



# FOCUS COLORADO: ECONOMIC AND REVENUE FORECAST

COLORADO LEGISLATIVE COUNCIL STAFF  
ECONOMICS SECTION

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*Photograph courtesy of Suzanne Keim.*

## HIGHLIGHTS

The Colorado and U.S. economies are expected to continue to expand at a modest pace. Demographic change, growing inflationary pressures, and rising interest rates will temper consumer spending. Business activity has improved. Yet, the recovery in energy, manufacturing, and export industries remains fragile and dependent upon global factors. Elevated global political uncertainty poses a significant risk to the economic outlook.

Preliminary data indicate that the General Fund ended **FY 2015-16** with a surplus of \$49.7 million in excess of the required reserve.

A **TABOR refund** will not occur for tax year 2016, as state revenue fell short of the Referendum C cap in FY 2015-16. Revenue is also expected to fall short in FY 2016-17 before exceeding the cap in FY 2017-18 and FY 2018-19.

In **FY 2016-17**, General Fund revenue is expected to be \$169.2 million, or 1.6 percent, short of the amount needed to fully fund the budget and a 6.5 percent reserve. This amount is net of additional Senate Bill 16-218 diversions from the General Fund to cover severance tax refunds estimated at \$45.7 million.

The General Assembly will have \$215.7 million, or 2.1 percent, more revenue to spend or save in **FY 2017-18** than the amount budgeted for FY 2016-17. This amount assumes the FY 2016-17 shortfall is carried forward into FY 2017-18. The shortfall is net of a TABOR refund obligation and halved Senate Bill 09-228 transfers to capital construction and transportation.

The **residential assessment rate**, which is applied to the market value of residential property to determine its assessed value for property taxes, is expected to fall in 2017. School finance funding will require \$380.8 million from the General Fund in FY 2017-18 to hold the negative factor constant and maintain a \$100 million balance in the State Education Fund.

After dropping last year, the state's **adult prison population** is increasing, while **juvenile corrections populations** are expected to continue to fall.

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## EXECUTIVE SUMMARY

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This report presents the budget outlook based on current law and the December 2016 General Fund revenue, cash fund revenue, and TABOR forecasts. It also includes summaries of expectations for the U.S. and Colorado economies and summaries of current economic conditions in nine regions around the state.

Additionally, this report includes four annual forecasts related to the budget. Forecasts for assessed values of taxable property and kindergarten through twelfth grade (K-12) enrollment are presented to inform the budget for school finance. Forecasts for the adult prison and parole populations and the Division of Youth Corrections commitment, detention, and parole populations are presented to inform the budgets for the Department of Corrections and the Department of Human Services.

### General Fund Budget Outlook

**FY 2015-16.** Based on preliminary data, the General Fund ended FY 2015-16 with \$49.7 million more than was budgeted to be spent and saved in the reserve. Revenue fell short of the Referendum C cap by \$49.9 million.

**FY 2016-17.** The General Fund is expected to end FY 2016-17 with a reserve equal to 4.7 percent of appropriations, \$169.2 million lower than the budgeted 6.5 percent reserve. This shortfall has fallen relative to expectations in September because of increased expectations for individual income, sales, and use tax revenue.

Revenue subject to TABOR is expected to fall short of the Referendum C cap by \$113.8 million.

**FY 2017-18 — Unbudgeted.** Assuming the \$169.2 million shortfall in FY 2016-17 is addressed by reducing the required reserve, revenue will fall short of the amount required to maintain the same level of appropriations in FY 2017-18 as is currently budgeted for FY 2016-17 by \$215.7 million, or 2.1 percent. This figure is net of halved Senate Bill 09-228 transfers to the Highway Users Tax Fund and the Capital Construction Fund, and a TABOR refund obligation of \$279.4 million.

*More information about the **General Fund budget overview** begins on page 7 and is summarized in Table 1 on page 8.*

*More information about the state's **TABOR outlook** begins on page 15 and is summarized in Table 5 on page 18.*

*The **General Fund revenue** forecast begins on page 21 and is summarized in Table 8 on page 25.*

### Cash Fund Revenue

Cash fund revenue subject to TABOR totaled \$2.99 billion in FY 2015-16. This revenue is expected to fall 4.8 percent to \$2.85 billion in FY 2016-17. A large decline in Hospital Provider Fee revenue will be largely offset by increases in most other cash fund revenue sources in FY 2016-17. Total cash fund revenue subject to TABOR will increase 13.7 percent to \$3.24 billion in FY 2017-18, as a rebound in Hospital Provider Fee revenue will augment increases in severance tax revenue. This revenue is projected to grow another 1.8 percent to \$3.30 billion in FY 2018-19, as both transportation and severance tax revenue continue to rise.

*The **cash fund revenue forecasts** begin on page 27. Forecasts for state revenue subject to TABOR are summarized in Table 9 on page 28.*

## Economic Outlook

The Colorado and U.S. economies are expected to continue to expand at a modest pace throughout the forecast period. Aging U.S. and Colorado populations, growing inflationary pressures, and rising interest rates are expected to temper consumer spending in coming years. Business activity has improved in recent months, sparking renewed optimism in U.S. economic growth prospects. Yet, the recovery in energy, manufacturing, and export industries remains fragile and reliant upon stronger global demand and higher commodity prices. Risks to the forecast remain skewed to the downside, with elevated global political uncertainty threatening the outlook.

*More information about the **state and national economic outlook** begins on page 35.*

*Summaries of economic conditions in nine **regions** around the state begin on page 92.*

## Assessed Value and Residential Assessment Rate

The residential assessment rate is expected to decrease from 7.96 percent to 6.85 percent in 2017, the first decrease since 2003. Despite healthy growth in residential market values, assessed values will decrease 3.1 percent in 2017 due to the rate reduction. Nonresidential values are expected to increase 2.5 percent. Total statewide assessed values are expected to decrease 0.1 percent. However, assessed values in each region of the state are determined by the unique mix of properties and economic forces specific to each region and school district.

*The **property tax assessed value** forecast begins on page 59.*

*The **kindergarten through twelfth grade enrollment** forecast begins on page 69.*

## Kindergarten through Twelfth Grade Enrollment

Colorado's public school enrollment continued to increase in the current 2016-17 school year, albeit at a slower rate than recent years. The enrollment count totaled 832,519 FTE students across Colorado's public schools, up 5,291 FTE students, or 0.6 percent, from the previous school year.

Colorado schools are expected to continue to add students over the next two school years. Statewide K-12 enrollment is projected to increase by 7,415 FTE students, or 0.9 percent, in the 2017-18 school year. Enrollment in the 2018-19 school year is expected to increase 0.7 percent, or by 5,864 FTE students. Growth will be strongest in the southwest mountain and northern regions, where strong job growth and new relatively affordable housing options will continue to attract young families.

## Implications of School Finance Related Forecasts

**FY 2016-17.** School districts statewide experienced lower enrollment growth and are expected to collect less local tax revenue than was anticipated when the FY 2016-17 budget was passed. On net, these changes create \$5.6 million more flexibility in school finance funding than was previously expected.

**FY 2017-18.** School finance funding is expected to require \$380.8 million from the General Fund in FY 2017-18 to maintain a constant negative factor and a \$100 million fund balance in the State Education Fund. Of this amount, \$178 million is the result of changes in expectations for the local share. Funding from the State Education Fund is expected to decrease by \$154 million relative to FY 2016-17 in order to maintain a \$100 million balance.

## Prison and Parole Populations

The state's **adult prison population** is expected to increase from 19,619 inmates in June 2016 to 20,067 inmates in June 2019, an average annual increase of 0.8 percent over three years. Revocations of adult parolees to prison triggered a significant decline in the prison population during FY 2015-16 but are expected to stabilize, while increasing court commitments are expected to drive a population increase through the forecast period.

*The **adult prison and parole population** forecasts begin on page 77.*

*The forecast for juvenile populations in the **Division of Youth Corrections** begins on page 87.*

The **in-state adult parole population** is projected to increase from 8,402 offenders in June 2016 to 8,739 in June 2019, an average annual increase of 1.3 percent. Expectations have been increased significantly relative to last year's forecast primarily as a result of the implementation of Senate Bill 15-124.

The **juvenile commitment population** is expected to decrease from an average daily population of 690 youths in FY 2015-16 to 558 youths in FY 2018-19, an average annual decrease of 6.8 percent over the three-year forecast period. The **juvenile detention population** is expected to decrease 4.9 percent annually, falling from 279 youths on average in FY 2015-16 to 240 youths on average in FY 2018-19. The average daily **youth parole population** will correspondingly fall from 242 youths in FY 2015-16 to 233 youths in FY 2018-19.

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## GENERAL FUND BUDGET OVERVIEW

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Table 1 on page 8 presents the General Fund overview based on current law. Tables 3 and 4 on pages 13 and 14 provide estimates for General Fund rebates and expenditures (line 9 of Table 1) and detail for cash fund transfers to and from the General Fund (lines 3 and 10 of Table 1). This section also presents the implications of the K-12 enrollment and assessed value forecasts on the school finance budget, expectations for revenue to the State Education Fund, the outlook for Senate Bill 09-228 transfers to capital construction and transportation, and the availability of tax benefits dependent on the collection of sufficient General Fund revenue.

**FY 2015-16.** Based on preliminary data, the General Fund ended FY 2015-16 with \$49.7 million more than was budgeted to be spent or saved in the reserve. Revenue subject to TABOR fell short of the Referendum C cap by \$49.9 million.

A total of \$56.8 million was diverted from General Fund revenue to address severance tax refunds pursuant to Senate Bill 16-218. Of these refunds, \$39.0 million were the result of economic trends in the oil and gas industry rather than the Supreme Court's decision in *BP America Production Co. v. Colorado Department of Revenue, et al.* Although they occurred after July 1, they reduced revenue reported for FY 2015-16 through an accounting accrual adjustment.

Senate Bill 16-218 also required that the amount of money held in reserve in the General Fund for FY 2015-16 be reduced by a dollar for each dollar diverted for severance tax refunds. Therefore, the required reserve was reduced by \$56.8 million to 5.0 percent of operating appropriations.

**FY 2016-17.** As shown in Figure 1, the General Fund is expected to end the year with a 4.7 percent reserve, \$169.2 million lower than the budgeted 6.5 percent reserve. Expectations for General Fund revenue net of changes to marijuana tax collections increased by \$115 million relative to the September forecast. Most of the increase resulted from higher expectations for sales, use, and individual income tax collections. Revenue subject to TABOR is expected to fall short of the Referendum C cap by \$113.8 million.

This shortfall incorporates the impact of an estimated \$45.7 million diversion of income taxes from the General Fund to cover the costs of severance tax refunds pursuant to Senate Bill 16-218.

**FY 2017-18 — Unbudgeted.** Figure 2 illustrates new revenue in FY 2017-18 relative to expected changes in statutory and constitutional obligations between this year and next. Because a budget has not yet been enacted for FY 2017-18, Figure 2 and lines 22 and 23 of Table 1 show the amount of revenue available in FY 2017-18 relative to the amount budgeted to be spent or saved *this year*, in FY 2016-17. Assuming the \$169.2 million shortfall in FY 2016-17 is addressed by reducing the reserve and is therefore carried forward into FY 2017-18, the General Assembly will have \$215.7 million, or 2.1 percent, more to spend from or save in the General Fund than what is budgeted to be spent this year. This figure assumes that the reserve is restored to the full 6.5 percent in FY 2017-18. It is net of halved Senate Bill 09-228 transfers to capital construction and transportation and a set aside for the TABOR refund obligation of \$279.4 million.



**Table 1**  
**General Fund Overview**  
*Dollars in Millions*

		FY 2015-16 Preliminary	FY 2016-17 Estimate	FY 2017-18 Estimate	FY 2018-19 Estimate
<b>Funds Available</b>					
1	Beginning Reserve	\$689.6	\$513.5	\$465.7	*
2	General Fund Revenue	\$9,968.4	\$10,424.3	\$11,008.5	\$11,641.7
3	Transfers from Other Funds <i>(Table 4)</i>	25.0	45.3	18.3	19.1
4	<b>Total Funds Available</b>	<b>\$10,683.0</b>	<b>\$10,983.2</b>	<b>\$11,492.5</b>	*
5	Percent Change	3.7%	2.8%	4.6%	*
<b>Expenditures</b>		<b>Budgeted</b>	<b>Budgeted</b>	<b>Estimate</b>	<b>Estimate</b>
6	General Fund Appropriations Subject to Limit	\$9,335.6	\$9,813.3	*	*
7	TABOR Refund Obligation Under Art. X, §20, (7)(d) <sup>1</sup>	0.0	0.0	279.4	287.2
8	Release of TABOR Refund Obligation Under Art. X, §20, (3)(c) <sup>2</sup>	(58.0)	NA	NA	NA
9	Rebates and Expenditures <i>(Table 3)</i>	281.2	283.3	292.7	306.7
10	Transfers to Other Funds <i>(Table 4)</i> <sup>3</sup>	176.2	153.0	88.9	88.4
11	Transfers to the State Education Fund Pursuant to SB 13-234	25.3	25.3	25.3	25.0
12	Transfers for Highway Construction	199.2	158.0	110.1	116.4
13	Transfers to the Capital Construction Fund	271.1	84.5	55.0	58.2
14	<b>Total Expenditures</b>	<b>\$10,230.7</b>	<b>\$10,517.5</b>	*	*
15	Percent Change	6.0%	2.8%	*	*
16	Accounting Adjustments <sup>4</sup>	61.1	*	22.9	*
<b>Reserve</b>		<b>Budgeted</b>	<b>Budgeted</b>	<b>Estimate</b>	<b>Estimate</b>
17	Year-End General Fund Reserve	\$513.5	\$465.7	*	*
18	Year-End Reserve as a Percent of Appropriations	5.5%	4.7%	*	*
19	Statutorily Required Reserve <sup>5</sup>	463.9	634.9	*	*
20	<b>Amount in Excess or (Deficit) of Statutory Reserve</b>	<b>\$49.7</b>	<b>(\$169.2)</b>	*	*
21	Excess Reserve as a Percent of Expenditures	0.5%	-1.6%	*	*
<b>Perspective on FY 2017-18 (Unbudgeted Year)</b>				<b>Estimate</b>	<b>Estimate</b>
Amount Available in FY 2017-18 Relative to FY 2016-17 Expenditures <sup>6</sup>					
22	Amount in Excess of (Deficit) of Statutory Reserve			\$215.7	*
23	As a Percent of Prior-Year Expenditures			2.1%	*
<b>Addendum</b>		<b>Preliminary</b>	<b>Estimate</b>	<b>Estimate</b>	<b>Estimate</b>
24	Percent Change in General Fund Appropriations	5.3%	5.1%	*	*
25	5% of Colorado Personal Income Appropriations Limit	\$12,332.4	\$13,326.7	\$13,886.6	\$14,414.3
26	Transfers to State Education Fund Per Amendment 23	\$522.6	\$549.3	\$582.2	\$616.3

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

<sup>1</sup>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.

<sup>2</sup>\$58 million set aside in FY 2014-15 pursuant to House Bill 15-1367 and its release in FY 2015-16 pursuant to the passage of Proposition BB.

<sup>3</sup>Includes diversions from the General Fund to cover severance tax refunds pursuant to Senate Bill 15-218, which totaled \$56.8 million in FY 2015-16 and are estimated at \$45.7 million for FY 2016-17.

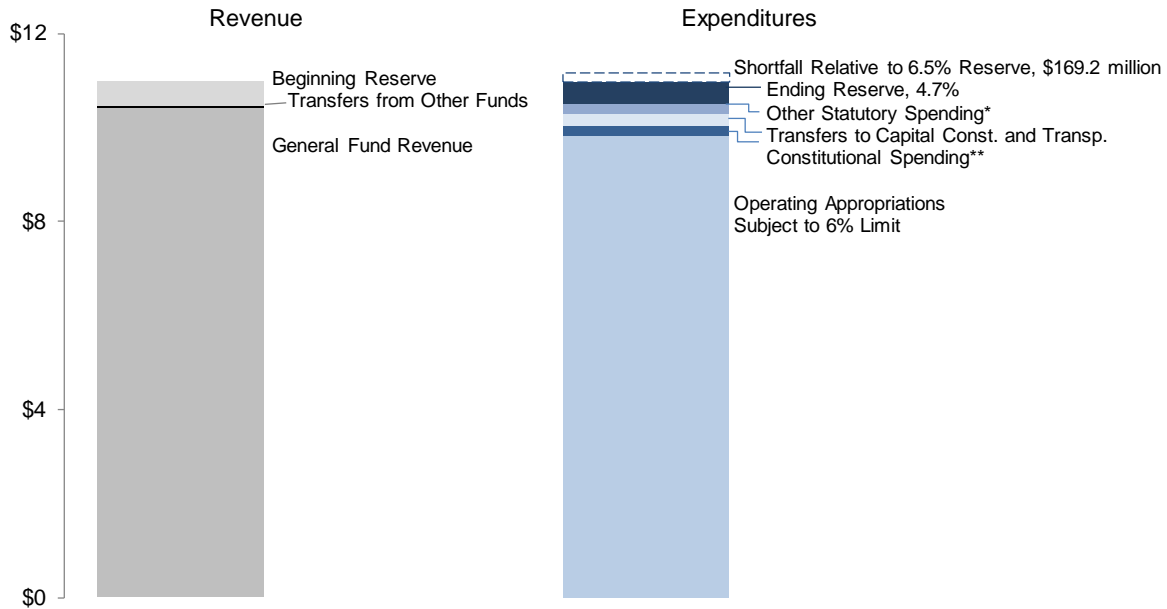
<sup>4</sup>The \$22.9 million accounting adjustment in FY 2017-18 represents the share of the \$279.4 million FY 2017-18 TABOR refund obligation that is carried forward from the FY 2014-15 refund obligation; this amount is already restricted in the fund balance.

<sup>5</sup>Pursuant to Senate Bill 15-251, appropriations to fulfill the state's obligations of certain certificates of participation are excluded for purposes of calculating the statutory reserve requirement. In addition, the FY 2015-16 statutory reserve was reduced by \$56.8 million pursuant to Senate Bill 16-218.

<sup>6</sup>This holds appropriations in FY 2017-18 equal to appropriations in FY 2016-17 (line 6) to determine the total amount of money available relative to FY 2016-17 expenditures, net of the obligations in lines 7 through 13.



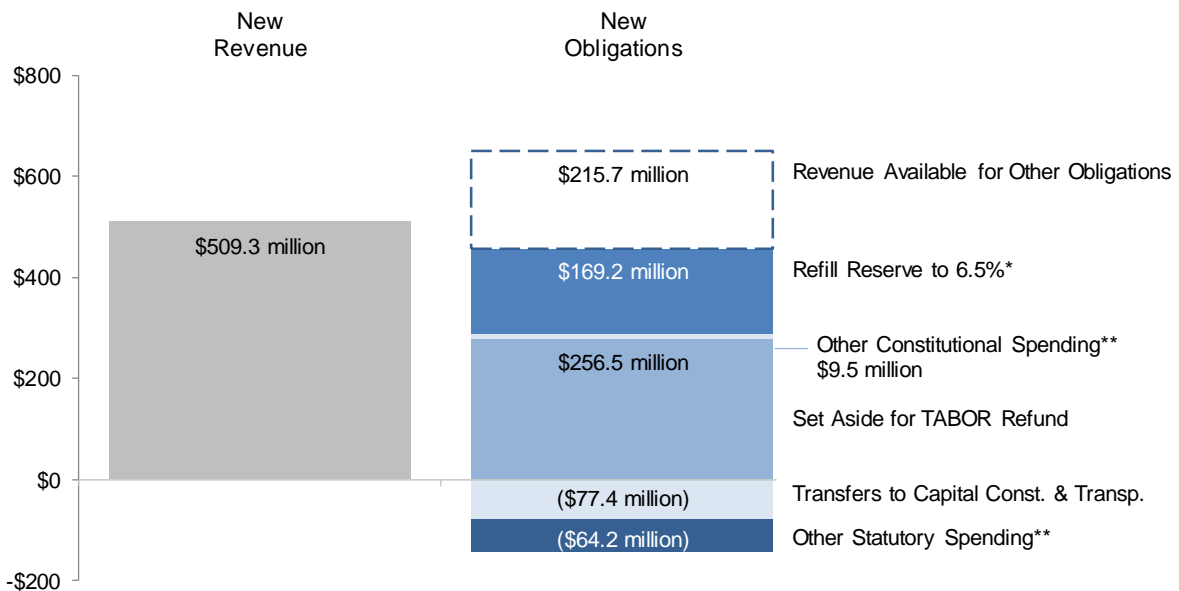
**Figure 1**  
**FY 2016-17 General Fund Budget Outlook**  
*Dollars in Billions*



\*Other statutory spending includes severance tax refunds pursuant to Senate Bill 16-218, a transfer to the Older Coloradans Fund, and expenditures on the Aged Property Heat Credit, interest payments for school loans, local fire and police pensions, and cigarette and marijuana tax revenue transfers to local governments.

\*\*Constitutional spending includes restrictions on revenue for future TABOR refunds, reimbursements to counties for property tax exemptions, and expenditures for the Old Age Pension Fund.

**Figure 2**  
**Change in General Fund Revenue and Obligations**  
**FY 2016-17 to FY 2017-18**  
*Dollars in Millions*



\*This assumes the \$169.2 million FY 2016-17 shortfall is addressed by reducing the reserve in FY 2016-17, thereby carrying it forward.

\*\* Please see the footnotes to Figure 1 for the definition of constitutional spending and other statutory spending.

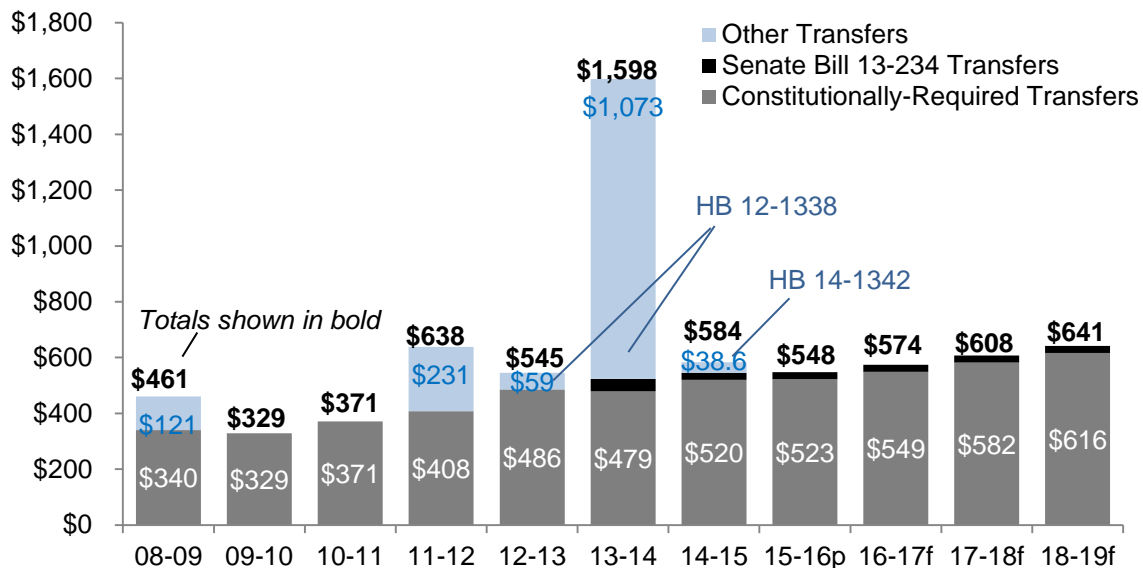
## Implications of School Finance Related Forecasts

**FY 2016-17.** School districts statewide experienced lower enrollment growth and are expected to collect less local tax revenue than was anticipated when the FY 2016-17 budget was passed. On net, these changes create \$5.6 million more flexibility in school finance funding than was previously expected.

**FY 2017-18.** School finance funding is expected to require \$380.8 million from the General Fund in FY 2017-18 to maintain a constant negative factor and a \$100 million fund balance in the State Education Fund. Of this amount, \$178 million is the result of changes in expectations for the local share. Funding from the State Education Fund is expected to decrease by \$154 million relative to FY 2016-17 in order to maintain a \$100 million balance.

**State Education Fund.** The Colorado Constitution requires the State Education Fund to receive one-third of one percent of taxable income (see Table 1, line 26). In addition, the General Assembly has authorized the transfer of additional moneys from the General Fund to the State Education Fund. Money in the State Education Fund is required to be used to fund kindergarten through twelfth grade public education. However, additional revenue in the State Education Fund does not affect the overall flexibility of the General Fund budget. Figure 3 shows a history and forecast for these revenue sources through the end of the forecast period.

**Figure 3**  
**Revenue to the State Education Fund**  
*Dollars in Millions*



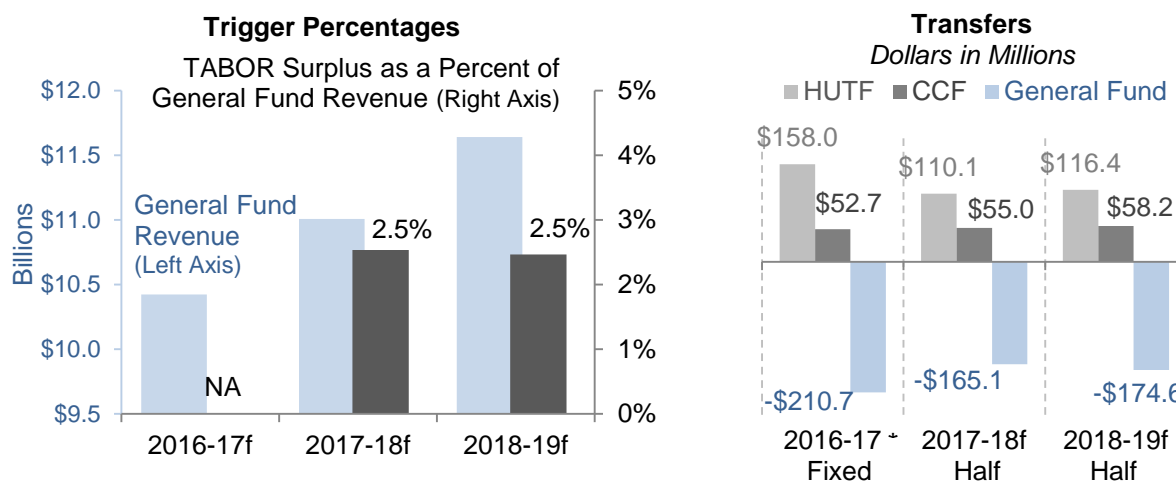
Source: Colorado State Controller's Office through FY 2015-16 and Legislative Council Staff from FY 2016-17-through FY 2018-19. "p" indicates preliminary; "f" indicates forecast.

## Senate Bill 09-228 Transfers

Senate Bill 09-228 requires a five-year block of infrastructure transfers as soon as the first release of data published by the U.S. Bureau of Economic Analysis reports that Colorado personal income increased by at least 6.0 percent during any calendar year following the Great Recession. This occurred for 2014, triggering the first year of the five-year block of infrastructure transfers under Senate Bill 09-228 in FY 2015-16. House Bill 16-1416 fixed Senate Bill 09-228 transfers in FY 2015-16 and FY 2016-17 to set amounts. The Highway Users Tax Fund received \$199.2 million in FY 2015-16 and will receive \$158.0 million in FY 2016-17. The Capital Construction Fund received \$49.8 million in FY 2015-16 and will receive \$52.7 million in FY 2016-17.

In FY 2017-18 through FY 2019-20, Senate Bill 09-228 requires transfers equal to 1.0 percent and 2.0 percent of General Fund revenue to the Capital Construction Fund and the Highway Users Tax Fund, respectively. However, if during any particular year the state incurs a large enough TABOR surplus, these transfers will either be cut in half or eliminated for that year. The transfers are cut in half if the TABOR surplus during that year is between 1.0 percent and 3.0 percent of General Fund revenue, and eliminated if the surplus exceeds 3.0 percent of General Fund revenue.

**Figure 4**  
**Projected Senate Bill 09-228 Transfers and General Fund Impacts**



\*House Bill 16-1416 fixed the transfer amounts in FY 2015-16 and FY 2016-17. The size of the TABOR surplus relative to General Fund revenue is therefore no longer applicable in these years.

Source: Colorado State Controller's Office through FY 2015-16 and Legislative Council Staff from FY 2016-17 through FY 2018-19. "p" indicates preliminary; "f" indicates forecast.

Figure 4 shows the TABOR surplus as a percent of General Fund revenue and expected Senate Bill 09-228 transfers in FY 2017-18 and FY 2018-19. This forecast anticipates halved transfers in both FY 2017-18 and FY 2018-19. In FY 2017-18, the TABOR refund obligation is expected to total \$279.4 million, or 2.5 percent of General Fund revenue. In FY 2018-19, the TABOR refund obligation is expected to be 2.5 percent of General Fund revenue. Small margins of error in the forecasts for General Fund and cash fund revenue subject to TABOR

could produce very different results. Because this forecast is based on current law, these errors include the impact of legislation enacted in the future by the General Assembly or U.S. Congress that affect General Fund revenue or cash fund revenue subject to TABOR. Thus, these transfers could occur in full or not at all.

## **Tax Policies Dependent on Sufficient General Fund Revenue**

Two tax policies are only available when the Legislative Council Staff forecast indicates that General Fund revenue will be sufficient to allow General Fund appropriations to increase by at least 6 percent. Revenue did not meet this requirement in FY 2015-16 and is not expected to meet it through at least FY 2018-19, the end of the forecast period. As a result, the sales tax refund for cleanrooms was not available from July 2016 through June 2017 and is not expected to be available thereafter. In addition, the historic property preservation tax credit will not be available in tax years 2016 and 2017; and is not expected to be available through in tax year 2018. Table 2 lists and describes the availability of these tax policies.

**Table 2**  
**Tax Policies Dependent on Sufficient General Fund Revenue to Allow General Fund Appropriations to Increase by at Least 6 Percent**

<b>Tax Policy</b>	<b>Forecast that Determines Availability</b>	<b>Tax Policy Availability</b>
Historic Property Preservation Income Tax Credit (Section 39-22-514, C.R.S.) <i>Revenue reduction of less than \$1.0 million per year</i>	December forecast immediately before the tax year when the credit becomes available.	Available in tax years 2013 through 2015. Not available in tax years 2016 and 2017. Not expected to be available in tax year 2018. Repealed tax year 2020.
Cleanroom Machinery Sales and Use Tax Exemption (Section 39-26-722, C.R.S.) <i>Revenue reduction of less than \$500,000 per year</i>	If the June forecast indicates sufficient revenue for the fiscal year that is about to end, the exemption will become available in July.	Not available July 2016 through June 2017 and not expected to be available thereafter. Repealed July 1, 2018.

**Table 3**  
**General Fund Rebates and Expenditures**  
*Dollars in Millions*

<b>Category</b>	<b>Preliminary FY 2015-16</b>	<b>Estimate FY 2016-17</b>	<b>Estimate FY 2017-18</b>	<b>Estimate FY 2018-19</b>
Senior and Veterans Property Tax Exemptions	\$127.1	\$136.0	\$148.0	\$160.7
Percent Change	8.8	6.9	8.9	8.5
Cigarette Rebate	10.5	11.1	11.0	10.8
Percent Change	-14.2	5.4	-1.3	-1.4
Old-Age Pension Fund	108.3	97.7	95.1	93.4
Percent Change	8.9	-9.8	-2.6	-1.8
Aged Property Tax and Heating Credit	9.3	6.0	5.7	5.6
Percent Change	64.9	-36.1	-3.8	-2.6
Older Coloradans Fund <sup>3</sup>	10.0	10.0	10.0	10.0
Percent Change	-0.1	0.0	0.0	0.0
Interest Payments for School Loans	1.2	3.6	4.9	6.8
Percent Change	84.1	187.7	36.7	38.2
Fire and Police Pensions	3.7	4.4	4.5	4.5
Percent Change	-11.9	20.0	1.0	1.0
Amendment 35 Distributions	0.9	0.9	0.9	0.9
Percent Change	1.7	2.1	-0.5	-0.7
Marijuana Sales Tax Transfer to Local Governments	10.1	13.7	12.6	14.0
Percent Change	70.9	35.6	-7.9	10.9
<b>TOTAL REBATES &amp; EXPENDITURES</b>	<b>\$281.2</b>	<b>\$283.3</b>	<b>\$292.7</b>	<b>\$306.7</b>

*Totals may not sum due to rounding.*

**Table 4**  
**Cash Fund Transfers**  
*Dollars in Millions*

<b>Transfers to the General Fund</b>		<b>2015-16</b>	<b>2016-17</b>	<b>2017-18</b>	<b>2018-19</b>
HB 05-1262	Amendment 35 Tobacco Tax	\$0.9	\$0.9	\$0.9	\$0.9
HB 10-1325	Natural Resource Damage Recovery Fund	0.2	0.2		
HB 11-1281	Nursing Teacher Loan Forgiveness Pilot Program	0.1			
SB 13-133	Limited Gaming Fund	15.5	15.7	17.4	18.2
HB 15-1379 & SB 15-168	Marijuana Tax Cash Fund	0.1			
SB 16-196 & HB 16-1398	Intellectual and Developmental Disability Fund	0.3	1.2		
SB 15-249 & HB 16-1418	Marijuana Tax Cash Fund		26.3		
§ 36-1-148 (2)	Land and Water Management Fund	0.03			
HB 16-1409	Unclaimed Property Trust Fund	8.0			
HB 16-1413	Water Quality Improvement Fund		1.2		
<b>Total Transfers to the General Fund</b>		<b>\$25.0</b>	<b>\$45.3</b>	<b>\$18.3</b>	<b>\$19.1</b>
<b>Transfers from the General Fund</b>		<b>2015-16</b>	<b>2016-17</b>	<b>2017-18</b>	<b>2018-19</b>
SB 11-047	Bioscience Income Tax Transfer to OEDIT	\$7.3	\$1.66	\$8.1	\$8.6
HB 12-1315	Clean Renewable Energy Fund	1.6	1.6		
HB 13-1001 & HB 14-1011	Advanced Industries Acceleration Fund				
HB 13-1193	Advanced Industries Export Acceleration Fund	0.3	0.3	0.3	
SB 14-215	Marijuana Tax Cash Fund	57.2	77.6	71.5	79.3
HB 14-1016 <sup>1</sup>	Procurement Technical Assistance Cash Fund	0.2	0.2	0.2	0.2
SB 14-011	Energy Research Cash Fund	1.0			
HB 15-1178	CWCB Emergency Dewatering Grant Account	0.2	0.3		
SB 15-112	Building Regulation Fund		0.2		
SB 15-244	State Public School Fund	7.8	7.8	7.8	
SB 15-245	Natural Hazard Mapping Fund	3.8	2.4	0.7	
HB 15-1367 & Proposition BB	Public School Capital Construction Fund (BEST)	40.0			
HB 16-1161 <sup>2</sup>	Veterans Grant Program Fund ( <i>conditional</i> )				
HB 16-1288	Industry Infrastructure Fund		0.3	0.3	0.3
HB 16-1453	Cybersecurity Cash Fund		7.9		
SB 16-003	Wildfire Risk Reduction Fund		1.0		
SB 16-218	State Severance Tax Refunds	56.8	45.7		
<b>Total Transfers from the General Fund</b>		<b>\$176.2</b>	<b>\$153.0</b>	<b>\$88.9</b>	<b>\$88.4</b>
<b>Net General Fund Impact</b>		<b>(\$151.2)</b>	<b>(\$107.7)</b>	<b>(\$70.6)</b>	<b>(\$69.4)</b>

<sup>1</sup>This transfer is dependent on the receipt of at least \$200,000 in gifts, grants, and donations by the relevant contractor.

<sup>2</sup>This transfer is conditional, dependent on budgeted expenditures for the Senior Homestead and Disabled Veterans Property Tax Exemptions, exceeding actual expenditures. This bill transfers 5 percent of the difference to the Veterans Grant Program Fund.

## TABOR OUTLOOK

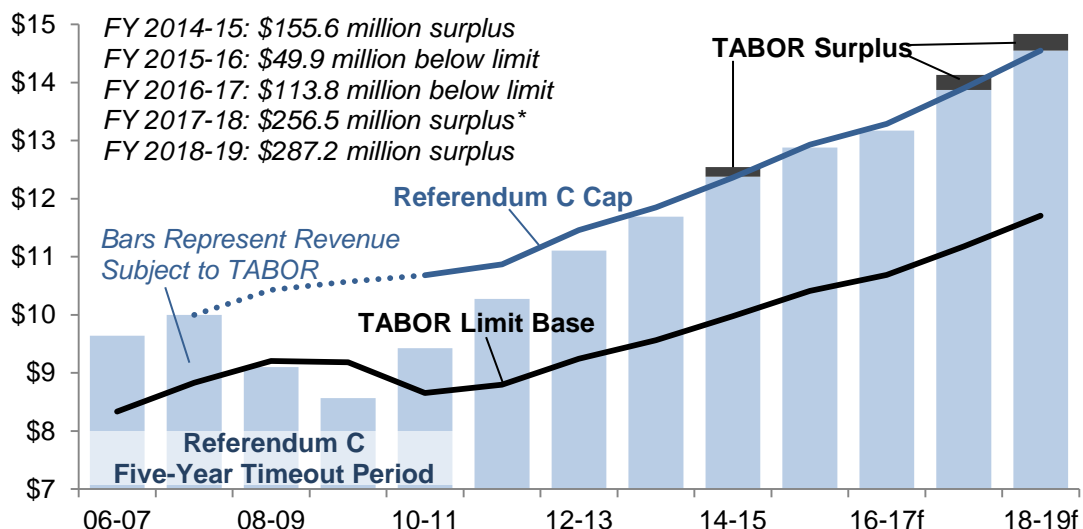
This section presents the outlook for the state's TABOR situation through FY 2018-19. Forecasts for TABOR revenue and surplus amounts are summarized in Table 5 on page 18 and illustrated in Figure 5, which also provides a ten-year history of the TABOR limit base and the Referendum C cap.

The state did not collect a TABOR surplus in FY 2015-16, and no TABOR refund will be available on returns for tax year 2016. The revenue recertification issued by the Office of the State Controller on September 15, 2016, indicates that state fiscal year spending totaled \$12,880.8 million, falling short of the Referendum C cap by \$49.9 million. These numbers are preliminary and subject to additional audits.

For FY 2016-17, state revenue subject to TABOR is expected to fall short of the Referendum C cap by \$113.8 million. This amount is within normal forecast error, indicating the possibility that a TABOR surplus may be collected during FY 2016-17. State revenue is expected to exceed the Referendum C cap by **\$256.5 million in FY 2017-18** and **\$287.2 million in FY 2018-19**, prompting **TABOR refunds of \$279.4 million in FY 2018-19 and \$287.2 million in FY 2019-20**. The amount of the refund for FY 2018-19 is expected to exceed the FY 2017-18 TABOR surplus by \$22.9 million, the amount by which prior year TABOR refunds fell short of the state's refund obligation.

Line 7 of the General Fund overview presented in Table 1 on page 8 presents expectations for the state's TABOR refund obligation for all years of the current forecast period. Of the refund obligation expected to be incurred for FY 2017-18, the General Assembly will be required to set aside only the \$256.5 million TABOR surplus collected in that year. The \$22.9 million adjustment for previous underrefunds is already restricted in the General Fund and should not be encumbered a second time; this is reflected in the accounting adjustment in line 16 of Table 1.

**Figure 5**  
**TABOR Refund Estimates**  
*Dollars in Millions*



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 of previous TABOR surpluses.



**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 by inflation, population growth, and changes in enterprise status. It is always grown from the prior year's cap, regardless of the level of revenue collected.

***Fiscal Year Spending:***

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

When revenue exceeds the cap, TABOR requires the surplus to be refunded during the following fiscal year. Additionally, state law requires adjustments to the refund amount based on overrefunds or underrefunds of previous TABOR surpluses. Most recently, revenue exceeded the Referendum C cap by \$155.6 million in FY 2014-15, prompting TABOR refunds on returns for tax year 2015. The amount of the next TABOR refund is expected to differ from the next TABOR surplus for two reasons related to the underrefund of the FY 2014-15 surplus as described below.

*Refunds issues for tax year 2015.* At the time when tax forms were printed, the refund obligation for FY 2014-15 was estimated at \$153.7 million. The amounts of refunds available to individual taxpayers were intended to refund this amount. As of December 1, 2016, the Department of Revenue reports that refunds issued for tax year 2015 total \$136.3 million, or \$17.4 million less than the administered surplus. This amount will be refunded when the state next refunds a surplus.

*Adjustments to the FY 2014-15 TABOR schedule.* The Office of the State Controller discovered three adjustments to the FY 2014-15 TABOR schedule after tax forms were printed. These include:

- \$19.6 million subject to TABOR in the Department of Health Care Policy and Financing originally accounted as exempt;
- \$0.3 million subject to TABOR in the Department of Natural Resources originally accounted as exempt; and
- \$14.4 million exempt funds in the Department of Public Safety originally accounted as fiscal year spending.

These adjustments will add a net of \$5.5 million to the TABOR refund obligation when the state next refunds a surplus.

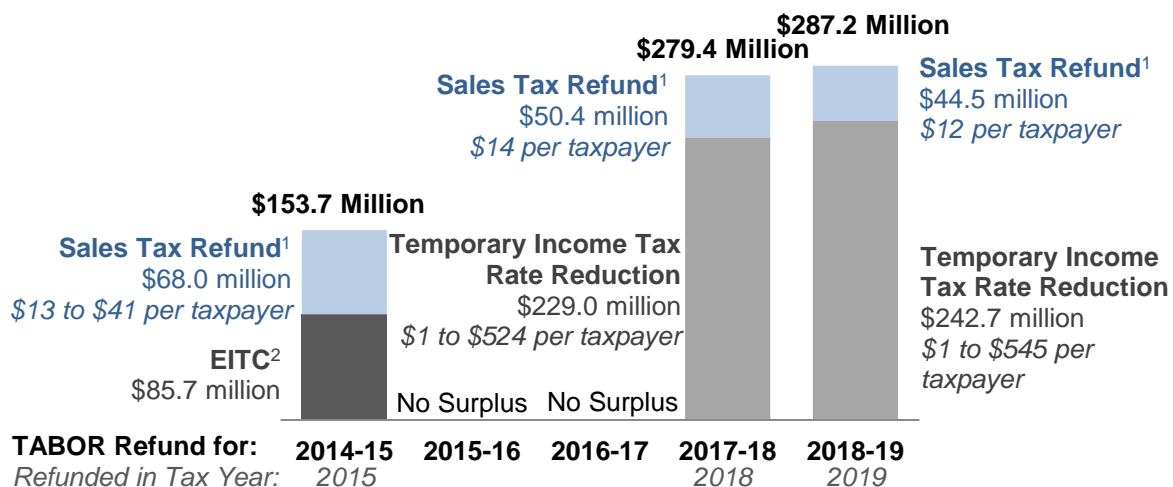
**TABOR refund mechanisms.** Figure 6 and Table 6 show how state law requires TABOR surplus amounts to be refunded. Current law contains two refund mechanisms: a sales tax refund and a temporary cut in the income tax rate from 4.63 percent to 4.50 percent. The size of the TABOR refund determines which refund mechanisms are available each year. A

separate Earned Income Tax Credit refund mechanism was used on returns for tax year 2015 and is now available as a permanent state income tax credit beginning in tax year 2016.

The TABOR surplus expected in FY 2017-18 will be refunded in FY 2018-19 on income tax returns for tax year 2018. An estimated **\$229.0 million** will be refunded by a temporary income tax rate reduction from 4.63 percent to 4.50 percent, available to all individual and corporate income taxpayers. The remaining **\$50.4 million** will be available as a sales tax refund worth \$14 for taxpayers filing single returns and \$28 for taxpayers filing joint returns.

The TABOR surplus expected in FY 2018-19 will be refunded in FY 2019-20 on income tax returns for tax year 2019. An estimated **\$242.7 million** will be refunded by extension of the previous year's temporary income tax rate reduction, and the rate will revert to 4.63 percent in tax year 2020 unless the state continues to collect a sufficiently large TABOR surplus. The remaining **\$44.5 million** will be available as a sales tax return worth \$12 for taxpayers filing single returns and \$24 for taxpayers filing joint returns.

**Figure 6**  
**TABOR Refund Estimates**



<sup>1</sup>If the average sales tax refund among all taxpayers is \$15 or less, Section 39-22-2002 (2)(b), C.R.S. requires every taxpayer to receive an identical refund. If the amount exceeds \$15, Section 39-22-2003 (4)(a), C.R.S. requires the sales tax refund to be distributed proportionately to the sales tax refund that occurred in tax year 1999. Taxpayers filing joint returns receive twice the amount shown.

<sup>2</sup>Section 39-22-123.5 (3), C.R.S., converts the Earned Income Tax Credit from a TABOR refund mechanism into a permanent tax credit the year after it is first used to refund a TABOR surplus.

**Table 5**  
**TABOR Limit and Retained Revenue**  
*Dollars in Millions*

	Preliminary FY 2015-16	Estimate FY 2016-17	Estimate FY 2017-18	Estimate FY 2018-19
TABOR Revenue				
1 General Fund <sup>1</sup>	\$9,894.2	\$10,324.2	\$10,915.6	\$11,539.7
2 Cash Funds <sup>1</sup>	\$2,986.6	\$2,848.7	\$3,238.8	\$3,298.6
3 <b>Total TABOR Revenue</b>	<b>\$12,880.8</b>	<b>\$13,172.9</b>	<b>\$14,154.4</b>	<b>\$14,838.3</b>
<b>Revenue Limit</b>				
4 Allowable TABOR Growth Rate	4.4%	3.1%	4.6%	4.7%
5 Inflation ( <i>from Prior Calendar Year</i> )	2.8%	1.2%	2.9%	2.9%
6 Population Growth ( <i>from Prior Calendar Year</i> )	1.6%	1.9%	1.7%	1.8%
7 TABOR Limit Base	\$10,410.4	\$10,688.2	\$11,179.9	\$11,705.4
8 Voter Approved Revenue Change (Referendum C)	\$2,470.4	\$2,484.7	\$2,718.0	\$2,845.8
9 Total TABOR Limit / Referendum C Cap	\$12,930.7	\$13,286.7	\$13,897.9	\$14,551.1
10 <b>TABOR Revenue Above (Below) Referendum C Cap</b>	<b>(\$49.9)</b>	<b>(\$113.8)</b>	<b>\$256.5</b>	<b>\$287.2</b>
<b>Retained/Refunded Revenue</b>				
11 Revenue Retained under Referendum C <sup>2</sup>	\$2,470.4	\$2,484.7	\$2,718.0	\$2,845.8
12 Total Available Revenue ( <i>revenue available to be spent or saved</i> )	\$12,880.8	\$13,172.9	\$13,897.9	\$14,551.1
13 Amount Restricted in General Fund <sup>3</sup>			\$22.9	
14 <b>Revenue to Be Refunded to Taxpayers<sup>4</sup></b>	<b>\$0.0</b>	<b>\$0.0</b>	<b>\$279.4</b>	<b>\$287.2</b>
15 TABOR Reserve Requirement	\$386.4	\$395.2	\$416.9	\$436.5

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

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

<sup>3</sup>The General Fund contains a restricted \$22.9 million to be refunded with the next TABOR surplus. This amount comprises \$17.4 million under-refunded from the FY 2014-15 surplus and a net \$5.5 million discovered to be subject to TABOR after refunds were processed. Because this money is already set aside within the General Fund (i.e., "restricted"). Table 1 includes an accounting adjustment indicating that this amount does not need to be encumbered a second time.

<sup>4</sup>Pursuant to Section 24-75-201(2), C.R.S., the 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 2017-18 will be aside in FY 2017-18 and refunded in FY 2018-19 on income tax returns for tax year 2018.

**Table 6**  
**Average Taxpayer TABOR Refunds**

**No TABOR Refund Obligation is Forecast for FY 2016-17, Tax Year 2017**

**FY 2017-18 Refund Obligation, Tax Year 2018 Forecast**

Single Filers					Joint Filers		
Adjusted Gross Income		Six Tier Sales Tax	Income Tax Rate Cut	Total	Six Tier Sales Tax	Income Tax Rate Cut	Total
up to	\$38,900	\$14	\$8	\$22	\$28	\$1	\$29
\$38,900	to \$83,200	14	47	61	28	25	53
\$83,200	to \$129,700	14	92	106	28	77	105
\$129,700	to \$176,100	14	140	154	28	130	158
\$176,100	to \$220,400	14	182	196	28	182	210
\$220,400	and up	14	506	520	28	524	552

**FY 2018-19 Refund Obligation, Tax Year 2019 Forecast**

Single Filers					Joint Filers		
Adjusted Gross Income		Six Tier Sales Tax	Income Tax Rate Cut	Total	Six Tier Sales Tax	Income Tax Rate Cut	Total
up to	\$39,900	\$12	\$8	\$20	\$24	\$1	\$25
\$39,900	to \$85,400	12	49	61	24	26	50
\$85,400	to \$133,000	12	95	107	24	80	104
\$133,000	to \$180,700	12	146	158	24	136	160
\$180,700	to \$226,200	12	190	202	24	189	213
\$226,200	and up	12	526	538	24	545	569

Source: Legislative Council Staff.

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## GENERAL FUND REVENUE

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This section presents the Legislative Council Staff outlook for General Fund revenue, which provides the state's main source of revenue for operating appropriations. Table 8 on page 25 summarizes preliminary General Fund revenue collections for FY 2015-16 and projections for FY 2016-17 through FY 2018-19.

In FY 2015-16, General Fund revenue grew 1.7 percent over the prior fiscal year, according to preliminary data. This modest increase follows robust growth in FY 2014-15. Weak corporate profits, low wage pressures, and a slowdown in consumer spending accounted for the slower growth. In FY 2016-17, growth in General Fund revenue will remain subdued, as these trends persist. General Fund revenue is projected to grow at a slightly higher pace in FY 2017-18 and FY 2018-19, consistent with statewide inflation and population growth.

Throughout the forecast period, the outlook for General Fund revenue was increased slightly, on higher expectations for individual income and sales and use tax revenue. Relative to the September forecast, revenue is expected to come in \$123.4 million higher in 2016-17, and \$125.6 million higher in FY 2017-18. Additional information regarding the main sources of revenue to the General Fund is provided below.

**2016 legislative impacts.** Legislation passed during the 2016 legislative session is expected to have only a minor impact on General Fund revenue, as shown in Table 7. Triggered tax expenditures will have a larger impact.

**Triggered tax expenditures.** The FY 2014-15 TABOR surplus triggered the availability of the Earned Income Tax Credit (EITC) as a TABOR refund in tax year 2015 and a permanent tax credit beginning in tax year 2016. The Colorado EITC allows low- and middle-income Colorado taxpayers to claim a tax credit equal to 10 percent of the federal EITC, thereby reducing their Colorado income tax liability. The FY 2014-15 TABOR surplus and anticipated FY 2017-18 surplus will trigger the partial refundability of the Gross Conservation Easement Income Tax Credit in tax years 2015 and 2018, respectively. Triggered legislation is projected to reduce General Fund revenue by \$83.0 million in FY 2016-17 and \$98.4 million in FY 2017-18 with larger reductions in future fiscal years.

**Individual income taxes.** Individual income taxes are the state's largest source of tax revenue, representing almost 66 percent of gross General Fund revenue in FY 2015-16. In FY 2015-16, growth in individual income tax collections increased by 2.8 percent. Triggered income tax credits dampened growth, reducing revenue by an estimated \$79.6 million. Additionally, withholding payments—taxes withheld from employee paychecks—softened though most of FY 2015-16, reflecting low wage pressures for most industries and an aging state population (Figure 7, at left). Similarly, growth in estimated payments, which include income taxes on capital gains earnings, mineral royalties, and certain non-corporate business income, saw only modest growth last fiscal year. These trends reflect a lackluster stock market performance, the pull-back in oil and gas activity, and slower economic growth.

In FY 2016-17 and FY 2017-18, individual income tax revenue is expected to increase 5.0 percent and 6.0 percent, respectively. Moderate growth in wages and capital gains earnings will more than offset revenue reductions from triggered tax credits. Relative to the September forecast, expectations for individual income tax collections were revised upward by \$68.1 million in FY 2016-17 and \$69.3 million in FY 2017-18.

**Table 7**  
**Legislation Affecting General Fund Revenue**  
*Dollars in Millions*

<b>Major Legislation Passed in 2016</b>		<b>2015-16</b>	<b>2016-17</b>	<b>2017-18</b>
<b>Income Tax</b>				
HB 16-1142	Rural & Frontier Health Care Preceptor Tax Credit	\$0.1	\$0.2	\$0.2
HB 16-1194	Leasing Agricultural Assets Deduction	-0.03	-0.07	-0.07
HB 16-1286	Increase Wildfire Mitigation Deduction	-0.04	-0.09	-0.09
HB 16-1332	Alternative Fuel Motor Vehicle Tax Credits	0.15	0.3	0.3
HB 16-1465	Modifications to Low-Income Housing Tax Credit		-1.50	-4.75
HB 16-1467	First-Time Home Buyer Savings Account Deduction		0.02	0.09
Total Income Tax Impact		\$0.2	-\$1.1	-\$4.2
<b>Sales and Use Tax</b>				
HB 16-1006	Clarify Tax Exemptions for Housing Authorities	-\$1.4	ID	ID
HB 16-1119	Modify Sales and Use Tax Exemption for Aircraft		ID	ID
HB 16-1176	Wine & Spirit Wholesalers Employee Purchases		MD	MD
HB 16-1187	Retirement Community Food Exemption			MD
HB 16-1457	Residential Energy Source Exemption			PD
SB 16-036	Surety Requirement for Appealing Tax Bills		ID	ID
SB 16-124	Machine Tools Exemption for Recovered Materials			MD
Total Sales and Use Tax Impact		-\$1.4	ID	ID
<b>Revenue Impact of 2016 Legislation</b>		<b>-\$1.2</b>	<b>-\$1.1</b>	<b>-\$4.2</b>

<b>Triggered Legislation</b>		<b>2015-16</b>	<b>2016-17</b>	<b>2017-18</b>
<b>Income Tax</b>				
ON:	Gross Conservation Easement Tax Credit Partial Refundability <sup>1</sup>	-\$7.2		-\$5.2
ON:	Earned Income Tax Credit (10 percent of the federal credit) <sup>2</sup>	-72.4	-82.5	-91.7
OFF:	Historical Preservation Income Tax Credit <sup>3</sup>		<0.50	<1.00
<b>Sales and Use Tax</b>				
OFF:	Cleanroom Machinery Exemption <sup>4</sup>			<0.50
<b>Revenue Impact of Triggered Legislation</b>		<b>-\$79.6</b>	<b>-\$83.0</b>	<b>-\$98.4</b>

ID = Indeterminate decrease. MD = Minimal decrease. PD = Potential decrease.

<sup>1</sup>Triggered on by the FY 2014-15 TABOR surplus. Available in tax years 2015 and 2018, but not in 2016 or 2017 (Section 39-22-522 (5) (b), C.R.S.).

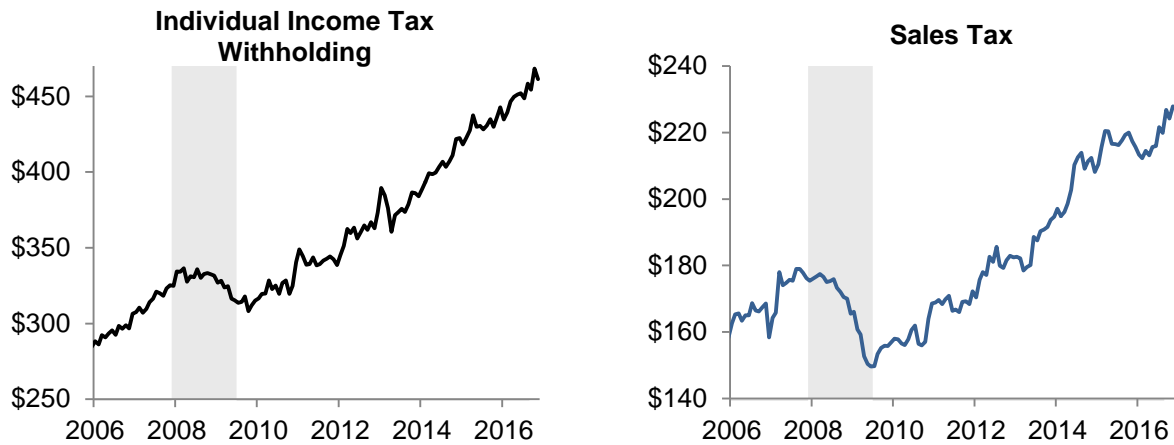
<sup>2</sup>Triggered on by the FY 2014-15 TABOR surplus. Available starting in tax year 2016 (Section 39-22-123, C.R.S.).

<sup>3</sup>Triggered off by the December 2015 forecast of insufficient revenue to grow General Fund appropriations by 6 percent (Section 39-22-514, C.R.S.). Credits that otherwise would have been claimed are not expected to exceed \$0.5 million in FY 2015-16 or \$1 million in FY 2016-17.

<sup>4</sup>Triggered off by a June 2016 forecast of insufficient revenue to grow General Fund appropriations by 6 percent (Section 39-26-722, C.R.S.). Exemptions that otherwise would have been claimed are not expected to exceed \$500,000 in FY 2016-17.



**Figure 7**  
**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 are shown on a cash-accounting basis as three-month moving averages. Data are through November 2016. Data for July through November 2016 are preliminary.*

**Sales taxes.** The 2.9 percent state sales tax is assessed on the purchase of goods, except those specifically exempted, and a relatively small collection of services. Revenue from the tax accounts for slightly more than a quarter of gross General Fund revenue, though this share is falling. Sales tax receipts increased just 1.3 percent in FY 2015-16, historically a weak rate of improvement for a mature economic expansion. Growth in sales tax receipts was subdued in part by low commodity prices. The sales tax base, composed primarily of goods, is lagging the broader consumer price index and is expected to continue to do so through the forecast period. A strong U.S. dollar has reduced prices for foreign imports, thus reducing the nondurable goods segment of the sales tax base. Sales tax revenues are also being hampered by demographic change, as the growing population of retirees in the state reduces consumption and shifts its purchases from taxable goods to untaxed services.

Despite these persistent headwinds, the December forecast includes modest upward revisions to expectations for sales tax revenue in all three years of the current forecast period. Sales tax receipts are now expected to total \$2.8 billion in FY 2016-17, an increase of 6 percent from the prior year. The revision reflects higher expectations for commodity prices, as well as better-than-expected tax collections in the current fiscal year. Sales tax revenues are expected to grow 4.0 percent in FY 2017-18 and 5.1 percent in FY 2018-19. This moderate pace of growth is consistent with inflation and population growth expectations.

**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. In FY 2015-16, use tax collections fell 7.3 percent, reflecting the contraction in energy industry capital investment in response to persistently low oil prices.

Based on data available through November of the current fiscal year, use tax revenues are projected to grow 5.9 percent to total \$255.6 million during FY 2016-17. These expectations reflect the U.S. Supreme Court's December 12<sup>th</sup> decision not to grant a writ of certiorari in *Direct Marketing Association v. Brohl*. The plaintiffs in the case had contested provisions of

House Bill 10-1193, which required out-of-state retailers, including online retailers, not collecting sales taxes to notify customers and the Department of Revenue of the customers' state use tax obligation. The Tenth Circuit Court of Appeals issued a ruling upholding the law in February, but its implementation had been delayed pending the result of the petitioners' appeal to the Supreme Court. The contested provisions are now expected to take effect during calendar year 2017. This forecast assumes that retailers will choose to comply with the law by notifying consumers of their use tax obligation rather than by collecting sales taxes. Notifications are required to be issued by January 31st for purchases made during the prior calendar year, and consumers are required to remit use taxes by April 15th.

The fiscal impacts of this decision are uncertain at this time. This forecast assumes an increase in use tax compliance similar to that of the addition of consumer use tax reporting lines to the state individual income tax form for tax year 2015. With additional use tax collections resulting from the implementation of House Bill 10-1193, use tax receipts are expected to grow 10.3 percent and 7.1 percent, respectively, in FY 2017-18 and FY 2018-19.

**Corporate income taxes.** In FY 2015-16, corporate income tax revenue declined 5.8 percent from the prior year due in part to lower energy industry earnings on lower oil and gas prices. In FY 2016-17, corporate income taxes are expected to decline an additional 8.8 percent, reflecting weak corporate earnings in the first half of 2016. Corporate income tax collections are expected to rebound in FY 2017-18, assuming oil prices rise and corporate profits improve. Collections are expected to grow 7.8 percent in FY 2017-18 and 3.3 percent in FY 2018-19. Relative to the September forecast, projected collections were revised down slightly, by \$6.6 million in FY 2016-17 and \$6.1 million in FY 2017-18.

**Table 8**  
**General Fund Revenue Estimates**  
*Dollars in Millions*

<b>Category</b>	<b>Preliminary FY 2015-16</b>	<b>Percent Change</b>	<b>Estimate FY 2016-17</b>	<b>Percent Change</b>	<b>Estimate FY 2017-18</b>	<b>Percent Change</b>	<b>Estimate FY 2018-19</b>	<b>Percent Change</b>
<b>Excise Taxes</b>								
1 Sales	\$2,652.6	1.3	\$2,812.0	6.0	\$2,925.7	4.0	\$3,076.1	5.1
2 Use	241.2	-7.3	255.6	5.9	281.9	10.3	301.8	7.1
3 Cigarette	37.2	-1.8	38.0	2.1	37.5	-1.3	37.0	-1.4
4 Tobacco Products	21.1	18.5	21.5	2.1	21.4	-0.5	22.2	3.8
5 Liquor	43.6	5.0	45.8	5.1	46.8	2.1	48.3	3.3
6 Total Excise	2,995.7	0.6	3,172.9	5.9	3,313.3	4.4	3,485.4	5.2
<b>Income Taxes</b>								
7 Net Individual Income	6,526.5	2.8	6,868.9	5.2	7,280.9	6.0	7,732.6	6.2
8 Net Corporate Income	652.3	-5.8	594.6	-8.8	639.8	7.6	661.1	3.3
9 Total Income Taxes	7,178.8	1.9	7,463.6	4.0	7,920.7	6.1	8,393.7	6.0
10 Less: Portion Diverted to the SEF	-522.6	0.5	-549.3	5.1	-582.2	6.0	-616.3	5.8
11 Income Taxes to the General Fund	6,656.2	2.0	6,914.2	3.9	7,338.5	6.1	7,777.4	6.0
<b>Other Sources</b>								
12 Insurance	277.5	8.1	298.1	7.4	312.5	4.8	327.5	4.8
13 Pari-Mutuel	0.6	0.5	0.6	-3.7	0.6	-1.2	0.6	-1.6
14 Investment Income	12.4	40.3	11.8	-4.9	16.2	36.7	22.4	38.2
15 Court Receipts	3.5	34.5	4.0	13.8	4.2	7.0	4.5	5.6
16 Other Income	22.5	-33.8	22.7	0.9	23.3	2.6	23.9	2.7
17 Total Other	316.5	4.5	337.2	6.5	356.8	5.8	378.9	6.2
18 <b>Gross General Fund Revenue</b>	<b>\$9,968.4</b>	<b>1.7</b>	<b>\$10,424.3</b>	<b>4.6</b>	<b>\$11,008.5</b>	<b>5.6</b>	<b>\$11,641.7</b>	<b>5.8</b>

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

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## CASH FUND REVENUE

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

Cash fund revenue subject to TABOR totaled \$2.99 billion in FY 2015-16. This revenue is expected to fall 4.8 percent to \$2.85 billion in FY 2016-17. The large decline in Hospital Provider Fee revenue will be largely offset by increases in most other cash fund revenue sources.

Total cash fund revenue subject to TABOR will increase 13.7 percent to \$3.24 billion in FY 2017-18, as a rebound in Hospital Provider Fee revenue will augment increases in severance tax revenue. This revenue is projected to grow another 1.8 percent to \$3.30 billion in FY 2018-19, as both transportation and severance tax revenue continue to rise.

**Transportation-related revenue** subject to TABOR is expected to increase 1.5 percent between FY 2015-16 and FY 2016-17 to \$1.20 billion, and increase 1.5 percent to \$1.22 billion in FY 2017-18. The forecast for TABOR revenue to transportation-related cash funds is shown in Table 10 on page 29.

The *Highway Users Tax Fund* (HUTF) is the largest source of transportation revenue subject to TABOR and receives a majority of its money from motor fuel excise taxes (22¢ per gallon of gasoline and 20.5¢ per gallon of diesel fuel). Fuel taxes are expected to increase 1.8 percent to \$620.8 million in FY 2016-17 and 1.1 percent to \$627.9 million in FY 2017-18 as fuel prices gradually rise. The HUTF also receives revenue from other sources, including registration fees, which are expected to generate \$363.2 million in FY 2016-17 and \$370.6 million in FY 2017-18. Total HUTF revenue is expected to increase 2.1 percent to \$1,051.8 million in FY 2016-17 and 1.4 percent to \$1,067.0 million in FY 2017-18.

The State Highway Fund (SHF) receives money from HUTF transfers, local government grants, and interest earnings. The largest amount of SHF money comes from HUTF transfers, while the local government grants and interest earnings are the two largest sources of TABOR revenue to the SHF. The HUTF revenue is subject to TABOR when it is originally collected by the state but transfers from the fund are not. These transfer amounts are excluded from the amounts shown in Table 10. SHF revenue subject to TABOR is expected to decrease 23.6 percent to \$39.9 million in FY 2016-17 and decrease 0.2 percent to \$39.8 million in FY 2017-18.

*Other transportation cash fund revenue subject to TABOR* is expected to be \$110.8 million in FY 2016-17, an 8.3 percent increase from the previous year, and grow slowly through the forecast period. Other transportation revenue is from the sale of aviation and jet fuel, certain registration fees, and driving fines.

Revenue to the *Statewide Bridge Enterprise* is not subject to TABOR and is shown as an addendum to Table 10. Revenue to this enterprise is expected to grow 1.8 percent to 108.6 million in FY 2016-17 and 2.2 percent to \$111.0 million in FY 2017-18. The bridge safety surcharge fee collections typically grow at about the same rate as vehicle registrations.

**Table 9**  
**Cash Fund Revenue Subject to TABOR**  
*Dollars in Millions*

	Preliminary FY 2015-16	Estimate FY 2016-17	Estimate FY 2017-18	Estimate FY 2018-19	CAAGR*
Transportation-Related Percent Change	\$1,184.7 1.7%	\$1,202.6 1.5%	\$1,220.0 1.5%	\$1,237.3 0.0%	1.5%
Hospital Provider Fee Percent Change	\$804.0 52.0%	\$656.6 -18.3%	\$864.7 31.7%	\$859.2 0.0%	2.2%
Severance Tax Percent Change	\$18.9 -93.3%	\$31.5 66.3%	\$153.3 387.3%	\$161.2 5.2%	104.3%
Gaming Revenue <sup>1</sup> Percent Change	\$102.7 3.4%	\$104.4 1.6%	\$107.4 2.9%	\$109.8 0.0%	2.2%
Insurance-Related Percent Change	\$13.3 -33.1%	\$13.7 2.6%	\$14.0 2.1%	\$14.2 0.0%	2.2%
Regulatory Agencies Percent Change	\$68.8 4.8%	\$71.4 3.8%	\$72.9 2.1%	\$74.4 2.0%	2.6%
Capital Construction Related - Interest <sup>2</sup> Percent Change	\$5.2 -6.6%	\$5.2 -0.3%	\$5.0 -3.8%	\$4.9 -2.3%	-2.1%
2.9% Sales Tax on Marijuana <sup>3</sup> Percent Change	\$31.6 42.0%	\$38.9 23.1%	\$43.2 11.1%	\$46.7 8.2%	13.9%
Other Cash Funds Percent Change	\$764.4 29.5%	\$724.4 -5.2%	\$758.3 4.7%	\$790.8 4.3%	1.1%
<b>Total Cash Fund Revenue Subject to the TABOR Limit</b>	<b>\$2,993.7 7.8%</b>	<b>\$2,848.7 -4.8%</b>	<b>\$3,238.8 13.7%</b>	<b>\$3,298.6 1.8%</b>	<b>3.3%</b>

*Totals may not sum due to rounding.*

\* CAAGR: Compound average annual growth rate for FY 2015-16 to FY 2018-19.

<sup>1</sup>Gaming revenue in this table does not include revenue from Amendment 50, which expanded gaming limits, because it is not subject to TABOR.

<sup>2</sup>Includes interest earnings to the Capital Construction Fund, the Controlled Maintenance Trust Fund, and transfers from certain enterprises into TABOR.

<sup>3</sup>Includes revenue from the 2.9 percent sales tax collected from the sale of medical and retail marijuana. \$14.5 million was collected and deposited into the General Fund in FY 2013-14. This revenue is subject to TABOR.

**Table 10**  
**Transportation Revenue by Source**  
*Dollars in Millions*

	Preliminary FY 2015-16	Estimate FY 2016-17	Estimate FY 2017-18	Estimate FY 2018-19	CAAGR*
<b>Highway Users Tax Fund (HUTF)</b>					
Motor and Special Fuel Taxes	\$609.7	\$620.8	\$627.9	\$634.7	1.4%
Percent Change	1.7%	1.8%	1.1%	1.1%	
Total Registrations	\$356.0	\$363.2	\$370.6	\$378.1	2.0%
Percent Change	1.2%	2.0%	2.0%	2.0%	
Registrations	\$210.3	\$214.5	\$218.8	\$223.1	
Road Safety Surcharge	\$127.2	\$129.6	\$132.2	\$134.8	
Late Registration Fees	\$18.5	\$19.1	\$19.7	\$20.3	
Other HUTF Receipts <sup>1</sup>	\$64.5	\$67.8	\$68.5	\$69.3	2.4%
Percent Change	1.7%	5.0%	1.1%	1.2%	
<b>Total HUTF</b>	<b>\$1,030.2</b>	<b>\$1,051.8</b>	<b>\$1,067.0</b>	<b>\$1,082.1</b>	<b>1.7%</b>
Percent Change	1.5%	2.1%	1.4%	1.4%	
State Highway Fund (SHF) <sup>2</sup>	\$52.2	\$39.9	\$39.8	\$39.6	-8.8%
Percent Change	23.1%	-23.6%	-0.2%	-0.4%	
Other Transportation Funds	\$102.3	\$110.8	\$113.2	\$115.6	4.1%
Percent Change	-4.8%	8.3%	2.2%	2.1%	
Aviation Fund <sup>3</sup>	\$15.2	\$20.2	\$21.0	\$21.8	
Law Enforcement-Related <sup>4</sup>	\$9.3	\$9.3	\$9.3	\$9.3	
Registration-Related <sup>5</sup>	\$77.9	\$81.3	\$82.9	\$84.5	
<b>Total Transportation Funds</b>	<b>\$1,184.7</b>	<b>\$1,202.6</b>	<b>\$1,220.0</b>	<b>\$1,237.3</b>	<b>1.5%</b>
Percent Change	1.7%	1.5%	1.5%	1.4%	

Totals may not sum due to rounding.

\*CAAGR: Compound average annual growth rate for FY 2015-16 to FY 2018-19.

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

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

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

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

<sup>5</sup>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 2015-16	Estimate FY 2016-17	Estimate FY 2017-18	Estimate FY 2018-19	CAAGR*
Bridge Safety Surcharge	\$106.6	\$108.6	\$111.0	\$113.4	2.1%
Percent Change	3.4%	1.8%	2.2%	2.2%	

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



The **Hospital Provider Fee** (HPF) is assessed on hospitals; revenues are used to draw a federal match and spent to reimburse hospitals for uncompensated health care costs and to pay for health care provided to Medicaid expansion populations. The state Medical Services Board sets the fee based on rates proposed by the Department of Health Care Policy and Financing. The fee is generally set to maximize the state's ability to draw a federal match, though it may be constrained by an appropriation in the annual appropriations bill (Long Bill) at the discretion of the General Assembly.

The long bill for FY 2016-17 constrains the amount of fee revenue that the state is permitted to collect. With this constraint, fees and interest earnings are expected to total \$656.6 million before growing to an unconstrained \$864.7 million in FY 2017-18.

The forecast for FY 2017-18 incorporates a new federal cost model approved in June 2016. The federal government will match fee revenue up to an amount equal to 6 percent of hospitals' *net patient revenue*, calculated as inpatient and outpatient hospital revenue minus expenses. With Medicare cost reports now finalized through 2013, expectations of the amount for which the state will be able to draw a federal match in FY 2017-18 have been revised upward relative to June expectations. The forecast for fee revenue is unchanged from September.

**Severance tax revenue**, including interest earnings, is expected to be \$31.5 million in FY 2016-17 and increase to \$153.3 million in FY 2017-18. The forecast reflects the Colorado Supreme Court ruling (*BP America v. Colorado Department of Revenue*) allowing energy companies to deduct additional costs from revenue when calculating their severance tax liability. Deductible costs were expanded to include both foregone returns on investment (ROI) as a result of expenditures for the transportation, manufacturing, and processing of oil and gas, and those listed on the Netback Expense Report Forms (NERF) submitted to county assessors. Taxpayers are allowed to claim refunds for previous year's taxes and deduct the additional costs going forward.

In FY 2016-17, oil and gas severance tax collections are projected to total \$21.3 million, which nets out severance tax refunds paid out of the General Fund pursuant to Senate Bill 16-218. A total of \$67.0 million is expected to be collected in the severance tax fund and \$45.7 million will be refunded through the General Fund in FY 2016-17. Oil and gas severance tax collections are expected to increase to \$142.2 million in FY 2017-18 due to the resolution of refunds resulting from the supreme court ruling, a lower ad valorem tax credit projected to be available to producers, and an increase in energy prices. Table 11 on page 31 presents the forecast for severance tax revenue by mineral source.

After plateauing around \$38 per barrel in late summer, Colorado oil prices increased slightly through the fall before the recent uptick in December. Based on preliminary data, 2016 production has declined 2.2 percent compared with 2015. Weld County is now responsible for nearly 90 percent of the state's oil production. Although production is down in 2016, this forecast assumes that oil prices will rise gradually and average about \$51 per barrel in 2017 and \$56 per barrel in 2018, spurring additional production in Weld County and the broader Niobrara formation.

Regional natural gas prices have also increased through the fall. Prices at regional hubs were about \$1.99 per Mcf (thousand cubic feet) in early November, but increased 95.6 percent in just over one month to \$3.88 per Mcf by early December. Prices are expected to rise gradually through the end of 2016.

**Table 11**  
**Severance Tax Revenue by Source**  
*Dollars in Millions*

	Preliminary FY 2015-16	Estimate FY 2016-17	Estimate FY 2017-18	Estimate FY 2018-19	CAAGR*
Oil and Gas	\$5.2	\$21.3	\$142.2	\$149.6	111.9%
Percent Change	-98.0%	309.0%	566.4%	5.2%	
Coal	\$3.6	\$2.9	\$2.5	\$2.1	-17.2%
Percent Change	-33.3%	-19.4%	-12.5%	-15.3%	
Molybdenum and Metallica	\$1.5	\$1.5	\$1.5	\$1.5	0.1%
Percent Change	1.6%	0.1%	0.1%	0.1%	
Total Severance Tax Revenue	\$10.3	\$25.7	\$146.2	\$153.2	90.1%
Percent Change	-96.2%	150.1%	469.0%	4.8%	
Interest Earnings	\$8.6	\$5.8	\$7.1	\$8.0	-2.6%
Percent Change	-11.7%	-33.3%	23.4%	12.5%	
Total Severance Tax Fund Revenue	\$18.9	\$31.5	\$153.3	\$161.2	71.4%
Percent Change	-93.3%	66.3%	387.3%	5.2%	

\* CAAGR: Compound average annual growth rate for FY 2015-16 to FY 2018-19.

Coal, which has historically been the second largest mineral source of severance taxes in Colorado after oil and natural gas, is expected to generate \$2.9 million in severance taxes in FY 2016-17. Total coal production in Colorado has declined 39.1 percent through the first ten months of 2016 on a year-over-year basis, after declining 18.5 percent in 2015. This decline was largely due to the closure of the Bowie #2 mine, but each of Colorado's seven other producing mines have year-over-year declines, ranging from 9.8 to 44.2 percent through the first seven months of 2016. Because of the recent declines, only five mines are consistently exceeding the 300,000 per quarter production threshold and paying coal severance taxes. In September, it was announced that the New Horizon Mine will close when the Nucla Station power plant is taken off line in 2022. In both FY 2017-18 and FY 2018-19, collections are expected to fall further to \$2.5 million and \$2.1 million, respectively.

Finally, interest earnings are expected be \$5.8 million in FY 2016-17 and increase 23.4 percent to \$7.1 million in FY 2017-18.

**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. Limited gaming revenue tax and fee revenue subject to TABOR is anticipated to grow 1.6 percent to \$104.4 million in FY 2016-17, before growing 2.9 percent to \$107.4 million in FY 2017-18.

The state limited gaming tax is a graduated tax assessed on a casino's *adjusted gross proceeds*, the amount of wagers collected, less the amount paid to players in winnings. During FY 2015-16, casinos attracted more wagers than ever while also reducing amounts paid to winners across slot machines and all permitted table games (blackjack, poker, craps, and roulette). The result was a significant increase in limited gaming tax revenue, which grew 5.6 percent to an all-time high of \$116.3 million. Of that amount, tax revenue totaling \$101.0 million was subject to TABOR, plus about \$1.7 million in fees and interest earnings.

Gaming tax revenue continues to increase thus far in FY 2016-17, albeit at a reduced rate. FY 2016-17 limited gaming tax collections increased 1.0 percent through November relative to the same period last year. Available data from the Division of Gaming suggest that slowing growth is attributable primarily to decelerating growth in wagers, rather than stabilizing casino “hold” percentages.

Growth in gaming tax revenue subject to TABOR is statutorily capped at 3.0 percent. Years when total gaming tax revenue grows by more than 3.0 percent therefore result in growth rates of greater than 3.0 percent for gaming taxes exempt from TABOR. TABOR-exempt Amendment 50 revenues grew 26.9 percent to \$15.3 million in FY 2015-16 but are expected to grow just 2.0 percent to \$15.6 million this year. These revenues primarily support the state community college system.

Monthly **marijuana tax collections** continue to increase but the market is becoming more mature and the growth rate is expected to slow. Total marijuana tax revenue is expected to reach \$188.0 million in FY 2016-17 and \$193.9 million in FY 2017-18, as shown in Table 12.

The first \$40 million in excise tax revenue each year is constitutionally dedicated to school construction, and excise taxes are expected to exceed this threshold by \$17.8 million in FY 2016-17 and \$26.6 million in FY 2017-18; these amounts will be deposited into the permanent school fund.

The state imposes a special sales tax on adult-use marijuana, 15 percent of which is distributed to local governments that allow retail sales. Revenue from this tax is expected to reach \$91.3 million in FY 2016-17. While marijuana sales are expected to continue to grow throughout the forecast period, the special sales tax rate goes from 10 percent to 8 percent starting in FY 2017-18 and special sales tax revenue will decline to \$84.1 million in that year because of the rate reduction.

The state's 2.9 percent sales tax on medical and retail marijuana is subject to the TABOR spending limit. This revenue is expected to be \$38.9 million in FY 2016-17 and \$43.2 million in FY 2017-18.

**Table 12**  
**Tax Revenue from the Marijuana Industry**  
*Dollars in Millions*

	Forecast FY 2015-16	Forecast FY 2016-17	Forecast FY 2017-18	Forecast FY 2018-19
<b>Proposition AA Taxes</b>				
Total Special Sales Tax	\$67.3	\$91.3	\$84.1	\$93.3
State Share of Special Sales Tax	57.2	77.6	71.5	79.3
Local Share of Special Sales Tax	10.1	13.7	12.6	14.0
15% Excise Tax	42.7	57.8	66.6	73.9
<b>Total Proposition AA Taxes</b>	<b>110.0</b>	<b>149.2</b>	<b>150.7</b>	<b>167.1</b>
<b>2.9 Sales Tax (Subject to TABOR)</b>				
2.9% Sales Tax on Medical Marijuana	12.2	12.5	12.8	13.1
2.9% Sales Tax on Retail Marijuana	19.4	26.3	30.3	33.6
Total 2.9% Sales Tax	<b>31.6</b>	<b>38.9</b>	<b>43.2</b>	<b>46.7</b>
<b>Total Taxes on Marijuana</b>	<b>\$141.6</b>	<b>\$188.0</b>	<b>\$193.9</b>	<b>\$213.8</b>

**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.

For FY 2016-17, FML revenue is projected to fall to \$90.7 million, a 2.4 percent decrease from the previous year. The decrease includes the federal rescission of \$7.8 million to reimburse cancelled leases from the Roan Plateau. The relatively small decline results from the combination of the expected increase in natural gas prices and the continued decline in Colorado coal production. Roughly 75 percent of this production occurs on federal lands, and through the first ten months of 2016, production was down 39.1 percent on a year-over-year basis after falling 18.5 percent in 2015. Coal production is expected to continue to decline through the forecast period, further dampening growth in FML revenue.

FML revenue is expected to rebound to \$106.7 million in FY 2017-18 and \$110.7 million in FY 2018-19 with higher natural gas prices.

Forecasts for **Unemployment Insurance (UI) Trust Fund** revenue, benefit payments, and year-end balance are shown in Table 13. Revenue to the UI Trust Fund is excluded from Table 9 on page 28 because it is not subject to TABOR. Revenue to the Employment Support Fund, which receives a portion of the UI premium surcharge, is still subject to TABOR and is included in the revenue estimates for other cash funds in Table 9.

A tightening labor market and a low number of new benefit applications continue to support the state's UI Trust Fund. In FY 2015-16, the ending balance for the trust fund was \$679.8 million, relatively unchanged from the previous fiscal year. The trust fund is expected to remain solvent through the forecast period.

Premiums paid by employers are expected to decline by 10.6 percent in FY 2016-17. The strength of the labor market in recent years will shift employer's experience ratings to a lower tier beginning in 2017, which reduces their contribution amount to the UI fund. However, premiums are expected to pick up slightly in FY 2017-18 and FY 2018-19 as wages pick up speed statewide.

Unemployment insurance benefits paid are expected to be relatively stable through the forecast period. On average, the amount of benefits paid from the UI Trust Fund is expected to decline by 0.4 percent over the forecast period.

**Table 13**  
**Unemployment Insurance Trust Fund**  
**Revenues, Benefits Paid, and Fund Balance**

	Preliminary FY 2015-16	Estimate FY 2016-17	Estimate FY 2017-18	Estimate FY 2018-19	CAAGR*
Beginning Balance	\$680.1	\$679.8	\$609.9	\$683.9	
Plus Income Received					
UI Premium	\$622.3	\$553.6	\$567.7	\$605.5	-3.02%
Interest	\$15.5	\$16.5	\$16.9	\$18.6	
Total Revenues	\$637.8	\$570.1	\$584.5	\$624.0	-2.86%
Percent Change	-7.1%	-10.6%	2.5%	6.8%	
Less Benefits Paid	(\$516.2)	(\$515.0)	(\$510.5)	(\$508.1)	-0.37%
Percent Change	7.0%	-0.2%	-0.9%	-0.5%	
UI Bonds Principal Repayment	(\$125.0)	(\$125.0)	\$0.0	\$0.0	
Accounting Adjustment	\$3.0	\$0.0	\$0.0	\$0.0	
Ending Balance	\$679.8	\$609.9	\$683.9	\$799.8	5.57%
Solvency Ratio					
Fund Balance as a Percent of Total Annual Private Wages	0.62%	0.53%	0.55%	0.60%	0.62%

*Totals may not sum due to rounding.*

*\*CAAGR: Compound average annual growth rate for FY 2015-16 to FY 2018-19.*

## ECONOMIC OUTLOOK

The U.S. and Colorado economies are expected to continue to expand at modest rates in 2017 and 2018. Several factors will temper growth over the forecast period, including demographic change, which continues to mute income and consumption growth. The Colorado housing market remains hot, while the national market has cooled. Higher housing costs and gradually rising interest rates will contribute to inflationary pressures and slow consumer activity. The tightening labor market will subdue business growth as labor becomes scarcer and rising wages increase business costs.

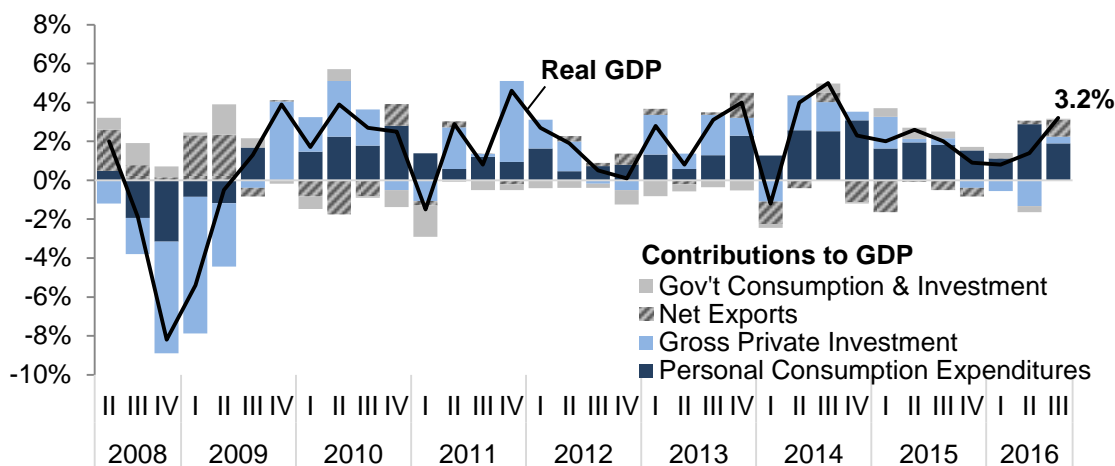
Weak through much of 2016, business activity has improved in recent months bolstered by higher energy prices, a rebound in corporate profits, and improvements in exports and manufacturing activity. While optimism has been renewed by these recent gains, risks remain skewed toward the downside. Global economic growth has gained momentum, yet global economic uncertainty remains elevated with greater political risk. The recovery in energy, manufacturing, and export industries will be fragile and contingent upon stronger global demand and higher commodity prices.

Tables 14 and 15 on pages 57 and 58 present histories and expectations for economic indicators in the U.S. and Colorado, respectively.

### Gross Domestic Product

U.S. economic activity continues to expand at a moderate pace, as measured by real gross domestic product (GDP), a broad measure of inflation-adjusted economic activity. In the third quarter of 2016, real GDP increased 3.2 percent at a seasonally adjusted annual rate, the fastest rate of growth experienced during the past two years. Figure 8 presents the annualized change in real U.S. GDP and contributions from its four major components.

**Figure 8**  
**Contribution to Real U.S. Gross Domestic Product**  
*Seasonally Adjusted Annual Rates*



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

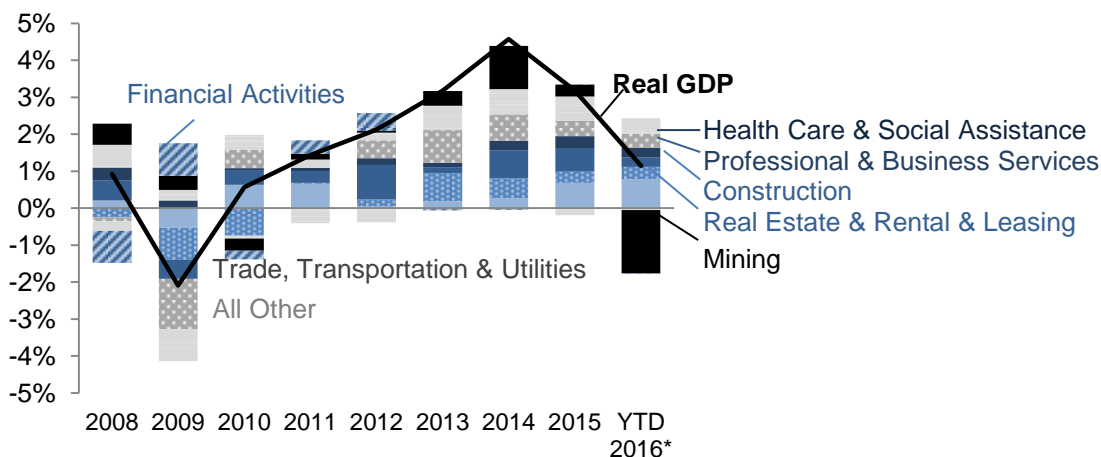
Personal consumption expenditures, which generally represent consumer spending, contributed most to the rise in real GDP growth in the third quarter. Consumers spent more on both goods and services. Among goods, strong demand for durable goods (those lasting more than three years) offset a slight decline in nondurable goods.

Gross private domestic investment reflects business spending and investment and household spending on residential improvements. Following three consecutive quarters of declines, gross private domestic investment rose in the third quarter. The reversal, however, almost entirely reflects businesses replenishing their inventories in preparation for future sales. Business investments in equipment and intellectual property remained weak, and household investments in residential improvements fell for a second consecutive quarter.

Real U.S. GDP received an unusually strong positive contribution from net exports in the third quarter, which is primarily attributable to a boost in soybean exports. U.S. exporters filled a gap left by a poor fall harvest season in South America. Without a similar boost, fourth quarter economic activity is expected to be less robust. Finally, government consumption and investment contributed very modestly to economic activity in the third quarter. An increase in federal government spending and investment was partially offset by a decrease in state and local government spending.

In **Colorado**, real state GDP rose 1.1 percent in the first half of the year relative to the first half of 2015, a slower rate relative to growth in the past four years. Energy industry weakness posed a considerable drag on the Colorado economy in the first half of the year, reflecting weak industry earnings and a pull-back in production amid low energy prices and coal industry retrenchments (Figure 9). With the exception of a modest decline in agriculture and financial services activity, all other major industries contributed to GDP growth in the first half of year. Real estate and construction industries have been particularly robust in recent years, reflecting rapid home value and housing rental price appreciation and growing residential and nonresidential construction industry activity.

**Figure 9**  
**Real Colorado Gross Domestic Product**  
*Contributions to Year-over-Year Change by Industry*



Source: U.S. Bureau of Economic Analysis. "Real" GDP is inflation-adjusted. \*2016 values reflect the first half of the year over the first half of 2015.



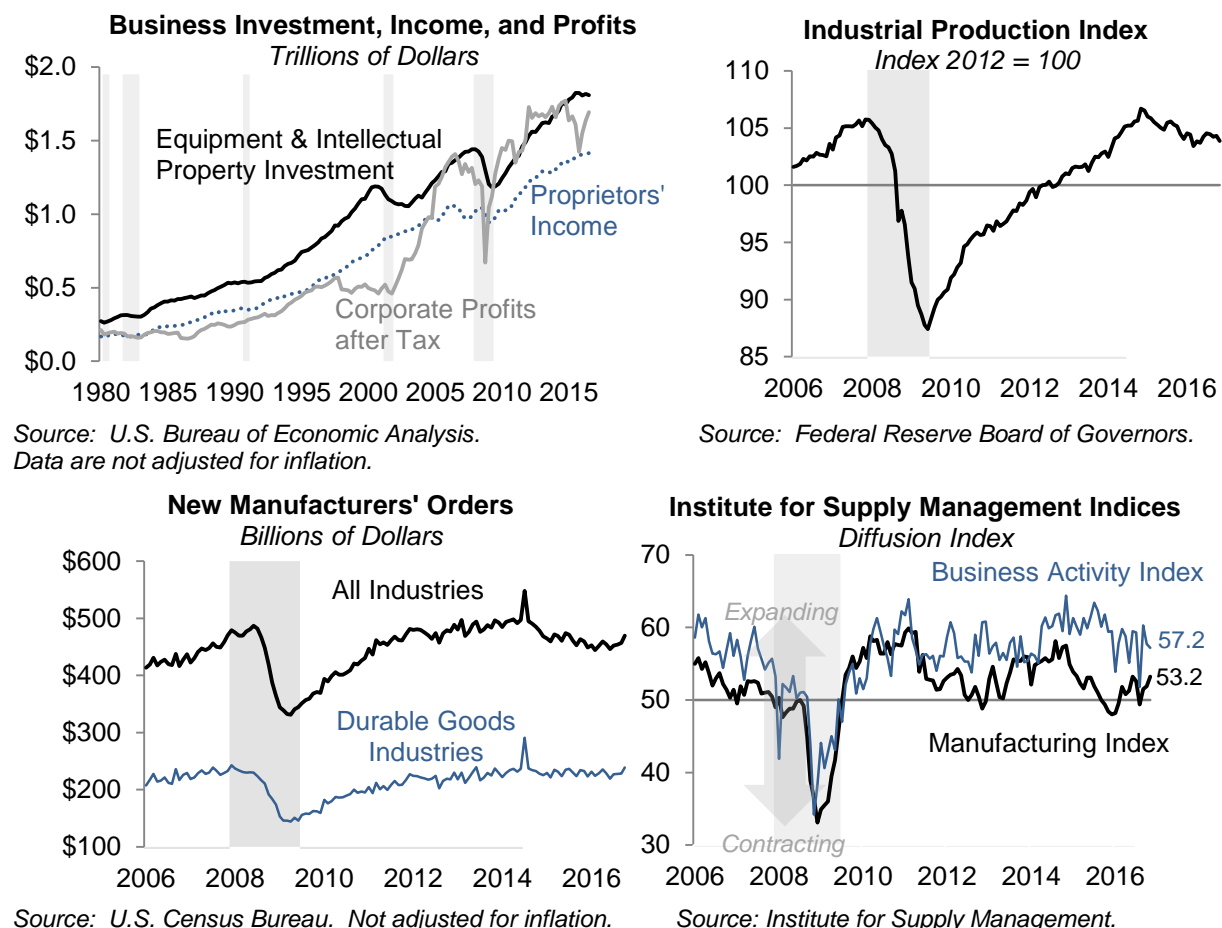
- Real U.S. GDP is expected to increase 1.6 percent in 2016 and 2.4 percent in 2017. Increases in consumer spending and business activity are expected to offset drags from net exports.

## Business Income and Activity

Historically, business income and investment has been a reliable leading indicator of future economic activity. Slowing **investment** in equipment and intellectual property and contractions in **corporate profits** have been consistent antecedents to economic downturns (Figure 10, top left). In the current business cycle, however, the slowdown in investment and contraction in corporate profits largely reflect the contraction in commodity prices for energy, agriculture, and metals, and a slowdown in global economic activity in 2015 and 2016. These factors have impacted many downstream industries, including manufacturing and exports, but have failed to produce a more broad-based economic recession with their pull.

The recent rebound in corporate profits, slight rise in oil prices, and strengthening global economic activity indicate that these drags on U.S. growth may be subsiding. Yet, recovery will be slow and fragile. The outlook for commodity markets, including energy, agriculture, manufacturing and exports remains contingent upon stronger global demand, weaker global supply, or a combination of both dynamics.

**Figure 10**  
**Select Indicators of Business Activity**



**Industrial production**, a measure of the total amount of goods produced in the U.S., continues to struggle to gain footing (Figure 10, top right). Energy production continues to fall with the contraction in domestic oil, gas, and coal industry activity. Non-energy production has been mixed in recent months. Among consumer goods, strength in durable goods production, including automotive products, has been partially offset by weaker production of nondurable goods, including clothing and paper products. Business equipment production is down slightly on the mix of strong information processing equipment production but weak transit and industrial production.

Recent **manufacturing activity** indicators point toward industry stabilization, though a recovery is contingent on sustainable improvements in the energy industry. New manufacturers' orders have risen for four consecutive months. In October, new orders rose 4.8 percent, led by demand for transportation equipment (Figure 10, bottom left). Similarly, the Institute for Supply Management (ISM) manufacturing index returned to expansionary territory in the last three months (Figure 10, bottom right). A value greater than 50 signals expansion. The ISM non-manufacturing business activity index continues to point toward expansion.

In recent months, the Tenth District manufacturing index, which includes manufacturing activity in Colorado and six other surrounding states, signaled modest expansion. This follows nearly two full years of contraction, led by downturns in energy and downstream industries.

Most **financial industry** indicators continue to improve. In a speech summarizing third quarter conditions, the Chairman of the Federal Deposit Insurance Corporation (FDIC) stated that revenue and net income among FDIC-insured institutions rose relative to year ago levels, loan balances increased, asset quality improved, and the number of unprofitable banks and "problem banks" continued to fall.

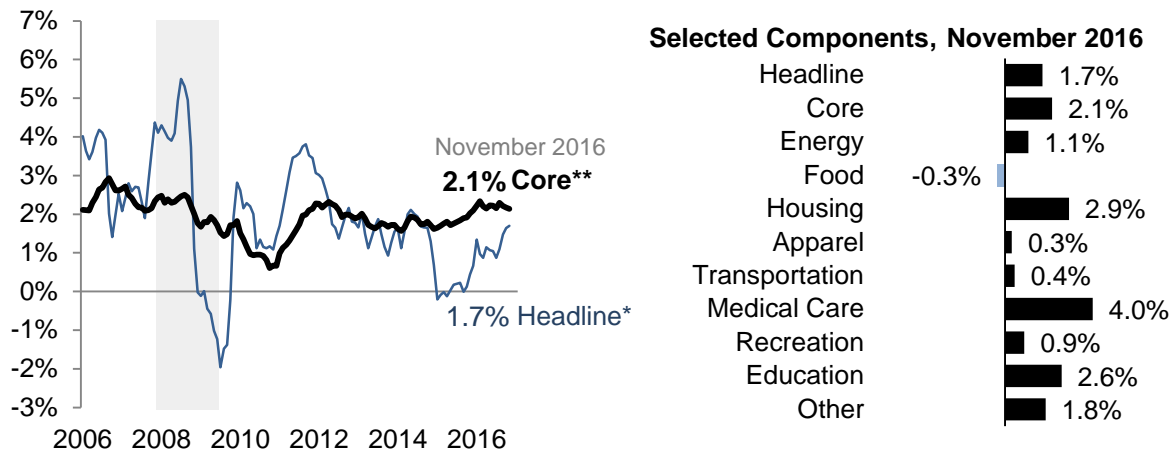
Yet, new risks have emerged following the recovery from the U.S. subprime mortgage crisis and global financial crisis. In the current low interest rate environment, some lending institutions have taken on higher risk assets in search of higher yields, exposing the financial system to greater risk. Additionally, the amount of noncurrent loans and loan charge-offs to energy and agriculture businesses have been rising.

## **Monetary Policy and Inflation**

In November, headline U.S. inflation rose to 1.7 percent over the same month in the prior year (Figure 11, top left). Core inflation, which excludes the more volatile components of food and energy, held steady at 2.1 percent. Low energy prices continue to subdue inflationary pressures, though the drag has eased considerably over the past several months and turned slightly positive in October and November. Housing and medical care continue to contribute most to rising inflationary pressures (Figure 11, top right).

Core Colorado inflation, as measured by the Denver-Boulder-Greeley consumer price index, rose 4.5 percent in the first half of 2016 over the first half of the prior year. Headline inflation rose more modestly at 3.0 percent due to low energy prices. Colorado inflation was double that of the nation in the first half of the year, due primarily to strong appreciation in the housing component. Recreation and apparel components also outpaced nationwide price growth in the first half of the year, while education and medical care cost increases were more subdued than the nation as a whole. The Denver-Boulder-Greeley consumer price index for the second half of the year becomes available early in February 2017.

**Figure 11**  
**Consumer Price Index (CPI) Inflation, All U.S. Urban Areas**  
*Percent Change in Prices, Year-over-Year*

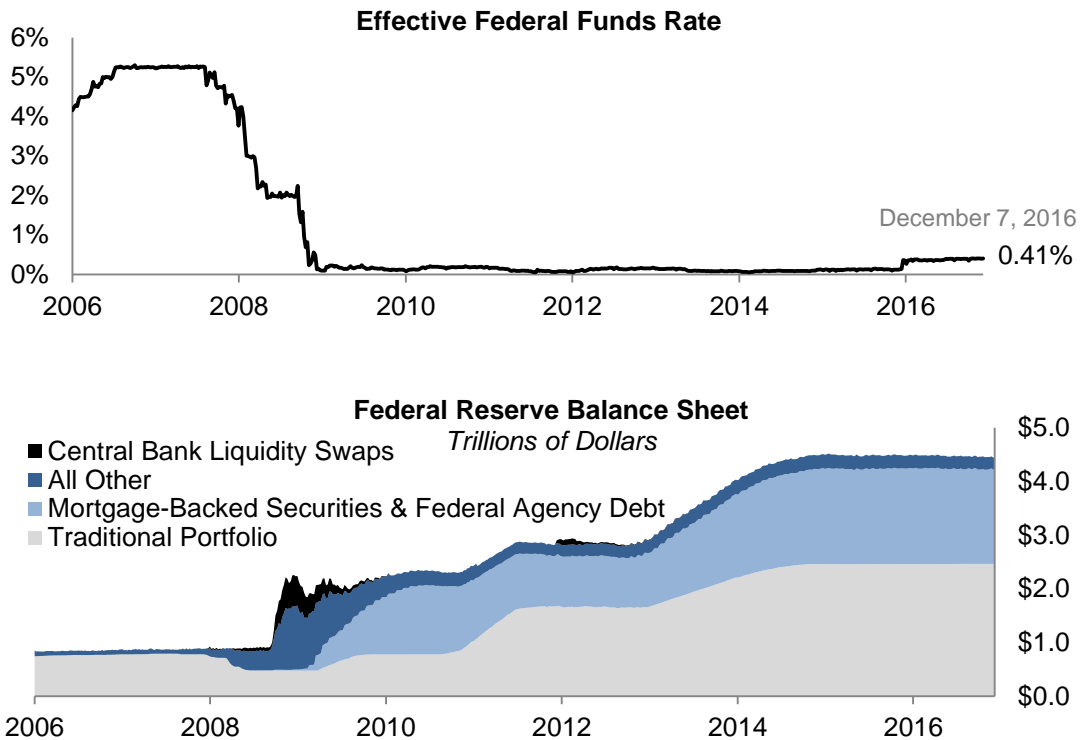


Source: U.S. Bureau of Labor Statistics. Inflation is calculated as the growth in urban area prices in a given period relative to the same period in the prior year. \*Headline inflation includes all products and services. \*\*Core inflation excludes food and energy prices.

In December, the Federal Open Market Committee (FOMC) increased the target federal funds rate by a quarter of a percentage point to between 0.50 percent and 0.75 percent (top of Figure 12). This marks the second modest rate increase since the Great Recession, which began eight years ago. The first rate increase was announced one year ago in December. The FOMC continues to keep its balance sheet elevated by reinvesting proceeds from maturing Treasury securities and principal payments from its holdings of federal agency debt and agency mortgage-backed securities (bottom of Figure 12). These efforts are expected to maintain downward pressure on long-term interest rates, lowering borrowing costs for home mortgages and other longer-term financing of business and consumer activity.

- A gradual rise in oil prices and rising housing and medical care costs are expected to firm inflationary pressures and prompt additional monetary policy tightening throughout the forecast period. Nationally, prices are expected to increase 1.2 percent in 2016 and 2.3 percent in 2017.
- The Denver-Boulder-Greeley consumer price index will increase 2.9 percent in 2016 and 2.9 percent in 2017. Continued increases in home prices and Front Range rents are projected to drive inflation through the forecast period.

**Figure 12**  
**U.S. Monetary Policy Indicators**



Source: Federal Reserve Board of Governors.

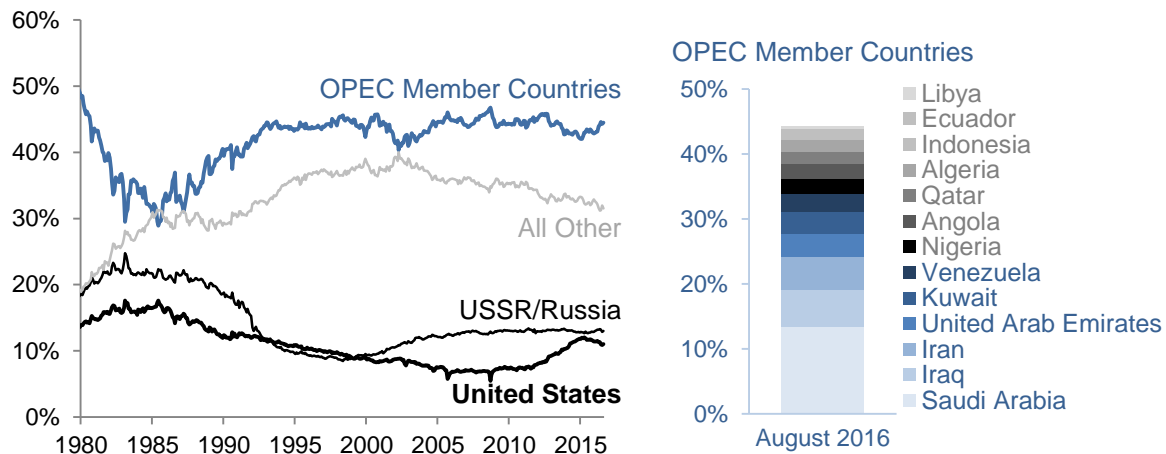
## Energy Markets

Energy industry activity remains mixed. Oil prices have risen slightly on the prospect of global production cuts, though rising drilling activity in the U.S. will likely keep prices from rising far. Natural gas markets are seeing a slight boost due to colder weather. Meanwhile, coal markets continue to stagnate. Slow growth in global demand and a global supply glut of energy commodities are expected to maintain downward pressure on energy prices through 2017.

At the end of November, **OPEC** member countries agreed to cut production by 1.2 million barrels per day for six months beginning in January 2017. This represents about 2 percent of world supply. Non-OPEC member countries are also considering cuts to the tune of 600,000 barrels per day. These announcements sent oil prices above \$50 per barrel in early December.

OPEC member country oil production consistently comprised between 40 and 45 percent of total world production over the past 25 years. However, U.S. production has gained considerable market share over the past decade (Figure 13). U.S. producers have been anxiously waiting for a modest rise in prices and are poised to rapidly bring new production online. This will keep oil prices lower for longer. Technological developments, including hydraulic fracturing and horizontal drilling, have reduced U.S. production costs and made access to previously unrecoverable deposits possible.

**Figure 13**  
**Share of World Oil Production**

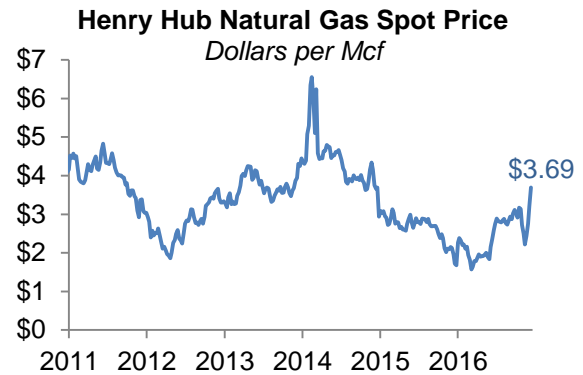
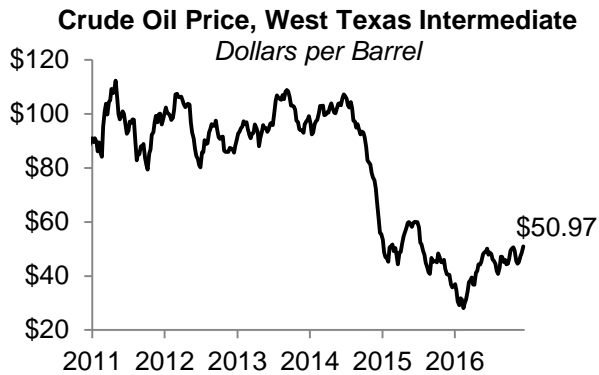


Source: U.S. Energy Information Administration, *Monthly Energy Review*. Data through August 2016.

With the precipitous fall in oil prices that began toward the end of 2014 (Figure 14, upper left), new drilling activity, as measured by active drilling rigs, dropped off dramatically in the U.S. and Colorado (Figure 14, middle). New drilling activity has crept up slightly over the past six months as oil prices have stabilized and trended modestly upward. While new drilling has been rising, crude oil production continues to fall, reflecting shifts made by producers to curb production in areas that are more costly to drill (Figure 14, lower left). U.S. crude oil stocks remain elevated, reflecting a burgeoning domestic supply that continues to put downward pressure on prices (Figure 14, lower right). **Natural gas** prices rose at the start of December on expectations of a cold winter in the U.S. Prices, however, remain low relative to historical prices (Figure 14 upper right).

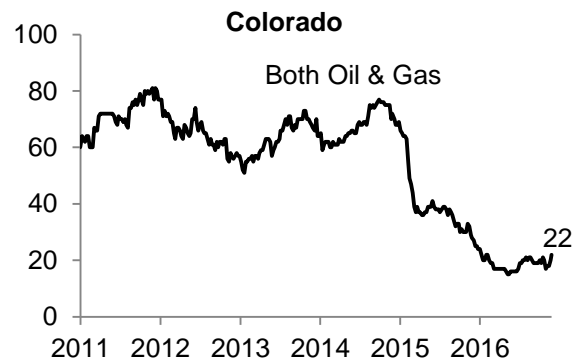
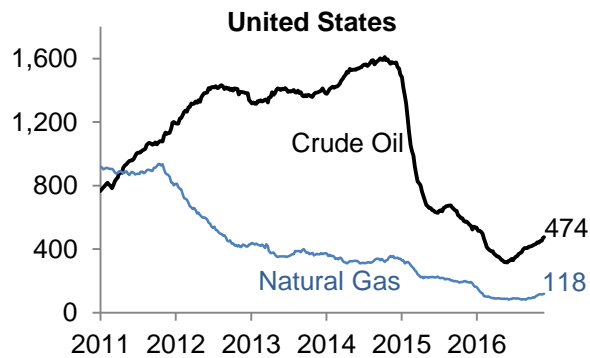
In Colorado, energy industry investment has picked up modestly and is expected to rise further with the recent rise in oil and gas prices. The Denver-Julesburg Basin, located primarily in Weld County, is expected to experience the greatest increase in activity due to lower production costs relative to other areas in the U.S. Meanwhile, Colorado's **coal** industry continues to contract on market and regulatory pressures. Natural gas has absorbed market share from coal in recent years as consumers have shifted toward the cheaper alternative. Several recent Colorado coal mine closures have impacted western slope economies, including portions of Montrose, Delta, and Moffat counties.

**Figure 14**  
**Selected Indicators of Oil and Gas Industry Activity**

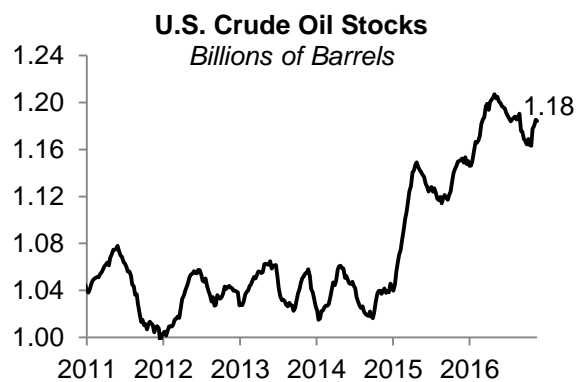
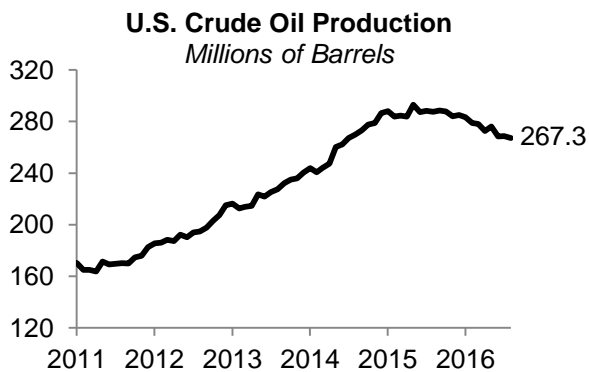


Source: U.S. Energy Information Administration. Weekly average prices. Data are not seasonally adjusted.

**Active Drilling Rig Counts**



Source: Baker Hughes. Data are not seasonally adjusted.



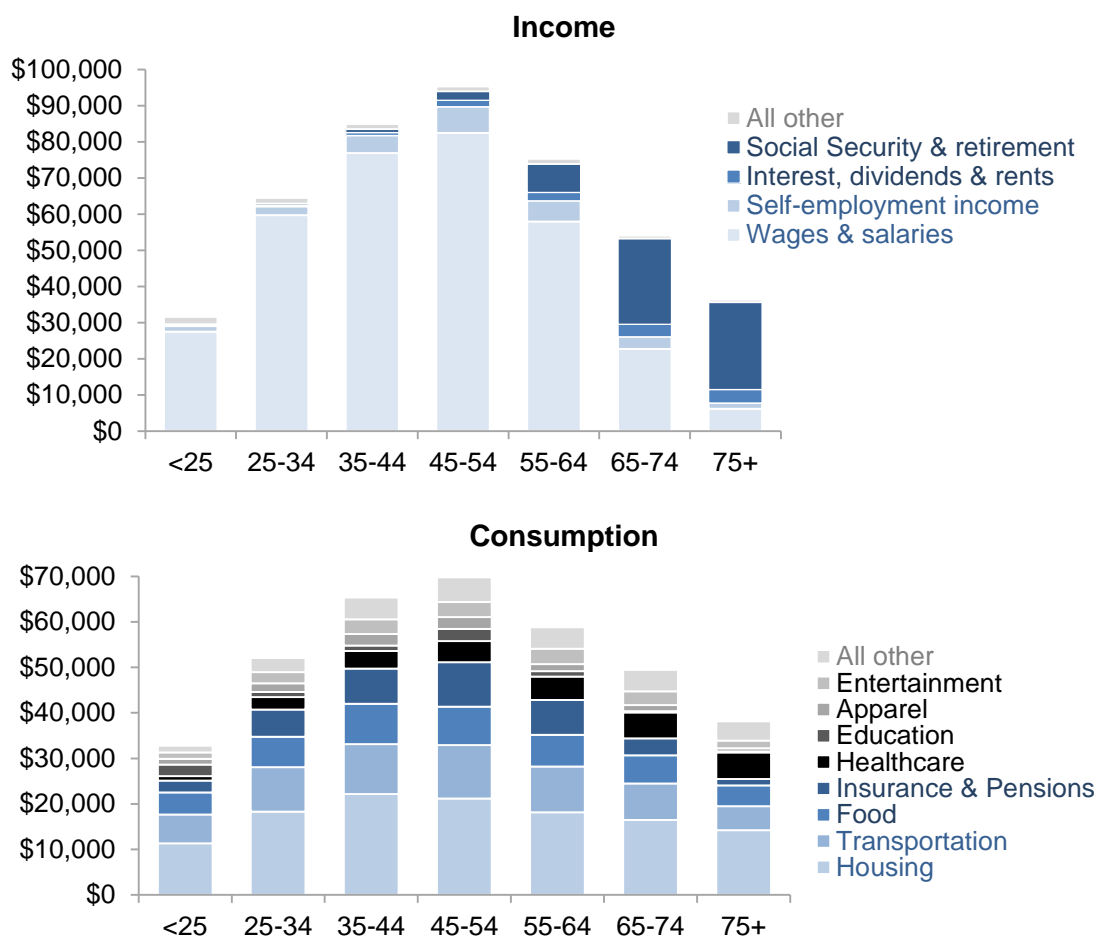
Source: U.S. Energy Information Administration. Data are shown as a three-month moving average and are not seasonally adjusted.

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

## Demographics

Demographic change has played an active role in economic activity across the U.S. and in Colorado. As the baby-boomer generation—those born between 1946 and 1964—retires, labor market participation has been declining, slowing income and consumption growth. On average, income earnings and consumption peaks for individuals in their 40s and early 50s (Figure 15). As the baby-boomer generation reached their 40s and 50s, the U.S. enjoyed a “demographic dividend”, marked by strong economic growth in the late 1990s and early 2000s. A demographic drag is now expected to impact the U.S. and Colorado economies for many years. The oldest baby-boomers reached age 65 in 2010. The youngest will reach retirement age in 2029.

**Figure 15**  
**Average U.S. Income and Consumption by Age Cohort, 2015**



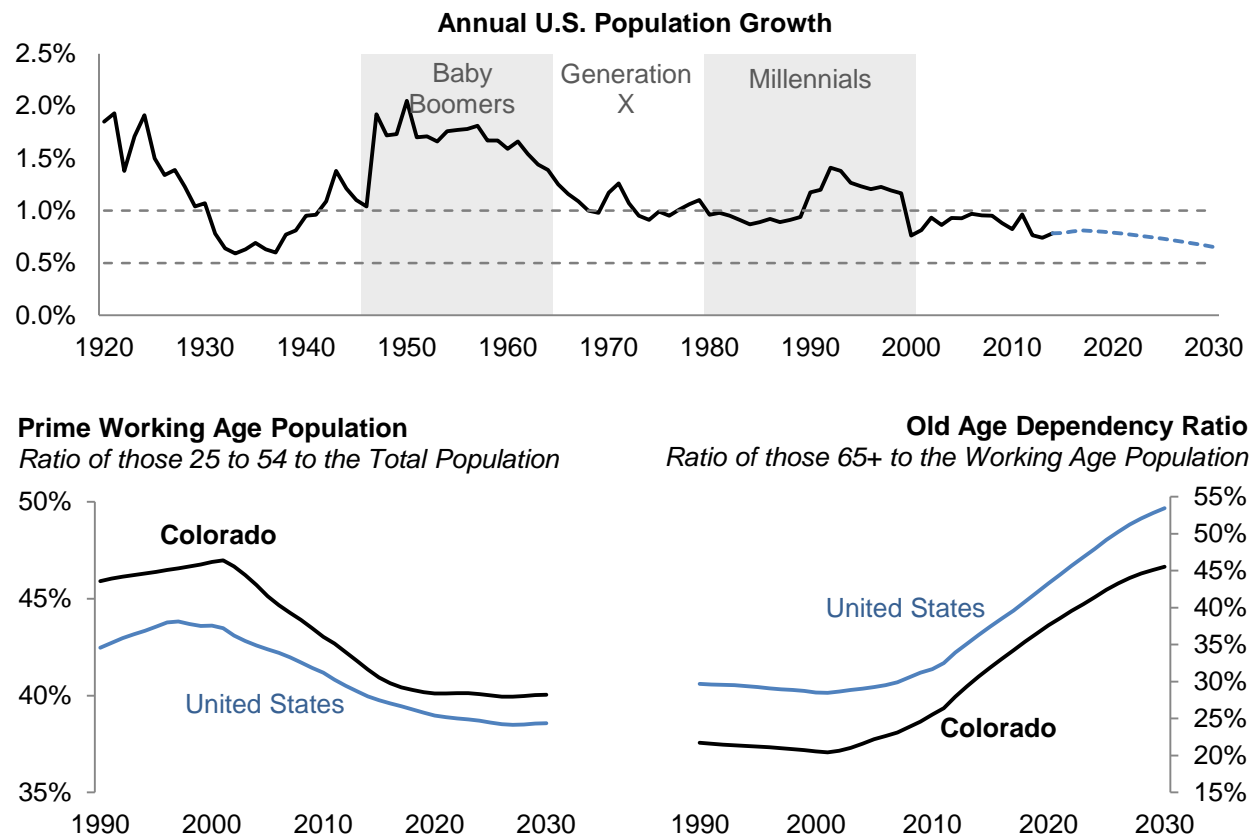
Source: U.S. Bureau of Labor Statistics, Consumer Expenditure Survey.

Slowing birth rates in Colorado and the U.S. are contributing to the aging of the population. The most recent U.S. Census population projections for the U.S. expect population growth of about 0.7 percent between 2015 and 2030 (Figure 16, top). This is roughly a third of the growth rate experienced during the baby boom.

In Colorado, strong in-migration of individuals in their 20s and 30s without children has boosted the state's prime working age population (Figure 16, bottom left). While the Colorado population is younger than the nation as a whole, Colorado's retirement age population is expected to grow faster than the nation in coming years. Colorado's prime working age population, those ages 25 to 54, is projected to fall from a high of 47 percent in 2001 to 40.2 percent by 2020. Comparatively, the share of the prime working age population in the U.S. is projected to fall from a high of 43.8 percent in 1997 to 39.0 percent by 2020 (Figure 16, bottom right).

The ratio of those at retirement age to the prime working age population is expected to rise dramatically in Colorado and the U.S. This ratio is termed the "old age dependency ratio", reflecting the share of the population at retirement age relative to income earners still active in the labor force. The ratio is expected to approach 55 percent for the U.S. and 45 percent for Colorado over the coming decade and half.

**Figure 16**  
**Selected Demographic Indicators**



Source: U.S. Census Bureau intercensal estimates and 2014 population projections; Colorado State Demography Office, 2016 population projections.

Millennials, those born between 1980 and 2000, are the largest generation in U.S. history. As of 2016, Millennials represented more than 27 percent of the U.S. and Colorado populations. Relative to prior generations, Millennials are delaying marriage, having fewer children, and having children later in their lives. Relative to the Baby-boomers and Generation X, Millennials



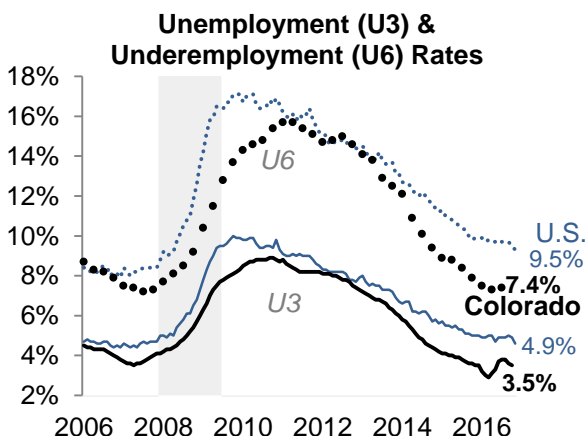
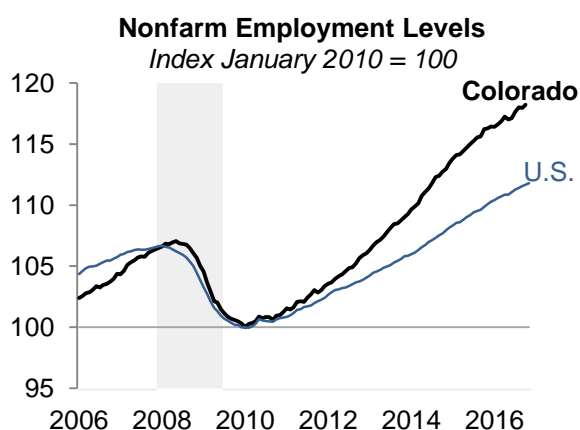
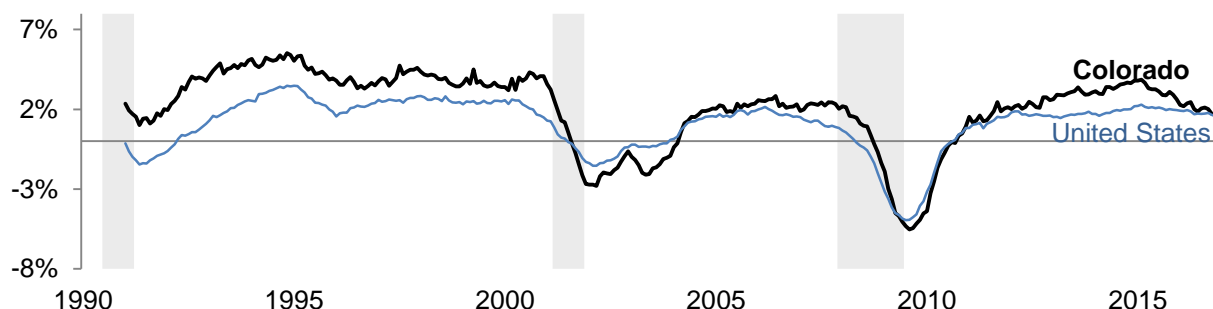
are also less likely to purchase a home and have been hesitant to take on debt. These generational differences in household formation and consumer activity have tempered near-term economic growth. Millennials are, however, likely to spur stronger growth in the future as they earn higher incomes, start families, and spend more.

## Labor Markets

Employment growth continues to slow in Colorado and across the U.S., as is typical of the late stages of an economic expansion (Figure 17, top). As of November, the number of nonfarm jobs in the U.S. was up 1.6 percent relative to year ago levels. The nation continues to add a healthy number of jobs, averaging 180.2 thousand additional jobs per month in 2016 through November. Colorado added jobs at a rate of 1.7 percent in October relative to year ago levels, averaging 3,900 jobs added per month in the first 10 months of 2016. Job gains are expected to slow in 2017 as labor becomes scarcer. As the labor market tightens, wages are expected to rise, though growth will be partially offset by the retirement of high-earning baby boomers.

The U.S. unemployment rate continues to fall, ticking down to a business cycle low of 4.9 percent as of November (Figure 17, bottom right). The nation's underemployment rate also fell through November but remains two percentage points above pre-recessionary lows, pointing to persistent slack in the labor market.

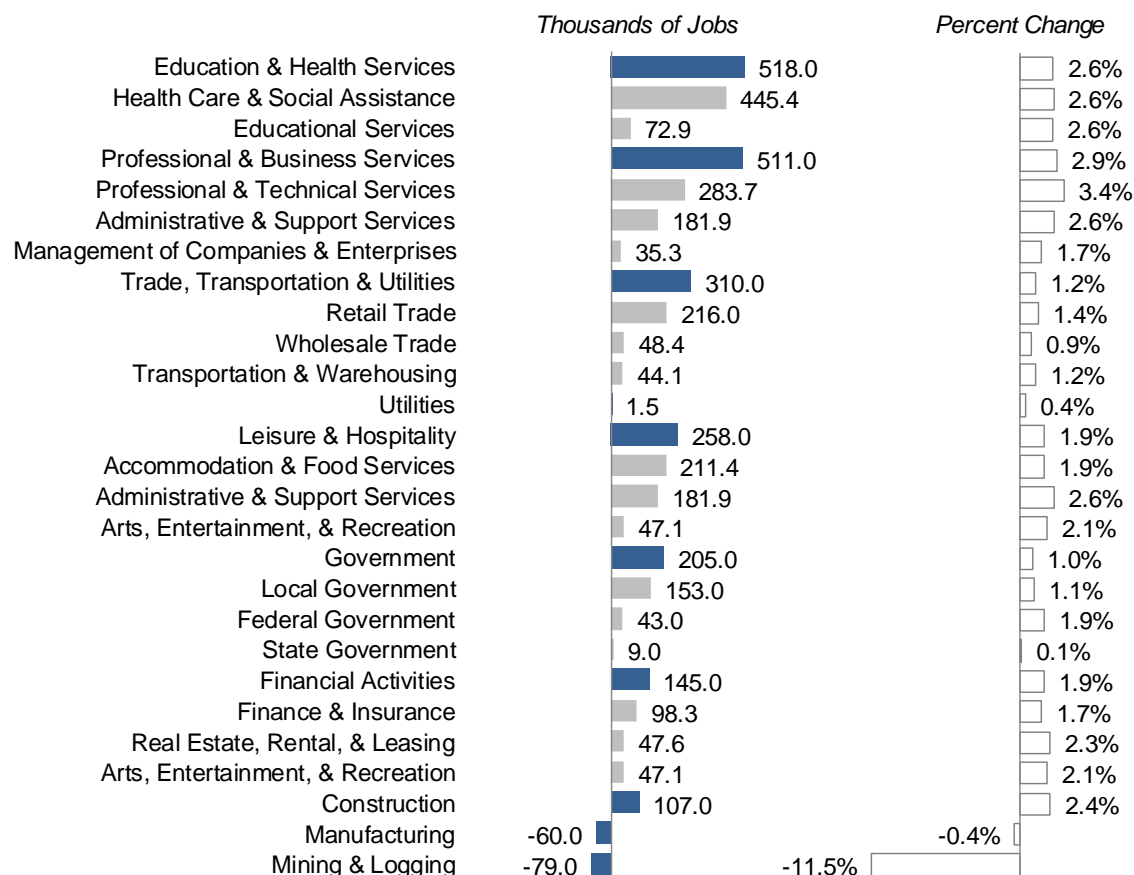
**Figure 17**  
**Selected Colorado and U.S. Labor Market Indicators**  
**Nonfarm Employment Growth**  
*Year-over-Year Percent Change*



Source: U.S. Bureau of Labor Statistics. Unemployment rates for Colorado are shown as four-quarter averages, while data for the U.S. are monthly. Data are seasonally adjusted. Nonfarm employment estimates include revisions expected by Legislative Council Staff from the Bureau of Labor Statistics' annual re-benchmarking process.

U.S. job gains remain broad-based, with professional and business services, and health care and social assistance sectors, adding the most workers (Figure 18). Only the manufacturing and mining and logging sectors posted year-over-year losses, reflecting energy and downstream industry weaknesses and stagnant global demand. Both sectors have stabilized over the past three months and industry indicators point to a modest recovery in the months ahead.

**Figure 18**  
**U.S. Job Gains and Losses by Industry**  
*Year-over-Year Change, November 2016 over November 2015*



*Source: U.S. Bureau of Labor Statistics. Data are seasonally adjusted. Super-sectors are shown in blue, sub-sectors shown in grey.*

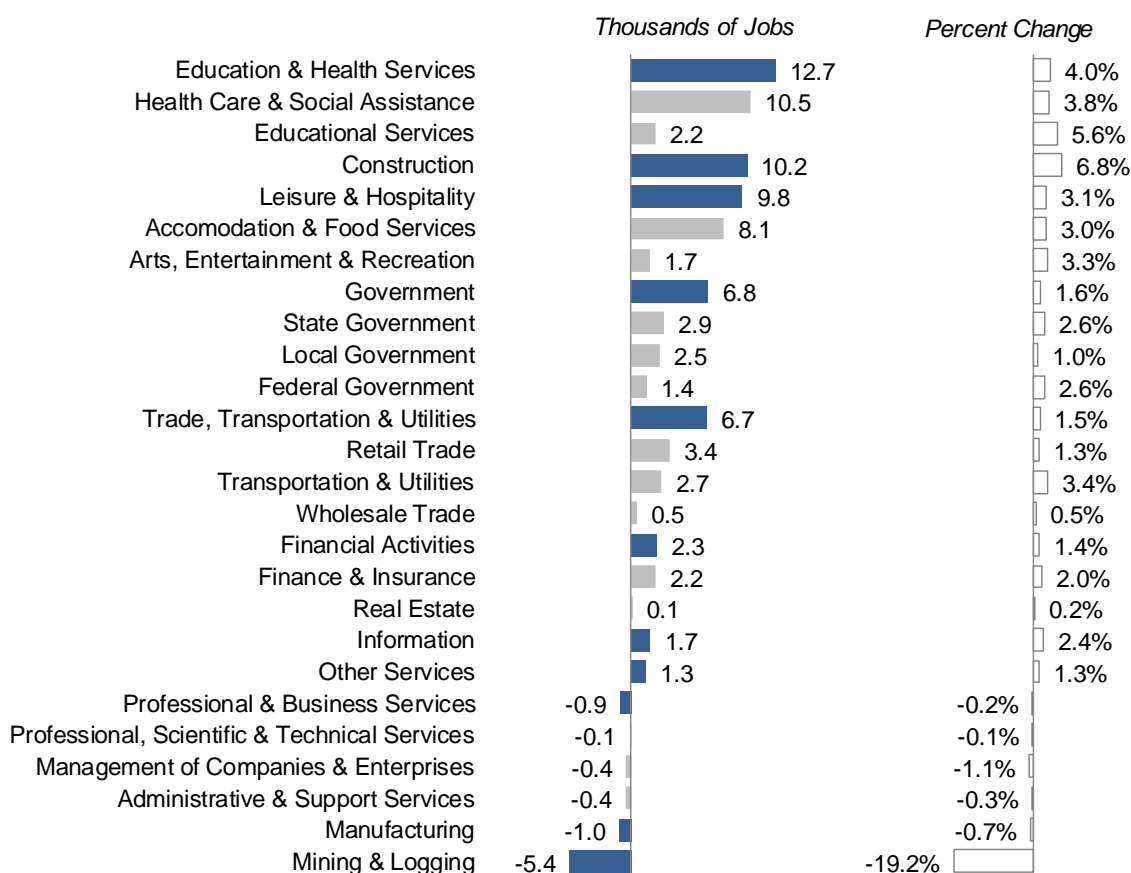
Like the nation as a whole, **Colorado** employment growth slowed in 2016. Slowing reflects energy industry woes and a labor market at full employment. Colorado employment estimates shown in this forecast document reflect Legislative Council Staff rebenchmarking, which incorporates more complete Colorado employment data and suggests a downward revision to published employment estimates.

Strong population in-migration has been pushing up the number of workers seeking jobs in Colorado, boosting the state unemployment and underemployment rates slightly. In October, Colorado's unemployment rate was 3.5 percent, more than a percentage point lower than the national rate.

Much like the nation, Colorado job growth has been broad-based, reflecting gains across nearly all industries relative to year ago levels in October (Figure 19). Health care and social assistance, construction, and leisure and hospitality industries led growth. Energy and manufacturing industries experienced losses on a year-over-year basis, similar to national trends. Unlike the U.S., professional and business services have softened in Colorado. This likely reflects a shortage of skilled workers teamed with retirements and turnover, instead of industry weakness.

- Colorado will continue to add jobs through the forecast period, though at a slower pace as labor market shortages constrain growth. Nonfarm employment in the state will increase 2.1 percent in 2016 and 1.8 percent in 2017.
- U.S. nonfarm employment will increase 1.8 percent in 2016 and 1.6 percent in 2017.

**Figure 19**  
**Colorado Job Gains and Losses by Industry**  
*Year-over-Year Change, October 2016 over October 2015*



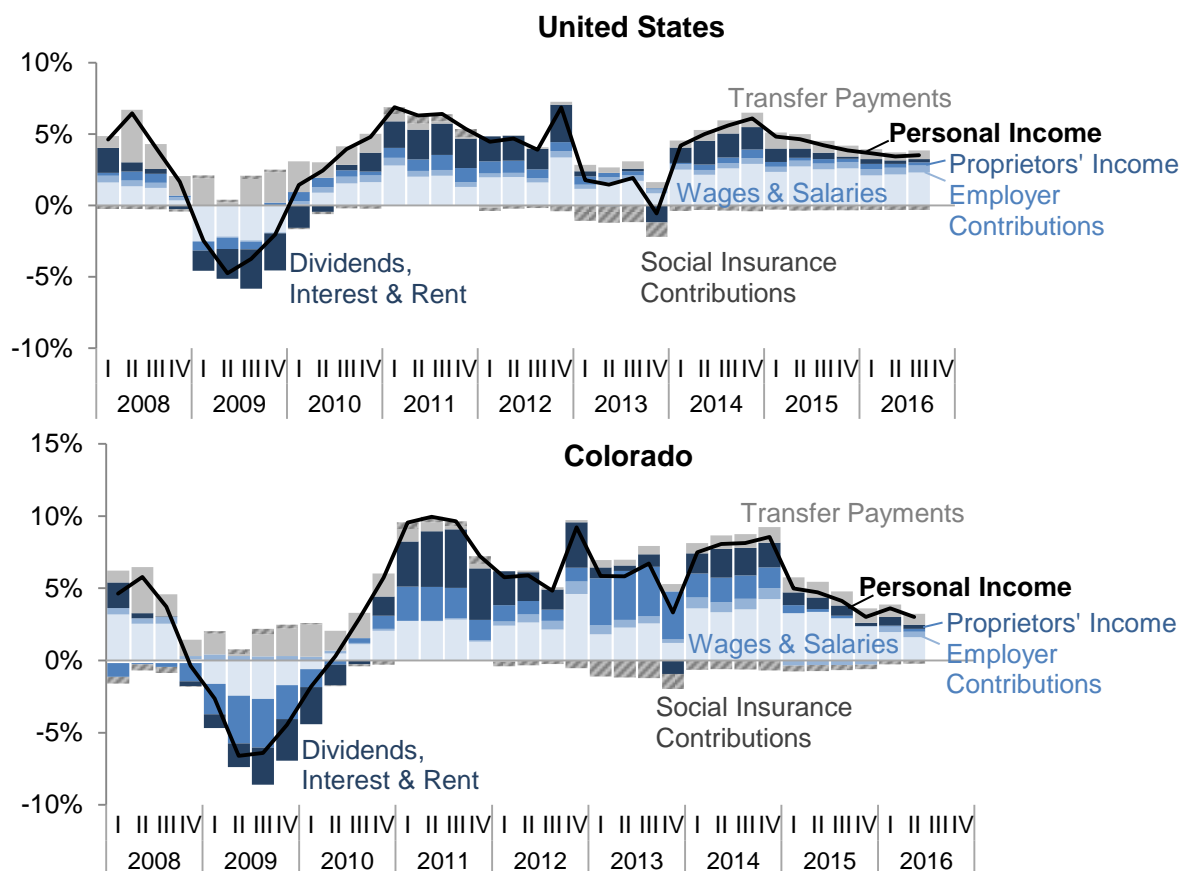
Source: U.S. Bureau of Labor Statistics. Data are seasonally adjusted. Nonfarm employment estimates include revisions expected by Legislative Council Staff from the Bureau of Labor Statistics' annual re-benchmarking process. Super-sectors are shown in blue, sub-sectors shown in grey.

## Households and Consumers

While U.S. households continue to improve their balance sheets, household spending and income growth have cooled and are expected to remain subdued over the forecast period. Real wages have inched upward, but income growth remains slow in part due to demographic change. Higher inflation will erode some of the purchasing power of consumers in the year ahead as rising energy, housing, and medical care costs consume a growing share of the household budget.

Growth in **personal income**, an aggregate indicator of household income, slowed in the U.S. and Colorado in 2016. Figure 20 shows the contributions to year-over-year growth in personal income. In the third quarter of the year, U.S. personal income rose 3.5 percent over levels a year prior. Colorado personal income rose 3.0 percent in the second quarter over the same period last year. Consistent with historical trends, wages and salaries, which make up the largest share of household income, contributed most to growth in both economies. However, wage growth has slowed in Colorado. Gains in dividends, interest, and rent earnings have also been weak relative to historical contributions, reflecting lackluster stock market gains over the past year and a half. In Colorado, more modest gains in proprietors' income, a measure of small business earnings, has also slowed growth prospects.

**Figure 20**  
**Personal Income and Its Components**  
*Contributions to Percent Change over the Same Quarter in the Prior Year*



Source: U.S. Bureau of Economic Analysis with Legislative Council Staff calculations. Data are not adjusted for inflation. Colorado and U.S. data are through the second and third quarter of 2016, respectively.

With slowing income growth, **consumer spending**, as measured by retail trade sales, has softened. U.S. retail sales rose 2.8 percent in October over year ago levels (Figure 21). Colorado data are only available through February 2016. Through the second month of the year, sales were up 4.8 percent over February 2015. The fall in energy prices, which began at the end of 2014, is partially responsible for muted retail sales growth over the past two years. Low oil prices have translated to a drop in gasoline station sales. Electronics and appliance stores have also weakened in recent months, in part reflecting lower prices for consumer electronics.

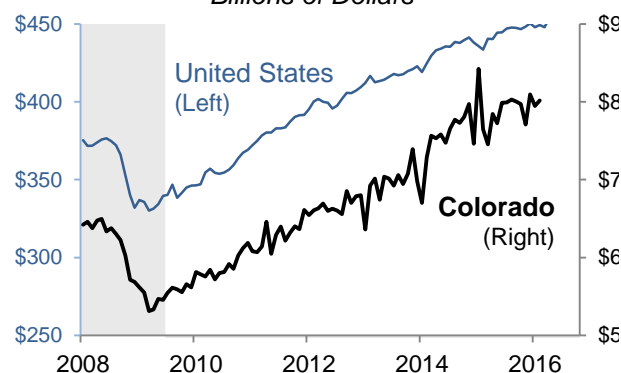
With the stabilization and recent rise in oil prices, retail sales are expected to maintain growth. However, shifting consumption patterns resulting from an aging population are expected to continue to pose a drag on sales. Additionally, higher medical care and housing costs are expected to reduce sales of non-essential goods.

Generally, household balance sheets continue to improve. The **savings rate** for all U.S. households reached 6.0 percent in October, continuing a general upward trend. In spite of rising home values, mortgage debt service ratios remain low, reflecting increases in disposable incomes and low interest rates (Figure 22, bottom). Consumer debt service ratios are rising but remain just below the historical average dating back to the 1980s (Figure 22, top).

Concerns over **subprime auto loan** performance are on the rise. The Quarterly Report on Household Debt and Credit for the third quarter of year shows a continued increase in the balance of delinquent auto loans, particularly among “sub-prime” borrowers—those with credit scores below 620. The quarterly report is published by the Federal Reserve Bank of New York and leverages Equifax credit report data from a sample of 5 percent of the U.S. population of borrowers. While the majority of auto loans are performing well, concerns over auto finance company lending in particular are mounting. The estimated rate of delinquencies among auto finance companies rose a full percentage point over the past four quarters. These companies have taken on a greater share of subprime loans in recent years relative to other lending institutions.

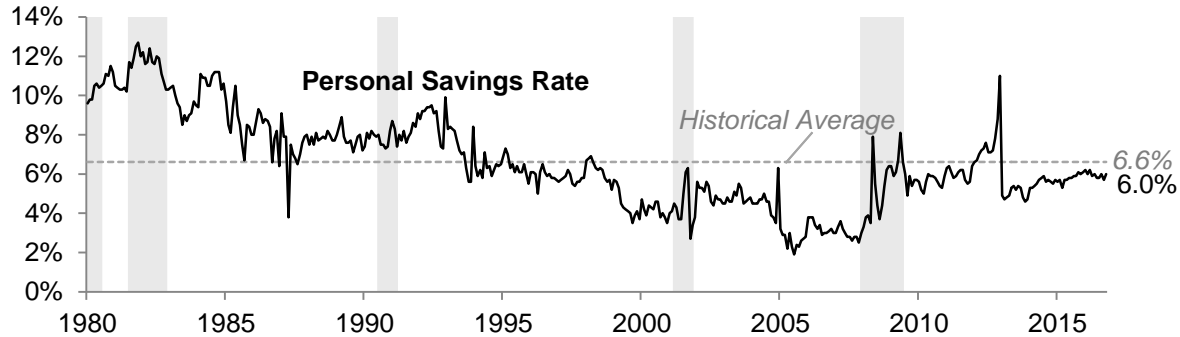
- Colorado personal income is forecast to increase 3.8 percent in 2016 and 4.7 percent in 2017. Nationally, personal income is expected to increase 3.9 percent in 2016 and 5.3 percent in 2017.
- The largest component of personal income, wages and salaries, is expected to increase 4.2 percent in 2016 and 5.6 percent in 2017 in Colorado. For the U.S., wages and salaries are expected to increase 4.4 percent and 5.4 percent, respectively.
- Nominal Colorado retail sales will grow 3.1 percent in 2016 and 4.3 percent in 2017.

**Figure 21**  
**Retail Trade Sales**  
*Billions of Dollars*

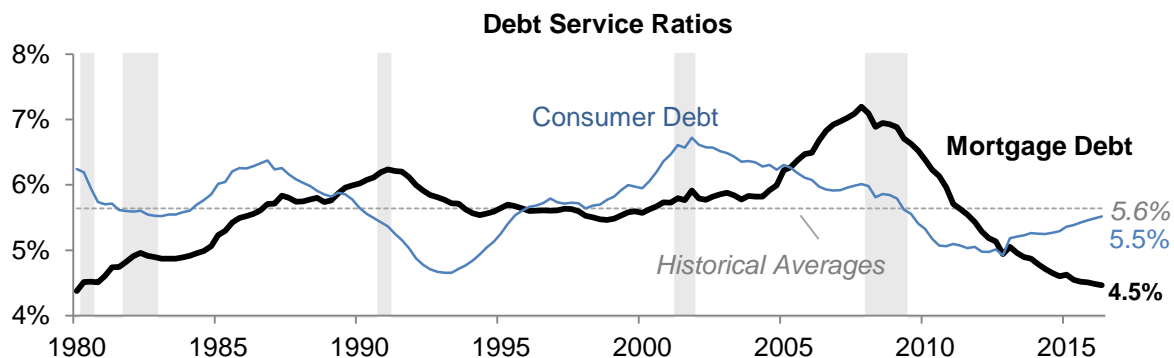


*Source: U.S. Census Bureau and Colorado Department of Revenue. Data are seasonally adjusted but are not adjusted for inflation. U.S. data through October 2016; Colorado data through February 2016.*

**Figure 22**  
**U.S. Household Savings and Debt**



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



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

## Residential Real Estate and Construction

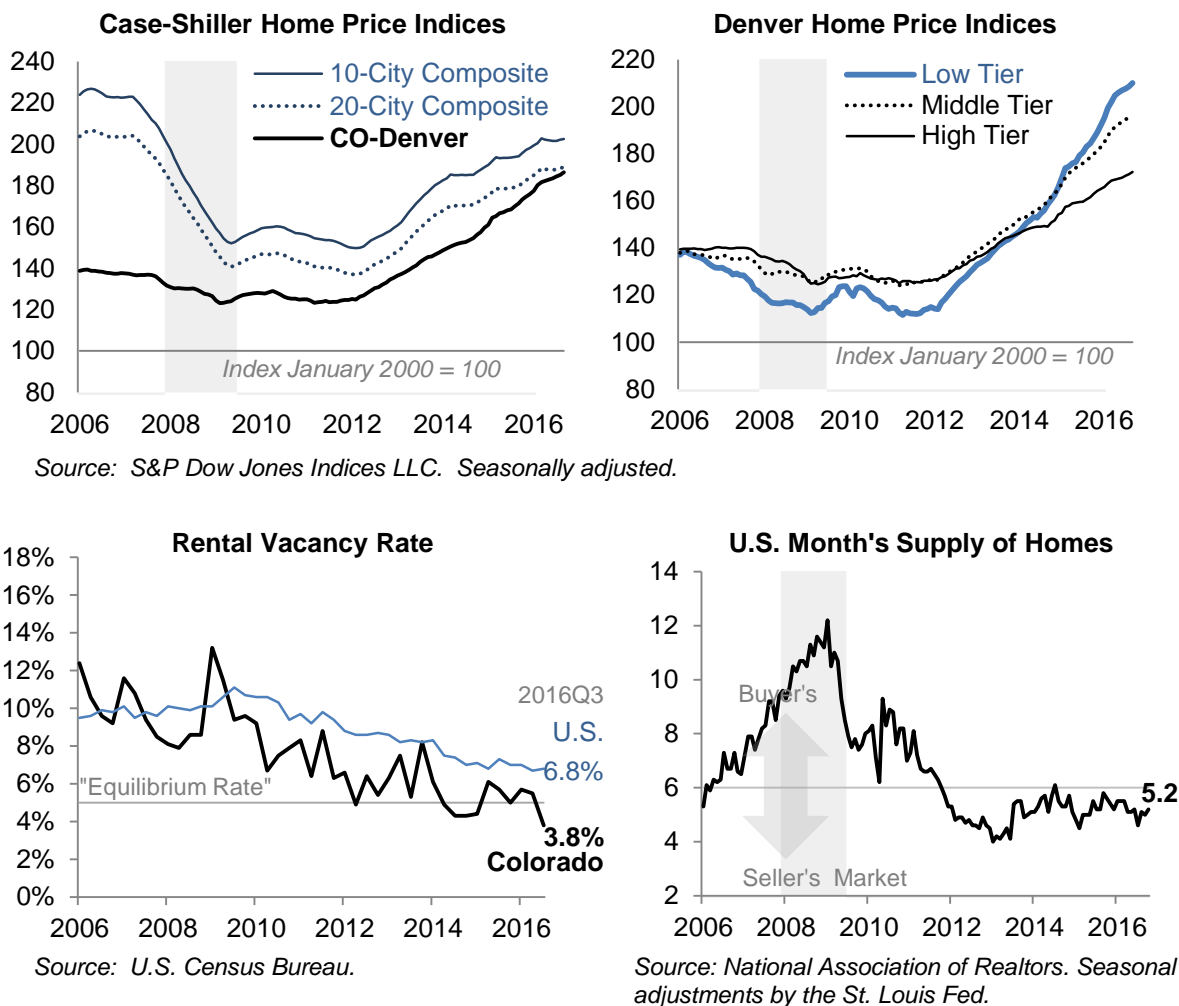
While the national housing market has cooled, Colorado real estate remains hot. Home and rental prices continue to rise as strong demand outstrips a constrained supply of homes. While price appreciation may slow some, continued in-migration and supply constraints for buildable lots and skilled labor are expected to maintain upward pressure on home and rental prices in 2017 and 2018.

In recent months, Colorado home price hikes slowed ever so slightly relative to the pace experienced over the past four years (Figure 23, top left). As measured by the Case-Shiller home prices index for Denver, home prices rose 8.8 percent in September over year ago prices. Comparatively, the 10- and 20-city composite indices, which represent prices across 10 and 20 other major U.S. metropolitan areas, rose 4.3 percent and 5.1 percent, respectively. Prices among lower value homes continue to see the steepest rise in the Denver metro area (Figure 23, top right). All regions of the state have experienced strong price appreciation, with Grand Junction, Pueblo, and Colorado Springs metro areas experiencing stronger growth than the nation as a whole, but weaker growth than other Front Range metro areas of the state.

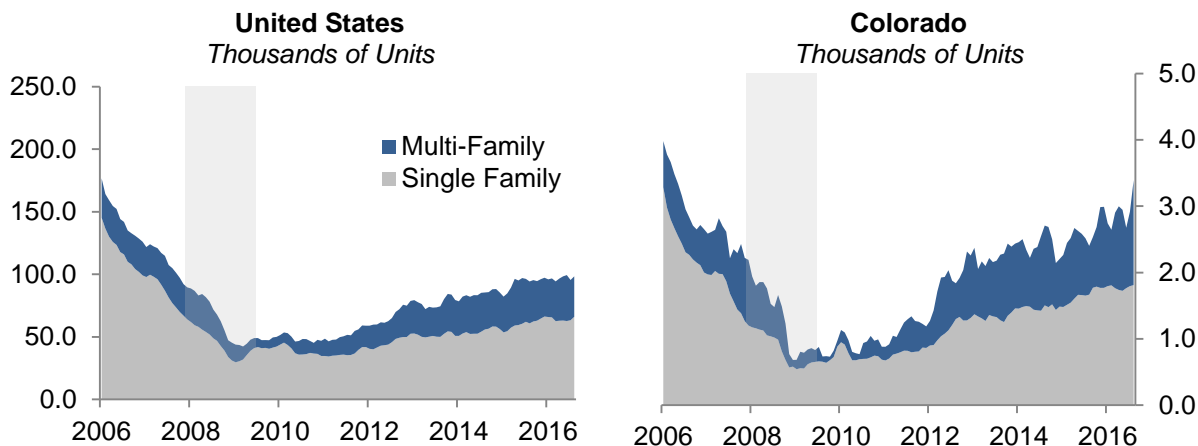
Strong in-migration to Colorado has sent rental vacancy rates downward over the past seven years (Figure 23, middle left). U.S. rental vacancy rates have also declined since the Great Recession, but are nearly double the vacancy rates of Colorado. Landlords and home

sellers remain in control of rental and home prices as demand continues to outstrip supply (Figure 23, middle right).

**Figure 23**  
**Selected Housing Market Indicators**



**Building Permits Issued for New Construction**





Strong demand continues to support new home construction in Colorado. Building has slowed for the nation, while it has picked up in Colorado bolstered by single family home construction activity (Figure 23, bottom left and right). In Colorado, single family housing permits are up 11.0 percent year-to-date through October, and multi-family permits are up 43.9 percent. Nationally, single family permits rose 11.1 percent, while multi-family permits fell 1.4 percent. Many builders in Colorado are reporting difficulties finding skilled labor. Labor shortages across much of the state and limited buildable lots in the Denver metro area are tempering the supply of new homes.

- On strong demand for housing in Colorado, total residential building permits will increase 20.4 percent in 2016 and 4.8 percent in 2017. Growth will be tempered by satisfied demand for multi-family building in recent years and supply constraints.

## **Nonresidential Construction**

Nonresidential construction activity has slowed over the past year. The value of U.S. nonresidential construction grew 2.4 percent in October over year ago levels, according to data published by the U.S. Census Bureau. Construction activity remains just below pre-recessionary highs. Weaker infrastructure spending contributed most to the slowdown, including declines in public safety, transportation, and sewage and waste disposal construction spending. Manufacturing and communication construction spending also fell year-over-year in October.

In Colorado, data published by Dodge Data & Analytics show a 15.4 percent increase in the value of nonresidential construction year-to-date through October over the same period last year. The number and square footage of projects, however, fell 1.8 percent and 2.1 percent, respectively. The value of construction of hotels and motels, offices and banks, education and science buildings, colleges and schools, and warehouses showed strong gains, offsetting declines in the construction of public buildings, and hospitals and health treatment centers.

- The value of nonresidential construction in Colorado will grow 15.3 percent in 2016. Nonresidential construction will decrease 1.2 percent in 2017 as some demand for new construction is satisfied.

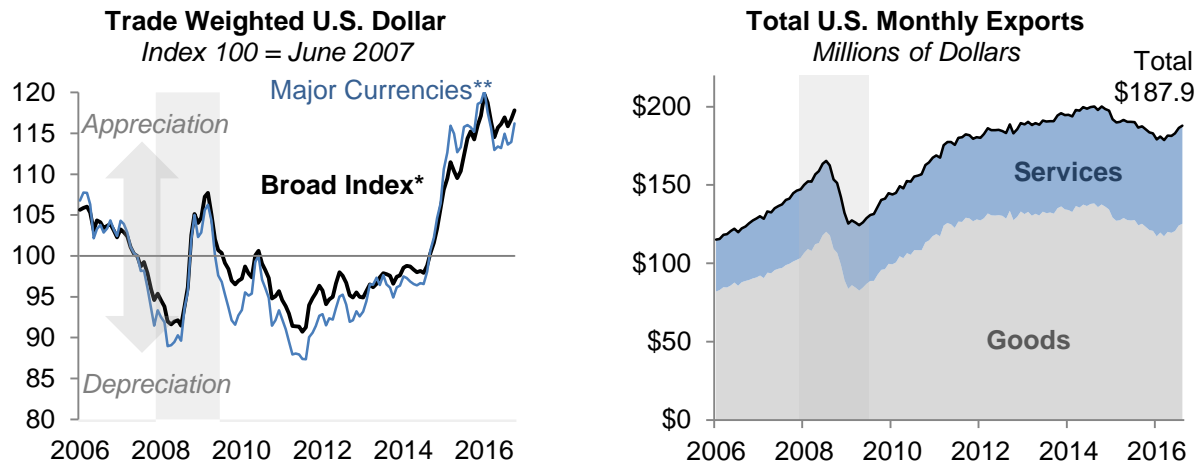
## **Global Economy**

While U.S. and Colorado exports have rebounded some, the strong dollar and subdued global economic activity continue to temper prospects for export growth. Many economies abroad have outpaced expectations in recent months, and commodity prices are trending upward slowly, signaling that the worst may have past. Downside risks, however, dominate the outlook as political uncertainty is rising.

The value of the U.S. dollar relative to foreign currencies remains elevated (Figure 24, left). As a result, the prices of U.S. goods are less competitive than those of foreign trade partners. The strong dollar continues to weigh on U.S. exports and is impacting business operations abroad. In spite of a strong dollar, exports have rebounded, in part due to slightly higher commodity prices. After more than a year of declines, the value of U.S. exports stabilized and reversed trend in the second quarter of 2016 (Figure 24, right). Year-to-date data, however, continue to reflect the 2015 and early 2016 contraction. U.S. exports fell 5.1 percent through September relative to the same period last year, according to data published by WiserTrade.



**Figure 24**  
**Selected Global Economic Indicators**



Canada, the U.S.'s largest trade partner, continues to lead the decline, followed by Mexico, China, and Brazil. Year-to-date exports were down across most commodities. Industrial machinery, including computers, contributed most to the decline. Mineral fuel and related products remained weak, primarily reflecting low crude oil prices.

Comparatively, Colorado exports are down 7.6 percent through September relative to the same period last year. Exports to the Netherlands (which experienced a strong decline in molybdenum ores and concentrates exports), Canada, China, and Mexico contributed most to the decline. Like the nation, export values fell across most commodities, though industrial machinery, including computers, chemicals, and pharmaceutical products contributed most to the weakness in exports.

The October 2016 update of the International Monetary Fund's (IMF's) World Economic Outlook assumes a cautiously optimistic outlook. Growth exceeded expectations in several countries in 2016. In particular, **Russia** and **Brazil**, two countries recently mired in recession, were showing stronger than expected improvements. The IMF maintained expectations for **world output** relative to the July report on the balance of upward revisions to growth in emerging markets and reduced expectations for the U.S. and Eurozone.

Economic activity in **Canada**, the largest trade partner to the U.S., remains mixed. Canada has been hit hard by low commodity prices, which have slowed exports and employment growth. Economic growth in **Mexico** has slowed on government spending cuts, weak manufacturing activity, and declines in consumer confidence.

Uncertainty in the aftermath of the **Brexit** vote continues. In early November, the European Commission reduced its growth outlook citing a poor business investment climate on the uncertainty surrounding how, when, and if Brexit will occur. The High Court ruled in early November that only Parliament can invoke Article 50, which is a necessary precursor to a British exit from the European Union. This makes the probability of a "soft" exit more likely. The

European Commission forecast that the UK economy will grow only 1.0 percent in 2017, a downward revision from the spring forecast of 1.4 percent. Inflation in the UK continues to creep upward reflecting the depreciation of the pound relative to foreign currencies. The weak pound has failed to promote UK exports abroad.

Elsewhere in the Eurozone, at least eight of **Italy's** troubled banks risk failure under rising market uncertainty following a referendum that resulted in increasing political uncertainty and the resignation of the country's prime minister.

Rebalancing the **Chinese** economy poses continued challenges to global economic growth. The country's worrisome shadow banking industry and mounting state-owned and private industry debt pose considerable risks to the country's financial stability. Additionally, an outflow of capital from the country is putting downward pressure on the Chinese renminbi and is raising concerns over capital flight. China is pursuing several strategies to stem capital flight, including a prohibition on certain forms of foreign direct investment in other countries.

**India's** Prime Minister, Narendra Modi, declared the country's high value bank notes (paper money) invalid in early November in efforts to migrate India's cash-based, tax-avoidant economy towards formalized digital payment systems. The move was initially celebrated by markets but the full impact of the move has yet to come to light and will be marked by mixed results. Consumer and business spending and housing market activity are expected to slow in coming months as households and companies operate without cash.

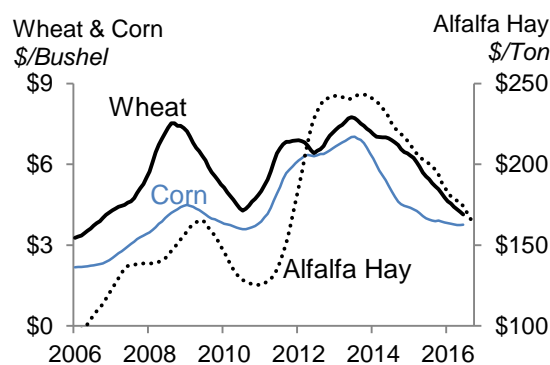
## Agriculture

American agricultural producers continue to struggle. Elevated U.S. crop yields are flooding the market, pushing down prices (Figure 25). The U.S. Department of Agriculture now forecasts record U.S. supply for wheat and corn in 2016, attributable to both increased production and a reduction in net exports. A strong dollar compounds the challenges faced by U.S. farmers, as international consumers turn to cheaper food supplies from other countries.

Declining income, low commodity prices, and low profit margins have hurt farm cash flow. As shown in the upper right panel of Figure 26, 87 percent of bankers responding to the Kansas City Federal Reserve's Quarterly Survey of Agricultural Credit reported a decline in farm income among their clients in the third quarter of 2016. Respondents also reported decreases in the value of farmland.

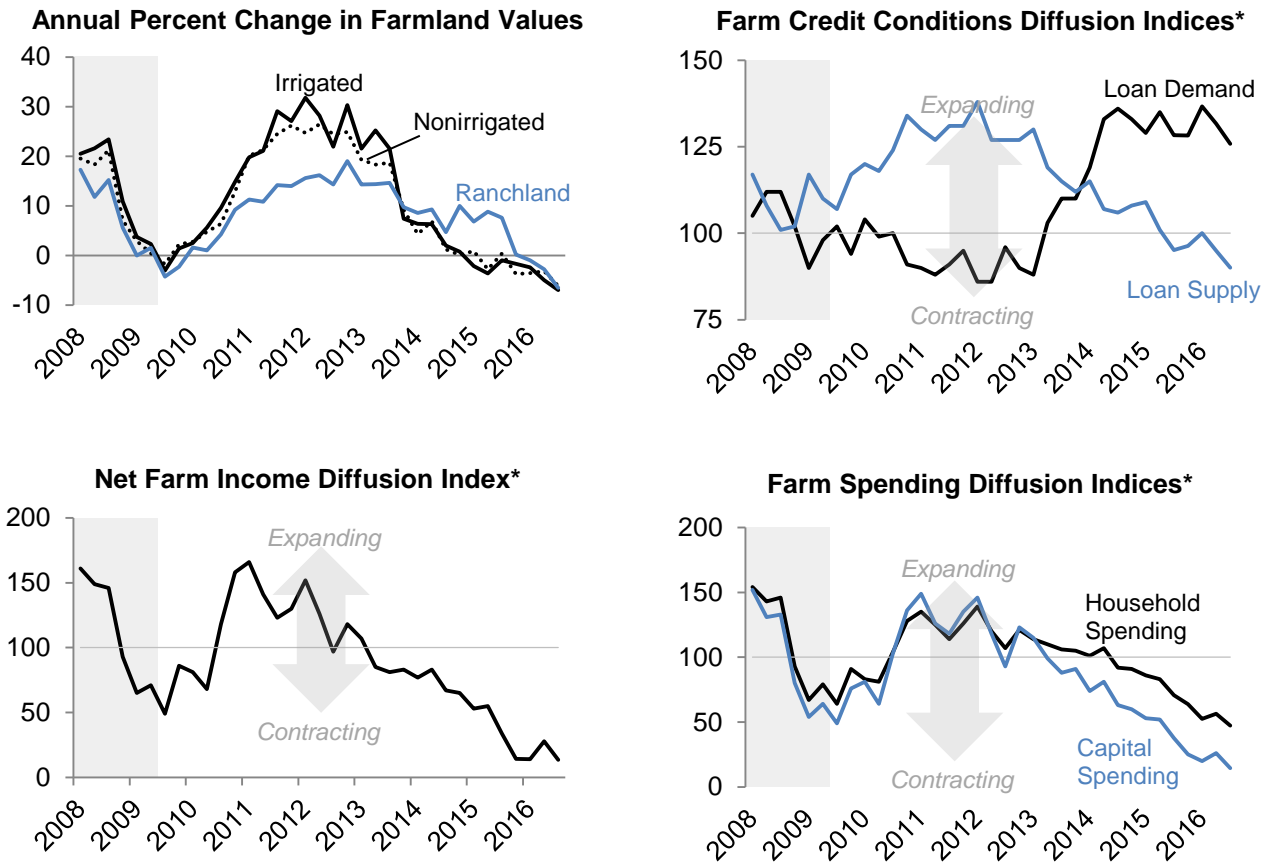
Low cash flow and reduced wealth have resulted in lower levels of household and capital spending (Figure 26, lower right) and prompted many farmers to take on short-term loans. As farmers become more reliant on credit and crop prices remain low, concerns over debt solvency are rising. The Federal Reserve reports that the number of agricultural loans past due by more than 90 days have risen in each of the last 5 quarters and have reached their highest level since 2013.

**Figure 25**  
**Prices Received for Colorado Crops**



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

**Figure 26**  
**Select Indicators of Tenth District Agricultural Credit Conditions**



Source: Federal Reserve Bank of Kansas City, Quarterly Survey of Agricultural Credit Conditions. Survey respondents include approximately one third of agriculture bankers in the Tenth District. The Tenth district includes Wyoming, Oklahoma, Colorado, Kansas, eastern Missouri and northern New Mexico.

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

## Summary

The Colorado and U.S. economies are expected to continue to expand at a modest pace throughout the forecast period. Growth in household income and consumer spending has slowed over the past year, owing in part to demographic change and low commodity prices. Aging U.S. and Colorado populations, growing inflationary pressures, and rising interest rates are expected to temper consumer spending in coming years.

Business activity has improved in recent months, sparking renewed optimism in U.S. economic growth prospects. Yet, the recovery in energy, manufacturing, and export industries remains fragile and reliant upon stronger global demand and higher commodity prices. Rising global political risk threatens the economic outlook.

## **Risks to the Forecast**

Risks remain skewed to the downside under rising global political uncertainty. The energy and manufacturing industries appear poised for a modest recovery over the coming year. However, another drop in energy prices or contraction in economic activity abroad could pose a blow to struggling energy, export, and manufacturing industries.

Upside risks include a more robust rebound in global economic growth and stronger oil price appreciation than expected. Additionally, a rise in federal government spending on infrastructure or other projects could provide larger than expected fiscal stimulus to the U.S. economy. Relative to the September forecast, the risk of recession has diminished slightly, but remains elevated.

**Table 14**  
**National Economic Indicators**

Calendar Years	2011	2012	2013	2014	2015	Legislative Council Staff Forecast		
						2016	2017	2018
Real GDP ( <i>Billions</i> ) <sup>1</sup>	\$15,020.6	\$15,354.6	\$15,612.2	\$15,982.3	\$16,397.2	\$16,659.5	\$17,059.4	\$17,434.7
Percent Change	1.6%	2.2%	1.7%	2.4%	2.6%	1.6%	2.4%	2.2%
Nonfarm Employment ( <i>Millions</i> ) <sup>2</sup>	131.9	134.2	136.4	138.9	141.8	144.4	146.7	148.6
Percent Change	1.2%	1.7%	1.6%	1.9%	2.1%	1.8%	1.6%	1.3%
Unemployment Rate <sup>2</sup>	8.9%	8.1%	7.4%	6.2%	5.3%	4.8%	5.0%	5.1%
Personal Income ( <i>Billions</i> ) <sup>1</sup>	\$13,254.5	\$13,915.1	\$14,073.7	\$14,809.7	\$15,458.5	\$16,061.4	\$16,912.6	\$17,842.8
Percent Change	6.2%	5.0%	1.1%	5.2%	4.4%	3.9%	5.3%	5.5%
Wage and Salary Income ( <i>Billions</i> ) <sup>1</sup>	\$6,633.2	\$6,930.3	\$7,116.7	\$7,476.3	\$7,854.8	\$8,200.4	\$8,643.2	\$9,127.3
Percent Change	4.0%	4.5%	2.7%	5.1%	5.1%	4.4%	5.4%	5.6%
Inflation <sup>2</sup>	3.1%	2.1%	1.5%	1.6%	0.1%	1.2%	2.3%	2.4%

*Sources*

<sup>1</sup>Bureau of Economic Analysis. Real gross domestic product (GDP) is adjusted for inflation. Personal income and wages and salaries not adjusted for inflation.

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

**Table 15**  
**Colorado Economic Indicators**

Calendar Years	2011	2012	2013	2014	2015	Legislative Council Staff Forecast		
						2016	2017	2018
Population ( <i>Thousands, as of July 1</i> ) <sup>1</sup>	5,119.7	5,191.7	5,272.1	5,355.9	5,456.6	5,549.3	5,649.2	5,750.9
Percent Change	1.4%	1.4%	1.5%	1.6%	1.9%	1.7%	1.8%	1.8%
Nonfarm Employment ( <i>Thousands</i> ) <sup>2</sup>	2,259.0	2,311.4	2,380.6	2,461.6	2,540.8	2,594.1	2,640.8	2,688.4
Percent Change	1.7%	2.3%	3.0%	3.4%	3.2%	2.1%	1.8%	1.8%
Unemployment Rate <sup>2</sup>	8.3	7.8	6.7	4.9	3.8	3.4	3.4	3.6
Personal Income ( <i>Millions</i> ) <sup>3</sup>	\$219,861	\$234,006	\$246,648	\$266,535	\$277,732	\$288,286	\$301,835	\$315,719
Percent Change	9.1%	6.4%	5.4%	8.1%	4.2%	3.8%	4.7%	4.6%
Wage and Salary Income ( <i>Millions</i> ) <sup>3</sup>	\$118,558	\$125,014	\$129,597	\$138,701	\$146,574	\$152,730	\$161,283	\$170,154
Percent Change	4.2%	5.4%	3.7%	7.0%	5.7%	4.2%	5.6%	5.5%
Retail Trade Sales ( <i>Millions</i> ) <sup>4</sup>	\$75,548	\$80,073	\$83,569	\$90,653	\$94,920	\$97,863	\$102,071	\$106,052
Percent Change	6.8%	6.0%	4.4%	8.5%	4.7%	3.1%	4.3%	3.9%
Housing Permits ( <i>Thousands</i> ) <sup>1</sup>	13.5	23.3	27.5	28.7	31.9	38.4	40.2	41.8
Percent Change	16.5%	72.6%	18.1%	4.3%	11.1%	20.4%	4.8%	3.9%
Nonresidential Building ( <i>Millions</i> ) <sup>5</sup>	\$3,923	\$3,695	\$3,624	\$4,315	\$4,784	\$5,516	\$5,450	\$5,336
Percent Change	24.7%	-5.8%	-1.9%	19.1%	10.9%	15.3%	-1.2%	-2.1%
Denver-Boulder-Greeley Inflation <sup>2</sup>	3.7%	1.9%	2.8%	2.8%	1.2%	2.9%	2.9%	2.5%

*Sources*

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

<sup>2</sup>Bureau of Labor Statistics. Nonfarm employment estimates include revisions to 2014 data expected by Legislative Council Staff from the Bureau of Labor Statistics's annual re-benchmarking process. Inflation shown as the year-over-year change in the consumer price index for Denver-Boulder-Greeley metro areas.

<sup>3</sup>Bureau of Economic Analysis. Personal income and wages and salaries not adjusted for inflation.

<sup>4</sup>Colorado Department of Revenue.

<sup>5</sup>F.W. Dodge.

## ASSESSED VALUE PROJECTIONS

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This section provides projections of assessed values for residential and nonresidential property in Colorado and the residential assessment rate through 2019. Assessed values are an important factor in determining property taxes, the largest source of local government tax revenue in Colorado. School districts, counties, cities, and special districts all receive property tax revenue. Local property tax revenue is also a major source of local public school funding, along with state equalization payments in most districts. Assessed values are thus an important determinant of the amount of state aid provided to public schools.

### Summary

Statewide assessed (taxable) values are expected to decline 0.1 percent between 2016 and 2017. This decrease is expected despite strong appreciation in the market value of residential property between 2014 and 2016, because that appreciation necessitates a decrease in the residential assessment rate (RAR). Nonresidential values are expected to increase 2.5 percent in 2017, as increases in commercial property and vacant land will offset declines in assessed values for oil and natural gas property due to continued low oil and natural gas prices. Assessed values in each region of the state will be determined by the unique mix of properties and economic forces specific to each region and school district.

The RAR is expected to decrease from *7.96 percent* to *6.85 percent* for 2017 and 2018. The RAR has not changed since 2003. To comply with the Gallagher Amendment in the state constitution, the General Assembly will need to set the new RAR through legislation during the 2017 session based on calculations performed by the Division of Property Taxation published in January and April 2017.

### Residential Assessment Rate

The Gallagher Amendment in the Colorado Constitution requires an adjustment to the RAR in order to maintain a constant relationship between the statewide share of residential taxable value and the statewide share of nonresidential taxable value. The amendment prevents the share of residential property from increasing relative to other classes of property due to an increase in home values.

**Target percentage.** The first step in determining the RAR is updating the existing target percentages of residential property and nonresidential property for the prior assessment cycle. The new target percentage is based on economic activity that occurred between the last reassessment cycle and the current assessment cycle. For the 2017 assessment cycle, the target percentage is based on the properties that existed on January 1, 2015 and adjusted for new construction and changes in natural resource production that occurred during 2015 and 2016. The target percentage for residential property is expected to decrease from 45.67 percent in 2015 to 45.20 percent in 2017.

**Residential assessment rate.** Once the target percentage has been determined, the RAR is adjusted so that 2017 residential taxable values account for the target percentage. Based on the projected market values of 2017 residential and nonresidential properties, the RAR for 2017

and 2018 is expected to be 6.85 percent. In 2019, the RAR is expected to decline to 6.10 percent. The RAR is expected to decrease 13.9 percent, which results in reduced residential assessed values in any region or school district that experienced less than 13.9 percent appreciation in home values between the 2015 and 2017 reassessment cycles.

This rate is based on the Legislative Council Staff forecast for market values. Therefore, the RAR may be higher or lower than 6.85 percent in 2017 and 2018, depending on the actual residential and nonresidential values reported to the Division of Property Taxation in the spring of 2017.

***Division of Property Taxation report.*** The Division of Property Taxation within the Department of Local Affairs is required to publish a preliminary estimate for the target percentage and RAR in January 2017 and a final estimate in April 2017. Assessed value data provided to the division by county assessors are used to prepare the report. Once the final report has been published, the General Assembly must pass a bill<sup>1</sup> in 2017 to set the RAR for 2017 and 2018 whether the RAR changes or not.

***The Gallagher and TABOR amendments.*** The RAR has been fixed in law at 7.96 percent since 2003. TABOR requires voter approval to increase any tax rate, including the RAR. The target percentages calculated by the Division of Property Taxation are calculated consistent with the Gallagher Amendment, which allows the RAR to float each reassessment cycle. Based on a floating assessment rate, the RAR would have reached 9.13 percent for 2013 and 2014 and would have been 8.24 percent for 2015 and 2016. However, the RAR could not rise to these levels without a vote of the people.

## **Statewide Assessed Values**

Statewide assessed (taxable) values reached \$101.4 billion in 2016 and are expected to decrease 0.1 percent in 2017. In 2018, assessed values are expected to increase 1.3 percent due to new construction and an improving market for oil and natural gas producers. Residential and nonresidential assessed values are shown in Table 16 on page 61 and Figure 27 on page 62. Maps with assessed values by region and school districts are shown in Figures 29 and 30 on pages 66 and 67.

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<sup>1</sup>Colo. Const. art. X, §3.



**Table 16**  
**Residential and Nonresidential Assessed Values**  
*Billions of Dollars*

Year	Residential Assessed Value	Percent Change	Nonresidential Assessed Value	Percent Change	Total Assessed Value	Percent Change
2007	\$39,331	14.5%	\$45,816	14.0%	\$85,147	14.2%
2008	\$40,410	2.7%	\$47,140	2.9%	\$87,550	2.8%
2009	\$42,298	4.7%	\$55,487	17.7%	\$97,785	11.7%
2010	\$42,727	1.0%	\$49,917	-10.0%	\$92,644	-5.3%
2011	\$38,908	-8.9%	\$48,986	-1.9%	\$87,894	-5.1%
2012	\$39,198	0.7%	\$50,211	2.5%	\$89,409	1.7%
2013	\$38,495	-1.8%	\$50,153	-0.1%	\$88,648	-0.9%
2014	\$39,003	1.3%	\$52,579	4.8%	\$91,582	3.3%
2015	\$46,378	18.9%	\$58,899	12.0%	\$105,277	15.0%
2016	\$47,261	1.9%	\$54,157	-8.1%	\$101,419	-3.7%
2017*	\$45,790	-3.1%	\$55,522	2.5%	\$101,312	-0.1%
2018*	\$46,636	1.8%	\$56,041	0.9%	\$102,677	1.3%
2019*	\$45,148	-3.2%	\$58,130	3.7%	\$103,278	0.6%

Source: Colorado Department of Local Affairs, Division of Property Taxation.

\*Legislative Council Staff forecast.

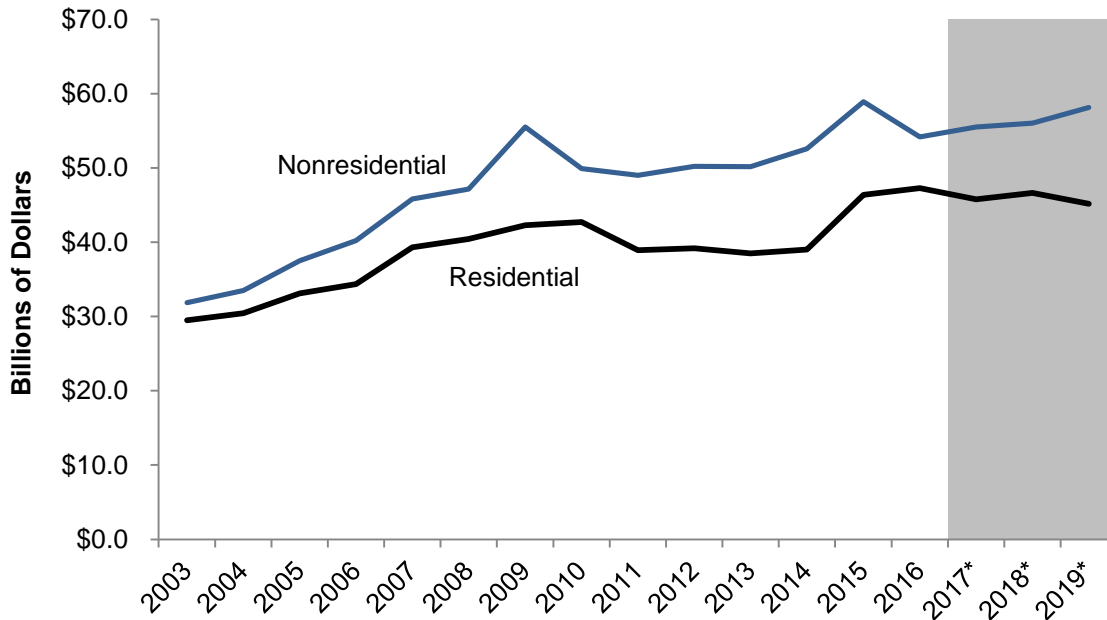
**Residential assessed values.** Statewide residential *market* values are expected to increase 12.6 percent in 2017, a reassessment year. The 2017 market values are determined by home sales that occurred in 2015 and the first half of 2016. The housing market was especially strong along the northern front range, with double digit price increases forecast in the Denver metro area, northern Colorado, and the mountain resort areas. Rural parts of the state are expected to have slower home price appreciation.

After applying the drop in the RAR from 7.96 percent to 6.85 percent, residential assessed values will decline 3.1 percent compared with 2016 assessed values. If the RAR did not change from 7.96 percent to 6.85 percent in 2017, statewide residential assessed values would have been \$7.4 billion higher.

**Nonresidential assessed values.** The assessment rate for nonresidential property is fixed in law, so changes in actual value are reflected in the assessed value. Total statewide assessed nonresidential property values are expected to increase 2.5 percent in 2017. Projected increases in commercial property and vacant land will be large enough to offset expected decreases in natural resource producing properties, especially oil and gas.

Nonresidential assessed values are expected to increase moderately through the forecast period driven by oil and natural gas price increases in 2017 and 2018. Figure 27 on page 62 depicts residential and nonresidential assessed values from 2003 through the end of the forecast period.

**Figure 27**  
**Residential and Nonresidential Assessed Values**  
 2003 to 2019



Source: Colorado Department of Local Affairs, Division of Property Taxation.  
 \*Legislative Council Staff forecast.

## Regional Impact

Assessed values in each region of the state are determined by the unique mix of properties and economic forces specific to each region and school district. Table 17 on page 62 shows the 2016 assessed value by region and the expected change throughout the forecast period.

**Table 17**  
**2016 Assessed Value and Forecast Changes**  
 Billions of Dollars

Region	Preliminary 2016*	2017	2018	2019	3-Year Annual Average
Colorado Springs	\$6,957	-2.8%	1.4%	-1.3%	-0.9%
Eastern Plains	\$2,749	-3.9%	-0.3%	-0.6%	-1.6%
Metro Denver	\$52,944	2.9%	2.2%	2.0%	2.3%
Mountain	\$11,450	-2.2%	0.3%	-1.6%	-1.2%
Northern	\$12,813	-4.7%	-0.2%	-0.5%	-1.8%
Pueblo	\$2,703	-2.8%	0.4%	-0.9%	-1.2%
San Luis Valley	\$641	-3.1%	1.0%	-1.6%	-1.3%
Southwest Mountain	\$2,953	-5.3%	1.6%	0.3%	-1.2%
Western	\$8,210	-2.9%	-0.1%	-1.7%	-1.6%
<b>Statewide Total</b>	<b>\$101,419</b>	<b>-0.1%</b>	<b>1.3%</b>	<b>0.6%</b>	<b>0.6%</b>

Source: Colorado Department of Local Affairs, Division of Property Taxation.  
 \*Legislative Council Staff forecast.

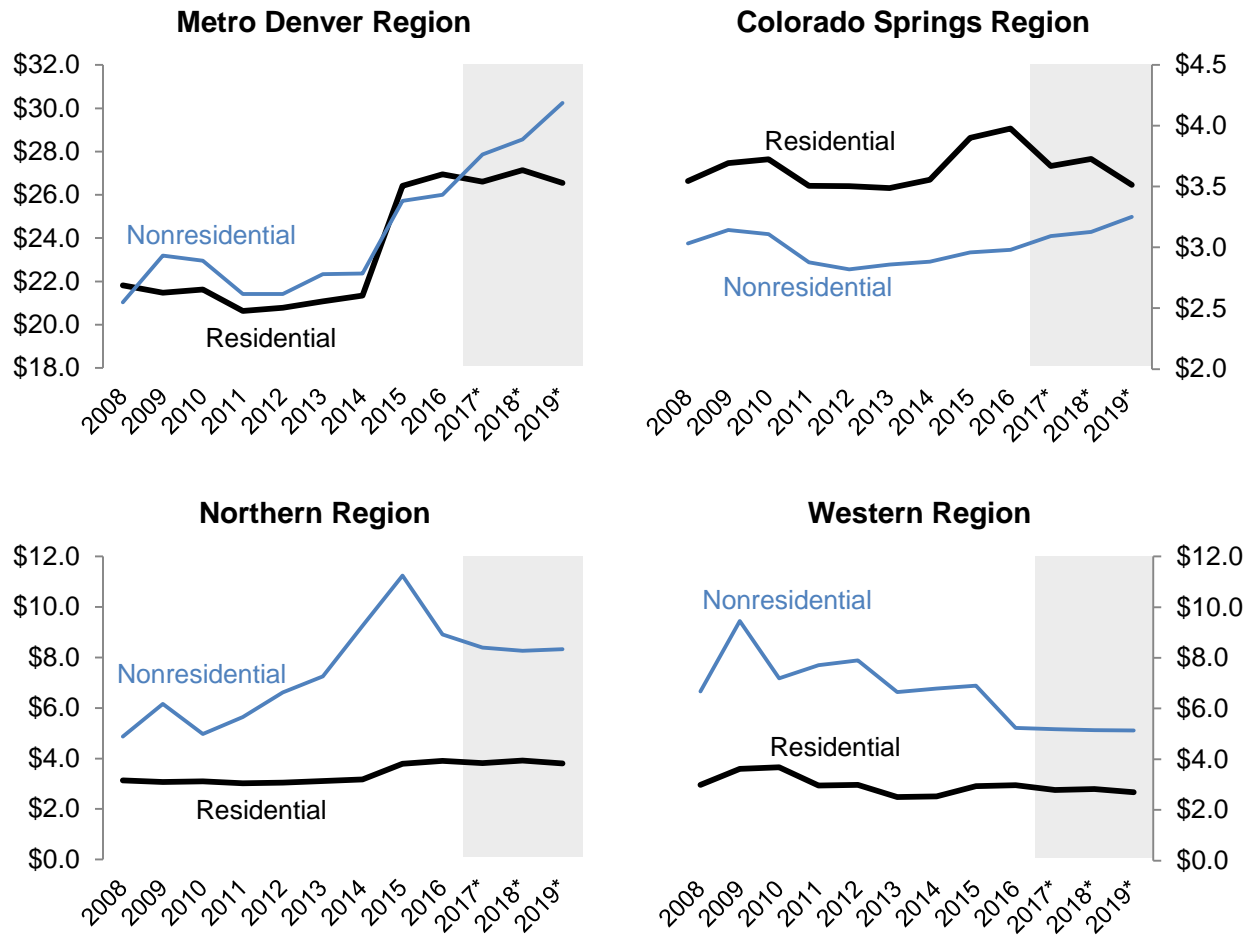
The only region in the state with an increase in total assessed value between 2016 and 2017 is the metro Denver region. Values of nonresidential property classes in the Denver region are forecast to increase throughout the forecast period. In addition, home prices between 2014 and 2016 appreciated at similar rates to the reduction in the RAR. The combination of these two factors thus resulted in only a slight decline in residential assessed values.

The largest declines in assessed values between 2016 and 2017 are expected to occur in the northern, southwest mountain, and eastern regions of the state. Oil and natural gas property is expected to decline in the first two years of the forecast period, and account for a significant portion of the value of taxable property in these three regions. Other nonresidential property classes in these three regions are expected to increase through the forecast period, but not enough to exceed the declines in the value of oil and gas property. In addition, they will experience reduced residential assessed values because the reduction in the RAR is greater than regional home price appreciation.

The other five regions are expected to experience decreases in total assessed values of between 2.2 percent and 3.1 percent between 2016 and 2017. In general, nonresidential property assessed values in these regions are expected to increase through the forecast period. Value for state assessed property is forecast to increase in the next three years. Vacant and agricultural land values are expected to increase in value in 2017 and 2019, the next two reassessment years. Commercial and industrial property assessed values will increase in 2017 and 2019 based on continued economic expansion, and will have a smaller increase due to new construction in the intervening year. These increases are offset by declining residential assessed values due to the RAR reduction.

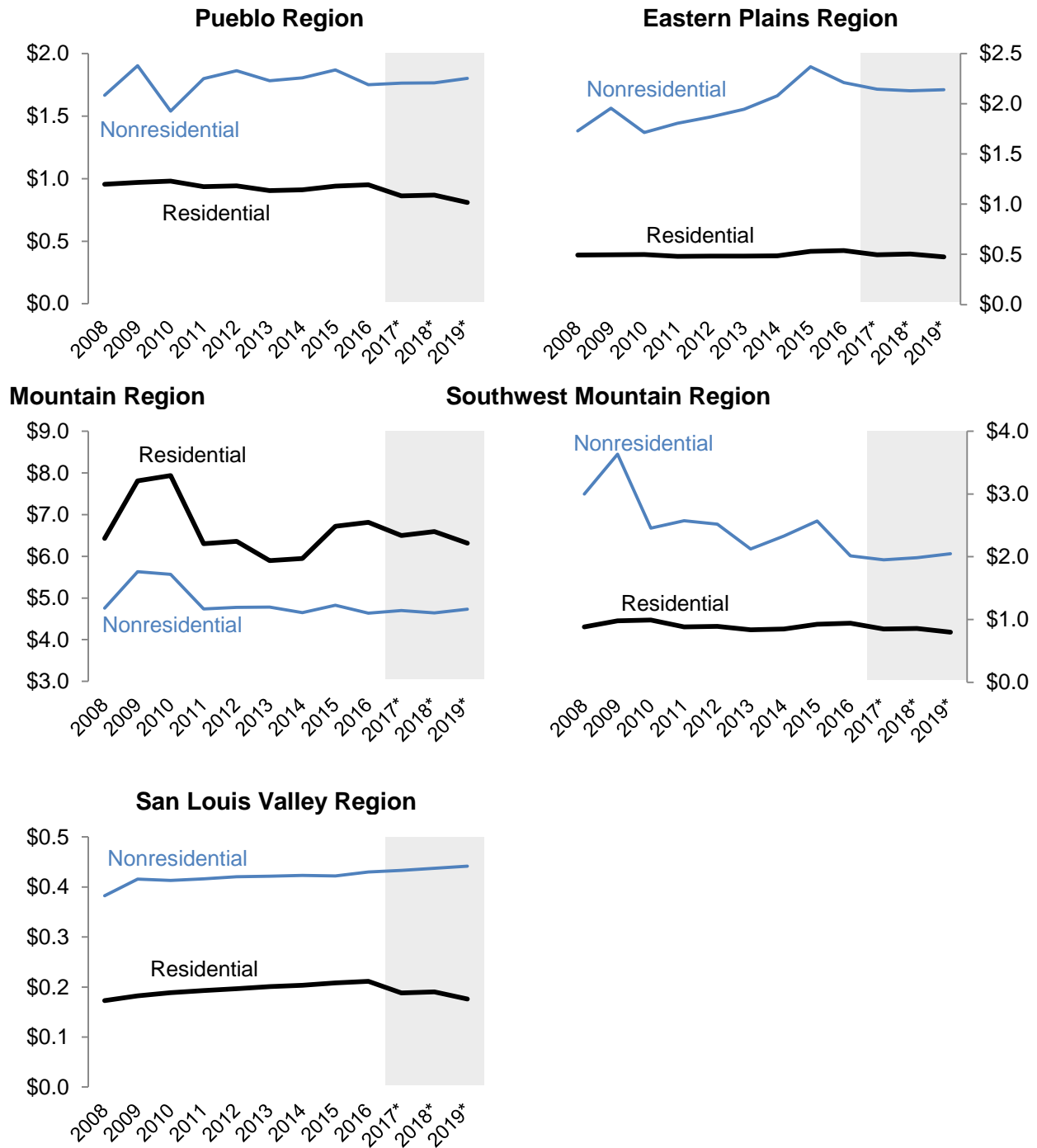
Regional trends for residential and nonresidential assessed (taxable) values are shown in Figure 28 on page 64.

**Figure 28**  
**Assessed Values by Region**  
*Dollar Amounts in Billions*



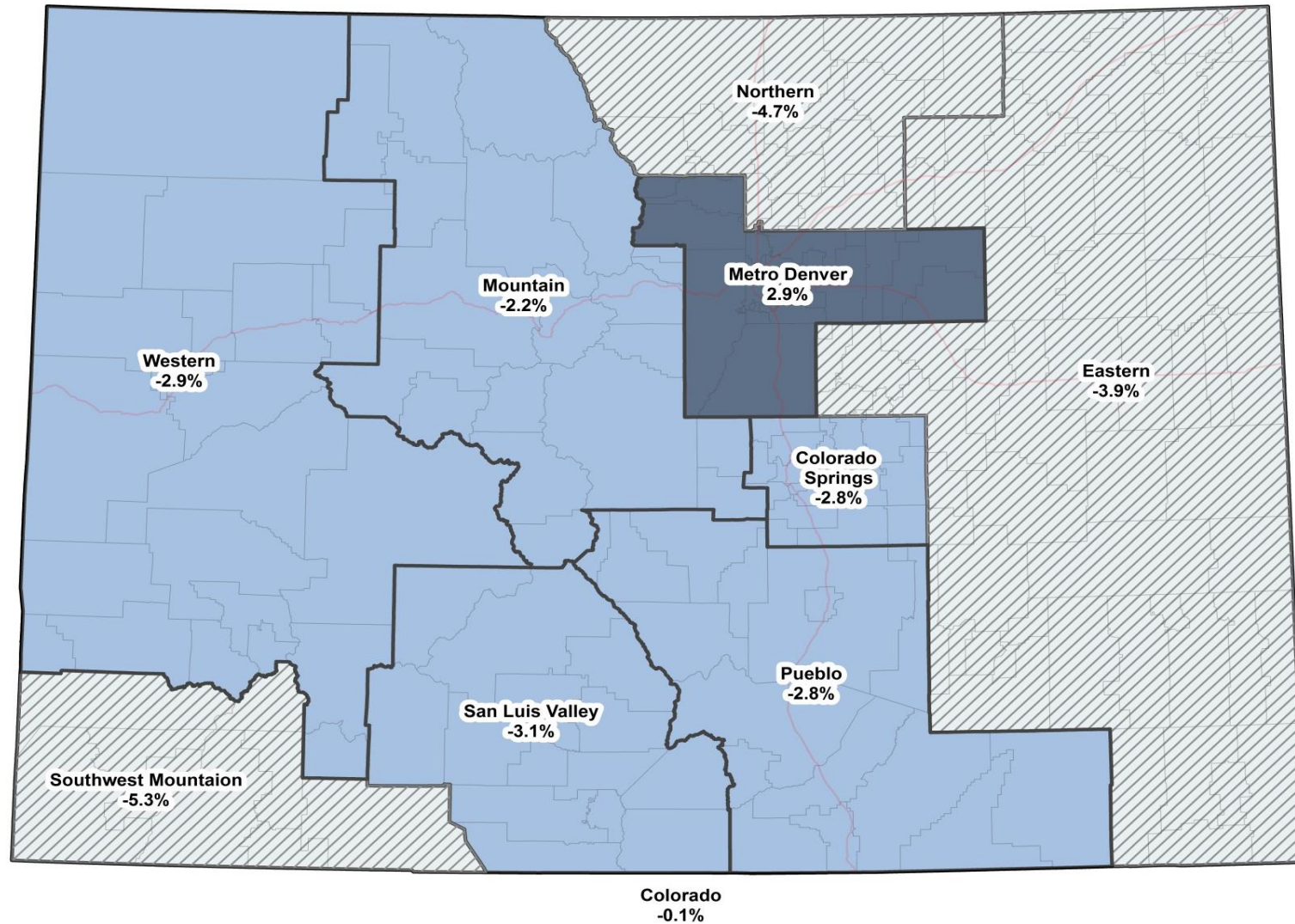
Source: Department of Local Affairs, Division of Property Taxation.  
 \*Legislative Council Staff forecast.

**Figure 28**  
**Assessed Values by Region (Continued)**  
*Dollar Amounts in Billions*



Source: Department of Local Affairs, Division of Property Taxation.  
 \*Legislative Council Staff forecast.

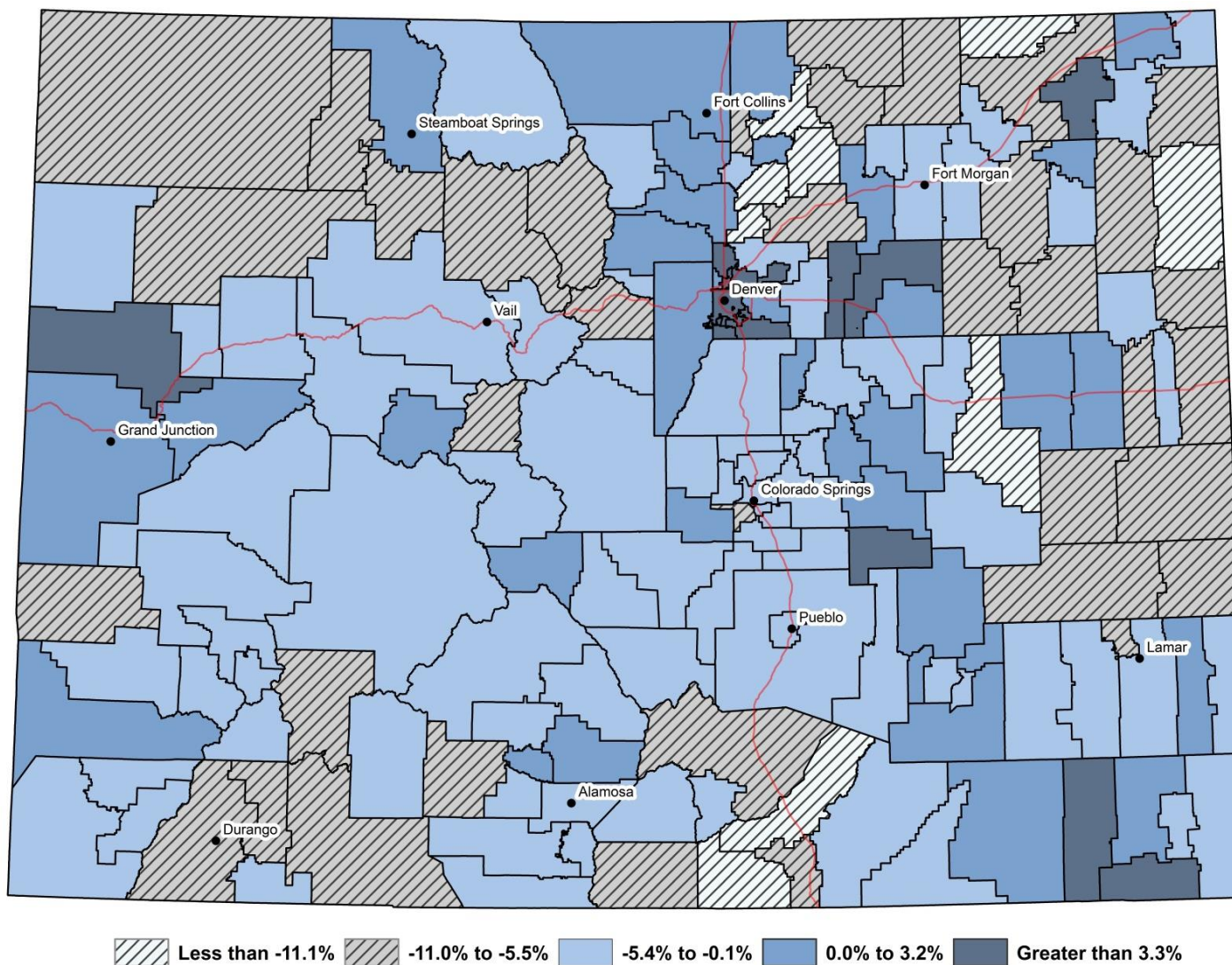
**Figure 29**  
**Forecast Percent Change in Total Assessed Valuation by Economic Region**  
**2017 Assessment Year (Budget Year 2017-18)**



Source: Legislative Council Staff forecast.



**Figure 30**  
**Forecast Percent Change in Total Assessed Valuation by School District**  
**2017 Assessment Year (Budget Year 2017-18)**



Source: Legislative Council Staff forecast.

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## SCHOOL ENROLLMENT PROJECTIONS

This section of the forecast presents projections for kindergarten through twelfth grade (K-12) enrollment in Colorado's public schools. Projections are presented in full-time equivalent (FTE) terms, and are used to determine funding levels for Colorado's 178 school districts. Table 18 summarizes current and projected enrollment for the 2016-17 through 2018-19 school years by forecast region. Figures 33 and 34 on pages 74 and 75 show enrollment growth projections by forecast region and school district, respectively, for the FY 2017-18 school year.

- The enrollment count for the current (2016-17) school year totaled 832,519 FTE students across Colorado's public schools, up 5,291 FTE students, or 0.6 percent, from the previous school year.
- Statewide K-12 enrollment is projected to increase by 7,415 FTE students, or 0.9 percent, in the 2017-18 school year. Enrollment in the 2018-19 school year is expected to increase 0.7 percent, or by 5,864 FTE students.
- All nine forecast regions will experience growth in enrollment over the next two school years. Growth will be strongest in the southwest mountain and northern regions, where strong job growth, and new and relatively more affordable housing options will continue to attract young families.

**Table 18**  
**K-12 Public School Enrollment**  
*Full-Time Equivalent (FTE) Students\**

Region	Actual 2016-17	Percent Change	Estimated 2017-18	Percent Change	Estimated 2018-19	Percent Change	Average Growth**
Metro Denver	478,706	0.2%	481,955	0.7%	484,119	0.4%	0.6%
Northern	85,062	1.6%	86,592	1.8%	88,044	1.7%	1.7%
Colorado Springs	116,435	0.9%	117,917	1.3%	119,063	1.0%	1.1%
Pueblo	32,961	-0.9	32,950	0.0%	32,993	0.1%	0.1%
Eastern Plains	24,499	3.4%	24,760	1.1%	24,992	0.9%	1.0%
San Luis Valley	7,322	1.2%	7,344	0.3%	7,394	0.7%	0.5%
Mountain	24,626	0.5%	24,820	0.8%	24,946	0.5%	0.6%
Southwest Mountain	12,689	5.1%	12,977	2.3%	13,200	1.7%	2.0%
Western	50,222	0.8%	50,619	0.8%	51,046	0.8%	0.8%
<b>Statewide Total</b>	<b>832,519</b>	<b>0.6%</b>	<b>839,934</b>	<b>0.9%</b>	<b>845,798</b>	<b>0.7%</b>	<b>0.8%</b>

Source: Colorado Department of Education and Legislative Council Staff.

\*Kindergarten students are counted as 0.5 FTE.

\*\*Compound average annual growth rate between 2016-17 and 2018-19.

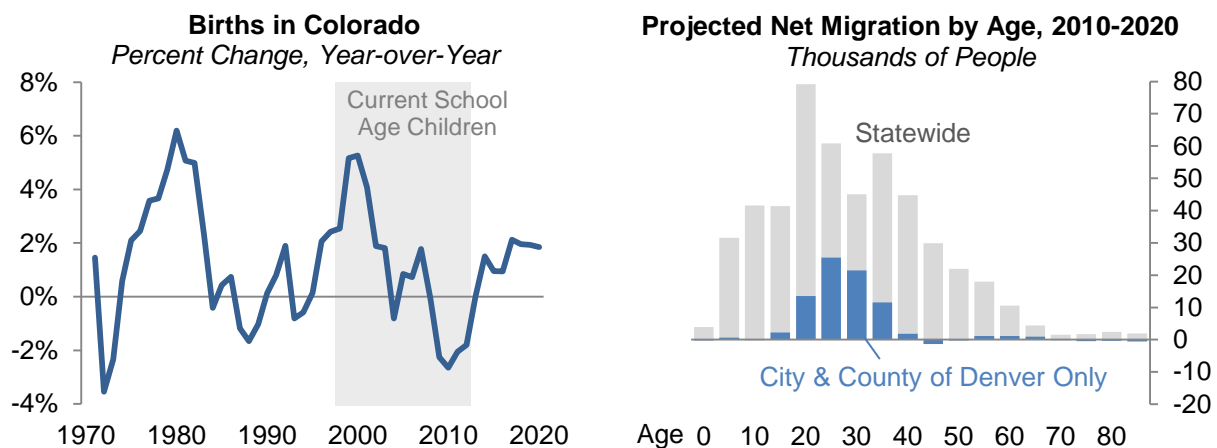
**Statewide enrollment.** Colorado's public school enrollment continued to increase in the current school year (FY 2016-17), albeit at a slower rate than recent years. School districts added 5,291 students in FY 2016-17, a 0.6 percent increase from the previous school year. Enrollment grew in all but one region of the state; the Pueblo region declined by 0.9 percent, or

298 FTE. Relative to the Legislative Council Staff forecast published last December, actual enrollment in the 2016-17 school year was 3,701 FTE, or 0.4 percent, lower than forecast. Enrollment was lower than expected across all regions of the state except in the eastern and southwest mountain regions.

Colorado schools are expected to continue to add students through the forecast period. In the upcoming FY 2017-18 school year, statewide public schools are expected to add another 7,415 FTE students, a 0.9 percent increase from the current school year. Growth is expected across all regions of the state except for the Pueblo region, which is expected to remain flat compared with the current school year. In FY 2018-19, K-12 public school enrollment is expected to grow by 0.7 percent from the previous year.

Demographic trends and home price appreciation are impacting enrollment in Colorado. A decline in the number of births during the Great Recession continues to influence the number of 5 and 6 year olds entering the Colorado public school system. As shown in Figure 31 on the left, the number of births in Colorado fell each year between 2008 and 2012 following healthy gains over the ten prior years. As a result, smaller cohorts are moving into the K-12 school system, while larger cohorts are aging out. The impact of lower birth rates will continue to constrain growth through the forecast period.

**Figure 31**  
**Selected Colorado Demographic Indicators**

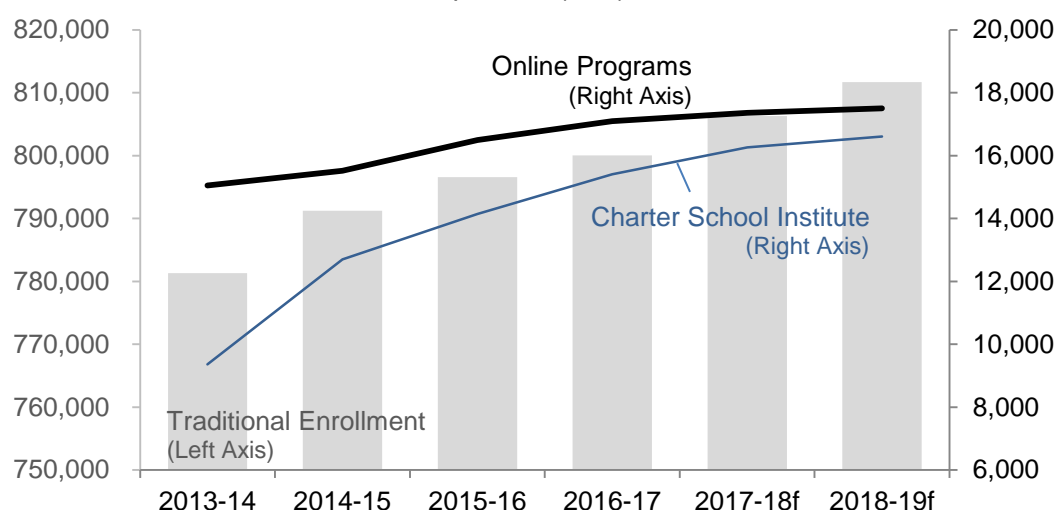


Source: Colorado Department of Local Affairs, State Demography Office, vintage 2015 estimates.

Rising housing costs are influencing the distribution of enrollment across the state. In particular, high housing costs in the metro Denver area are causing families with school age children to relocate to less expensive areas of Colorado or in some cases to leave the state altogether. The state as a whole is expected to see positive net migration of school age children between 2010 and 2020 (Figure 31, right). In some areas, however, such as the City and County of Denver, more families are expected to move out than to move into the area. High housing costs, in addition to delayed household formation and smaller family sizes, will constrain enrollment growth in the metro Denver region. Conversely, more affordable regions of the state will experience stronger enrollment growth.

Enrollment in online programs and Charter School Institute (CSI) schools continued to grow in the 2016-17 school year. These options now represent 2.1 percent and 1.9 percent of total statewide enrollment, respectively (Figure 32). While enrollment in online programs is expected to level off, CSI enrollment is expected to grow modestly with new school openings over the next two years.

**Figure 32**  
**Online, CSI, and Traditional Enrollment**  
*Full-Time Equivalent (FTE) Students\**



Source: Colorado Department of Education and Legislative Council Staff.

\*Kindergarten students are counted as 0.5 FTE.

**Enrollment by Region.** The following paragraphs provide brief summaries of enrollment for school districts in the nine forecast regions of the state.

The **metro Denver region**, which includes Adams, Arapahoe, Boulder, Broomfield, Denver, Douglas, and Jefferson counties, accounted for 57.5 percent of total Colorado enrollment in the 2016-17 school year. In 2016-17, regional enrollment grew 0.2 percent over the previous school year. Low birth rates, rapid home and rental price appreciation, and an aging population tempered growth. In-migration and new residential construction in the metro Denver area remains strong, but has been dominated by young professionals without children. As a result, enrollment growth has not been as robust as population and economic growth.

Metro Denver enrollment will continue to grow at a modest pace throughout the forecast period as these trends persist. Regional enrollment is expected to rise 0.7 percent and 0.5 percent in the 2017-18 and 2018-19 school years, respectively.

Enrollment in the **northern region**, which includes Larimer and Weld counties, grew 1.6 percent in the 2016-17 school year with an additional 1,361 student FTE. Enrollment in the region has outpaced statewide growth for six consecutive years, reflecting stronger job growth and new residential developments. In spite of low energy prices, drilling activity has continued in Weld County, sustaining job and enrollment growth in area school districts. Regional enrollment is expected to grow 1.8 percent and 1.7 percent, respectively, in the 2017-18 and

2018-19 school years. New residential development, lower housing costs relative to the metro Denver region, and strong employment opportunities are expected to drive growth.

Enrollment in the **Colorado Springs region**, which is comprised of El Paso County, increased 0.9 percent, or by 1,030 FTE students, in the 2016-17 school year. The improving regional economy and relatively affordable housing are attracting families to the area. Total enrollment growth in the region is expected to accelerate to 1.3 percent in the FY 2017-18 school year.

Total enrollment in the **Pueblo region**, which is comprised of Fremont, Custer, Huerfano, Las Animas, and Pueblo counties, declined by 298 FTE, or 0.9 percent, in the FY 2016-17 school year and is expected to remain relatively flat in the FY 2017-18 school year. Growth continues to be sustained by the Pueblo County Rural School District 70, the second biggest school district in the region. The district, which is located in the Pueblo West area of the region, is experiencing relatively strong growth in new residential construction.

The **eastern plains region** reversed more than a decade long decline in enrollment in the 2016-17 school year. An improving and changing economy has created new areas of growth in the region. Primarily dominated by the agricultural sector, the region has focused on other industries such as renewable energy. In addition, some school districts closer to the Metro Denver and northern regions are benefiting from new residential construction. Enrollment in the region is expected to remain relatively flat in FY 2017-18, adding 262 new FTE students. However, a small increase in enrollment can have a large impact in the region.

The **San Luis Valley region**, consisting of Alamosa, Conejos, Costilla, Mineral, Rio Grande, and Saguache counties, is the smallest in the state in terms of K-12 enrollment. Regional enrollment grew 1.2 percent, or by 84 FTE students in the 2016-17 school year. The regional economy is highly dependent on agriculture, which has been subdued by low crop prices over the past two years. Enrollment growth rates are expected to grow modestly, at 0.3 percent in the 2017-18 school year and 0.7 percent in the 2018-19 school year. Crop prices are expected to remain fairly low and the area population is expected to continue to age.

Enrollment in the **mountain region**, consisting of Chaffee, Clear Creek, Eagle, Gilpin, Grand, Jackson, Lake, Park, Pitkin, Routt, Summit, and Teller counties, grew 0.5 percent in the 2016-17 school year and is expected to increase 0.8 percent in 2017-18. Enrollment growth is dependent on the ski and gambling industries. In addition, affordable housing for workers in this region has a strong influence on the number of students that enroll in schools in the region. The Eagle County and Steamboat Springs school districts continue to drive regional enrollment growth.

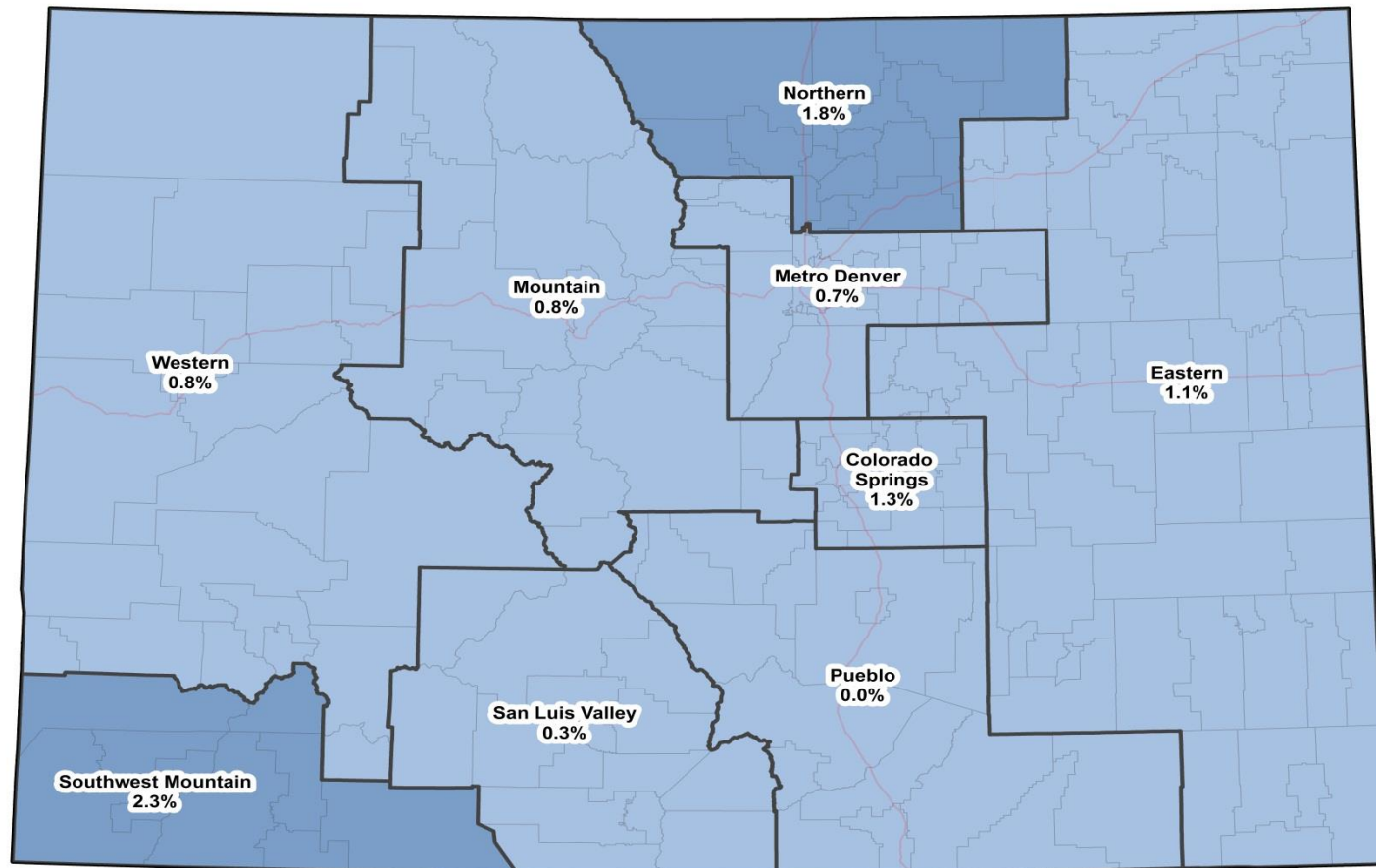
In spite of energy industry weaknesses, enrollment in the **western region**, which includes Delta, Garfield, Gunnison, Hinsdale, Mesa, Moffat, Montrose, Ouray, Rio Blanco, and San Miguel counties, rose 0.8 percent in the 2016-17 school year. Enrollment growth was mixed across districts in the region, with declines in those most dependent on energy activity. A lower cost of living relative to other regions of the state may drive additional growth. Regional enrollment is expected to grow 0.8 percent in both the 2017-18 and 2018-19 school years, as energy prices move upward slightly, housing remains more affordable than areas along the Front Range, and the regional economy continues to diversify.

The **southwest mountain region**, which includes Archuleta, Dolores, La Plata, Montezuma, and San Juan counties, saw enrollment growth of 5.1 percent in the 2016-17 school year, the

fastest rate among the nine regions in the state. Relatively affordable housing and growing industry opportunities have attracted families to the area in recent years. Enrollment growth rates of 2.3 percent and 1.7 percent are expected for the 2017-18 and 2018-19 school years, respectively.

***Risks to the forecast.*** Significant changes to immigration policy could temper enrollment growth across the state, while stronger than expected in-migration of families or an expansion of affordable housing options could result in higher enrollment in affected regions of Colorado. Additionally, energy industry volatility poses a risk to enrollment in many regions of the state. Further coal mine closures could reduce district enrollment in the western region. Rising (or contracting) oil and gas prices could increase (or decrease) enrollment in districts in the western, southwest mountain, and northern regions of the state.

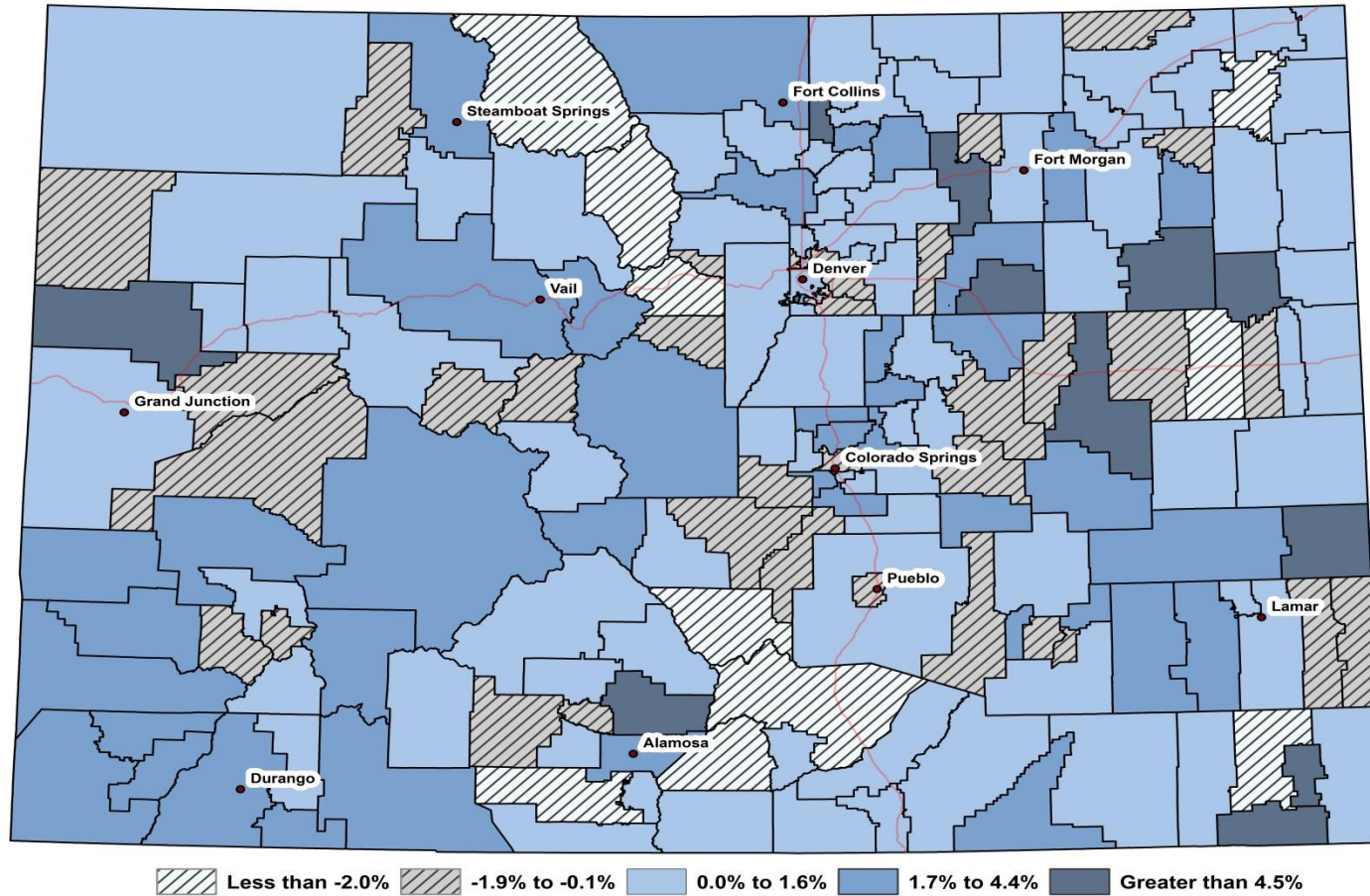
**Figure 33**  
**Forecast Percent Change in Enrollment by Economic Region**  
**2016-17 School Year (Budget Year 2017-18)**



*Prepared by Legislative Council Staff.*



**Figure 34**  
**Forecast Percent Change in Enrollment by School District**  
**2016-17 School Year (Budget Year 2017-18)**



*Prepared by Legislative Council Staff.*

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## ADULT PRISON POPULATION AND PAROLE CASELOAD PROJECTIONS

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This section presents forecasts of the state's adult prison population and parole caseload for FY 2016-17 through FY 2018-19. The section includes a discussion of the historical and current trends affecting these populations, the adjustments made to the December 2015 forecast, and recent legislation impacting the prison and parole populations. The section concludes with an analysis of risks to the forecast.

**Key findings.** The December 2015 forecast predicted that the state adult inmate population would total 19,960 persons at the end of FY 2015-16, declining 3.2 percent from the end of the prior year and reversing a two-year pattern of increases. The population actually declined more significantly than forecast, falling 4.9 percent to 19,619 inmates. A majority of the discrepancy can be explained by a steep reduction in the number of parolees revoked to Department of Corrections (DOC) custody for technical parole violations. This development also effected an increase in the state's parole caseload, which grew 6.8 percent to total 8,402 parolees at the end of FY 2015-16. These trends are explained in further detail on the following page.

Relative to the December 2015 forecast, expectations for prison population and parole caseload have each been revised upward for FY 2016-17. The change in the prison population forecast reflects slowing sentence discharges and releases to parole since early 2016, while the change in the parole caseload forecast primarily reflects a higher initial parole caseload than was anticipated in last year's forecast. For FY 2017-18, expectations for parole caseload have been increased, while expectations for the prison population have been decreased.

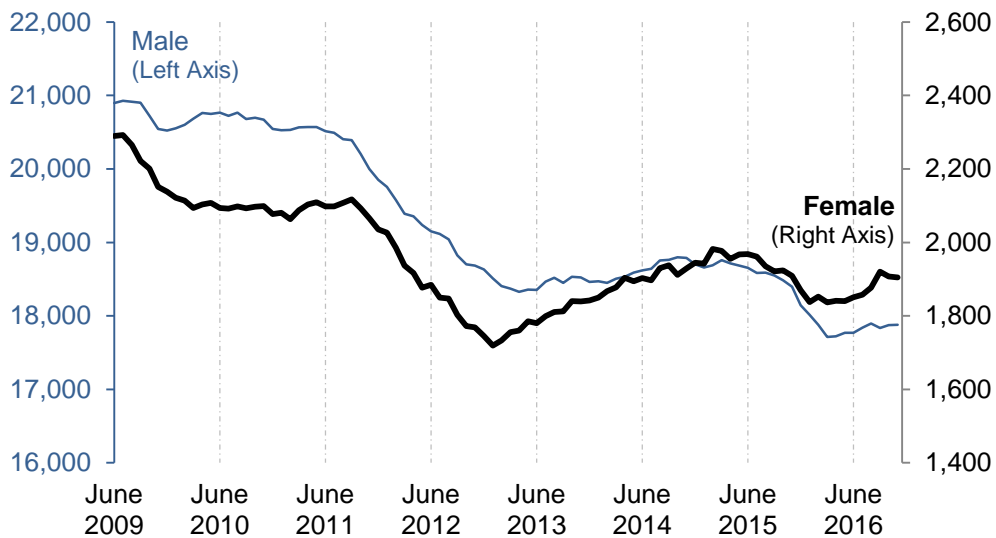
The following outcomes are anticipated over the forecast period:

- **Overall population (increase).** Rising admissions attributable to new court commitments, coupled with reduced releases through the fall of 2017, are expected to drive a modest increase in the inmate population through the forecast period. The state prison population is expected to grow 1.2 percent over the course of FY 2016-17, decelerating to 0.8 percent in FY 2017-18.
- **Male population (increase).** The male population is expected to grow from 17,768 inmates in June 2016 to 17,911 inmates in June 2017, representing growth of 0.8 percent, before growing 0.5 percent to 17,996 inmates in June 2018. Trends driving growth in the male population are similar to those for the aggregate state inmate population.
- **Female population (increase).** The state's women's prisons account for an increasing share of the state inmate population. Through November 2016, the female population has grown 2.9 percent since the beginning of the fiscal year. This population is expected to increase 4.6 percent to total 1,936 inmates by the end of FY 2016-17, before growing 3.6 percent to 2,005 inmates in June 2018.
- **Parole (increase).** In-state parole caseload is expected to increase from 8,402 offenders in June 2016 to 8,739 offenders at the end of the forecast period. Rising caseload is primarily a result of reduced revocations of parolees for technical violations. The total parole population, which includes all in-state and out-of-state parolees, but excludes interstate transfers and absconders, will grow from 10,058 offenders in June 2016 to 10,290 offenders at the end of the forecast period.

## Population Forecast

**Historical and recent trends.** The state's prison population rose through the 1990s and 2000s, reaching its peak at 23,220 inmates in July 2009. Since 2009, changes in the population have been less consistent. The inmate population fell significantly between August 2010 and April 2013, dropping by 12.1 percent. Then, after roughly two years of growth, the population again began to decline quickly in July 2015 following the adoption of **Senate Bill 15-124**; it has since stabilized. A history of male and female prison population is shown in Figure 35.

**Figure 35**  
**Prison Population by Gender**  
*June 2009 to November 2016*



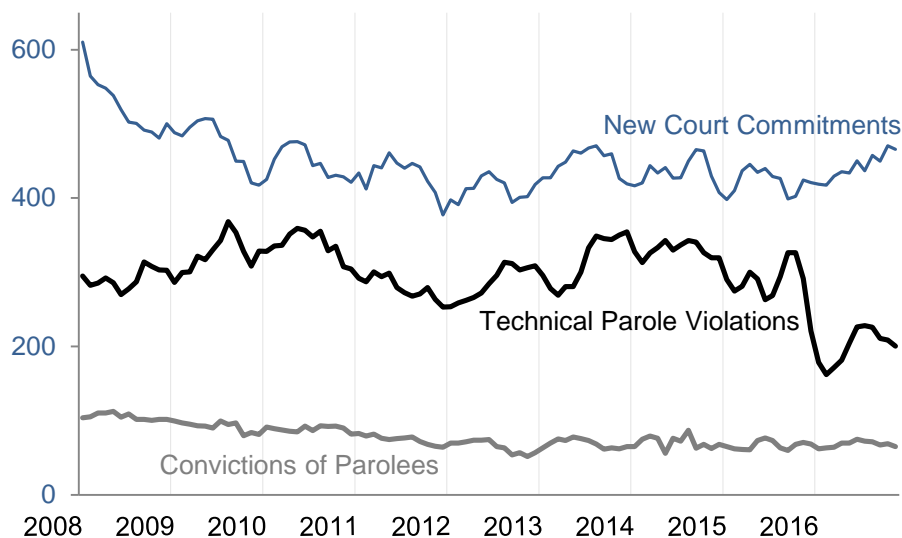
Source: Colorado Department of Corrections.

**Technical parole violations.** The most recent decline in inmate population is attributable primarily to decreasing admissions; in particular, decreasing readmissions of parolees committing technical parole violations. Between FY 2014-15 and FY 2015-16, admissions from technical violations fell 21.5 percent, a loss of 777 admissions for the year or roughly 65 admissions per month. Admissions for technical violations are compared to new convictions and reconvictions of parolees committing new crimes in Figure 36.

**Technical parole violation:**

An offender's violation of the terms of his or her parole that does not independently constitute a new crime.

**Figure 36**  
**State Prison Admissions by Source\***  
*Three-Month Moving Average*



Source: Colorado Department of Corrections.

\*Omits admissions for returns from prior releases to probation, court order discharge or appeal bond, interstate compact, and youthful offender system terminations. These streams produced a combined average of 10 admissions per month over the sample period.

The change in the composition of admissions is primarily attributable to SB 15-124, which directs the DOC's Division of Adult Parole to "consider all appropriate or available intermediate sanctions" before filing a complaint for revocation of a parolee who has committed a technical violation of a condition of parole, provided that the nature of the technical violation does not indicate that the offender poses a heightened risk to public safety. As of December 2016, the Division conducts weekly case staffing meetings for all arrested parolees to determine whether suitable alternatives to revocation are available. Data from the State Board of Parole indicate that this policy has resulted in fewer offenders appearing before the Board for a revocation hearing. Additionally, the Board is now revoking a smaller share of parolees against whom a complaint was filed. In FY 2015-16, the Board revoked an offender's parole in 79.0 percent of hearings for which it made a determination, down from 88.7 percent during the prior fiscal year. Available data suggest that revocations for parole violations have fallen to a new level and stabilized, with significantly less change in monthly revocations since the spring of this year.

**New court commitments.** The state prison population increased 0.8 percent through the first five months of the current FY 2016-17. Part of the increase is attributable to growth in the number of convicted criminals sentenced to prisons. Prison admissions from new court commitments totaled 2,295 between July and November of 2016, up 10.9 percent relative to the same period during the prior fiscal year. Part of the increase is assumed to be attributable to **House Bill 15-1043**, which took effect on August 5, 2015. The bill allows district attorneys to pursue felony cases against defendants charged with driving under the influence (DUI), DUI *per se*, or driving while ability impaired (DWAI), provided that the defendant has at least three prior convictions for such crimes. The Judicial Branch reports that 1,133 felony DUI cases were filed in state district courts during FY 2015-16, a figure expected to increase this year and to contribute to increasing prison admissions in FY 2016-17 and beyond.

**Releases.** Releases from prison have decreased by 17.1 percent through November compared with the same period during the previous fiscal year, a significant change from an increase of 1.9 percent during FY 2015-16. Part of last year's increase is assumed to be attributable to **House Bill 14-1355**, which added nearly 80 staff to the DOC's case management, parole officer, training and skill development, behavioral health care, and other reentry programs. It appears that any change brought on by this legislation has now been absorbed. Releases are a function of the population eligible for release, which in turn depends on the date an offender began to serve a sentence, the length of the sentence, and the amount of earned time accrued toward the offender's parole eligibility date. This year's decline in releases echoes a significant decrease in new court commitments from approximately eight years ago.

Present trends in new court commitments are expected to continue through the forecast period. Revocations of parolees for technical parole violations are expected to continue at their current, reduced level. Releases are expected to stabilize above their current level. Table 19 shows historical and present prison populations by gender from FY 2009-10 through FY 2018-19.

**Table 19**  
**Adult Prison Population by Gender**  
*As of June 30 each Fiscal Year*

<b>Fiscal Year</b>	<b>Males</b>	<b>Percent Change</b>	<b>Females</b>	<b>Percent Change</b>	<b>Total</b>	<b>Percent Change</b>
FY 2009-10	20,766	-0.6%	2,094	-8.6%	22,860	-1.4%
FY 2010-11	20,512	-1.2%	2,098	0.2%	22,610	-1.1%
FY 2011-12	19,152	-6.6%	1,885	-10.2%	21,037	-7.0%
FY 2012-13	18,355	-4.2%	1,780	-5.6%	20,135	-4.3%
FY 2013-14	18,619	1.4%	1,903	6.9%	20,522	1.9%
FY 2014-15	18,655	0.2%	1,968	3.4%	20,623	0.5%
FY 2015-16	17,768	-4.8%	1,851	-5.9%	19,619	-4.9%
FY 2016-17*	17,911	0.8%	1,936	4.6%	19,847	1.2%
FY 2017-18*	17,996	0.5%	2,005	3.6%	20,001	0.8%
FY 2018-19*	18,060	0.4%	2,007	0.1%	20,067	0.3%

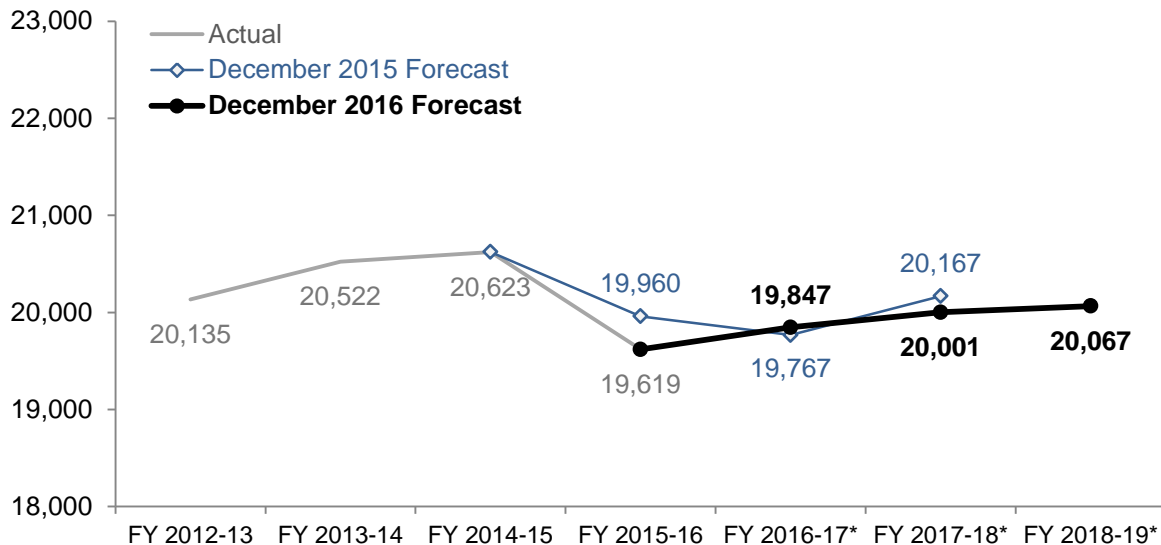
*Source: Colorado Department of Corrections. \*Legislative Council Staff projections.*

**Adjustments to the forecast for total population.** Figure 37 illustrates the inmate population forecasts published in December 2015 and December 2016. The 2016 forecast contains a slight upward revision to the prison population anticipated June 2017 and a downward revision to the population expected in June 2018. Revised expectations are attributable to changes in policy implementation and court commitment trends relative to those anticipated in last year's forecast.

The most significant change affecting the prison population since last year's forecast is the implementation of SB 15-124, the intermediate sanctions program for offenders committing technical parole violations. The 2015 forecast anticipated that the reduction in prison population resulting from this policy change would manifest over two fiscal years; however, speedy and assertive implementation of this policy resulted in a quicker decline and earlier stabilization than

forecast. Revisions to the forecast reflect the assumption that this change has already been fully implemented. The 2016 forecast also projects more significant increases in new court commitments than those anticipated last year.

**Figure 37**  
**Adult Inmate Population, Forecast-to-Forecast Comparison**  
*December 2015 to December 2016 Forecast*



Source: Colorado Department of Corrections and Legislative Council Staff. Actual totals shown for FY 2012-13 through FY 2015-16. \*Current forecast period.

## Parole Forecast

**Historical and recent trends.** The in-state adult parole population decreased smoothly between March 2013 and October 2015, losing 11.8 percent of its peak value during this 31-month span. Beginning last winter, the parole population climbed at an unprecedented speed as the number of parolees readmitted to prison for parole violations plummeted. Between November 2015 and March 2016, the number of parolees located in the state increased by 10.0 percent. The population fell during the late spring and summer, stabilizing between 8,300 offenders and 8,350 offenders during the latter half of this year. These trends correlate inversely with admissions from technical violations, which suggests that most of the recent volatility in parole caseload is attributable to shifts in population between state prisons and parole programs.

Parole caseload is projected to increase slowly through the forecast period. Despite the recent decline in releases, parole caseload increased steadily between July and November of the current fiscal year. Available data suggest that releases to parole are continuing to outpace discharges from parole.

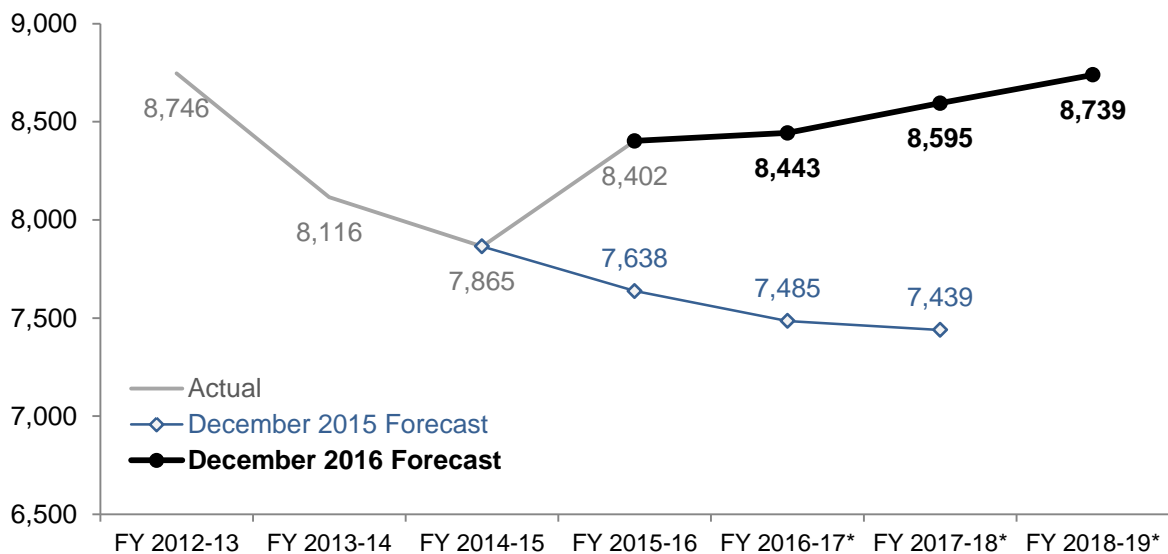
Table 20 shows historical and projected adult parole projections, by location, from FY 2009-10 through FY 2018-19.

**Table 20**  
**Parole Population**  
*As of June 30 each Fiscal Year*

Fiscal Year	In-State Parole	Percent Change	Out-of-State Parole	Percent Change	Total	Percent Change
FY 2009-10	8,535	-5.3%	2,100	3.5%	10,635	-3.7%
FY 2010-11	8,181	-4.1%	1,922	-8.5%	10,103	-5.0%
FY 2011-12	8,445	3.2%	2,066	7.5%	10,511	4.0%
FY 2012-13	8,746	3.6%	2,008	-2.8%	10,754	2.3%
FY 2013-14	8,116	-7.2%	1,808	-10.0%	9,924	-7.7%
FY 2014-15	7,865	-3.1%	1,636	-9.5%	9,501	-4.3%
FY 2015-16	8,402	6.8%	1,656	1.2%	10,058	5.9%
FY 2016-17*	8,443	0.5%	1,590	-4.0%	10,033	-0.3%
FY 2017-18*	8,595	1.8%	1,572	-1.1%	10,167	1.3%
FY 2018-19*	8,739	1.7%	1,551	-1.4%	10,290	1.2%

Source: Colorado Department of Corrections. \*Legislative Council Staff projections.

**Figure 38**  
**Adult In-State Parole Population, Forecast-to-Forecast Comparison**  
*December 2015 to December 2016 Forecast*



Source: Colorado Department of Corrections and Legislative Council Staff. Actual totals shown for FY 2012-13 through FY 2015-16. \*Current forecast period.

**Adjustments to the forecast for parole.** Figure 38 illustrates the in-state parole caseload forecasts published in December 2015 and December 2016. The 2015 forecast anticipated that November 2016 in-state caseload would be 7,574 parolees. Actual caseload was 8,359, a difference of 785 parolees. The 2015 forecast severely underestimated the impact of SB 15-124 on the state parole caseload, explained above. For FY 2016-17 and FY 2017-18, the 2016 forecast contains significant upward revisions, primarily reflecting higher initial parole caseload than that anticipated in last year's forecast. The forecast anticipates increases in in-state parole caseload during future years, continuing the trend of increasing in-state caseload relative to out-of-state caseload and reflecting anticipated release dates for offenders being committed to DOC custody this year.

## **Factors Affecting the Adult Prison Population and Parole Caseload**

It can be difficult to isolate the factors that directly impact the adult prison population and parole caseload. Historically, increases in prison population were thought to be tied to rising crime during periods of poor economic performance, as well as increases in the general state population. These assumptions have been challenged since the Great Recession, which witnessed a decline in prison admissions and a decrease in the prison population.

The following paragraphs describe how external factors, including demographic and economic trends, changes within the criminal justice system, new legislation, and internal factors including departmental and Parole Board administration, can influence the growth or decline of the inmate population and parole caseload volume.

- **Population.** All other things being equal, a larger population may result in a greater number of criminal offenses, arrests, criminal felony filings, and prison commitments. Colorado's population is projected to grow about 5.5 percent through the forecast period, which may put mild upward pressure on the inmate population.
- **Economic factors.** As discussed above, prison admissions exhibited essentially no correlation with economic conditions during the Great Recession and the subsequent recovery. Accordingly, this forecast assumes no correlation between economic growth and prison population.
- **Criminal justice system.** The actions of the state courts affect inmate population growth. In particular, commitment of offenders to prison is a major determinant of the inmate population. The mix of crimes sentenced also affects the prison population because more serious crimes entail longer durations of stay in correctional facilities.
- **Departmental and Parole Board administration.** Statute defers the authority to grant discretionary inmate releases to the appointed members of the State Board of Parole. In FY 2015-16, the Board granted releases to a similar share of parole applicants as during the prior fiscal year, while reducing the share of parolees revoked to DOC custody after committing a technical parole violation. The Board is autonomous, and any change in its pattern of releases would have a significant effect on the state prison population and parole caseload.

The DOC's Division of Adult Parole oversees the state's parole officers. Under SB 15-124, the Division is required to exhaust available intermediate sanctions before

filing a complaint for revocation with the Parole Board. Data for FY 2015-16 suggest that the Division's implementation of this policy was largely responsible for decreasing the number of parole revocation hearings held, reducing the number of revocation decisions made by the Board by 7.1 percent. A change in the implementation of this or another policy could have a significant effect on the state prison population and parole caseload.

- **Legislation.** Legislation enacted by the General Assembly may influence the state prison population and parole caseload. The impacts of three major pieces of legislation from past sessions, HB 14-1355, HB 15-1043, and SB 15-124, are described above. During the 2016 legislative session, the General Assembly enacted eight bills that may impact the state prison population in the future, the most significant of which is **Senate Bill 16-102**. All eight bills are described below.

**Senate Bill 16-102** removes mandatory minimum terms of incarceration for convictions of certain types of second degree assault or violations of bail bond conditions. The bill is expected to result in approximately 33 offenders per year being sentenced to fines, probation, or jail in lieu of a state correctional facility. The bill reduces anticipated admissions by 33 offenders annually beginning in FY 2016-17. It also reduces anticipated releases by 14 offenders in FY 2017-18, and by 33 offenders in FY 2018-19 and subsequent years.

**House Bill 16-1066** allows the trier of fact – a judge or jury, depending on the trial – to determine whether a defendant may be sentenced as a habitual domestic violence offender. Habitual domestic violence is sentenced as a class 5 felony extraordinary risk crime rather than a class 1 misdemeanor and carries a prison sentence of between one and four years. The bill is expected to minimally impact state prison admissions from court commitments.

**House Bill 16-1080** classifies strangulation as first or second degree assault, depending on the circumstance. The bill is expected to increase prison admissions by at least two offenders per year.

**House Bill 16-1129** strengthens criminal penalties against charitable fraud. In fringe cases, e.g. where an offender is convicted of a misdemeanor fraud violation involving three separate contributors in any one campaign, an offense may be prosecuted as a class 5 felony. This bill is not expected to affect the state prison population.

**Senate Bill 16-034** creates a new crime of tampering with a deceased human body. It is assumed that offenders convicted of this crime most likely would be convicted of another felony absent the bill; thus, the bill is not expected to increase admissions. However, an additional conviction could increase an offender's length of stay, potentially reducing releases in years beyond the current forecast period.

**Senate Bill 16-051** removes the requirement that offenders convicted of multiple crimes of violence serve consecutive rather than concurrent sentences, if one of the convictions is for aggravated robbery, second degree assault, or escape. The bill could increase releases after an offender meeting the conditions in the bill has served concurrent sentences. For these crimes, any impact would occur outside of the current forecast period.



**Senate Bill 16-180** creates a specialized program for offenders who committed a felony as a juvenile and were sentenced as an adult. Upon successful completion of the program after three years, an offender is eligible for early parole subject to review by the governor. The bill potentially increases releases beginning in FY 2019-20.

**Senate Bill 16-181** provides resentencing options for offenders convicted of a class 1 felony between July 1, 1990, and July 1, 2006, for an offense committed while a juvenile. Because all offenses covered by the bill carry a minimum sentence of no less than 30 years, the bill has no impact on releases until FY 2020-21 at the earliest.

## **Risks to the Forecast**

The most significant risk to the forecast is the behavior of the Parole Board. The Board has a tremendous influence on parole caseload and revocations to prison custody, and exclusive authority over discretionary releases to parole. To the extent that the Parole Board behaves differently than in previous years, prison population and parole caseload could be higher or lower than forecast. A change in the Division of Adult Parole's administration of SB 15-124 could produce a similarly large impact on the prison and parole populations.

The impact of HB 15-1043, which created a felony penalty for repeat DUI offenders, is assumed to drive an increase in new court commitments through the forecast period. Cases can take significant time to navigate the criminal courts system, so the extent to which the impact of this legislation is still being phased in remains unknown. This forecast anticipates that convictions under the new statute will continue to increase over the current forecast period. To the extent that new court commitments increase more or less quickly than anticipated here, the prison population could be higher or lower than forecast.

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## YOUTH CORRECTIONS POPULATION PROJECTIONS

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This section presents the forecast for the population of juvenile offenders administered by the Division of Youth Corrections (DYC) in the Department of Human Services. The three major populations administered by the DYC are juveniles committed to custody, juveniles sentenced to a detention facility, and juveniles sentenced to community parole.

- The DYC **commitment population** will decrease from an average daily population of 690 youths in FY 2015-16 to 558 youths in FY 2018-19.
- The DYC **detention population** will decrease from an average daily population of 279 youths in FY 2016-17 to 240 youths in FY 2018-19.
- The average daily **parole population** will correspondingly fall from 242 youths in FY 2015-16 to 233 youths in FY 2018-19.

### Juvenile Offender Sentencing Options

Juvenile offenders not prosecuted as adults are managed through the juvenile courts. If a court determines that a juvenile committed a crime, he or she is adjudicated as a delinquent. Upon determination of guilt, the court may sentence a juvenile to any one or a combination of the following:

**Commitment.** Depending on age and offense history, a juvenile may be committed to the custody of the DYC for a determinate period of between one and seven years for committing an offense that would be a felony or misdemeanor if committed by an adult.

**Detention.** The court may sentence a juvenile to a detention facility if he or she is found guilty of an offense that would constitute a class 3, 4, 5, or 6 felony or a misdemeanor if committed by an adult. Detention sentences may not exceed 45 days and are managed by the DYC.

**County jail or community corrections.** Juveniles between 18 and 21 who are adjudicated as delinquent prior to turning 18 may be sentenced to county jail for up to six months or to a community correctional facility or program for up to one year.

**Probation or alternative legal custody.** The court may order that a juvenile be placed under judicial district supervision and report to a probation officer. Conditions of probation may include participation in public service, behavior programs, restorative justice, or restitution. The court may also place the juvenile in the custody of a county department of social services, a foster care home, a hospital, or a child care center.

### Influences on the Juvenile Offender Population

**Court sentencing practices.** Total juvenile delinquency filings increased consistently during the 1990s, peaking in 1998. Since then, filings have declined steadily, falling at an average annual rate of 5.4 percent over the ten years between FY 2006-07 and FY 2015-16. This decline in filings is expected to continue and will put downward pressure on the populations committed to DYC supervision.

In addition, policies affecting sentencing alternatives for juveniles affect the size of the detention and commitment populations. These include the creation of diversionary programs as alternatives to incarceration, mandated caps on sentence placements, and changes to parole terms. Between the 2013 and 2015 legislative sessions, four bills passed that may affect the juvenile detention, commitment, and parole populations through the current forecast period; these are described below. None of the bills passed during the 2016 legislative session are expected to influence the juvenile offender population.

**Senate Bill 13-177** reduced the bed cap for the NYC detention population from 422 to 382. This bill was enacted along with a series of other changes that consolidated assessment units and reduced contract placements for youths in the custody of the NYC.

**House Bill 14-1023** required the Office of the State Public Defender to hire social workers to assist in juvenile defense cases, potentially reducing the number of youths sentenced to the NYC.

**House Bill 14-1032** required that a juvenile detained for a delinquent act be represented by counsel at a detention hearing and provided state representation when private counsel is not retained. It created specific procedures for the advisement of rights and waiver of counsel.

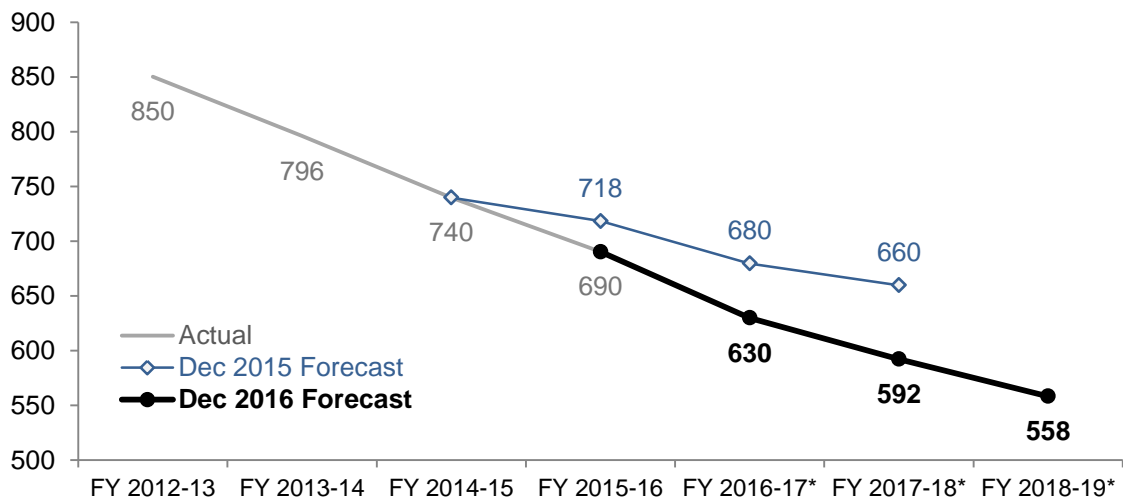
**Senate Bill 15-184** directed chief judges of each judicial district to create a policy for addressing truancy cases through means other than NYC detention. Beginning in FY 2016-17, this bill is expected to reduce NYC average daily detention population by between 1 and 2 youths each month.

## **Division of Youth Corrections Sentencing Placements and Population Forecast**

**Commitment.** The commitment population consists of juveniles adjudicated for a crime and committed to NYC custody. In FY 2015-16, the average daily commitment population was 690 youths, representing a 6.7 percent decrease from the prior year. Between FY 2016-17 and FY 2018-19, the commitment population is expected to drop to 558 youths, representing a total decrease of 19.1 percent from FY 2015-16.

The FY 2015-16 average daily commitment population fell short of the December 2015 forecast by 28 youths. Projected NYC commitments have been adjusted downward from 2015 expectations to account for the larger than anticipated decline in FY 2015-16. Specifically, the 2015 forecast anticipated that the commitment population would level out as the number of committed youths approached some minimum amount and stabilized. However, available data suggest that the long historical trend of declines in NYC commitments is not slowing. Through October, the NYC commitment population for FY 2016-17 averaged 648 youths, already 6.1 percent lower than in FY 2015-16. Because committed youths continue to leave the NYC substantially more quickly than new youths are admitted, the forecast anticipates continued declines through the forecast period. Figure 39 compares the current average daily commitment population forecast to that published last year.

**Figure 39**  
**Comparison of DYC Average Daily Commitment Population Forecasts,**  
**December 2015 and December 2016**



Source: Colorado Department of Human Services Division of Youth Corrections and Legislative Council Staff.  
 \*Forecast.

**Detention.** The DYC manages ten secure detention facilities and contracts for additional detention beds. Under Senate Bill 13-177, the detention population is capped at 382 youths.

In FY 2015-16, the detention population averaged 279 youths, representing a 1.3 percent decrease from the prior year. Between FY 2016-17 and FY 2018-19, the detention population is expected to drop to 240 youths, representing a total decrease of 14.0 percent from FY 2015-16.

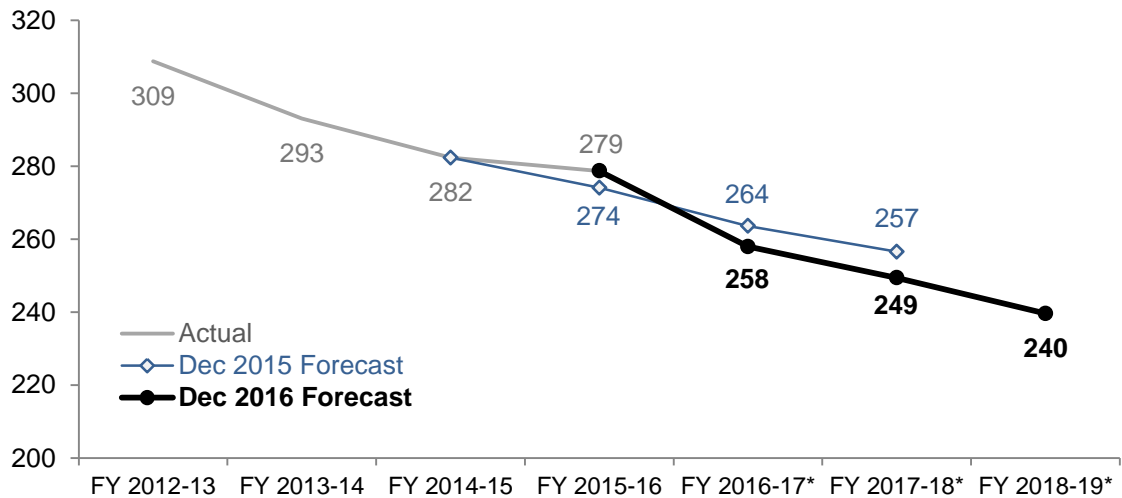
The FY 2015-16 average daily detention population exceeded the December 2015 forecast by 5 youths. Relative to the commitment population, the detention population has a significantly shorter length of stay in DYC facilities and is thus more volatile. Available data suggest that the population is declining more quickly than usual during FY 2016-17. Through October, the average daily detention population averaged 254 youths, a decrease of 8.8 percent relative to FY 2015-16. Figure 40 compares the current average daily detention population forecast to that published last year.

**Parole.** Juveniles who have served their commitment sentence and are approved by the Juvenile Parole Board are eligible for release to community parole. The DYC continues to be closely involved with parolees, preparing the parole plan for presentation to the board and monitoring the youth's progress while on parole.

The juvenile parole population averaged 242 youths in FY 2015-16, a decrease of 0.3 percent from the prior fiscal year. Between FY 2016-17 and FY 2018-19, the average daily parole population is expected to drop to 233 youths, a further decrease of 4.0 percent over the forecast period.

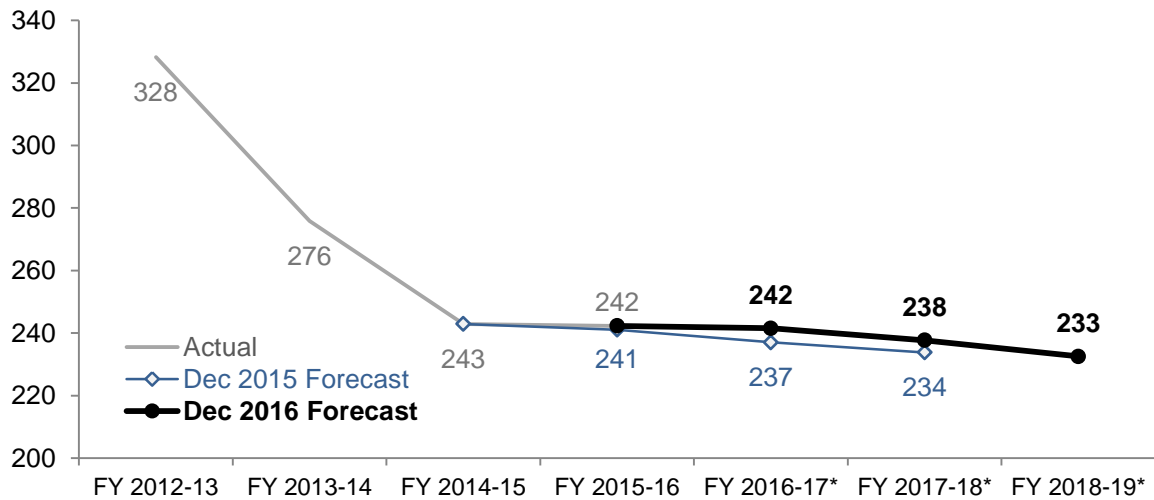
The FY 2015-16 average daily parole population was 1 youth higher than anticipated in the December 2015 forecast. As shown in Figure 41, expectations for the FY 2016-17 and FY 2017-18 parole populations are roughly consistent with those published last year.

**Figure 40**  
**Comparison of DYC Average Daily Detention Population Forecasts,**  
**December 2015 and December 2016**



Source: Colorado Department of Human Services Division of Youth Corrections and Legislative Council Staff.  
 \*Forecast

**Figure 41**  
**Comparison of DYC Average Daily Parole Population Forecasts,**  
**December 2015 and December 2016**



Source: Colorado Department of Human Services Division of Youth Corrections and Legislative Council Staff.  
 \*Forecast.

## **Risks to the Forecast**

Commitment and detention sentences are at the discretion of the courts. The population forecasts assume that sentencing patterns will remain consistent with current practices, which have resulted in a steady decline in juvenile filings and an increase in alternative sentencing options. To the extent that judges decide to place more offenders under DYC supervision, populations will be greater than forecast.

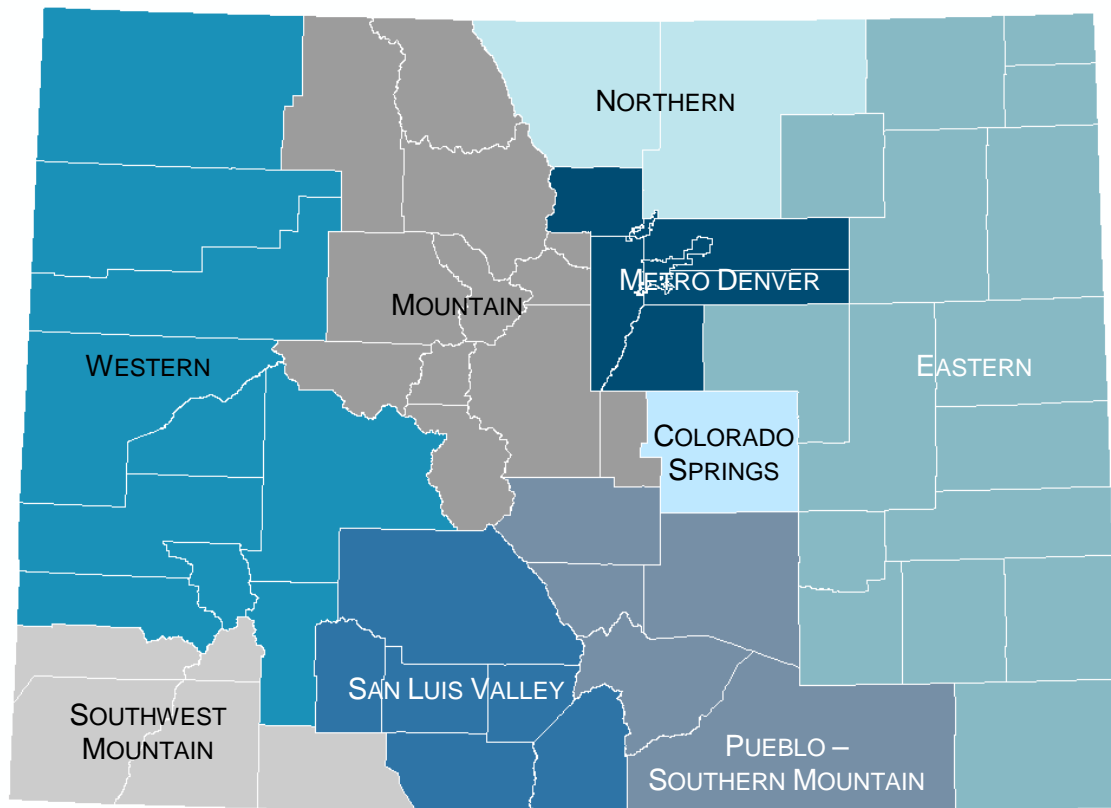
Additionally, the Juvenile Parole Board has a significant influence upon the parole population through releases, revocations, and re-commitments. Because the board has the discretion to extend parole beyond the six-month mandatory period in a majority of cases, the parole population could fluctuate depending on the decisions of the board.





## COLORADO ECONOMIC REGIONS

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### *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 this 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. This data is revised periodically. Retail trade sales data typically have few revisions because the data reflect actual sales by Colorado retailers. Nonresidential construction data in the current year reflect reported construction activity, which is revised the following year to reflect actual construction activity.

## Metro Denver Region

The economy of the seven-county metro Denver region continues to expand, supported by population in-migration and a diverse industry composition. Job growth remains robust, consumer spending continues to improve, and residential and nonresidential construction activity remains at historically high levels. Table 21 shows economic indicators for the northern region.

The diversity of the region's economy demonstrated resiliency to industry-specific shocks in 2015 and 2016. Figure 42 shows the number of nonfarm jobs added over a twelve month period in the region. After growing as quickly as 4.5 percent on a year-over-year basis during mid-2014, growth fell to the mid-two percent range by late 2015 as a result of the pull-back in oil and gas activity. Employment gains have since regained some momentum, increasing 3.1 percent year-to-date through October 2016 relative to the same period last year. Meanwhile, labor availability is constraining the rate of job growth; the unemployment rate averaged 3.2 percent in 2016 through October, down from an average rate of 3.6 percent in 2015 (Figure 43).



Consistent with state and nationwide trends, low gasoline prices dampened the value of retail sales in the metro Denver region in 2015. Regardless, the region's retail sales have remained relatively strong, outpacing most other regions of the state and the nation as a whole in recent years (Figure 44).

**Table 21**  
**Metro Denver Region Economic Indicators**

Adams, Arapahoe, Broomfield, Boulder, Denver, Douglas, and Jefferson Counties

	2012	2013	2014	2015	YTD 2016
Employment Growth <sup>1</sup>	2.9%	3.6%	3.7%	3.5%	3.1%
Unemployment Rate <sup>2</sup>	7.6%	6.5%	4.7%	3.6%	3.2%
Housing Permit Growth <sup>3</sup>					
Denver-Aurora MSA Single-Family	58.5%	18.9%	16.3%	17.8%	10.8%
Boulder MSA Single-Family	29.0%	22.5%	17.7%	74.2%	22.9%
Nonresidential Construction Growth <sup>4</sup>					
Value of Projects	14.2%	22.2%	3.9%	39.3%	-13.8%
Square Footage of Projects	-8.6%	-9.1%	10.5%	21.7%	12.7%
Level ( <i>Millions</i> )	2,471	2,246	2,482	3,021	2,595
Number of Projects	6.1%	22.4%	25.1%	15.7%	-15.9%
Level	611	748	936	1,083	736
Retail Trade Sales Growth <sup>5</sup>	7.6%	5.1%	8.4%	6.2%	N/A

MSA = Metropolitan statistical area. NA = Not available.

<sup>1</sup>Bureau of Labor Statistics, CES (establishment survey). Seasonally adjusted. Data through October 2016.

<sup>2</sup>Bureau of Labor Statistics, LAUS (household Survey). Data prior to 2010 adjusted by Legislative Council Staff. Seasonally adjusted. Data through October 2016.

<sup>3</sup>U.S. Census. Growth in the number of residential building permits. Data through October 2016.

<sup>4</sup>F.W. Dodge. Data through September 2016.

<sup>5</sup>Colorado Department of Revenue. Data through December 2015.

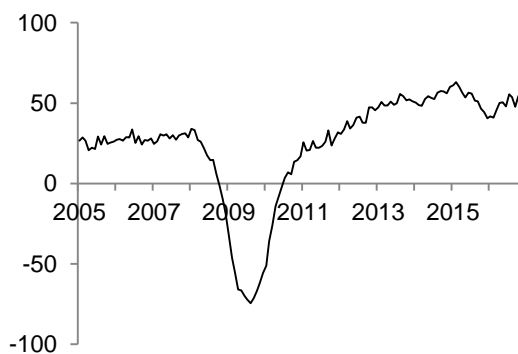
Metro Denver's housing market remains hot. Population in-migration and household formation are contributing to strong demand for new residential units (Figure 45). The number of permits granted for residential construction exceeded pre-recession levels in 2013 and remained at historically high levels through the fall of 2016. Yet, demand continues to outpace supply. Supply constraints, including a shortage of buildable lots and skilled labor, are holding back new construction and contributing to higher prices.

Meanwhile, the City of Westminster and the Adams County Housing Authority are nearing completion on \$75 million in public investments in the area of the Regional Transportation District's B Line station in Westminster near West 70<sup>th</sup> Avenue and Federal Boulevard, including a 40-acre park and a mixed-use affordable housing project.

Nonresidential building activity continued at historically high levels in 2016. Lower cost projects were undertaken, as the value and number of projects decreased through September while the square footage of projects rose. Meanwhile, metro Denver vacancy rates for both offices and industrial space increased in the third quarter of 2016. According to data published by CoStar Group, the vacancy rate for offices increased from 9.7 percent in the second quarter to 10.0 percent in the third quarter, while the rate for industrial space increased from 3.5 percent to 3.7 percent.

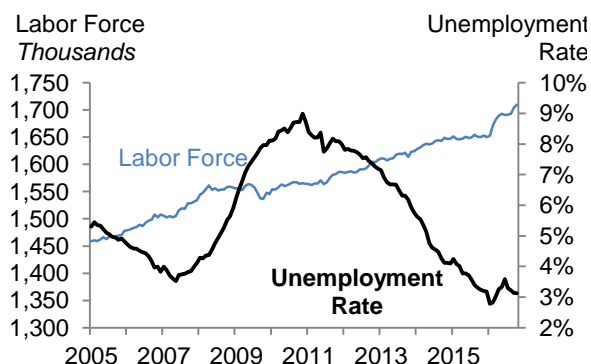
Health care is expected to remain a significant driver of nonresidential construction. For example, the City of Thornton and the North Suburban Medical Center announced plans to develop an 88-acre Thornton Healthcare district east of Interstate-25 and Thornton Parkway in the coming years that would include 175,000 square feet of new medical office buildings, assisted living facilities, and a hotel.

**Figure 42**  
**Nonfarm Job Gains Over Prior 12 Months**  
*Thousands of Jobs*



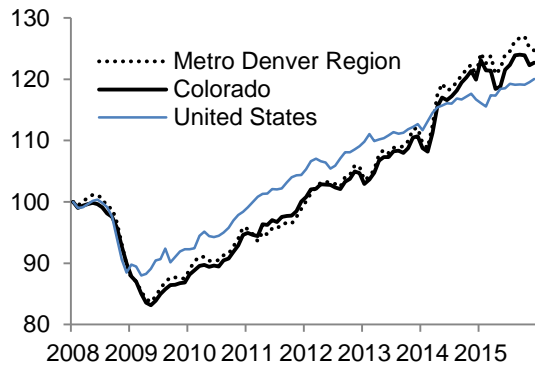
Source: U.S. Bureau of Labor Statistics; CES. Data are seasonally adjusted and are through October 2016.

**Figure 43**  
**Labor Market Trends**



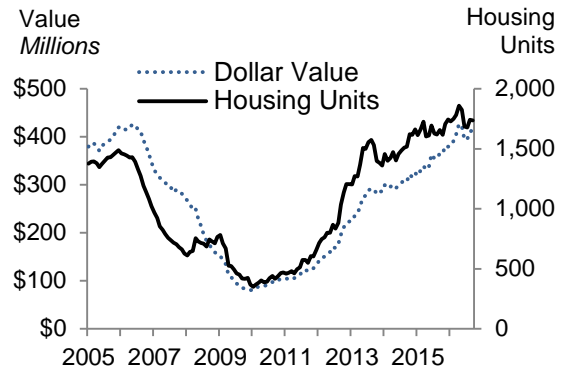
Source: U.S. Bureau of Labor Statistics; LAUS. Data prior to 2010 are adjusted by Legislative Council staff. Data are seasonally adjusted and are through October 2016.

**Figure 44**  
**Retail Trade Trends**



Source: Colorado Department of Revenue and U.S. Census Bureau. Data are shown as a three-month moving averages. Data are seasonally adjusted and are through December 2015.

**Figure 45**  
**Denver Metro Residential**



Source: U.S. Census Bureau. Data are shown as three-month moving averages. Data are not seasonally adjusted and are through September 2016.

## Northern Region

The economy in the region remains one of the strongest in the state; however the decline in oil and natural gas prices is clearly resulting in less economic activity in Weld County. In Larimer County, growth in employment has grown faster than the state in the first ten months of 2016. In oil-dependent Weld County, employment growth thus far in 2016 is only one half of the growth that occurred in 2015. The Larimer County unemployment rate remains among the lowest in the state, while the Weld County rate increased earlier in the year. A similar pattern emerges with residential construction, where permits have increased in Larimer County and decreased in Weld County year-to-date. Table 22 shows economic indicators for the northern region.



**Table 22**  
**Northern Region Economic Indicators**  
Weld and Larimer Counties

	2012	2013	2014	2015	YTD 2016
Employment Growth <sup>1</sup>					
Fort Collins-Loveland MSA	2.7%	3.2%	3.4%	3.9%	3.2%
Greeley MSA	4.8%	5.4%	8.9%	2.8%	1.4%
Unemployment Rate <sup>2</sup>					
Fort Collins-Loveland MSA	6.7%	5.8%	4.2%	3.3%	2.9%
Greeley MSA	7.8%	6.5%	4.4%	3.8%	3.5%
State Cattle and Calf Inventory Growth <sup>3</sup>	-3.4%	-8.7%	-4.2%	-4.4%	0.2%
Natural Gas Production Growth <sup>4</sup>	14.1%	12.5%	27.0%	44.3%	15.7%
Oil Production Growth <sup>4</sup>	36.6%	44.5%	52.4%	39.4%	-7.8%
Housing Permit Growth <sup>5</sup>					
Fort Collins-Loveland MSA Total	59.3%	28.8%	8.7%	-8.1%	43.9%
Fort Collins-Loveland MSA Single Family	63.3%	31.3%	10.2%	1.3%	-10.2%
Greeley MSA Total	54.6%	45.6%	41.1%	-3.5%	-11.9%
Greeley MSA Single Family	58.8%	37.7%	18.5%	3.8%	-10.5%
Nonresidential Construction Growth <sup>6</sup>					
Value of Projects	12.0%	55.0%	31.1%	24.8%	-20.7%
Square Footage of Projects	42.1%	40.4%	45.5%	14.3%	-26.9%
Level ( <i>Thousands</i> )	273,779	424,437	556,538	694,382	417,406
Number of Projects	23.3%	-2.5%	66.5%	-6.6%	-1.2%
Level	159	155	258	241	171
Retail Trade Sales Growth <sup>7</sup>					
Larimer County	6.3%	6.1%	8.5%	6.7%	N/A
Weld County	9.0%	6.6%	12.2%	1.0%	N/A

MSA = Metropolitan statistical area. NA = Not available.

<sup>1</sup>Bureau of Labor Statistics, CES (establishment survey). Seasonally adjusted. Data through October 2016.

<sup>2</sup>Bureau of Labor Statistics, LAUS (household survey). Data prior to 2010 adjusted by Legislative Council Staff. Seasonally adjusted. Data through October 2016.

<sup>3</sup>National Agricultural Statistics Service. Cattle and calves on feed through September 2016.

<sup>4</sup>Colorado Oil and Gas Conservation Commission. Natural gas data through July 2016. Oil data through July 2016.

<sup>5</sup>U.S. Census Bureau. Growth in the number of residential building permits. Data through October 2016.

<sup>6</sup>F.W. Dodge. Data through September 2016.

<sup>7</sup>Colorado Department of Revenue. Data through December 2015.

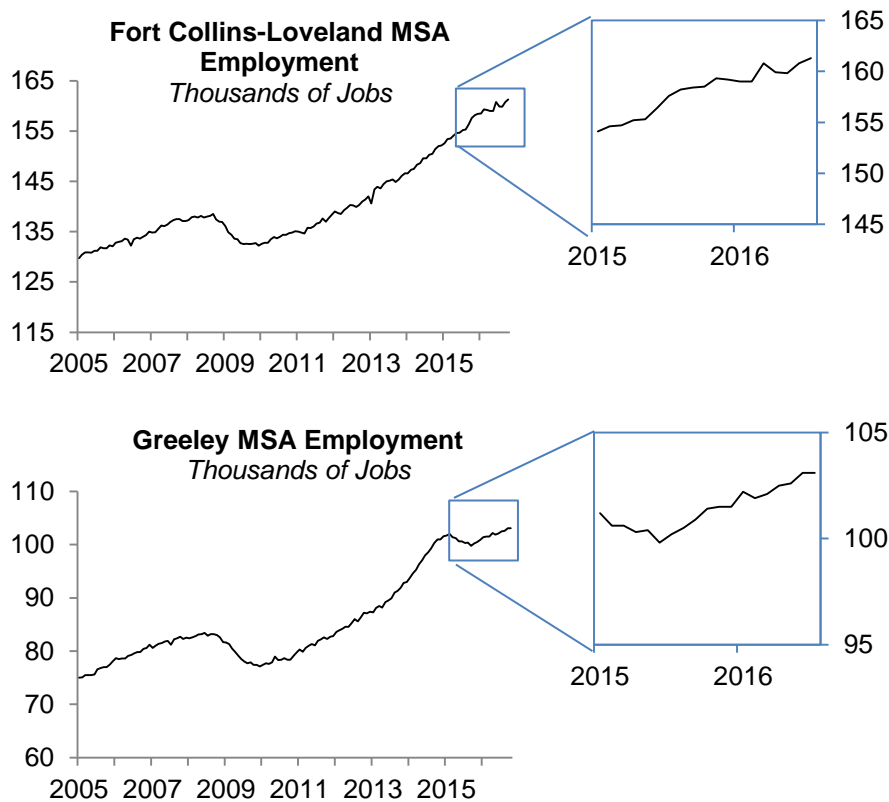
Over the last seven years, Weld County has been the epicenter of oil and natural gas production in the state, and that concentration of activity is only increasing. In 2009 the northern region was responsible for 61.3 percent of oil production in the state; year-to-date in 2016 the northern region is responsible for 90.1 percent of oil production in the state. Oil production in the northern region declined 7.8 percent in the first seven months of 2016 compared with the same period last year as existing wells are producing less oil. While oil has declined, natural gas has increased 15.7 percent as producers are capturing the natural gas from oil wells and putting what was previously a by-product on the market.

While the labor market remains strong in Larimer County, employment growth in Weld County is clearly decelerating with the drop in energy prices. Figure 46 shows employment trends for Larimer and Weld counties, with the pull-out boxes highlighting growth that occurred in 2015 and the first ten months of 2016. Employment grew 3.2 percent in Larimer County in the first ten months of 2016 compared with the same period in the previous year. After growing 8.9 percent in 2014, employment has continued to decelerate in Weld County, increasing 2.8 percent in 2015 and 1.4 percent in the first ten months of the year.

Regional housing construction is also diverging between Larimer and Weld Counties. In the first 10 months of 2016, the number of housing permits in Larimer County increased 43.9 percent on a year-over-year basis. This jump is due to an increase in multi-family units amid a decline of 10.2 percent in new single family permits. In Weld County, the number of single family and total residential permits declined 10.5 percent and 11.9 percent, respectively, in the first ten months of 2016. The number, value, and size of nonresidential construction projects have all declined in the nine months of 2016 compared with the same period in 2015. Figure 47 shows the three-month moving average of residential construction permits in the northern region.

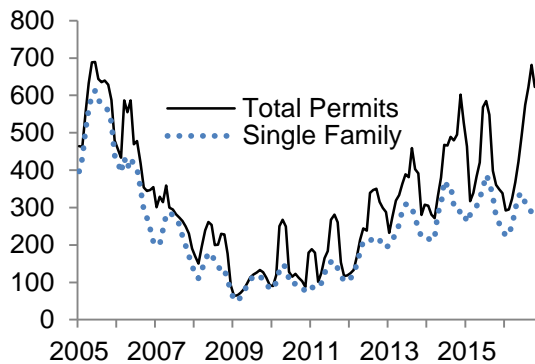
Retail sales growth decelerated in both Larimer and Weld counties in 2015, growing 6.7 percent and 1.0 percent respectively. Figure 48 shows that the growth in indexed retail sales in each county in the northern region continues to outpace both the state and the nation as a whole.

**Figure 46**  
**Fort Collins – Loveland and Greeley MSA Nonfarm Employment**  
*Seasonally Adjusted Data*



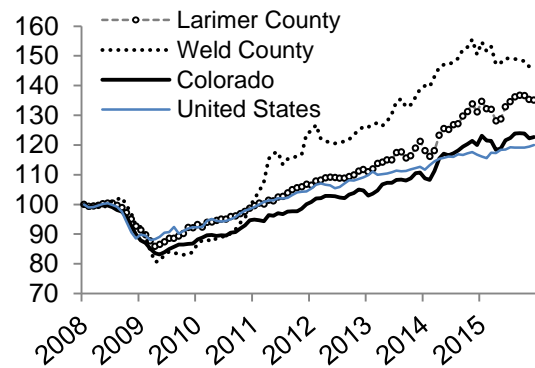
Source: U.S. Bureau of Labor Statistics, CES. Data through October 2016.

**Figure 47**  
**Northern Region Residential Building Permits**  
*Three-Month Moving Average;  
 Non-Seasonally Adjusted Data*



Source: U.S. Census Bureau. Data shown as three-month moving averages. Data are not seasonally adjusted and are through October 2016.

**Figure 48**  
**Northern Region Retail Sales Indexed to January 2008**  
*Seasonally Adjusted Data*



Source: Colorado Department of Revenue and U.S. Census Bureau. Data are through December 2015.

## Colorado Springs Region

After posting healthy gains across most broad economic indicators in 2015, the Colorado Springs region continues to show notable improvement. The improving economy is attracting people to the area, which is generating demand for homes and helping local retailers. Indicators for the Colorado Springs region are shown in Table 23.

The Colorado Springs labor market continues to add jobs at an encouraging rate through October 2016. After a banner year in 2015 in which businesses in the region added jobs at a faster rate than the state, employment growth has increased 2.2 percent through October compared with the same period one year ago. Job growth has been broad-based across most industries; however, demand for housing in the region has supported job growth in the construction industry in particular. Figure 49 shows the employment trend for the Colorado Springs region from 2005 to October 2016.



The region's unemployment rate also continues improve. Through October, the region's average unemployment rate was 3.9 percent, down from 4.8 percent from the same period last year. The improving labor market and relatively affordable housing are attracting people to the region and aiding in the improvement of the region's unemployment rate. However, as shown in Figure 50, the rate did rise slightly over the summer, but has since continued to decline. The reentry or addition of workers into the labor force can temporally cause the unemployment rate to rise.

**Table 23**  
**Colorado Springs Region Economic Indicators**  
El Paso County

	2012	2013	2014	2015	YTD 2016
Employment Growth <sup>1</sup>					
Colorado Springs MSA	1.0%	2.3%	2.2%	3.2%	2.2%
Unemployment Rate <sup>2</sup>	8.8%	7.8%	6.0%	4.6%	3.9%
Housing Permit Growth <sup>3</sup>					
Total	33.0%	17.2%	3.8%	-0.4%	38.0%
Single-Family	50.1%	19.2%	-7.7%	13.3%	19.8%
Nonresidential Construction Growth <sup>4</sup>					
Value of Projects	0.5%	6.5%	-4.2%	85.2%	9.1%
Square Footage of Projects	-1.6%	25.2%	-12.0%	-0.2%	4.0%
Level ( <i>Thousands</i> )	479,770	510,809	489,589	906,914	422,567
Number of Projects	-11.7%	-1.7%	-5.9%	12.3%	-5.6%
Level	361	355	334	375	272
Retail Trade Sales Growth <sup>5</sup>	5.3%	4.9%	4.1%	5.8%	N/A

MSA = Metropolitan statistical area. NA = Not Available.

<sup>1</sup>U.S. Bureau of Labor Statistics, CES (establishment survey). Seasonally adjusted. Data through October 2016.

<sup>2</sup>U.S. Bureau of Labor Statistics, LAUS (household survey). Data prior to 2010 adjusted by Legislative Council Staff. Seasonally adjusted. Data through October 2016.

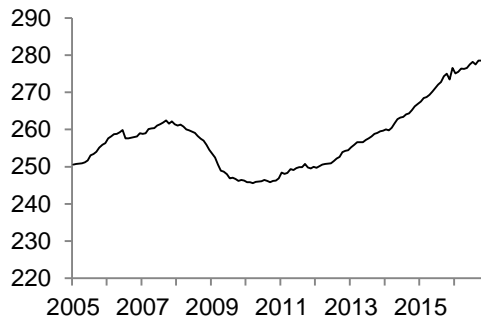
<sup>3</sup>U.S. Census. Growth in the number of residential building permits. Data through October 2016.

<sup>4</sup>F.W. Dodge. Data through September 2016.

<sup>5</sup>Colorado Department of Revenue. Data through December 2015.

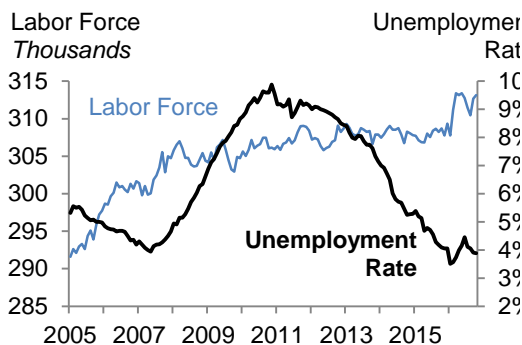


**Figure 49**  
**Unemployment Rate and Labor Force**  
**Colorado Springs Employment**  
*Thousands of Jobs*



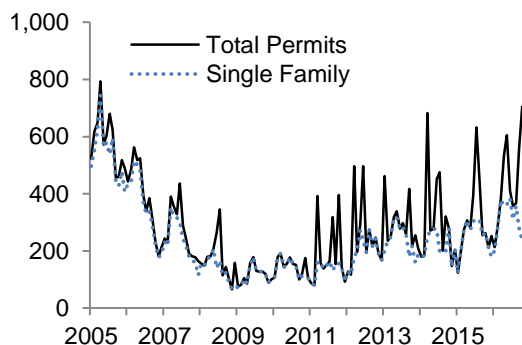
Source: U.S. Bureau of Labor Statistics; CES. Data are seasonally adjusted and are through October 2016.

**Figure 50**  
**Unemployment Rate and Labor Force**



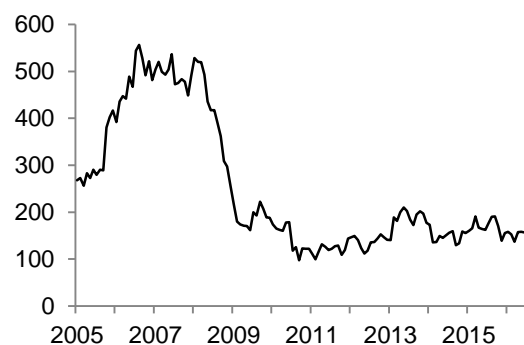
Source: U.S. Bureau of Labor Statistics; LAUS. Data are seasonally adjusted and are through October 2016.

**Figure 51**  
**Colorado Springs MSA**  
**Residential Building Permits**  
*Number of Units*



Source: U.S. Census Bureau. Data are shown as three-month moving averages. Data are not seasonally adjusted and are through October 2016.

**Figure 52**  
**Colorado Springs**  
**Nonresidential Projects**  
*Thousands of Square Feet*



Source: F.W. Dodge. Data are shown as three-month moving averages. Data are not seasonally adjusted and are through September 2016.

The improving labor market and strong tourism growth are aiding retail sales in the Colorado Springs region. In 2015, retail trade sales increased 5.8 percent compared with the same period last year. Collections from the city's sales tax on hotel rooms and rental cars continue to improve. In 2015, consumer spending outpaced the state and the nation.

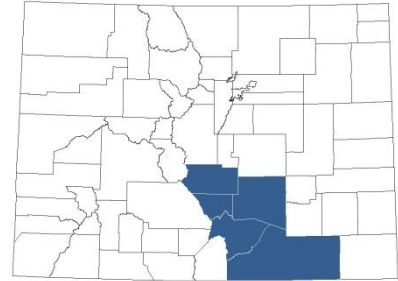
Residential construction activity remains robust through the first ten months of 2016. Residential permits issued for both single family and multi-family construction totaled 4,407 through October, a 38 percent improvement from the same period one year ago (Figure 51). An expanding labor market, a declining inventory of existing houses, and rising property values are supporting growth in the residential construction building market. In addition, relatively affordable homes compared to the Denver metro and northern Colorado real estate markets have contributed to demand for new homes in the Colorado Springs region.

Similar to the residential construction market, the nonresidential market continues to see improvement. After a strong performance in 2015, the value of nonresidential construction projects continues to improve. However, relative to pre-recessionary levels, nonresidential construction activity remains subdued (Figure 52).

## Pueblo – Southern Mountains Region

Recent success in attracting new high tech businesses appears to be aiding the economic recovery in the Pueblo – Southern Mountains region, which consists of Pueblo, Fremont, Custer, Huerfano and Las Animas counties. Employment growth in the region is on track for its best performance in almost ten years. The improving labor market has helped push down the region's unemployment rate. Residential construction remains subdued but is showing evidence for momentum in the economy, and demand for nonresidential construction remains strong. Table 24 shows several economic indicators for the region.

Employment growth in the Pueblo – Southern Mountains region has been lagging other areas of the state over the past few years. Recently, however, the region is showing encouraging signs of employment growth. Employment in the larger five-county Pueblo region increased 2.5 percent through October, while the Pueblo MSA, which includes only Pueblo County, added jobs at a pace of 2.2 percent (Figure 53). Progress has been broad-based across all major industries, with the education and health services and professional business services sectors reporting the strongest gains over the year. Several new business expansion announcements in 2015 should add more momentum to employment numbers. New developments in the region include a new research and development office for United Launch Alliance, construction of the nation's largest hemp oil processing facility, and the development of the state's largest solar farm.



**Table 24**  
**Pueblo Region Economic Indicators**  
Custer, Fremont, Huerfano, Las Animas, and Pueblo Counties

	2012	2013	2014	2015	YTD 2016
Employment Growth					
Pueblo Region <sup>1</sup>	-1.0%	-0.8%	1.0%	0.9%	2.5%
Pueblo MSA <sup>2</sup>	-0.2%	0.8%	1.5%	2.2%	2.2%
Unemployment Rate <sup>1</sup>	10.9%	10.1%	7.4%	5.7%	5.0%
Housing Permit Growth <sup>3</sup>					
Pueblo MSA Total	125.4%	-40.6%	-0.6%	69.4%	-1.3%
Pueblo MSA Single-Family	50.9%	-8.1%	-0.6%	29.9%	34.5%
Nonresidential Construction Growth <sup>4</sup>					
Value of Projects	717.4%	-75.3%	192.7%	14.6%	35.1%
Square Footage of Projects	390.8%	-72.2%	197.9%	2.3%	18.5%
Level ( <i>Thousands</i> )	109,397	30,389	90,527	92,620	54,563
Number of Projects	-31.7%	7.1%	96.7%	-22.0%	67.6%
Level	28	30	59	46	57
Retail Trade Sales Growth <sup>5</sup>	3.2%	1.5%	4.9%	2.9%	N/A

MSA = Metropolitan statistical area. NA = Not Available.

<sup>1</sup>U.S. Bureau of Labor Statistics, CES (establishment survey). Seasonally adjusted. Data through October 2016.

<sup>2</sup>U.S. Bureau of Labor Statistics, LAUS (household survey). Data prior to 2010 adjusted by Legislative Council Staff. Seasonally adjusted. Data through October 2016.

<sup>3</sup>U.S. Census Bureau. Growth in the number of residential building permits. Data through October 2016.

<sup>4</sup>F.W. Dodge. Data through September 2016.

<sup>5</sup>Colorado Department of Revenue. Data through December 2015.

The unemployment rate in the region has averaged 5.0 percent through October 2016, down from almost 6.0 percent from the same period one year ago. The rate has been gradually declining since 2013 (Figure 54) as the labor market in the region has improved. The rate did tick up slightly in May and June, as roughly 450 workers from Evraz North America's steel mill in Pueblo were temporarily laid off. Although the area unemployment rate has shown significant improvement, it remains above the statewide rate of 3.7 percent.

The residential construction market continues to recover, but relative to pre-recessionary levels construction activity remains subdued (Figure 56). The number of residential building permits has averaged 18 each month since 2013, principally single family permits. Through October 2016, the number of new permits is averaging approximately 22 per month.

Strong demand for commercial and industrial buildings continues to boost nonresidential construction in the region. In 2015, the region added over 92,000 square feet to their nonresidential inventory. The number of nonresidential projects is up nearly 68 percent through October compared with same period one year ago. Marijuana entrepreneurs are acquiring warehouse and large building space.

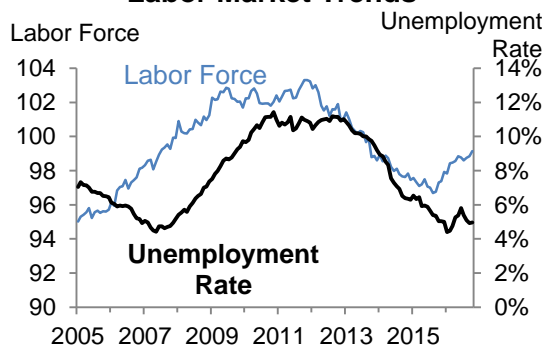
Area retail trade rose by 2.9 percent in 2015, down from the 4.9% growth rate in 2014, the most recent data available. Despite an improving labor market and an increase in construction, area consumer spending underperformed statewide trends in 2015 (Figure 55).

**Figure 53**  
**Pueblo MSA Employment**  
*Thousands of Jobs*



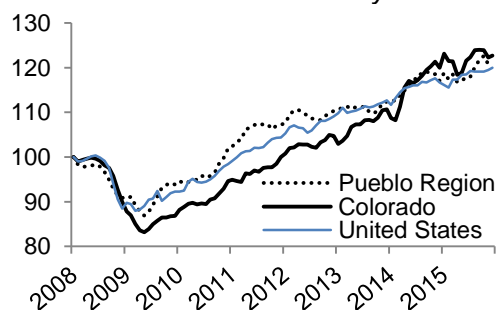
Source: U.S. Bureau of Labor Statistics; CES. Data are seasonally adjusted and are through October 2016.

**Figure 54**  
**Labor Market Trends**



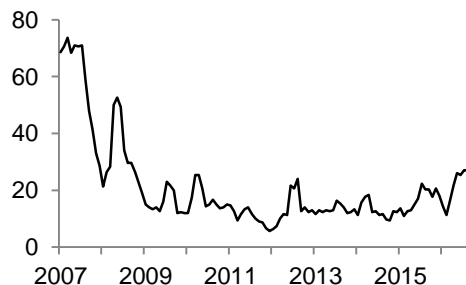
Source: U.S. Bureau of Labor Statistics; LAUS. Data are seasonally adjusted and are through October 2016.

**Figure 55**  
**Retail Trade Trends**  
*Index=100 January*



Source: Colorado Department of Revenue and U.S. Census Bureau. Data shown as a three-month moving averages. Data are seasonally adjusted and are through December 2015.

**Figure 56**  
**Single Family Residential Building Permits**  
*Number of Housing Units*



Source: U.S. Census Bureau. Data shown are three-month moving averages. Data are not seasonally adjusted and are through October 2016.

## San Luis Valley Region

The six San Luis Valley counties comprise the oldest, smallest, and poorest region in the state. The regional economy is centered on agricultural production, with cities and towns throughout the valley supporting the largely rural population. The region produces barley, potatoes, and vegetable crops while also providing regional services and welcoming tourists. Economic data for the San Luis Valley are sparse and frequently arrive after a significant lag. However, metrics available for 2016 suggest a good year for the region. Available data are summarized in Table 25.

According to the Bureau of Labor Statistics' household employment survey, the region added jobs at a rate of 5.5 percent between January and September of 2016. This represents the highest rate recorded in the state during that span. Jobs are available in local governments, including area schools, public safety agencies, and county human services departments. Businesses are also adding jobs in agriculture and food service. On strong job growth, the regional unemployment rate has ticked down to an average of 4.7 percent in 2016, a full percentage point lower than last year, even as the labor force population remains elevated. Regional labor market indicators are presented in Figure 57.



Agriculture is the most important industry in the San Luis Valley. The valley produces barley, potatoes, alfalfa hay, vegetables, and quinoa, while also furnishing grazing land to livestock producers. In 2015, regional producers harvested over 52,000 acres of barley worth an average of \$878.50 per acre, both increases of over 20 percent relative to the prior year. Persistently low potato prices are weighing on the region's agricultural producers, though this

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

	2012	2013	2014	2015	YTD 2016
Employment Growth <sup>1</sup>	0.2%	-2.2%	2.6%	3.3%	5.5%
Unemployment Rate <sup>1</sup>	10.9%	10.5%	8.0%	6.2%	4.7%
San Luis Valley Agriculture District <sup>2</sup>					
Barley					
Acres Harvested	43,100	46,600	42,900	52,100	N/A
Crop Value (\$/Acre)	\$ 904.6	\$ 824.4	\$ 730.1	\$878.5	N/A
Potatoes					
Acres Harvested	54,000	49,600	53,900	51,800	N/A
Crop Value (\$/Acre)	\$ 2,668	\$ 3,614	\$ 3,218	\$3,234	N/A
Housing Permit Growth <sup>3</sup>	41.5%	15.0%	-25.0%	21.5%	-5.0%
Retail Trade Sales Growth <sup>4</sup>	4.4%	0.6%	3.7%	11.5%	N/A

NA = Not Available.

<sup>1</sup>U.S. Bureau of Labor Statistics, LAUS (household survey). Data prior to 2010 adjusted by Legislative Council Staff. Seasonally adjusted. Data through October 2016.

<sup>2</sup>National Agricultural Statistics Service. Barley through December 2015; potatoes through November 2015.

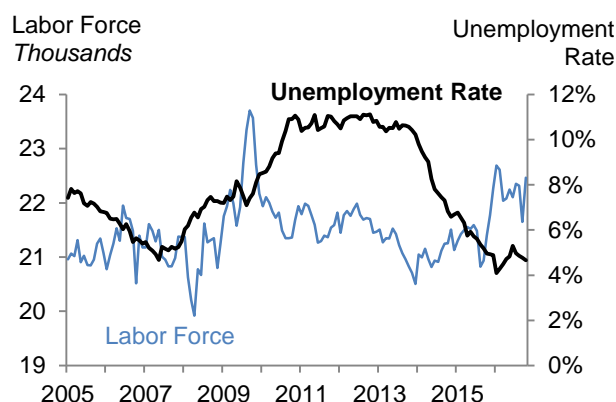
<sup>3</sup>F.W. Dodge. Data through September 2016.

<sup>4</sup>Colorado Department of Revenue. Data through December 2015.

trend may be reversing. As shown in Figure 58, Colorado potato prices were, on average, 6.4 percent higher between January and September 2016 than in the same period during 2015, largely because they plunged less significantly during the potato harvest than last season.

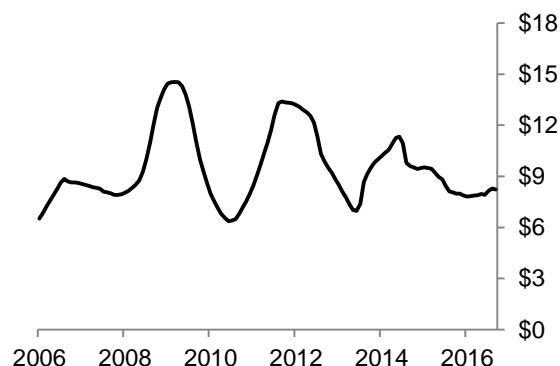
Retail sales growth in the San Luis Valley increased 11.5 percent in 2015 and 3.7 percent in 2014. Part of the increase in retail sales was due to a spike in sales in the first half of 2015, which could result in a negative retail figure for 2016. The number of new housing permits issued in the region declined by 5.0 percent in the first nine months of 2016 compared with the same period in 2015. Because the region is small and has relatively few housing permits, annual average growth is volatile. Building permits increased by 15.0 percent in 2013, fell 25.0 percent in 2014, and increased 21.5 percent in 2015. These are large swings in percentage terms, but only represent a difference of 48 construction permits between the year with the most construction (2013, 192 units) and least (2014, 144 units).

**Figure 57**  
**San Luis Valley Labor Market Indicators**



Source: U.S. Bureau of Labor Statistics; LAUS. Data are seasonally adjusted and are through October 2016.

**Figure 58**  
**Prices Received for Colorado Potatoes**  
*Dollars per hundredweight*

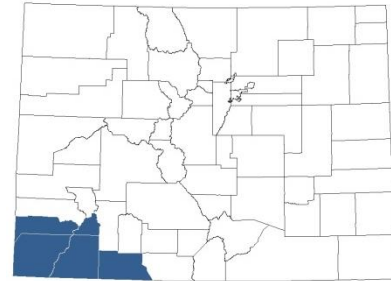


Source: National Agricultural Statistics Service. Data shown as twelve-month moving averages. Data through September 2016.

## Southwest Mountain Region

The five counties of the southwest mountain region account for one of the state's most diverse regional economies, with important contributions from tourism, agriculture, resource extraction, and a regional hub in Durango. These sectors are pulling the regional economy in different directions: strong contributions from tourism continue to drive growth, while low commodity prices have dimmed the outlook for agricultural producers and energy firms. In total, the region's performance during 2016 has thus far improved on last year. Economic indicators for the region are summarized in Table 26.

The regional labor market is improving. Through October, regional employers drove job growth of 2.7 percent relative to the first ten months of 2015. Should this rate hold through the end of 2016, it would represent the region's second-best year of job gains since the Great Recession by a comfortable margin. Consequently, the region's unemployment rate has averaged 3.7 percent thus far in 2016, down from 4.0 percent last year and just above the statewide average. Employers are continuing to add jobs, particularly in Durango's robust health care sector. The region's labor force population and unemployment rate are shown in Figure 59.



Regional tourist visits continue to increase. Winter destinations in La Plata, San Juan, and Archuleta counties benefited from record statewide ski visits during the 2015-16 winter season. Summer destinations also attracted more visitors: Mesa Verde National Park and Hovenweep National Monument, both in Montezuma County, saw visitations rise 7.5 percent between January and October compared with the first 10 months of last year. Poor snowpack could hamper the region's tourism performance heading into 2017. Precipitation during the current water year, which began on October 1, has fallen at just 62 percent of average in the region's San Juan watershed, which includes the San Miguel, Dolores, and Animas river basins.

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

	2012	2013	2014	2015	YTD 2016
Employment Growth <sup>1</sup>	0.7%	0.8%	3.2%	1.1%	2.7%
Unemployment Rate <sup>1</sup>	7.6%	6.6%	4.8%	4.0%	3.7%
Housing Permit Growth <sup>2</sup>	2.4%	44.7%	14.2%	-6.1%	14.1%
Retail Trade Sales Growth <sup>3</sup>	7.2%	5.0%	3.0%	1.7%	N/A
National Park Recreation Visits <sup>4</sup>	-13.8%	-5.9%	8.9%	10.2%	7.5%

NA = Not available.

<sup>1</sup>U.S. Bureau of Labor Statistics, LAUS (household survey). Seasonally adjusted. Data prior to 2010 adjusted by Legislative Council Staff. Data through October 2016.

<sup>2</sup>F.W. Dodge. Data through September 2016.

<sup>3</sup>Colorado Department of Revenue. Data through December 2015.

<sup>4</sup>National Park Service. Data through October 2016. Recreation visits for Mesa Verde National Park and Hovenweep National Monument.

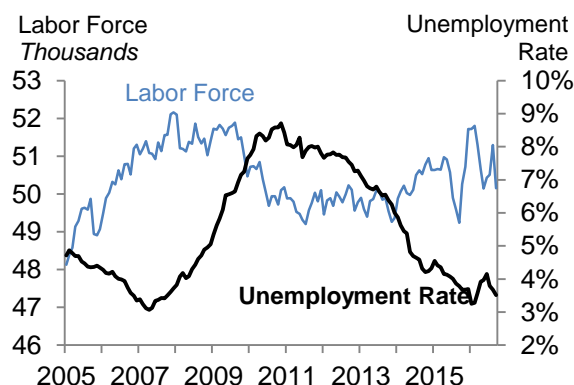


Low crop and natural gas prices continue to depress both agricultural and energy industry activity in the region. Agricultural prices were depressed through 2016 as supply outpaced demand for agricultural goods. Similarly, the price of natural gas has stayed low, softening employment prospects in the regional energy industry.

Permits for residential construction show some relief coming for the tight regional housing market. The number of housing permits issued increased by 14.1 percent between January and September relative to the same period in 2015. The increase reverses a small decline last year, continuing a construction boom dating to 2013.

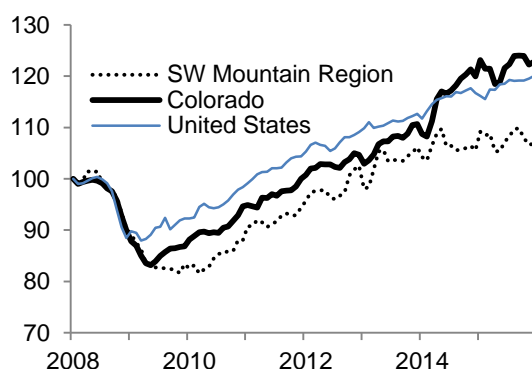
Regional consumer spending, as measured by retail trade sales, grew only modestly in 2015. Retail sales rose 1.7 percent relative to statewide growth of 5.4 percent. Similar to nationwide trends, some of the weakness is attributable to lower gasoline prices. Retail trade indices for the region, state, and nation are shown in Figure 60. While regional data are available only through the end of 2015, an improving labor market and steady growth in tourist visitations suggest that retail performance improved in 2016.

**Figure 59**  
**Southwest Mountain Region Employment**  
*Thousands of Jobs*



Source: U.S. Bureau of Labor Statistics; LAUS. Data prior to 2010 adjusted by Legislative Council Staff. Data are seasonally adjusted and are through October 2016.

**Figure 60**  
**Retail Trade Trends**  
*Index 100 = January 2008*

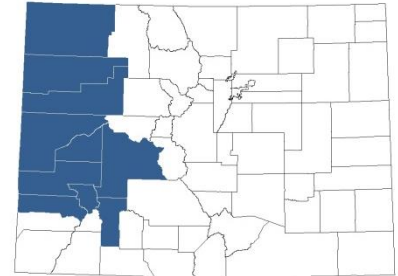


Source: Colorado Department of Revenue and U.S. Census Bureau. Data shown as a three-month moving averages. Data are seasonally adjusted and are through December 2015.

## Western Region

The western region experienced moderate economic growth through the third quarter of 2016, despite weakness in the energy industry. Garfield, Rio Blanco, and Delta counties have been significantly impacted by persistently low natural gas prices and a struggling coal industry. On the other hand, popular tourist destinations in the region continue to add jobs as an expanding state and national economy are helping to bolster regional travel. Economic indicators for the region are summarized in Table 27.

Despite weakness in the energy sector, total employment has increased 1.5 percent in the region through September 2016 compared with the same period in 2015. Employment growth in Grand Junction, the largest town in the region, grew at a more modest rate, 0.5 percent through October 2016. In September the western region's unemployment rate was 4.6 percent, as shown in Figure 61.



Natural gas production in the western region has declined each year since 2013. This trend has continued through July 2016, declining 11.7 percent year-to-date, as shown in Figure 62. The region's natural gas production is concentrated in the Piceance Basin, primarily in Garfield County. Low gas prices have been depressing regional production; however the U.S. Geological Survey increased its estimate of the amount of natural gas in the region by 40 times earlier this year. The new estimates result in the Piceance basin being the second largest source of potential natural gas resources in the country.

**Table 27**  
**Western Region Economic Indicators**

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

	2012	2013	2014	2015	YTD 2016
Employment Growth <sup>1</sup>					
Western Region <sup>1</sup>	0.3%	-0.6%	2.1%	-0.3%	1.5%
Grand Junction MSA <sup>2</sup>	0.8%	0.6%	2.5%	0.0%	0.5%
Unemployment Rate <sup>1</sup>	9.2%	8.2%	5.9%	4.9%	4.6%
Natural Gas Production Growth <sup>3</sup>	3.5%	-8.8%	-5.3%	-12.8%	-11.7%
Housing Permit Growth <sup>4</sup>	22.4%	-1.0%	7.9%	21.2%	11.0%
Nonresidential Construction Growth <sup>4</sup>					
Value of Projects	13.2%	-24.7%	221.9%	-37.9%	-9.7%
Square Footage of Projects	26.0%	-42.0%	157.9%	-41.0%	-31.6%
Level ( <i>Thousands</i> )	682	396	1,021	602	316
Number of Projects	16.7%	-28.6%	21.8%	-17.9%	14.6%
Level	77	55	67	55	47
Retail Trade Sales Growth <sup>5</sup>	2.3%	2.4%	4.7%	7.4%	N/A

MSA = Metropolitan statistical area. NA = Not available.

<sup>1</sup> U.S. Bureau of Labor Statistics, LAUS (household survey). Data prior to 2010 adjusted by Legislative Council Staff. Seasonally adjusted. Data through October 2016.

<sup>2</sup> U.S. Bureau of Labor Statistics, CES (establishment survey). Seasonally adjusted. Data through October 2016.

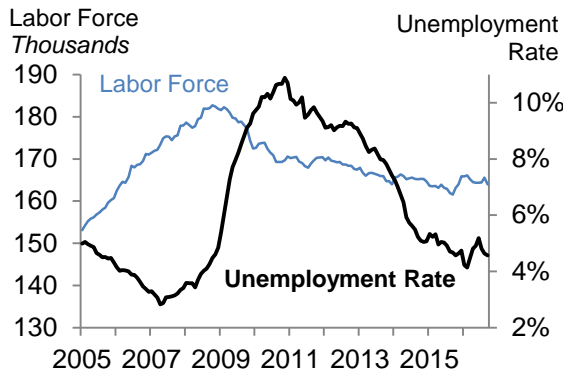
<sup>3</sup> Colorado Oil and Gas Conservation Commission. Data through July 2016.

<sup>4</sup> F.W. Dodge. Data through September 2016.

<sup>5</sup> Colorado Department of Revenue. Seasonally adjusted. Data through December 2015.

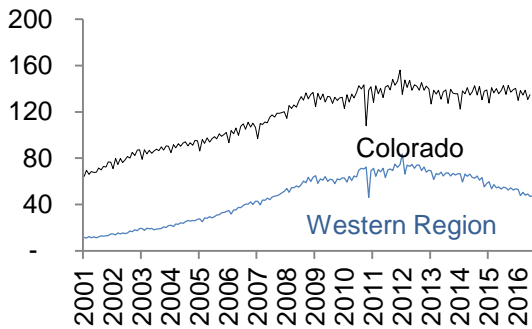


**Figure 61**  
**Labor Market Trends**



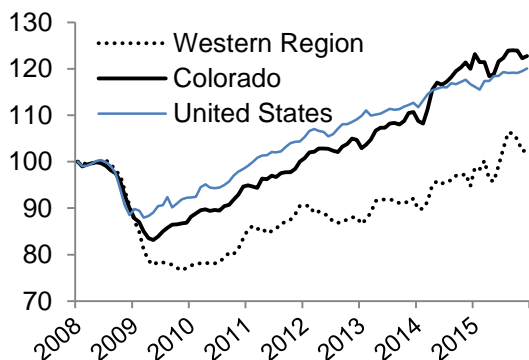
Source: U.S. Bureau of Labor Statistics; LAUS. Data are seasonally adjusted and are through September 2016.

**Figure 62**  
**Natural Gas Production**  
Millions of MCF



Source: Colorado Oil and Gas Commission. Data through July 2016.

**Figure 63**  
**Retail Trade Trends**  
Index 100 = January 2008



Source: Colorado Department of Revenue and U.S. Census Bureau. Data shown as three-month moving averages, are seasonally adjusted, and are through December 2015.

Decreasing demand and low prices continue to impact the coal industry in the western region. Between 2013 and September 2016, four coal mines in the region announced plans to close. The mine closings are part of a larger industry reorganization, which included companies going bankrupt. The largest coal producer in Colorado, Arch Coal, emerged from Chapter 11 bankruptcy in October, while the second largest coal producer, Peabody Energy, is expected to emerge from bankruptcy by the end of the year.

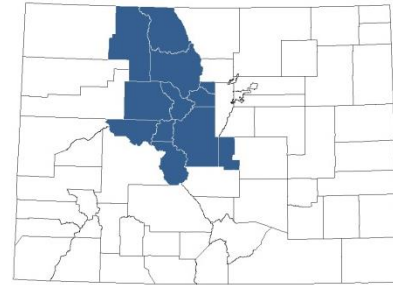
Regional residential construction continued to grow through the first nine months of 2016, as housing permits increased by 11.0 percent. Approximately half of this growth is located in Mesa County. Improving labor market conditions and relatively affordable housing costs are supporting the residential real estate market in the Grand Junction area.

Nonresidential construction declined in the region through the first nine months of 2016. The total value of nonresidential construction projects between January and September 2016 declined 9.7 percent compared with the same period in 2015, while the square footage declined 31.6 percent, indicating that projects have decreased in size.

Consumer spending, as measured by retail trade sales, increased 7.4 percent in 2015. Retail sales continue to lag well behind other areas of the state. As shown in Figure 63, retail trade sales in the western region fell further than sales statewide during the recession and have yet to reach pre-recession levels.

## Mountain Region

The mountain region, comprising the twelve mountainous counties north of Poncha Pass, consistently rates as one of the best-performing regional economies in the state. Buoyed by strong tourism performance in 2016, the region boasts the state's lowest unemployment rate. Improved household incomes nationwide are driving visitors and newcomers to the resorts, bolstering the mountain economy through the late years of the current expansion. Economic indicators for the region are presented in Table 28.



Regional job growth cooled moderately during the third quarter of 2016, according to the Bureau of Labor Statistics' household survey. Nevertheless, regional employment still increased by 3.7 percent through October compared with the same period during the previous year. Businesses continue to hire employees for increasingly service-driven tourism amenities, including resorts, lodging, and restaurants but also adventure camps and dude ranches. Figure 64 charts regional employment statistics, while Figure 65 shows the regional labor force and unemployment rate.

Consumer spending, as measured by retail sales, rose 6.7 percent in 2015 over the prior year, compared to statewide growth of 5.4 percent. Figure 66 indexes growth in retail sales for the region, state, and U.S. since January 2008. The mountain region has outpaced state and nationwide growth in consumer spending over the past three years. In November, the Aspen City Council approved a policy requiring new "formula" (chain) retailers in its jurisdiction to submit to council review before obtaining a retail license, which could stave off changes in the composition of Pitkin County retail sales.

**Table 28**  
**Mountain Region Economic Indicators**

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

	2012	2013	2014	2015	YTD 2016
Employment Growth <sup>1</sup>	1.0%	0.8%	3.4%	1.8%	3.7%
Unemployment Rate <sup>1</sup>	7.1%	6.1%	4.3%	3.3%	2.8%
Housing Permit Growth <sup>2</sup>	6.9%	63.6%	2.2%	-17.5%	21.2%
Nonresidential Construction Growth <sup>2</sup>					
Value of Projects	-57.4%	-8.6%	84.8%	15.1%	-56.3%
Square Footage of Projects	-29.6%	-19.6%	206.5%	-56.5%	-48.0%
Level ( <i>Thousands</i> )	548	441	1,352	588	303
Number of Projects	11.4%	2.0%	20.0%	-36.7%	17.1%
Level	49	50	60	38	41
Retail Trade Sales Growth <sup>3</sup>	6.3%	6.1%	8.5%	6.7%	N/A

<sup>1</sup>Bureau of Labor Statistics. LAUS (household) survey. Seasonally adjusted. Data prior to 2010 adjusted by Legislative Council Staff. Data through October 2016.

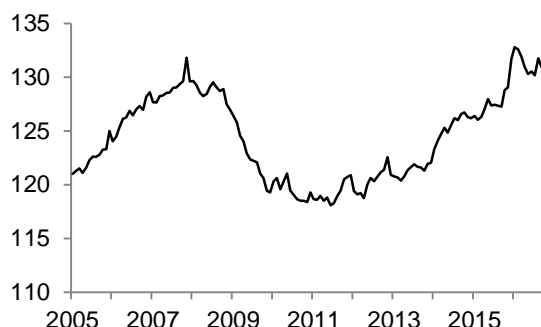
<sup>2</sup>F.W. Dodge. Data through September 2016.

<sup>3</sup>Colorado Department of Revenue. Seasonally adjusted. Data through December 2015.

Residential construction continues to increase steadily amid constraints posed by high infrastructural costs and a tight market for skilled construction workers. The region achieved 21.2 percent growth in housing permits through September 2016, a rebound from last year's similarly-sized decline, as shown in Figure 67. The outlook for nonresidential construction activity is mixed: permits issued thus far this year indicate growth in the number of nonresidential products, but contractions in their size and value.

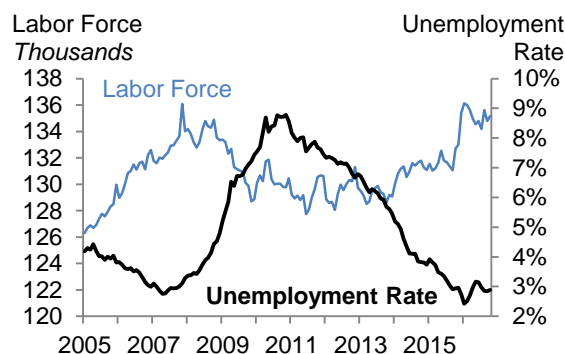
The threat of a dry winter poses a significant downside risk for the regional economy heading into next year. According to Colorado Ski Country USA, skier visits reached a record 13 million during the 2015-16 ski season, contributing to strong performance in the economy during 2016. However, for the current water year beginning October 1, precipitation in the Upper Colorado and Yampa-White-Green river basins fell at 63 percent and 68 percent of average, respectively, through November. These basins include major ski destinations: Vail-Beaver Creek, Aspen-Snowmass, Breckenridge, Winter Park, Copper Mountain, Keystone, and Steamboat Springs. Low precipitation has already delayed some ski area openings and, if it persists, could stunt economic performance during the crucial winter season.

**Figure 64**  
**Mountain Region Employment**  
*Thousands of Jobs*



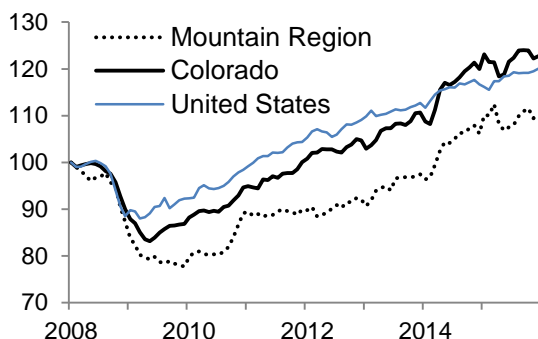
Source: U.S. Bureau of Labor Statistics; LAUS. Data prior to 2010 adjusted by Legislative Council Staff. Data are seasonally adjusted and are through October 2016.

**Figure 65**  
**Labor Market Trends**



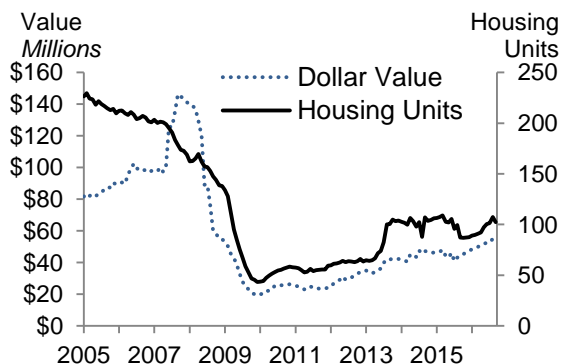
Source: U.S. Bureau of Labor Statistics; LAUS. Data prior to 2010 are adjusted by Legislative council Staff. Data are seasonally adjusted and are through October 2016.

**Figure 66**  
**Retail Trade Trends**  
*Index 100 = January 2008*



Source: Colorado Department of Revenue and U.S. Census Bureau. Data are shown as a three-month moving averages. Data are seasonally adjusted and are through December 2015.

**Figure 67**  
**Residential Construction**  
*Index 100 = January 2008*

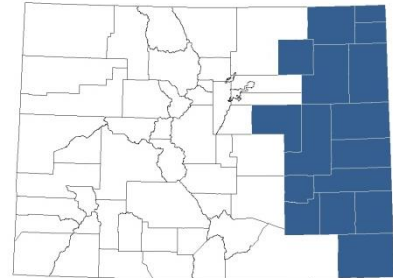


Source: U.S. Census Bureau. Data are shown as three-month moving averages. Data are not seasonally adjusted and are through September 2016.

## Eastern Region

The sixteen counties that comprise the eastern region are largely reliant on the agricultural sector. American agricultural producers have struggled in 2016, as the strong dollar and a weak global economy have conspired to push both prices and exports down. Farm income is falling amidst rising debt levels and interest rates for agricultural loans. Meanwhile, retail trade in the eastern region is falling. Economic indicators for the region are presented in Table 29.

Farmers and ranchers in the eastern region produce a myriad of crops and livestock products, including primarily beef, wheat, corn, alfalfa hay, and milk. Figure 68 shows the prices received for Colorado wheat, corn, and alfalfa hay, which have fallen consistently since mid-2013. Falling crop prices reflect excess production and weak demand, the latter of which is sensitive to trade conditions with Canada, Mexico, and particularly for meat products, Asia.



Meanwhile, nonfarm employment in the eastern region accelerated in 2016, from 2.4 percent during calendar year 2015 to 3.3 percent year-to-date through September compared with year-ago levels. Nonfarm jobs in the eastern region are primarily in the health care and social assistance, public administration, and educational services industries. As shown in Figure 69, the region's unemployment rate continued to drop in 2016, averaging 3.1 percent September.

The City of Burlington and Kit Carson County are expecting a drop in tax and fee revenue as a result of the closure of the Kit Carson Correctional Center in Burlington, which employed 142 people, during the summer of 2016. Although the closure had been expected to reduce the area's workforce, job growth has continued in the area and enrollment in the area's schools continued to grow this fall.

**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

	2012	2013	2014	2015	YTD 2016
Employment Growth <sup>1</sup>	-0.8%	-1.3%	3.0%	2.4%	3.3%
Unemployment Rate <sup>1</sup>	6.7%	6.1%	4.4%	3.5%	3.1%
Crop Price Changes <sup>2</sup>					
Wheat (\$/Bushel)	4.2%	0.8%	-11.5%	-25.6%	-26.7%
Corn (\$/Bushel)	9.2%	-2.8%	-31.0%	-13.1%	-6.8%
Alfalfa Hay (Baled, \$/Ton)	37.0%	-0.1%	-11.3%	-13.9%	-12.1%
Livestock <sup>3</sup>					
State Cattle and Calf Inventory Growth	-3.4%	-8.7%	-4.2%	-4.4%	0.2%
Milk Production	7.1%	3.5%	7.9%	3.9%	4.7%
Retail Trade Sales Growth <sup>4</sup>	5.1%	2.3%	9.7%	-5.4%	N/A

NA = Not Available.

<sup>1</sup>U.S. Bureau of Labor Statistics, LAUS (household survey). Seasonally adjusted. Data prior to 2010 adjusted by Legislative Council Staff. Data through October 2016.

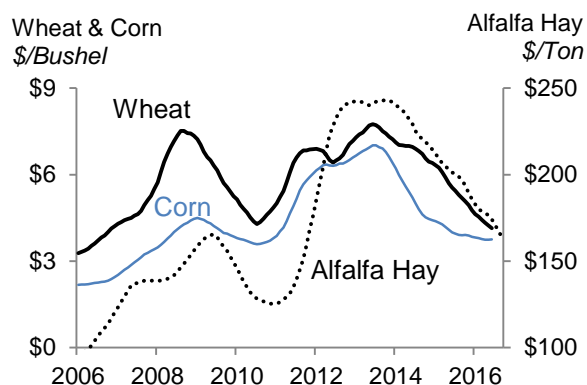
<sup>2</sup>National Agricultural Statistics Service. Price data through September 2016.

<sup>3</sup>National Agricultural Statistics Service. Data through September 2016.

<sup>4</sup>Colorado Department of Revenue. Data through December 2015.

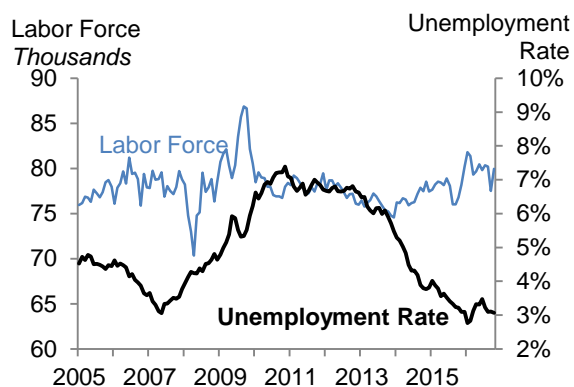
Regional retail sales were down 5.4 percent in 2015 compared with the previous year. Figure 70 shows that retail trade sales in the region have been trending down since 2014. Declining retail trade may reflect weaker income among the region's farmers and ranchers.

**Figure 68**  
**Prices Received for Colorado Crops**



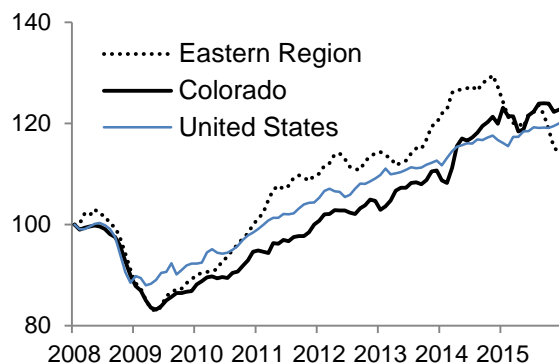
Source: National Agricultural Statistics Service. Data are twelve-month moving averages and are through September 2016.

**Figure 69**  
**Labor Market Trends**



Source: U.S. Bureau of Labor Statistics; LAUS. Data prior to 2010 are adjusted by Legislative Council Staff. Data are seasonally adjusted and are through October 2016.

**Figure 70**  
**Retail Trade Trends**



Source: Colorado Department of Revenue and U.S. Census Bureau. Data shown as a three-month moving averages. Data are seasonally adjusted and are through December 2015.

## APPENDIX: HISTORICAL DATA

### National Economic Indicators

Calendar Years	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015
GDP (\$ Billions) <sup>1</sup>	10,621.8	10,977.5	11,510.7	12,274.9	13,093.7	13,855.9	14,477.6	14,718.6	14,418.7	14,964.4	15,517.9	16,155.3	16,691.5	17,393.1	18,036.7
Percent Change	3.3%	3.3%	4.9%	6.6%	6.7%	5.8%	4.5%	1.7%	-2.0%	3.8%	3.7%	4.1%	3.3%	4.2%	3.7%
Real GDP (\$ Billions) <sup>1</sup>	12,682.2	12,908.8	13,271.1	13,773.5	14,234.2	14,613.8	14,873.7	14,830.4	14,418.7	14,783.8	15,020.6	15,354.6	15,612.2	15,982.3	16,397.2
Percent Change	1.0%	1.8%	2.8%	3.8%	3.3%	2.7%	1.8%	-0.3%	-2.8%	2.5%	1.6%	2.2%	1.7%	2.4%	2.6%
Unemployment Rate <sup>2</sup>	4.7%	5.8%	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%
Inflation <sup>2</sup>	2.8%	1.6%	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%
10-Year Treasury Note <sup>3</sup>	5.0%	4.6%	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%
Personal Income (\$ Billions) <sup>1</sup>	8,991.6	9,153.9	9,491.1	10,052.9	10,614.0	11,393.9	12,000.2	12,502.2	12,094.8	12,477.1	13,254.5	13,915.1	14,073.7	14,809.7	15,458.5
Percent Change	4.1%	1.8%	3.7%	5.9%	5.6%	7.3%	5.3%	4.2%	-3.3%	3.2%	6.2%	5.0%	1.1%	5.2%	4.4%
Wage & Salaries (\$ Billions) <sup>1</sup>	4,954.4	4,996.4	5,137.9	5,421.9	5,692.0	6,057.4	6,395.2	6,531.9	6,251.4	6,377.5	6,633.2	6,930.3	7,116.7	7,476.3	7,854.8
Percent Change	2.7%	0.8%	2.8%	5.5%	5.0%	6.4%	5.6%	2.1%	-4.3%	2.0%	4.0%	4.5%	2.7%	5.1%	5.1%
Nonfarm Employment (Millions) <sup>2</sup>	132.1	130.6	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
Percent Change	0.0%	-1.1%	-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%

#### Sources

<sup>1</sup>Bureau of Economic Analysis. Real gross domestic product (GDP) is adjusted for inflation. Personal income and wages and salaries not adjusted for inflation.

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

<sup>3</sup>Federal Reserve Board of Governors.

## Colorado Economic Indicators

Calendar Years	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015
Nonfarm Employment ( <i>Thousands</i> ) <sup>1</sup>	2,227.1	2,184.7	2,152.6	2,179.4	2,225.9	2,279.7	2,331.1	2,350.6	2,245.5	2,222.3	2,259.0	2,311.4	2,380.6	2,461.6	2,540.8
Percent Change	0.6%	-1.9%	-1.5%	1.2%	2.1%	2.4%	2.3%	0.8%	-4.5%	-1.0%	1.7%	2.3%	3.0%	3.4%	3.2%
Unemployment Rate <sup>1</sup>	3.8	5.6	6.0	5.5	4.9	4.2	3.8	4.9	7.6	8.8	8.3	7.8	6.7	4.9	3.8
Personal Income (\$ <i>Millions</i> ) <sup>2</sup>	\$154,592	\$156,288	\$159,103	\$164,457	\$176,129	\$189,493	\$201,743	\$208,608	\$198,082	\$201,570	\$219,861	\$234,006	\$246,648	\$266,535	\$277,732
Percent Change	5.0%	1.1%	1.8%	3.4%	7.1%	7.6%	6.5%	3.4%	-5.0%	1.8%	9.1%	6.4%	5.4%	8.1%	4.2%
Per Capita Personal Income (\$) <sup>2</sup>	\$34,930.7	\$34,805.0	\$35,131.8	\$35,946.7	\$38,025.4	\$40,143.1	\$41,996.0	\$42,662.5	\$39,838.0	\$39,926.1	\$42,944.4	\$45,073.0	\$46,783.8	\$49,765.0	\$50,898.5
Percent Change	2.7%	-0.4%	0.9%	2.3%	5.8%	5.6%	4.6%	1.6%	-6.6%	0.2%	7.6%	5.0%	3.8%	6.4%	2.3%
Wage & Salary Income (\$ <i>Millions</i> ) <sup>2</sup>	\$89,130	\$88,089	\$89,281	\$93,569	\$98,787	\$105,664	\$112,506	\$116,678	\$112,297	\$113,786	\$118,558	\$125,014	\$129,597	\$138,701	\$146,574
Percent Change	3.1%	-1.2%	1.4%	4.8%	5.6%	7.0%	6.5%	3.7%	-3.8%	1.3%	4.2%	5.4%	3.7%	7.0%	5.7%
Retail Trade Sales (\$ <i>Millions</i> ) <sup>3</sup>	\$59,014	\$58,850	\$58,689	\$62,288	\$65,492	\$70,437	\$75,329	\$74,760	\$66,345	\$70,738	\$75,548	\$80,073	\$83,569	\$90,653	\$94,920
Percent Change	1.8%	-0.3%	-0.3%	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 <sup>4</sup>	55,007	47,871	39,569	46,499	45,891	38,343	29,454	18,998	9,355	11,591	13,502	23,301	27,517	28,698	31,871
Percent Change	0.8%	-13.0%	-17.3%	17.5%	-1.3%	-16.4%	-23.2%	-35.5%	-50.8%	23.9%	16.5%	72.6%	18.1%	4.3%	11.1%
Nonresidential Construction ( <i>Millions</i> ) <sup>5</sup>	\$3,476	\$2,805	\$2,686	\$3,245	\$4,275	\$4,641	\$5,259	\$4,114	\$3,354	\$3,147	\$3,923	\$3,695	\$3,624	\$4,315	\$4,784
Percent Change	-0.6%	-19.3%	-4.2%	20.8%	31.7%	8.6%	13.3%	-21.8%	-18.5%	-6.2%	24.7%	-5.8%	-1.9%	19.1%	10.9%
Denver-Boulder-Greeley Inflation <sup>1</sup>	4.6%	2.0%	1.0%	0.1%	2.1%	3.6%	2.2%	3.9%	-0.6%	1.9%	3.7%	1.9%	2.8%	2.8%	1.2%
Population ( <i>Thousands, July 1</i> ) <sup>4</sup>	4,426	4,490	4,529	4,575	4,632	4,720	4,804	4,890	4,972	5,049	5,120	5,192	5,272	5,356	5,457
Percent Change	2.3%	1.5%	0.9%	1.0%	1.2%	1.9%	1.8%	1.8%	1.7%	1.5%	1.4%	1.4%	1.5%	1.6%	1.9%

### Sources

<sup>1</sup>Bureau of Labor Statistics. Nonfarm employment estimates include revisions to 2015 data expected by Legislative Council Staff from the Bureau of Labor Statistic's annual re-benchmarking process. Inflation shown as the year-over-year change in the consumer price index for Denver-Boulder-Greeley metro areas.

<sup>2</sup>Bureau of Economic Analysis. Personal income and wages and salaries not adjusted for inflation.

<sup>3</sup>Colorado Department of Revenue.

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

<sup>5</sup>F.W. Dodge.