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Photo captures columbine flowers in the San Juan Mountains, courtesy of Suzanne Keim.

## FOCUS COLORADO: ECONOMIC AND REVENUE FORECAST

## COLORADO LEGISLATIVE COUNCIL STAFF ECONOMICS SECTION

### MARCH 17, 2017

## HIGHLIGHTS

The U.S. and Colorado economies are expected to continue to expand at a moderate pace. Business activity has improved in recent months, sparking renewed optimism in U.S. economic growth prospects. The two-year downturn in the oil and gas industry appears to have ended as rig counts have begun to increase. Consumer spending remains robust and employers continue to add jobs at a moderate rate, further lowering unemployment. However, full employment and an aging population are expected to dampen economic growth.

General Fund revenue is expected to be \$169.1 million short of the amount needed to fully fund the budget and a 6.5 percent reserve in **FY 2016-17**. This shortfall is largely unchanged relative to expectations published in the December forecast. A higher forecast for General Fund revenue was offset by higher expectations for expenditures, which incorporate the supplemental budget package and additional severance tax refunds paid out of the General Fund pursuant to Senate Bill 16-218.

Revenue will fall short of the Referendum C cap by \$161.8 million, or 1.2 percent, in FY 2016-17.

The General Assembly will have \$254.2 million, or 2.4 percent, more to spend or save in **FY 2017-18** than the amount budgeted for FY 2016-17. This amount is \$38.4 million higher than had been expected in December. Expectations for revenue available to the budget increased by \$55.9 million, which was partially offset by higher FY 2016-17 expenditures due to the supplemental budget package and increased expectations for the FY 2017-18 TABOR refund obligation. This amount assumes that this year's \$169.1 million shortfall is carried forward and the General Fund reserve is restored to 6.5 percent of appropriations in FY 2017-18. It is net of a \$264.1 million set aside for TABOR refunds and halved Senate Bill 09-228 transfers to capital construction and transportation.

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### EXECUTIVE SUMMARY

This report presents the budget outlook based on current law and the March 2017 General Fund revenue, cash fund revenue, and TABOR forecasts. It also includes summaries of expectations for the U.S. and Colorado economies and summaries of current economic conditions in nine regions of the state.

#### **General Fund Budget Outlook**

**FY 2016-17.** The General Fund is anticipated to end FY 2016-17 with a reserve equal to 4.7 percent of appropriations, \$169.1 million lower than the budgeted 6.5 percent reserve. Increased expectations for individual income tax revenue were largely offset by lower expectations for corporate income taxes and higher expectations for expenditures. Higher expenditures are the result of the supplemental budget package and a higher forecast for severance tax refunds pursuant to Senate Bill 16-218.

Revenue subject to TABOR is expected to fall short of the Referendum C cap by \$161.8 million.

**FY 2017-18** — **Unbudgeted.** Assuming the FY 2016-17 shortfall is addressed by reducing the required reserve,

revenue will exceed the amount required to maintain the same level of appropriations in FY 2017-18 as is currently budgeted for FY 2016-17 by \$254.2 million, or 2.4 percent. This amount is \$34.8 million higher than the forecast published in December. The amount of revenue available for the General Fund budget increased by \$55.9 million, while expectations for baseline expenditures increased by \$17.5 million (see Table 2 on page 7).

Because a budget has not yet been approved for FY 2017-18, baseline expenditures assume the FY 2016-17 General Fund operating budget plus forecast growth in non-operating statutory and constitutional obligations for FY 2017-18. Baseline expenditures are expected to increase as a result of the FY 2016-17 supplemental budget package and higher expectations for the TABOR refund obligation for FY 2017-18. They assume halved Senate Bill 09-228 transfers to the Highway Users Tax Fund and the Capital Construction Fund, and a set aside for the TABOR refund obligation of \$264.1 million.

#### Cash Fund Revenue

Total cash fund revenue subject to TABOR will increase 14.0 percent to \$3.18 billion in FY 2016-17 and 1.9 percent to \$3.24 billion in FY 2017-18. Revenue from the Hospital Provider Fee will decline slightly in FY 2018-19, while revenue from severance and transportation taxes will continue to increase. The **cash fund revenue forecasts** begin on page 25. Forecasts for state revenue subject to TABOR are summarized in Table 6 on page 19.

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#### **Economic Outlook**

The U.S. and Colorado economies are expected to continue to expand in 2017 and 2018. The two-year downturn in the oil and gas industry appears to be at an end as rig counts have begun to increase in recent months. Consumer spending remains robust and employers continue to add jobs at a moderate rate, further lowering the unemployment rate. Globally, growth in many economies abroad has outpaced expectations in recent months, stimulating improvements in U.S. exports and manufacturing activity. Several factors may temper growth over the forecast period, including demographic change, which

More information about the state and national economic outlook begins on page 33.

Summaries of economic conditions in nine **regions** around the state begin on page 61.

continues to mute income and consumption growth. Full employment may subdue economic growth if employers cannot fill vacant positions. A tighter labor market may also fuel inflation.

## GENERAL FUND BUDGET OVERVIEW

Table 1 on page 6 presents the General Fund overview based on current law. Tables 4 and 5 on pages 12 and 13 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 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 contingent on the collection of sufficient General Fund revenue.

**FY 2015-16.** The General Fund ended FY 2015-16 with \$48.8 million, or 0.5 percent, more than was budgeted to be spent or saved in the General Fund reserve. Revenue subject to TABOR fell short of the Referendum C cap by \$122.1 million.

A total of \$56.8 million was diverted from the General Fund 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 General Fund money held in reserve for FY 2015-16 be reduced by the amount 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.** The General Fund is expected to end the year with a 4.7 percent reserve, \$169.1 million lower than the budgeted 6.5 percent reserve. This shortfall incorporates the impact of an estimated \$53.0 million diversion of income taxes from the General Fund to cover the costs of severance tax refunds pursuant to Senate Bill 16-218. Revenue subject to TABOR is expected to fall short of the Referendum C cap by \$161.8 million.

Expectations for the shortfall relative to a 6.5 percent reserve changed only minimally relative to the December forecast, as higher expectations for revenue offset a higher outlook for expenditures. Table 2 on page 7 show the components of that change.

**FY 2017-18** — **Unbudgeted.** Figure 1 illustrates new revenue in FY 2017-18 relative to anticipated changes in statutory and constitutional obligations between this year and next. Because a budget has not yet been enacted for FY 2017-18, lines 23 and 24 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 FY 2016-17 shortfall is addressed by reducing the reserve and therefore carrying the shortfall forward into FY 2017-18, the General Assembly will have \$254.2 million, or 2.4 percent, more to spend from or save in the General Fund than what is budgeted to be spent this year. This amount 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 \$264.1 million. Although the TABOR refund obligation is expected to be \$286.7 million in FY 2017-18, \$22.6 million of this amount is already set aside for the refund in the General Fund after having been carried forward from the FY 2014-15 TABOR refund obligation.

### Table 1 General Fund Overview

		FY 2015-16	FY 2016-17	FY 2017-18	FY 2018-19
Fun	ds Available	Actual	Estimate	Estimate	Estimate
1	Beginning Reserve	\$689.6	\$512.7	\$466.7	*
2	General Fund Revenue	\$9,971.4	\$10,451.8	\$11,064.8	\$11,690.1
3	Transfers from Other Funds (Table 5)	25.0	44.7	16.5	17.3
4	Total Funds Available	\$10,686.0	\$11,009.2	\$11,548.0	*
5	Percent Change	3.7%	3.0%	4.9%	*
Exp	enditures	Actual	Budgeted	Estimate	Estimate
6	General Fund Appropriations Subject to Limit <sup>1</sup>	\$9,335.6	\$9,827.3	*	*
7	TABOR Refund Obligation Under Art. X, §20, (7)(d) <sup>2</sup>	0.0	0.0	286.7	288.6
8	Release of TABOR Refund Obligation Under Art. X, §20, (3)(c) <sup>3</sup>	(58.0)	NA	NA	NA
9	Rebates and Expenditures (Table 4)	281.3	287.0	287.1	297.5
10	Transfers to Other Funds (Table 5) <sup>4</sup>	176.2	160.5	88.5	87.9
11	Transfers to the State Education Fund Pursuant to SB 13-234	25.3	25.3	25.3	25.0
12	Transfers to Highway Users Tax Fund	199.2	158.0	110.6	116.9
13	Transfers to the Capital Construction Fund	271.1	84.5	55.3	58.5
14	Total Expenditures	\$10,230.7	\$10,542.6	*	*
15	Percent Change	6.0%	3.0%	*	*
16	Accounting Adjustments <sup>5</sup>	57.4	*	22.6	*
Res	erve	Actual	Estimate	Estimate	Estimate
17	Year-End General Fund Reserve	\$512.7	\$466.7	*	*
18	Year-End Reserve as a Percent of Appropriations	5.5%	4.7%	*	*
19	Statutorily Required Reserve <sup>6</sup>	463.9	635.8	*	*
20	Transfers From the Reserve	NA	NA	NA	NA
21	Amount in Excess or (Deficit) of Statutory Reserve	\$48.8	(\$169.1)	*	*
22	Excess Reserve as a Percent of Expenditures	0.5%	-1.6%	*	*
Per	spective on FY 2017-18 (Unbudgeted Year)			Estimate	Estimate
Am	ount Available in FY 2017-18 in Relative to FY 2016-17 Expenditures <sup>7</sup>				
23	Amount in Excess of (Deficit) of Statutory Reserve			\$254.2	*
24	As a Percent of Prior-Year Expenditures			2.4%	*
Add	lendum	Preliminary	Estimate	Estimate	Estimate
25	Percent Change in General Fund Appropriations	5.3%	5.3%	*	*
26	5% of Colorado Personal Income Appropriations Limit	\$12,332.4	\$13,326.7	\$13,886.6	\$14,381.0
27	Transfers to State Education Fund Per Amendment 23	\$522.6	\$550.0	\$585.3	\$618.7

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

<sup>1</sup>Includes \$14.0 million increase per the FY 2016-17 supplemental package.

<sup>2</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 the following year.

<sup>3</sup>\$58 million was set aside in FY 2014-15 pursuant to House Bill 15-1367 and is released in FY 2015-16 pursuant to the passage of Proposition BB.

<sup>4</sup>Includes diversions from the General Fund to cover severance tax refunds pursuant to Senate Bill 16-218, which totaled \$56.8 million in FY 2015-16 and are estimated at \$53.0 million for FY 2016-17.

<sup>5</sup>The \$22.6 million accounting adjustment in FY 2017-18 represents the share of the FY 2017-18 TABOR refund obligation that is carried forward from the FY 2014-15 refund obligation; this amount is already restricted in the fund balance.

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

# Table 2 Components of Change in the General Fund Budget Situation Relative to the December Forecast

Change in Funds Available	FY 2016-17	FY 2017-18	Note
Beginning Reserve	(\$0.8 million)	(\$1.0 million)	The FY 2015-16 year-end (and FY 2016-17 beginning) reserve is final.
General Fund Revenue	\$27.5 million	\$56.3 million	Higher expectations for sales and individual income tax revenue were partially offset by lower expectations for corporate income taxes.
Transfers to/from Other Funds (Net, Table 5)	(\$8.0 million)	(\$1.4 million)	Most of the change in FY 2016-17 is due to a \$7.3 million increase in the forecast for severance tax refunds paid from the General Fund pursuant to Senate Bill 16-218.
Less change in Expenditures			
Net change resulting from the supplemental budget package	\$14.9 million	\$14.9 million	Incorporates supplemental budget legislation signed into law. Includes the impact on the required reserve.
TABOR Refund Set Aside	\$0	\$7.2 million	Higher expectations for General Fund revenue were partially offset by lower expectations for cash fund revenue subject to TABOR in FY 2017-18.
Rebates and Expenditures (Table 4)	\$3.7 million	(\$5.6 million)	Expectations for expenditures out of the Old Age Pension Fund and Aged Property Tax and Heating Credit were decreased.
Senate Bill 09-228 Transfers	\$0	\$0.9 million	Expectations for halved transfers in FY 2017-18 remained unchanged.
Equals	\$86,000		Expectations for this year's shortfall fell by about \$86,000.
Change in Budget Situation		\$38.4 million	An estimated \$38.4 million more is expected to be available in the General Fund in FY 2017-18 than was expected in December.

Totals do not sum due to rounding.

### Figure 1 Change in General Fund Revenue and Obligations FY 2016-17 to FY 2017-18

**Dollars in Millions** 



/a Assumes the \$169.1 million FY 2016-17 shortfall is addressed by reducing the reserve in FY 2016-17, thereby carrying it forward. Any change in funding for the operating budget will also change this amount by 6.5 percent of the change.

/b Other constitutional spending includes reimbursements to counties for property tax exemptions and expenditures for the Old Age Pension Fund.

/c Other statutory spending includes severance tax refunds pursuant to Senate Bill 16-218, transfers from the General Fund to cash funds, 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.

Totals may not sum due to rounding.

**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 27). In addition, the General Assembly has at different times authorized the transfer of additional moneys from the General Fund to the State Education Fund. Money in the State Education Fund is required to be used to fund kindergarten through twelfth grade public education. However, additional revenue in the State Education Fund does not affect the overall flexibility of the General Fund budget. Figure 2 shows a history and forecast for revenue sources to the State Education Fund through the end of the forecast period.



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 beginning 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 3 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: Legislative Council Staff. "p" indicates preliminary; "f" indicates forecast.

Figure 3 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. The TABOR refund obligation is expected to represent 2.6 percent and 2.5 percent of General Fund revenue in FY 2017-18 and FY 2018-19, respectively. 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 tax year 2018. Table 3 lists and describes the availability of these tax policies.

# Table 3Tax Policies Dependent on Sufficient General Fund Revenue to Allow General FundAppropriations to Increase by at Least 6 Percent

Tax Policy	Forecast that Determines Availability	Tax Policy Availability
Historic Property Preservation Income Tax Credit (Section 39-22-514, C.R.S.) <i>Revenue reduction less than</i> \$1.0 million per year	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 \$1.1 million</i> <i>per year.</i>	If the June forecast indicates sufficient revenue for the fiscal year that is about to begin, the exemption will become available in July.	Not available through June 2017 and repealed thereafter.

# Table 4 General Fund Rebates and Expenditures

TOTAL REBATES & EXPENDITURES	\$281.3	\$287.0	\$287.1	\$297.5
Marijuana Sales Tax Transfer to Local Governments Percent Change	10.1 70.9	13.6 35.0	12.5 -8.0	13.9 10.8
Amendment 35 Distributions	0.9	0.9	0.9	0.9
Percent Change	1.7	0.1	0.3	-0.1
Fire and Police Pensions	3.7	4.2	4.2	4.3
Percent Change	-11.9	13.6	1.0	1.0
Interest Payments for School Loans	1.2	3.4	4.6	4.7
Percent Change	84.1	171.6	36.6	1.8
Older Coloradans Fund	10.0	16.4	10.0	10.0
Percent Change	-0.1	0.6	-39.0	0.0
Aged Property Tax and Heating Credit	9.3	5.7	5.3	5.0
Percent Change	64.9	-39.4	-7.1	-4.8
Old-Age Pension Fund	108.3	96.1	90.7	87.3
Percent Change	8.9	-11.3	-5.6	-3.7
Cigarette Rebate	10.5	10.9	10.8	10.7
Percent Change	-14.2	2.9	-0.3	-0.9
Senior and Veterans Property Tax Exemptions	\$127.1	\$136.0	\$148.0	\$160.7
Percent Change	8.8	6.9	8.9	8.5
Category	Actual	Estimate	Estimate	Estimate
	FY 2015-16	FY 2016-17	FY 2017-18	FY 2018-19

Totals may not sum due to rounding.

#### Table 5 **Cash Fund Transfers** Dollars in Millions

Transfers to the G	eneral Fund	2015-16	2016-17	2017-18	2018-19
HB 05-1262	B 05-1262 Amendment 35 Tobacco Tax			\$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	15.1	15.6	16.4
HB 15-1379	Marijuana Tax Cash Fund	0.1			
SB 15-168, 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		
Total Transfers to	the General Fund	\$25.0	\$44.7	\$16.5	\$17.3
Transfers from the	General Fund	2015-16	2016-17	2017-18	2018-19
SB 11-047	Bioscience Income Tax Transfer to OEDIT	7.3	7.76	8.19	8.69
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	77.3	71.1	78.7
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 (conditional)		0.3		
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	53.0		
Total Transfers fro	m the General Fund	\$176.2	\$160.5	\$88.5	\$87.9
Net General Fund	Impact	(\$151.2)	(\$115.7)	(\$72.0)	(\$70.6)

<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.

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## 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 6 on page 19 and illustrated in Figure 4 on page 16, 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 is available on returns for tax year 2016. The FY 2015-16 comprehensive annual financial report, released on March 14, certifies that fiscal year spending totaled \$12,824.4 million, falling short of the Referendum C cap by \$122.1 million.

For FY 2016-17, state revenue subject to TABOR is expected to fall short of the Referendum C cap by \$161.8 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 **\$264.1 million in FY 2017-18** and **\$288.6 million in FY 2018-19**, prompting **TABOR refunds of \$286.7 million in tax year 2019** and **\$288.6 million in tax year 2020**. The amount of the refund for FY 2018-19 is expected to exceed the FY 2017-18 TABOR surplus by \$22.6 million, the amount by which prior year TABOR refunds fell short of the state's refund obligation. Money collected in excess of the Referendum C cap is required to be set aside during the year it is collected to be refunded in the following fiscal year.

Line 7 of the General Fund Overview presented in Table 1 on page 6 presents expectations for the state's TABOR refund obligation. Of the refund obligation expected to be incurred for FY 2017-18, the General Assembly will be required to set aside only the \$264.1 million TABOR surplus collected in that year. The \$22.6 million adjustment for previous under-refunds 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.

**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 spend or save.

#### Figure 4 TABOR Revenue, Limit Base, and the Referendum C Cap Dollars in Billions



Source: Office of the State Controller and Legislative Council Staff. \*The refund amount for FY 2017-18 differs from the surplus amount because it includes under-refunds of previous TABOR surpluses.

When revenue exceeds the cap, TABOR requires the surplus to be refunded during the following fiscal year. Additionally, state law requires adjustments to the refund amount based on over-refunds or under-refunds of previous TABOR surpluses. Most recently, revenue exceeded the Referendum C cap in FY 2014-15, prompting TABOR refunds on returns for tax year 2015. The amount of the FY 2014-15 refund obligation is now estimated to have been \$159.4 million, adjusting for accounting errors discovered after refunds were issued. To date, the state has refunded \$136.8 million of this obligation. For this reason, the amount of the next TABOR refund is expected to differ from the next TABOR surplus by \$22.6 million as described below.

*Refunds issued 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 chosen to refund this amount. As of March 1, 2017, the Department of Revenue reports that refunds issued for tax year 2015 total \$136.8 million, or \$16.9 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 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;

- \$4.1 million subject to TABOR in the Department of Agriculture and the State Fair Authority originally accounted as exempt;
- \$0.3 million subject to TABOR in the Department of Natural Resources originally accounted as exempt;
- \$18.3 million exempt funds in the Department of Public Safety originally accounted as fiscal year spending; and
- \$0.1 million exempt funds in the Department of the Treasury originally accounted as fiscal year spending.

These adjustments will add a net of \$5.7 million to the TABOR refund obligation when the state next refunds a surplus. Combined with the under-refund of the administered surplus, the total under-refund for the FY 2014-15 surplus is estimated at \$22.6 million.

Amount encumbered for FY 2014-15 refunds. The General Assembly encumbered \$169.7 million in the General Fund for payment of the refund obligation generated by the FY 2014-15 surplus. This amount is reflected in the comprehensive annual financial report for FY 2015-16. State fiscal year spending for FY 2014-15 exceeded the Referendum C cap by \$155.8 million, less than the amount originally projected. The \$13.9 million difference represents an over-encumbrance of revenue.

**TABOR refund mechanisms.** Figure 5 and Table 7 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 **\$230.1 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 **\$56.5 million** will be available as a sales tax refund worth \$15 for taxpayers filing single returns and \$30 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 **\$243.5 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 **\$45.1 million** will be available as a sales tax refund worth \$12 for taxpayers filing single returns and \$24 for taxpayers filing joint returns.

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



<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 6 TABOR Limit and Retained Revenue

**Dollars in Millions** 

		Actual FY 2015-16	Estimate FY 2016-17	Estimate FY 2017-18	Estimate FY 2018-19
	TABOR Revenue				
1	General Fund <sup>1</sup>	\$9,897.3	\$10,337.6	\$10,972.5	\$11,588.8
2	Cash Funds <sup>1</sup>	\$2,927.1	\$2,787.3	\$3,176.2	\$3,237.0
3	Total TABOR Revenue	\$12,824.4	\$13,124.9	\$14,148.7	\$14,825.8
	Revenue Limit				
4	Allowable TABOR Growth Rate	4.4%	3.1%	4.5%	4.7%
5	Inflation (from Prior Calendar Year)	2.8%	1.2%	2.8%	2.9%
6	Population Growth (from Prior Calendar Year)	1.6%	1.9%	1.7%	1.8%
7	TABOR Limit Base	\$10,427.6	\$10,689.7	\$11,170.8	\$11,695.8
8	Voter Approved Revenue Change (Referendum C)	\$2,396.8	\$2,435.2	\$2,713.8	\$2,841.4
9	Total TABOR Limit / Referendum C Cap	\$12,946.5	\$13,286.7	\$13,884.6	\$14,537.2
10	TABOR Revenue Above (Below) Referendum C Cap	(\$122.1)	(\$161.8)	\$264.1	\$288.6
	Retained/Refunded Revenue				
11	Revenue Retained under Referendum C <sup>2</sup>	\$2,396.8	\$2,435.2	\$2,713.8	\$2,841.4
12	Fiscal Year Spending (revenue available to be spent or saved)	\$12,824.4	\$13,124.9	\$13,884.6	\$14,537.2
13	Amount Restricted in General Fund <sup>3</sup>			\$22.6	
14	Revenue Refunded to Taxpayers <sup>4</sup>	\$0.0	\$0.0	\$286.7	\$288.6
15	TABOR Reserve Requirement	\$384.7	\$393.7	\$416.5	\$436.1

Totals may not sum due to rounding.

<sup>1</sup>These figures may differ from the amounts 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 \$22.6 million to be refunded with the next TABOR surplus. This amount comprises \$16.9 million under-refunded from the FY 2014-15 surplus and a net \$5.7 million discovered to be subject to TABOR after refunds were processed. Because this money is already set aside within the General Fund (i.e., "restricted"), Table 1 includes an accounting adjustment indicating that this amount does not need to be encumbered a second time.

<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 set aside in FY 2017-18 and refunded in FY 2018-19 on income tax returns for tax year 2018.

# Table 7Estimated 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

			Six-Tier	Single Filers Income Tax			Joint Filers Income Tax	
			Sales Tax	Rate Cut (average)	Total	Six-Tier Sales Tax	Rate Cut (average)	Total
Up	o to	\$39,000	\$15	\$8	\$23	\$30	\$1	\$31
\$39,000	to	\$83,500	15	47	62	30	26	56
\$83,500	to	\$130,200	15	93	108	30	78	108
\$130,200	to	\$176,800	15	142	157	30	132	162
\$176,800	to	\$221,300	15	184	199	30	183	213
\$221,300	and	d Up	15	511	526	30	529	559

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

				Single Filers		1	Joint Filers	
			Six-Tier	Income Tax			Income Tax	
			Sales	Rate Cut		Six-Tier	Rate Cut	
			Tax	(average)	Total	Sales Tax	(average)	Total
U	p to	\$40,000	\$12	\$9	\$21	\$24	\$1	\$25
\$40,000	to	\$85,600	12	49	61	24	27	51
\$85,600	to	\$133,400	12	96	108	24	81	105
\$133,400	to	\$181,200	12	148	160	24	137	161
\$181,200	to	\$226,800	12	192	204	24	191	215
\$226,800	and	d Up	12	532	544	24	551	575

### GENERAL FUND REVENUE

This section presents the Legislative Council Staff outlook for General Fund revenue, which provides the state's main source of revenue for operating appropriations. Table 8 on page 24 summarizes 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. Weak corporate profits, low wage pressures, and a slowdown in consumer spending dampened growth. In FY 2016-17, growth in General Fund revenue will accelerate on higher consumer spending, moderate wage growth, strong capital gains earnings, and an increase in energy industry activity. While Colorado's aging population continues to put downward pressure on revenue growth, growth in General Fund collections is expected to outpace statewide inflation and population growth slightly throughout the forecast period.

The outlook for General Fund revenue was increased slightly, on higher expectations for individual income tax revenue, which more than offset lower expectations for corporate income tax collections. Relative to the December forecast, revenue is expected to come in \$27.5 million higher in 2016-17 and \$56.3 million higher in FY 2017-18. Additional information regarding the main sources of revenue to the General Fund is provided below.

**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 \$81.9 million in FY 2016-17 and \$87.1 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 nearly two-thirds of gross General Fund revenue. In FY 2016-17, individual income tax revenue is expected to increase 6.6 percent. Wage withholding — income taxes withheld from employee paychecks — is the largest component of individual income taxes (Figure 6, left). Rising wage pressure from a tight Colorado labor market will be partially offset by the aging of Colorado's population into retirement. As a result, growth in withholding collections is expected to be consistent with inflation and population growth throughout the forecast period.

In FY 2016-17, estimated payments and payments made when taxpayers file income tax returns (cash with returns) will see a boost from growth in capital gains, non-corporate business income, and retirement income. Income tax refunds are expected to grow with the number of taxpayers claiming the Earned Income Tax Credit, which will partially offset gains from other components of individual income taxes.

In FY 2017-18 and FY 2018-19, individual income tax collections are expected to grow 5.6 percent and 6.1 percent, respectively. Relative to the December forecast, expectations for individual income tax collections were revised upward by \$86.4 million in FY 2016-17 and by \$61.8 million in FY 2017-18. Revisions primarily reflect a higher forecast for estimated

payments that incorporate stronger expectations for capital gains and non-corporate business income.



Figure 6 Selected Sources of General Fund Revenue Millions of Dollars Collected per Month

Source: Colorado Department of Revenue. Data seasonally adjusted by Legislative Council Staff using the Census x12 method. Data shown on a cash-accounting basis as three-month moving averages. Data are through February 2017.

**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. Sales tax receipts recovered during the recent holiday season from an early 2016 slump (Figure 6, right). Revenue is projected to narrowly exceed \$2.8 billion for the current fiscal year, up 6.0 percent from last year on an accrual accounting basis. These estimates include the TABOR-exempt special sales tax on retail marijuana; subtracting this revenue, sales tax collections are projected to grow 5.3 percent.

Revenue is expected to increase 4.5 percent and 5.2 percent in FY 2017-18 and FY 2018-19, respectively, at a pace slightly faster than inflation and population growth. Acceleration in growth is consistent with the strengthening global economy and consumer sentiment, nascent wage pressure, and expectations for increased consumption driven by household formation among those of the Millennial generation. Sales tax revenue continues to be dampened by the rising cost of living in Colorado and an aging population, which is shifting purchases from taxable goods to untaxed services, such as housing and health care. Relative to the December forecast, sales tax expectations were generally unchanged for FY 2016-17, but were increased \$14.6 million in FY 2017-18.

**Use taxes.** The 2.9 percent state use tax is due when sales tax is owed but is not collected at the point of sale. Use tax revenue is largely driven by capital investment among manufacturing, energy, and mining firms. Use tax collections dropped considerably during 2015 and 2016, reflecting a contraction in energy industry capital investment that is just now beginning to rebound. Use tax revenues are projected to grow 4.9 percent and 10.6 percent during FY 2016-17 and FY 2017-18, respectively.

Expectations for FY 2017-18 assume the implementation of House Bill 10-1193, which requires 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. Implementation of the bill had been stayed pending resolution of an ongoing legal dispute and is now expected to affect sales made by out-of-state retailers during 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 31 for purchases made during the prior calendar year, and consumers are required to remit use taxes by April 15. The fiscal impacts of this policy change 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.

**Corporate income taxes.** In FY 2016-17, corporate income tax collections are expected to decline 20.6 percent to \$517.8 million. The decline is due to weak corporate earnings in the first half of 2016. Collections are expected to reach \$621.1 million in FY 2017-18 on higher corporate profits, a 19.9 percent increase. Collections will grow 2.9 percent in FY 2018-19, reaching \$639.1 million. Relative to the December forecast, corporate income tax collections were revised downward by \$76.8 million in FY 2016-17 and \$18.7 million in FY 2017-18. Revisions reflect lower than expected collections in the first eight months of FY 2016-17.

18	Gross General Fund Revenue	\$9,971.4	1.7	\$10,451.8	4.8	\$11,064.8	5.9	\$11,690.1	5.7
17	Total Other	319.4	5.5	359.2	12.5	361.0	0.5	380.5	5.4
16	Other Income	22.6	-33.6	39.9	76.8	23.6	-40.7	24.3	2.8
15	Court Receipts	3.5	34.5	3.7	5.2	3.8	3.6	3.9	2.9
14	Investment Income	12.4	40.3	11.2	-9.6	15.4	36.6	22.7	47.5
13	Pari-Mutuel	0.6	0.5	0.6	-3.7	0.6	-1.1	0.6	-1.5
12	Insurance	280.3	9.2	303.8	8.4	317.6	4.5	329.1	3.6
	Other Sources								
11	Income Taxes to the General Fund	6,656.2	2.0	6,923.2	4.0	7,378.5	6.6	7,808.9	5.8
10	Less: Portion Diverted to the SEF	-522.6	0.5	-550.0	5.2	-585.3	6.4	-618.7	5.7
9	Total Income Taxes	7,178.8	1.9	7,473.2	4.1	7,963.8	6.6	8,427.7	5.8
8	Net Corporate Income	652.3	-5.8	517.8	-20.6	621.1	19.9	639.1	2.9
7	Net Individual Income	6,526.5	2.8	6,955.4	6.6	7,342.7	5.6	7,788.5	6.1
	Income Taxes								
6	Total Excise	2,995.7	0.6	3,169.4	5.8	3,325.3	4.9	3,500.7	5.3
5	Liquor	43.6	5.0	45.0	3.2	46.5	3.5	48.4	4.0
4	Tobacco Products	21.1	18.5	21.7	2.7	21.5	-0.8	22.5	4.8
3	Cigarette	37.2	-1.8	37.1	-0.3	37.0	-0.3	36.7	-0.9
2	Use	241.2	-7.3	253.1	4.9	280.0	10.6	300.3	7.2
1	Excise Taxes Sales	\$2,652.6	1.3	\$2,812.6	6.0	\$2,940.3	4.5	\$3,092.8	5.2
	Category	FT 2013-10	Change	FT 2010-17	Change	FT 2017-10	Change	FT 2010-19	Change
	Cotogony	Actual FY 2015-16	Percent	Estimate FY 2016-17	Percent	Estimate FY 2017-18	Percent	Estimate FY 2018-19	Percent
		Astual	Deveent	Estimate	Denerut	Estimate	Denerat	Estimate	Densent

# Table 8 General Fund Revenue Estimates Dollars in Millions

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

## CASH FUND REVENUE

Table 9 summarizes the forecast for cash fund revenue subject to TABOR. The largest sources are motor fuel taxes and other transportation-related revenue, the Hospital Provider Fee, gaming taxes, and severance taxes. The end of this section also presents the forecasts for marijuana sales and excise taxes, 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 \$2.93 billion in FY 2015-16. This revenue is expected to fall 4.8 percent to \$2.79 billion in FY 2016-17. The large decline in Hospital Provider Fee revenue will be mostly offset by increases in most other cash fund revenue sources.

Total cash fund revenue subject to TABOR will increase 14.0 percent to \$3.18 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 1.9 percent to \$3.24 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 2.1 percent between FY 2015-16 and FY 2016-17 to \$1.21 billion and increase 2.0 percent to \$1.23 billion in FY 2017-18. The forecast for TABOR revenue to transportation-related cash funds is shown in Table 10 on page 27.

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). Increased collections in the first seven months of FY 2016-17 are expected to result in fuel tax revenue of \$628.0 million for the full fiscal year. In FY 2017-18, fuel tax collections are expected to grow 1.5 percent and reach \$637.1 million. The HUTF also receives revenue from other sources, including registration fees, which will generate \$369.1 million in FY 2016-17 and \$376.9 million in FY 2017-18. Total HUTF revenue will increase 3.4 percent to \$1.07 billion in FY 2016-17 and 1.7 percent to \$1.08 billion in FY 2017-18.

The State Highway Fund receives money from HUTF transfers, local government grants, and interest earnings. The largest amount of State Highway Fund money comes from HUTF transfers, while the local government grants and interest earnings are the two largest sources of TABOR revenue to the fund. Local government grants into the fund fluctuate based on the budgeting needs of local governments. HUTF revenue is subject to TABOR when it is originally collected by the state, but transfers to the State Highway Fund are not. State Highway Fund revenue subject to TABOR is expected to decrease 38.4 percent to \$32.2 million in FY 2016-17 and increase 9.5 percent to \$35.2 million in FY 2017-18.

Other transportation cash fund revenue subject to TABOR is expected to be \$112.3 million in FY 2016-17, a 9.7 percent increase from the previous year, and is expected to grow slowly through the forecast period. Other transportation revenue is collected from the sale of aviation and jet fuel, certain registration fees, and driving fines.

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

Total Cash Fund Revenue	\$2,927.1	\$2,787.3	\$3,176.2	\$3,237.0	3.4%
Subject to the TABOR Limit	5.7%	-4.8%	14.0%	1.9%	
Other Cash Funds	\$699.5	\$655.6	\$688.3	\$718.6	0.9%
Percent Change	20.1%	-6.3%	5.0%	4.4%	
2.9% Sales Tax on Marijuana <sup>3</sup>	\$31.8	\$38.7	\$42.0	\$44.6	11.9%
Percent Change	43.0%	21.7%	8.7%	6.0%	
Capital Construction Related - Interest <sup>2</sup>	\$5.2	\$4.9	\$5.5	\$4.9	-2.2%
Percent Change	-6.6%	-6.8%	11.7%	-10.2%	
Regulatory Agencies	\$68.8	\$72.0	\$73.5	\$75.0	2.9%
Percent Change	4.8%	4.7%	2.1%	2.0%	
Insurance-Related	\$11.4	\$11.7	\$12.0	\$12.2	2.2%
Percent Change	-42.7%	2.6%	2.1%	2.0%	
Gaming Revenue <sup>1</sup>	\$102.7	\$104.2	\$106.0	\$108.3	1.8%
Percent Change	3.4%	1.4%	1.8%	2.1%	
Severance Tax	\$18.9	\$33.8	\$149.9	\$156.0	102.0%
Percent Change	-93.2%	78.5%	343.7%	4.1%	
Hospital Provider Fee	\$804.0	\$656.6	\$864.7	\$859.2	2.2%
Percent Change	52.0%	-18.3%	31.7%	-0.6%	
Transportation-Related	\$1,184.7	\$1,209.9	\$1,234.4	\$1,258.4	2.0%
Percent Change	1.7%	2.1%	2.0%	1.9%	
	Actual FY 2015-16	Estimate FY 2016-17	Estimate FY 2017-18	Estimate FY 2018-19	CAAGR*

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 subject to TABOR collected from the sale of medical and retail marijuana. This revenue is subject to TABOR.

# Table 10 Transportation Revenue by Source Dollars in Millions

	Actual FY 2015-16	Estimate FY 2016-17	Estimate FY 2017-18	Estimate FY 2018-19	CAAGR*
Highway Users Tax Fund (HUTF)					
Motor and Special Fuel Taxes	\$609.7	\$628.0	\$637.1	\$646.0	1.9%
Percent Change	1.7%	3.0%	1.5%	1.4%	
Total Registrations Percent Change	\$356.0 1.2%	\$369.1 3.7%	\$376.9 2.1%	\$384.8 2.1%	2.6%
Registrations	\$210.3	\$218.4	\$222.8	\$227.2	
Road Safety Surcharge	\$127.2	\$131.5	\$134.2	\$136.8	
Late Registration Fees	\$18.5	\$19.2	\$19.9	\$20.7	
Other HUTF Receipts <sup>1</sup> Percent Change	\$64.5 1.7%	\$68.4 6.1%	\$69.9 2.2%	\$71.6 2.4%	3.5%
Total HUTF Percent Change	<b>\$1,030.2</b> 1.5%	<b>\$1,065.5</b> 3.4%	<b>\$1,083.9</b> 1.7%	<b>\$1,102.4</b> 1.7%	2.3%
State Highway Fund (SHF) <sup>2</sup> Percent Change	\$52.2 23.1%	\$32.2 -38.4%	\$35.2 9.5%	\$38.5 9.4%	-9.6%
Other Transportation Funds Percent Change	\$102.3 -4.8%	\$112.3 9.7%	\$115.3 2.7%	\$117.5 1.9%	4.7%
Aviation Fund <sup>3</sup>	\$15.2	\$21.2	\$22.4	\$23.0	
Law-Enforcement-Related <sup>4</sup>	\$9.3	\$8.9	\$8.8	\$8.7	
Registration-Related <sup>⁵</sup>	\$77.9	\$82.1	\$84.1	\$85.8	
Total Transportation Funds Percent Change	<b>\$1,184.7</b> 1.7%	<b>\$1,209.9</b> 2.1%	<b>\$1,234.4</b> 2.0%	<b>\$1,258.4</b> 1.9%	2.0%

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

	Actual FY 2015-16	Estimate FY 2016-17	Estimate	Estimate FY 2018-19	CAAGR*
Bridge Safety Surcharge	\$106.6	\$110.2	\$112.6	\$115.1	2.6%
Percent Change	3.4%	3.3%	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.

Revenue to the *Statewide Bridge Enterprise* is not subject to TABOR and is shown as an addendum to Table 10. Revenue to this enterprise is expected to grow 3.3 percent to \$110.2 million in FY 2016-17 and 2.2 percent to \$112.6 million in FY 2017-18. The bridge safety surcharge fee collections typically grow at a similar rate as vehicle registrations.

The *Hospital Provider Fee* is assessed on hospitals; fee revenue is used to draw a federal match and is 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 and FY 2018-19 incorporates the federal government's current cost model. Under the model, fee revenue is matched up to an amount equal to 6 percent of hospitals' net patient revenue, calculated as inpatient and outpatient hospital revenue minus expenses. The forecast for fee revenue is unchanged from December.

**Severance tax** revenue, including interest earnings, is expected to be \$33.8 million in FY 2016-17 before increasing to \$149.9 million in FY 2017-18. The forecast reflects additional refund claims by oil and gas producers following the Colorado Supreme Court ruling 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 taxes paid in previous years and deduct the additional costs going forward. Table 11 on page 29 presents the forecast for severance tax revenue by mineral source.

In FY 2016-17, oil and gas severance tax collections are projected to total \$23.1 million. The Supreme Court decision allowed severance taxpayers to claim refunds for previous year's severance tax payments; however revenue into the severance tax fund may not be sufficient to meet these refund obligations. The legislature passed Senate Bill 16-218, which allows severance tax refunds to be paid out of the General Fund for FY 2015-16 and FY 2016-17. In FY 2016-17, a total of \$76.1 million is expected to be collected in the severance tax fund and \$53.0 million will be refunded through the General Fund in FY 2016-17. Oil and gas severance tax collections are expected to increase to \$138.2 million in FY 2017-18 once refunds resulting from the court decision have been claimed.

After declining in 2015, oil prices bottomed out at just under \$24 per barrel in February 2016 before rising to almost \$44 per barrel in December. Prices have remained around \$44 per barrel so far in 2017. Based on preliminary data, 2016 production declined 2.4 percent compared with 2015. Weld County is now responsible for nearly 90 percent of the state's oil production. Although production was down in 2016, this forecast assumes that oil prices will rise gradually and average about \$48 per barrel in 2017 and \$50 per barrel in 2018, spurring additional production in Weld County and the broader Niobrara formation.

	Actual FY 2015-16	Estimate FY 2016-17	Estimate FY 2017-18	Estimate FY 2018-19	CAAGR*
Oil and Gas	\$5.2	\$23.1	\$138.2	\$143.2	110.4%
Percent Change	-98.0%	341.8%	499.5%	3.6%	
Coal	\$3.6	\$2.6	\$2.4	\$2.2	-15.9%
Percent Change	-33.3%	-27.4%	-7.7%	-7.4%	
Molybdenum and Metallics	\$1.5	\$2.2	\$2.3	\$2.4	15.9%
Percent Change	1.6%	47.3%	4.7%	4.5%	
Total Severance Tax Revenue	\$10.3	\$27.8	\$142.9	\$147.8	88.9%
Percent Change	-96.2%	170.8%	413.5%	3.5%	
Interest Earnings	\$8.6	\$6.0	\$7.0	\$8.1	-2.1%
Percent Change	-0.2%	-31.1%	17.6%	16.1%	
Total Severance Tax Fund Revenue	\$18.9	\$33.8	\$149.9	\$156.0	70.3%
Percent Change	-93.2%	78.5%	343.7%	4.1%	

# Table 11Severance Tax Revenue Forecast by Source

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

Mild winter weather hurt demand for natural gas, reflected in lower regional natural gas prices. Natural gas prices reached \$3.88 per Mcf in early December, but declined to \$2.47 per Mcf in the first half of March 2017. Prices are expected to average about \$3.32 per Mcf in 2017 and \$3.81 per Mcf in 2018.

Coal severance taxes are expected to generate \$2.6 million in revenue in FY 2016-17. Total coal production in Colorado has declined 31.5 percent in 2016, 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 8.7 percent at the New Horizon North mine to 37.0 percent at the Foidel Creek mine. In both FY 2017-18 and FY 2018-19, collections are expected to fall further to \$2.4 million and \$2.2 million, respectively.

Finally, interest earnings are expected be \$6.0 million in FY 2016-17 and increase 17.6 percent to \$7.0 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 tax and fee revenue subject to TABOR is anticipated to grow 1.4 percent to \$104.2 million in FY 2016-17, before growing 1.8 percent to \$106.0 million in FY 2017-18.

The state limited gaming tax is a graduated tax assessed on casino adjusted gross proceeds, which is the amount of wagers collected less the amount paid to players in winnings, in the three state-sanctioned gaming municipalities: Black Hawk, Central City, and Cripple Creek. Casinos on tribal lands in southwestern Colorado are not subject to the state tax. Division of Gaming statistics for FY 2016-17 indicate that gaming tax revenue is continuing to grow despite sagging wagers at casinos. Wagers at slot machines, which comprise the overwhelming majority of total casino wagers, fell 0.6 percent through January relative to the

same period in FY 2015-16. Tax collections increased 2.2 percent over the same period as casinos continued to increase their "hold" percentages, the percentages of wagers retained by casinos and not paid to players in winnings.

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 results in more gaming taxes being exempt from TABOR. TABOR-exempt Amendment 50 revenue grew 26.9 percent to \$15.3 million in FY 2015-16 but is expected to grow just 1.7 percent to \$15.5 million this year. This revenue primarily supports the state community college system.

Monthly *marijuana tax* collections continue to increase but at a slower rate than recent years as the market is becoming more mature. Total marijuana tax revenue is expected to reach \$187.2 million in FY 2016-17 and \$191.8 million in FY 2017-18. Marijuana tax collections are 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 \$17.6 million in FY 2016-17 and \$26.2 million in FY 2017-18; these amounts will be deposited into the Permanent School Fund.

	Actual FY 2015-16	Forecast FY 2016-17	Forecast FY 2017-18	Forecast FY 2018-19	CAAGR*
Proposition AA Taxes					
Special Sales Tax	\$67.3	\$90.9	\$83.6	\$92.6	10.6%
State Share of Sales Tax	57.2	77.3	71.1	78.7	
Local Share of Sales Tax	10.1	13.6	12.5	13.9	
15% Excise Tax	42.7	57.6	66.2	73.3	18.1%
Total Proposition AA Taxes	110.0	148.5	149.8	165.9	13.7%
2.9% Sales Tax (Subject to TABOR)					
2.9% Sales Tax on Medical Marijuana	12.2	12.2	11.6	10.9	-3.7%
2.9% Sales Tax on Retail Marijuana	19.4	26.2	30.1	33.4	18.1%
TABOR Interest	0.2	0.3	0.3	0.3	
Total 2.9% Sales Tax	31.8	38.7	42.0	44.6	11.3%
Total Taxes on Marijuana	\$141.8	\$187.2	\$191.8	\$210.5	13.2%

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

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 \$90.9 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; special sales tax revenue will decline to \$83.6 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 \$38.7 million in FY 2016-17 and \$42.0 million in FY 2017-18.

**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.

For FY 2016-17, FML revenue is projected to fall to \$90.0 million, a 3.2 percent decrease from the previous year. The decline in FML revenue from the previous year is due to declining coal production in Western Colorado. Roughly 75 percent of this production occurs on federal lands, and coal production was down 31.5 percent between 2015 and 2016. Coal production is expected to decline slightly through the forecast period. Natural gas prices are expected to slowly increase, however, helping to support FML payments.

FML revenue is expected to rebound to \$104.3 million in FY 2017-18 and \$110.7 million in FY 2018-19.

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 26 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 percent in FY 2016-17. The strength of the labor market in recent years will shift employers' experience ratings to a lower tier beginning in 2017, which reduces their contribution amount to the fund. However, premiums are expected to pick up slightly in FY 2017-18 and FY 2018-19 as wages increase 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 1.5 percent over the forecast period.

# Table 13Unemployment Insurance Trust FundRevenues, Benefits Paid, and Fund Balance

Dollars in Millions

	Actual FY 2015-16	Estimate FY 2016-17	Estimate FY 2017-18	Estimate FY 2018-19	CAAGR*
Beginning Balance	\$680.1	\$679.8	\$630.3	\$713.3	
Plus Income Received	<b>\$6661</b>	<i>QOOOOOOOOOOOOO</i>	<i><b>Q</b></i> <b>CCCCCCCCCCCCC</b>	ψ1 TOTO	
UI Premium Interest	\$622.3 \$15.5	\$557.6 \$16.4	\$559.4 \$16.6	\$588.7 \$18.0	-3.49%
Total Revenues Percent Change	\$637.8 -7.1%	\$574.0 -10.0%	\$576.0 0.4%	\$606.7 5.3%	-3.34%
Less Benefits Paid Percent Change	(\$516.2) 7.0%	(\$498.4) -3.4%	(\$493.0) -1.1%	(\$484.6) -1.7%	-1.52%
UI Bonds Principal Repayment Accounting Adjustment	(\$125.0) \$3.0	(\$125.0) \$0.0	\$0.0 \$0.0	\$0.0 \$0.0	
Ending Balance	\$679.8	\$630.3	\$713.3	\$835.4	7.11%
Solvency Ratio Fund Balance as a Percent of Total Annual Private Wages	0.62%	0.55%	0.59%	0.65%	

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. economy will complete its eighth consecutive year of expansion in 2017. Advancement continues across most major economic indicators. After dampening economic growth in the first half of 2016, business profits and investments gained momentum in the latter half of the year. Higher oil prices have stimulated new investment and resilient U.S. consumers remain the key catalyst to growth in the economy. Healthy labor and real estate markets, along with strong consumer confidence, helped boost consumer spending. Globally, many economies abroad have outpaced expectations in recent months, stimulating improvements for U.S. exports and manufacturing activity. Finally, robust investor confidence, spurred by promises of reduced business regulations and changes to the federal corporate and individual income tax systems, have lifted key stock indices to new highs.

The Colorado economy also continues to expand; although, after outperforming the nation in many areas since the last recession, various key indicators are aligning closer to the national pace. The Colorado housing market remains hot and the labor market continues to add jobs.

The U.S. and Colorado economies are expected to continue to expand in 2017 and 2018. Several factors may temper growth over the forecast period, including demographic, which continues to mute income and consumption growth. Full employment may subdue economic growth if employers cannot fill vacant positions. A tighter labor market may also add fuel to inflation.

Tables 14 and 15 on pages 58 and 59 present histories and expectations for economic indicators in the U.S. and Colorado, respectively.

#### **Gross Domestic Product**

The U.S. economy continued to expand in 2016, the seventh consecutive year of positive growth. Economic activity slowed in the final quarter of the year; however a substantial spike in soybean exports in the previous quarter elevated growth for the year. The Colorado economy also continues to improve but is now growing at a pace closer to the nation. Robust demand for new homes in the state has offset the drag from the mining industry, which has begun to recover from persistently low oil prices.

After growing 2.6 percent in 2015, **real gross domestic product** (GDP), an estimate of the inflation-adjusted value of final U.S. goods and services produced, increased 1.6 percent in 2016. U.S. consumers, the main drivers for the U.S. economy, increased spending by a solid 2.7 percent. They were especially fervent on big-ticket items, such as vehicles and household appliances. Growth was hampered by lower business investment and a strong U.S. dollar, which constrained U.S. exports. However, both of these components picked up in the last half of the year. Figure 7 shows the annual percent change in and contributions to U.S. real GDP since 2008.

U.S. economic growth slowed in the last quarter of 2016, increasing at an annual rate of 1.9 percent. However, a significant spike in soybean exports contributed to a rise in exports in the third quarter of the year. U.S. soybean exports surged after a poor harvest in Brazil and Argentina. After several quarters of declines, businesses ratcheted up overall spending. Gross

private investment increased 10.7 percent from the previous third quarter. Similarly, residential builders boosted investment in new housing by just over 10 percent, marking the first advance in three quarters. Finally, total government spending increased by 1.2 percent, as declines in federal spending were offset by state and local government outlays.



Source: U.S. Bureau of Economic Analysis.

Colorado economic activity continues to expand at a moderate pace. In the third quarter of 2016, real GDP increased 1.9 percent from the same quarter one year ago (Figure 8). The state's economy managed to expand despite a drag from the oil and gas industry, which suffered from weak industry earnings and a pull-back in production amid low energy prices. Growth in the construction and real estate industries continues to be robust, reflecting rapid home value and housing rental price appreciation and growing residential and nonresidential construction industry activity. Figure 9 shows contributions to real Colorado GDP growth between the third quarter of 2015 and the third quarter of 2016.



Source: U.S. Bureau of Economic Analysis.

#### Figure 9 Contributions to Real Gross Domestic Product, Third Quarter 2016

Percent change, Year-over-Year



Source: U.S. Bureau of Economic Analysis.

• Real U.S. GDP is expected to increase 2.4 percent in 2017 and 2.4 percent in 2018. Increases in consumer spending and business investment are expected to drive growth through the forecast period.

#### Labor Market

The U.S. labor market continued to add jobs in 2016, giving the nation seven consecutive years of job growth and falling unemployment rates. Figure 10 shows selected U.S. labor market indicators. Job gains were realized across most major industries. Colorado's labor market also continues to improve, but after consistently outperforming the nation since the last recession, Colorado's employment growth is aligning closer to the nation's pace of job growth. The state still boasts one of the lowest unemployment rates in the country.

Figure 11 shows U.S. job gains and losses by industry from February 2016 to February 2017. Nationwide, total nonfarm employment increased 1.6 percent, down from 1.8 percent in 2015. Job gains were broad-based across most major industries. The professional and business services and education and health services industries continue to add workers at a healthy pace. Together these two industries account for just over half (51 percent) of total nonfarm employment in the nation. Construction employment continues to build momentum, adding a healthy 176,000 jobs, or a 3.3 percent increase, over the year. The manufacturing industry managed to post positive gains despite a strong dollar. Employment in the oil and gas sector continues to recover from two years of low oil and gas prices, and job losses in the industry are decelerating.

The number of people filing for unemployment benefits remains near historical lows. In February, the U.S. unemployment rate ticked down to a business cycle low of 4.7 percent (Figure 10, bottom left).



Source: U.S. Bureau of Labor Statistics. Monthly data are seasonally adjusted.
#### Figure 11 U.S. Job Gains and Losses by Industry Year-over-Year Change, February 2017 over February 2016



Source: U.S. Bureau of Labor Statistics. Darker bars represent employment supersectors.

Colorado posted its fifth consecutive year of job growth in 2016, adding almost 53,000 jobs. After growing 3.2 percent in 2015, the pace of employment growth moderated to 2.3 percent in 2016. As shown in Figure 12, the majority of industries in the state reported positive job gains in 2016. A growing and aging population continues to increase demand for workers in the education and health services industry, which added 12,500 jobs between February 2016 and February 2017. Demand for new housing helped increase the number of construction jobs in the state by 1.5 percent. Similar to the nation, Colorado's energy and manufacturing industries have experienced losses on a year-over-year basis.

After gradually increasing through most of 2016, Colorado's unemployment rate started to drop in the last quarter of the year, ending the year at 3.0 percent. The uptick was primarily from more people entering the state's labor force than people reporting themselves as employed. Colorado's unemployment rate is one of the lowest in the country and significantly lower than the national average. It fell to 2.9 percent by February 2017.

### Figure 12 Colorado Job Gains and Losses by Industry



Year-over-Year Change, December 2017 over December 2016

Source: U.S. Bureau of Labor Statistics, with revisions expected by Legislative council staff from the Bureau of Labor Statistics annual re-benchmarking process. Darker bars represent employment supersectors.

Economic indicators suggest that the nation is nearing full employment. The gap between the headline unemployment and underemployment rates is a valuable indicator of slack in the labor market, and tends to be about 4 percentage points when the economy is at full employment. In Colorado, this gap has narrowed from 6.3 percentage points in FY 2009-10 to 4.1 percentage points in FY 2015-16 (Figure 13, right). Nationwide, the gap has fallen, though not as much as in Colorado. However, other measures of labor market slack, the rate at which job seekers are hired and workers quit their jobs, remain near pre-recession levels (Figure 13, left).

#### Figure 13 Measures of Labor Market "Slack"



Source: U.S. Bureau of Labor Statistics, Job Openings and Labor Turnover Survey (JOLTS). Data are for total nonfarm employment and are seasonally adjusted.



Source: U.S. Bureau of Labor Statistics. Underemployment rates are shown as four-quarter averages.

- Colorado will continue to add jobs through the forecast period, though at a slower pace than recent years as labor market shortages constrain growth. Nonfarm employment in the state will increase 2.0 percent in 2017 and 1.8 percent in 2018.
- U.S. nonfarm employment will increase 1.8 percent in 2017 and 1.5 percent in 2018.

#### **Financial Markets**

Positive corporate earnings and robust investor confidence continue to buoy U.S. equity markets. The *Financial Times* reports that corporate earnings are up 4.6 percent for the fourth quarter of 2016, with 82 percent of companies in the Standard & Poor's (S&P) 500 index reporting through February. The two major U.S. benchmark stock indices, the Dow Jones and S&P 500, continued to advance through February 2016. On average, the Dow Jones index is up almost 23 percent compared with the same two months one year ago, while the broader S&P index has risen 16 percent. Figure 14 shows the growth of the two indices since March 2007.



#### Figure 14 Stock Market Growth Comparisons

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

The VIX index, a popular measure to gauge the level of fear in the financial markets, has been lingering near historical lows. The index is based on future and option prices over the next 30 days. When the VIX is low, it implies traders are expecting rising stock prices in the coming month, while a high VIX suggests traders are expecting falling prices. The VIX's average since 2007 has been near 21; since the beginning of 2017 it has hovered around 11. Figure 15 shows the daily closing price for the VIX index since January 2007.



Source: Chicago Board Options Exchange (CBOE).

#### **Business Income and Activity**

Historically, business income and investment have been reliable leading indicators of future economic activity. Slowing **investment** in equipment and intellectual property and contractions in **corporate profits** have been consistent antecedents to economic downturns (Figure 16, 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 are subsiding.

U.S. **industrial production**, a measure of output from the manufacturing, mining, electric, and gas sectors, continues to struggle to gain footing. Gains in manufacturing and mining output have been offset by declines in utilities output. The percentage of industrial capacity in use fell 0.3 percentage point during the month to 75.3 percent. Federal Open Market Committee (FOMC) officials look to capacity use as a signal for how much further the economy can accelerate before sparking higher inflation.

U.S. **manufacturing activity** continues to gain momentum. In February, the Institute of Supply Management (ISM) index jumped to 57.7, the highest level since December 2014. The ISM index, which is based on surveys of more than 300 manufacturing firms, has been rising since the fourth quarter of 2016. Improvement has been broad-based among the 18 manufacturing industries tracked by the index. The only industry showing diminishing activity was furniture and related products. The new export orders component of the survey has also shown encouraging improvement over the last few months, despite a strong U.S. dollar and its attendant drag on exports.

After gradually declining through the last quarter of 2016, economic activity in the **non-manufacturing** sector has improved. The ISM nonmanufacturing index hit 57.6 in February (Figure 16, top right). A reading above 50 on this index indicates expansion in the service sector, and a reading below 50 indicates contraction. While some survey respondents communicated concerns about uncertainty, the majority of respondents reported a positive outlook on business conditions and the overall economy.

Data from Federal Deposit Insurance Corporation (FDIC) shows that the **financial industry** continues to improve. Commercial banks and savings institutions reported net income of \$43.7 billion in the fourth quarter of 2016, up \$3.1 billion, or 7.7 percent from a year earlier. The increase in earnings was mainly attributable to a 7.6 percent increase in net interest income. The proportion of banks that were unprofitable in the fourth quarter fell to 8.1 percent from 9.6 percent a year earlier. Finally, the number of banks on the FDIC's Problem Bank List fell from 132 to 123 during the fourth quarter. This is the smallest number of problem banks in more than seven years and is down significantly from the peak of 888 in the first quarter of 2011.



#### Figure 16 Select Indicators of Business Activity

#### **Energy Markets**

Lower oil production and an improving global economy have lifted oil prices from a low of \$26 a barrel in February 2016 to \$53 a barrel one year later. In Colorado, the rise in oil prices has encouraged some producers to start drilling, but activity remains modest. Meanwhile, natural gas prices have failed to gain momentum, as unanticipated warm winter weather has created a backlog. Low natural gas prices continue to depress demand for coal as fuel for electrical generation. However, U.S. coal producers are optimistic that changes in federal regulations may help the struggling industry.

With the precipitous fall in oil prices that began toward the end of 2014, OPEC member countries agreed to cut oil production by 1.2 million barrels per day for six months beginning in January 2017 in a bid to reduce a glut of crude oil on the international market. Early indications show compliance with the agreed output cuts. In January, OPEC production decreased by

890,000 barrels per day. However, U.S. crude oil stocks have been steadily increasing and remain elevated, reflecting a bourgeoning domestic supply that continues to put downward pressure on global oil prices. Figure 17 (middle right) shows U.S. stocks of crude oil as reported by the U.S. Energy Information Administration.

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. U.S. producers have been anxiously waiting for a modest rise in prices and are poised to rapidly bring new production online. This will suppress prices into the future. Technological developments, including hydraulic fracturing and horizontal drilling, have reduced U.S. production costs and made access to previously unrecoverable deposits possible.

New drilling activity, as measured by active drilling rigs, 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 17, middle left). In Colorado, energy industry investment has also picked up modestly and is expected to rise further with the recent rise in oil 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.

Natural gas prices rose at the start of December due to seasonal winter demand. Prices, however, remain low relative to historical prices as the unexpectedly warm winter has reduced demand for natural gas (Figure 17, upper right). 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.

Oil prices are expected to increase modestly throughout the forecast period to \$56 per barrel in 2019 as new technologies allow oil producers to quickly increase production in response to prices. Natural gas prices are expected to follow a similar pattern. Prices will increase from a low of \$2.54 Mcf in 2016 to approximately \$4.13 in 2019. Producers have invested less in natural gas development in the last several years, causing natural gas production to be less responsive to price signals than oil.

Figure 17 Selected Indicators of Oil and Gas Industry Activity



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







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



**Active Rig Counts** 



Source: Baker Hughes.

#### **Household and Consumers**

U.S. **personal income**, the sum of all income received by households during a given period, ticked up slightly in the fourth quarter of 2016 and closed the year up 3.5 percent compared with 2015 levels. The modest increase was driven by a 4.2 percent increase in wage and salary income, which accounts for just over half of household income nationally (Figure 19).

Investment income from dividends and interest was essentially flat, while income from rents surged by 6.9 percent over the prior year. Most components of personal income decelerated from faster growth rates in 2015, though interest receipts and employer benefit contributions bucked this trend. Additionally, the rate of decline in farm proprietors' income slowed from 41.7 percent to 28.7 percent, reflecting continued weakness in the nation's agriculture industry.



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

Colorado income growth has outpaced the nation (Figure 18). State nominal income growth decelerated to 3.4 percent in the first three quarters of 2016, down from 4.2 percent growth last year (Figure 20). Deceleration was especially pronounced in wages and salaries, which increased 4.0 percent in 2016 after growing 5.7 percent in 2015; and dividends, interest, and rent, were up 1.7 percent versus 3.1 percent in 2015. Slow growth in investment income indicates pronounced weakness in dividend and interest income but, the Front Range real estate market contributed to ballooning rental income for landlords.



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



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

**Consumer spending**, which increased for 28 consecutive quarters through the end of 2016, remains the most reliable contributor to growth in the national economy. Personal consumption expenditures contributed 1.8 percentage points to real U.S. GDP during the fourth quarter of 2016, representing a slight acceleration from 2015's 1.7 percentage point contribution. U.S. consumer confidence also remains high (Figure 21, top left). Spending is expected to increase as personal income rises, buoying the economy during its mature expansion. Although growth in household consumption is largely attributable to spending on services, which was up 4.6 percent in 2016, spending on durable goods accelerated, ending the year up 3.5 percent.

Indicators for consumer spending at retail establishments in 2016 were muddled by price effects. U.S. retail sales increased 3.0 percent in 2016 on a nominal basis, outpacing headline inflation by just 1.7 percentage points. However, the inflation-adjusted statistic understates retail trade performance because inflation was strongest in housing, health care, and education, none of which are purchased at retail. Additionally, sagging energy and transport prices disproportionately impacted retail goods, depressing the value of reported nominal sales. Industry analysts suggest that retail prices are actually deflating, obfuscating industry performance in frequently cited statistics.

Retail consumption ended 2016 on a high note, with sales during the November and December holiday period surpassing 2015 levels by 4.0 percent versus 1.9 percent headline inflation. Performance, however, varied significantly among retailer types. The increase was attributable in large part to non-store retailers, a category that includes online retailers, whose sales jumped 12.6 percent. Brick and mortar retailers fared significantly worse, with electronics stores reporting year-over-year losses. Apparel shops and general merchandisers, including Macy's, Sears, and Kmart announced store closings across the country, while Sports Authority, headquartered in Englewood, ceased operations.

Trends in U.S. and Colorado retail trade sales are shown in Figure 21.

Figure 21 Selected Indicators of Consumer Spending





Source: U.S. Census Bureau and colorado Department of Revenue. U.s. data are through December, colorado data are through February 2016. Data are seasonally adjusted and not adjusted for inflation.

#### Change in U.S. Retail Sales, Year-to-Date through December

Total U.S. Retail Sales	3.0%	Share of Sales
Nonstore Retailers	11.4%	10.4%
Health & Personal Care Stores	7.1%	6.1%
Building, Garden & Supplies Dealers	5.9%	6.4%
Food Services & Drinking Places	5.5%	11.8%
Miscellaneous Store Retailers	5.0%	2.3%
Sporting Goods & Hobby	2.6%	1.6%
Furniture & Home Furnishings Stores	3.4%	2.0%
Motor Vehicle & Parts Dealers	3.5%	21.0%
Food & Beverage Stores	2.1%	12.6%
Clothing & Clothing Accessory Stores	0.3%	4.6%
General Merchandise Stores -1.1%		11.7%
Electronics & Appliance Stores -3.6%		1.8%
Gasoline Stations -6.4%		7.6%

Source: U.S. Census Bureau, advanced monthly retail trade report.

U.S. household balance sheets remain relatively healthy. The Federal Reserve Board's quarterly report on household debt and credit shows total household debt grew to \$12.58 trillion by the end of 2016. As a percentage of GDP, debt is near 2002 levels. Consumer debt service ratios remain below the historical average dating back to the 1980s (Figure 22, bottom). The savings rate for all U.S. households continues to hover just below its historical average of 6.6 percent (Figure 22, top).



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.

#### **Residential Real Estate**

Residential real estate indicators remain encouraging for both the national and Colorado housing markets. However, tight inventories continue to push home prices higher, making more homes less affordable and slowing momentum in the market. In 2016, the national 20-city Case-Shiller composite home price index gained 4.4 percent from the previous year. The Colorado real estate market remains one of the strongest in the nation, but there are indications that rapid price appreciation is dampening growth as first time buyers are being priced out of the market. Although mortgage interest rates remain near historical lows, rate hikes by the Federal Reserve will likely contribute to lower affordability and moderating growth in the industry.

Rising prices, healthy demand, and a low supply of available properties continue to drive the U.S. housing market. The median existing home price increased 7 percent in November 2016 compared with year-ago levels. The number of months it takes to sell a home remains at historical lows, averaging 5.8 months on the market. In general, if the number is below six months of supply, this indicates that buyers outnumber sellers. The number of permits

<sup>\*</sup>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 adjusted.

issued for single family construction closed 2016 up 9.9 percent, in line with the pace of 2015 growth. In contrast, the number of multi-family permits issued fell 2.7 percent in 2016 after growing 11.5 percent in 2015, though the level of multi-family permits remain high. Nationally, home prices have risen faster in the western region of the U.S., with the highest year-over-year increases occurring in Seattle and Portland.





14

12

10

8

6

4

2

Source: U.S. Census Bureau.





Seller's Market

2006 2008 2010 2012 2014 2016

Colorado

Thousands of Units

Multi-Family

Single Family

Source: National Association of Realtors.

U.S. Month's Supply of Homes

Source: U.S. Census Bureau.



5.8

5.0

4.0

3.0

2.0

1.0

0.0

A combination of historically low vacancy rates, a lack of inventory, above average price appreciation, a relatively strong labor market, positive in-migration growth, and a rising number of millennials starting families continue to make the Colorado housing market along the Front Range one of the strongest in the country. The Colorado average rental vacancy rate dropped to 4.7 percent in 2016, down from 5.3 percent in 2015, and 2.2 percentage points lower than the national average (Figure 23, middle left).

Long-term mortgage rates surged at the end of 2016 (Figure 23, bottom), causing refinancing activity to drop and pricing some first time buyers out of the market. The 30-year fixed mortgage rate increased 16 percent from November to early March. Though mortgage rates remain at historical lows, the increase has limited the number of possible buyers and how much they can afford to pay. Millennials, or those born between 1981 and 2000, are expected to be the next wave of homebuyers in the coming years.

• The number of permits issued for residential construction will increase 4.8 percent in 2017 and 3.9 percent in 2018.

#### Nonresidential Construction

After a banner year in 2015, total spending on nonresidential construction in the nation continued to increase in 2016, although the year-over-year pace has been moderating. Total nonresidential spending was \$701.7 billion in 2016, up 4.9 percent from one year ago. Growth was concentrated in the private sector. Spending on private construction projects increased 6.3 percent in 2016, while public construction spending was down 1.8 percent. Lodging and office development projects increased by more than 20 percent, while publically financed categories, such as sewage and waste treatment facilities, saw a decline in spending by almost 20 percent.

Increased demand for warehouses, office space, and hotel real estate continue to drive nonresidential activity in Colorado. Data published by Dodge Data and Analytics shows total nonresidential spending increased by 16.4 percent in 2016. Persistently low vacancy rates and demand for regional distribution facilities from firms like Amazon and Walmart are buoying the industrial real estate market. The Denver office market continues to see strong growth, with several new projects planned outside the central business district. The hotel industry continues to add new rooms in downtown Denver, but at a slower rate than previous years. Robust growth over the past few years has contributed to an oversupply of rooms.

Experienced and skilled labor remains a major concern for the nonresidential construction industry. Several nonresidential construction market surveys continue to report that recruiting and retaining qualified staff is a growing issue, perhaps even preventing some developers to start projects. Many construction workers left the industry during the Great Recession.

• Nonresidential industry construction in Colorado will continue to grow in 2017 and 2018, but at a slower pace than in recent years.

#### Monetary Policy and Inflation

Inflationary pressures have gained momentum in recent months. Headline U.S. inflation climbed 2.8 percent over 2016 prices (Figure 24, top left). The year-over-year price increase for

all products and services was the largest gain since March 2012. A steady advance in energy prices has been the primary cause for higher inflation. In February, the energy component of the Consumer Price Index spiked 15.6 percent over the same month one year prior. Price advances for new vehicles and medical care were also major contributors. Core inflation, which excludes the more volatile components of food and energy, held steady at 2.2 percent (Figure 24, top right).

### Figure 24 Consumer Price Index (CPI) Inflation

Percent Change in Prices, Year-over-Year

#### All U.S. Urban Areas



**Denver-Boulder-Greeley** 



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.

Core Colorado inflation, as measured by the Denver-Boulder-Greeley consumer price index, rose 3.5 percent in the second half of 2016 over the second half of the prior year

(Figure 1, bottom left). Higher housing costs accelerated core inflation in the second half of 2016, increasing 6.1 percent. Headline inflation rose more modestly at 2.6 percent on the drag from energy prices (Figure 24, bottom right). Most other price components fell over the prior year.

On March 15, the Federal Open Market Committee (FOMC) raised the target federal funds rate by 0.25 percentage point to a range of 0.75 percent to one percent (top of Figure 25). The increase was the third rate hike since December 2015. The FOMC continues to indicate that it sees the federal funds rate at 1.4 percent by the end of 2017. Inflationary expectations and indications of tightening labor market conditions are reasons cited by the FOMC to continue gradual increases in the federal funds rate through the current year.

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 25). 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.

The value of the U.S. dollar relative to foreign currencies began to rapidly appreciate in August 2014. The nation's comparatively strong economy, weakness in global demand, and falling commodity prices put upward pressure on the dollar. The December 2016 hike in short-term interest rates and possibility of three increases this year have sustained strength in the U.S. dollar.



Figure 25 Selected Monetary Policy Indicators

Source: Federal Reserve Board of Governors.

#### International Trade

In spite of a persistently strong dollar that continues to weigh on U.S. business operations abroad, exports showed improvement in 2016 (Figure 26, right). Total exports declined 2.2 percent compared with a 5 percent drop one year earlier. Exports declined to a majority of trade partners; however, Canada, and Mexico—the top two U.S. trade partners—led export weaknesses. The U.S. dollar has seen strong appreciation against the Canadian dollar and Mexican peso over the past three years. Exports fell across most commodities. Industrial machinery, including computers, contributed most to declines.

Total US exports have been gaining momentum over the past year, primarily because energy companies have been shipping crude oil outside the country. Technological advancements in the oil and gas industry have shifted many energy rich regions in the country from net importers to net exporters. In 2016, the Houston area exported more than it imported by nearly \$14 billion. U.S. gasoline exports, the majority coming from Gulf Coast refineries, have increased from 4 million barrels a month to 25 million barrels a month in 2016.

Colorado exports struggled in 2016. Exports to Canada, China, and the Netherlands (which experienced a strong decline in molybdenum ores and concentrates exports) contributed most to the decline. Like the nation as a whole, export values fell across most commodities, though industrial machinery, including computers, contributed to nearly half of the total decline in exports.



#### Figure 26 Selected Global Economic Indicators

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

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

#### **Global Economy**

Many economies abroad have outpaced expectations in recent months. The January 2017 update of the International Monetary Fund's World Economic Outlook was virtually unchanged

relative to October 2016 expectations. Slight upward revisions to the outlook for developed countries offset slight downward revisions for less developed countries. However, downside risks continue to dominate the outlook as political uncertainty remains elevated.

Economic activity in **Canada**, the largest trade partner to the U.S., improved over the past three months. In January, the country added more jobs than expected, and the nation's unemployment rate ticked down to 6.8 percent. Rising energy prices have improved production and manufacturing activity in the net energy exporting industry.

Economic activity in **Mexico** has grown tepid. While the unemployment rate fell over the past five months and export activity has improved, advanced indicators of economic activity have soured and inflationary pressures continue to mount. In January, the country's inflation rate reached an 18-year high of 4.7 percent, prompting a hike in interest rates.

The **Eurozone** faces an uneven economic landscape, with Spain, Germany, and France faring well, while other economies are more stagnant. Italy's banking crisis and the ongoing Greek debt crisis continue to weigh on regional economic activity.

Aggregate economic activity in the Eurozone picked up in the fourth quarter of 2016, as measured by real GDP. The boost offers a taste of optimism for the area, though political uncertainty continues to dominate the economic outlook for Europe. The Netherlands, France, Germany, and Italy will all hold important elections this year, with a rising number of European voters demanding sweeping changes in economic and social policies. Uncertainty surrounding Brexit persists, as the United Kingdom inches closer to exiting the European Union. Reflecting political risk, foreign direct investment (FDI) in Europe fell 29 percent in 2016 relative to 2015 levels, according to data published by the United Nations Conference on Trade and Development. Foreign direct investment was down 13 percent worldwide in 2016, led by the drop in investment in Europe.

In January, **Chinese** exports beat expectations, confirming a rise in global demand. China continues to push toward rebalancing its economy, though capital flight, a large shadow banking industry, and mounting state-owned and private industry debt pose rising risks to the country's financial stability.

A bright spot in 2016, India's economic prospects have dimmed some. Economic activity in **India** has slowed following Prime Minister Narendra Modi's "demonetization" experiment in early November. The outlook for economic growth was downgraded across many major forecasts on a mix of economic indicators.

#### Agriculture

American agricultural producers continue to struggle. Elevated U.S. crop yields are flooding the market, pushing down prices (Figure 27). A strong dollar compounds the challenges faced by U.S. farmers, as international consumers



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

turn to cheaper food supplies from other countries. The U.S. Department of Agriculture reports that U.S. wheat, corn, and alfalfa hay prices decreased 27.9 percent, 7.7 percent, and 15.5 percent, respectively, in 2016.

Declining income, low commodity prices, and low profit margins have hurt farm cash flows. As shown in the upper right panel of Figure 28, farm income in the Federal Reserve's Tenth District, which includes Wyoming, Oklahoma, Colorado, Kansas, eastern Missouri and northern New Mexico, decreased for 15 consecutive quarters through the end of 2016. The Kansas City Federal Reserve's Quarterly Survey of Agricultural Credit reported that 70 percent of Tenth District bankers expected farm incomes to continue to fall in the first quarter of 2017. 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 28, lower left) 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 producers appear to be storing commodities in the hope of better prices in the future, selling them only when necessary to make loan payments.



Figure 28 Select Indicator of Tenth District Agricultural Credit Conditions

Source: Kansas City Federal Reserve Quarterly Survey of Agricultural Credit Conditions. The 10<sup>th</sup> District is comprised of Wyoming, Oklahoma, Colorado, Kansas, eastern Missouri and northern New Mexico. \*Values above 100 indicate expansion; values below 100 indicate contraction.

#### **Demographics**

In late December, the U.S. Census Bureau released July 1, 2016 population estimates. Colorado population growth slowed to 1.7 percent, but continues to outpace nationwide growth of 0.7 percent. In 2016, Colorado saw the seventh fastest growth rate among states, and rose to the 21st largest state in the nation. According to the Colorado State Demography Office, population in-migration accounted for two thirds of the growth, while natural increase (births minus deaths) made up the remainder. Net migration has been dominated by movers in their 20s, who have settled primarily along the Front Range. Net migration is projected to slow on rising housing costs and housing constraints (Figure 29, top left). Birth rates in Colorado remain below historical averages and are projected to slow further, consistent with nationwide trends (Figure 29, top right).



#### Figure 29 Selected Demographic Indicators



Source: Colorado State Demography Office, Components of Change. Estimates through 2014, forecast from 2015 to 2020.



Source: Colorado State Demography Office. \*Ages 25 to 54 as a share of the total population. \*\*Ages 65 and older relative to the prime working age population.





Demographic change plays an active role in economic activity across the U.S. and in Colorado. An increasing share of the baby-boomer generation—those born between 1946 and 1964—is retiring, causing labor force participation to decline, and with it, slowing income and consumption growth. Colorado's prime working age population, those who are age 25 to 54, is projected to fall from a high of 47 percent in 2001 to 40.2 percent by 2020 (Figure 29, bottom left). The ratio of those of retirement age to the prime working age population is expected to rise dramatically in Colorado and the U.S., approaching, and for the U.S. exceeding, a 1 to 2 ratio over the coming decade.

Income and consumption rise and fall with age (Figure 29, bottom right). 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.

#### Summary

The current expansion is over seven and a half years old. Business activity has improved in recent months, sparking renewed optimism in U.S. economic growth prospects. Despite the strong U.S. dollar, manufacturing activity is picking up. The two-year downturn in the oil and gas industry appears to have ended as rig counts have begun to increase in recent months. Consumer spending remains robust and employers continue to add jobs at a moderate rate, further lowering the unemployment rate.

Nevertheless, several factors may constrain growth over the forecast period, including the aging population, which continues to mute income and consumption growth. Full employment may influence economic growth if employers cannot fill vacant positions subduing business growth. A tighter labor market may also contribute to rising inflation.

#### **Risk to the Forecast**

Uncertainties regarding fiscal and other economic policies have increased, raising a variety of potential risks to forecast. It is too early to know if or how these policies might alter the economic outlook.

**Downside**. Economic growth could be tempered if employers are unable to fill vacant positons with qualified labor. Expected interest rate hikes could result in further appreciation of the U.S. dollar and strike a blow to the export industry or slow residential and nonresidential real estate markets. Federal government spending on infrastructure projects may accelerate inflationary pressure.

**Upside.** Robust optimism in the U.S. equity markets could translate into new business investment and hiring. Greater demand for labor will increase wages and support higher levels of consumer spending. Additionally, a rise in federal government spending on infrastructure or other projects could provide a fiscal stimulus to the U.S. economy. Global economic activity could improve at a faster rate than currently projected, aiding U.S. exports.

## Table 14National Economic Indicators

						Legislative Council Staff Forecas		
Calendar Years	2012	2013	2014	2015	2016	2017	2018	2019
Real GDP ( <i>Billions</i> ) <sup>1</sup>	\$15,355	\$15,612	\$15,982	\$16,397	\$16,660	\$17,062	\$17,468	\$17,854
Percent Change	2.2%	1.7%	2.4%	2.6%	1.6%	2.4%	2.4%	2.2%
Nonfarm Employment ( <i>Millions</i> ) <sup>2</sup>	134.2	136.4	138.9	141.8	144.3	146.9	149.1	151.0
Percent Change	1.7%	1.6%	1.9%	2.1%	1.8%	1.8%	1.5%	1.3%
Unemployment Rate <sup>2</sup>	8.1%	7.4%	6.2%	5.3%	4.9%	4.5%	4.6%	4.6%
Personal Income ( <i>Billions</i> ) <sup>1</sup>	\$13,915.1	\$14,073.7	\$14,809.7	\$15,458.5	\$16,011.8	\$16,876.4	\$17,872.1	\$18,890.9
Percent Change	5.0%	1.1%	5.2%	4.4%	3.6%	5.4%	5.9%	5.7%
Wage and Salary Income ( <i>Billions</i> ) <sup>2</sup>	\$6,930.3	\$7,116.7	\$7,476.3	\$7,854.8	\$8,189.4	\$8,615.2	\$9,071.9	\$9,552.7
Percent Change	4.5%	2.7%	5.1%	5.1%	4.3%	5.2%	5.3%	5.3%
Inflation <sup>2</sup>	2.1%	1.5%	1.6%	0.1%	1.3%	2.5%	2.1%	2.6%

Sources

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

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

						Legislative Council Staff Forecast		
Calendar Years	2012	2013	2014	2015	2016	2017	2018	2019
Population ( <i>Thousands, as of July 1</i> ) <sup>1</sup>	5,189.9	5,267.6	5,349.6	5,448.8	5,540.5	5,640.3	5,741.8	5,845.2
Percent Change	1.4%	1.5%	1.6%	1.9%	1.7%	1.8%	1.8%	1.8%
Nonfarm Employment (Thousands) <sup>2</sup>	2,311.4	2,380.6	2,461.6	2,540.8	2,598.3	2,650.3	2,698.0	2,746.5
Percent Change	2.3%	3.0%	3.4%	3.2%	2.3%	2.0%	1.8%	1.8%
Unemployment Rate <sup>2</sup>	7.8	6.6	4.9	3.8	3.3	3.1	2.9	2.9
Personal Income (Millions) <sup>3</sup>	\$234,006	\$246,648	\$266,535	\$277,732	\$287,620	\$304,564	\$323,546	\$343,356
Percent Change	6.4%	5.4%	8.1%	4.2%	3.6%	5.9%	6.2%	6.1%
Wage and Salary Income ( <i>Millions</i> ) <sup>3</sup>	\$125,014	\$129,597	\$138,701	\$146,574	\$152,594	\$160,066	\$168,140	\$177,056
Percent Change	5.4%	3.7%	7.0%	5.7%	4.1%	5.6%	5.5%	5.5%
Retail Trade Sales ( <i>Millions</i> ) <sup>4</sup>	\$80,073	\$83,569	\$90,653	\$94,920	\$98,042	\$102,506	\$107,246	\$112,568
Percent Change	6.0%	4.4%	8.5%	4.7%	3.3%	4.6%	4.6%	5.0%
Housing Permits ( <i>Thousands</i> ) <sup>1</sup>	23.3	27.5	28.7	31.9	38.4	40.2	41.8	43.4
Percent Change	72.6%	18.1%	4.3%	11.1%	20.5%	4.8%	3.9%	3.9%
Nonresidential Building ( <i>Millions</i> ) <sup>5</sup>	\$3,695	\$3,624	\$4,316	\$4,846	\$5,641	\$5,573	\$5,456	\$5,342
Percent Change	-5.8%	-1.9%	19.1%	12.3%	16.4%	-1.2%	-2.1%	-2.1%
Denver-Boulder-Greeley Inflation <sup>2</sup>	1.9%	2.8%	2.8%	1.2%	2.8%	2.9%	2.5%	2.5%

## Table 15Colorado Economic Indicators

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>U.S. Bureau of Labor Statistics. Nonfarm employment estimates include revisions to 2014 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>3</sup>U.S. Bureau of Economic Analysis. Personal income and wages and salaries not adjusted for inflation. Figures for 2016 are estimates.

<sup>4</sup>Colorado Department of Revenue. The 2016 figure is an estimate.

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

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

Like the employment data, residential housing permits and agriculture data are also based on surveys. This data is revised periodically. Retail trade sales data typically has few revisions because the data reflects actual sales by Colorado retailers. Nonresidential construction data in the current year reflects 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 remained strong in 2016, supported by population in-migration and a diverse industry composition. Job growth remains strong, consumer spending continues to improve, and construction activity remains at historically high levels. Table 16 shows economic indicators for the region.

The diversity of the region's economy demonstrated resilience to industry-specific shocks in 2015 and 2016.



Figure 30 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 the result of the pull-back in oil and gas activity. Employment gains have since regained some momentum. The region's employed increased 2.9 percent on average in 2016 compared with 2015 levels. Meanwhile, labor availability is constraining the rate of job growth; the unemployment rate averaged 3.1 percent in 2016, down from an average rate of 3.6 percent in 2015 (Figure 31).

Consistent with state and nationwide trends, low gasoline prices dampened the value of retail sales in the metro Denver region in 2015. 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. Retail trade data are unavailable for 2016. However, the Mayor's 2017 budget for the City and County and Denver includes expectations for growth rates of 5.3 percent and 4.3 percent in the city's core sales and use tax revenues for 2016 and 2017, respectively.

	2012	2013	2014	2015	2016
Employment Growth <sup>1</sup>	2.9%	3.6%	3.7%	3.5%	2.9%
Unemployment Rate <sup>2</sup>	7.6%	6.5%	4.7%	3.6%	3.1%
Housing Permit Growth <sup>3</sup>					
Denver-Aurora MSA Single-Family	58.5%	18.9%	16.3%	17.8%	12.2%
Boulder MSA Single-Family	29.0%	22.5%	17.7%	74.2%	10.2%
Nonresidential Construction Growth <sup>4</sup>					
Value of Projects	-8.6%	-9.1%	10.5%	22.2%	22.2%
Square Footage of Projects	14.2%	22.2%	3.9%	39.5%	0.3%
Level (Millions)	2,471	2,246	2,482	3,032	3,705
Number of Projects	6.1%	22.4%	25.1%	16.1%	2.0%
Level	611	748	936	1,087	1,109
Retail Trade Sales Growth <sup>5</sup>	7.6%	5.1%	8.4%	6.2%	N/A

#### Table 16 Metro Denver Region Economic Indicators

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

MSA = Metropolitan statistical area. NA = Not available.

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

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

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

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

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





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

#### Figure 31 Denver Metro 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 December 2016.



#### Figure 32 Denver Metro Residential Building Permits

Source: U.S. Census Bureau. Data are shown as three-month moving averages. Data are not seasonally adjusted and are through December 2016. Metro Denver's housing market remains hot. Population in-migration and household formation are contributing to strong demand for new residential units (Figure 32). The number of permits granted for residential construction exceeded pre-recession levels in 2013 and have continued to grow at a double-digit pace since. Yet, demand continues to outpace supply; a shortage of readily-buildable lots and skilled labor has held back new construction and contributed to higher prices.

Nonresidential building continued at historically high levels in 2016. The value of permits granted for nonresidential construction increased 22.2 percent for the second consecutive year in 2016, although most of the growth occurred in the first half of the year (Figure 33).

The Adams 12 school district plans to build a 40,000 square foot career and technical education campus and make improvements to its existing 65,000 square foot campus following approval by the district's voters of a \$350 million bond measure. The new campus is scheduled to open in 2019. Meanwhile, the Regional Transportation District began operating the R-Line, a 22 mile light rail line which runs from Aurora to Lone Tree, on February 24. The line required \$687 million worth of construction for new track. New developments along the line include a hotel, medical facilities, and a 224-unit apartment complex at the East Iliff Avenue station.

#### Figure 33 Denver Metro Nonresidential Building Permits



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

#### Northern Region

The economy in the northern region continues to grow; however this growth is being driven by activity in Larimer County while the Weld County economy faces headwinds from the impact of persistently low oil and natural gas prices. In Larimer County, growth in employment was faster than the state in 2016. In oil-dependent Weld County, employment growth in 2016 was 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 and was slightly above the statewide unemployment rate for 2016. A similar pattern emerges with residential construction, where permits have increased in Larimer County and decreased in Weld County year to date. Table 17 shows economic indicators for the northern region.

Weld and Larimer Counties								
	2012	2013	2014	2015	2016			
Employment Growth <sup>1</sup>								
Fort Collins-Loveland MSA	2.7%	3.2%	3.4%	3.9%	2.8%			
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%	2.8%			
Greeley MSA	7.8%	6.5%	4.4%	3.8%	3.4%			
State Cattle and Calf Inventory Growth <sup>3</sup>	-3.4%	-8.7%	-4.2%	-4.4%	1.2%			
Natural Gas Production Growth <sup>4</sup>	14.1%	12.5%	27.0%	44.3%	15.2%			
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%	47.9%			
Fort Collins-Loveland MSA Single Family	63.3%	31.3%	10.2%	1.3%	-2.9%			
Greeley MSA Total	54.6%	45.6%	41.1%	-3.5%	-7.8%			
Greeley MSA Single Family	58.8%	37.7%	18.5%	3.8%	-8.9%			
Nonresidential Construction Growth <sup>6</sup>								
Value of Projects	12.0%	55.0%	31.1%	24.9%	4.2%			
Square Footage of Projects	42.1%	40.4%	45.5%	14.4%	-19.8%			
Level (Thousands)	273,779	424,437	556,538	695,182	724,627			
Number of Projects	23.3%	-2.5%	66.5%	-5.8%	3.7%			
Level	159	155	258	243	252			
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			

Table 17 Northern Region Economic Indicators

MSA = Metropolitan statistical area. NA = Not available.

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

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

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

<sup>4</sup>Colorado Oil and Gas Conservation Commission. Data through September 2016.

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

<sup>6</sup>F.W. Dodge. Data through December 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. Year to date in 2016 the northern region is responsible for 89.4 percent of oil production in the state and 36.9 percent of natural gas production. Oil production in the northern region declined 7.8 percent in the first nine months of 2016 compared with the same period in 2015. While oil production has declined, natural gas on the market increased 15.2 percent as producers capture the natural gas from oil wells and place it on the market.

Figure 34 shows employment trends for Larimer and Weld counties, with the pull-out boxes highlighting growth that occurred in 2015 and 2016. In Larimer County, employment growth in 2016 was 2.8 percent, faster than statewide employment growth but slower than 2015 employment growth. 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 2016.

Regional housing construction is also diverging between Larimer and Weld Counties. In 2016, the number of housing permits in Larimer County increased 47.9 percent on a year-over-year basis. This jump is due to an increase in multi-family units amid a decline of 2.9 percent in single family homes. In Weld County, the number of single family and total residential permits both declined at rates of 8.9 percent and 7.8 percent, respectively, in 2016. Figure 35 shows the three-month moving average of residential construction permits in the northern region. The number of non-residential construction projects increased in 2016, but they are smaller projects with less square footage than those built in 2015.

Retail sales growth decelerated in both Larimer and Weld Counties in 2015, growing 6.7 percent and 1.0 percent respectively. Figure 36 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. Retail trade data for 2016 are unavailable.



Figure 34 Fort Collins – Loveland and Greeley MSA Nonfarm Employment Seasonally Adjusted Data

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

Figure 35 Northern Region Residential Building Permits



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



Source: Colorado Department of Revenue and U.S. Census Bureau. Data are through February 2016.

#### Pueblo – Southern Mountains Region

The Pueblo – Southern Mountains region includes five southern Front Range counties centered on the City of Pueblo. The region was one of the state's hardest hit during the Great Recession but in 2016 exhibited its strongest year of recovery yet. The labor market strengthened at its best rate during the current expansion. The regional housing market also improved, but residential construction remains subdued even after accounting for significant growth during the past two years. Nonresidential construction is similarly slow by historical standards. Indicators for the regional economy are presented in Table 18.



Employers added 2,100 jobs during 2016, representing both the region's largest addition and fastest growth rate since 2007. The unemployment rate fell to an average of 4.9 percent, down from 5.7 percent in 2015. Significantly, the unemployment rate dropped even as workers continued their return to the labor force. An unemployment rate above the state average and an increasing labor force population suggests that labor market slack continues to exist but is being absorbed. Diverse employment opportunities are available in health care, construction, transportation, tourism, and local government, suggesting the possibility of additional improvement in 2017. Regional employment is tracked in Figure 37, while the regional unemployment rate and labor force population are charted in Figure 38.

	2012	2013	2014	2015	2016
Employment Growth					
Pueblo Region <sup>1</sup>	-1.0%	-0.8%	1.0%	0.9%	2.3%
Pueblo MSA <sup>2</sup>	-0.2%	0.8%	1.5%	2.2%	2.1%
Unemployment Rate <sup>1</sup>	10.9%	10.1%	7.4%	5.7%	4.9%
Housing Permit Growth <sup>3</sup>					
Pueblo MSA Total	125.4%	-40.6%	-0.6%	69.4%	2.3%
Pueblo MSA Single-Family	50.9%	-8.1%	-0.6%	29.9%	29.9%
Nonresidential Construction Growth <sup>4</sup>					
Value of Projects	390.8%	-72.2%	197.9%	2.3%	-33.0%
Square Footage of Projects	717.4%	-75.3%	192.7%	14.6%	-5.4%
Level (Thousands)	109,397	30,389	90,527	92,620	62,080
Number of Projects	-31.7%	7.1%	96.7%	-22.0%	45.7%
Level	28	30	59	46	67
Retail Trade Sales Growth <sup>5</sup>	3.2%	1.5%	4.9%	2.9%	N/A

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

MSA = Metropolitan statistical area. NA = Not available.

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

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

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

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

Regional construction volumes plummeted during the Great Recession and have recovered only fractionally in the years since. However, available data suggest that the real estate market remains on an upward trend. Residential permits issued for the Pueblo Metropolitan Statistical Area (Pueblo County) increased 2.1 percent in 2016. While permits issued in 2015 included a 62 unit multifamily complex, those issued last year were entirely single family dwellings. The Pueblo Association of Realtors reports that Pueblo area home sales totaled \$426 million in 2016, the first year in which sales exceeded \$390 million since 2006. While the housing market is tightening, construction remains far below pre-recession levels. Permits for 1,179 residential units were pulled in 2006 versus just 272 last year, as shown in Figure 39.

Nonresidential construction indicators for 2016 were mixed: the number of projects permitted increased, while project value and square footage fell relative to the prior year. Key projects underway include The Center at Parkwest, an \$18 million nursing home that broke ground in 2015 and will be completed in March, and the Colorado Department of Transportation's \$28 million administrative and mechanics complex, which is set for completion at a north Pueblo site in 2018.

An increase in tourism revenue could boost 2016 retail trade figures for Fremont County, for which data are not yet available. The Colorado River Outfitters Association reports that the number of rafters on the Arkansas River grew 14 percent between 2015 and 2016, though these gains could be split between river sections in the region (Fremont County) and elsewhere (Chaffee County). Retail trade data for the region, state, and nation are indexed in Figure 40.



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



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



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



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 February 2016.

#### Colorado Springs Region

The Colorado Springs economy continued to expand through 2016, with strong growth in tourism and housing demand contributing to steady job gains. While employment in the region is dominated by the public sector, the region's private tourism, advanced technology manufacturing, and information technology industries are vibrant. Major employers include two hospitals, four institutions of higher education, four military installations, and several federally funded defense contractors specializing in aerospace, information technology,



and cybersecurity. Employers in eastern El Paso County also include dairy farmers and ranchers. Indicators for the regional economy are presented in Table 19

The Colorado Springs labor market added jobs at a rate of 2.0 percent in 2016. While job growth has been broad-based across most industries, demand for housing in the region has supported job growth in the construction industry in particular. Figure 41 shows employment trends in the region. The region's unemployment rate also improved, from an average of 4.6 percent in 2015 to an average of 3.8 percent in 2016 (Figure 42).

The improving labor market, population growth, and strong tourism growth are aiding retail sales in the region. In 2015, the region's retail trade sales increased 5.8 percent. Collections from the city's sales and lodging taxes continue to improve. According to the City of Colorado Springs, revenue from the city's general sales and use tax and lodger's tax increased 9.0 percent and 15.5 percent, respectively, in 2016. Retail trade data are not available for 2016.

	2012	2013	2014	2015	2016
Employment Growth <sup>1</sup>					
Colorado Springs MSA	1.0%	2.3%	2.2%	3.2%	2.0%
Unemployment Rate <sup>2</sup>	8.8%	7.8%	6.0%	4.6%	3.8%
Housing Permit Growth <sup>3</sup>					
Total	33.0%	17.2%	3.8%	-0.4%	41.3%
Single-Family	50.1%	19.2%	-7.7%	13.3%	19.7%
Nonresidential Construction Growth <sup>4</sup>					
Value of Projects	0.5%	6.5%	-4.2%	-1.0%	50.3%
Square Footage of Projects	-1.6%	25.2%	-12.0%	-0.2%	32.4%
Level (Thousands)	479,770	510,809	489,589	484,547	728,104
Number of Projects	-11.7%	-1.7%	-5.9%	12.6%	7.2%
Level	361	355	334	376	403
Retail Trade Sales Growth <sup>5</sup>	5.3%	4.9%	4.1%	5.8%	N/A

#### Table 19 Colorado Springs Region Economic Indicators El Paso County

MSA = Metropolitan statistical area. NA = Not available.

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

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

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

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



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





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



2005 2007 2009 2011 2013 2015

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

The number of permits issued for residential construction increased 41.3 percent in the region in 2016. Figure 43 shows that the fastest growth occurred for multi-family construction, although permits for single-family homes also increased at the rapid rate of 19.7 percent. Job gains, a declining inventory of existing homes, and rising property values are supporting growth In addition, relatively the market. in 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.

The value of nonresidential permits increased 50.3 percent in 2016. The number and square footage of projects increased 7.2 percent and 32.4 percent, respectively, indicating that more expensive projects were permitted in 2016 than the year prior. While growth in activity appears to indicate a boom in nonresidential construction, the level of activity remains subdued relative to pre-recessionary levels (Figure 44).



Figure 44

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

#### San Luis Valley Region

The six San Luis Valley counties comprise the smallest economic region in the state. The regional economy is centered on agricultural production, producing 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 20.



According to the Bureau of Labor Statistics' household employment survey, the region added jobs at a rate of 5.1 percent in 2016, the fastest rate of growth in the state. Most of this growth, however, did not occur in 2016 but instead during the second half of 2015. The region's employment base, comprised of about 21,500 jobs at the end of 2016, increased by 2,000 jobs between August 2015 and January 2016. The region's unemployment rate decreased from 5.3 percent to 4.3 percent during the same time period, as increases in the region's labor force, which were also significant, were slower than job gains. Employers in the region include government agencies, Adams State University, agriculture, food service, and the San Luis Valley Medical Center. The region's labor market trends are shown in Figures 45 and 46.

Agriculture is the most important industry in the San Luis Valley. The valley produces barley, alfalfa hay, vegetables, and quinoa, while also furnishing grazing land to livestock producers, and is the center of the potato industry in Colorado. Figure 47 shows that prices received by potato farmers in Colorado ticked up in 2016 after falling throughout 2015. According to the Colorado Potato Committee, the number of potato shipments originating in the San Luis Valley decreased 2.2 percent year-to-date through February compared with the first two months of 2016. Production data for 2016 are not yet available.

	2012	2013	2014	2015	2016
Employment Growth <sup>1</sup>	0.2%	-2.2%	2.6%	4.4%	5.1%
Unemployment Rate <sup>1</sup>	10.9%	10.5%	8.0%	5.7%	4.6%
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%	-10.4%	2.3%
Retail Trade Sales Growth <sup>4</sup>	4.4%	0.6%	3.7%	11.5%	N/A

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

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 December 2016.

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

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

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

Retail sales growth in the San Luis valley increased 11.5 percent in 2015. 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 in 2016. The number of new housing permits issued in the region increased 2.3 percent in 2016. Because the region is small and has relatively few housing permits, annual average growth is volatile.



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

Figure 47 Prices Received for Colorado Potatoes



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

Figure 46 San Luis Valley Labor Market Trends



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

#### Southwest Mountain Region

Economic activity in the five counties of the southwest mountain region continued to expand in 2016, though at slightly slower rates than in the prior two years. The diverse regional economy includes strong contributions from tourism, agriculture, and natural resource extraction industries. While summer tourism was strong, low commodity prices depressed agriculture and energy industry activity over the past year. Reflecting overall improvements in the regional economy and population growth, construction activity accelerated in 2016. Economic indicators for the region are summarized in Table 21.



In 2016, regional employment grew 1.3 percent over the year prior, marking the fifth consecutive year of job gains for the Southwest Mountain region (Figure 48, left). The region's unemployment rate continues to fall, as employment opportunities outpace growth in the labor force (Figure 48, right). The unemployment rate for the region averaged 3.6 percent in 2016, just above the statewide rate of 3.3 percent.

Unseasonably warm and dry winter weather is expected to dampen ski-related tourism in La Plata, San Juan, and Archuleta counties. Summer recreation, however, has been strong, and marked by a record number of regional tourist visits (Figure 49). Visits to Mesa Verde National Park rose 6.6 percent of the prior year, and visits to Hovenweep National Monument rose 22.1 percent over 2015 visitations.

Low crop and natural gas prices continue to depress both agricultural and energy industry activity in the region. Supply continues to outpace demand for agricultural goods, maintaining downward pressure on prices. Natural gas prices trended upward throughout 2016 from lows at the start of the year. Higher prices offer rising optimism for energy industry employment in the area.

	2012	2013	2014	2015	2016
Employment Growth <sup>1</sup>	0.7%	0.8%	3.2%	1.1%	1.3%
Unemployment Rate <sup>1</sup>	7.6%	6.6%	4.8%	4.0%	3.6%
Housing Permit Growth <sup>2</sup>	2.4%	44.7%	14.2%	-6.1%	16.8%
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%

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

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 December 2016.

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

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

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

Regional construction activity picked up in 2016 on rising demand from population and economic growth in the region. Residential construction permits rose 16.8 percent over the prior year. The value and number of nonresidential construction projects rose 7.4 percent and 12.5 percent, respectively, in 2016 over the prior year. The square footage of projects was flat.



Figure 48 Selected Indicators of Southwest Mountain Region Labor Market Activity

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



Figure 49 Recreation Visits for Mesa Verde National Park and Hovenweep National Monument

Source: National Park Service. \*Data through December 2016.

#### Western Region

The western region experienced moderate economic growth through 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 Economic indicators for the region are regional travel. summarized in Table 22.



Despite weakness in the energy sector, total employment increased 1.5 percent in the region in 2016. Employment growth in Grand Junction, the largest city in the region, grew at a more modest rate, 0.4 percent. The western region's unemployment rate was 5.1 percent in June before declining in the second half of the year to 4.0 percent in December 2016. The average unemployment rate for the region was 4.5 percent for 2016, as shown in Figure 50.

Natural gas production in the western region has declined each year since 2013. This trend has continued through September 2016, declining 8.0 percent year-to-date, as shown in Figure 51. 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 reserves in the region by 40 times in 2016. The new estimates put the Piceance basin at the second largest source of potential gas resources in the country that can be developed if natural gas prices increase.

	2012	2013	2014	2015	2016
Employment Growth					
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%	0.4%
Unemployment Rate <sup>1</sup>	9.2%	8.2%	5.9%	4.9%	4.5%
Natural Gas Production Growth <sup>3</sup>	3.5%	-8.8%	-5.3%	-12.8%	-8.0%
Housing Permit Growth <sup>4</sup>	22.4%	-1.0%	7.9%	20.0%	7.6%
Nonresidential Construction Growth <sup>4</sup>					
Value of Projects	13.2%	-24.7%	221.9%	-37.9%	-1.9%
Square Footage of Projects	26.0%	-42.0%	157.9%	-41.0%	-23.8%
Level (Thousands)	682	396	1,021	602	459
Number of Projects	16.7%	-28.6%	21.8%	-17.9%	16.4%
Level	77	55	67	55	64
Retail Trade Sales Growth <sup>5</sup>	2.3%	2.4%	4.7%	7.4%	N/A

#### Table 22 Western Region Economic Indicators

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

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

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

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

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

Figure 50 Western Region Labor Market Trends



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



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





2008 2009 2010 2011 2012 2013 2014 2015

Source: Colorado Department of Revenue and U.S. Census Bureau. Data shown as three-month 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, remains in

bankruptcy.

Regional residential construction continued to arow through 2016, as housing permits increased by 7.6 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 in 2016. The total value of nonresidential construction projects declined 1.9 percent in 2016, while the square footage declined 23.8 percent. indicating that projects have decreased in size. Recent nonresidential construction activity in the region includes a \$3.5 million amphitheater in Grand Junction approved in October 2016.

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 52, retail trade sales in the western region fell further than sales statewide during the recession and have yet to reach pre-recession levels. Retail trade data for 2016 are unavailable.

#### Mountain Region

The mountain region, comprising the twelve mountain counties north of Poncha Pass, continued to see economic growth in spite of headwinds. Tourism has remained strong, but unseasonably warm and dry winter weather has hampered outdoor recreation industries in recent months. Construction activity was mixed in 2016 and regional home prices and rents continue to rise as demand outpaces the supply of affordable housing. Economic indicators for the region are presented in Table 23.



Employment continued to improve in 2016, bringing total regional employment above the pre-recessionary peak of late 2008 (Figure 53, left). Leading this growth, tourism activity reached peak levels in 2016. To keep pace, businesses hired a rising number of employees to support service-driven tourism amenities, including resorts, lodging, restaurants, and outdoor adventure options.

The regional unemployment rate fell to 2.8 percent in 2016. By comparison, the statewide rate fell to 3.3 percent. Growing employment opportunities in the mountain region continue to outpace the growth in the labor force, causing the unemployment rate to fall (Figure 53, right).

An unseasonably warm and dry winter has put a damper on the 2016-17 ski season and may keep 2017 from another year of record tourism. Low precipitation delayed some ski area openings and record February temperatures teamed with low snowfall kept local skiiers from the slopes through much of the start of the year. Without sufficient late winter and early spring precipitation, summer outdoor recreation will also be impacted by dry conditions.

## Table 23Mountain Region Economic Indicators

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

	2012	2013	2014	2015	2016
Employment Growth <sup>1</sup>	1.0%	0.8%	3.4%	1.8%	0.5%
Unemployment Rate <sup>1</sup>	7.1%	6.1%	4.3%	3.3%	2.8%
Housing Permit Growth <sup>2</sup>	20.2%	25.4%	25.6%	-16.0%	1.2%
Nonresidential Construction Growth <sup>2</sup>					
Value of Projects	-57.4%	-8.6%	84.8%	15.1%	-40.3%
Square Footage of Projects	-29.6%	-19.6%	206.5%	-56.5%	-39.0%
Level (Thousands)	548	441	1,352	588	358
Number of Projects	11.4%	2.0%	20.0%	-36.7%	42.1%
Level	49	50	60	38	54
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 December 2016.

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

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

Regional construction activity was mixed in 2016. Residential building was relatively flat, with residential housing permits growing only 1.2 percent from the year prior (Figure 54, left). While the number of nonresidential construction projects rose, the value and square footage of projects fell (Figure 54, right). Rising housing costs are making some areas in the region unaffordable to area workers, slowing the prospects for employment growth.



Figure 53 Mountain Region Labor Market Activity

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



Figure 54 Mountain Region Construction Activity

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

#### Eastern Region

The eastern region comprises the 16 plains counties located to the east of the I-25 corridor. These counties rely on agriculture as a primary industry, with retailers and government operations placed to support farming and ranching communities. The state's agricultural economy broadly, and the eastern region in particular, struggled in 2016. Indicators for the region are presented in Table 24.



Statewide farm proprietors' income fell 54.1 percent

year-to-date through the third quarter of 2016 compared with the same period in 2015. Projecting for the entire year based on past seasonal trends, farmers and ranchers are estimated to have collected \$415.1 million in proprietors' income, less than half of the prior year total and the lowest amount since 2009. Declining receipts are a result of low prices for agricultural commodities, which are in turn a result of high crop yields and weak purchasing power among international consumers.

Figure 27 on page 54 shows the prices received for Colorado wheat, corn, and alfalfa hay. All of these commodity prices fell in 2016, and wheat and corn prices are at their lowest levels during the current economic expansion. Cattle inventory increased modestly after four consecutive years of declines, while the state's dairies continue to increase milk production. This is not an exhaustive list of agricultural indicators, as the region produces a diverse array of beets, sugar beets, soybeans, canola, bison, and other products. The U.S. Department of Agriculture will conduct its Census of Agriculture in 2017 for the first time since 2012, which should provide valuable information about how the composition of the region's principal industry has changed over time.

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

Table 24

	2012	2013	2014	2015	2016
Employment Growth <sup>1</sup>	-0.8%	-1.3%	3.0%	2.4%	3.4%
Unemployment Rate <sup>1</sup>	6.7%	6.1%	4.4%	3.5%	3.0%
Crop Price Changes <sup>2</sup>					
Wheat (\$/Bushel)	4.2%	0.8%	-11.5%	-25.6%	-27.9%
Corn (\$/Bushel)	9.2%	-2.8%	-31.0%	-13.1%	-7.7%
Alfalfa Hay (Baled, \$/Ton)	37.0%	-0.1%	-11.3%	-13.9%	-15.5%
Livestock <sup>3</sup>					
State Cattle and Calf Inventory Growth	-3.4%	-8.7%	-4.2%	-4.4%	1.2%
Milk Production	7.1%	3.5%	7.9%	3.9%	5.2%
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 December 2016.

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

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

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

The region's nonfarm employers added jobs at a rate of 3.4 percent in 2016, the best rate during the current expansion. Jobs grew more quickly than the labor force population, dropping regional unemployment to 3.0 percent, the state's second lowest rate. Employment indicators for the eastern region are presented in Figure 55. Retail trade statistics are not yet available beyond February 2016; these data are indexed against state and national retail performance in Figure 56.

The State Demographer projects Elbert County to add an average of 5.9 percent to its population annually through 2020, the fastest projected growth rate in the state by a wide margin. Housing development in the southeast Denver exurbs near Elizabeth is projected to make Elbert County the most populous in the region by next year, overtaking Morgan County. Rapid growth in Elbert County over the next few years may have an outsized influence on the statistics available for this sparsely populated region.



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





Source: Colorado Department of Revenue. Data shown as a three-month moving averages. Data are seasonally adjusted and are through February 2016.

#### **National Economic Indicators**

Calendar Years	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016
GDP (\$ <i>Billions</i> ) <sup>1</sup>	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	18,567.0
Percent Change	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%	2.9%
Real GDP (\$ <i>Billions</i> ) <sup>1</sup>	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	16,660.0
Percent Change	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%	1.6%
Unemployment Rate <sup>2</sup>	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%	4.9%
Inflation <sup>2</sup>	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%	1.3%
10-Year Treasury Note <sup>3</sup>	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%	1.8%
Personal Income (\$ <i>Billions</i> ) <sup>1</sup>	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	16,011.8
Percent Change	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%	3.6%
Wage & Salaries (\$ <i>Billions</i> ) <sup>1</sup>	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	8,189.4
Percent Change	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%	4.3%
Nonfarm Employment ( <i>Millions</i> ) <sup>2</sup>	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	144.3
Percent Change	-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%	1.8%

Sources <sup>1</sup>U.S. Bureau of Economic Analysis. Real gross domestic product (GDP) is adjusted for inflation. Personal income and wages and salaries not adjusted for inflation. <sup>2</sup>U.S. Bureau of Labor Statistics. Inflation shown as the year-over-year change in the consumer price index for all urban areas (CPI-U). <sup>3</sup>Federal Reserve Board of Governors.

#### **Colorado Economic Indicators**

Calendar Years	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016
Nonfarm Employment ( <i>Thousands</i> ) <sup>1</sup> Percent Change	2,152.6 -1.5%		2,225.9 2.1%	2,279.7 2.4%	2,331.1 2.3%	2,350.6 0.8%	2,245.5 -4.5%		2,259.0 1.7%	2,311.4 2.3%	2,380.6 3.0%	2,461.6 3.4%		2,598.3 2.3%
Unemployment Rate <sup>1</sup>	6.0	5.5	4.9	4.2	3.8	4.9	7.6	8.8	8.3	7.8	6.6	4.9	3.8	3.3
Personal Income (\$ <i>Millions</i> ) <sup>2</sup> Percent Change	\$159,103 1.8%	\$164,457 3.4%	\$176,129 7.1%	\$189,493 7.6%	\$201,743 6.5%	\$208,608 3.4%	\$198,082 -5.0%	\$201,570 1.8%	\$219,861 9.1%	\$234,006 6.4%	\$246,648 5.4%	\$266,535 8.1%	\$277,732 4.2%	NA
Per Capita Personal Income (\$) <sup>2</sup> Percent Change	\$35,131.8 0.9%	\$35,946.7 2.3%	\$38,025.4 5.8%	\$40,143.1 5.6%	\$41,996.0 4.6%	\$42,662.5 1.6%	\$39,838.0 -6.6%	\$39,929.0 0.2%	\$42,946.0 7.6%	\$45,073.0 5.0%		\$49,768.0 6.4%	\$50,899.00 2.3%	NA
Wage & Salary Income (\$ <i>Millions</i> ) <sup>2</sup> Percent Change	\$89,281 1.4%	\$93,569 4.8%	\$98,787 5.6%	\$105,664 7.0%	\$112,506 6.5%		\$112,297 -3.8%		\$118,558 4.2%	\$125,014 5.4%	\$129,597 3.7%	\$138,701 7.0%	\$146,574 5.7%	NA
Retail Trade Sales (\$ <i>Millions</i> ) <sup>3</sup> Percent Change	\$58,689 -0.3%	\$62,288 6.1%	\$65,492 5.1%	\$70,437 7.5%	\$75,329 6.9%	\$74,760 -0.8%	\$66,345 -11.3%	\$70,738 6.6%	\$75,548 6.8%	\$80,073 6.0%	\$83,569 4.4%	\$90,653 8.5%	\$94,920 4.7%	NA
Residential Housing Permits <sup>4</sup> Percent Change	39,569 -17.3%	46,499 17.5%	45,891 -1.3%	38,343 -16.4%	29,454 -23.2%	18,998 -35.5%	9,355 -50.8%	11,591 23.9%	13,502 16.5%	23,301 72.6%	27,517 18.1%	28,698 4.3%	31,871 11.1%	38,393 20.5%
Nonresidential Construction ( <i>Millions</i> ) <sup>5</sup> Percent Change	\$2,686 -4.2%		\$4,275 31.7%	\$4,641 8.6%	\$5,259 13.3%	\$4,114 -21.8%	\$3,354 -18.5%	\$3,147 -6.2%	\$3,923 24.7%	\$3,695 -5.8%	\$3,624 -1.9%	\$4,316 19.1%	\$4,846 12.3%	\$5,641 16.4%
Denver-Boulder-Greeley Inflation <sup>1</sup>	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%	2.8%
Population ( <i>Thousands, July 1</i> ) <sup>4</sup> Percent Change	4,529 0.9%	4,575 1.0%	4,632 1.2%	4,720 1.9%	4,804 1.8%	4,890 1.8%	4,972 1.7%	5,049 1.5%	5,118 1.4%	5,190 1.4%	5,268 1.5%	5,350 1.6%	5,449 1.9%	5,541 1.7%

NA = Not available.

<sup>1</sup>U.S. 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>U.S. 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.