state, added 15,300 jobs from July 2017, a 3.7 percent increase. Additionally, the leisure and hospitality supersector, which includes the arts, entertainment, and accommodation and food services sectors, continues to benefit from Colorado's thriving tourism industry. Finally, employment in the mining and logging supersector continues to trend upward as oil prices improve.

Figure 16
Colorado Job Gains and Losses by Industry
Year-over-Year Change, July 2018 over July 2017



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

Colorado's unemployment rate is still among the lowest in the country and the number of new and continued unemployment claims remain near historical lows. The state unemployment rate has averaged 2.8 percent through the first seven months of the year. Many employers are reporting that it is becoming increasingly difficult to find the talent and skilled labor needed to grow their businesses.

- Colorado will continue to add jobs through the forecast period, although at a slower pace than in recent years as labor market shortages constrain growth. Nonfarm employment in the state will increase 2.7 percent in 2018 and 1.8 percent in 2019. The state's unemployment rate will average 2.9 percent in 2018 and 3.1 percent in 2019.

- As the nation maintains full employment, U.S. nonfarm employment will increase 1.6 percent in 2018 and 1.4 percent in 2019. The national unemployment rate will average 3.9 percent in 2018 and 4.0 percent in 2019.

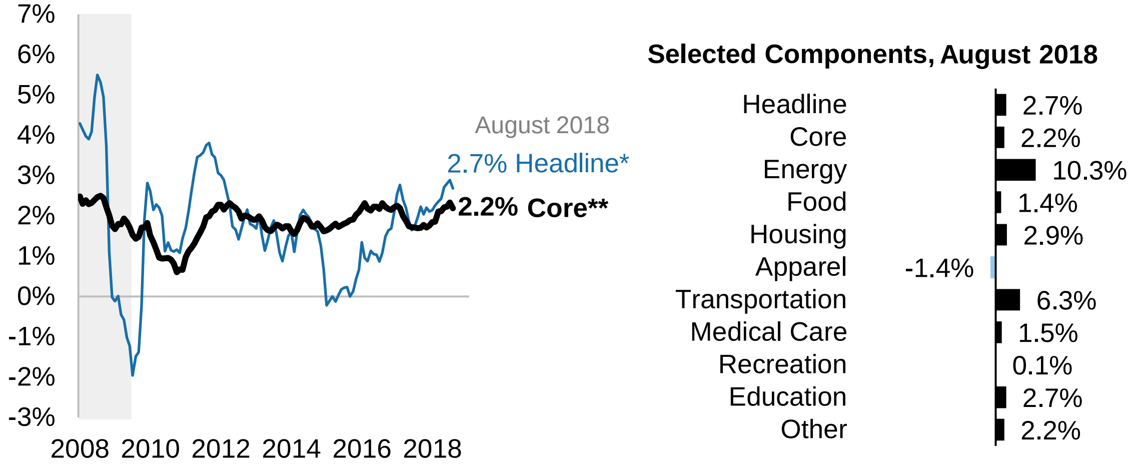
Monetary Policy and Inflation

Interest rates are on the rise. The Federal Reserve is prioritizing the inflation side of its dual mandate, pursuing a fairly aggressive agenda of interest rate hikes over 2018 and 2019. In June, the Federal Open Market Committee voted to increase the target range for the federal funds rate to between 1.75 percent and 2.00 percent, continuing a pattern of quarterly increases of 25 basis points each. With economic indicators showing a tight labor market and mounting inflationary pressure, further tightening appears imminent. Twelve of fifteen committee members surveyed at the Fed's June meeting agreed that the federal funds rate should rise to between 2.75 percent and 3.00 percent, or higher, by the end of next year, suggesting at least four additional hikes. This course of action represents a sea change after years of dovish Fed decision making. Until the middle of last year, the Fed's target for the federal funds rate was below 1.00 percent.

During the latter years of the current business cycle, tighter monetary policy will act to control inflation and stave off labor market overheating. Rising interest rates will encourage businesses and consumers to migrate a portion of their expenditures toward savings; this forecast anticipates an increase in interest income. In Colorado, higher rates could pose additional challenges in a housing market already unfriendly to buyers. The inflation forecast carries upside risk associated with labor market conditions and the potential for expanded tariffs.

Inflationary pressure is mounting. U.S. consumer prices, as measured by the consumer price index for all urban areas, increased 2.7 percent in August relative to the same month a year prior (Figure 17). Core inflation, which excludes food and energy, increased at a slightly slower 2.2 percent. Inflationary pressure is expected to increase nationally with rising energy prices, which have downstream impacts on prices for most goods and many services. A tight labor market also boosts inflation by increasing labor input costs for producers and because businesses set prices to capture a portion of rising household incomes. As shown in Figure 17, U.S. consumer prices are being driven by energy price increases, attendant transportation prices, and the quickening national housing market.

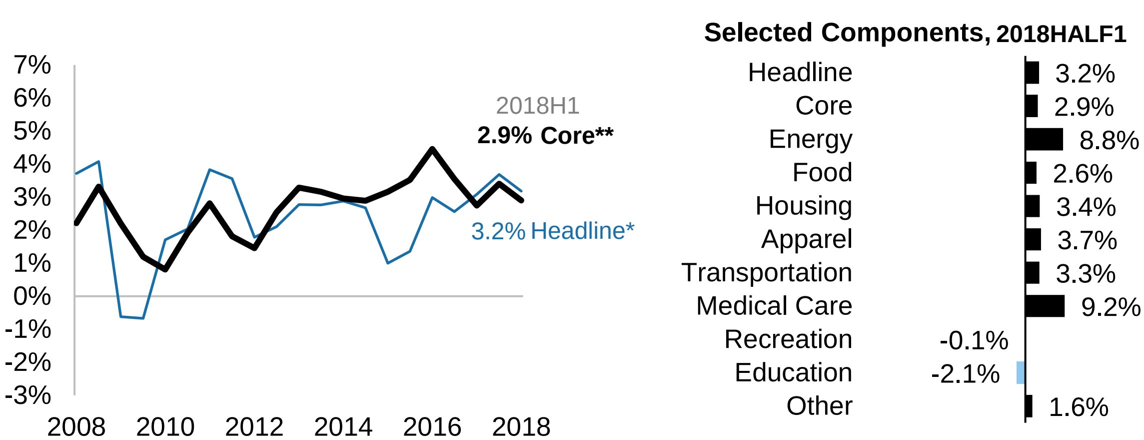
Figure 17
Consumer Price Index Inflation for All Urban Areas in the U.S.
Percent Change in Prices, Year-over-Year



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

Consumer prices in Colorado will continue to rise faster than national rates due in large part to rapid growth in housing costs across most of the state and spillover effects from the higher cost of living. In the first half of 2018, the headline Denver-Aurora-Lakewood consumer price index rose 3.2 percent over year-ago levels, while core prices rose 2.9 percent (Figure 18). Housing price inflation has abated significantly, measured at 3.4 percent year over year. Energy costs account for a significant piece of inflation, as nationally, and medical costs are showing high inflationary pressure – though this may dissipate as statistics are revised

Figure 18
Denver-Boulder-Greeley Consumer Price Index (CPI-U) Inflation
Percent Change in Prices, Year-over-Year



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

- Consumer prices for the Denver-Aurora-Lakewood area are expected to increase 3.2 percent in 2018 and 2.9 percent in 2019. By comparison, the national measure for all urban areas is expected to rise 2.6 percent in 2018 and 2.5 percent in 2019.

Households and Consumers

Over the next two years, higher wage and investment incomes are expected to bolster household spending even as prices inflate more quickly and demographic change dampens consumption patterns. As savings rates have fallen and household debt continues to grow, rising incomes present an opportunity for household deleveraging in the face of rising interest rates.

Personal income is accelerating. As shown in the top half of Figure 19, U.S. personal income grew 4.6 percent in the second quarter of 2018 compared with the same quarter last year. After two disappointing years, a tight national labor market and the arrival of higher interest rates have put U.S. households on track for their best year of income growth since 2015. While personal income growth remains modest to moderate by the standards of past expansions, the outlook for both wage earners and investors has improved and remains on the upswing.

Wage and salary contributions are improving despite demographic drag. Wage and salary earnings are driving broader personal income growth. However, growth in wages and salaries is increasingly attributable to wage inflation rather than increasing employment, a sign that the tight labor market is finally delivering on its promise to wage earners. Through August, average hourly earnings increased at a rate of 2.9 percent year-over-year, their fastest increase during the current business cycle.

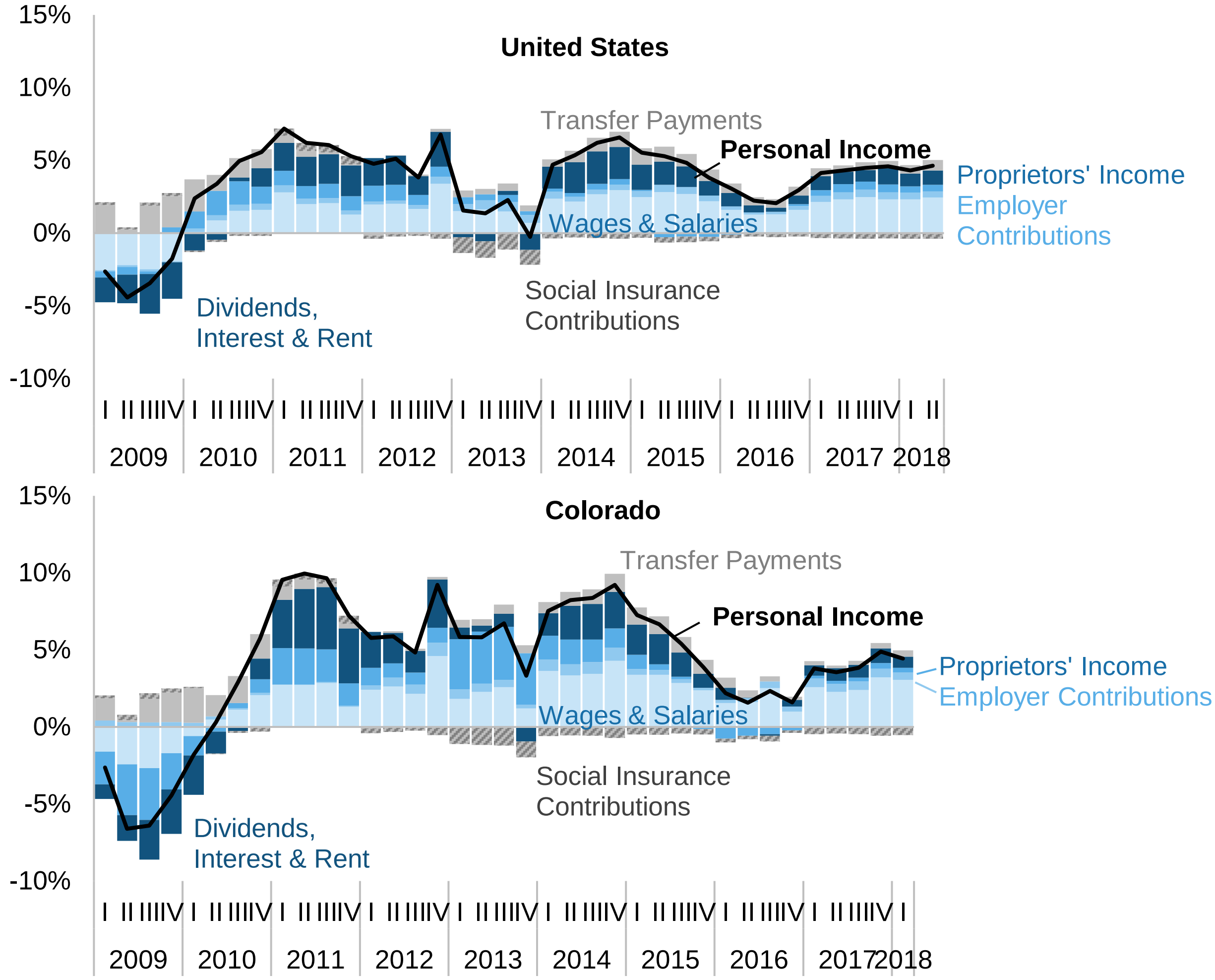
While employee compensation has been rejuvenated over the past year, wage and salary growth is weighed down by demographic factors. On an inflation-adjusted, per-worker basis, wages and salaries fell during both 2016 and 2017. Many economists attribute this phenomenon to the retirement of long-tenured 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.

Investment income is poised to continue its rise. The contribution from dividends, interest, and rent is also on the upswing. This component of personal income grew 3.3 percent in 2017 but surged to 4.9 percent in the second quarter of 2018 compared with the same period last year. The increase is driven by the uptick in interest rates. Interest income increased 7.9 percent in the second quarter of 2018 compared with last year's second quarter figure, and is poised to post further gains as monetary policy tightens.

Colorado incomes are increasing in-line with national trends. Personal income in Colorado increased 4.4 percent in the first quarter of 2018 compared with the first quarter last year, as shown in the bottom half of Figure 19. Colorado personal income growth has outpaced national figures for much of the current business cycle. Data suggest that income growth may now be in line with the broader national economy, though future survey information may confirm or contradict this finding.

The composition of Colorado personal income growth is even more skewed towards wage and salary income than in the nation at large, and Colorado wage and salary employees out-earned their national counterparts, adding 5.8 percent in quarter one of 2018 from the same quarter one year ago. While Colorado wage earners are outgaining their national counterparts, investors – particularly property lessors – are beset by a suddenly high-supply rental market and deflating rent pressure. Nonfarm proprietors' income and dividends, interest, and rent each increased 3.4 percent in Colorado through the first quarter, both somewhat slower than at the national level.

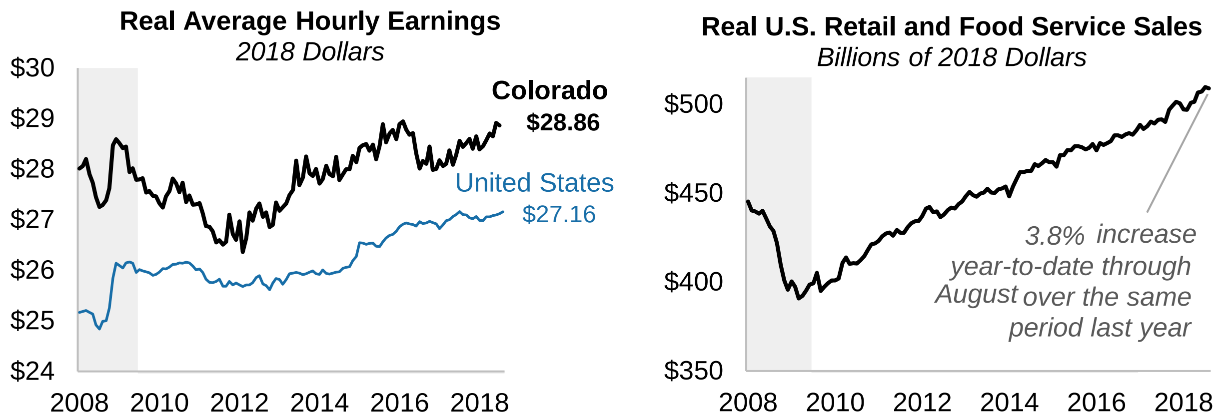
Figure 19
Personal Income and Its Components
Contributions to Percent Change, Year-over-Year



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

Growth in consumer spending is peaking. A tight labor market and pro-cyclical fiscal policy continue to drive confidence in current economic conditions, bolstering consumer spending. U.S. personal consumption expenditures were up 3.8 percent on an annual basis in the second quarter over the preceding quarter. Spending on services continues to outperform spending on goods, with the largest contribution to services spending in the food services and accommodations category. Colorado's unemployment rate and wage growth both perform better than the national indicators, with unemployment in the state hovering around 3 percent for about two years and average state wage growth outpacing national growth (Figure 20, left). Cost of living expenses continue to burden many Coloradans, which in turn can put downward pressure on other spending decision. Additional downside risks to consumer spending include the inflationary pressures caused by the tight labor market and the various tariffs, both implemented and threatened.

Figure 20
Wage Growth is Driving Retail Sales



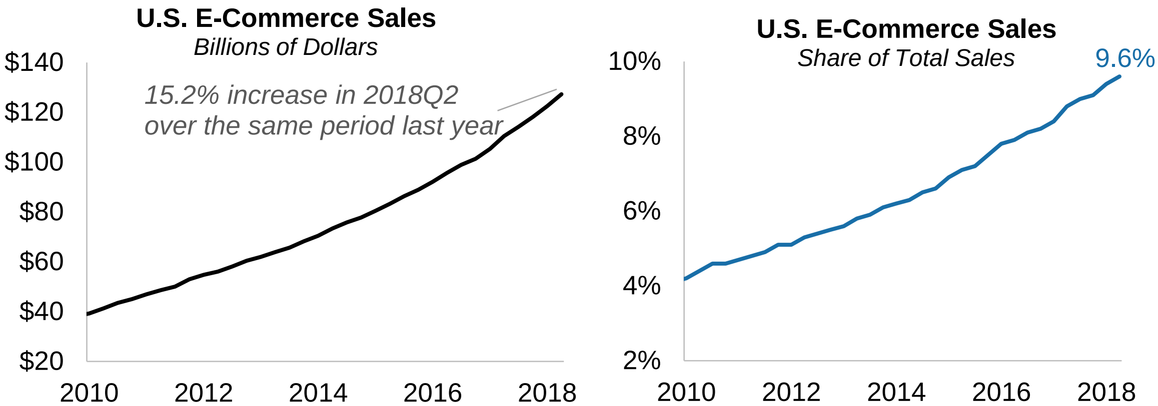
Sources: U.S. Bureau of Labor Statistics (left) and U.S. Census Bureau (right); adjusted for inflation using the consumer price index for all urban areas (CPI-U) to the dollar value of most recent month of data. Data are seasonally adjusted.

While still elevated relative to the last decade, the University of Michigan's Index of Consumer Sentiment was down in August, both month-over-month and year-over-year, with 1.7 percent and 0.6 percent declines, respectively. Current Economic Conditions experienced the largest monthly decline of the three indicators reported, at 3.6 percent. This decline is attributed to market-price perceptions and higher interest rates. On the upside, job strength and future income were cited as reasons for stronger spending.

Retail trade activity continues to rise, with inflation offsetting the slowdown in auto purchases. U.S. retail sales show strong growth, up 3.8 percent through August, on an inflation-adjusted basis, over the same period last year (Figure 20, right). On a nominal basis, retail spending rose 5.5 percent, with spending on gasoline up 15.2 percent in August compared with the same month last year, in part because gas prices are the highest they have been since the summer of 2014. The largest share of retail spending—currently over 20 percent—stems from spending on motor vehicles and parts. The tariffs on steel and aluminum are expected to nominally increase prices for new automobiles; however, if tariffs are implemented on automobile imports, prices are expected to increase in the thousands of dollars per vehicle. Along with rising interest rates, this poses a downside risk to consumer spending.

Online sales continue to pick up a larger share of the retail market. The second quarter's reported U.S. e-commerce sales hit $127.3 billion, which is a 15.2 percent increase year-over-year (Figure 21, left). Data from the U.S. Census Bureau suggest that e-commerce sales currently represent 9.6 percent of total retail sales (Figure 21, right). Despite the continued rise of the e-commerce sector, retail sales at brick-and-mortar stores ticked up in the second quarter of the year, boosting stock prices for retail behemoths Target, Macy's, and Kohl's. Brick-and-mortar stores are creating more services in an effort to compete with online retailer Amazon's convenience. Target and Walmart are offering curb-side pickup, while others are trying to capitalize on the experience customers have while in-store. Online retailers like Amazon and Wayfair are opening brick-and-mortar stores in an effort to provide their customers with the tactile experiences their websites lack and to offer a point of pickup or return for products. The competition for consumers' dollars will continue to be fierce, especially if the downside risks become a reality.

Figure 21
U.S. E-Commerce Sales and Market Share



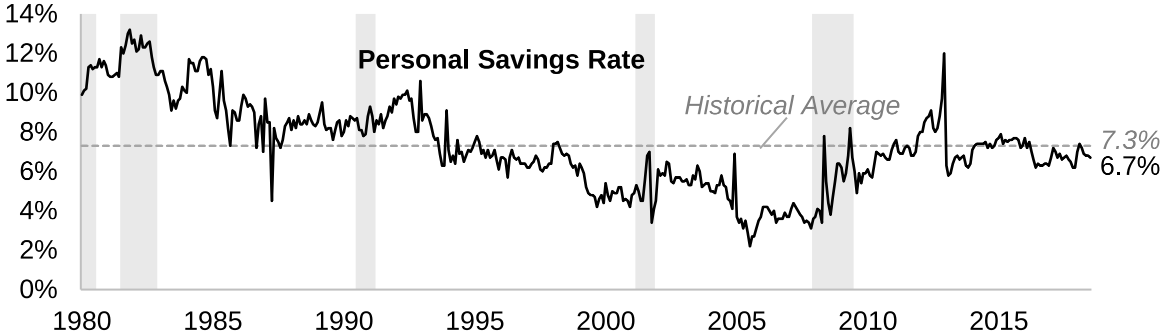
Source: U.S. Census Bureau. Data are seasonally adjusted.

Household savings rates are in line with historical averages. The personal savings rates continues to hover near the historical average, reaching 6.7 percent as of July 2018 (Figure 22, top). In July 2018, the U.S. the Bureau of Economic Analysis revised its estimates of the personal savings rate to reflect new data made available by the Internal Revenue Service's National Research Program. These revised estimates account for higher than previously reported taxpayer incomes, and resulted in a savings rate nearly double of that initially reported.

Growth in household debt has moderated. While consumer debt as a share of disposable household income remains elevated relative to historical trends, its growth has moderated in recent months (Figure 22, bottom). Mortgage debt service ratios have stabilized at historical lows impacted largely by the long period of historically low interest rates and mortgage refinancing, which pulled down the cost of borrowing to purchase a home over the past decade.

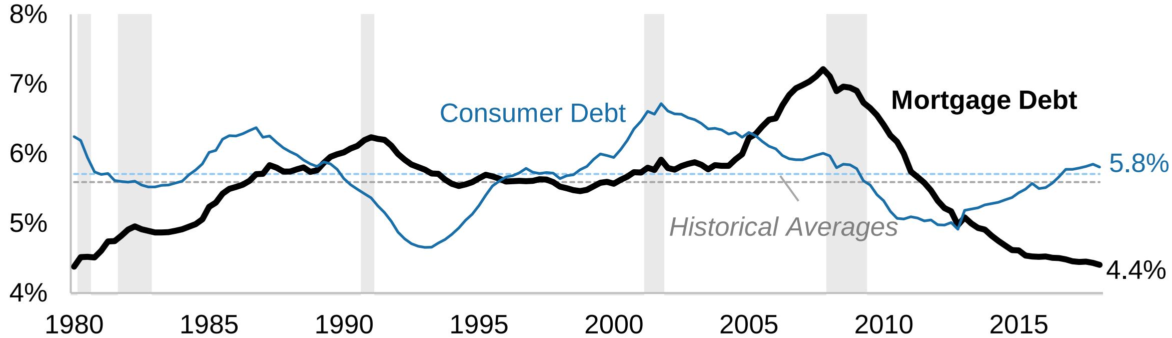
Total delinquencies continue to fall, while auto and student loan delinquencies rise. Growth in household debt has cooled across all major components in 2018, reflecting the dampening effect of rising interest rates on household borrowing (Figure 23, top). Total household debt rose 3.5 percent in the second quarter over year-ago levels. Mortgage debt, which makes up the largest share of household debt, rose 3.5 percent. The increase in credit card debt slowed but continued to show the strongest growth, rising 5.7 percent over year-ago levels. By comparison, auto loan balances slowed to 4.0 percent growth over the prior year following near double-digit rates in 2016. Growth in student loan debt slowed to 4.5 percent, in part reflecting moderation in college enrollment.

Figure 22
U.S. Household Savings Rate and Debt Ratios



Source: U.S. Bureau of Economic Analysis.
**The personal savings rate is calculated as the ratio of personal saving as a percentage of disposable personal income. Data are shown as seasonally adjusted annual rates.*

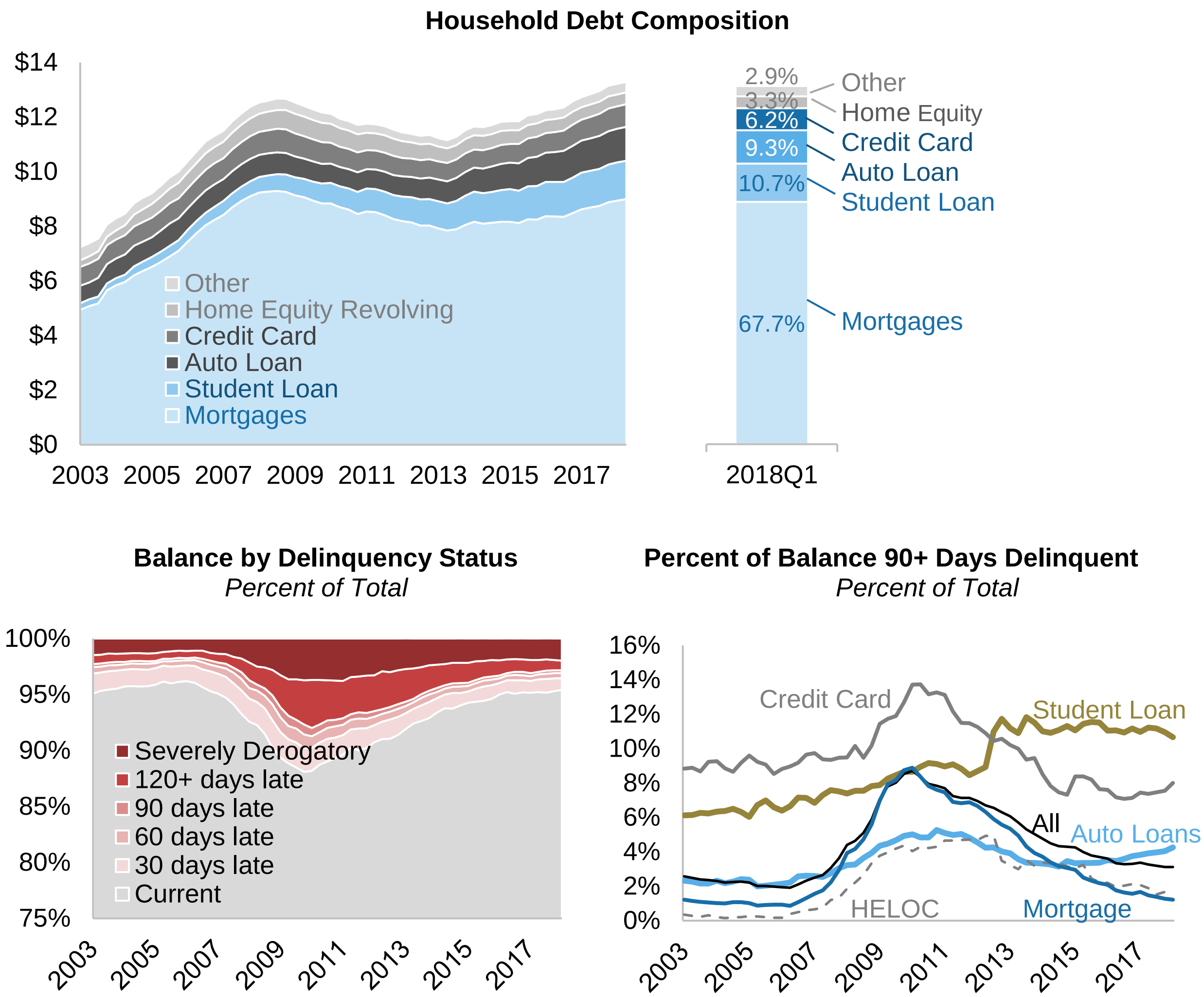
Debt Service Ratios**



Source: Federal Reserve Board of Governors.
***Debt service ratios are calculated as the ratio of household mortgage and consumer credit (e.g. credit card) debt payments to disposable household income. Historical averages are calculated from 1980 to the most recent quarter of data (2017Q4). Data are seasonally adjusted.*

The share of debt that is delinquent continues to fall (Figure 23, bottom left). As of the second quarter of the year, 4.5 percent of debt was 30 or more days delinquent, and 2.8 percent was severely delinquent (more than 90 days past due). Delinquency rates for total household debt have been falling since 2010, led primarily by improvements in mortgage debt payments. By contrast, delinquency rates for auto loans and credit card loans have been rising in recent years, and student loan debt delinquencies remain elevated (Figure 23, bottom right).

Figure 23
U.S. Household Debt Composition and Delinquency Rates



Source: Federal Reserve Bank of New York/Equifax.

Consumer and mortgage debt in Colorado. Average consumer debt for Coloradans fell in the first quarter of 2018 relative to the same period a year prior, according to the biannual Consumer Credit Report published by the Federal Reserve Bank of Kansas City. The Kansas City Fed estimate of consumer credit excludes first mortgages, which typically are not used to fund consumer spending, but includes all other sources of household debt. Due to a higher cost of living, Coloradans carry higher average debt loads than U.S. residents as a whole. Yet, delinquency rates among Coloradans are lower than the national average across all major loan types, including mortgage, auto loan, student loan, and consumer finance debt.

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

- U.S. personal income is projected to grow 4.8 percent in 2018 and 5.4 percent in 2019. Wage and salary income will continue to dominate personal income, growing 5.1 percent in 2018 and 6.1 percent in 2019.

- Colorado personal income is expected to continue to outpace the nation, growing 5.8 percent in 2018 and 6.3 percent in 2019. Wage and salary income will advance 6.3 percent in 2018 and 6.8 percent in 2019, contributing to broader growth in personal income.

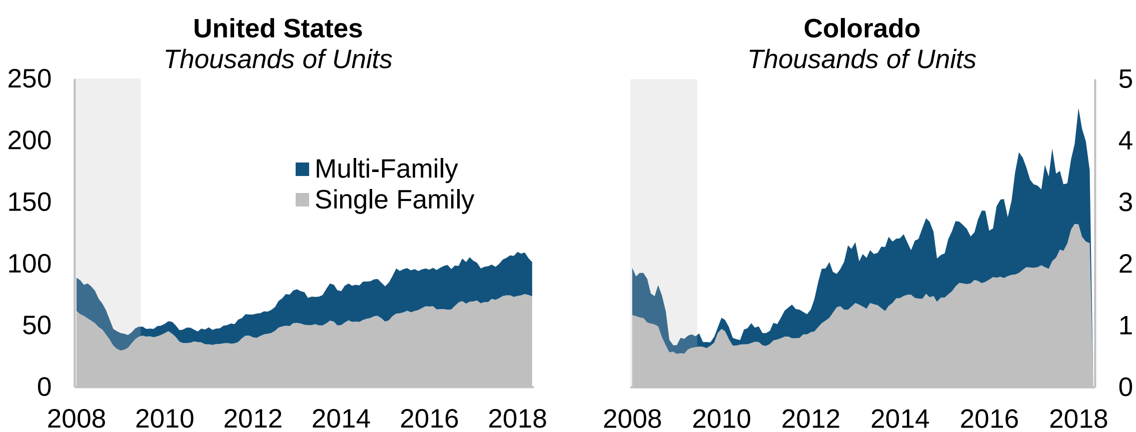
- Supported by rising wages, Colorado retail sales are expected to increase 5.8 percent in 2018 and 5.4 percent in 2019.

Residential Real Estate

Elevated prices from a lack of inventory and rising interest rates have slowed the U.S. housing market. However, demand for housing remains strong and recent market indicators suggest that homebuilders are shifting to single family developments after building up the nation's stock of multi-family units over the past years. Colorado's real estate market is mixed. After years of robust price increases in the Metro Denver area, the housing market is showing signs of slowing. However, some parts in the state are experiencing solid housing growth as their labor markets improve and people move to these relatively affordable areas.

The national housing market is softening. National residential real estate market indicators have been pointing to a softening in the housing market in recent months. Rising mortgage rates and strong price increases have strained affordability and sidelined many potential homebuyers, specifically first-time purchasers. Total new U.S. housing starts through July 2018 are down 7.0 percent from the same period last year (Figure 24, left). The deceleration is mainly attributable to fewer multi-family development starts this year. As rental vacancy rates for apartments have steadily risen from historical lows, homebuilders have been transitioning from multi-family to single family construction across many areas in the country. Single family construction continues to trend upward but at slower pace from prior years.

Figure 24
New Residential Construction Housing Starts



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

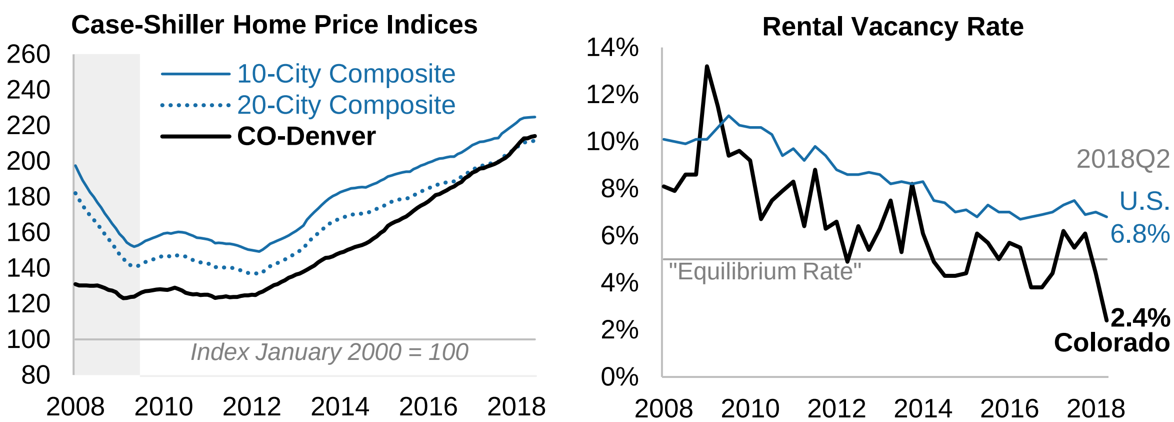
Homebuilders continue to report strong demand for new housing, fueled by steady growth in the labor market and recent income growth. However, growing affordability concerns stemming from rising construction costs, a shortage of skilled labor, and a dearth of buildable lots are dampening homebuilder confidence. Homebuilders are slowly ramping up production, but they are mostly building on move-up and high-end levels, not at the entry level where demand is strongest. High construction costs are making it more difficult to profit on low-priced homes.

Colorado residential market indicators remain strong. Colorado's real estate market remains one of the hottest in the country. The number of residential permits issued in Colorado continues to outpace the national market. Historically low rental vacancy rates (Figure 25, left) have kept demand for new residential construction at high levels. Through June 2018, total housing permits for the state were up 28 percent from the same period one year ago. Growth has been primarily driven by single family permits, increasing by almost 30 percent through the first half of 2018. In contrast, multi-family permit issuances were up 3 percent over the same period. Some homebuilders, specifically in the City and County of Denver, have recently transitioned from multi-family type developments to single family structures as an oversupply of attached homes has caused rent prices to decelerate.

More people are looking for homes outside of Denver. For the past few years, the metro Denver region has experienced some of the sharpest home price increases in the country (Figure 25, left); however, record high price gains and historically low inventories are causing many potential buyers to pullback or seek options outside of the metro area. Through July 2018, the total number of new residential permits pulled by metro Denver counties increased by 17.1 percent, while the number outside the region grew by 39.4 percent.

- With demand for housing still strong, the number of permits for new residential units in Colorado is expected to increase 12.8 percent in 2018. Following a boom in multi-family building, a decrease in multi-family permits will reduce total residential permits by 2.1 percent in 2019.

Figure 25
U.S. and Colorado Shelter Price Indicators



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

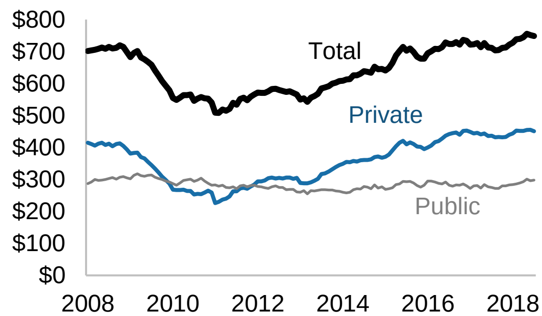
Source: U.S. Census Bureau.
Data through the second quarter of 2018.

Nonresidential Construction

Private and public investment is driving demand for new facilities. Nonresidential construction activity continues to expand in both the U.S. and Colorado markets, albeit at slower pace than in recent years (Figure 26). Total U.S. nonresidential spending continued to improve through the first seven months of 2018, increasing by 3.4 percent from the same period last year. While spending slightly dipped in June and July of this year, total investment in nonresidential projects remained elevated at $748.8 billion.

U.S. and Colorado nonresidential construction activity remain elevated. Nationally, both public and private investments have contributed to building activity, though spending on public projects has driven growth in the nonresidential construction market through most of 2018, with the largest year-over year increases occurring in water supply, conservation and development, office, and commercial projects. Relatively low interest rates and improving state and local government finances have allowed many government entities to spend more on infrastructure projects.

Figure 26
U.S. Nonresidential Construction Spending
Billions of Dollars



Source: U.S. Census Bureau. Monthly data are seasonally adjusted, annualized, and through July 2018.

Colorado's nonresidential construction market is also performing well and growth is reaching across the state; activity had been mainly restricted to the Metro Denver and Northern regions during most of the economic expansion. Several large projects in the state are scheduled to start in 2019 and continue to support the industry. However, both U.S. and Colorado construction contractors continue to cite labor constraints as the major impediment to growth in the industry.

Nationally, investment in public nonresidential projects continues to pick momentum through the first seven months of the year compared with the same period one year ago, increasing by 5.4 percent. Spending is up in all 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 has given many states a budget surplus for the first time in years, allowing them to invest in more public projects.

Private nonresidential spending also continues to improve, but at slower rates compared with prior years. Investment on private projects has been recently constrained as private costs have increased and concerns that some areas in the country are overbuilt or approaching overbuilt status.

Major nonresidential projects are on the way in Colorado. The value of nonresidential projects that have broken ground in Colorado through the first seven months of year was nearly $4.3 billion, an increase of almost 13 percent from the same period last year. Manufacturing facility starts, especially in Weld County, continue to support the nonresidential construction market, accounting for almost 25 percent of total statewide spending through the year. The county produces a wide variety of products, such as agricultural-related, optical lenses and products for the oil and gas industry, that have increased demand for manufacturing facilities. Nonresidential projects that have started construction this year have been spread across the state instead of most significant activity occurring in the Metro Denver and Northern regions.

Price effects suggest downside risk. Players in the nonresidential construction market are monitoring recently imposed tariffs on steel and aluminum that are expected to inflate construction materials prices over the next several months. In addition, 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 significantly slow. U.S. and Colorado construction contractors continue to report that worker shortages is 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.

- Supported by demand for commercial and industrial building and rising construction costs, the value of Colorado nonresidential construction projects is expected to increase 11.7 percent in 2018 and moderate to 6.5 percent growth in 2019.

Energy Markets

The energy markets are nearly balanced as the growing global economy is providing enough demand to offset increasing global energy production, thereby keeping prices stable. Increased domestic oil production has offset some of the demand for oil imports; the U.S. currently holds the title as the world's largest single producer of crude oil. While an oversupply of natural gas continues to keep prices low, natural gas is being used to generate electricity and as an input for industrial production, shifting demand away from coal. Coal production remains steady following the coal industry reorganization in 2016. These trends are expected to continue through 2019 as the global economy expands further.

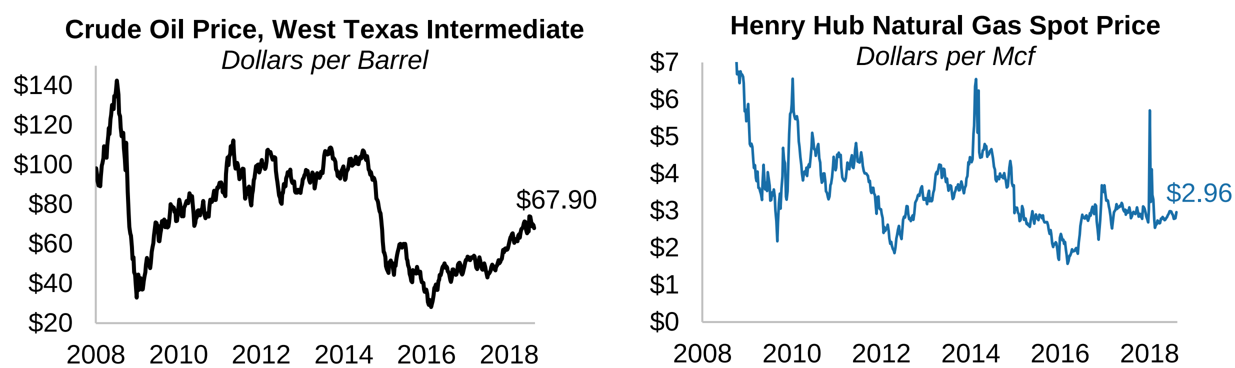
U.S. crude oil producers continue to grow their global market share. The U.S. Energy Information Administration expects domestic crude oil production to average 10.7 million barrels per day in 2018 and 11.7 million barrels per day in 2019. This would surpass the previous record of 9.6 million barrels per day set in 1970. Much of this growth is due to new production in the Permian basin in western Texas and eastern New Mexico. Growth may slow in the basin due to bottlenecks in the area's pipeline infrastructure until new infrastructure is completed to move crude oil to market. U.S. crude oil production increased through the summer and averaged 320.7 million barrels of production over the three months of March through May 2018 (Figure 27, middle left).

Increased domestic production is being processed and hitting the market, rather than increasing crude oil stocks (Figure 27, middle right). Some of this oil is being exported and some is being refined for domestic uses. At the beginning of July, U.S. gross refinery inputs surpassed 18 million barrels per day for the first time on record. According the U.S. Energy Information Administration, oil refinery capacity increased by 862,000 barrels per day between 2011 and 2018, keeping oil refinery utilization below highs set in 1998 despite processing record amounts of crude oil.

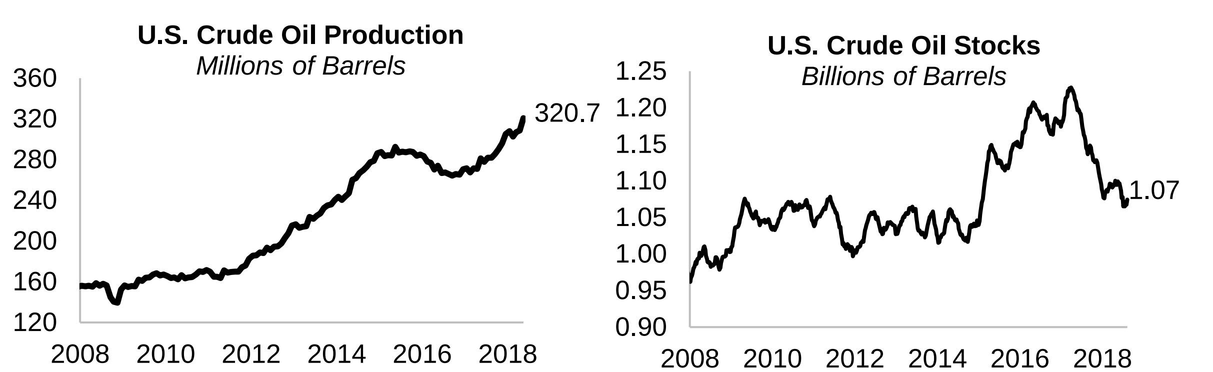
Oil price volatility will continue on geopolitical risk and supply disruptions. Crude oil prices increased in the first half of July due to a strike of Norwegian oil workers and fears of disruptions to oil shipping in the Strait of Hormuz. Iran increased military exercises in the area in July, potentially disrupting the supply of oil from OPEC countries. Global supply has eased somewhat and crude oil prices have slightly declined, averaging $67.90 per barrel in the first week of August (Figure 27, bottom right).

An abundance of natural gas supply continues to keep prices low. Natural gas prices averaged $2.96 per thousand cubic feet (Mcf) at the first week of August (Figure 27, top right). Natural gas production has increased for the last several years and 2018 production is expected to be about 10 percent higher than 2017. These production increases have been driven by the Appalachian Basin in the Northeast and the Permian Basin in Texas and New Mexico. New technology has allowed access to the natural gas in the Appalachian Basin. Natural gas production in the Permian Basin is the result of capturing natural gas from crude oil wells. This additional natural gas is being used as a source of fuel to generate electricity. A warm summer in the U.S. increased the demand for electricity to run air conditioning, which increased consumption of natural gas. The U.S. Energy Information Administration estimates that natural gas consumption for power generation reached a record high in July accounting for 26 percent of U.S. electricity.

Figure 27
Selected Indicators of Oil and Gas Industry Activity



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

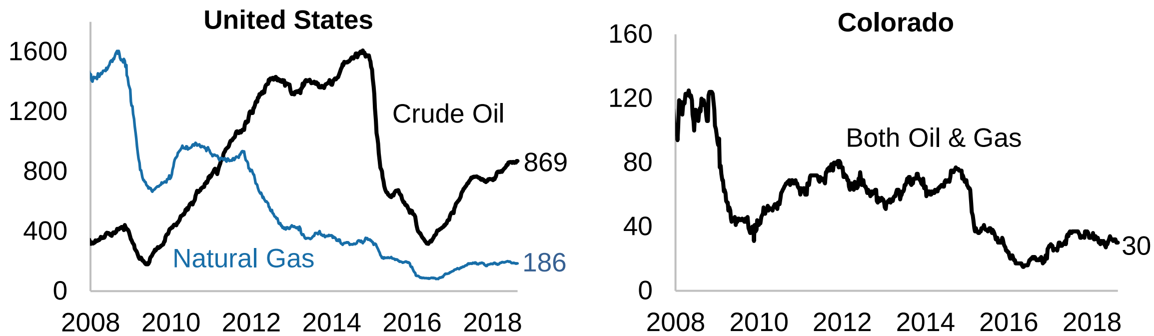


Source: U.S. Energy Information Administration. Data are shown as a three-month moving average and are not seasonally adjusted.

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

New drilling activity, as measured by active drilling rigs (Figure 28, left), increased throughout 2017 and into 2018, reaching a nationwide total of 869 oil rigs and 186 natural gas wells in the third week of August. New drilling activity is in response to stable prices for oil and natural gas and sustained demand for petroleum products from the expanding economy.

Figure 28
Active Oil and Gas Drilling Rig Counts



Source: Baker Hughes. Data are not seasonally adjusted.

Oil prices are high enough to boost Colorado production, but natural gas prices are not. In Colorado, stable energy prices have induced continued investment in new oil and natural gas development. In a survey of oil producers in the Tenth District of the Federal Reserve, which includes Colorado, producers reported that total revenues, total profits, and wages increased between the first and second quarter of 2018. Firms reported that current activity will continue to be profitable but that future development will require higher prices for oil and gas. The average price for firms to significantly increase exploration and production would be $69 per barrel for oil and $3.60 per million Btu for natural gas.

In addition to price fluctuations, firms report that labor supply, inflation, and transportation constraints may hamper future production. Roughly half of the surveyed firms reported difficulty filling low- and mid-skill positions and that inflation may dampen future growth. In addition, about 30 percent of firms expected a lack of pipeline capacity for oil and natural gas to limit near-term growth.

According to the Colorado Department of Natural Resources, coal production in Colorado decreased 5.0 percent in the first seven months of 2018 compared with the same period in 2017. Coal mines in Colorado had ramped up production by 18.3 percent as the owners of the two largest coal mines in Colorado emerged from bankruptcy.

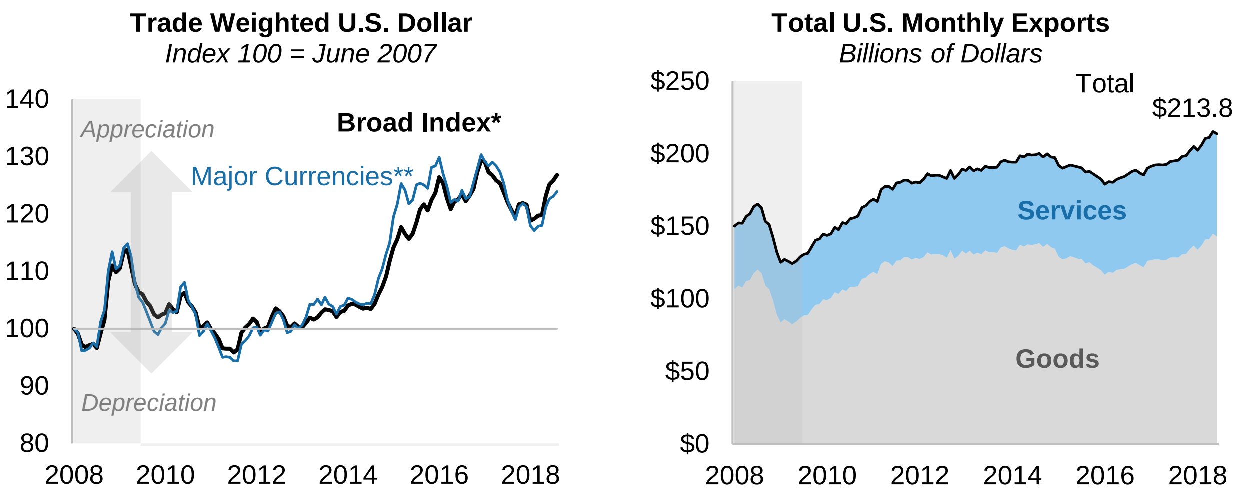
Global Economy

Increased uncertainty surrounding international trade negotiations paired with tightening global financial conditions present an uneasy outlook for the global economy. With increasing U.S. interest rates and emerging market debt and currency problems, the dollar has strengthened over the last few months, further exacerbating these issues in emerging markets. Among advanced counties, the Eurozone and Japan continue to struggle with low growth and near-zero interest rates, while the U.S. buoys growth.

Global signals are mixed, and downside risks are significant. The International Monetary Fund's (IMF's) global growth forecast remains largely unchanged at 3.9 percent for both 2018 and 2019. However, several individual country forecasts, mostly in the emerging market category, were downgraded. Emerging markets currently face the strongest headwinds, including a strong U.S. dollar, rising U.S. interest rates, which has prompted high inflation, and currency sell-offs. Despite rising risks, the IMF's growth forecast for emerging economies was unchanged from April, and projects 4.9 percent growth for 2018 and 5.1 percent for 2019. Advanced economies are projected to grow around 2.4 percent in 2018 and 2.2 percent in 2019. Growth in the European Union and Japan have moderated slightly, decreasing the forecast slightly from April.

The U.S. dollar is on the rise. The relative strength of the U.S. economy has boosted the strength of the dollar to its highest point in months (Figure 29, left). The trade-weighted U.S. dollar index is up over 6 percent since the beginning of the year. A strong dollar makes U.S. exports more expensive, threatening current export levels (Figure 29, right). An elevated U.S. dollar also makes imports relatively cheaper, which widens the trade deficit.

Figure 29
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.

Risks in emerging markets continue to rise. Despite overall strong growth in emerging and developing markets, several countries are facing economic challenges. With recent economic growth fueled by foreign currency-based debt, a steep fall in the value of the lira has caused Turkey to struggle to meet its debt obligations. The U.S. doubled steel and aluminum tariffs on Turkey's imports, contributing to the lira's fall. Argentina has also experienced a large devaluation of its peso in recent weeks. The country has faced high inflation, around 40 percent, prompting the Argentinian president to requested assistance from the IMF. The aid will inevitably include austerity measures, such as increasing interest rates to around 60 percent. In addition, Brazil, Indonesia, and South Africa have experienced currency and stock sells-offs in recent months; however, there are bright spots. India is growing at over 7 percent, and oil exporting countries, save Venezuela, are benefitting from higher oil prices.

China's economy continues to expand, with risk exposures elevated. China's growth has moderated, but remains strong. The Chinese economy continues to transition from a manufacturing-based economy to producing more value-added products under the government program, Made in China 2025. The Chinese government is encouraging its numerous state-owned banks to invest abroad, as domestic opportunities are slowing. This has led to more investments in emerging markets, exposing the Chinese economy to some of the risks faced abroad. China has increased investments under its Belt and Road Initiative in developing Asia, Africa, and Latin America, bringing China's debt-to-GDP ratio to all-time highs, around 300 percent of GDP. These pressures, paired with the ongoing trade tensions with the U.S., mean a riskier future for the Chinese economy. U.S. producers looking to shift production away from China in light of the tariffs could create unexpected unemployment problems and a decline in foreign investment.

International Trade

In efforts to promote U.S. interests, including national security, boosting U.S. manufacturing employment, reducing the U.S. trade deficit, and reducing unfair trade practices, the Trump Administration has pursued trade renegotiations with and a growing number of tariffs against many of the largest U.S. trade partners. These efforts remain unresolved and the uncertainties created by trade tensions are shifting global supply chains and contributing to currency issues in emerging markets. Tariffs are expected to put upward pressure on prices if they remain intact, posing an upside risk to the inflation forecast and downside risk to economic activity. Depending on the resolution of trade policies, the U.S. could find itself in a more favorable position, posing a longer-term upside risk to the forecast.

Tariffs continue to mount. The tariffs on imports into the U.S. that have already gone into effect total about $278.2 billion as shown in Table 16. Based on data and information provided by WiserTrade and the Peterson Institute for International Economics, Table 16 includes an estimate of the value of Colorado imports subject to tariffs. Additional tariffs on $200 billion in Chinese imports were announced this week but have yet to go into effect, and include a 10 percent tariff levied on the list of imports, which will increase to 25 percent at the beginning of 2019. In contrast to the first round of tariffs on China—worth around $50 billion—this new round of tariffs targets more consumer goods. The review process for a 25 percent tariff on imports of automobiles and automobile parts continues.

Trade negotiations are ongoing. Rounds of negotiations between NAFTA partner countries, Canada and Mexico and the U.S. continue. The U.S. and Mexico reached an agreement on rules-of-origin and automobile industry standards in a U.S. effort to move auto production back to the U.S. Trade talks with the U.S. and Canada have been less successful, with the northern neighbors raising concerns over dairy exports and Chapter 19, which governs review and dispute settlements for anti-dumping cases in the agreement. The administrations of both Mexico and the U.S. have indicated the potential for excluding Canada from a new agreement if they cannot reach an accord; however, the U.S. Congress and business community are vehemently against switching from a trilateral to bilateral agreement. Studies have put the loss to Canadian GDP between 1 and 2 percent through 2025 if they exit from NAFTA.

Table 16
Current and Pending Tariffs on Imports into the U.S.

Date Implemented	Country/Product	Tariff Rate	Total Value of Imports	Total Value of CO Imports
1/22/2018	Washing machines	20% on the first 1.2 million machines 50% for machines above 1.2 million	$1.8 billion	$7.6 million
1/22/2018	Solar panels	30% after the first 2.5 gigawatts, dropping to 15% over four years	$8.5 billion	$56 million
3/23/2018	Steel	25%	$10.2 billion	~$276 million
3/23/2018	Aluminum	10%	$7.7 billion	~$69 million
7/6/2018 & 8/23/2018	China	25% on selected goods	$50 billion	~$800 million
9/17/2018	China	10% now and 25% in 2019 on selected goods	$200 billion	Not estimated
Under review	Automobiles & parts	25%	Not estimated	Not estimated

Source: Peterson Institute for International Economics and WiserTrade. Total value of CO imports does not consider country quotas for steel and aluminum. All figures are estimates.

Retaliatory tariffs continue to escalate. Trade tensions between the U.S. and China show few signs of abating. As President Trump moves forward with the additional tariffs on $200 billion of Chinese imports, China has retaliated with tariffs on $60 billion of U.S. imports. The President has threatened additional tariffs on what effectively amounts to the remainder of imports from China, totaling another $267 billion. NAFTA partners and China are joined by the European Union, India, Turkey, and Russia in imposing retaliatory tariffs on U.S. goods. The products targeted by these tariffs include agricultural goods, bourbon whiskey, motorcycles, blue jeans, steel, and aluminum. Table 17 provides the top Colorado exports that are subject to tariffs by our largest trade partners.

Tariffs are expected to dampen growth modestly, and put upward pressure on prices. The projected effect of tariffs on U.S. GDP is still expected by most analysts to be nominal. For example, the Tax Foundation estimates that under tariffs currently in place, the U.S. faces a 0.12 percent reduction in GDP and loss of more than 94,000 jobs. According to the U.S. Chamber of Commerce, 733,900 Colorado jobs are supported by trade. If all tariffs threatened to date go into effect, the drag on GDP is estimated to grow to 0.6 percent, with a potential 460,000 jobs lost, which equates to 0.3 percent of the total U.S. workforce. For the automobile and automobile parts import tariffs alone, the Peterson Institute for International Economics (PIIE) has estimated that 195,000 U.S. workers would lose their jobs, with additional loses if retaliatory tariffs are placed on U.S. automobiles. PIIE also estimates that consumer prices will increase by a range of $1,400 to $7,000 per imported vehicle across entry-level to luxury categories.

Global supply chains are shifting. Businesses have preemptively purchased goods in advance of tariffs, boosting near-term consumption. Additionally, many businesses are considering sourcing products from and sending products to new trade partners to avoid higher costs and maintain market access, respectively. These trends are muting the impacts of tariffs. However, supply chain shifts may not be an easy option for some companies, and loss of market share can be difficult to regain, which has heightened concern among some U.S. businesses. The U.S. Department of Commerce offers exemptions on imports currently tariffed that have little to no domestic production; however, few have been approved to date.

The full impacts of tariffs on Colorado have yet to be seen. In 2017, Colorado exported just over $8 billion worth of goods, representing just 0.5 percent of the total $2.3 trillion in U.S. exports. Manufactured goods comprise the majority of Colorado's exports. Year-to-date as of July, about three-quarters of all exports from the state were manufactured goods, while the rest were non-manufactured commodities. Table 17 shows the values of good exported from Colorado ports to trade partners with which the U.S. current has trade disputes, and major products currently subject to tariffs.

Overall, the Colorado economy is expected to see a modest decline in state GDP and minimal job losses in the near-term as a result of the new tariffs; however, industries specifically targeted by tariffs face downside risks. The agricultural industry, and industries reliant on steel and aluminum for production, such as the aerospace industry or medical instrument manufacturing, are expected to be most exposed to the impacts of current tariffs. However, spillover effects and the extent of supply chain disruptions have yet to be seen. Producer and consumer prices are expected to be pushed upward the longer tariffs remain in place. Canadian tariffs on U.S. timber imports have already caused prices to rise impacting the construction industry.

Table 17
Colorado Exports to Major Trade Partners and Exports Subject to Retaliatory Tariffs*

Partner	Colorado Exports	Tariff	2017 Export Value
Mexico	Total Exports		$188 million
	Pork products	15% to 20%	$123.6 million
	Cheese	20%	$35.9 million
	Steel products	5% to 25%	$13.4 million
China	Total Exports		$105 million
	Metal waste and scrap (aluminum and copper)	25%	$50.8 million
	Medical instruments	25%	$35.6 million
	Steel articles and scrap	25%	$6.8 million
Canada	Total Exports		$51 million
	Aluminum articles	10%	$17.4 million
	Bread, pastries, cakes, etc.	10%	$13.5 million
	Surface-active products for washing the skin	10%	$5.5 million
EU	Total Exports		$8.2 million
	Articles of iron or steel	25%	$4.8 million
	Motorcycles, over 800cc	25%	$1.2 million
	Whiskey	25%	$625 thousand

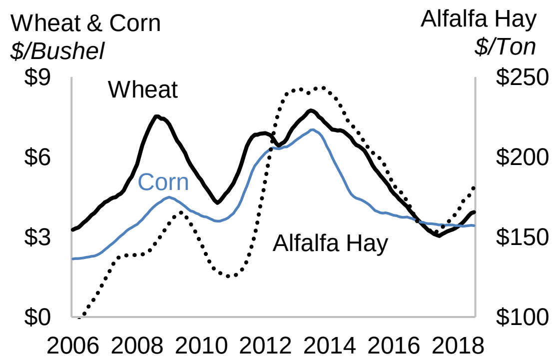
Source: WiserTrade and U.S. Chamber of Commerce.
**Information in this table is not exhaustive and does not include the latest round of tariffs.*

Agriculture

The headwinds faced by national and state agricultural producers continue to strengthen. Drought in parts of the state, and a strong dollar combined with retaliatory tariffs imposed on U.S. agricultural exports continue to put significant downward pressure on the industry. Additionally, the tight labor market and U.S. immigration policy are exacerbating labor shortages in the industry. The U.S. Department of Agriculture projects that overall agricultural exports will be up in 2019; however, exports of livestock, dairy, poultry, and oilseeds, like soybeans, are projected to decrease.

Agricultural conditions remain depressed on low prices. Crop prices continue at their lowest levels in years (Figure 30). In light of international trade tensions, prices for the various crops and livestock products affected face downward pressure, including pork and dairy prices. Drought conditions in pasturelands are helping prop up alfalfa hay prices, which have increased almost 25 percent year-over-year, as almost 50 percent of pasture and range conditions are listed as poor or very poor. Wheat prices are up about 12 percent in July year-over-year, and the export outlook is favorable. Corn prices are down slightly, however, with increased international demand, export prospects in the coming year are positive.

Figure 30
Prices Received for Colorado Crops

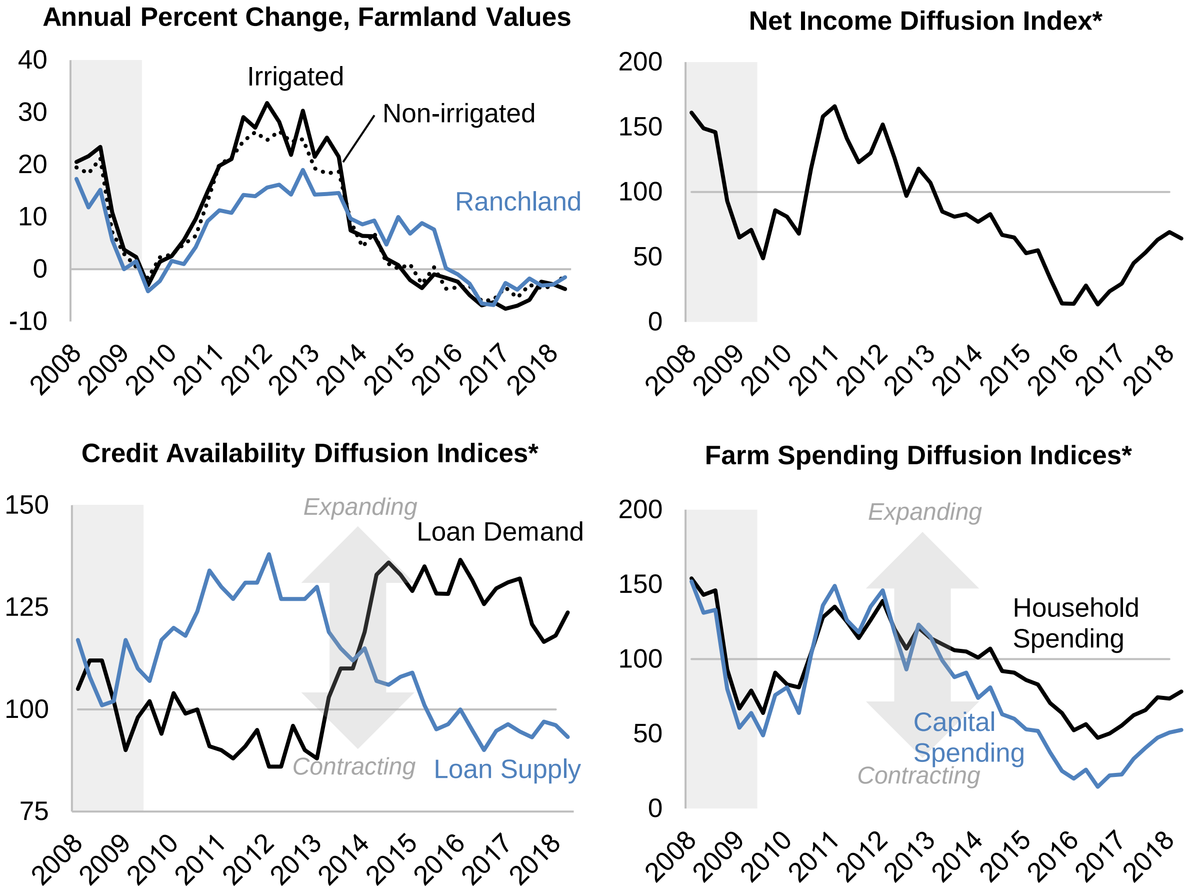


Source: USDA National Agriculture Statistics Service. Data shown as a 12-month moving average through March 2018.

The drop in prices, rising interest rates, and existing debt burdens are contributing to persistent farm credit and income concerns. Lower crop prices and the threat of lost markets from international trade uncertainty further dampen the farm income outlook. Figure 31 provides selected agricultural indicators for the Tenth District Region. Many producers are already heavily leveraged, squeezing farm capital spending and consumer spending in rural areas. Credit supply continues to tick down, as demand rises and banks face liquidity problems, despite recent and projected increases in interest rates. Repayment rates in the Tenth District have been declining each quarter for the past five years. Irrigated farmland values in the Mountain States (Colorado, northern New Mexico, and Wyoming) ticked down 4 percent in the second quarter in year-over-year comparisons, while ranchland and non-irrigated land up 6 and 2 percent, respectively, during the same period.

Global markets are critical for many U.S. agricultural producers. Recent retaliatory tariffs on U.S. agricultural products may lower trade volumes, thereby reducing prices and profits for U.S. producers. Colorado is not impervious to these impacts. In 2017, exports of food and agricultural products from Colorado are estimated at just over $2 billion, which is about a quarter of all exports from the state. The largest Colorado sectors to be affected by current tariffs are the pork, livestock, and dairy industries. Five agricultural exports currently affected by the tariffs are listed in Table 17.

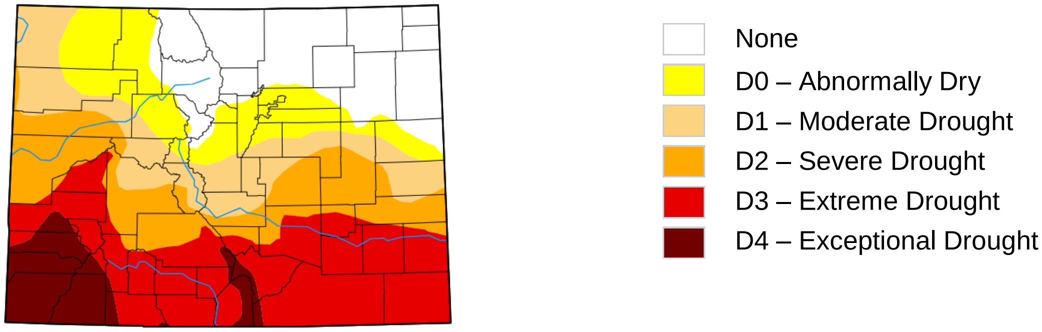
Figure 31
Selected Indicators of Agricultural Credit Conditions in the Tenth District



Source: Federal Reserve Bank of Kansas City, Quarterly Survey of Agricultural Credit Conditions. Data are through the second quarter of 2018.
**Values above 100 indicate expansion; values below 100 indicate contraction.*

Drought conditions continue to threaten some regions of the state. Drought continues to pressure agriculture and pastureland in parts of the state. About 80 percent of the state is at least abnormally dry, according to the United States Drought Monitor map in Figure 32, and over 44 percent is experiencing extreme or exceptional drought. This is up from 34 percent in May. The west and southwest area of the state has been hardest hit, while conditions in the southeast have improved over the last few months. This has affected pasture and range land, although livestock are reported to be doing well. Beans and hay suffer from adverse weather conditions, but the corn harvest is ahead of schedule. Dry conditions may affect the coming fall planting season. Table 18 compares drought conditions in May 2018 relative to recent drought conditions in May of 2012 and 2013.

Figure 32
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 May 22, 2018.

Table 18
Colorado Drought Indicators

	May 2012	May 2013	May 2018
Drought Levels	100%	100%	80%
Mountain Snowpack*	23% of median	83% of median	46% of median
Pasture Conditions	31% poor to very poor	45% poor to very poor	29% poor to very poor
Top Soil Moisture	39% short to very short	54% short to very short	44% short to very short

Source: USDA's National Agricultural Statistics Service Crop Progress & Condition reports.
**Mountain snowpack reported by USDA's Natural Resources Conservation Service Colorado.*

Summary

Driven by continued increases in consumer spending and robust business investment, the U.S. and Colorado economies are expected to accelerate this year. The economies will continue to expand in 2019 and 2020, although at slower rates as a number of factors dampen growth. National and state economies will wrangle with rising inflationary pressures and tighter labor markets, which will pose challenges to business growth and profits over the longer term. The passage of the federal Tax Cuts and Jobs Act boosted business investment in recent months that will promote future productivity gains. However, this near-term boost may have pulled economic activity forward, at the cost of steadier and more consistent growth over the longer term.

Uncertainty over trade policy has also boosted near-term consumption and investment, as businesses pre-purchased materials for production in advance of tariffs. Continued uncertainty and ongoing tariffs will contribute to inflationary pressures, and may produce market volatility as global supply chains shift. Additional interest rate hikes may quell inflationary pressures, yet rate hikes are likely to heighten financial market volatility as investors shift strategies.

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

Risks to the Forecast

Several factors could result in stronger or weaker economic activity than forecast. These risks are balanced over the next year and skewed to the downside in the latter half of the forecast period.

Downside. The economy is at capacity in many industries, as is signaled by increasing labor shortages and accelerating wage pressures. Historically, these trends have preceded recession. If the economy is operating further beyond capacity than assumed in this forecast, a recession is more likely within the forecast period.

As the Federal Reserve tightens monetary policy, consumer spending and business investment could be suppressed more than expected. Additionally, higher interest rates could produce unexpected shifts in investor behavior that could create shocks to U.S. and global financial markets.

Global economic or political events could also produce downside economic shocks. Tensions between the U.S. and China over tariffs could upset the U.S. relationship with its most significant trading partner. Similarly, the renegotiation of NAFTA could destabilize trade with next two most important partners, Canada and Mexico. Emerging markets faced a turbulent summer, with Turkey and Argentina battling high inflation and falling currencies. These trends pose the risk of global contagion effects capable of reaching financial markets in the U.S.

Upside. The outlook for business has brightened as an effect of the Tax Cuts and Jobs Act, and market volatility offers near-term upside for savvy investors. The outcomes of trade negotiations could further boost business activity in particular sectors, while increasing energy prices may benefit Colorado disproportionately. This forecast assumes that employment growth and other economic inputs will be constrained with the economy at or near capacity. The economy could perform better than expected if capacity is greater than estimated, for example if the labor force participation rate increases or if investors do not curtail their economic contributions in response to higher interest rates.

Table 19
National Economic Indicators

Calendar Years	2013	2014	2015	2016	2017	Legislative Council Staff Forecast 2018	2019	2020
Real GDP (*Billions*)[1]	$16,495	$16,900	$17,387	$17,659	$18,051	$18,592	$19,094	$19,419
Percent Change	1.8%	2.5%	2.9%	1.6%	2.2%	3.0%	2.7%	1.7%
Nonfarm Employment (*Millions*)[2]	136.4	138.9	141.8	144.3	146.6	149.0	151.1	152.4
Percent Change	1.6%	1.9%	2.1%	1.8%	1.6%	1.6%	1.4%	0.9%
Unemployment Rate[2]	7.4%	6.2%	5.3%	4.9%	4.4%	3.9%	4.0%	4.3%
Personal Income (*Billions*)[1]	$14,181.1	$14,991.8	$15,719.5	$16,125.1	$16,830.9	$17,639	$18,591	$19,446
Percent Change	1.2%	5.7%	4.9%	2.6%	4.4%	4.8%	5.4%	4.6%
Wage and Salary Income (*Billions*)[1]	$7,113.2	$7,473.2	$7,854.4	$8,080.7	$8,453.8	$8,885	$9,427	$9,832
Percent Change	2.7%	5.1%	5.1%	2.9%	4.6%	5.1%	6.1%	4.3%
Inflation[2]	1.5%	1.6%	0.1%	1.3%	2.1%	2.6%	2.5%	2.1%

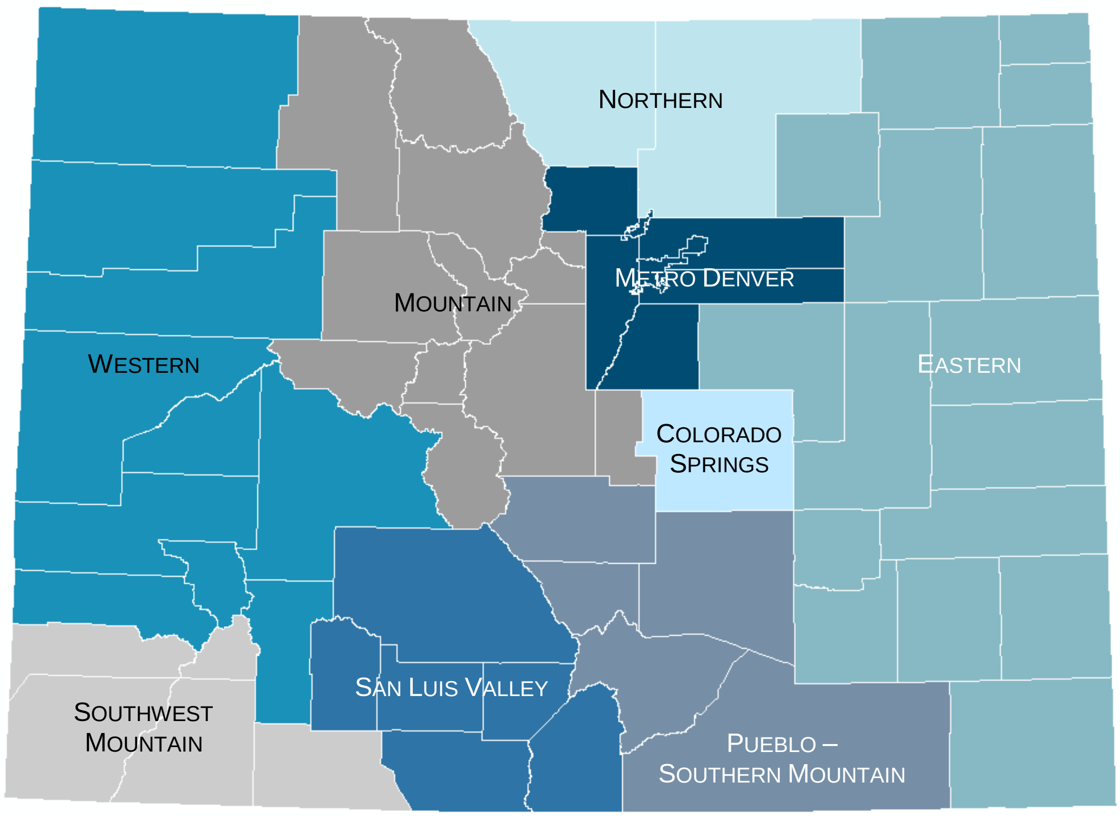
Sources
[1]U.S. Bureau of Economic Analysis. Real gross domestic product (GDP) is adjusted for inflation. Personal income and wages and salaries not adjusted for inflation.
[2]U.S. Bureau of Labor Statistics. Inflation shown as the year-over-year change in the consumer price index for all urban areas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

Table 20
Colorado Economic Indicators

Calendar Years	2013	2014	2015	2016	2017	Legislative Council Staff Forecast 2018	2019	2020
Population (*Thousands, as of July 1*)[1]	5,262.6	5,342.3	5,440.4	5,530.1	5,607.2	5,680.0	5,753.9	5,828.7
Percent Change	1.5%	1.5%	1.8%	1.6%	1.4%	1.3%	1.3%	1.3%
Nonfarm Employment (*Thousands*)[2]	2,380.8	2,464.0	2,541.7	2,602.6	2,658.7	2,730.5	2,779.6	2,818.5
Percent Change	3.0%	3.5%	3.2%	2.4%	2.2%	2.7%	1.8%	1.4%
Unemployment Rate[2]	6.9%	5.0%	3.9%	3.3%	2.8%	2.9%	3.1%	3.4%
Personal Income (*Millions*)[3]	$246,648	$267,225	$282,665	$288,103	$299,677	$317,058	$337,033	$356,244
Percent Change	5.4%	8.3%	5.8%	1.9%	4.0%	5.8%	6.3%	5.7%
Wage and Salary Income (*Millions*)[3]	$129,597	$138,678	$146,635	$151,322	$158,840	$168,847	$180,328	$189,525
Percent Change	3.7%	7.0%	5.7%	3.2%	5.0%	6.3%	6.8%	5.1%
Retail Trade Sales (*Millions*)[4]	$83,569	$90,653	$94,920	$98,812	$104,346	$110,398	$116,359	$121,479
Percent Change	4.4%	8.5%	4.7%	4.1%	5.6%	5.8%	5.4%	4.4%
Housing Permits (*Thousands*)[1]	27.3	29.3	30.5	37.0	41.1	46.3	45.4	46.8
Percent Change	27.8%	7.3%	4.2%	21.5%	10.9%	12.8%	-2.1%	3.3%
Nonresidential Building (*Millions*)[5]	$3,624	$4,351	$4,988	$5,972	$6,062	$6,771	$7,211	$7,363
Percent Change	-1.9%	20.1%	14.6%	19.7%	1.5%	11.7%	6.5%	2.1%
Denver-Boulder-Greeley Inflation[6]	2.8%	2.8%	1.2%	2.8%	3.4%	3.2%	2.9%	2.7%

Sources
[1]U.S. Census Bureau. Residential housing permits are the number of new single and multi-family housing units permitted for building.
[2]U.S. Bureau of Labor Statistics.
[3]U.S. Bureau of Economic Analysis. Personal income and wages and salaries not adjusted for inflation. The Legislative Council Staff forecast begins in 2017.
[4]Colorado Department of Revenue. The Legislative Council Staff forecast begins in 2016.
[5]F.W. Dodge.
[6]U.S. Bureau of Labor Statistics. Inflation shown as the year-over-year change in the consumer price index. Beginning in February, the Denver-Boulder-Greeley consumer price index will be replaced with the Denver-Aurora-Lakewood consumer price index.

Colorado Economic Regions



A Note on Data Revisions

Economic indicators reported in this forecast document are often revised by the publisher of the data and are therefore subject to change. Employment data are based on survey data from a "sample" of individuals representative of the population as a whole. Monthly employment data are based on the surveys received at the time of data publication and data are revised over time as more surveys are collected to more accurately reflect actual employment conditions. Because of these revisions, the most recent months of employment data may reflect trends that are ultimately revised away. Additionally, employment data undergoes an annual revision, which is published in March of each year. This annual revision may affect one or more years of data values.

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

Metro Denver Region

Colorado's largest regional economy, the seven-county metro Denver region, continues to expand at a healthy pace in spite of rising labor shortages. The region possesses a heavily diversified economy, with growing sector concentrations in information technology and finance. Area employment growth accelerated in the first half of the year, and residential construction activity remains robust. Higher interest rates have given way to cooling in the real estate markets of some of Denver's hottest neighborhoods, as steep home prices and the higher cost of borrowing have prompted homebuyers to look elsewhere. Housing demand, however, continues to overwhelm supply, and robust construction activity continues both within and outside of Denver's urban core. Economic indicators for the region are summarized in Table 21.

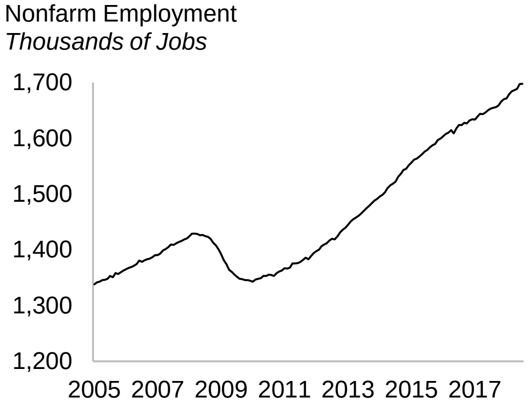
Table 21
Metro Denver Region Economic Indicators
Adams, Arapahoe, Broomfield, Boulder, Denver, Douglas, and Jefferson Counties

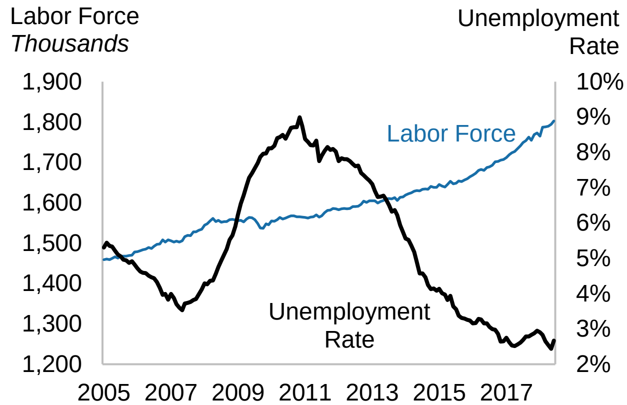
	2014	2015	2016	2017	YTD 2018
Employment Growth[1]	3.7%	3.6%	2.6%	1.9%	2.6%
Unemployment Rate[2]	4.7%	3.6%	3.0%	2.7%	2.7%
Housing Permit Growth[3]					
Denver-Aurora MSA Single Family	16.3%	17.8%	12.2%	3.8%	17.1%
Boulder MSA Single Family	17.7%	74.2%	10.2%	-4.3%	24.8%
Nonresidential Construction Growth[4]					
Value of Projects	10.5%	25.6%	27.3%	-11.4%	-0.2%
Square Footage of Projects	3.9%	43.6%	6.6%	-15.5%	-32.3%
Level (*Millions*)	14,745	21,170	22,569	19,076	7,982
Number of Projects	25.1%	20.7%	9.4%	-24.6%	-23.3%
Level	936	1,130	1,236	932	435
Retail Trade Sales Growth[5]	8.4%	6.2%	NA	NA	NA

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

After some moderation in employment growth in 2017, early data suggest that the metro Denver region added jobs at an increasing pace in the first seven months of the 2018 relative to the same period last year (Figure 33, left). Over the past two years, in-migration to the area and the return of workers who dropped out of the labor force during the Great Recession have supported job growth (Figure 33, right). Yet, the labor market continues to tighten, and a shortage of skilled labor is expected to constrain business growth prospects in 2018 and 2019. Averaging 2.7 percent in the first seven months of 2018, the regional unemployment rate remains lower than the statewide average of 3.0 percent.

Figure 33
Metro Denver Region Labor Market Activity



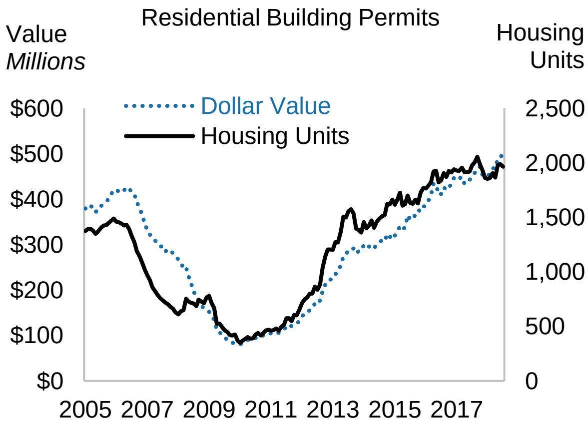


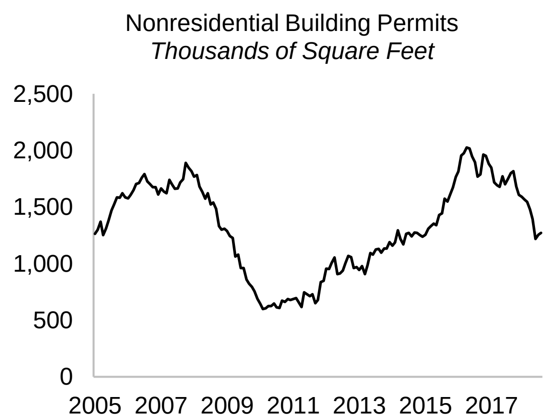
Source: U.S. Bureau of Labor Statistics; CES (left) through July 2018, and LAUS (right) through June 2018. Source: U.S. Data prior to 2010 adjusted by Legislative Council Staff. Data are seasonally adjusted.

Residential construction activity remains strong in the region, propped up by continued in-migration to the area (Figure 34, left). In the first seven months of the year, the number of single family home permits in the Denver-Aurora region rose 17.1 percent over year-ago levels, while permits issued for the Boulder metro area increased 24.8 percent. This marks an acceleration in activity relative to that of 2017. As robust multi-family construction in the City and County of Denver has slowed, construction activity has shifted outside of the land-scarce urban core, toward a mix of both single and multi-family building in surrounding Adams, Arapahoe, and Jefferson counties.

Following a slowdown in activity in 2017, nonresidential building activity slowed further in the first half of 2018. The value of new nonresidential projects held steady, while the square footage and number of projects fell at double-digit rates (Figure 34, right).

Figure 34
Metro Denver Region Construction Activity



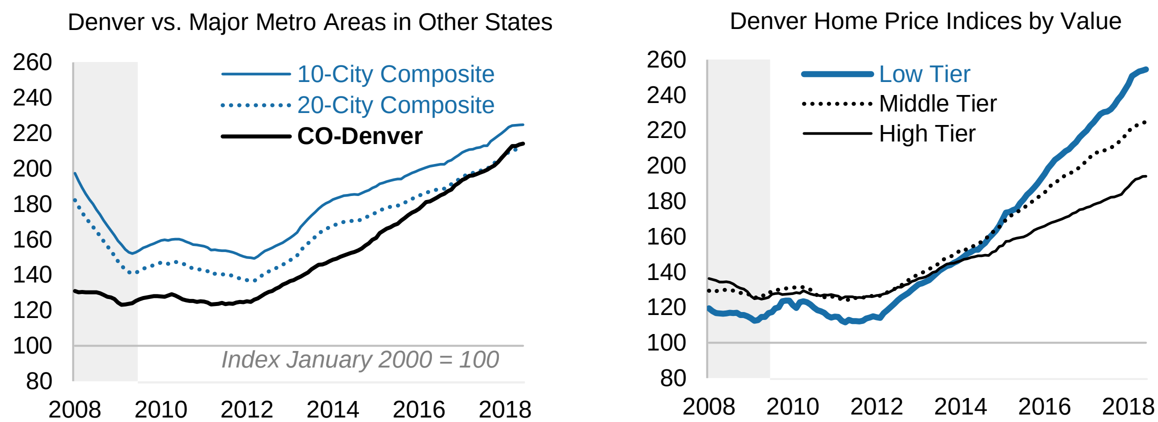


Source: F.W. Dodge. Data shown as twelve-month moving averages. Data are not seasonally adjusted and are through July 2018.

Home prices continued to climb in 2018, though home price appreciation has slowed ever so slightly. As of the second quarter of the year the Federal Housing Finance Agency reported 10.2 percent growth in Denver-area home prices relative to year-ago prices. Boulder-area home prices were up 8.8 percent over year ago prices. Figure 35 compares growth in home price indices for Colorado, the U.S., and major Colorado metropolitan areas. Data published by the Denver Metro Association of Realtors suggest a larger 2018 summer housing inventory than a year ago, some slowing in sales activity, and reduced listing prices for a growing share of homes on the market. These trends signal some cooling in real estate activity, as higher interest rates and high home prices give potential buyers greater pause.

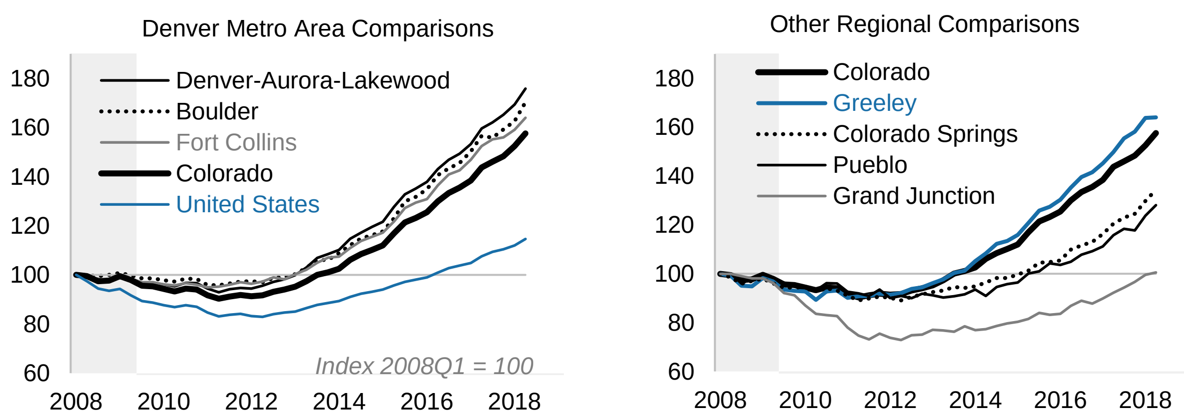
Figure 35
Metro Denver Region Home Price Indices

Case-Shiller Home Price Indices



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

FHFA Home Price Indices



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

Northern Region

The northern region continues to be one of the best performing areas economically in the state. The energy sector has recovered from an industry-specific recession in 2016 and the other sectors of the economy continue to fire on all cylinders. The region added jobs at a pace nearing the fastest in the state, and the unemployment rate continues to hover near historical lows. Population growth and a strong labor market have boosted demand for housing and nonresidential real estate. Table 22 shows economic indicators for the northern region.

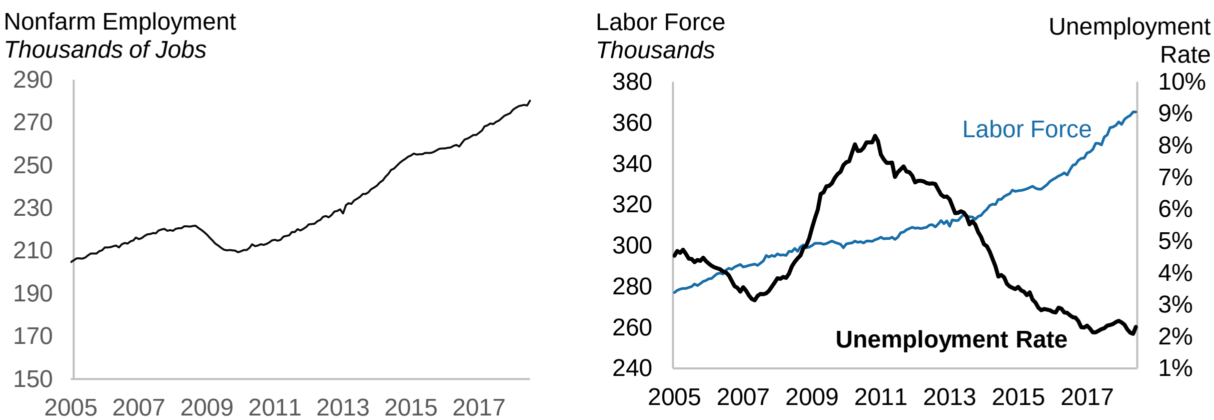
Table 22
Northern Region Economic Indicators
Weld and Larimer Counties

	2014	2015	2016	2017	YTD 2018
Employment Growth[1]					
Fort Collins-Loveland MSA	3.4%	4.0%	3.8%	3.7%	2.8%
Greeley MSA	9.0%	2.4%	-1.3%	3.3%	4.9%
Unemployment Rate[2]					
Fort Collins-Loveland MSA	4.2%	3.3%	2.8%	2.4%	2.4%
Greeley MSA	4.4%	3.8%	3.4%	2.7%	2.6%
State Cattle and Calf Inventory Growth[3]	-4.2%	-4.4%	1.0%	6.7%	2.5%
Natural Gas Production Growth[4]	27.0%	44.3%	14.6%	5.6%	12.9%
Oil Production Growth[4]	52.4%	39.4%	-7.3%	13.5%	38.7%
Housing Permit Growth[5]					
Fort Collins-Loveland MSA Total	8.7%	-8.1%	47.9%	-44.4%	-32.0%
Fort Collins-Loveland MSA Single Family	10.2%	1.3%	-2.9%	78.0%	-20.2%
Greeley MSA Total	41.1%	-3.5%	-7.8%	-11.8%	49.6%
Greeley MSA Single Family	18.5%	3.8%	-9.9%	62.5%	49.5%
Nonresidential Construction Growth[6]					
Value of Projects	31.1%	32.3%	2.1%	28.1%	130.5%
Square Footage of Projects	45.5%	19.3%	-14.5%	16.0%	-37.6%
Level (*Thousands*)	3,326	3,969	3,393	3,935	1,458
Number of Projects	66.5%	-4.3%	12.1%	1.4%	-4.5%
Level	258	247	277	281	169
Retail Trade Sales Growth[7]					
Larimer County	8.5%	6.7%	NA	NA	NA
Weld County	12.2%	1.0%	NA	NA	NA

MSA = Metropolitan statistical area. NA = Not available.
[1]U.S. Bureau of Labor Statistics, CES (establishment survey). Seasonally adjusted. Data through July 2018.
[2]U.S. Bureau of Labor Statistics, LAUS (household survey). Seasonally adjusted. Data through June 2018.
[3]National Agricultural Statistics Service. Cattle and calves on feed through June 2018.
[4]Colorado Oil and Gas Conservation Commission. Data through May 2018.
[5]U.S. Census Bureau. Growth in the number of residential building permits. Data through June 2018.
[6]F.W. Dodge. Data through July 2018.
[7]Colorado Department of Revenue. Data through December 2015.

The labor market in the northern region is among the strongest in the state, with robust employment growth and a historically low unemployment rate. The region's two metropolitan statistical areas (MSAs), Fort Collins-Loveland and Greeley, posted strong job growth over prior-year levels through the first half of 2018, increasing 2.8 percent and 4.9, respectively. Employment growth rebounded in the Greeley MSA in 2017 as oil prices stabilized and the energy industry increased oil and gas development in the Denver-Julesburg Basin. Area unemployment continues to fall as employment gains outpace growth in the labor force. The year-to-date Fort Collins-Loveland unemployment rate averaged 2.4 percent, while Greeley averaged 2.6 percent through June 2018. Figure 36 shows employment trends for the northern region metro areas.

Figure 36
Northern Region Labor Market Activity

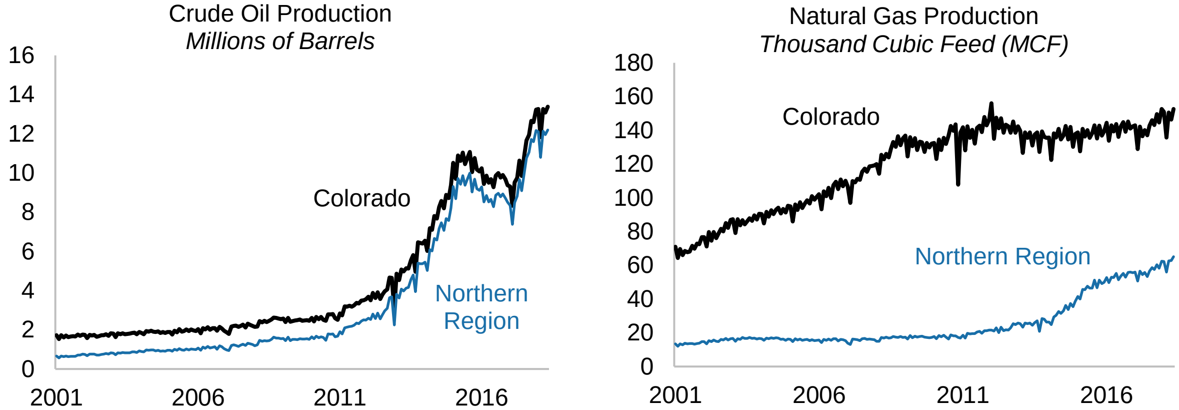


Source: U.S. Bureau of Labor Statistics; LAUS. Data prior to 2010 adjusted by Legislative Council Staff. Data are seasonally adjusted and are through June 2018.

The northern region produces about a quarter of the value of Colorado's agricultural products due to the livestock industry in Weld County. Tariffs on agricultural commodities are causing concern for the industry, as the reshuffling of global supply chains cause uncertainty for farmers and ranchers. Low prices for corn have decreased the cost of feed for the cattle industry. However, prices for beef and milk are also depressed.

Oil production in the northern region, particularly in Weld County, has dominated statewide production for over a decade (Figure 37). Oil production increased 13.5 percent in 2017 and accelerated to 38.7 percent through the first five months of 2018. Oil and gas production has increased because prices stabilized inducing the development of new wells. However, the number of active drilling rigs in the first week of September 2018 was 21, a decline from 35 active drilling rigs a year ago. 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 37
Colorado Energy Production

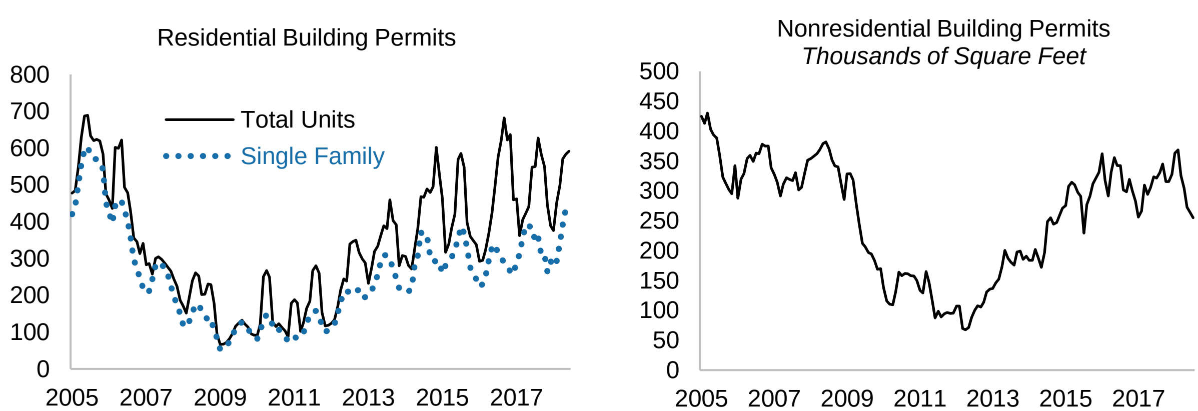


Source: Colorado Oil and Gas Conservation Commission. Monthly data through May 2018.

The northern region's residential real estate market is mixed between Larimer and Weld Counties. 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 38, left). Yet, the Fort Collins-Loveland MSA is now experiencing fewer buildable lots and a scarcity of skilled construction labor. Strong growth in recent years has dampened the supply of new single family permits, which have declined 20.2 percent in the first half of 2018. Multi-family permits are also lower than in 2017 as the rental market catches up to additional units built in 2016. Residential construction in Weld County has recovered along with the oil industry, with permits increasing 49.6 percent in the first six months of 2018.

Activity in the nonresidential construction industry is also tied to the oil and gas industry. The value of non-residential construction projects increased 130.5 percent in the first seven months of 2018, while the square footage of those projects declined 38.7 percent. The oil and gas industry has been developing new infrastructure for the transportation and processing of oil and natural gas, which has considerable value but does not result in additional square footage of retail or commercial property (Figure 38, right).

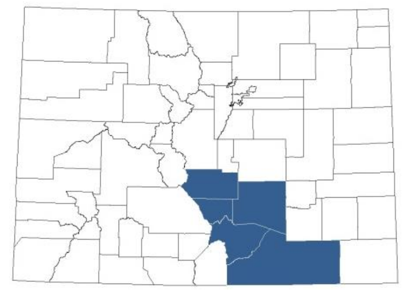
Figure 38
Northern Region Construction Activity



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

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

Pueblo – Southern Mountains Region



The Pueblo – Southern Mountains region includes five southern Front Range counties surrounding the City of Pueblo. Construction activity accelerated in the region during 2018, as strong demand and mild winter weather allowed for an expansion of the housing and nonresidential inventory. Labor market activity slowed at the start of 2018 only to pick up steam over the last three months. Recent tariffs imposed on steel imports offer the potential for rejuvenation of Pueblo's manufacturing industry. However, the longevity of tariffs remain in question, and industry investment tentative. Indicators for the regional economy are presented in Table 23.

Table 23
Pueblo Region Economic Indicators
Custer, Fremont, Huerfano, Las Animas, and Pueblo Counties

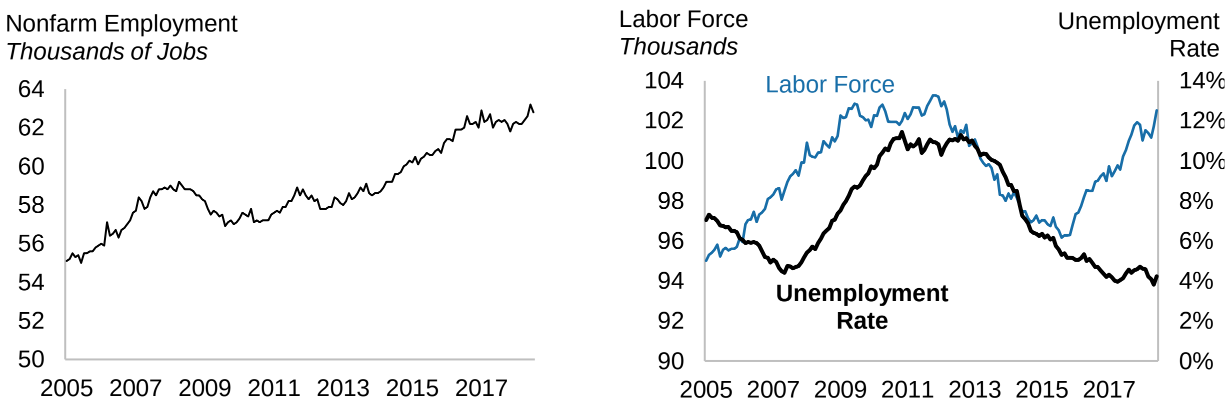
	2014	2015	2016	2017	YTD 2018
Employment Growth					
Pueblo Region[1]	1.0%	0.9%	2.8%	2.6%	1.7%
Pueblo MSA[2]	1.5%	2.0%	1.8%	1.1%	0.2%
Unemployment Rate[1]	7.4%	5.7%	4.8%	4.3%	4.3%
Housing Permit Growth[3]					
Pueblo MSA Total	-0.6%	69.4%	6.0%	9.2%	48.5%
Pueblo MSA Single Family	-0.6%	29.9%	29.9%	22.3%	35.8%
Nonresidential Construction Growth[4]					
Value of Projects	197.9%	2.6%	-22.6%	-73.7%	257.0%
Square Footage of Projects	192.7%	14.6%	-3.8%	-59.0%	-27.9%
Level (*Thousands*)	309	355	341	140	362
Number of Projects	96.7%	-18.6%	50.0%	-72.2%	90.9%
Level	59	48	72	20	21
Retail Trade Sales Growth[5]	4.9%	2.9%	NA	NA	NA

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

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 and institutions of higher education offer work for many area residents. The area economy has experienced steady improvements in labor market activity since 2014 (Figure 39). Yet, the area employment to population ratio remains low and the regional unemployment rate remains elevated relative to the statewide average. Through June, the unemployment rate averaged 4.3 percent, while the statewide rate averaged 3.0 percent over the same period.

Labor market activity softened at the start of 2018, with a slowdown in both employment and labor force growth (Figure 39). However, preliminary data for April through June suggest a rebound in activity, and strong construction activity in the region suggests the possibility for an upward revision to the data. Should the recent 25 percent tariffs on U.S. imports of steel remain in place, Pueblo may also see a boost from steel industry hiring. Many expect the tariffs to spur domestic production with the tariffs making foreign steel untenable for purchase. At this time, the impact of steel tariffs on the Pueblo region remains speculative. Uncertainty over the longevity of the tariffs, the possibility for exemptions, and business responses to the tariffs remain unclear.

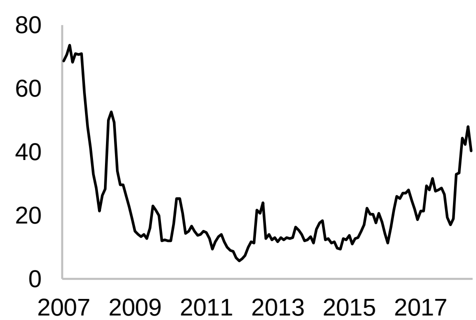
Figure 39
Pueblo Region Labor Market Activity



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

A relatively affordable housing market compared with the northern and metro Denver regions and an improving labor market has boosted demand for housing permits in the region. As shown in Figure 40, residential construction activity continues to accelerate, supported by in-migration to the area. Both single and multi-family housing permits rose at a double-digit pace in the first six months of the year 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. According to data published by the Federal Housing Finance Agency, home prices rose 10.7 percent in the second quarter of 2018 compared to the same period a year prior.

Figure 40
Single Family Residential Permits
Number of Housing Units



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

Following two years of mixed data in 2016 and 2017, nonresidential construction activity rose at the start of the year. The value and number of nonresidential projects are up considerably relative to year-ago levels in the first seven months of 2018.

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 24.

Table 24
Colorado Springs Region Economic Indicators
El Paso County

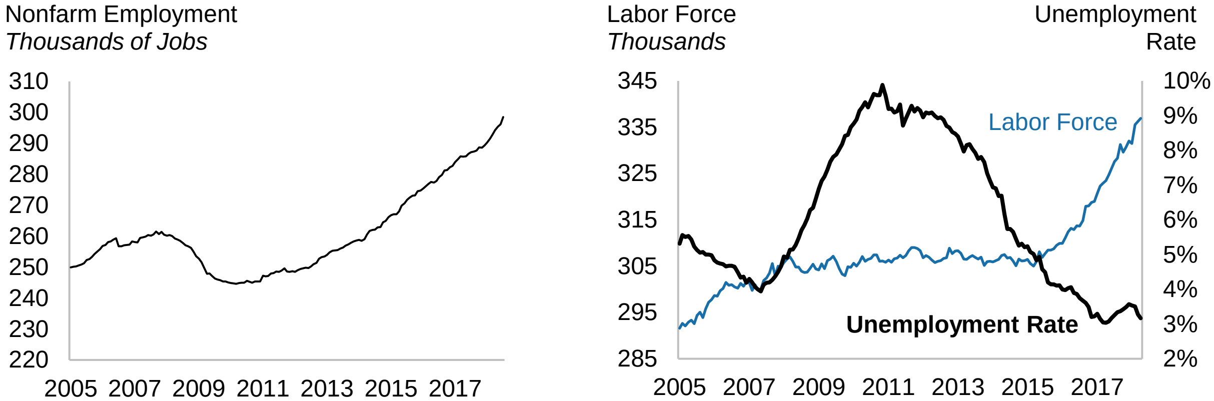
	2014	2015	2016	2017	YTD 2018
Employment Growth[1]					
Colorado Springs MSA	2.2%	3.3%	2.9%	1.8%	3.0%
Unemployment Rate[2]	6.0%	4.6%	3.7%	3.3%	3.3%
Housing Permit Growth[3]					
Total	3.8%	-0.4%	41.3%	-3.9%	61.4%
Single Family	-7.7%	13.3%	19.7%	6.7%	20.9%
Nonresidential Construction Growth[4]					
Value of Projects	-4.2%	-1.0%	48.9%	-23.4%	-17.6%
Square Footage of Projects	-12.0%	-0.2%	26.1%	9.2%	-10.3%
Level (*Thousands*)	1,870	1,865	2,353	2,569	1,326
Number of Projects	-5.9%	13.5%	11.6%	29.3%	-13.7%
Level	334	379	423	547	296
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 July 2018.
[2]U.S. Bureau of Labor Statistics, LAUS (household survey). Seasonally adjusted. Data through June 2018.
[3]U.S. Census. Growth in the number of residential building permits. Data through June 2018.
[4]F.W. Dodge. Data through July 2018.
[5]Colorado Department of Revenue. Data through December 2015.

Preliminary data suggest that job growth in the Colorado Springs metropolitan statistical area (MSA) accelerated through the first half of 2018, growing 3.0 percent in the first seven months of the year over the same period last year (Figure 41, left). Job growth has been broad-based across industries, with population in-migration supporting demand for new construction, retail trade activity, and jobs in the leisure and hospitality industry. Strong in-migration has also brought new workers into the labor force over the past two years (Figure 41, right). The vast majority of new job seekers have found work, maintaining downward pressure on the unemployment rate. Year-to-date through June, the unemployment rate averaged 3.3 percent.

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 5.8 percent year-to-date through July over to the same period last year. Tax statistics point to strong contributions from auto sales and tourism-related activity, including hotel, retail, and restaurant sales.

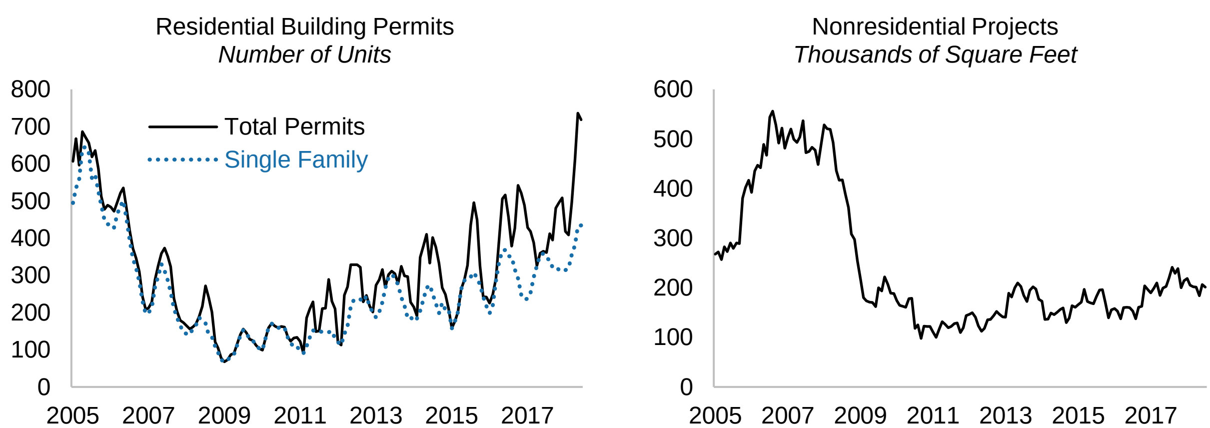
Figure 41
Colorado Springs Labor Market Activity



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

Colorado Springs construction activity experienced robust growth in the first half of 2018. Year-to-date through July, single family permits increased 20.9 percent over year-ago levels (Figure 42, left), driving the largest county-level share of single family permit growth across the 64 counties in the state. Multi-family housing permits more than doubled over the same period. The number of permits for multi-family units was second only to the City and County of Denver. While more affordable than real estate in the Denver metro region, Colorado Springs home prices continue to rise at a double-digit rates as demand continues to outstrip supply. According to data published by the Federal Housing Finance Agency, home prices rose 11.5 percent in the second quarter of 2018 over the same period a year prior.

Figure 42
Colorado Springs Construction Activity

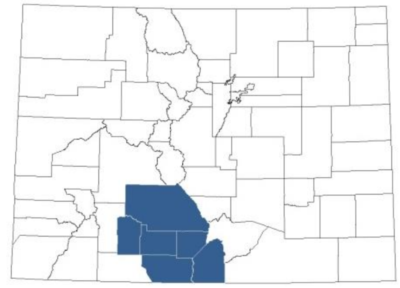


Source: U.S. Census Bureau. Data are shown as three-month moving averages. Data are not seasonally adjusted and are through June 2018.

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

Nonresidential construction was down slightly at the start of the year. 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 42, 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 that are 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 25.

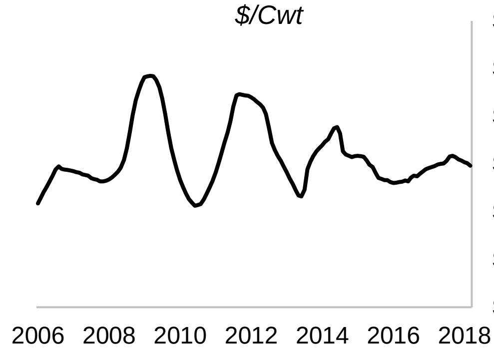
Table 25
San Luis Valley Region Economic Indicators
Alamosa, Conejos, Costilla, Mineral, Rio Grande, and Saguache Counties

	2014	2015	2016	2017	YTD 2018
Employment Growth[1]	2.5%	3.9%	6.2%	5.0%	4.2%
Unemployment Rate[1]	8.0%	5.7%	4.5%	3.9%	3.8%
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)	$3,218	$3,234	NA	NA	NA
Housing Permit Growth[3]	-25.0%	21.5%	-1.1%	16.8%	14.9%
Retail Trade Sales Growth[4]	3.7%	11.5%	NA	NA	NA

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

Agricultural production centers on the potato crop in the San Luis Valley, one of the driest regions in the state. The entire region experienced extreme drought conditions throughout the summer. Despite the lack of precipitation, 84 percent of the potato crop is in good or excellent condition, and the harvest is slightly ahead of last year's. Barley, alfalfa hay, and livestock are also grown and raised in the region, all of which can tolerate dry conditions. Potato prices have remained relatively flat over the last several years, adding stability to producer profits (Figure 43). While domestic demand is expected to remain strong, tariffs imposed on U.S. frozen potato exports by Mexico pose a downside risk for producers reliant on foreign markets.

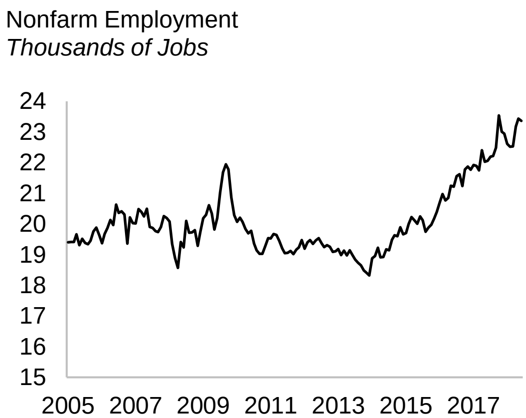
Figure 43
Prices Received for Colorado Potatoes
$/Cwt

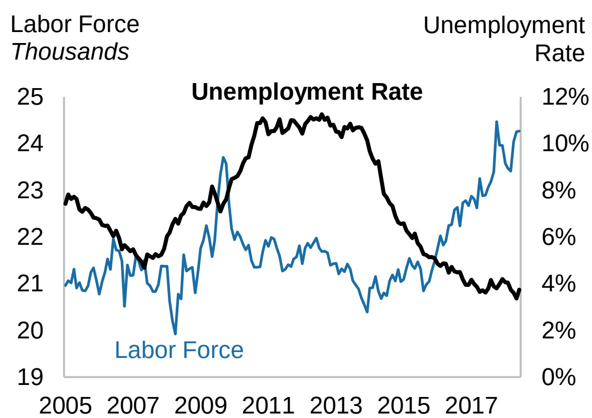


Source: National Agricultural Statistics Service. Data shown as twelve-month moving averages. Data through June 2018.

In addition to the agricultural industry, tourism, a large retirement community, and government services, including Adams State University, support the San Luis Valley economy. Labor market conditions continue to improve in the region (Figure 44). Employment growth this decade peaked in 2016 at 6.2 percent and has since slowed slightly. It now stands at 4.2 percent through June of this year, remaining the highest growth rate of all regions in the state. The area unemployment rate continues to fall (Figure 44, right), averaging 3.8 percent year-to-date through June. Despite strong job growth, the unemployment rate is the second highest among the nine economic regions in Colorado. Comparatively, the region's unemployment rate remains just below national average of 3.9 percent.

Figure 44
San Luis Valley Labor Market Activity

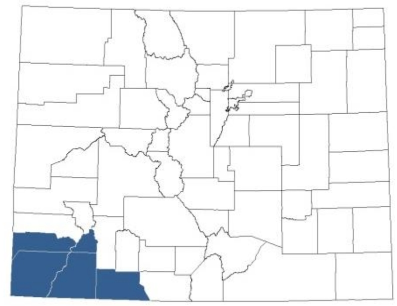




Source: U.S. Bureau of Labor Statistics; LAUS. Data prior to 2010 adjusted by Legislative Council Staff. Data are seasonally adjusted and are through June 2018.

The real estate market in the San Luis Valley has not faced the supply and cost issues that much of the state has been experiencing. Growth in residential housing permits during the first seven months of 2018 is relatively on par with 2017 growth, growing 14.9 percent year-to-date through June relative to the same period last year. Supported by a growing economy, housing demand is expected to remain elevated.

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. This year has exhibited the region's diversity as a valuable asset. While the tourism industry suffered as a result of forest fires and related land closures, the regional economy has shown resiliency in the face of sudden pressures. Economic indicators for the region are summarized in Table 26.

Table 26
Southwest Mountain Region Economic Indicators
Archuleta, Dolores, La Plata, Montezuma, and San Juan Counties

	2014	2015	2016	2017	YTD 2018
Employment Growth[1]	3.1%	0.7%	3.9%	3.2%	1.9%
Unemployment Rate[1]	4.9%	4.1%	3.4%	2.9%	3.0%
Housing Permit Growth[2]	14.2%	17.6%	-4.6%	29.8%	31.8%
Retail Trade Sales Growth[3]	3.0%	1.7%	NA	NA	NA
National Park Recreation Visits[4]	8.9%	10.2%	7.5%	4.4%	-1.8%

NA = Not available.
[1]U.S. Bureau of Labor Statistics, LAUS (household survey). Seasonally adjusted. Data through July 2018.
[2]F.W. Dodge. Data through July 2018.
[3]Colorado Department of Revenue. Data through December 2015.
[4]National Park Service. Data through July 2018. Recreation visits for Mesa Verde National Park and Hovenweep National Monument.

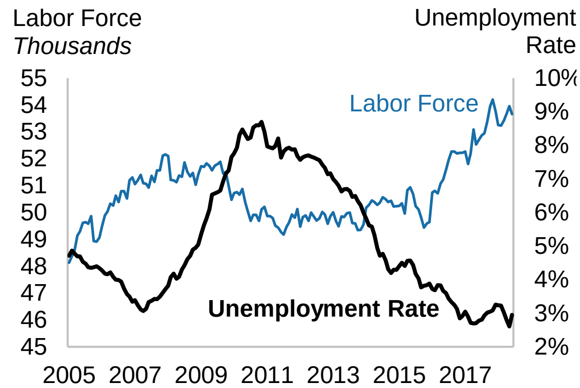
Beset by drought conditions, hot temperatures, and high winds, the region was devastated by forest fires during the summer months. The 416 Fire, which burned in La Plata County northwest of Hermosa, was the most significant. It consumed some 50,000 acres of forest and brush land, registering among the region's largest fires ever. Only the West Fork Complex fires, which burned on Wolf Creek Pass in 2013, and the deadly Missionary Ridge Fire, which burned near Durango in 2002, were larger. The nearby Burro Fire burned nearly 5,000 additional acres of forest in Montezuma County, and the Plateau Fire burned approximately 20,000 acres in Montezuma and Dolores counties north of the Town of Dolores.

The fires were a significant drag on summer tourist activity. U.S. Highway 550 was closed between Durango and Silverton, as was the popular Durango & Silverton Narrow Gauge Railroad. The U.S. Forest Service closed significant areas of San Juan National Forest that would otherwise have drawn campers, hikers, and fishers, and many of these areas remain closed as rifle hunting season approaches. Visits to Mesa Verde National Park and Hovenweep National Monument, which were not directly affected by the largest fires, fell 7.2 percent in June and July relative to the same period in 2017, and are down 1.8 percent year-to-date despite elevated spring traffic. Suppressed tourism weakens revenues for many regional businesses, cooling seasonal employment at outfitters and dampening sales and lodging tax receipts for local governments.

Household surveys indicate a mature labor market (Figure 45). Through June, surveys of the five-county region report 1.9 percent job growth over the same period last year, roughly in line with annual population growth in this part of the state. The unemployment rate was measured at 3.0 percent, just 0.1 percentage points higher than the average rate measured last year.

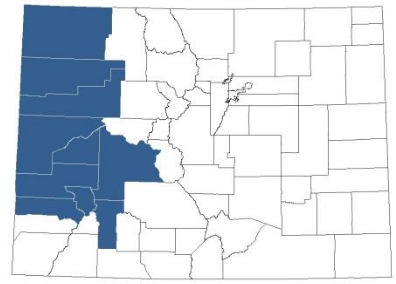
Residential construction has continued its surge. Housing developers received permits for 501 residential units between January and July, an increase of 31.8 percent from the same period last year. The number of permits issued positions regional homebuilders for their highest level of construction activity since the mid-2000s, potentially alleviating some of the very high price pressure in the Durango area. Developers continue to seek zoning changes to access more buildable areas.

Figure 45
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 June 2018.

Western Region



The western region has a diverse economy. Key industries in the northern counties of Mesa, Garfield, Moffat, Rio Blanco, and Routt include energy and agriculture, while the counties of Delta, Gunnison, Hinsdale Montrose, Ouray, and San Miguel are more reliant on tourism, mining, and retiree-related spending. 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 27.

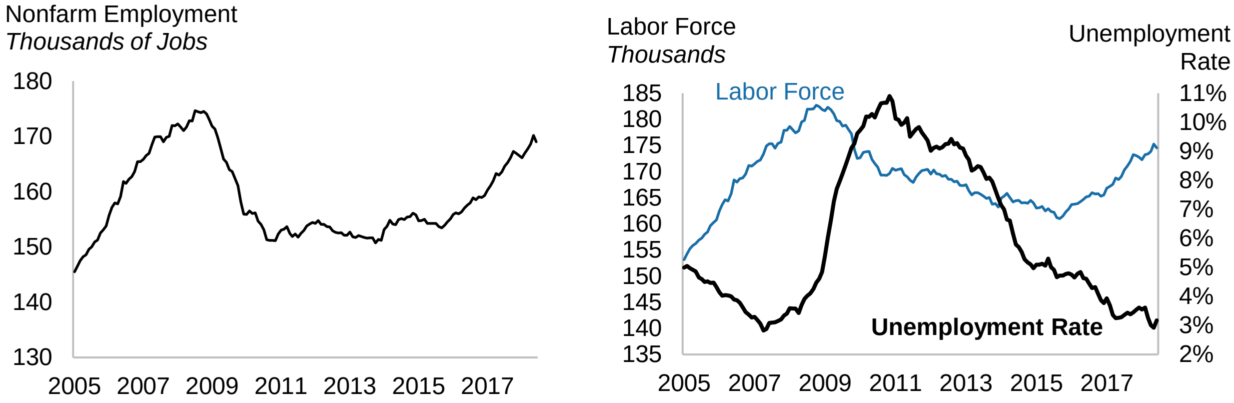
Table 27
Western Region Economic Indicators
Delta, Garfield, Gunnison, Hinsdale, Mesa, Moffat, Montrose, Ouray, Rio Blanco, and San Miguel Counties

	2014	2015	2016	2017	YTD 2018
Employment Growth					
Western Region[1]	2.1%	-0.3%	2.1%	4.1%	3.7%
Grand Junction MSA[2]	2.5%	-0.2%	-0.3%	-0.4%	2.4%
Unemployment Rate[1]	5.9%	4.9%	4.4%	3.5%	3.3%
Natural Gas Production Growth[3]	-5.3%	-12.8%	-6.7%	-2.1%	3.1%
Housing Permit Growth[4]	7.9%	24.7%	6.7%	42.8%	13.7%
Nonresidential Construction Growth[4]					
Value of Projects	221.9%	-37.8%	11.2%	-31.6%	-9.5%
Square Footage of Projects	157.9%	-41.0%	-8.1%	-14.4%	-29.6%
Level (*Thousands*)	1,021	602	553	474	290
Number of Projects	21.8%	-16.4%	37.5%	-39.0%	26.7%
Level	67	56	77	47	38
Retail Trade Sales Growth[5]	4.7%	7.4%	NA	NA	NA

MSA = Metropolitan statistical area. NA = Not available.
[1]U.S. Bureau of Labor Statistics, LAUS (household survey). Seasonally adjusted. Data through June 2018.
[2]U.S. Bureau of Labor Statistics, CES (establishment survey). Seasonally adjusted. Data through July 2018.
[3]Colorado Oil and Gas Conservation Commission. Data through May 2018.
[4]F.W. Dodge. Data through July 2018.
[5]Colorado Department of Revenue. Seasonally adjusted. Data through December 2015.

The region's labor market improved through 2017 and into 2018 despite slow natural gas production and a struggling coal industry. Employment increased 4.1 percent in 2017, and has increased 3.7 percent through the first seven months of 2018 compared with the same period in the prior year. The region's unemployment rate declined for the seventh consecutive year in 2017, and has improved further in 2018 as employment gains outpace growth in the labor force. 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 2.4 percent in the first seven months of 2018, over year-ago levels, reversing modest employment declines over the past three years. Figure 46 shows labor market activity in the western region.

Figure 46
Western Region Labor Market Activity

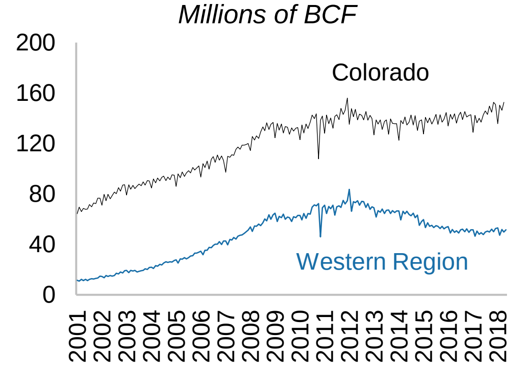


Source: U.S. Bureau of Labor Statistics; LAUS. Data prior to 2010 adjusted by Legislative Council Staff. Data are seasonally adjusted and are through June 2018.

After years of subpar growth, the region's residential construction market has gained momentum. In 2017, the region's planning departments issued permits for almost 1,300 residential units, up 42.8 percent from the prior year. The construction industry has increased activity above those high levels in 2018, growing 13.7 percent through the first seven months of the year. A limited number of existing homes, lower prices, and in-migration to the region is buoying the housing market. Higher rental prices in the region are also prompting more people to buy a home. Conversely, activity in the region's nonresidential construction sector was down in 2018 compared with the year prior. The total value of nonresidential construction projects fell 9.5 percent in the first seven months of 2018 relative to year-ago levels.

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 47). There has been a slight increase in natural gas production in the first five months of 2018, with natural gas production increasing 3.1 percent year-to-date. The recent uptick in production has gone to power plants as natural gas continues to be an attractive fuel to replace coal for electricity generation.

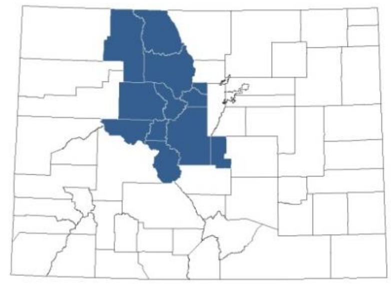
Figure 47
Natural Gas Production
Millions of BCF



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

The number of people that visited the Black Canyon of the Gunnison National Park increased 33.2 percent in the first eight months of 2018 relative to the prior year. While the Black Canyon of the Gunnison is not far from the struggling coal city of Somerset, most visitors to the park visit the south rim of the canyon and patronize businesses in the gateway communities of Montrose and Gunnison. Tourism has been less strong in other areas of the region. Visitations to the Colorado National Monument near Grand Junction decreased 0.8 percent year-to-date through August.

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. The mountains host one of the state's healthiest regional economies. Employers continue to add workers at a brisk pace, and homebuilders are responding with a significant expansion of regional housing stock. Economic indicators for the mountain region are presented in Table 28.

Table 28
Mountain Region Economic Indicators
Chaffee, Clear Creek, Eagle, Gilpin, Grand, Jackson, Lake, Park, Pitkin, Routt, Summit, and Teller Counties

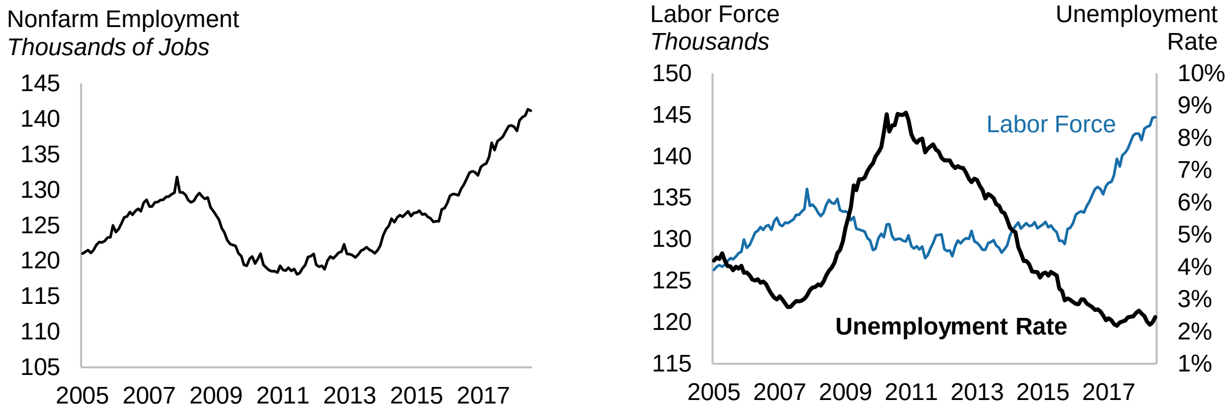
	2014	2015	2016	2017	YTD 2018
Employment Growth[1]	3.3%	1.5%	3.5%	4.3%	3.7%
Unemployment Rate[1]	4.3%	3.3%	2.7%	2.4%	2.4%
Housing Permit Growth[2]	2.2%	-7.6%	29.0%	-10.7%	85.4%
Nonresidential Construction Growth[2]					
Value of Projects	84.8%	44.0%	-31.3%	294.1%	-77.2%
Square Footage of Projects	206.5%	-62.0%	18.7%	220.9%	-65.0%
Level (*Thousands*)	1,352	514	609	1,956	456
Number of Projects	20.0%	-33.3%	52.5%	0.0%	13.5%
Level	60	40	61	61	42
Retail Trade Sales Growth[3]	8.5%	6.7%	NA	NA	NA

NA = Not available.
[1]U.S. Bureau of Labor Statistics. LAUS (household) survey. Seasonally adjusted. Data through June 2018.
[2]F.W. Dodge. Data through July 2018.
[3]Colorado Department of Revenue. Seasonally adjusted. Data through December 2015.

The tight job market is coaxing mountain residents into the labor force. Household surveys indicate that the regional labor force grew 4.0 percent during 2017 (Figure 48, right), versus population growth of 1.6 percent estimated by the State Demography Office. The regional workforce is estimated to have added another 3.7 percent through June 2018 compared with the same period last year. To the extent that labor force gains outstrip broader population growth, 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. Regional job offerings have kept pace with the number of new workers (Figure 48, left), and the region's steady 2.4 percent unemployment rate remains the lowest in the state.

The regional housing market remains very strong, with robust demand supporting high prices and abundant construction. Housing permit issuances are up 85.4 percent through July, and builders are easily on pace for their peak year of homebuilding, both in unit and dollar terms, since the Great Recession (Figure 49, left). With supply constrained for now, workers in some communities have been priced out of their local market, pushed toward less expensive housing further from their workplace.

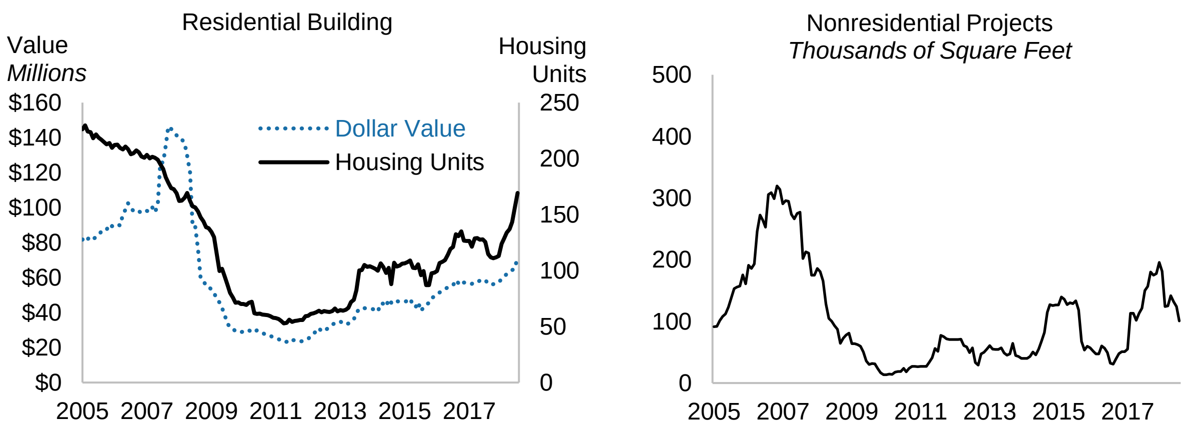
Figure 48
Mountain Region Labor Market Activity



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

Nonresidential construction indicators are down in dollar and square footage terms. However, these figures are skewed by the Monarch Casino Black Hawk expansion project permitted in 2017, which was the largest nonresidential project ever permitted in the region. Local authorities issued permits for 42 nonresidential projects between January and July (Figure 49, right), a healthy increase of 13.5 percent over year-ago levels.

Figure 49
Mountain Region Construction Activity



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

The most recent long-lead seasonal forecast from the National Oceanic and Atmospheric Administration (NOAA) Climate Prediction Center identifies an increased probability of El Niño conditions during the coming winter. Based on this climatological forecast, NOAA expects above normal winter precipitation throughout Colorado and the southwestern United States. Elevated snowfall would represent a welcome reversal from last year's dry winter conditions for winter tourism communities in the mountain region, particularly in resort-dependent areas of Eagle, Grand, Pitkin, Routt, and Summit counties.

Eastern Region

The eastern region comprises Colorado's 16 rural plains counties. The region relies on agriculture as its primary industry, with retailers, other locally-focused business, and government operations supporting area farming and ranching communities. While crop prices have gradually increased, prices for most crops remain below 10-year averages. Growth in the regional livestock inventory continued to improve through the second quarter of 2018, after posting the best in eight years. Downside risks, including those posed by drought and international trade disputes, cloud the regional outlook. Indicators for the region are presented in Table 29.

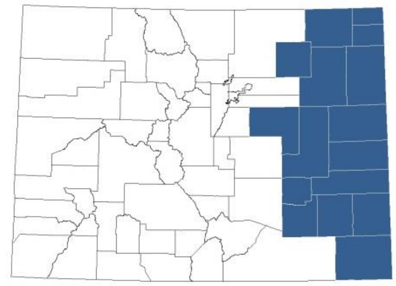


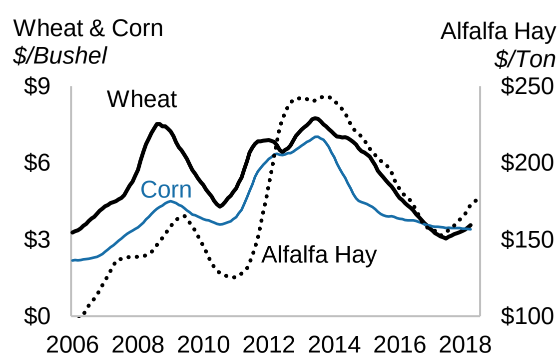
Table 29
Eastern Region Economic Indicators
Baca, Bent, Logan, Cheyenne, Crowley, Elbert, Kiowa, Kit Carson, Lincoln, Morgan, Otero, Phillips, Prowers, Sedgwick, Washington, and Yuma Counties

	2014	2015	2016	2017	YTD 2018
Employment Growth[1]	3.0%	2.1%	4.1%	4.2%	3.6%
Unemployment Rate[1]	4.4%	3.5%	2.9%	2.5%	2.5%
Crop Price Changes[2]					
Wheat ($/Bushel)	-11.5%	-25.6%	-27.9%	-2.9%	35.0%
Corn ($/Bushel)	-31.0%	-13.1%	-7.7%	-3.4%	-0.3%
Alfalfa Hay (Baled, $/Ton)	-11.3%	-13.9%	-15.5%	4.8%	16.6%
Livestock[3]					
State Cattle and Calf Inventory Growth	-4.2%	-4.4%	1.0%	6.7%	2.5%
Milk Production	7.9%	3.9%	5.2%	6.7%	9.9%
Retail Trade Sales Growth[4]	9.7%	-5.4%	NA	NA	NA

NA = Not available.
[1]U.S. Bureau of Labor Statistics, LAUS (household survey. Data through June 2018.
[2]National Agricultural Statistics Service. Data through June 2018.
[3]National Agricultural Statistics Service. Data through June 2018.
[4]Colorado Department of Revenue. Data through December 2015.

Colorado's primary agricultural goods are produced in the eastern region of the state, from dairy and livestock to wheat and corn. The agricultural industry faces significant headwinds from falling prices, international trade tariffs, and tough weather conditions. Prices for wheat have fallen by about half from their peak in 2013-14 at almost $8 a bushel, and corn and alfalfa prices have followed a similar trajectory (Figure 50). Although the eastern part of the state was largely saved from the worst of this summer's drought, hail storms and tornadoes present other risks to crops. Alfalfa hay benefitted from the drought, as pasture and range land conditions were too dry to sustain livestock the entire summer. Livestock conditions were on par with last year's, at over 80 percent in good or excellent condition.

Figure 50
Prices Received for Colorado Crops



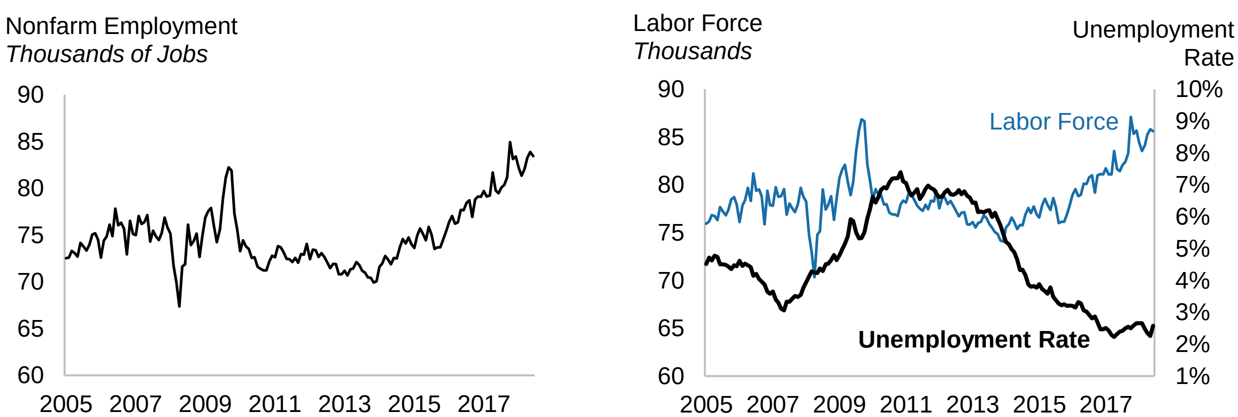
Source: National Agricultural Statistics Service. Data shown as twelve-month moving averages. Data through June 2018.

Heavy downside risks attributable to weather and trade policy uncertainty suggest a rocky outlook for the agricultural industry and producers; however, the northern counties in the region may fare better than those with drier weather in the south.

Labor market conditions in the eastern region continue to improve. Employment growth remains strong and while it has moderated slightly from last year, growth rates continue at a pace stronger than statewide growth (Figure 51, left). The area unemployment rate averaged 2.5 percent over the first half of 2018 and remained among one of the lowest across regions in the state (Figure 51, right). Demand for labor in the agricultural sector is high, and it is increasingly becoming more challenging to find both seasonal and year-round workers familiar with the industry, despite higher wages.

The regional economy is expected to continue to expand in 2018 and 2019 due to the growing population in the counties closest to major metropolitan areas along the Front Range. Morgan County, which is characterized by a strong agricultural industry presence, is currently the region's largest in terms of both population and employment. Elbert County, however, is projected to become the most populated county in the region in 2019 as new residential developments continue to support in-migration and new jobs in the area. The State Demography Office projects that Elbert County's population will grow an average of 4.6 percent annually through 2020, the fastest projected county growth rate among the counties in the state by more than a full percentage point.

Figure 51
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 June 2018.

Appendix: Historical Data

National Economic Indicators

Calendar Years	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017
GDP ($ *Billions*)[1]	$11,458.2	$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	$19,485.4
Percent Change	4.8%	6.6%	6.7%	6.0%	4.6%	1.8%	-1.8%	3.8%	3.7%	4.2%	3.6%	4.4%	4.0%	2.7%	4.2%
Real GDP ($ *Billions*)[1]	$13,879.1	$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	$18,050.7
Percent Change	2.9%	3.8%	3.5%	2.9%	1.9%	-0.1%	-2.5%	2.6%	1.6%	2.2%	1.8%	2.5%	2.9%	1.6%	2.2%
Unemployment Rate[2]	6.0%	5.5%	5.1%	4.6%	4.6%	5.8%	9.3%	9.6%	8.9%	8.1%	7.4%	6.2%	5.3%	4.9%	4.4%
Inflation[2]	2.3%	2.7%	3.4%	3.2%	2.9%	3.8%	-0.3%	1.6%	3.1%	2.1%	1.5%	1.6%	0.1%	1.3%	2.1%
10-Year Treasury Note[3]	4.0%	4.3%	4.3%	4.8%	4.6%	3.7%	3.3%	3.2%	2.8%	1.8%	2.4%	2.5%	2.1%	1.8%	2.3%
Personal Income ($ *Billions*)[1]	$9,487.5	$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	$16,830.9
Percent Change	3.6%	5.8%	5.6%	7.4%	5.5%	3.6%	-3.1%	4.1%	6.2%	5.1%	1.2%	5.7%	4.9%	2.6%	4.4%
Wage & Salaries ($ *Billions*)[1]	$5,138.7	$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
Percent Change	2.9%	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%
Nonfarm Employment (*Millions*)[2]	130.3	131.8	134.0	136.5	138.0	137.2	131.3	130.4	131.9	134.2	136.4	138.9	141.8	144.3	146.6
Percent Change	-0.2%	1.1%	1.7%	1.8%	1.1%	-0.5%	-4.3%	-0.7%	1.2%	1.7%	1.6%	1.9%	2.1%	1.8%	1.6%

Sources
[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	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017
Nonfarm Employment (*Thousands*)[1]	2,179.0	2,225.5	2,279.0	2,330.6	2,350.0	2,244.7	2,221.4	2,258.1	2,312.3	2,380.8	2,464.0	2,541.7	2,602.6	2,658.7
Percent Change	1.2%	2.1%	2.4%	2.3%	0.8%	-4.5%	-1.0%	1.7%	2.4%	3.0%	3.5%	3.2%	2.4%	2.2%
Unemployment Rate[1]	5.5%	5.0%	4.3%	3.7%	4.9%	7.3%	8.7%	8.4%	7.9%	6.9%	5.0%	3.9%	3.3%	2.8%
Personal Income ($ *Millions*)[2]	$164,457	$176,129	$189,493	$201,743	$208,608	$198,082	$201,570	$219,861	$234,006	$246,648	$267,225	$282,665	$288,103	$299,677
Percent Change	3.4%	7.1%	7.6%	6.5%	3.4%	-5.0%	1.8%	9.1%	6.4%	5.4%	8.3%	5.8%	1.9%	4.0%
Per Capita Personal Income ($)[2]	35,947	38,025	40,143	41,996	42,663	39,838	39,930	42,972	45,120	46,869	50,021	51,956	52,097	53,504
Percent Change	2.3%	5.8%	5.6%	4.6%	1.6%	-6.6%	0.2%	7.6%	5.0%	3.9%	6.7%	3.9%	0.3%	2.7%
Wage & Salary Income ($ *Millions*)[2]	$93,569	$98,787	$105,664	$112,506	$116,678	$112,297	$113,786	$118,558	$125,014	$129,597	$138,678	$146,635	$151,322	$158,840
Percent Change	4.8%	5.6%	7.0%	6.5%	3.7%	-3.8%	1.3%	4.2%	5.4%	3.7%	7.0%	5.7%	3.2%	5.0%
Retail Trade Sales ($ *Millions*)[3]	$62,288	$65,492	$70,437	$75,329	$74,760	$66,345	$70,738	$75,548	$80,073	$83,569	$90,653	$94,920	NA	NA
Percent Change	6.1%	5.1%	7.5%	6.9%	-0.8%	-11.3%	6.6%	6.8%	6.0%	4.4%	8.5%	4.7%		
Residential Housing Permits[4]	44,855	45,422	39,211	30,149	19,507	9,385	11,530	13,386	21,325	27,263	29,257	30,490	37,037	41,069
Percent Change	9.3%	1.3%	-13.7%	-23.1%	-35.3%	-51.9%	22.8%	16.1%	59.3%	27.8%	7.3%	4.2%	21.5%	10.9%
Nonresidential Construction (*Millions*)[5]	$3,245	$4,275	$4,641	$5,259	$4,114	$3,354	$3,147	$3,923	$3,695	$3,624	$4,351	$4,988	$5,972	$6,062
Percent Change	20.8%	31.7%	8.6%	13.3%	-21.8%	-18.5%	-6.2%	24.7%	-5.8%	-1.9%	20.1%	14.6%	19.7%	1.5%
Denver-Boulder-Greeley Inflation[1]	0.1%	2.1%	3.6%	2.2%	3.9%	-0.6%	1.9%	3.7%	1.9%	2.8%	2.8%	1.2%	2.8%	3.4%
Population (*Thousands, July 1*)[4]	4,575	4,632	4,720	4,804	4,890	4,972	5,048	5,116	5,186	5,263	5,342	5,440	5,530	5,607
Percent Change	1.0%	1.2%	1.9%	1.8%	1.8%	1.7%	1.5%	1.4%	1.4%	1.5%	1.5%	1.8%	1.6%	1.4%

NA = Not available.
[1]U.S. Bureau of Labor Statistics. Inflation shown as the year-over-year change in the consumer price index for Denver-Boulder-Greeley metro area.
[2]U.S. Bureau of Economic Analysis. Personal income and wages and salaries not adjusted for inflation.
[3]Colorado Department of Revenue.
[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.