FOCUS COLORADO:
ECONOMIC AND REVENUE FORECAST

COLORADO LEGISLATIVE COUNCIL STAFF
ECONOMICS SECTION

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Photograph captures Sand Beach area in Rocky Mountain National Park, September 2016.

HIGHLIGHTS

Household spending is expected to support modest growth in the **U.S. and Colorado economies** through 2016 and 2017. A tight labor market and modest wage pressure are signaling full employment. However, a pullback in business investment and lower exports in the midst of a weak global economy suggest that the rate of growth will be subdued. Should the global economy weaken further, a prolonged lapse in business confidence could trigger economic contraction. However, a gradual improvement in the international economy is expected to rebuild demand and prices, motivating continued growth.

General Fund revenue available to the budget came in $70.2 million higher than expected in FY 2015-16, primarily because of stronger than expected individual income taxes. Expectations for General Fund revenue available to the budget were reduced by $61.9 million and $121.6 million in FY 2016-17 and FY 2017-18, respectively. Reduced expectations for sales and use tax revenue accounted for most of the change.

Preliminary data indicate that the General Fund ended **FY 2015-16** with a surplus of $9.5 million in excess of a 5.0 percent reserve. Pursuant to Senate Bill 16-218, the General Fund reserve was adjusted to reflect diversions totaling $56.8 million from the General Fund to cover severance tax refunds accrued into FY 2015-16.

In **FY 2016-17**, General Fund revenue is expected to be $329.6 million, or 3.0 percent, short of the amount needed to fully fund the budget and a 6.5 percent reserve. This amount is net of additional Senate Bill 16-218 diversions from the General Fund to cover severance tax refunds estimated at 36.5 million.

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

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EXECUTIVE SUMMARY

This report presents the budget outlook based on current law and the September 2016 General Fund revenue, cash fund revenue, and TABOR forecasts. In also includes summaries of expectations for the U.S. and Colorado economies, summaries of current economic conditions in nine regions around the state, and a special issue about predicting the next recession.

General Fund and TABOR Outlook

FY 2015-16. Based on preliminary data, the General Fund ended FY 2015-16 with $9.5 million more than was budgeted to be spent and saved in the reserve. Revenue fell short of the Referendum C cap by $26.7 million.

FY 2016-17. The General Fund is expected to end FY 2016-17 with a reserve equal to 3.1 percent of appropriations, $329.6 million lower than the budgeted 6.5 percent reserve. This shortfall is larger than expected in the June forecast because of lower expectations for sales and use tax revenue and increased expectations for the amount of General Fund revenue required during both FY 2015-16 and FY 2016-17 to address severance tax refunds pursuant to Senate Bill 16-218.

Revenue subject to TABOR is expected to fall short of the Referendum C cap by $209.4 million.

*More information about the **General Fund budget overview** begins on page 5 and is summarized in Table 1 on page 6.*

*More information about the state's **TABOR outlook** begins on page 13 and is summarized in Table 5 on page 16.*

*The **General Fund revenue** forecast begins on page 19 and is summarized in Table 8 on page 23.*

FY 2017-18 — Unbudgeted. Assuming the $329.6 million shortfall in FY 2016-17 is addressed by reducing the required reserve, revenue will fall short of the amount required to maintain the same level of appropriations in FY 2017-18 as is currently budgeted for FY 2016-17 by $65.0 million, or 0.6 percent. This figure is net of full Senate Bill 09-228 transfers to the Highway Users Tax Fund and the Capital Construction Fund, and a TABOR refund obligation of $82.3 million.

Cash Fund Revenue

Preliminary data indicate that cash fund revenue subject to TABOR totaled $2.99 billion in FY 2015-16. This revenue is expected to fall 4.2 percent to $2.87 billion in FY 2016-17. Increases in transportation-related and severance tax revenue will be offset by declines in Hospital Provider Fee and other cash fund revenue in FY 2016-17. Total cash fund revenue subject to TABOR will increase 11.2 percent to $3.19 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 3.4 percent to $3.30 billion in FY 2018-19, as severance tax revenue grows with increased oil and gas activity.

*The **cash fund revenue forecasts** begin on page 25. Forecasts for state revenue subject to TABOR are summarized on page 26.*

Economic Outlook

Continued expansion is expected in both the U.S. and Colorado economies through the forecast period. Reliable contributions from household and consumer spending are driving modest growth in U.S. gross domestic product amid headwinds brought on by restrained business investment and weak exports. Low unemployment rates and slowing job growth are signaling full employment, which will contribute to upward wage pressure as labor becomes more difficult to find.

A pullback in business investment suggests subdued future growth. The private sector is exercising restraint while labor costs rise, commodity prices remain low, and the global economy stagnates. To the extent that these trends continue, a prolonged lapse in business confidence could trigger economic contraction. However, a gradual improvement in the international economy is expected to rebuild demand and prices, motivating continued economic expansion.

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

*Special to this edition of Focus Colorado, a discussion about **predicting the next recession** begins on page 55.*

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

Predicting the Next Recession

Current economic indicators do not provide enough evidence to include a recession within the forecast period, which ends in FY 2018-19. However, economic uncertainty and the risk of recession are rising. Most economic forecasters do not acknowledge a recession until it is too late to adequately plan for it, primarily because the evidence needed to forecast a recession and its severity usually is not available until after the recession is already underway. This chapter is intended to begin a conversation about why Legislative Council Staff believes the risk of recession is rising, the reasons why it is difficult to predict the likelihood and timing of a recession with any precision, and the potential consequences to General Fund revenue collections should a recession occur.

GENERAL FUND BUDGET OVERVIEW

Table 1 on page 6 presents the General Fund overview based on current law. Tables 3 and 4 on pages 10 and 11 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 information on revenue to the State Education Fund, the outlook for Senate Bill 09-228 transfers to capital construction and transportation, and the availability of tax benefits dependent on the collection of sufficient General Fund revenue.

FY 2015-16. Based on preliminary data, the General Fund ended FY 2015-16 with $9.5 million more than was budgeted to be spent or saved in the reserve. Revenue available to the budget came in $70.2 million, or 0.7 percent, higher than forecast in June due primarily to stronger than expected individual income taxes. Revenue subject to TABOR fell short of the Referendum C cap by $26.7 million.

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

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

FY 2016-17. General Fund revenue is expected to be $329.6 million, or 3.0 percent lower than the amount budgeted to be spent or retained in the reserve in FY 2016-17. The remaining reserve, equal to 3.1 percent of General Fund appropriations, is $12.2 million lower than half of the required reserve. Expectations for General Fund revenue net of changes to marijuana tax collections fell by $61.9 million relative to the June forecast. Most of the decrease resulted from lower expectations for sales, use, and individual income tax collections. Revenue subject to TABOR is expected to fall short of the Referendum C cap by $209.4 million.

This shortfall incorporates the impact of an estimated $36.5 million diversion of income taxes from the General Fund to cover the costs of severance tax refunds pursuant to Senate Bill 16-218.

In FY 2015-16, the General Fund reserve ended the year with $9.5 million more than the budgeted amount. This figure is preliminary and subject to change.

In FY 2016-17, revenue is expected to be sufficient to allow for a 3.1 percent reserve, $329.6 million lower than the budgeted 6.5 percent reserve.

What Happens When There's a Budget Deficit?

A budget deficit in FY 2016-17 can be addressed by legislative action during the 2017 regular legislative session.

During the legislative interim and if the forecast prepared by the Office of State Planning and Budgeting projects revenue to be insufficient to fund half of the required reserve for the current year, the Governor must reduce General Fund spending to preserve at least half of the reserve. If the Governor reduces General Fund expenditures by at least 1.0 percent to meet that requirement, he or she is also authorized to transfer moneys from the Capital Construction Fund into the General Fund. These changes may be codified by the General Assembly during the following legislative session.

Table 1
General Fund Overview
Dollars in Millions

	Funds Available	FY 2015-16 Preliminary	FY 2016-17 Estimate	FY 2017-18 Estimate	FY 2018-19 Estimate
1	Beginning Reserve	$709.2	$473.4	$305.2	*
2	General Fund Revenue	$9,968.4	$10,300.9	$10,883.0	$11,494.6
3	Transfers from Other Funds *(Table 4)*	24.1	45.5	17.7	18.8
4	**Total Funds Available**	**$10,701.8**	**$10,819.9**	**$11,205.9**	*****
5	Percent Change	3.9%	1.1%	3.6%	*****
	Expenditures	Budgeted	Budgeted	Estimate	Estimate
6	General Fund Appropriations Subject to Limit	$9,335.6	$9,813.2	*	*
7	TABOR Refund Obligation Under Art. X, §20, (7)(d)[1]	0.0	0.0	82.3	189.3
8	Release of TABOR Refund Obligation Under Art. X, §20, (3)(c)[2]	(58.0)	NA	NA	NA
9	Rebates and Expenditures *(Table 3)*	281.2	299.6	314.4	333.1
10	Transfers to Other Funds *(Table 4)*[3]	173.9	134.0	74.5	73.1
11	Transfers to the State Education Fund Pursuant to SB 13-234	25.3	25.3	25.3	25.0
12	Transfers for Highway Construction	199.2	158.0	217.7	114.9
13	Transfers to the Capital Construction Fund	271.1	84.5	108.8	57.5
14	**Total Expenditures**	**$10,228.4**	**$10,514.6**	*	*
15	Percent Change	5.9%	2.8%	*	*
16	Accounting Adjustments	*	*	*	*
	Reserve	Budgeted	Budgeted	Estimate	Estimate
17	Year-End General Fund Reserve	$473.4	$305.2	*	*
18	Year-End Reserve as a Percent of Appropriations	5.1%	3.1%	*	*
19	Statutorily Required Reserve[4]	463.9	634.9	*	*
20	**Amount in Excess or (Deficit) of Statutory Reserve**	**$9.5**	**($329.6)**	*	*
21	Excess Reserve as a Percent of Expenditures	0.1%	-3.1%	*	*
	Amount Available in FY 2017-18 Relative to FY 2016-17 Expenditures[5]			Estimate	Estimate
22	Amount in Excess or (Deficit) of Statutory Reserve			($65.0)	*
23	As a Percent of Prior-Year Expenditures			-0.6%	*
	Addendum	Preliminary	Estimate	Estimate	Estimate
24	Percent Change in General Fund Appropriations	5.3%	5.1%	*	*
25	5% of Colorado Personal Income Appropriations Limit	$12,322.4	$13,086.8	$13,755.4	$14,456.9
26	Transfers to State Education Fund per Amendment 23	$522.6	$544.9	$577.7	$608.7

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

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

[2]*$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.*

[3]*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 $36.5 million for FY 2016-17.*

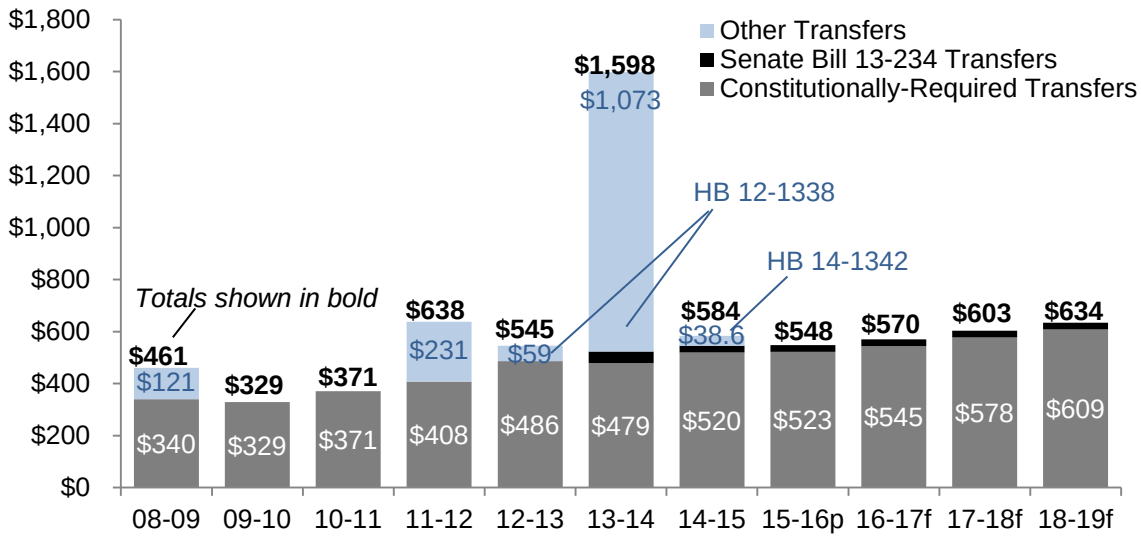
[4]*Pursuant to Senate Bill 15-251, appropriations to fulfill the state's obligations of certain certificates of participation are excluded for purposes of calculating the statutory reserve requirement. In addition, the FY 2015-16 statutory reserve was reduced by $58.6 million pursuant to Senate Bill 16-218.*

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

FY 2017-18 — Unbudgeted. Because a budget has not yet been enacted for FY 2017-18, lines 22 and 23 of Table 1 show the amount of money available in FY 2017-18 relative to the amount budgeted to be spent or saved *this* year, in FY 2016-17. Assuming the $329.6 million shortfall in FY 2016-17 is addressed by reducing the reserve and is therefore carried forward into FY 2017-18, revenue is expected to fall short of the amount required to maintain appropriations at the same level budgeted for this year by $65.0 million, or 0.6 percent, in FY 2017-18. This figure is net of full Senate Bill 09-228 transfers to capital construction and transportation and a TABOR refund obligation of $82.3 million.

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

Figure 1
Revenue to the State Education Fund
Dollars in Millions

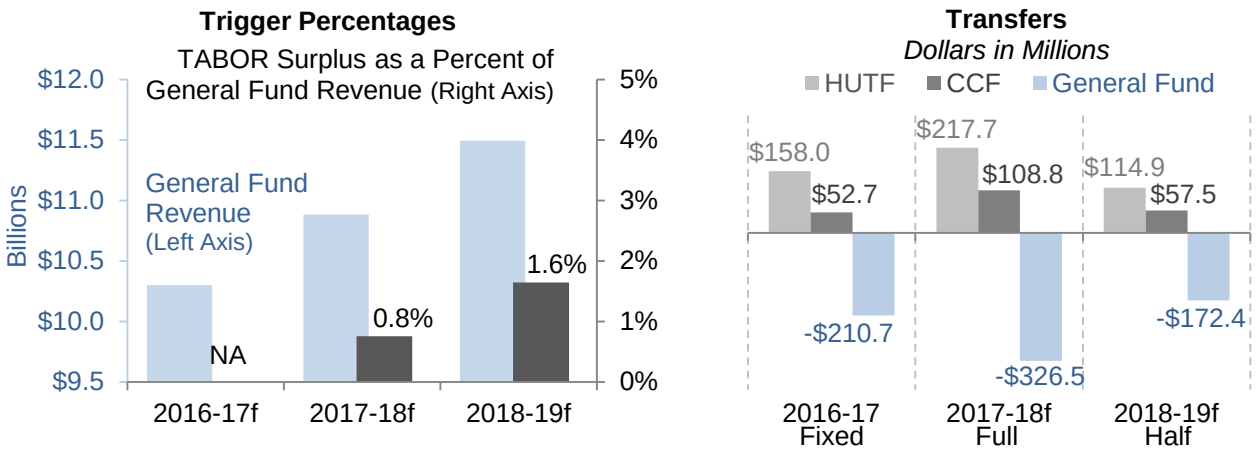


Source: Colorado State Controller's Office through FY 2015-16 and Legislative Council Staff from FY 2016-17 through FY 2018-19. "p" indicates Preliminary; "f" Forecast.

Senate Bill 09-228 transfers. Colorado personal income increased 6.2 percent in 2014, triggering the first year of the five-year block of infrastructure transfers under Senate Bill 09-228 in FY 2015-16. House Bill 16-1416 fixed Senate Bill 09-228 transfers in FY 2015-16 and FY 2016-17 to set amounts. The Highway Users Tax Fund received $199.2 million in FY 2015-16 and will receive $158.0 million in FY 2016-17. The Capital Construction Fund received $49.8 million in FY 2015-16 and will receive $52.7 million in FY 2016-17.

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

Figure 2
Projected Senate Bill 09-228 Transfers and General Fund Impacts



**House Bill 16-1416 fixed these transfers to the amounts shown 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.*

Figure 2 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 a TABOR refund obligation of $82.3 million, or 0.8 percent of General Fund revenue in FY 2017-18, indicating full transfers in FY 2017-18. In FY 2018-19, the TABOR refund obligation is expected to be 1.6 percent of General Fund revenue, indicating halved transfers. However, small margins of error in the forecasts for General Fund revenue and the TABOR surplus 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 no longer available beginning in July 2016. In addition, the historic property preservation tax credit will no longer be available in tax year 2016 and is not expected to be available through at least tax year 2018. Table 2 lists and describes the availability of these tax policies.

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

Tax Policy	Forecast that Determines Availability	Tax Policy Availability
Historic Property Preservation Income Tax Credit (Section 39-22-514, C.R.S.) *Revenue reduction of less than $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 year 2016, and not expected to be available in tax year 2017 or 2018. Repealed tax year 2020.
Cleanroom Machinery Sales and Use Tax Exemption (Section 39-26-722, C.R.S.) *Revenue reduction of less than $500,000 per year*	If the June forecast indicates sufficient revenue for the fiscal year that is about to end, the exemption will become available in July.	Not available July 2016 through June 2018. Repealed July 1, 2018.

Table 3
General Fund Rebates and Expenditures
Dollars in Millions

Category	Estimate FY 2015-16	Estimate FY 2016-17	Estimate FY 2017-18	Estimate FY 2018-19
Senior and Veterans Property Tax Exemptions	$127.1	$138.7	$147.9	$157.5
Percent Change	8.8	9.1	6.6	6.5
Cigarette Rebate	10.5	10.9	10.8	10.7
Percent Change	-14.2	3.1	-0.9	-1.0
Old-Age Pension Fund	108.3	112.2	117.2	122.9
Percent Change	8.9	3.6	4.4	4.9
Aged Property Tax and Heating Credit	9.3	6.7	7.0	7.2
Percent Change	64.9	-28.1	4.0	2.6
Older Coloradans Fund	10.0	10.0	10.0	10.0
Percent Change	-0.1	0.0	0.0	0.0
Interest Payments for School Loans	1.2	3.6	5.0	6.9
Percent Change	84.1	187.7	38.8	39.8
Fire and Police Pensions	3.7	4.2	4.2	4.3
Percent Change	-11.9	14.2	1.0	1.0
Amendment 35 Distributions	0.9	0.9	0.9	0.9
Percent Change	1.7	-0.2	-0.3	-0.3
Marijuana Sales Tax Transfer to Local Governments	10.1	12.4	11.5	12.8
Percent Change	70.9	23.2	-7.6	11.4
TOTAL REBATES & EXPENDITURES	**$281.2**	**$299.6**	**$314.4**	**$333.1**

Totals may not sum due to rounding.

Table 4
Cash Fund Transfers
Dollars in Millions

Transfers to the General Fund		2015-16	2016-17	2017-18	2018-19
HB 10-1325	Natural Resource Damage Recovery Fund	$0.2	$0.2		
SB 13-133	Limited Gaming Fund	15.5	16.6	17.6	18.7
HB 15-1150	Severance Tax Operational — Mine Reclamation	0.1	0.1	0.1	0.1
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		
HB 16-1409	Unclaimed Property Trust Fund	8.0			
HB 16-1413	Water Quality Improvement Fund		1.2		
Total Transfers to the General Fund		**$24.1**	**$45.5**	**$17.7**	**$18.8**

Transfers from the General Fund		2015-16	2016-17	2017-18	2018-19
HB 12-1315	Clean Renewable Energy Fund	$1.6	$1.6		
HB 13-1001 & HB 14-1011	Advanced Industries Acceleration Fund	5.0	5.0		
HB 13-1193	Advanced Industries Export Acceleration Fund	0.3	0.3	0.3	
SB 14-215	Marijuana Tax Cash Fund	57.2	70.5	65.2	72.6
HB 14-1016[1]	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[2]	Veterans Grant Program Fund *(conditional)*				
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	36.5		
Total Transfers from the General Fund		**$173.9**	**$134.0**	**$74.5**	**$73.1**
Net General Fund Impact		**($149.8)**	**($88.5)**	**($56.7)**	**($54.3)**

[1]*This transfer is dependent on the receipt of at least $200,000 in gifts, grants, and donations by the relevant contractor.*

[2]*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 5 on page 16 and illustrated in Figure 3, which also provides a ten-year history of the TABOR limit base and the Referendum C cap.

The state did not collect a TABOR surplus in FY 2015-16, and no TABOR refund will be available on returns for tax year 2016. Preliminary, unaudited FY 2015-16 revenue reports indicate that the state revenue subject to TABOR totaled $12,904.0 million, falling short of the Referendum C cap by $26.7 million.

For FY 2016-17, state revenue subject to TABOR is expected to fall short of the Referendum C cap by $209.4 million. For FY 2017-18 and FY 2018-19, state revenue is expected to exceed the Referendum C cap, prompting **TABOR refunds of $82.3 million in FY 2018-19** and **$189.3 million in FY 2019-20**.

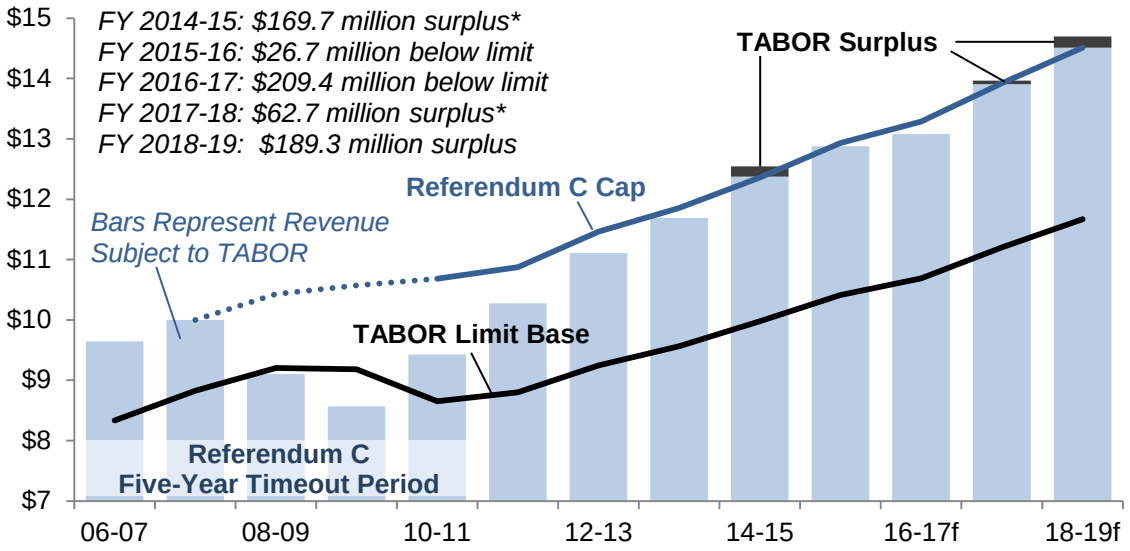
This forecast is based on the certification of TABOR revenue for FY 2015-16 released by the Office of the State Controller on September 1, 2016. The Office of the State Controller released a recertification of FY 2015-16 TABOR revenue on September 15, 2016. The recertification reduced the amount of cash fund revenue subject to TABOR in FY 2015-16 by $23.2 million. This change will not impact the state's TABOR or General Fund budget situation in FY 2015-16 or FY 2016-17. However, the out year forecasts for cash fund revenue subject to TABOR, and therefore the TABOR refund obligation, may have changed had the forecast been adjusted for the recertification. Because there was inadequate time to do this, the recertification was not incorporated into this forecast. The change in out year cash fund revenue forecasts would have been small relative to normal forecasting error.

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

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

Referendum C allowed the state to spend all revenue collected above the limit during a five-year timeout period covering FY 2005-06 through FY 2009-10. Beginning in FY 2010-11, Referendum C allows the state to retain revenue collected above the TABOR limit base up to a capped amount. The cap is based on the highest amount of state revenue collected during a single fiscal year during the five-year timeout period and adjusted each year thereafter by inflation and population growth. Because revenue collections during the timeout period peaked in FY 2007-08, that year became the base for the cap. The cap is adjusted annually for 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.

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



Source: Office of the State Controller and Legislative Council Staff.
**Refund amounts for FY 2014-15 and FY 2017-18 differ from surplus amounts because they include under-refunds of and other adjustments to 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 overrefunds and underrefunds of previous TABOR surpluses. Most recently, revenue exceeded the Referendum C cap by $169.7 million in FY 2014-15, prompting TABOR refunds on returns for tax year 2015. The amount of the next TABOR refund is expected to differ from next TABOR surplus for two reasons related to the underrefund of the FY 2014-15 surplus as described below.

Adult Dental Fund transfer. About $19.6 million was transferred to the Adult Dental Fund from the TABOR-exempt Unclaimed Property Fund during FY 2014-15. This amount was determined to be subject to TABOR after refund amounts were set on 2015 tax forms. As a result, this amount is assumed to represent an underrefund of the FY 2014-15 surplus and is expected to be refunded along with the FY 2017-18 surplus unless a surplus is collected in FY 2016-17.

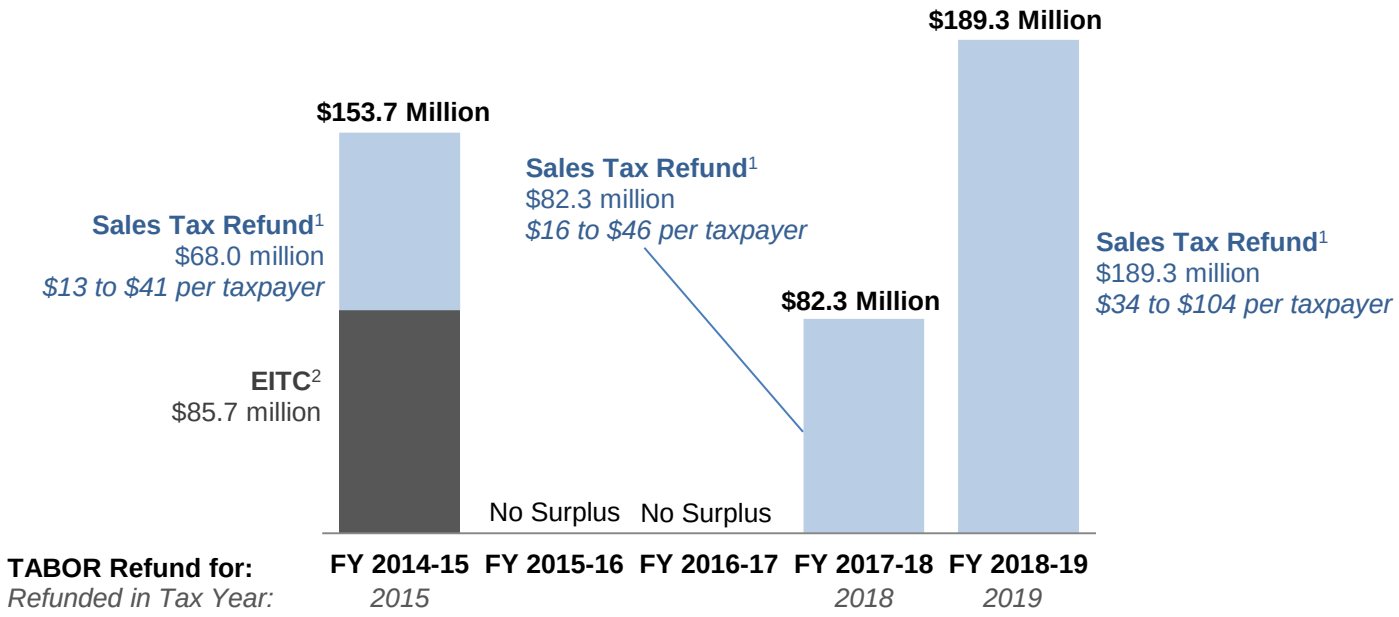
Refunds issued for tax year 2015. Preliminary tax data indicate that TABOR refunds issued on 2015 tax forms fell short of the amount allocated for refunds in the state budget. The exact amount by which the FY 2014-15 surplus was underrefunded for this reason is unknown at this time. For the purposes of this document, underrefunds of the FY 2014-15 surplus for reasons unrelated to the Adult Dental Fund transfer are not expected to affect the state's future refund obligations, since a corresponding amount of money has already been restricted in the state's General Fund for this purpose.

TABOR refund mechanisms. Figure 4 and Table 6 show how state law requires TABOR surplus amounts to be refunded. Current law contains two refund mechanisms: a sales tax refund and a temporary cut in the income tax rate from 4.63 percent to 4.50 percent. The size of the TABOR refund determines which refund mechanisms are available each year. A separate Earned Income Tax Credit refund mechanism was used on returns for tax year 2015, and is now available as a permanent state income tax credit beginning in tax year 2016.

The TABOR surplus expected in FY 2017-18 will be refunded in FY 2018-19 on income tax returns for tax year 2018. An estimated **$82.3 million** will be refunded using the six-tier sales tax refund mechanism. State law requires the sales tax refund to be distributed among six income tiers as it was distributed in tax year 1999, following the FY 1998-99 surplus. As shown in Table 6, taxpayers filing single returns with adjusted gross incomes of up to $38,700 will receive refunds of $16, while taxpayers with adjusted gross incomes of at least $219,000 will receive refunds of $46. Taxpayers filing joint returns will receive twice these amounts.

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 **$189.3 million** will be refunded using the six-tier sales tax refund mechanism. Taxpayers filing single returns will receive between $34 and $104 depending on their income, and joint filers will receive twice these amounts. Refund mechanisms for TABOR surpluses expected through FY 2018-19 are shown in Figure 4.

Figure 4
TABOR Refund Estimates



[1]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.

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

Table 5
TABOR Limit and Retained Revenue
Dollars in Millions

		Preliminary FY 2015-16	Estimate FY 2016-17	Estimate FY 2017-18	Estimate FY 2018-19
	TABOR Revenue				
1	General Fund[1]	$9,894.2	$10,209.2	$10,797.5	$11,400.4
2	Cash Funds[1]	$3,009.8	$2,868.1	$3,189.7	$3,298.2
3	Total TABOR Revenue	**$12,904.0**	**$13,077.3**	**$13,987.2**	**$14,698.7**
	Revenue Limit				
4	Allowable TABOR Growth Rate	4.4%	3.1%	4.8%	4.2%
5	Inflation (*from Prior Calendar Year*)	2.8%	1.2%	2.9%	2.4%
6	Population Growth (*from Prior Calendar Year*)	1.6%	1.9%	1.9%	1.8%
7	TABOR Limit Base	$10,441.7	$10,720.6	$11,235.2	$11,707.0
8	Voter Approved Revenue Change (Referendum C)	$2,462.3	$2,356.8	$2,689.3	$2,802.3
9	Total TABOR Limit / Referendum C Cap	$12,930.7	$13,286.7	$13,924.5	$14,509.3
10	TABOR Revenue Above (Below) Referendum C Cap[4]	**($26.7)**	**($209.4)**	**$62.7**	**$189.3**
	Retained/Refunded Revenue				
11	Revenue Retained under Referendum C[2]	$2,462.3	$2,356.8	$2,689.3	$2,802.3
12	Total Available Revenue (*Fiscal Year Spending*)	$12,904.0	$13,077.3	$13,924.5	$14,509.3
13	Revenue to Be Refunded to Taxpayers[3,4]	**$0.0**	**$0.0**	**$82.3**	**$189.3**
14	TABOR Reserve Requirement	$387.1	$392.3	$417.7	$435.3

Totals may not sum due to rounding.

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

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

[3]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.

[4]Revenue to be refunded (line 13) differs from revenue in excess of the Referendum C cap (line 10) in FY 2017-18. These amounts represent under-refunds of pre-Referendum C surpluses and other errors discovered in subsequent years that would have added to the last refund.

Table 6
Estimated Average Taxpayer TABOR Refunds

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

FY 2017-18 Refund Obligation, Tax Year 2018 Forecast

	Single Filers			Joint Filers		
Adjusted Gross Income	Six-Tier Sales Tax	Income Tax Rate Cut	Total	Six-Tier Sales Tax	Income Tax Rate Cut	Total
Up to $38,700	$16	$0	$16	$32	$0	$32
$38,700 to $82,700	21	-	21	42	-	42
$82,700 to $128,800	24	-	24	48	-	48
$128,800 to $175,000	27	-	27	54	-	54
$175,000 to $219,000	29	-	29	58	-	58
$219,000 and Up	46	-	46	92	-	92

FY 2018-19 Refund Obligation, Tax Year 2019 Forecast

	Single Filers			Joint Filers		
Adjusted Gross Income	Six-Tier Sales Tax	Income Tax Rate Cut	Total	Six-Tier Sales Tax	Income Tax Rate Cut	Total
Up to $39,600	$34	$0	$34	$68	$0	$68
$39,600 to $84,800	46	-	46	92	-	92
$84,800 to $132,200	53	-	53	106	-	106
$132,200 to $179,500	60	-	60	120	-	120
$179,500 to $224,700	65	-	65	130	-	130
$224,700 and Up	104	-	104	208	-	208

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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 23 summarizes preliminary General Fund revenue collections for FY 2015-16 and projections for FY 2016-17 through FY 2018-19.

In FY 2015-16, General Fund revenue grew 1.7 percent over the prior fiscal year, according to preliminary data. Following robust growth in FY 2014-15, collections moderated with weak corporate profits, modest wage pressures, and a slowdown in consumer spending. In FY 2016-17, growth in General Fund revenue will remain muted, as these trends persist. General Fund revenue, is projected to grow at a more moderate pace in FY 2017-18 and FY 2018-19, consistent with statewide inflation and population growth.

Revenue available to the budget (which nets out changes in expectations for marijuana taxes) in FY 2015-16 came in $70.2 million, or 0.7 percent, higher than forecast in June due primarily to stronger than expected individual income taxes. For FY 2016-17, the outlook for General Fund revenue was reduced slightly, on lower expectations for sales and use tax revenue. For FY 2017-18, the forecasts for all major sources of revenue were reduced. Relative to the June forecast, revenue available to the budget is expected to come in $61.9 million lower in 2016-17, and $121.6 million lower in FY 2017-18. Additional information regarding the main sources of revenue to the General Fund is provided below.

2016 legislative impacts. Legislation passed during the 2016 legislative session is expected to have only a minor impact on General Fund revenue, as shown in Table 7 on page 22. Triggered tax expenditures will have a larger impact.

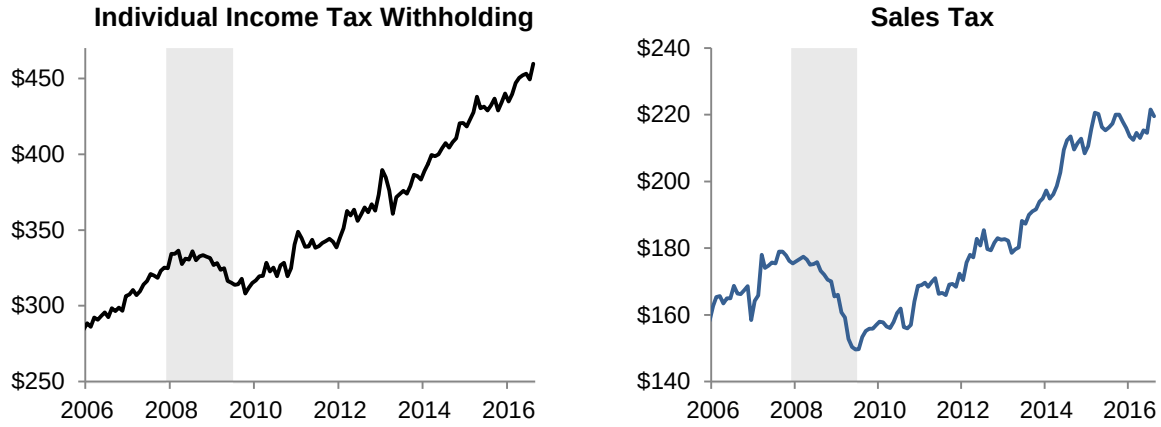
Triggered tax expenditures. The FY 2014-15 TABOR surplus triggered the availability of the Earned Income Tax Credit (EITC) as a TABOR refund in tax year 2015 and a permanent tax credit beginning in tax year 2016. The Colorado EITC allows low- and middle-income Colorado taxpayers to claim a tax credit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

Individual income taxes. Individual income taxes are the state's largest source of tax revenue, representing almost 66 percent of gross General Fund revenue in FY 2015-16. Growth in individual income tax collections slowed to 2.8 percent in FY 2015-16. Income taxes withheld from employee paychecks comprise the largest share of individual income tax collections. Withholding payments were soft though most of FY 2015-16, reflecting low wage pressures across most industries (Figure 5, at left). Similarly, growth in estimated payments, which include income taxes on capital gains earnings, mineral royalties, and certain non-corporate business income, saw only modest growth in FY 2015-16. These trends reflect a lackluster stock market performance, the pull-back in oil and gas activity, and slower economic growth. Triggered income tax credits also dampened growth in FY 2015-16, reducing revenue by an estimated $79.6 million.

In FY 2016-17 and FY 2017-18, individual income tax revenue is expected to increase 4.2 percent and 6.0 percent, respectively. Moderate wage growth and modest growth in capital gains earnings will more than offset revenue reductions from triggered tax credits. Relative to

the June forecast, expectations for individual income tax collections were reduced slightly. Projections were revised down by $2.5 million in FY 2016-17 and $56.4 million in FY 2017-18.

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



Source: Colorado Department of Revenue. Data seasonally adjusted by Legislative Council Staff using the Census x12 method. Data are shown on a cash-accounting basis as three-month moving averages. Data are through August 2016. Data for July and August 2016 are preliminary.

Sales taxes. The 2.9 percent state sales tax accounts for slightly more than a quarter of gross General Fund revenue, though this share is decreasing. State sales tax collections totaled $2.7 billion in FY 2015-16, 0.2 percent lower than estimated in the June forecast. While sales tax receipts reached a new all-time high, collections grew by just 1.3 percent, the weakest year-over-year performance since FY 2009-10. On an inflation-adjusted, per capita basis, sales tax collections declined an estimated 2.1 percent over the prior year—meaning that sales taxes paid per Coloradan declined, when holding the value of prices constant.

A number of factors depressed sales tax gains in FY 2015-16, including demographic change, modest wage growth, and the strong U.S. dollar. As an increasing share of the population ages and retires, consumers are spending less on goods and more on services, which are generally not subject to the state sales tax. Wage gains have been modest and enjoyed narrowly by skilled workers in high demand industries, such as construction and information technology. The strong U.S. dollar has made foreign imports cheaper. Along with low commodity prices for oil, metals, and agricultural products, this trend is depressing sales taxes because the price of many good have fallen. Further, foreign tourists traveling to Colorado are spending less because U.S. goods are relatively expensive.

Based on expectations that these headwinds will continue, the sales tax revenue forecast was reduced relative to the June forecast. Sales tax collections are now expected to increase 4.3 percent and 4.2 percent in FY 2016-17 and FY 2017-18, respectively. This moderate pace of growth is consistent with projected inflation and population growth and the pace of growth historically experienced in the late stages of an economic expansion.

Use taxes. The 2.9 percent state use tax is due when sales tax is owed but is not collected at the point of sale. Use tax revenue is largely driven by capital investment among manufacturing, energy, and mining firms. In FY 2015-16, use tax collections fell 7.3 percent, reflecting the contraction in energy industry capital investment in response to persistently low oil prices.

Industry investment is expected to remain muted as oil prices remain low through mid-2017. Reflecting these trends, use tax collections are projected to grow at a modest rate of 2.7 percent in the current fiscal year, sustained by growth in manufacturing, lodging, and consumer use tax receipts. Use tax collections will rebound in FY 2017-18, assuming that oil exceeds the break-even price for producers in the Denver-Julesburg basin. Relative to the June forecast, use tax revenue projections were reduced by $23.1 million for FY 2016-17 and $19.3 million for FY 2017-18.

Corporate income taxes. In FY 2015-16, corporate income tax revenue totaled $652.3 million, a decline of 5.8 percent from FY 2014-15 due partially to lower energy industry earnings on lower oil prices. In FY 2016-17, corporate income taxes are expected to decline 7.8 percent, to $601.3 million, reflecting weak corporate earnings at the start of 2016, and the expectation that energy industry profits will remain depressed.

Corporate income tax collections are expected to rebound in FY 2017-18, assuming oil prices rise and corporate profits improve. Collections in FY 2015-16 came in $11.4 million higher than the June forecast estimate, due to higher than expected collections at the end of the fiscal year. Relative to the June forecast, projected collections were revised down $5.5 million in FY 2016-17 and $3.2 million in FY 2017-18.

Table 7
Legislation Affecting General Fund Revenue
Dollars in Millions

Major Legislation Passed in 2016		2015-16	2016-17	2017-18
Income Tax				
HB 16-1142	Rural & Frontier Health Care Preceptor Tax Credit	$0.1	$0.2	$0.2
HB 16-1194	Leasing Agricultural Assets Deduction	-0.03	-0.07	-0.07
HB 16-1286	Increase Wildfire Mitigation Deduction	-0.04	-0.09	-0.09
HB 16-1332	Alternative Fuel Motor Vehicle Tax Credits	0.15	0.3	0.3
HB 16-1465	Modifications to Low-Income Housing Tax Credit		-1.50	-4.75
HB 16-1467	First-Time Home Buyer Savings Account Deduction	0.02	0.09	0.16
Total Income Tax Impact		$0.2	-$1.1	-$4.2
Sales and Use Tax				
HB 16-1006	Clarify Tax Exemptions for Housing Authorities	-$1.4	*ID*	*ID*
HB 16-1119	Modify Sales and Use Tax Exemption for Aircraft		*ID*	*ID*
HB 16-1176	Wine & Spirit Wholesalers Employee Purchases	*MD*	*MD*	*MD*
HB 16-1187	Retirement Community Food Exemption		*MD*	*MD*
HB 16-1457	Residential Energy Source Exemption		*PD*	*PD*
SB 16-036	Surety Requirement for Appealing Tax Bills		*ID*	*ID*
SB 16-124	Machine Tools Exemption for Recovered Materials		*MD*	*MD*
Total Sales and Use Tax Impact		-$1.4	*ID*	*ID*
Revenue Impact of 2016 Legislation		**-$1.2**	**-$1.1**	**-$4.2**

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

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

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

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

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

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

Table 8
General Fund Revenue Estimates
Dollars in Millions

	Category	Preliminary FY 2015-16	Percent Change	Estimate FY 2016-17	Percent Change	Estimate FY 2017-18	Percent Change	Estimate FY 2018-19	Percent Change
	Excise Taxes								
1	Sales	$2,652.6	1.3	$2,766.4	4.3	$2,883.9	4.2	$3,040.9	5.4
2	Use	241.2	-7.3	247.7	2.7	268.4	8.4	298.1	11.1
3	Cigarette	37.2	-1.8	37.1	-0.2	36.8	-0.9	36.4	-1.0
4	Tobacco Products	21.1	18.5	20.9	-1.0	20.9	0.2	21.8	4.4
5	Liquor	43.6	5.0	45.5	4.5	47.1	3.4	48.9	3.8
6	Total Excise	2,995.7	0.6	3,117.6	4.1	3,257.0	4.5	3,446.1	5.8
	Income Taxes								
7	Net Individual Income	6,526.5	2.8	6,800.8	4.2	7,211.6	6.0	7,640.2	5.9
8	Net Corporate Income	652.3	-5.8	601.3	-7.8	645.9	7.4	648.4	0.4
9	Total Income Taxes	7,178.8	1.9	7,402.1	3.1	7,857.5	6.2	8,288.6	5.5
10	Less: Portion Diverted to the SEF	-522.6	0.5	-544.9	4.3	-577.7	6.0	-608.7	5.4
11	Income Taxes to the General Fund	6,656.2	2.0	6,857.2	3.0	7,279.8	6.2	7,679.9	5.5
	Other Sources								
12	Insurance	277.5	8.1	291.7	5.2	306.6	5.1	322.2	5.1
13	Pari-Mutuel	0.6	0.5	0.6	2.3	0.6	0.1	0.6	0.2
14	Investment Income	12.4	40.3	11.2	-10.0	15.5	38.8	21.7	39.8
15	Court Receipts	3.5	34.5	3.7	6.4	3.9	5.3	4.1	5.3
16	Other Income	22.5	-33.8	18.9	-16.2	19.5	3.3	20.0	2.6
17	**Total Other**	316.5	4.5	326.1	3.0	346.1	6.1	368.6	6.5
18	**Gross General Fund Revenue**	**$9,968.4**	**1.7**	**$10,300.9**	**3.3**	**$10,883.0**	**5.7**	**$11,494.6**	**5.6**

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

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CASH FUND REVENUE

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

Preliminary data indicated that cash fund revenue subject to TABOR totaled $2.99 billion in FY 2015-16. This revenue is expected to fall 4.2 percent to $2.87 billion in FY 2016-17. Increases in transportation-related and severance tax revenue will be offset by declines in hospital provider fee and other cash fund revenue in FY 2016-17.

Total cash fund revenue subject to TABOR will increase 11.2 percent to $3.19 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 3.4 percent to $3.30 billion in FY 2018-19, as severance tax revenue grows with increased oil and gas activity.

Transportation-related revenue subject to TABOR reached $1.18 billion in FY 2015-16. Transportation-related revenue is expected to increase 1.6 percent to $1.20 billion in FY 2016-17 and 1.4 percent to $1.22 billion in FY 2017-18. The forecast for TABOR revenue to transportation-related cash funds is shown in Table 10 on page 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). After totaling $609.7 million in FY 2015-16, revenue from fuel taxes is expected to reach $615.5 million in FY 2016-17 and $621.1 million in FY 2017-18 based on an expectation of relatively stable fuel prices. The HUTF also receives revenue from other sources, including registration fees, which are expected to generate $363.3 million in FY 2016-17. Total HUTF revenue was $1.03 billion in FY 2015-16, and is expected to increase 1.4 percent to $1.04 billion in FY 2016-17 and 1.3 percent to $1.06 billion in FY 2017-18.

The State Highway Fund (SHF) receives money from HUTF transfers, local government grants, and interest earnings. The largest amount of SHF money comes from HUTF transfers, while local government grants and interest earnings are the two largest sources of TABOR revenue to the SHF. HUTF revenue is subject to TABOR when it is originally collected by the state but transfers are not. SHF revenue subject to TABOR is expected to increase 1.2 percent to $52.8 million in FY 2016-17 and 1.7 percent to $53.7 million in FY 2017-18.

Other transportation cash fund revenue subject to TABOR declined 4.8 percent in FY 2015-16 to $102.3 million. Other transportation revenue is from the sale of aviation and jet fuel, certain registration fees, and driving fines. These revenue sources are expected to increase slowly through the forecast period, totaling $106.4 million in FY 2016-17 and $108.6 million in FY 2017-18.

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 2.1 percent to $108.8 million in FY 2016-17 and 2.2 percent to $111.2 million in FY 2017-18. The bridge safety surcharge fee typically grows at about the same rate as vehicle registrations.

Table 9
Cash Fund Revenue Subject to TABOR
Dollars in Millions

	Preliminary FY 2015-16	Estimate FY 2016-16	Estimate FY 2017-18	Estimate FY 2018-19	CAAGR*
Transportation-Related	$1,184.7	$1,203.9	$1,220.3	$1,236.6	
Percent Change	1.7%	1.6%	1.4%	0.0%	1.4%
Hospital Provider Fee	$804.0	$656.8	$865.3	$859.7	
Percent Change	52.0%	-18.3%	31.8%	0.0%	2.3%
Severance Tax	$18.9	$53.1	$108.7	$163.0	
Percent Change	-93.3%	180.6%	104.9%	49.9%	105.0%
Gaming Revenue[1]	$102.7	$105.5	$108.2	$110.7	
Percent Change	3.4%	2.7%	2.6%	0.0%	2.5%
Insurance-Related	$13.3	$13.8	$14.4	$15.0	
Percent Change	-33.1%	3.7%	4.0%	0.0%	3.9%
Regulatory Agencies	$68.8	$71.4	$72.9	$74.4	
Percent Change	4.8%	3.8%	2.1%	0.0%	2.6%
Capital Construction Related - Interest[2]	$5.2	$4.7	$4.4	$5.3	
Percent Change	-6.6%	-10.5%	-6.8%	21.5%	0.5%
2.9% Sales Tax on Marijuana[3]	$31.6	$36.1	$38.8	$40.9	
Percent Change	42.0%	14.5%	7.4%	5.3%	9.0%
Other Cash Funds	$764.4	$722.8	$756.6	$792.7	
Percent Change	29.5%	-5.4%	4.7%	4.8%	1.2%
Total Cash Fund Revenue Subject to the TABOR Limit	$2,993.7	$2,868.1	$3,189.7	$3,298.2	
	7.8%	-4.2%	11.2%	3.4%	3.3%

Totals may not sum due to rounding.

** CAAGR: Compound average annual growth rate for FY 2014-15 to FY 2017-18.*

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

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

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

Table 10
Transportation Funds Revenue Forecast by Source
Dollars in Millions

	Preliminary 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	$615.5	$621.1	$626.5	0.9%
Percent Change	1.7%	1.0%	0.9%	0.9%	
Total Registrations	$356.0	$363.3	$370.6	$378.0	2.0%
Percent Change	1.2%	2.0%	2.0%	2.0%	
Registrations	*$210.3*	*$214.6*	*$218.9*	*$223.2*	
Road Safety Surcharge	*$127.2*	*$129.9*	*$132.5*	*$135.2*	
Late Registration Fees	*$18.5*	*$18.9*	*$19.2*	*$19.5*	
Other HUTF Receipts[1]	$64.5	$65.9	$66.3	$66.7	1.1%
Percent Change	1.7%	2.2%	0.5%	0.6%	
Total HUTF	$1,030.2	$1,044.7	$1,058.0	$1,071.2	1.3%
Percent Change	1.5%	1.4%	1.3%	1.2%	
State Highway Fund (SHF)[2]	$52.2	$52.8	$53.7	$54.6	1.5%
Percent Change	23.1%	1.2%	1.7%	1.6%	
Other Transportation Funds	$102.3	$106.4	$108.6	$110.9	2.7%
Percent Change	-4.8%	4.0%	2.1%	2.0%	
Aviation Fund[3]	*$15.2*	*$15.7*	*$16.3*	*$16.8*	
Law-Enforcement-Related[4]	*$9.3*	*$9.3*	*$9.3*	*$9.3*	
Registration-Related[5]	*$77.9*	*$81.4*	*$83.1*	*$84.8*	
Total Transportation Funds	**$1,184.7**	**$1,203.9**	**$1,220.3**	**$1,236.6**	1.4%
Percent Change	1.7%	1.6%	1.4%	1.3%	

Totals may not sum due to rounding.

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

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

[2]*Includes only SHF revenue subject to Article X, Section 20, of the Colorado Constitution (TABOR).*

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

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

[5]*Includes revenue from Emergency Medical Services registration fees, emissions registration and inspection fees, motorcycle and motor vehicle license fees, and P.O.S.T. Board registration fees.*

Addendum: TABOR-Exempt FASTER Revenue

	Estimate FY 2015-16	Estimate FY 2016-17	Estimate FY 2017-18	Estimate FY 2018-19	CAAGR*
Bridge Safety Surcharge	$106.6	$108.8	$111.2	$113.7	**2.5%**
Percent Change	3.4%	2.1%	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.

Hospital Provider Fee (HPF) collections and associated interest earnings totaled $804.0 million in FY 2015-16. The General Assembly imposed an upper bound on HPF collections in its budget for FY 2016-17. With this constraint, fees and interest earnings are expected to total $656.8 million before growing to an unconstrained $865.3 million in FY 2017-18.

The HPF is paid by hospitals and used to draw matching funds from the federal government. This revenue is then used to pay for reimbursements to hospitals for uncompensated medical care, expansion of the state's Medicaid program, and administrative costs associated with the fee. HPF rates are proposed by the Department of Health Care Policy and Financing at levels expected to meet program costs, and approved by the state Medical Services Board.

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

Severance tax revenue, including interest earnings, was revised down from the June forecast to $18.9 million for FY 2015-16. The reason for this downward revision was the combination of expanded allowable deductions for oil and gas operators resulting from the Colorado Supreme Court ruling in the BP America case and larger than expected ad valorem tax credit claims. This forecast assumes a total of $16.8 million in additional refunds will accrue in FY 2015-16 as a result of the Supreme Court's decision.

In FY 2016-17, severance tax collections are projected to total $53.1 million, representing a 31.1 percent reduction from the June forecast. The revision reflects lower expectations for oil production through the forecast period. In FY 2017-18 and FY 2018-19, collections are expected to rise to $108.7 million and $163.0 million, respectively, as oil and gas prices slowly increase. Table 11 presents the forecast for severance tax revenue by mineral source.

Table 11
Severance Tax Revenue Forecast by Source
Dollars in Millions

	Preliminary FY 2015-16	Estimate FY 2016-17	Estimate FY 2017-18	Estimate FY 2018-19	CAAGR*
Oil and Gas	$5.2	$42.8	$97.7	$151.5	112.3%
Percent Change	-98.0%	719.6%	128.4%	55.1%	
Coal	$3.6	$2.9	$2.8	$2.5	-11.7%
Percent Change	-33.3%	-18.5%	-4.7%	-9.4%	
Molybdenum and Metallics	$1.5	$1.5	$1.5	$1.5	0.0%
Percent Change	1.6%	0.0%	0.0%	0.0%	
Total Severance Tax Revenue	$10.3	$47.2	$101.9	$155.5	90.6%
Percent Change	-96.2%	359.0%	116.1%	52.5%	
Interest Earnings	$8.6	$5.9	$6.8	$7.6	-4.4%
Percent Change	-11.7%	-31.5%	15.3%	10.9%	
Total Severance Tax Fund Revenue	$18.9	$53.1	$108.7	$163.0	71.8%
Percent Change	-93.3%	180.6%	104.9%	49.9%	

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

After bottoming out at just under $24 per barrel in February, Colorado oil prices trended upwards through the spring, reaching $42 per barrel before plateauing at around $38 per barrel in late summer. Based on preliminary data through May, 2016 production has declined 5.7 percent compared with 2015. Weld County is now responsible for nearly 90 percent of the state's oil production. Although production is down in 2016, this forecast assumes that oil prices will rise gradually to about $51 per barrel in 2017 and $59 per barrel in 2018, spurring additional production in Weld County and the broader Niobrara formation.

Regional natural gas prices have also rebounded slightly through the summer. Prices at regional hubs were around $1.75 per Mcf (thousand cubic feet) in the middle of March, but rose to about $2.90 per Mcf by late August. Prices are expected to rise gradually through the end of 2016.

For FY 2015-16, oil and gas severance tax collections totaled $5.2 million, due to the additional refunds authorized through the BP America decision and operator's claims of the state's ad valorem tax credit. Collections are expected to increase to $42.8 million in FY 2016-17, $97.7 million in FY 2017-18, and $151.5 million in FY 2018-19.

Coal, which has historically been the second largest mineral source of severance tax revenue in Colorado after oil and natural gas, accounted for $3.6 million in collections in FY 2015-16. Collections are expected to fall to $2.9 million in FY 2016-17. Total coal production in Colorado has declined 42.6 percent through the first seven months of 2016 on a year-over-year basis, after declining 18.5 percent in 2015. This decline was largely due to the closure of the Bowie #2 mine in Delta County, but each of Colorado's seven other producing mines are exhibiting year-over-year declines, ranging from 12.0 to 55.3 percent through the first seven months of 2016. Currently, only five mines are consistently exceeding the 300,000 per quarter production threshold required to pay coal severance taxes. In September, it was announced that the New Horizon Mine will close when the Nucla Station power plant is taken off line in 2022. In both FY 2017-18 and FY 2018-19, collections are expected to fall further to $2.8 million and $2.5 million, respectively.

Finally, interest earnings for FY 2015-16 totaled $8.6 million and are expected to fall to $5.9 million in FY 2016-17. Over the remainder of the forecast period, interest earnings are expected to be $6.8 million in FY 2017-18 and $7.6 million in FY 2018-19.

Limited gaming revenue includes taxes, fees, and interest earnings collected in the Limited Gaming Fund and the State Historical Fund. Most of this revenue is subject to TABOR. Revenue attributable to Amendment 50, which expanded gaming beginning in FY 2009-10, is TABOR-exempt.

The state's casino industry posted its best year yet in FY 2015-16. Increased wagers drove gaming tax and fee revenue subject to TABOR to total $102.7 million, an increase of 3.4 percent from the prior fiscal year. These revenue streams are expected to grow to $105.5 million in FY 2016-17 and $108.2 million in FY 2017-18, representing a slight deceleration from last year's strong growth.

Gaming activity is accelerating with improved household incomes, casino capital improvements, and approval for more establishments to serve alcohol after 2 a.m. Casinos are also paying a lower percentage of wagers in winnings, adding to the casino earnings on which taxes are paid. In particular, casinos are benefitting from an increasing share of wagers made on table games, where they are able to capture a greater take than for slot machines.

Growth in gaming tax revenue subject to TABOR is statutorily capped at 3.0 percent. Years when total gaming tax revenue grows by more than 3.0 percent therefore result in growth rates of greater than 3.0 percent for gaming taxes exempt from TABOR. TABOR-exempt Amendment 50 revenues grew 26.9 percent to $15.3 million in FY 2015-16 and are expected to grow by a further 10.4 percent to $16.9 million this year. These revenues primarily support the state community college system.

As shown in Table 12, total taxes on ***marijuana*** are expected to generate $141.3 million in FY 2015-16 and $171.8 million in FY 2016-17. Monthly marijuana tax collections continue to increase, with collections in May 2016 representing the highest monthly collection level since legalization in January 2014. Because May collections correspond to April sales, this highpoint likely results from a spike in sales for the April 20 marijuana rally. 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 $12.7 million in FY 2016-17.

Growth in marijuana sales are expected to moderate in FY 2016-17 and FY 2017-18 as the market matures. House Bill 15-1367 reduced the sales tax rate from 10 percent to 8 percent starting in FY 2017-18. This rate reduction, combined with projected increases in marijuana sales results in a net, year-over-year reduction of $6.3 million in special sales tax revenue.

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 $36.1 million in FY 2016-17 and $38.8 million in FY 2017-18.

Table 12
Tax Revenue from the Marijuana Industry
Dollars in Millions

	Preliminary FY 2015-16	Forecast FY 2016-17	Forecast FY 2017-18	Forecast FY 2018-19
Proposition AA Taxes				
10% Special Sales Tax	$67.1	$83.0	$76.7	$85.4
State Share of 10% Sales Tax	57.0	70.5	65.2	72.6
Local Share of 10% Sales Tax	10.1	12.4	11.5	12.8
15% Excise Tax	42.7	52.7	60.9	67.9
Total Proposition AA Taxes	**109.7**	**135.7**	**137.6**	**153.3**
2.9% Sales Tax (Subject to TABOR)				
2.9% Sales Tax on Medical Marijuana	12.2	12.1	11.1	10.0
2.9% Sales Tax on Retail Marijuana	19.4	24.0	27.7	30.9
Total 2.9% Sales Tax	**31.6**	**36.1**	**38.8**	**40.9**
Total Taxes on Marijuana	**$141.3**	**$171.8**	**$176.5**	**194.1**

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

In FY 2015-16, FML revenue totaled $92.9 million. For FY 2016-17, FML revenue is projected to fall to $84.5 million. This estimate includes the federal rescission of $7.8 million to reimburse cancelled leases from the Roan Plateau. The reduced expectations are primarily the result of relatively steady natural gas prices over the summer, combined with the continued decline in Colorado coal production. Roughly 75 percent of this production occurs on federal lands, and through the first seven months of 2016, production was down 42.6 percent on

a year-over-year basis after falling 18.5 percent in 2015. Coal production is expected to continue to decline through the forecast period, further dampening growth in FML revenue.

FML revenue is expected to rebound to $111.9 million in FY 2017-18 and $122.2 million in FY 2018-19 with higher natural gas prices.

Forecasts for **Unemployment Insurance (UI) Trust Fund** revenue, benefit payments, and year-end balance are shown in Table 13. Revenue to the UI Trust Fund has not been subject to TABOR since FY 2009-10 and is therefore excluded from Table 9 on page 26. 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.

In FY 2015-16, the ending balance for the trust fund was $679.8 million, relatively unchanged from the previous fiscal year. Premiums paid by employers continued to decline through the year as the fund's ending balance in FY 2014-15 was sufficient to shift the employer's schedule to a lower premium rate beginning on January 1, 2015. The amount of unemployment insurance benefits paid increased by 7.0 percent as oil and gas and related sectors continued to shed jobs.

Unemployment insurance benefits paid are expected to increase gradually through the forecast period, rising by 7.6 percent to $555.2 million and 9.9 percent to $610.1 million in FY 2016-17 and FY 2017-18, respectfully. However, employee contributions are expected to remain relatively stable as moderate job growth and a higher chargeable wage base keep the fund secure.

Table 13
Unemployment Insurance Trust Fund
Revenues, Benefits Paid, and Fund Balance
Dollars in Millions

	Preliminary FY 2015-16	Estimate FY 2016-17	Estimate FY 2017-18	Estimate FY 2018-19	CAAGR*
Beginning Balance	$680.1	$679.8	$619.8	$669.3	
Plus Income Received					
UI Premium	$622.3	$608.4	$646.6	$647.6	1.28%
Interest	$15.5	$11.8	$12.9	$13.0	
Total Revenues	$637.8	$620.2	$659.5	$660.6	1.12%
Percent Change	-7.1%	-2.8%	6.3%	0.2%	
Less Benefits Paid	($516.2)	($555.2)	($610.1)	($670.8)	5.73%
Percent Change	7.0%	7.6%	9.9%	10.0%	
UI Bonds Principal Repayment	($125.0)	($125.0)	$0.0	$0.0	
Accounting Adjustment	$3.0	$0.0	$0.0	$0.0	
Ending Balance	$679.8	$619.8	$669.3	$659.0	1.03%
Solvency Ratio					
Fund Balance as a Percent of Total Annual Private Wages	0.63%	0.55%	0.56%	0.52%	

Totals may not sum due to rounding.

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

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Now in sync, the U.S. and Colorado economies continue to expand amid weakness in some areas. Ongoing growth has been sustained by healthy increases in consumer spending, as many households are reaping the benefits of a labor market at full employment. Meanwhile, investment by businesses has declined, as business owners struggle to combat a fragile global economy, low energy and agricultural prices, and rising competition for employees.

Colorado's economy, which had led the nation's through the better part of the expansion, is now in line with the national economy by most measures. The state is still feeling the effects of the oil price crash at the end of 2014 as energy companies and related businesses adjust to a new business environment. Caution among households and a shift toward consumption of services is constraining retail purchases and sales tax revenue. Separately, in-migration and household formation are supercharging demand for housing, boosting the state's construction industry, bolstering home values, and driving inflation.

The national and state economies will continue to grow modestly through the forecast period, buoyed by household spending. While business confidence will likely remain meager in the near term, the private sector is eventually expected to benefit from a gradual rebound in oil prices, as well as a global economy outdistancing the worst of its troubles. The Federal Reserve is expected to raise interest rates at a slow but deliberate pace, beginning in 2016 and continuing through 2017.

Tables 14 and 15 on pages 53 and 54 present histories and expectations for economic indicators in the U.S. and Colorado, respectively.

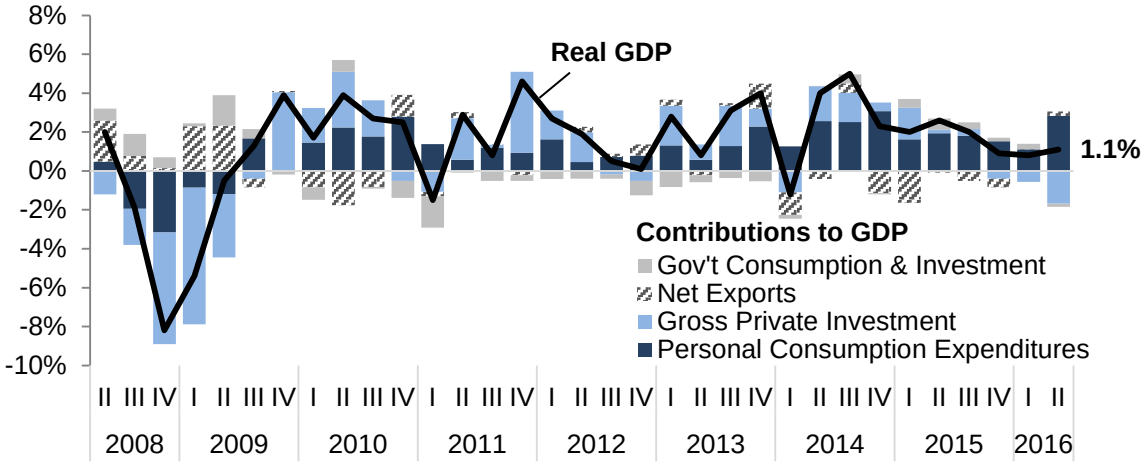
Gross Domestic Product

The seven-year-old economic expansion weakened during the first half of this year. As measured by gross domestic product (GDP), the broadest measure of economic activity, growth in each of the last three quarters was slower than in any of the previous six. Figure 6 presents the annualized change in real (inflation-adjusted) U.S. GDP and contributions from its four components for each quarter of the current business cycle.

The U.S. economy grows or contracts based on spending and investment by households, businesses, governments, and international consumers. For the past year, household consumption has been the only reliable contributor to GDP and has served as a bulwark against persistent small or negative contributions from the other three areas.

The ongoing expansion in consumer spending is reassuringly broad-based. The second quarter benefitted from a strong increase in spending on services, as well as a resurgence in spending on goods. Within the latter category, consumers increased spending on nondurable goods while also springing for higher-priced durable goods. Relative stagnation in the traditional motor vehicles sector was more than offset by strong performance in sales of recreational goods and vehicles, which includes bicycles, motorcycles, watercraft, RVs, campers, and ATVs. The economy is reaping temporary benefits from pent up household demand for expensive items. For as long as workers in the tightening labor market are able to bring home bigger paychecks, growth in personal consumption will continue to bolster the economy.

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



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

The future of the national economy will also depend on the presence and severity of continued weakness among the other major components of GDP. Private investment has fallen for three consecutive quarters and could continue to struggle as uncertainty mounts about the national economic outlook. More encouragingly, American exporters can expect a moderate rebound in sales abroad as the global economy strengthens and the dollar stabilizes relative to other world currencies. Finally, the outlook for government spending is hazy as the U.S. presidential and congressional elections remain undecided.

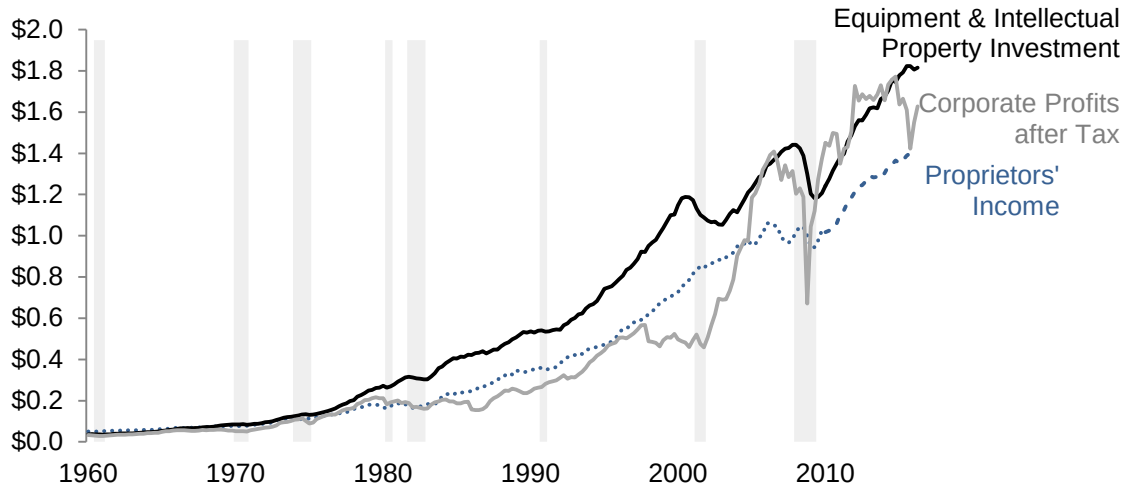
According to an initial estimate by the U.S. Bureau of Economic Analysis, Colorado's GDP grew 3.1 percent between the first quarter of 2015 and the first quarter of 2016. This was slightly below the national rate of 3.3 percent, and slower than growth in 30 other states. Colorado's growth over this period was stunted by a pullback in the oil industry. Generally, the states most reliant on the energy industry fared worst over this span, and Colorado outperformed all other major energy producers in the region.

- Real U.S. GDP is expected to increase 1.5 percent in 2016 and 1.8 percent in 2017, representing deceleration relative to the previous two years. Increases in consumer spending will continue to offset headwinds in other areas.

Business Income and Activity

Business activity fared poorly over the past year. Overall business investment and activity declined, and the manufacturing sector continued to report contraction in industrial production and new orders. Business investment is a reliable leading or current indicator for the health of the economy, and weakness in this area could portend a U.S. recession.

Figure 7
Business Investment, Income, and Profits
Trillions of Dollars

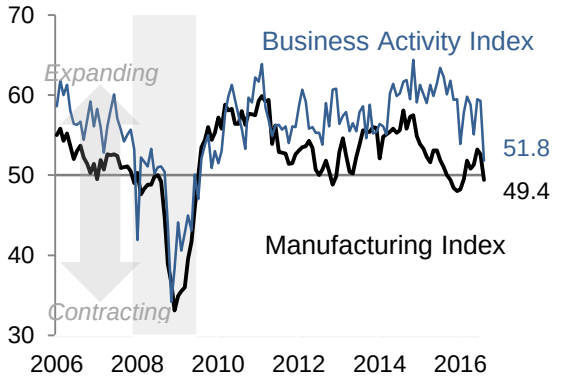


Source: U.S. Bureau of Economic Analysis. Data are not adjusted for inflation.

Figure 7 shows corporate profits, proprietors' income, and business investment on equipment and intellectual property. Business investment in equipment and intellectual property increased 1.4 percent in the first half of 2016 relative to the same period last year. The increase was entirely driven by investment in intellectual property, up 5.7 percent, which more than offset a decline in equipment investment of 1.4 percent. Equipment investment by businesses has declined for three consecutive quarters and investment in nonresidential structures is also down. Declines in private investment are historically correlated with recessions. At least two consecutive quarters of declines in gross private investment have been recorded immediately prior to, or during, each of the eight recessions since 1960. Gross private investment has now declined for three consecutive quarters.

Indices of business activity and industrial production are also signaling slower growth. The business activity indices produced by the Institute for Supply Management (ISM) reflect uncertainty in both the manufacturing and non-manufacturing sectors. In these indices, depicted in Figure 8, values greater than 50 represent expansion. Both indices have fallen to levels near 50, suggesting equal probabilities of growth and contraction. Notably, the manufacturing index has again fallen to a level below 50, signaling the possibility of contraction in this sector.

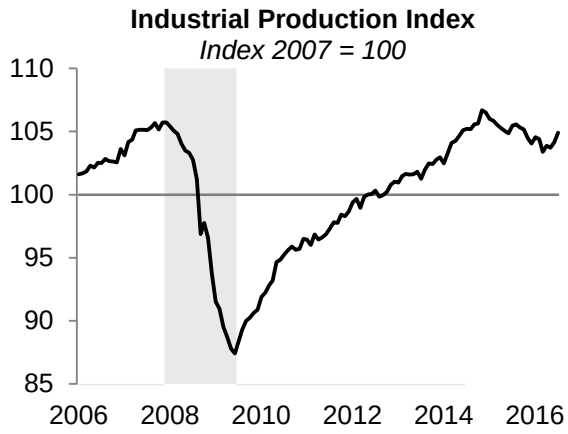
Figure 8
Institute for Supply Management Indices



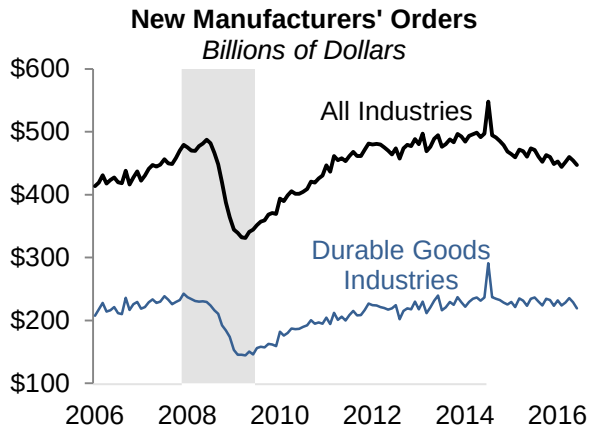
Source: Institute for Supply Management.

The Federal Reserve's industrial production index has ticked up somewhat recently after dropping since 2014, as shown in the left panel of Figure 9. On average, industrial activity was measured at a level 1.2 percent lower in the first seven months of 2016 compared with the same period last year. Much of the decline is due to oil and gas production and low commodity prices. Industrial production is expected to rebound in the second half of the year along with a gradual increase in oil prices.

Figure 9
Indicators of Industrial Production and Manufacturing



Source: Federal Reserve Board of Governors.

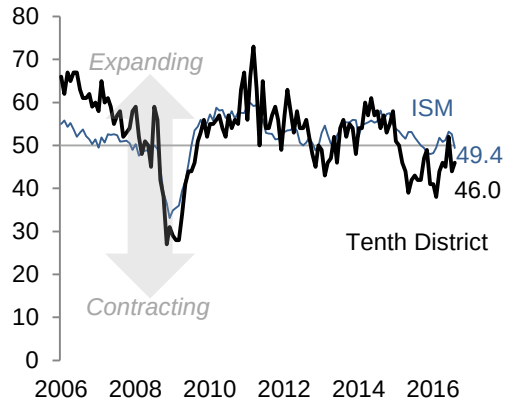


Source: U.S. Census Bureau. Not adjusted for inflation.

The manufacturing industry continues to feel the weight of a strong U.S. dollar and weak international activity. As shown in the right panel of Figure 9, new manufacturing orders for the first six months of 2016 were down 3.2 percent relative to last year. Most of the reduction is attributable to non-durable goods, including oil products.

The Federal Reserve Bank of Kansas City oversees the Tenth Federal Reserve District, which includes Colorado as well as Kansas, Nebraska, Oklahoma, Wyoming, western Missouri, and northern New Mexico. It produces a manufacturing index for businesses within its district similar to the ISM manufacturing index for the nation. While the two indices usually track closely with one another, the Tenth District index remains below the national index, as shown in Figure 10. This has been true since the oil price collapse and reflects the disproportionate share of oil and gas activity in the Tenth District relative to the rest of the country.

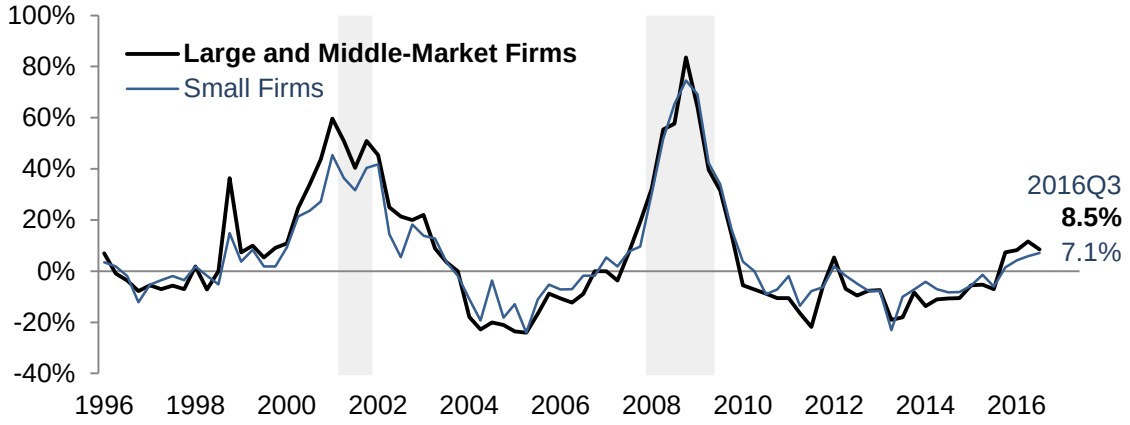
Figure 10
Manufacturing Indices for the U.S. and the Kansas City Federal Reserve



Source: Institute for Supply Management and Federal Reserve Bank of Kansas City.

The slowdown in the commodity and manufacturing sectors is resulting in elevated caution among business financiers. Figure 11 shows the net percentage of domestic banks tightening conditions for loans to small, medium, and large firms as reported in the Federal Reserve's Senior Loan Officer Survey. The credit markets for all business loans have tightened for three consecutive quarters. In addition to indicating current wariness in the banking sector, tighter credit conditions could raise liquidity challenges for businesses looking to grow through investment.

Figure 11
Net Percentage of Domestic Banks Tightening Standards for Commercial and Industrial Loans



Source: Federal Reserve Board of Governors, Senior Loan Officer Survey.

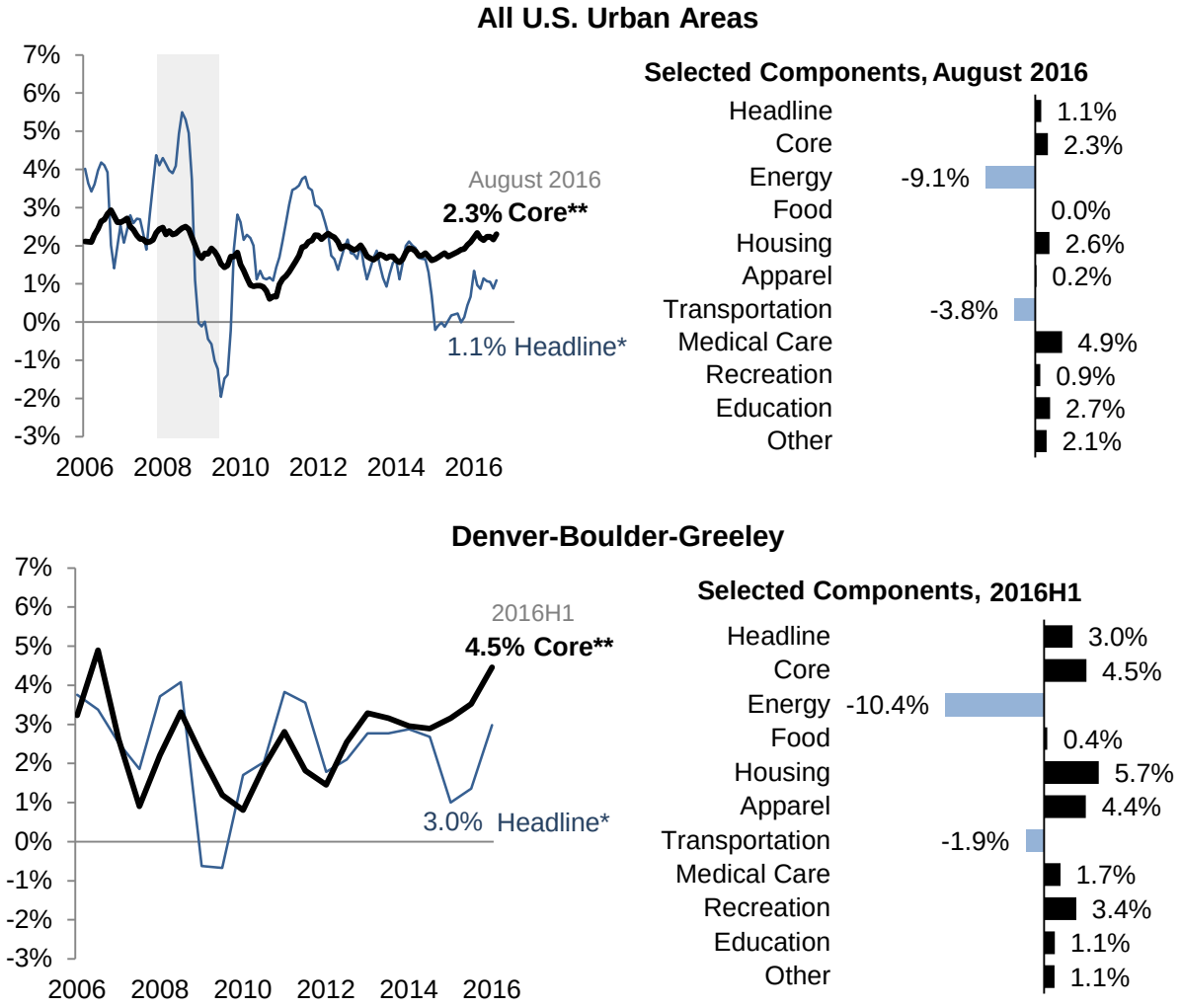
Monetary Policy and Inflation

In August, headline U.S. inflation rose slightly to 1.1 percent over the same month in the prior year, as shown in the top panel of Figure 12. Core inflation, which excludes volatile food and energy prices, rose slightly to 2.3 percent. Low energy prices continue to subdue inflationary pressures, while most other price components have climbed from year-ago levels. Crude oil prices reached lows early in the year and have since been rising in fits and starts; any oil price increases will not manifest in consumer price indices until next year.

Below the national level, consumer price indices are published by combined statistical area and are not available by state. Core Colorado inflation, as measured by the consumer price index for the Denver-Boulder-Greeley combined statistical area, increased to 4.5 percent in the first half of 2016. Headline inflation rose more modestly, but rapid growth in housing costs more than offset declining energy prices. Inflation in the Denver-Boulder-Greeley area is double that of the nation. Together with housing, the recreation and apparel components outpaced national growth in prices. Conversely, the education and medical care components exhibit less price pressure than in other areas of the country.

At its July meeting, the Federal Open Market Committee (FOMC) of the Federal Reserve chose to maintain its target of between 0.25 percent and 0.5 percent for the federal funds rate, the rate at which banks lend money to each other overnight. A history of the effective federal funds rate is presented in the upper panel of Figure 13. Given recent signals by Chair Janet Yellen and Vice Chair Stanley Fischer, the FOMC may increase the target rate at its September meeting. However, many economists and financial analysts expect that rates will remain lower for a longer period relative to historical standards. The FOMC is maintaining its balance sheet at its current, elevated level, as shown in the lower panel of Figure 13. These efforts are expected to maintain some downward pressure on long term interest rates, lowering borrowing costs for home mortgages and other longer term financing of business and consumer activity.

Figure 12
Consumer Price Index (CPI) Inflation
Percent Change in Prices, Year-over-Year

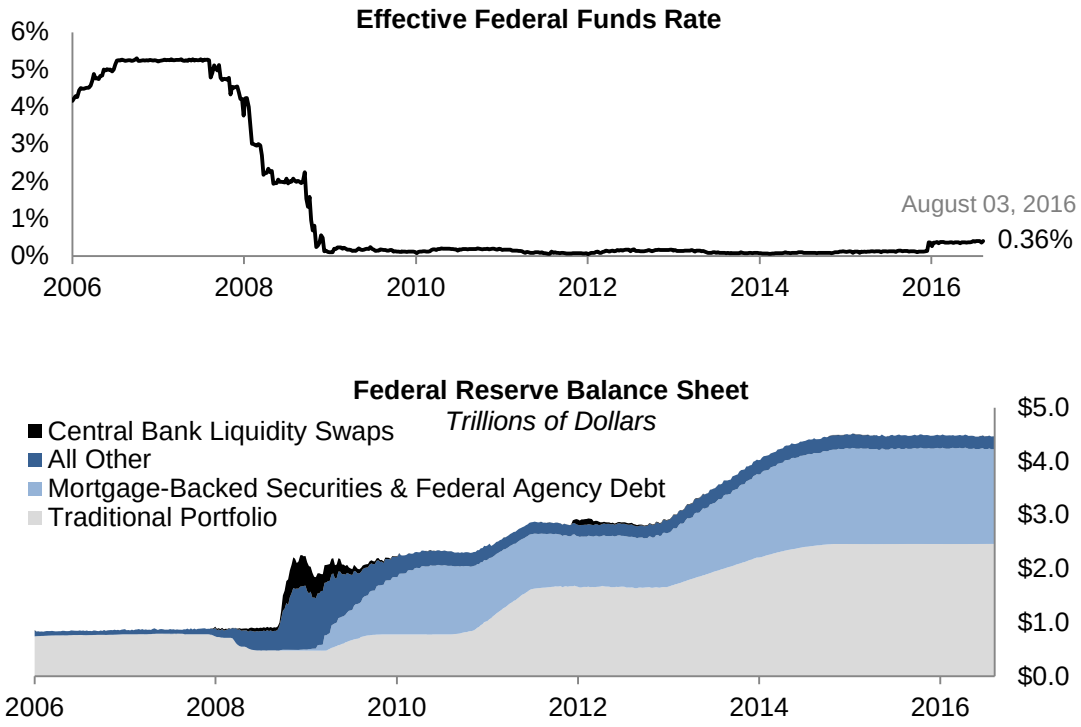


Source: U.S. Bureau of Labor Statistics.
Inflation is calculated as the growth in urban area prices in a given period relative to the same period in the prior year.
**Headline inflation includes all products and services. **Core inflation excludes food and energy prices.*

- Gradual increases in energy prices and continued low interest rates are expected to firm inflationary pressures. Nationally, prices are expected to increase 1.0 percent in 2016 and 2.1 percent in 2017.

- The Denver-Boulder-Greeley consumer price index will increase 2.9 percent in 2016 and 2.4 percent in 2017. Continued increases in home prices and Front Range rents are projected to drive inflation through the forecast period.

Figure 13
Selected Monetary Policy Indicators



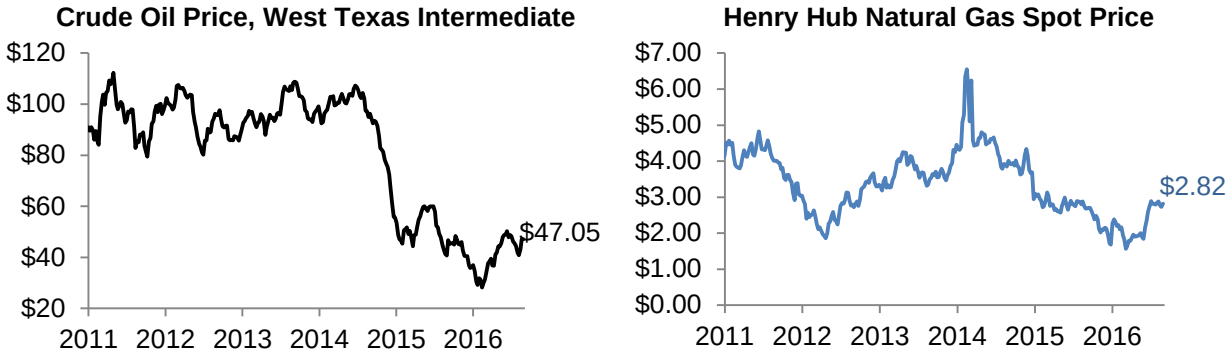
Source: Federal Reserve Board of Governors.

Energy Markets

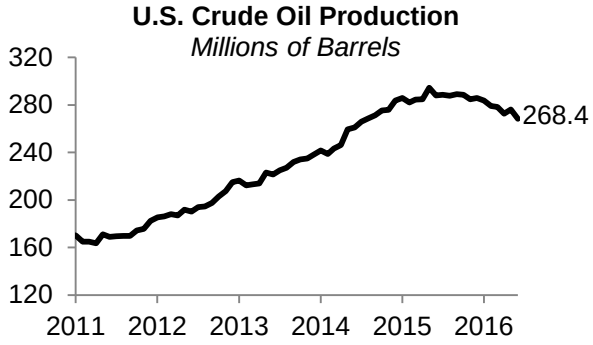
A weak global economy, coupled with technological advancements that have eased the oil extraction process, is conspiring to keep energy supply high and prices down. Historically low prices for natural gas and oil continue to distort many areas of the U.S. economy. Prices remain below break-even levels for most U.S. producers, who have responded by curtailing investment and cutting personnel. Upstream and downstream businesses that rely on strength in the energy industry have also been adversely affected by price shocks. At the same time, low energy prices have reduced the costs of essential products, including not only gasoline and electricity but also the multitude of goods whose prices include the costs of transportation. These price distortions have reduced growth in nominal consumer spending and retail trade, reined in inflation, and freed additional disposable income for households.

Figure 14 presents indicators for oil and gas industry activity. As shown in the top left panel, crude oil prices have stabilized between $40 and $50 per barrel since early April, up from a floor of about $28 per barrel in February. Prices are below the break-even level for oil producers in most American drilling basins, meaning that the revenue that can be generated from sale is not sufficient to cover production costs. In response, oil producers have mothballed the majority of their drilling rigs. As shown in the bottom panels of Figure 14, the number of operational oil rigs is at a fraction of its late 2014 peak, though national and Colorado rig counts have ticked up slightly this year. A lower level of rigs has sapped oil production, which is down 4.5 percent through June compared with the same period last year. At the same time, the oil that is being produced is being stored in anticipation of eventual price hikes. As shown in the center right panel, storage of crude oil in the U.S. is near its all-time high.

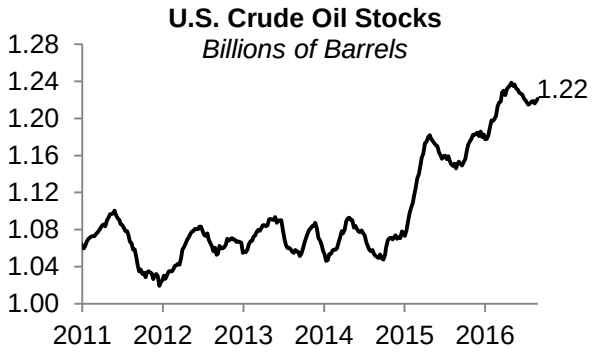
Figure 14
Selected Indicators of Oil and Gas Industry Activity



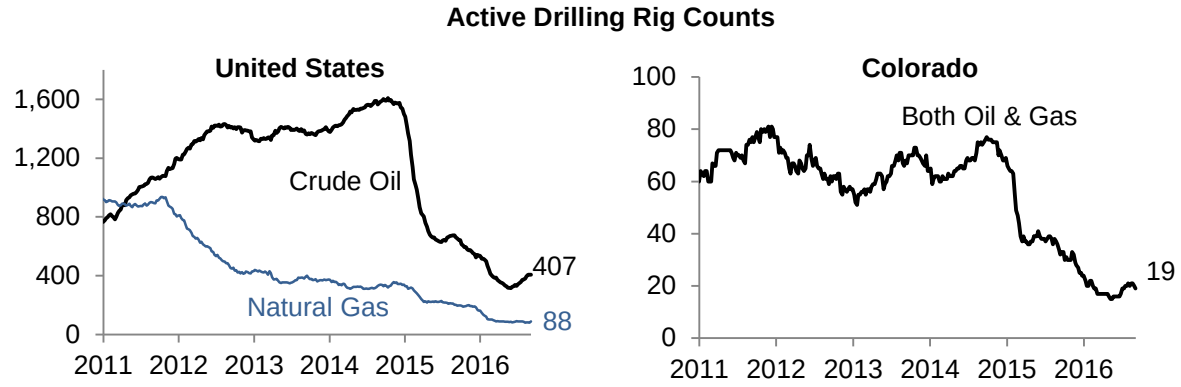
Source: Energy Information Administration. Weekly average prices. Data are not seasonally adjusted.



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



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



Source: Baker Hughes. Data are not seasonally adjusted.

In Colorado, investment in the energy industry has slowed in both the Denver-Julesburg Basin, located primarily in Weld County, and the Piceance Basin, located primarily in Garfield and Rio Blanco Counties. Oil production continues to surge from wells drilled prior to the price collapse in late 2014. Hydraulic fracturing of shale oil wells along the northern Front Range results in the harvesting of natural gas as a byproduct, and Weld County has overtaken Garfield County as the state's largest gas producer. Reduced investment has contributed to layoffs in the energy industry and in upstream and downstream businesses. Oil prices are expected to remain near their current levels through 2016 and rise above $50 and $55 per barrel on average

in 2017 and 2018, respectively. Investment and employment in the oil and gas industry will rebound slowly as prices rise to new levels.

Low prices and low demand continue to suffocate the state's already hurting coal industry. While the business and labor market impacts of coal industry contraction are less significant at the state level, these are highly concentrated in smaller western Colorado communities, particularly in Montrose, Delta, and Moffat Counties.

Labor Markets

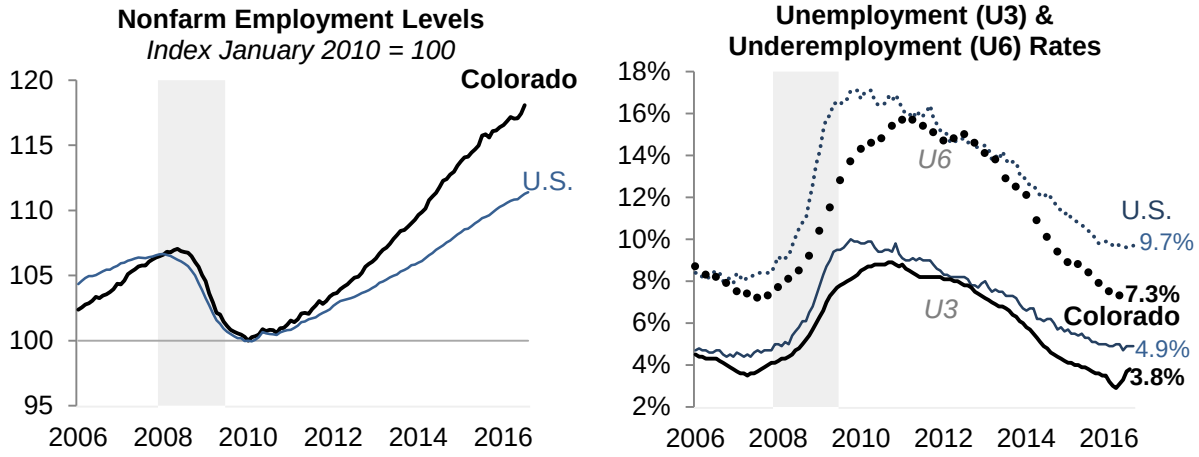
The national labor market appears to have followed Colorado's to full employment, meaning that most cyclical labor market slack has been absorbed. Employers in the state and nation continue to add jobs, albeit at slower rates than last year. In the national market, changes in employment are roughly consistent with changes in the size of the labor force. The result is a flattening unemployment rate accordant with the natural rate of unemployment, the lowest rate that the economy can sustain without overheating. In Colorado, in-migration of working age adults has helped boost the labor force population, and the unemployment rate is now rising even as the number of available jobs increases.

Figure 15 presents employment indicators for the state and national economies. As shown in the top right panel, the gap between the unemployment rate ("U3") and the underemployment rate ("U6") is narrowing at both the state and national levels. The underemployment rate expresses the share of unemployed workers as well as discouraged workers and individuals working part time for economic reasons. During the two previous expansions, the gap between the two rates narrowed to between 3 and 4 percentage points at the national level. As of August, the U.S. gap is 4.8 percentage points, suggesting that some labor market slack may still exist. However, a persistently high underemployment rate for the duration of the current expansion more likely indicates structural and demographic changes boosting the number of individuals working part time for economic reasons.

The U.S. unemployment rate has fallen by just 0.2 percentage points in the last 12 months. In addition to suggesting that the economy is at full employment, a near constant unemployment rate signals that the lifespan of the current expansion may be limited. During each of the ten prior economic expansions since 1950, the unemployment rate dipped to within 1 percentage point of its eventual trough about 18 months, on average, before the labor market began to worsen as a result of the following recession.

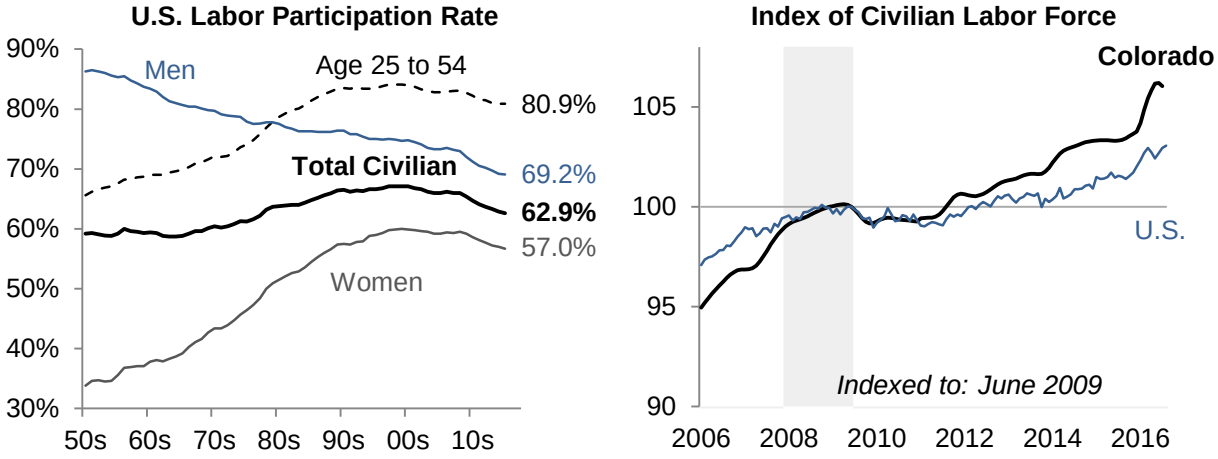
The tightening labor market is motivating some adults to rejoin the labor force. The lower panels of Figure 15 present long- and short-term labor force data. On a historic timetable, the nation's labor force participation rate will continue to fall for demographic reasons. The post-World War II "Baby Boom" peaked in 1957, and Americans born that year will celebrate their 60th birthday in 2017. In recent months, however, the labor force population and participation rate have each ticked upward at the national and state levels. Increases in the labor force are mitigating the wage effects of a late-cycle labor market by moderating competition for employees among businesses.

Figure 15
Colorado and U.S. Labor Market Indicators



Source: U.S. Bureau of Labor Statistics. Unemployment rates for Colorado are shown as four-quarter averages, while data for the U.S. are monthly. Data are seasonally adjusted.

Nonfarm employment estimates include revisions expected by Legislative Council Staff from the Bureau of Labor Statistics' annual re-benchmarking process.

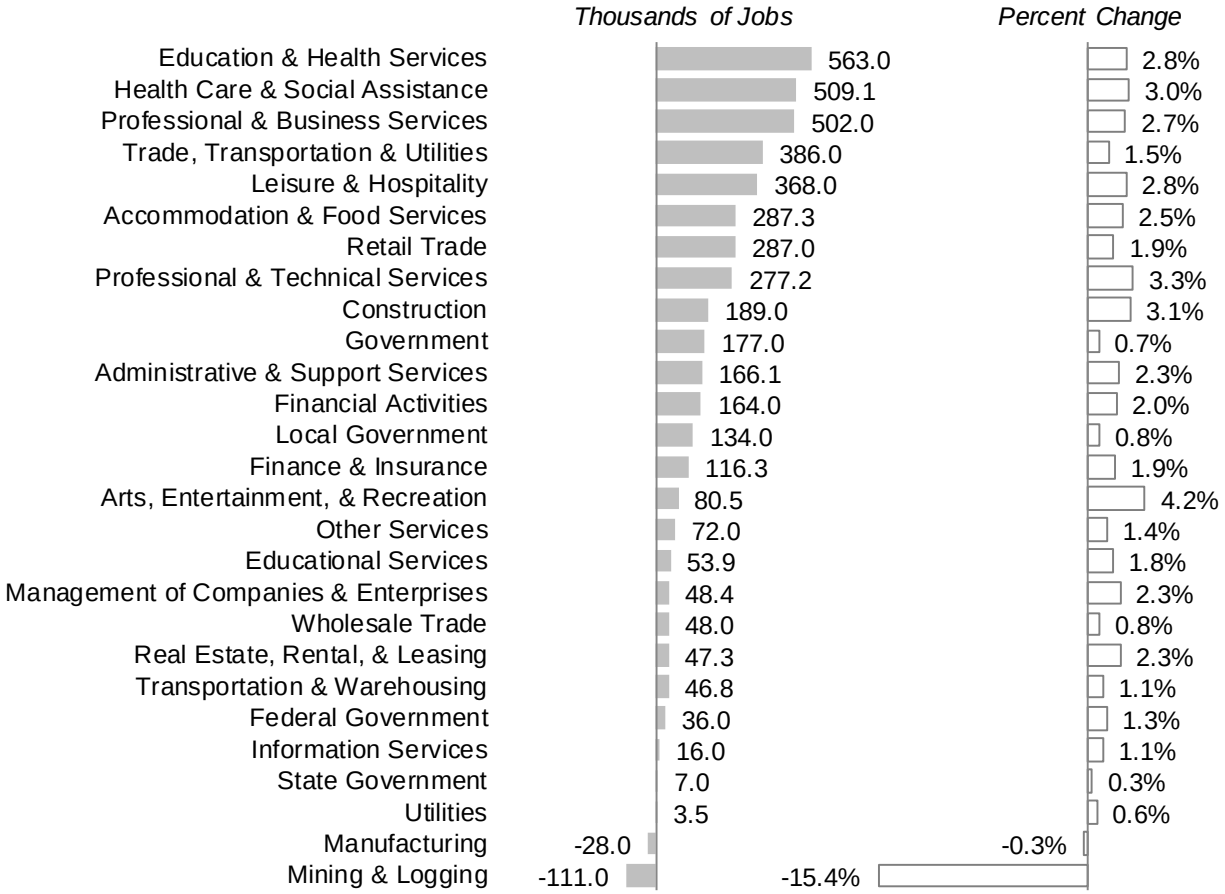


Source: U.S. Bureau of Labor Statistics.

Source: U.S. Bureau of Labor Statistics. Data are seasonally adjusted.

Nonfarm employment in the United States has increased 1.8 percent through August relative to year-ago levels, representing deceleration from last year's 2.1 percent rate. Employment growth continues to be relatively broad based, as shown in Figure 16. The service sectors have outpaced goods sectors for the entire expansion and continue to do so, with job reports indicating strong year-over-year gains in education, health care, business service, and tourism-related employment. Distorted commodity markets and a strong dollar are putting pressure on the energy, manufacturing, and utilities sectors, and also explain disproportionately weak economies in the commodity price sensitive energy states. Governments have posted modest year-over-year job increases, but U.S. employment remains overwhelmingly led by the private sector.

Figure 16
U.S. Job Gains and Losses by Industry
Year-over-Year Change, August 2016 over August 2015



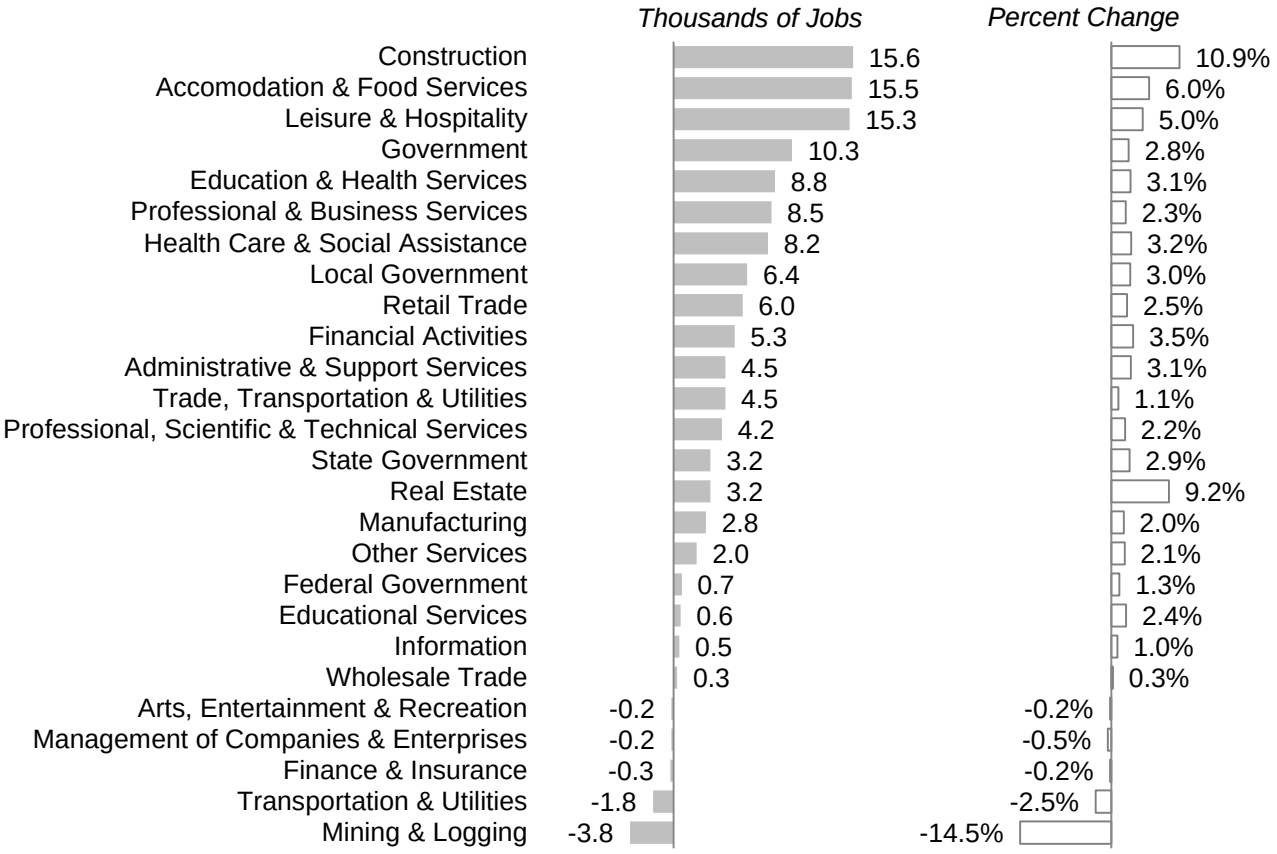
Source: U.S. Bureau of Labor Statistics. Data are seasonally adjusted.

Job growth in Colorado has likewise decelerated, from 3.2 percent in 2015 to 2.3 percent through August of this year. Employment gains are less consistent across Colorado industries. Of the 26 employment sectors shown in Figure 17, 20 achieved employment growth of at least 1.0 percent in July compared with a year earlier. Declines occurred in five diverse sectors. Meanwhile, the strongest employment growth rates occurred in the real estate and construction sectors, evidence of the state's tight housing market.

- Colorado will continue to add jobs through the forecast period. Nonfarm employment in the state will increase 2.5 percent in 2016 and 1.9 percent in 2017.

- U.S. nonfarm employment will increase 1.8 percent in 2016 and 1.6 percent in 2017.

Figure 17
Colorado Job Gains and Losses by Industry
Year-over-Year Change, July 2016 over July 2015



Source: U.S. Bureau of Labor Statistics. Data are seasonally adjusted.

Households and Consumers

The late stages of the current expansion have been less fruitful for households than in previous business cycles. Growth in U.S. personal income moderated significantly during the first half of 2016. Nominal household incomes increased by just 3.3 percent during the first half of 2015, representing deceleration from last year's 4.4 percent growth rate. Progress slowed across all major income components: wages and salaries; business proprietors' income; and dividends, interest, and rent. Income performance disappointed during a period when the national economy added jobs and inflation ticked upward. A history of quarter-over-quarter changes in U.S. personal income, as well as the year-over-year change in personal income components through the second quarter, is shown in the top panel of Figure 18.

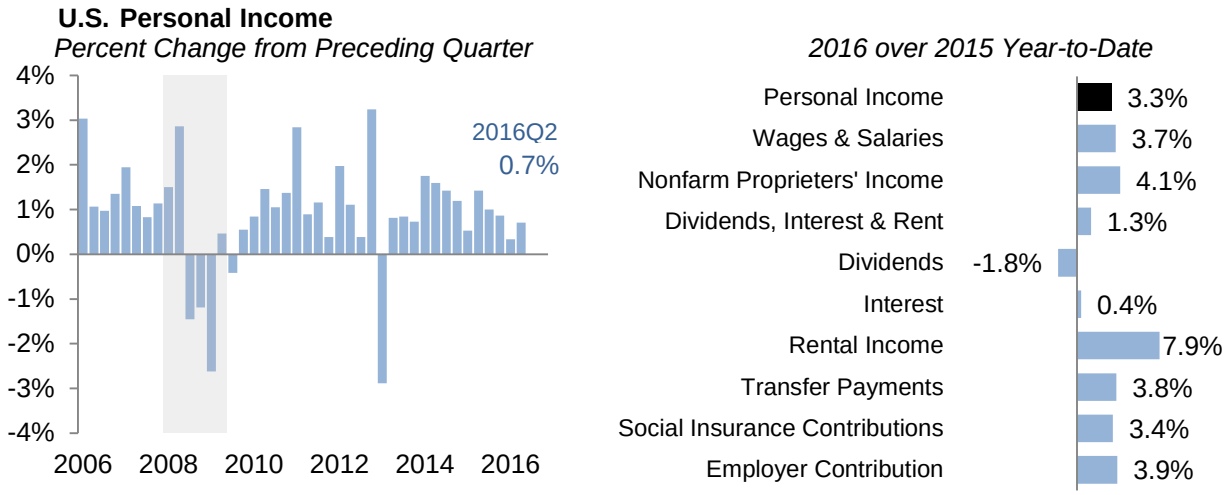
The later stages of the business cycle generally witness a shift in the composition of personal income. Growth in wage and salary income accelerates as a tightening labor market drives additional competition for workers among employers. Conversely, footing the bill for higher labor costs siphons a portion of business earnings away from proprietors' income. In this business cycle, it is expected that much of the forthcoming growth could be in investment income, particularly interest. The Federal Reserve waited much longer to raise interest rates

than usual during an expansion, but it is expected to do so slowly through 2017. A liftoff in interest rates could trigger a significant increase in the amount that investors are able to harness in interest earnings, which have stagnated since 2012.

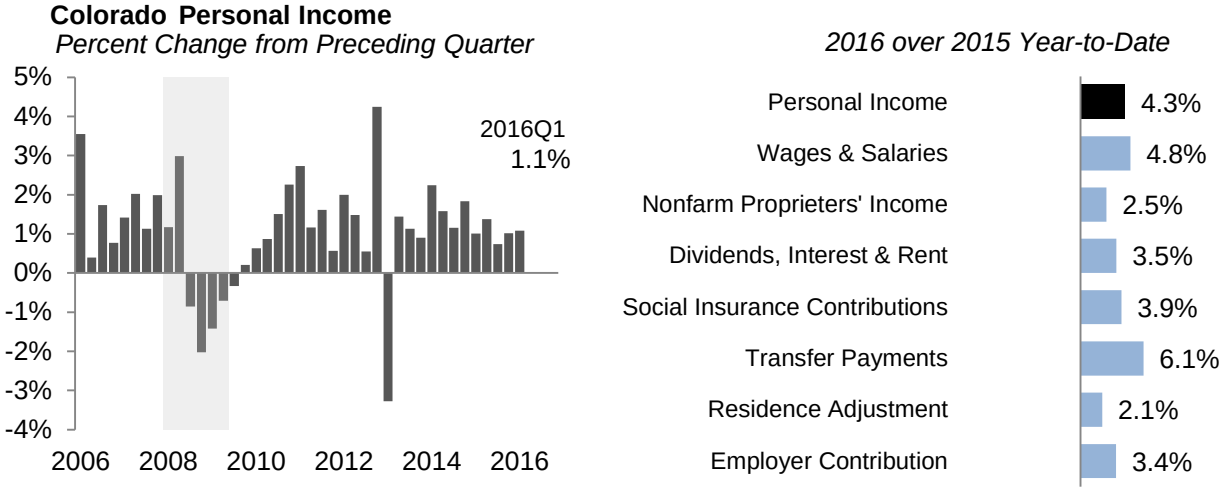
Households in Colorado are reaping the benefits of the late cycle economy to a greater extent than their national counterparts. Personal income grew 4.3 percent in the first quarter of 2016 relative to the first quarter of 2015, largely on the strength of higher wages and salaries, which account for slightly more than half of state incomes. In aggregate, wages and salaries do not yet exhibit the effects of significant wage pressure even as the labor market has reached full employment. Average weekly wages have begun to slowly gain speed, however, indicating that some of the slow growth in aggregate wages may be due to demographic changes. A history of quarter-over-quarter changes in Colorado personal income, as well as the year-over-year change in personal income components through the first quarter, is shown in the lower panel of Figure 18.

Figure 18
Personal Income and Its Components

United States



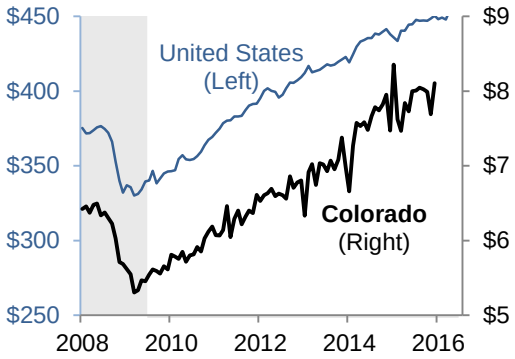
Colorado



Source: U.S. Bureau of Economic Analysis. Seasonally adjusted, nominal data through the first quarter of 2016.

Available data on household expenditures are sending mixed signals. As discussed in the previous section on gross domestic product, aggregate consumer spending has been a reliable contributor to economic growth. Meanwhile, despite some recent strength, both U.S. and Colorado retail sales appear to be topping out in the context of the current expansion. U.S. and Colorado retail trade data are presented in Figure 19. Nominal U.S. retail sales grew 2.6 percent through June relative to the same period last year, outpacing headline inflation of 1.0 percent over the same span. Colorado retail data are available only through December; however, state sales tax collections during the first half of the year declined 1.6 percent on a nominal basis relative to the same period in 2015.

Figure 19
U.S. and Colorado Retail Trade Sales
Billions of Dollars

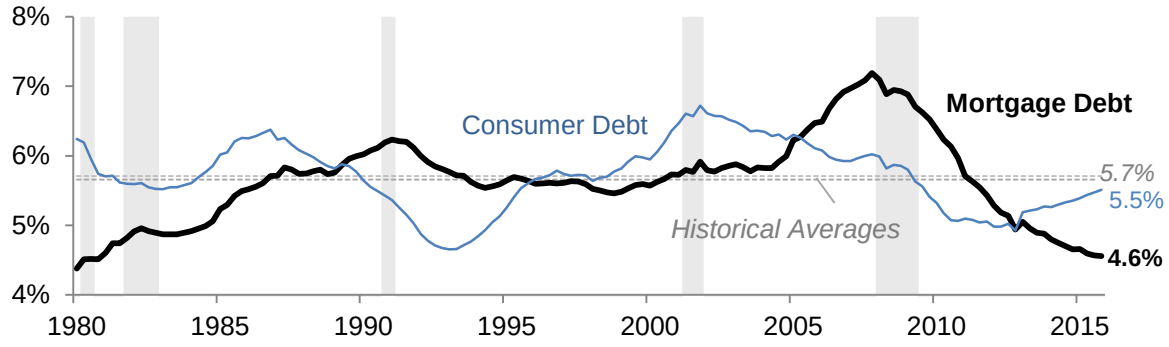


Source: U.S. Census Bureau and Colorado Department of Revenue.

Data are seasonally adjusted but are not adjusted for inflation. U.S. data through June 2016; Colorado data through December 2015.

The divergence between the relatively strong trend in consumer spending as measured for GDP and anemic retail trade and sales tax collections suggests that households are spending their incomes on a changing collection of goods and services. In particular, ballooning costs for essential services, including healthcare and education, are commanding a larger share of household budgets. Meanwhile, persistent caution among consumers has stunted demand for many goods. Notably, demand for automobiles appears to have peaked; seasonally adjusted car and light truck sales fell during each of the first two quarters of 2016.

Figure 20
Historical Debt Service Ratios



Source: Federal Reserve Board of Governors. Seasonally adjusted data.

Households continue to take on less debt from mortgages than before the recession. The debt service ratio for mortgages, or the ratio of mortgage debt payments to disposable household income, has fallen to 4.5 percent as of the first quarter of this year, its lowest level since the early 1980s. The downward trend in mortgage debt likely represents a combination of factors: more cautious consumers, tighter regulations on mortgage brokers, and a dearth of affordable housing in certain parts of the country. The debt service ratio for non-mortgage consumer loans, including credit cards, fell significantly following the Great Recession but has risen again since 2012. The lengthy and muted rebound in consumer confidence is slowly driving this ratio toward its forty-year historical average, around 5.7 percent. A history of consumer debt service ratios is illustrated in Figure 20.

- Colorado personal income is forecast to increase 4.3 percent in 2016 and 4.7 percent in 2017. Nationally, personal income is expected to increase 4.5 percent in 2016 and 4.9 percent in 2017.

- The largest component of personal income, wages and salaries, is expected to increase 4.7 percent in 2016 and 4.9 percent in 2017 in Colorado. For the U.S., wages and salaries are expected to increase 4.6 percent and 5.0 percent, respectively.

- With more consumer spending dedicated to services, nominal Colorado retail sales will grow 3.0 percent in 2016 and 3.8 percent in 2017.

Residential Real Estate and Construction

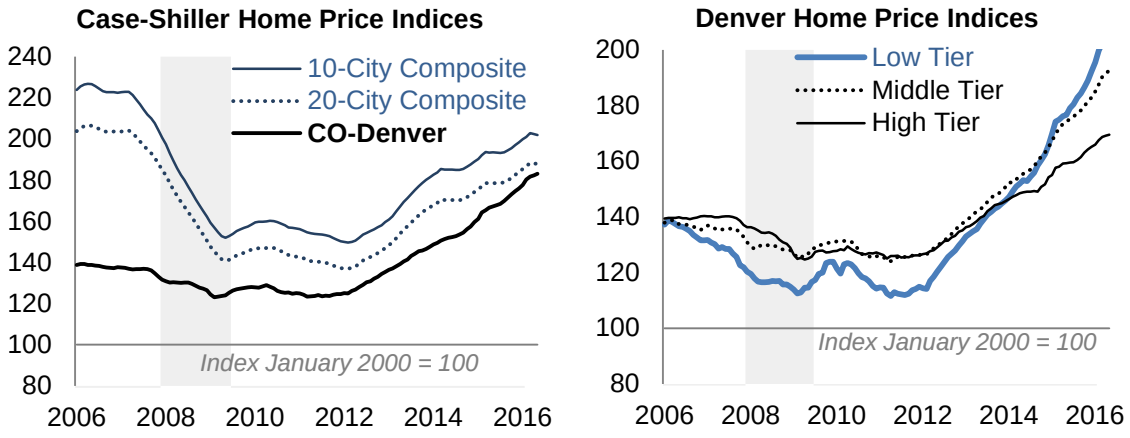
The national housing market continues its upswing, while Colorado's Front Range market continues its frenzy. Prices for residential real estate are appreciating across the country, though at much slower rates than seen during the bubble market of the mid-2000s. The S&P Dow Jones 10- and 20-city composite indices for major national housing markets indicate that nominal home prices remain below their prerecession peaks, and that appreciation has slowed relative to earlier years of the present expansion. Denver area home prices have posted year-over-year gains at or near 10 percent in each of the last six months, beating the national 20-city composite by between four and five percentage points. The two national composite indices are compared with Denver's home price index in the top left panel of Figure 21.

Within Colorado, only the Grand Junction housing market is behaving much like the national market. Along the Front Range, housing prices in all six markets for which statistics are kept — Denver-Aurora-Lakewood, Colorado Springs, Fort Collins, Pueblo, Greeley, and Boulder — have surged above pre-recession peak levels. The lower panels of Figure 21 compare a statewide home price index to one for each of these six markets. While the southern Front Range continues to lag its northern neighbors, both the Colorado Springs and Pueblo housing markets are showing considerable appreciation. High housing prices are also driving demand for rental units, and the state's rental vacancy rate has fallen to 5.5 percent from a recessionary peak of 13.2 percent.

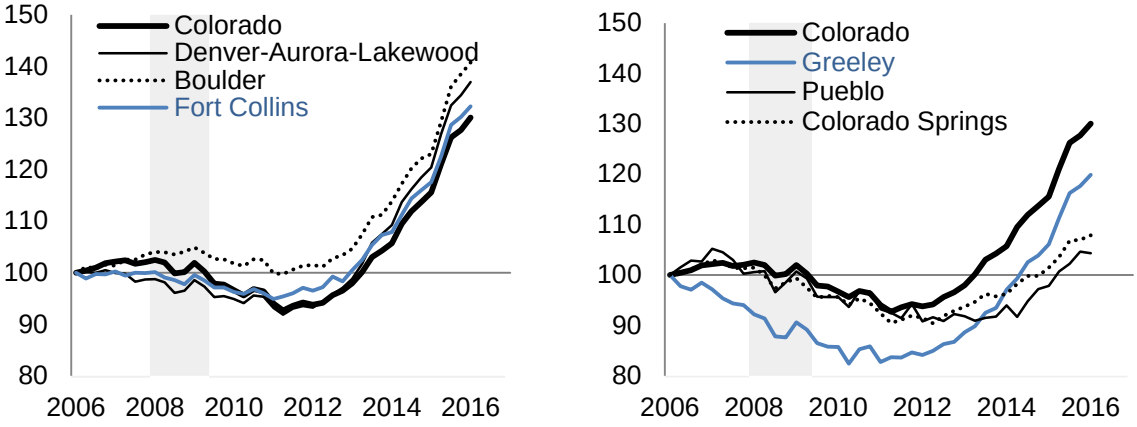
Household formation and in-migration of young adults is driving demand, particularly for inexpensive residential property. Appreciation in the cheapest third of houses and condominiums has overtaken middle and upper tier properties and continues at a torrid pace, as shown in the top right panel of Figure 21.

Part of the reason for rapid home price appreciation, particularly in Colorado, is a constraint in supply. Homebuilding is improving at a relatively slow rate in Colorado and appears to have stalled at its present level in the national market. The composition of home construction is also changing, with developers seeking additional permits for single family homes while holding multifamily construction essentially constant. Figure 22 shows building permits for new single and multifamily homes in both the U.S. and Colorado. With no signs of abatement in housing demand, the home supply is expected to grow as quickly as construction industry constraints will allow.

Figure 21
Selected Indices of Home Price Appreciation

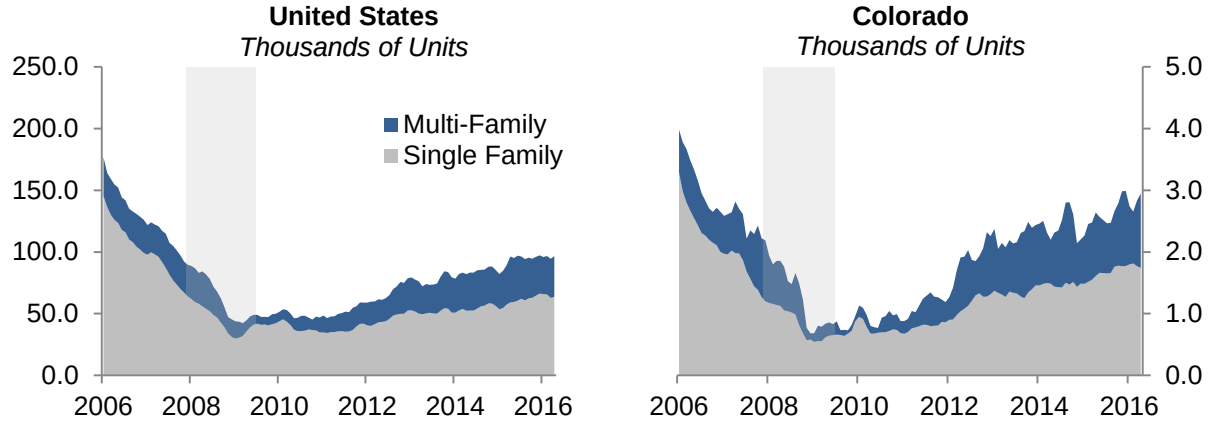


Source: S&P Dow Jones Indices LLC. Seasonally adjusted.



Source: U.S. Federal Housing Finance Agency.

Figure 22
Building Permits Issued for New Construction



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

- Supported by high demand for housing in Colorado, total residential building permits will increase 10.4 percent in 2016 and 4.9 percent in 2017. The 2017 figure represents deceleration from a spike in multifamily permits earlier this year.

Nonresidential Construction

After making slow but steady gains through five years of the economic expansion, nonresidential construction appears to have leveled off at the national level. The value of seasonally adjusted nonresidential construction projects grew 5.4 percent through June compared with the same period last year; however, the value of projects peaked in March and has declined in each month since. Construction figures have been buoyed by fast growth in commercial, lodging, and office property. Meanwhile, construction in most public goods sectors — including public safety, education, and health care — has fallen off.

Colorado's construction industry is riding a recent history of fast growth in permitted nonresidential projects. However, the outlook implied by permits for future construction is less sunny. After five years of strong expansion, all measures of nonresidential construction permits in Colorado show declines for the first seven months of the year. The value of permitted projects has fallen by a slight 1.2 percent, while the number of projects and their square footage each have dropped more significantly, by 21.5 percent and 11.7 percent, respectively. These statistics suggest that nonresidential construction is increasingly concentrated in a small number of large, expensive projects, which could be more difficult to sustain in the coming years. Nevertheless, the level of permitted construction projects remains high by historical standards, even as a year-over-year decline in permits shows weakness within the context of the state's rapid population growth.

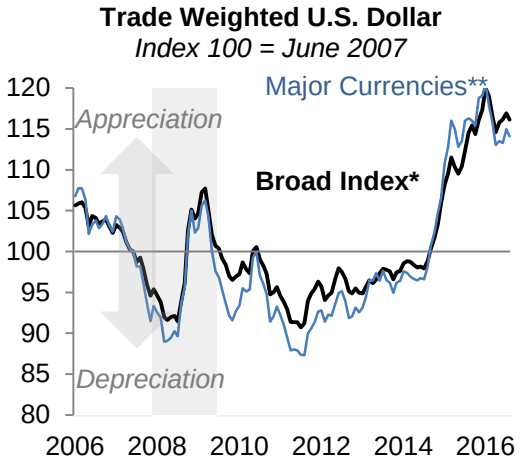
- Growth in Colorado nonresidential construction will slow to 4.1 percent in 2016, owing to reduced investment by businesses. Nonresidential construction will increase by an additional 5.0 percent in 2017.

Global Economy

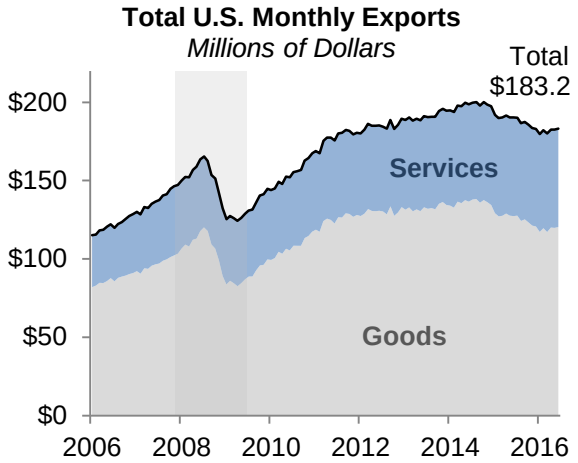
The global economic outlook remains subdued on uncertainty following the Brexit vote, slower economic growth in emerging markets, and persistently low commodity prices. Slow global growth continues to weigh on both the U.S. and Colorado economies. The value of the U.S. dollar relative to foreign currencies remains elevated, as shown in the left panel of Figure 23. Exchange rates are putting additional downward pressure on U.S. exports, which are already suffering from lackluster economic activity abroad. Despite these challenges, recent stabilization in oil prices and firming economic growth in key emerging markets are offering renewed optimism for 2017 and beyond.

As illustrated in the right panel of Figure 23, the value of U.S. exports stabilized in the second quarter following more than a year of monthly declines. According to data published by WiserTrade, exports of U.S. goods are down 6.4 percent in the first half of 2016 relative to the same period last year. Canada, the nation's largest trading partner, continues to be the most significant contributor to the decline, followed by China, Brazil, and Mexico. Exports weakened across most commodities; sales of industrial machinery, including computers, fell sharply.

Figure 23
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.

Colorado exports dropped 11.6 percent in the first half of 2016 relative to the same period during the previous year. Exports to Canada, the Netherlands, China, and Mexico contributed most to the decline. As at the national level, state export values fell across most goods and services, though industrial machinery, including computers, chemicals, and pharmaceutical products, weakened most.

The outlook for the world, and particularly **Europe**, has become less certain following the passage of the Brexit referendum. Following the vote, the International Monetary Fund downgraded expectations for 2016 world output by one tenth of one percent, largely reflecting weaker growth in the UK and the broader European Union. The outlook for **Brazil** and **Russia** — two major global economies that have been mired in recession — is stabilizing, and both countries are now expected to expand modestly in 2017 with reduced oil price volatility.

In spite of fiscal and monetary stimulus, second quarter data suggest that economic growth in **Japan** remains tepid. Economic output rose only 0.2 percent in the second quarter of 2016 on a quarter-over-quarter, annualized basis. In Japan's export-driven economy, corporate profits are down on recent appreciation in the yen and the slowdown in China. Additional stimulus is expected following the next Bank of Japan meeting in September.

Warnings on **Chinese** debt continue to mount. China's overall debt has risen to 240 percent of GDP, driven by state-owned enterprises in non-banking sectors. A "shadow banking" industry has emerged over the past five years, offering bank-to-bank loans and wealth management products. The latter of these warrants particular concern, as risky loans to indebted companies are being promoted as high yield investments.

Economic activity in **Canada**, the largest trading partner of both the U.S. and Colorado, slowed as oil prices fell and remained low. However, the promise of fiscal stimulus is now boosting growth projections. **Mexico** has been riding a currency rollercoaster and watched the peso appreciate rapidly following the Brexit referendum in Europe. In late June, the Bank of Mexico pursued its second interest rate hike in a year in an effort to manage inflationary risk.

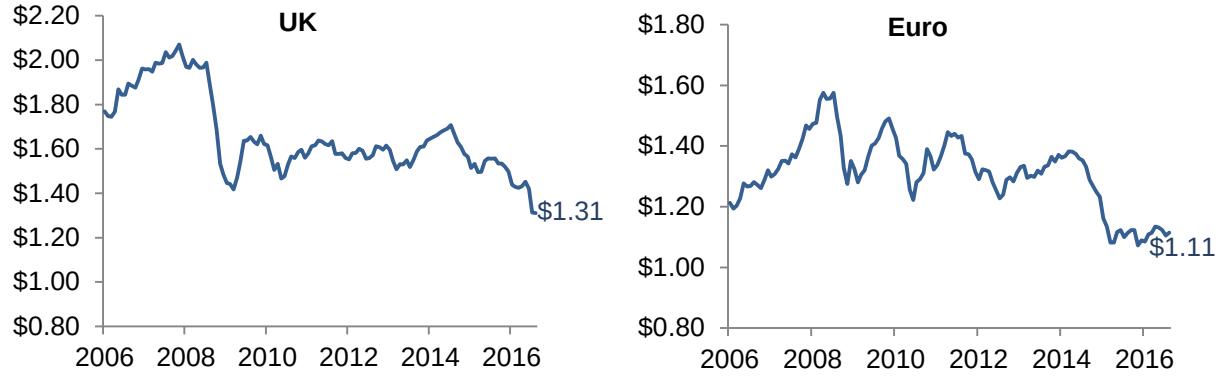
Brexit. On June 23, voters in the United Kingdom (UK) approved a referendum to exit the European Union. The full impact of Brexit is indeterminate at this time and will depend on future decisions by policymakers and business leaders. It is not yet clear when the UK will leave the EU and what kinds of institutional trade relations will exist between the UK and individual EU member states.

Global stock markets fell precipitously following the vote, only to reverse course and reach new heights in the subsequent weeks. Consumer confidence in the UK also fell following the vote and will likely fall further. Early employment data suggest little change in the labor market, as jobless claims flattened in July and fell in August. Job losses may still be in the UK's future, however. Several large companies have announced plans to cut staff, curtail investments, or suspend and even end operations in the UK on Brexit uncertainty.

The value of the British pound depreciated significantly relative to the U.S. dollar through the summer months as shown in the left panel of Figure 24. Relative to the dollar, the pound is now the least valuable it has been at any point since the mid-1980s. A weaker pound will make British exports less expensive to consumers abroad and could stimulate economic activity in the export and tourism sectors. Conversely, British consumers are already bearing higher prices for imports. Input prices are on the rise and are expected to cut into factory profits while driving higher prices for manufactured goods. In an effort to support economic growth, the Bank of England introduced a monetary stimulus package in early August, including the UK's first interest rate cut in seven years. The UK government is now weighing fiscal stimulus options as well.

For comparison, following pronounced depreciation in 2015, the euro has held steady against the dollar for the past year, as shown in the right panel of Figure 24.

Figure 24
Selected European Exchange Rates
Value of Foreign Currency in US Dollars



Source: Federal Reserve Board of Governors.

Agriculture

American agricultural producers continue to struggle. Elevated U.S. crop yields are flooding the market, driving down prices and incomes for farmers. The U.S. Department of Agriculture (USDA) now forecasts record U.S. supply for wheat, corn, and soybeans in 2016, attributable to both increased production and a reduction in net exports. A strong dollar compounds the challenges faced by U.S. farmers, as international consumers turn to cheaper food supplies from other countries. Dairies are among the hardest hit producers; on weak demand from China and Russia, milk prices have dropped to their lowest levels since the Great Recession.

Declining income, low commodity prices, and low profit margins have hurt farm cash flows, prompting many farmers to take on short-term loans. According to a survey by the Federal Reserve Bank of Kansas City, farm loans to pay operating expenses and the costs of production increased 50 percent between 2012 and 2015. In early September, the USDA announced that it would make an additional $185 million available in credit by reducing expenditures on other Farm Service Agency programs. As farmers become more reliant on credit and crop prices remain low, concerns over debt solvency are rising. The Federal Reserve reports that delinquency rates for agricultural loans have risen in each of the last four quarters and have reached their highest level since 2013. Delinquency rates for farm real estate loans are similarly rising.

Summary

The late cycle U.S. economy has weakened but continues its expansionary trend. The private sector has led the national and Colorado economies to full employment, and some workers are reaping the benefits of higher wages. The result is a steady expansion in consumer spending, bulwarking the economy against stressors elsewhere. Service sectors, landlords, and the construction industry have benefitted from gains in household spending and low prices for essential commodities, including food and energy.

Meanwhile, other areas of the economy are faring less well. In particular, business investment has halted and begun to backslide in some areas. Yet proprietors can look forward to a stabilizing global economy, slow tightening in monetary policy, and gradual gains in commodity prices, all of which are expected to bolster business prospects for struggling industries. Similarly, the global outlook and the resolution of the presidential election are more likely to stimulate than depress exports and government spending, respectively.

The U.S. and Colorado economies are expected to continue growing at reduced rates through the forecast period. At the national level, consumer spending is expected to be strong enough to offset potential weakness in other areas. In Colorado, steadying oil prices, diverse business activity, and a continued influx of new residents are all reasons to expect ongoing expansion.

Risks to the Forecast

The most significant upside risk to the forecast posits that business investment and activity has been delayed strategically and will rebound with the resolution of several near term uncertainties. In particular, business proprietors could be waiting for the markets' reaction to the Federal Reserve's eventual interest rate hike, or for the resolution of the presidential election. In this case, business indicators would improve over the next six months, leading to more robust growth in 2017 than anticipated here. Other upside risks include a faster rebound in the international economy and quicker oil price appreciation than expected in this forecast.

Because the economy's most pronounced weaknesses are in leading indicators like business investment, industrial production, and manufacturing orders, it is possible that the economy could begin to contract rather than rebounding. Tightening monetary policy at home, combined with expansionary policy abroad, could conspire to keep the dollar high, hurting American producers. The risk of recession is now higher than at previous points during the current expansion. For a discussion of recessionary risks, see the section of this document titled, "Predicting the Next Recession."

Table 14
National Economic Indicators

Calendar Years	2011	2012	2013	2014	2015	Legislative Council Staff Forecast 2016	2017	2018
Real GDP (*Billions*)[1]	$15,020.6	$15,354.6	$15,612.2	$15,982.3	$16,397.2	$16,643.1	$16,942.7	$17,264.6
Percent Change	1.6%	2.2%	1.7%	2.4%	2.6%	1.5%	1.8%	1.9%
Nonfarm Employment (*Millions*)[2]	131.9	134.2	136.4	138.9	141.8	144.4	146.7	148.6
Percent Change	1.2%	1.7%	1.6%	1.9%	2.1%	1.8%	1.6%	1.3%
Unemployment Rate	8.9%	8.1%	7.4%	6.2%	5.3%	4.8%	5.0%	5.1%
Personal Income (*Billions*)[1]	$13,254.5	$13,915.1	$14,073.7	$14,809.7	$15,458.5	$16,154.1	$16,945.7	$17,877.7
Percent Change	6.2%	5.0%	1.1%	5.2%	4.4%	4.5%	4.9%	5.5%
Wage and Salary Income (*Billions*)[1]	$6,633.2	$6,930.3	$7,116.7	$7,476.3	$7,854.8	$8,216.1	$8,626.9	$9,127.3
Percent Change	4.0%	4.5%	2.7%	5.1%	5.1%	4.6%	5.0%	5.8%
Inflation[2]	1.6%	3.1%	2.1%	1.5%	1.6%	1.0%	2.1%	2.2%

Sources

[1]Bureau of Economic Analysis. Real gross domestic product (GDP) is adjusted for inflation. Personal income and wages and salaries not adjusted for inflation.

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

Table 15
Colorado Economic Indicators

Calendar Years	2011	2012	2013	2014	2015	*Legislative Council Staff Forecast* 2016	2017	2018
Population (*Thousands, as of July 1*)[1]	5,119.7	5,191.7	5,272.1	5,355.9	5,456.6	5,560.2	5,660.3	5,762.2
Percent Change	1.4%	1.4%	1.5%	1.6%	1.9%	1.9%	1.8%	1.8%
Nonfarm Employment (*Thousands*)[2]	2,259.0	2,313.2	2,382.3	2,464.7	2,545.9	2,609.5	2,659.1	2,712.3
Percent Change	1.7%	2.4%	3.0%	3.5%	3.3%	2.5%	1.9%	2.0%
Unemployment Rate[2]	8.3	7.8	6.7	4.9	3.8	3.6	4.1	4.3
Personal Income (*Millions*)[3]	$227,052	$240,905	$246,448	$261,735	$275,061	$286,889	$300,372	$317,494
Percent Change	7.4%	6.1%	2.3%	6.2%	5.1%	4.3%	4.7%	5.7%
Wage and Salary Income (*Millions*)[3]	$118,558	$125,014	$129,509	$138,654	$146,403	$153,284	$160,795	$169,800
Percent Change	4.2%	5.4%	3.6%	7.1%	5.6%	4.7%	4.9%	5.6%
Retail Trade Sales* (*Millions*)[4]	$75,548	$80,073	$83,569	$90,653	$94,920	$97,768	$101,483	$106,050
Percent Change	6.8%	6.0%	4.4%	8.5%	4.7%	3.0%	3.8%	4.5%
Housing Permits (*Thousands*)[1]	13.5	23.3	27.5	28.7	31.9	35.2	36.9	38.9
Percent Change	16.5%	72.6%	18.1%	4.3%	11.1%	10.4%	4.9%	5.5%
Nonresidential Building (*Millions*)[5]	$3,923	$3,695	$3,624	$4,315	$4,781	$4,977	$5,226	$5,513
Percent Change	24.7%	-5.8%	-1.9%	19.1%	10.8%	4.1%	5.0%	5.5%
Denver-Boulder-Greeley Inflation[2]	3.7%	1.9%	2.8%	2.8%	1.2%	2.9%	2.4%	2.4%

Sources

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

[2]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.

[3]Bureau of Economic Analysis. Personal income and wages and salaries not adjusted for inflation.

[4]Colorado Department of Revenue.

[5]F.W. Dodge.

PREDICTING THE NEXT RECESSION

Legislative Council Staff does not have enough evidence to include a recession within the current forecast period, which ends in FY 2018-19. However, economic uncertainty and the risk of recession are rising. Most economic forecasters do not acknowledge a recession until it is too late to adequately plan for it, primarily because the evidence needed to forecast a recession and its severity usually is not available until after the recession is already underway. This chapter, special to this edition of *Focus Colorado*, is intended to begin a conversation about why Legislative Council Staff believes the risk of recession is rising, the reasons why it is difficult to predict the likelihood and timing of a recession with any precision, and the potential consequences to General Fund revenue collections should a recession occur.

This discussion of a recession describes a scenario where U.S. gross domestic product declines for two consecutive quarters and General Fund revenue is adversely affected. A scenario could also arise where the state economy is in recession while a national recession is avoided, or vice versa. The official designation of a recession is made by a committee of experts within the National Bureau of Economic Research.

Recessions and General Fund Revenue

Figure 25 on page 57 illustrates the impact of economic activity on General Fund revenue over the last two business cycles. Total General Fund revenue fell by $1.0 billion in both FY 2001-02 and FY 2008-09, followed by further decreases in the next year (Figure 25, top). Although the causes and severity of the two recessions differed significantly, both resulted in a remarkably similar percentage loss in revenue over a two-year period. Though notably, the decrease in FY 2001-02 would have been smaller if not for federal tax cuts.

Five years passed following the start of both recessions before total nominal revenue again reached pre-recession levels. Inflation-adjusted (real) per capita General Fund revenue, however, never fully recovered to the pre-recession peak after the 2001 recession, and has not yet recovered following the 2007-09 recession (Figure 25, bottom). Real per capita General Fund revenue appears to be trending down over the long term; it was $275 lower in FY 2014-15 (the most recent peak) than prior to the 2001 recession in FY 1999-00.

During both recessions, real per capita revenue fell in the same fiscal year as the start of the recession, although total nominal General Fund revenue continued to climb and did not fall until the following year. This by itself could potentially signal that a recession is already underway now, since real per capita revenue also fell in FY 2015-16. However, this conclusion cannot be made with full confidence, since last year's decrease could partially be explained by demographic changes and energy sector weakness that were not present in 2001 and 2007. In addition, tax policy changes also contributed to weakening revenue growth in both FY 2001-02 and FY 2015-16 (see Table 7 on page 22).

Obstacles to Accurately Predicting Recessions

Turning points in the economy are extremely difficult to predict. History tells us that changes in certain economic indicators precede changes in the overall economy in the short run, usually no more than a few months out. However, no recession is the same. Something that may have been a reliable leading indicator for the 2007-09 recession, such as home prices or residential construction permits, may not be a reliable leading indicator for the next. In addition, even when an indicator is reliable, the timing and magnitude of the relationship will differ between one business cycle and the next. Consequently, even if multiple indicators are flashing warning signals, it may remain nearly impossible to accurately predict a contraction, let alone its timing and severity.

Leading Indicator
An indicator that tends to change direction *in advance* of changes in the overall economy

Current Indicator
An indicator that tends to change direction *concurrently* with changes in the overall economy

Lagging Indicator
An indicator that tends to change direction *after* the rest of the economy

Complicating recession predictions further, recent data are likely to be inaccurate. Indeed, measurement error is perhaps the biggest obstacle to accurately predicting recessions. Most economic data are created using surveys and samples. For example, employment statistics are created by surveying a sample of business establishments and households, while statistics about manufacturing activity are created by surveying a sample of manufacturing firms. These data can contain significant survey error when they are initially released, depending on the size and composition of the sample. In addition to survey error, most data undergo multiple revisions several years into the future. Revisions of data collected during turning points in the economy are more likely to be larger than revisions of data collected during periods of uninterrupted economic expansion, and may change the direction of the trend altogether.

Quantitative models that attempt to create an index of leading indicators to predict short run changes in the economy suffer from these limitations. Many tend to perform well during periods of stable economic growth, but can break down as the economy approaches a turning point. The use of the most recently available historical data to quantify historical relationships between certain indicators is a notable weakness, since these data incorporate subsequent revisions that were not available when the economy entered recession. Therefore, in order to predict an imminent recession one must perform the inordinately difficult, if not impossible, task of accurately predicting revisions to existing data.

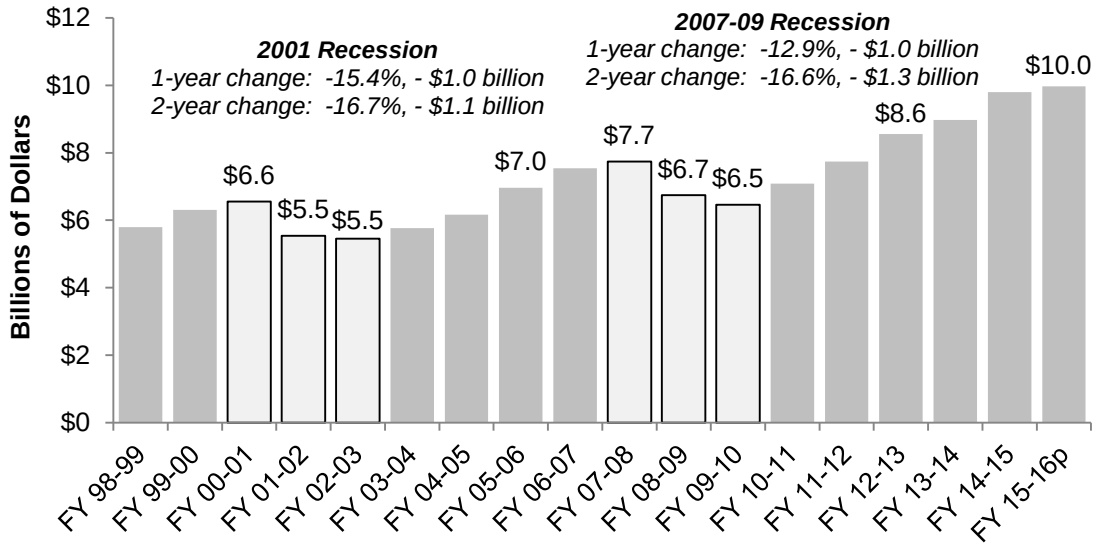
Predicting Past Recessions

For both of the last two recessions, neither Legislative Council Staff nor the Office of State Planning and Budgeting had enough evidence to predict a recession until the recession was already well underway.

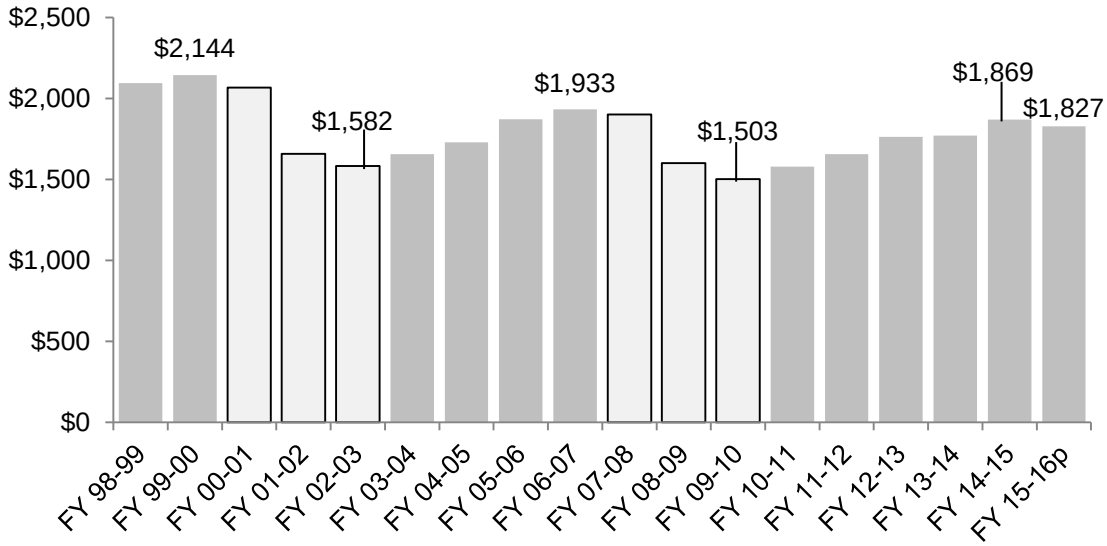
The 2001 recession was difficult to identify in its early stages because it was industry-specific, relatively mild in many sectors of the economy, and accompanied by federal tax cuts that muddied the signal from the trend in revenue collections. Legislative Council Staff began writing about weakening revenue growth for FY 2001-02 as early as September 2000. However, the forecast did not include an explicit acknowledgment of a recession or expectations for a decrease in General Fund revenue until September 2001, six months *after* the recession had already begun.

Figure 25
General Fund Revenue
Lighter Shaded Bars Illustrate the Effect of Recession on Revenue

Total General Fund Revenue, Not Adjusted for Inflation



Per Capita, Inflation-Adjusted General Fund Revenue
FY 2015-16 Dollars



P = Preliminary. Totals may not sum due to rounding.
Source: Colorado State Controller's Office (revenue), U.S. Bureau of Labor Statistics (Denver-Boulder-Greeley CPI-U), and Colorado State Demographer's Office (population).

For the 2007-09 recession, the credit market freeze that followed the collapse of Lehman Brothers in September 2008 prompted Legislative Council Staff to include a recession in the forecast released that December, *a year after* the recession had actually begun in December 2007. While in hindsight this delay appears long, the economic data then available were sending mixed signals and did not yet collectively reflect the recession that had already begun. One would not observe this by looking at the historical data available today, as several revisions since have corrected the record. If not for the spectacular nature of the financial collapse, these mixed signals may likely have prompted Legislative Council Staff to wait until the recessionary signals from the data strengthened, making it even more difficult for the General Assembly to adjust to the changing budget situation.

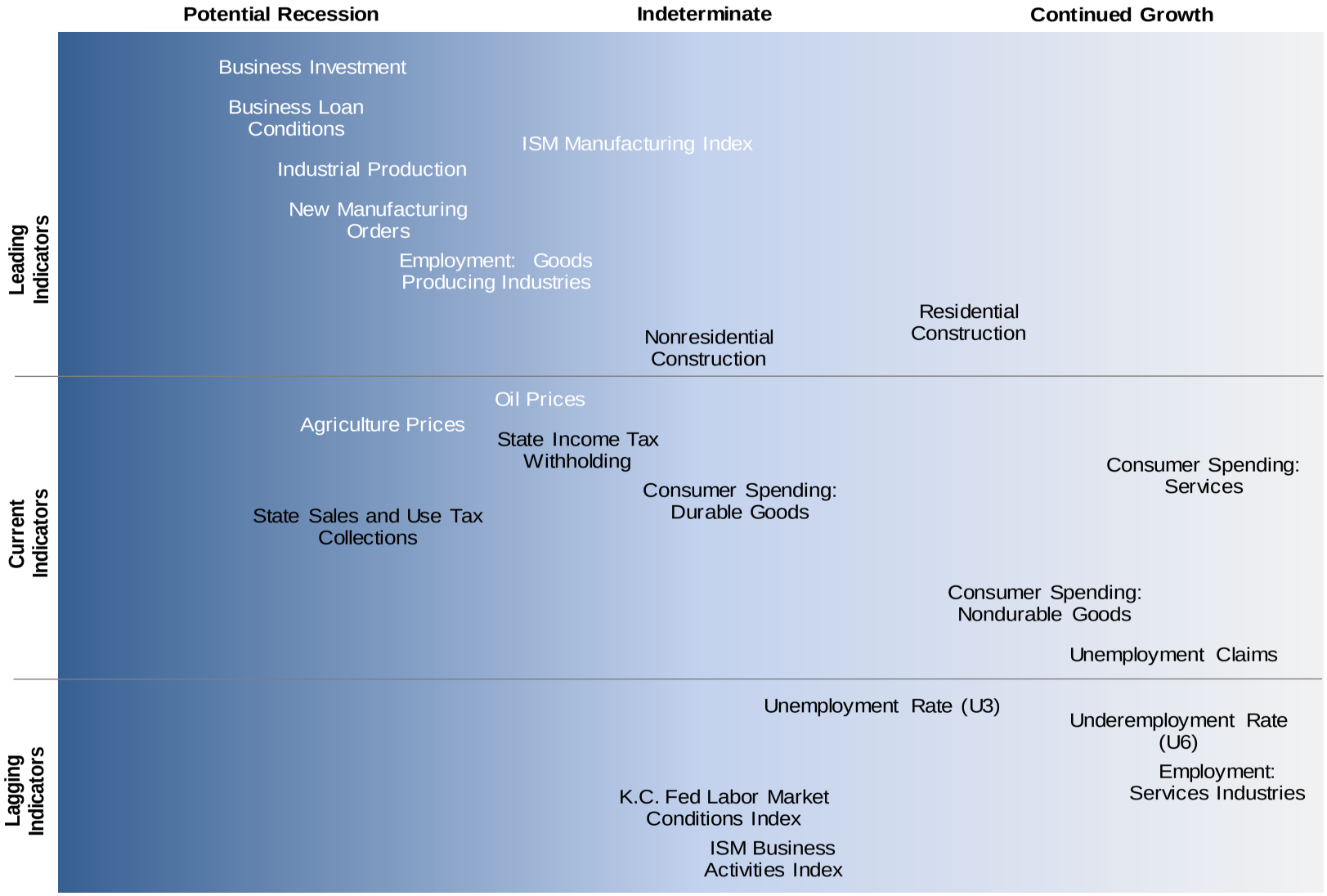
Gauging the Current Risk of Recession

Figure 26 illustrates the signals that recent trends in selected major economic indicators are sending about the state of the economy in the current business cycle. The vertical axis categorizes indicators as leading, current, or lagging indicators (see the box on page 56 for definitions of these terms). The horizontal axis attempts to place each indicator along the spectrum of signaling recession on the left and signaling continued growth on the right.

The figure shows that most *leading* indicators are pointing to a near-term recession, *current* indicators are collectively providing an indeterminate signal, while most *lagging* indicators show continued growth. Over the past year the overall pattern has shifted left, indicating a rising risk of a near-term recession. However, it does not conclusively predict a recession, even within the forecast period, which ends in FY 2018-19. Indicators presented in white text are those staff believes are most immediately affected by a weak global economy and its attendant strong dollar and low commodity prices. Most economists expect the global economy to slowly strengthen over the next few years. Should this occur, many of the indicators shown in white text will likely move toward the right in the coming months, shifting the overall signal away from recession.

Notably, the information in Figure 26 is more subjective than quantitative. The level of certainty in the placement of each indicator, both horizontally and vertically, differs. In addition, the amount of time associated with a leading or lagging indicator relative to current economic events also differs. Finally, future revisions to these data may show significant improvement from the current data, or that the nation or state is already in recession.

Figure 26
Signals from Recent Trends in Major Economic Indicators*
Indicators in white are those most immediately affected by a weak global economy.



**This figure represents Legislative Council Staff's interpretation of recent trends in major economic indicators and their implications for the state of the economy in the current business cycle.*

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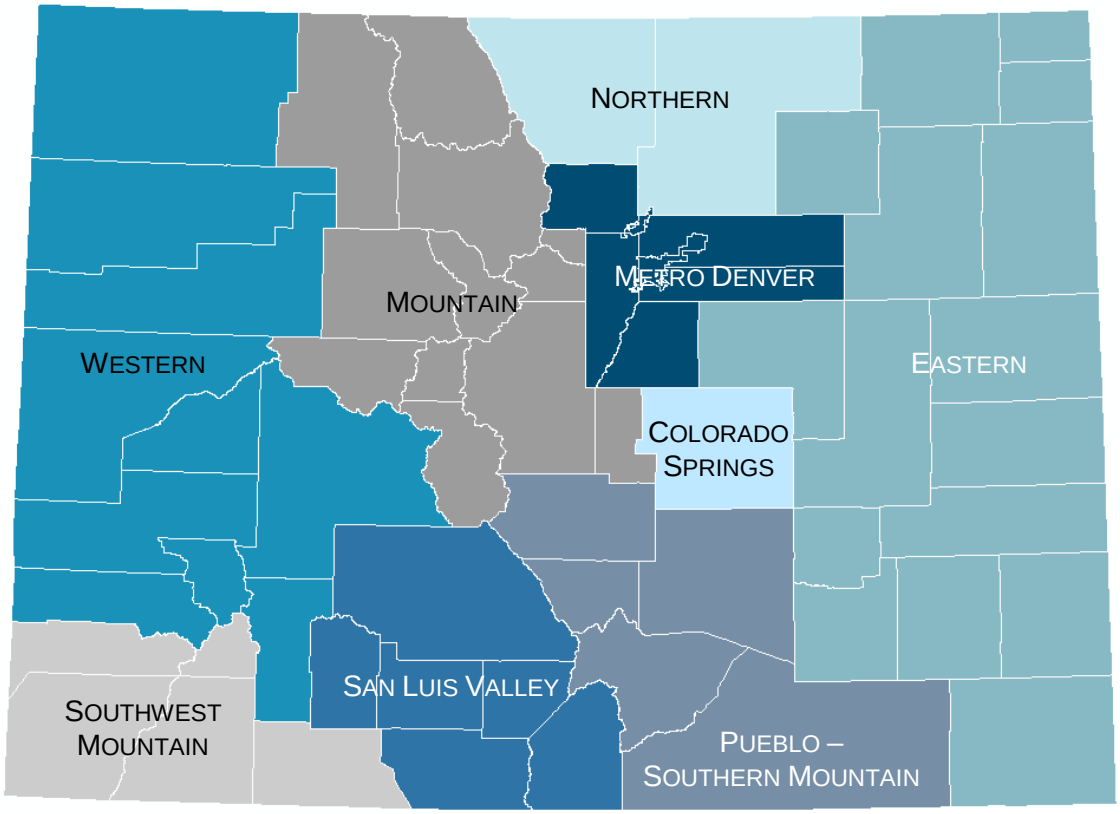
COLORADO ECONOMIC REGIONS



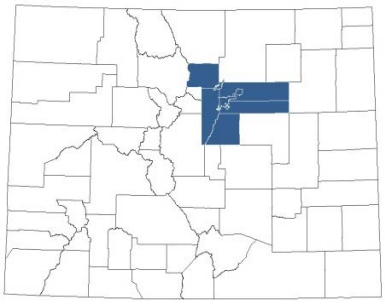
A NOTE ON DATA REVISIONS

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

Like the employment data, residential housing permits and agriculture data are also based on surveys. These data are revised periodically. Retail trade sales data typically have few revisions because the data reflect 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 continues to expand, supported by population in-migration and a diverse industry composition. Job growth remains robust and consumer spending continues to improve. The regional housing market remains tight, with home prices still rising and vacancy rates low. While construction activity has escalated, demand continues to outpace the supply of new residential units. Economic indicators for the metro Denver region are presented in Table 16.



The metro Denver region hosts the state's largest economy, with 56 percent of Colorado residents and 62 percent of Colorado's jobs. The diversity of the region's economy demonstrated resiliency to industry-specific shocks over the past twelve months. Job growth was slowed by the pull-back in oil and gas activity in 2015, but has since regained momentum (Figure 27). Year-to-date through July, employment grew 3.0 percent relative to the same period last year.

The unemployment rate averaged 3.1 percent in the first six months of the year. Unlike most other regions of the state, the metro Denver labor force has experienced relatively consistent growth over the past decade. The decline in the unemployment rate reflects consistent improvements in employment opportunities, which allow the regional economy to absorb the growing population of workers migrating to the area (Figure 28).

Consistent with state and nationwide trends, low gasoline prices have dampened the value of retail sales in the metro Denver region in 2015. Regardless, the region's retail sales have remained relatively strong, outpacing most other regions of the state and the nation as a whole in recent years (Figure 29).

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

	2012	2013	2014	2015	YTD 2016
Employment Growth [1]	2.9%	3.6%	3.7%	3.5%	3.0%
Unemployment Rate [2]	7.6%	6.5%	4.7%	3.6%	3.1%
Housing Permit Growth [3]					
Denver-Aurora MSA Single-Family	58.5%	18.9%	16.3%	17.8%	9.9%
Boulder MSA Single-Family	29.0%	22.5%	17.7%	74.2%	27.0%
Nonresidential Construction Growth [4]					
Value of Projects	14.2%	22.2%	3.9%	39.3%	-9.3%
Square Footage of Projects	-8.6%	-9.1%	10.5%	21.6%	11.4%
Level (*Millions*)	2,471	2,246	2,482	3,019	2,083
Number of Projects	6.1%	22.4%	25.1%	16.2%	-29.2%
Level	611	748	936	1,088	492
Retail Trade Sales Growth [5]	7.6%	5.1%	8.4%	6.2%	N/A

MSA = Metropolitan statistical area. NA = Not Available.

[1]Bureau of Labor Statistics, CES (establishment survey). Seasonally adjusted. Data through July 2016.

[2]Bureau of Labor Statistics, LAUS (household survey). Data prior to 2010 adjusted by Legislative Council Staff. Seasonally adjusted. Data through June 2016.

[3]U.S. Census. Growth in the number of residential building permits. Data through July 2016.

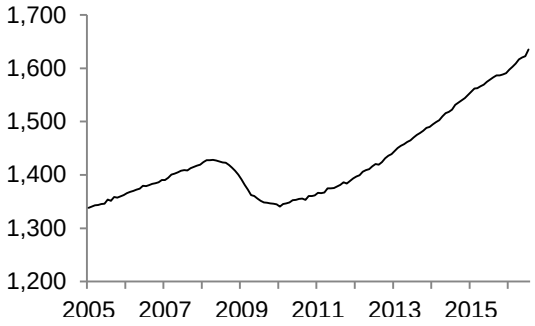
[4]F.W. Dodge. Data through July 2016.

[5]Colorado Department of Revenue. Data through December 2015.

Metro Denver's housing market remains hot. Population in-migration and household formation are contributing to strong demand for new residential units. Residential building activity has reached pre-recessionary highs (Figure 30). Yet, demand continues to outpace supply. Supply constraints, including a shortage of buildable lots and skilled labor, are holding back new construction and contributing to higher prices. As vacancy rates remain low, rental prices continue to rise. Rising home prices have made homeownership unaffordable for many, contributing to demand for rental units.

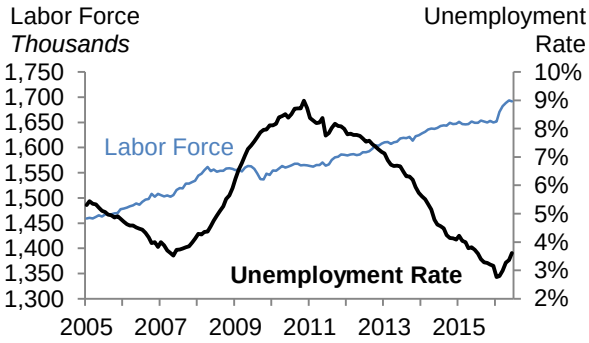
Following a very strong construction year in 2015, nonresidential building has been mixed through the first half of the year. Year-to-date through July, the value and number of projects were down, while the square footage of projects rose. Like residential building, shortages of buildable lots and skilled labor have slowed construction activity. In spite of energy industry weaknesses, which freed up valuable downtown commercial office space, office vacancy rates continue to inch downward. According to data published by CoStar Group, Inc., metro Denver office vacancy rates fell from 9.8 percent to 9.6 percent between the first and second quarter of the year. Industrial vacancy rates increased from 3.4 percent to 3.9 percent between the first and second quarter of the year, but remain very low.

Figure 27
Metro Denver Employment
Thousands of Jobs



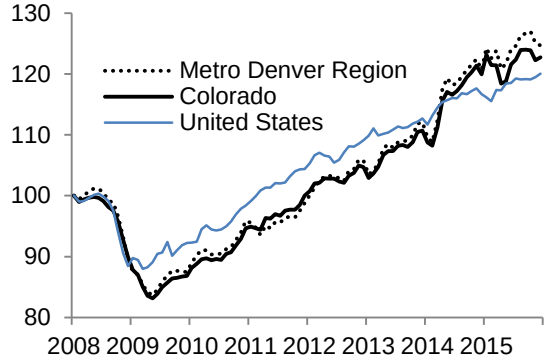
Source: U.S. Bureau of Labor Statistics; CES. Data are seasonally adjusted and are through July 2016.

Figure 28
Labor Market Trends



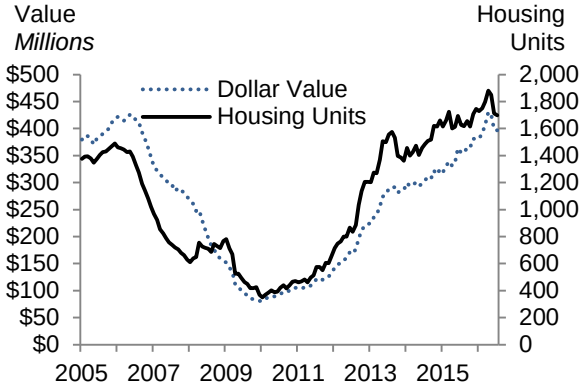
Source: U.S. Bureau of Labor Statistics; LAUS. Data prior to 2010 are adjusted by Legislative Council Staff. Data are seasonally adjusted and are through June 2016.

Figure 29
Retail Trade Trends
Index 100 = January 2008



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

Figure 30
Metro Denver Residential Building Permits



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

Northern Region

Larimer and Weld Counties make up the northern region. The economy in the region remains one of the strongest in the state; however the decline in oil and natural gas prices is adversely impacting the economy in Weld County. In Larimer County, growth in employment has grown faster than the state in the first seven months of 2016. In oil-dependent Weld County, employment growth thus far in 2016 is only one quarter of the growth that occurred in 2015. Accordingly, while the Larimer County unemployment rate remains among the lowest in the state, the Weld County rate has begun to tick upward. Residential construction permits in Larimer County have increased in 2016, while Weld County permits have declined. Retail sales exhibit a similar pattern with growth in Larimer County and declines in Weld County. Table 17 shows economic indicators for the northern region.

Table 17
Northern Region Economic Indicators
Weld and Larimer Counties

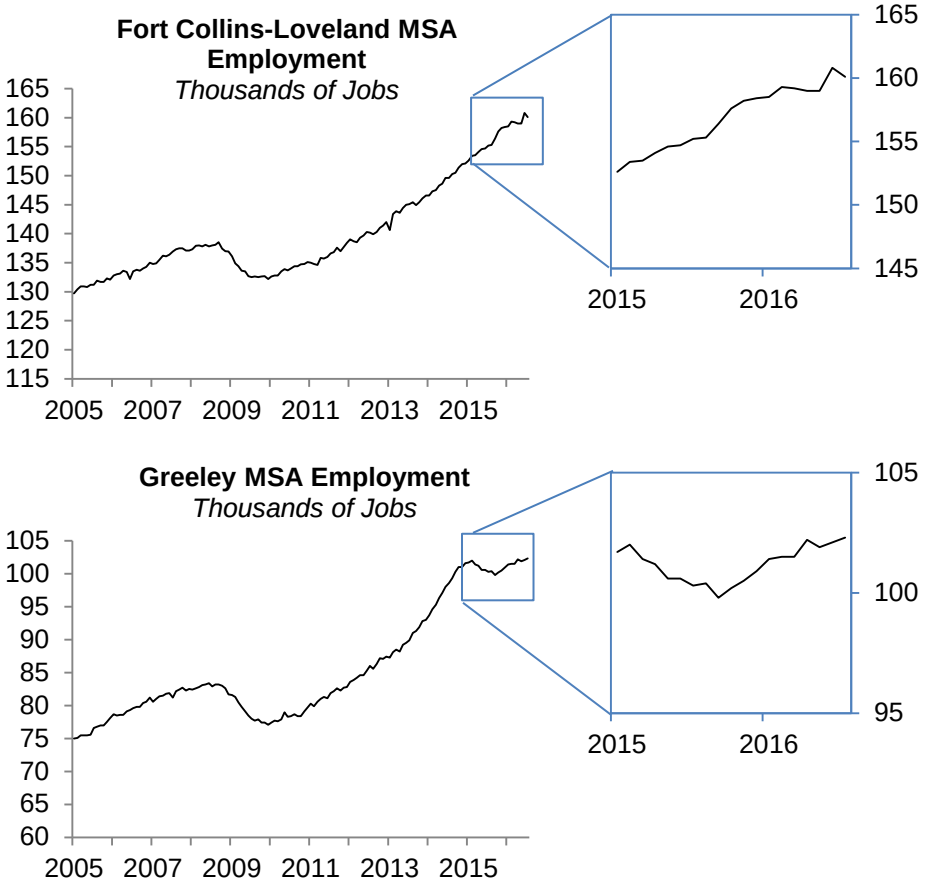
	2012	2013	2014	2015	YTD 2016
Employment Growth[1]					
Fort Collins-Loveland MSA	2.7%	3.2%	3.4%	3.9%	3.5%
Greeley MSA	4.8%	5.4%	8.9%	2.8%	0.7%
Unemployment Rate[2]					
Fort Collins-Loveland MSA	6.7%	5.8%	4.2%	3.3%	2.9%
Greeley MSA	7.8%	6.5%	4.4%	3.8%	3.5%
State Cattle and Calf Inventory Growth[3]	-3.4%	-8.7%	-4.2%	-4.4%	-0.2%
Natural Gas Production Growth[4]	14.1%	12.5%	27.0%	44.3%	17.8%
Oil Production Growth[4]	36.6%	44.5%	52.4%	39.4%	-5.8%
Housing Permit Growth[5]					
Fort Collins-Loveland MSA Total	59.3%	28.8%	8.7%	-8.1%	2.6%
Fort Collins-Loveland MSA Single Family	63.3%	31.3%	10.2%	1.3%	-9.3%
Greeley MSA Total	54.6%	45.6%	41.1%	-3.5%	-11.5%
Greeley MSA Single Family	58.8%	37.7%	18.5%	3.8%	-17.3%
Nonresidential Construction Growth[6]					
Value of Projects	12.0%	55.0%	31.1%	24.7%	-21.5%
Square Footage of Projects	42.1%	40.4%	45.5%	16.0%	-10.8%
Level (*Thousands*)	273,779	424,437	556,538	693,982	271,207
Number of Projects	23.3%	-2.5%	66.5%	-6.6%	-4.1%
Level	159	155	258	241	116
Retail Trade Sales Growth[7]					
Larimer County	6.3%	6.1%	8.5%	6.7%	N/A
Weld County	9.0%	6.6%	12.2%	1.0%	N/A

MSA = Metropolitan statistical area. NA = Not Available.
[1]Bureau of Labor Statistics, CES (establishment survey). Seasonally adjusted. Data through July 2016.
[2]Bureau of Labor Statistics, LAUS (household survey). Data prior to 2010 adjusted by Legislative Council Staff. Seasonally adjusted. Data through June 2016.
[3] National Agricultural Statistics Service. Cattle and calves on feed through July 2016.
[4]Colorado Oil and Gas Conservation Commission. Natural gas production data through April 2016. Oil production data through April 2016
[5]U.S. Census Bureau. Growth in the number of residential building permits. Data through July 2016.
[6]F.W. Dodge. Data through July 2016.
[7]Colorado Department of Revenue. Data through December 2015.

Over the last seven years, the northern region has been the epicenter of oil and natural gas production in the state, and that concentration of activity is only increasing. While oil prices began to decline at the end of 2014, production did not begin to decrease until 2016. Oil production declined 5.8 percent between January and April 2016 compared with the same period in 2015. Despite low natural gas prices, regional natural gas production increased 17.8 percent in the first four months of 2016. The increase is likely because producers are capturing natural gas from oil wells.

While the labor market remains strong in Larimer County, employment growth in Weld County is clearly decelerating with the drop in energy prices. Figure 31 shows employment trends for Larimer and Weld counties, with the pull-out boxes highlighting growth that occurred in 2015 and the first seven months of 2016. The figure shows continued employment growth in Larimer Counties, while growth in Weld County declined in the first half of 2015 and has grown slowly since. Overall, in the first seven months of 2016, employment grew 3.5 percent in Larimer County but only 0.7 percent in Weld County on a year-over-year basis, after growing 3.9 percent and 2.8 percent, respectively, in 2015.

Figure 31
Fort Collins – Loveland and Greeley MSA Nonfarm Employment
Seasonally Adjusted Data

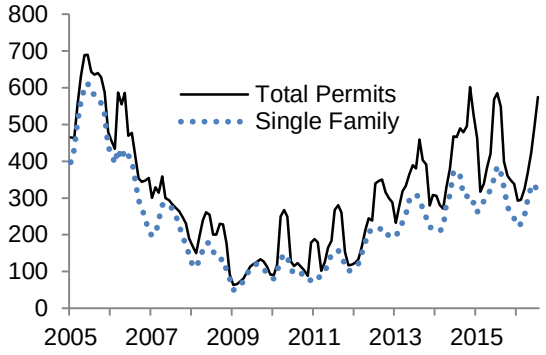


Source: U.S. Bureau of Labor Statistics, CES. Data are seasonally adjusted and are through July 2016.

The regional housing market, however, is slowing in response to the decline in oil and gas industry employment. In the first seven months of 2016, the number of housing permits in Larimer County increased 2.6 percent on a year-over-year basis, following an 8.1 percent drop in 2015. Growth in construction activity has also tapered in Weld County, with residential permits declining 11.5 percent through July 2016, after falling 3.5 percent in 2015. This comes after three consecutive years with permit growth in Weld County above 40 percent. In addition, regional non-residential construction has declined. The number, value, and size of nonresidential construction projects have all declined in the seven months of 2016 compared with the same period in 2015. Figure 32 shows the three-month moving average of residential construction permits in the northern region.

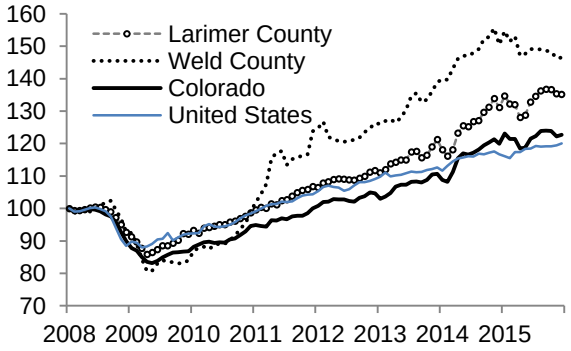
Retail sales growth decelerated in both Larimer and Weld Counties in 2015, growing 6.7 percent and 1.0 percent respectively. Figure 33 shows that the growth in indexed retail sales in each county in the northern region continues to outpace both the state and the nation as a whole.

Figure 32
Northern Region
Residential Building Permits



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

Figure 33
Retail Trade Trends
Index 100 – January 2008



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

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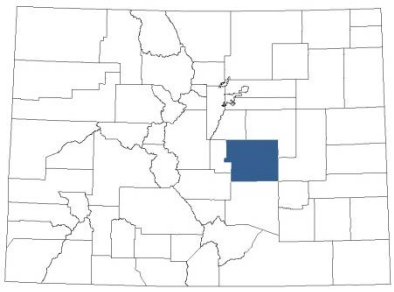
Colorado Springs Region

After lagging behind most regions in the state since the Great Recession, the Colorado Springs economy is showing consistent signs of recovery. The region enjoyed moderate job growth in 2015 and through the first seven months of 2016. The region's unemployment rate has dipped below pre-recessionary rates, driven primarily by growing area job opportunities. Recently, consumer spending has been outpacing both the state and nation. Residential construction activity has been robust through the current year, and after posting strong gains in 2015 nonresidential construction activity has continued to advance in the current year. Indicators for the Colorado Springs region are shown in Table 18.



The Colorado Springs labor market continues to show encouraging signs of recovery. Through July, the region added 2,200 net new jobs, a 2.6 percent increase over the same period last year (Figure 34). Although job growth has been broad-based across most industries, growth in the construction industry has been particularly strong.

The region's unemployment rate also continues to improve. The average unemployment rate through the first half of 2016 was 3.9 percent, down 1.4 percentage points from the same period last year. The rate has risen slightly over the last few months primarily because employment opportunities in the region have prompted people to join the labor force (Figure 35).

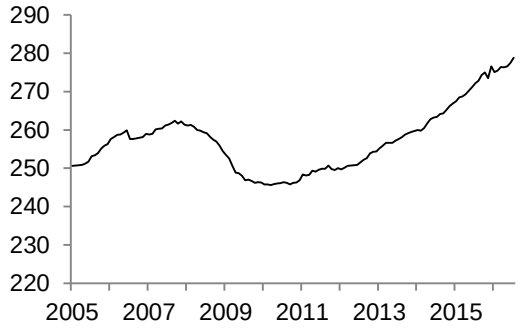
Consumer spending, as measured by retail trade sales, grew 5.8 percent in 2015, the latest data available. Recently, consumer spending in the region outpaced the state and nation, as shown in (Figure 36). Higher consumer confidence and housing growth have lifted retail trade sales in the region.

Table 18
Colorado Springs Region Economic Indicators
El Paso County

	2012	2013	2014	2015	YTD 2016
Employment Growth[1]					
Colorado Springs MSA	1.0%	2.3%	2.2%	3.2%	2.6%
Unemployment Rate[2]	8.8%	7.8%	6.0%	4.6%	3.9%
Housing Permit Growth[3]					
Total	33.0%	17.2%	3.8%	-0.4%	25.5%
Single-Family	50.1%	19.2%	-7.7%	13.3%	26.2%
Nonresidential Construction Growth[4]					
Value of Projects	0.5%	6.5%	-4.2%	53.8%	0.4%
Square Footage of Projects	-1.6%	25.2%	-12.0%	-0.2%	-1.5%
Level (*Thousands*)	479,770	510,809	489,589	753,021	268,811
Number of Projects	-11.7%	-1.7%	-5.9%	12.0%	-18.8%
Level	361	355	334	374	177
Retail Trade Sales Growth[5]	5.3%	4.9%	4.1%	5.8%	N/A

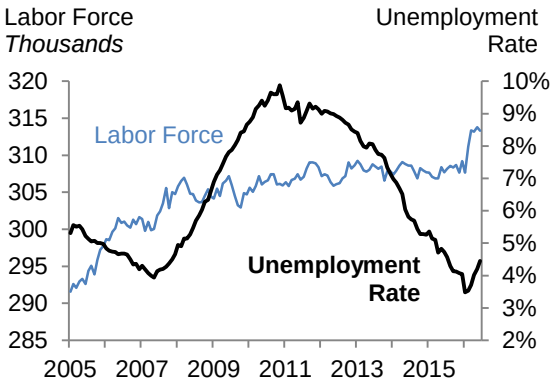
MSA = Metropolitan statistical area. NA = Not Available.
[1]U.S. Bureau of Labor Statistics, CES (establishment survey). Seasonally adjusted. Data through July 2016.
[2]U.S. Bureau of Labor Statistics, LAUS (household survey). Data prior to 2010 adjusted by Legislative Council Staff. Seasonally adjusted. Data through June 2016.
[3]U.S. Census. Growth in the number of residential building permits. Data through July 2016.
[4]F.W. Dodge. Data through July 2016.
[5]Colorado Department of Revenue. Data through December 2015.

Figure 34
Colorado Springs Employment
Thousands of Jobs



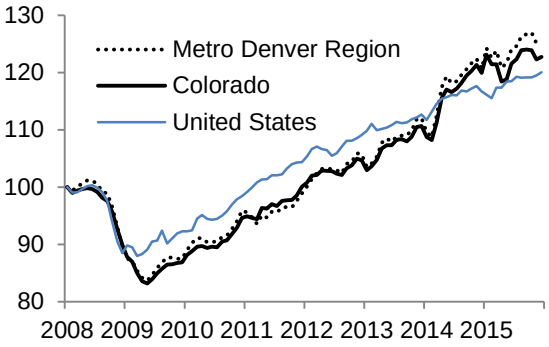
Source: U.S. Bureau of Labor Statistics; CES. Data are seasonally adjusted and are through July 2016.

Figure 35
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 June 2016.

Figure 36
Retail Trade Trends
Index 100 = January 2008

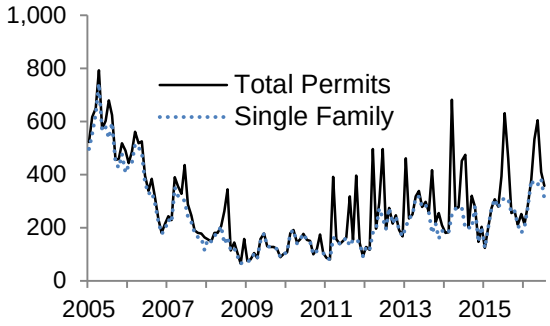


Source: Colorado Department of Revenue and U.S. Census Bureau. Data are shown as a three-month moving averages. Data are seasonally adjusted and are through December 2015.

Persistently low interest rates, low vacancy rates for the area, and an expanding labor market are supporting growth in the residential construction building market. Total housing permits rose 25.5 percent through July relative to the same period last year (Figure 37).

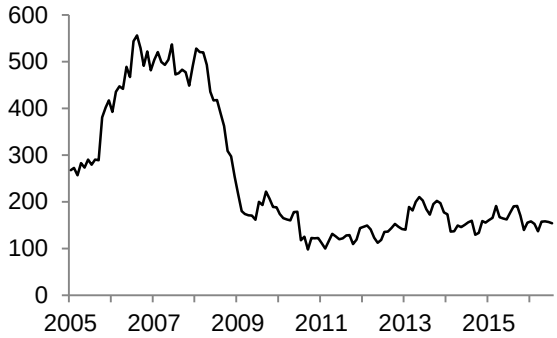
Similar to the residential construction market, the nonresidential market continues to see improvement. After a strong performance in 2015, the value of nonresidential construction projects continues to improve. However, relative to pre-recessionary levels, nonresidential construction activity remains subdued (Figure 38).

Figure 37
Colorado Springs MSA
Residential Building Permits
Number of Units



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

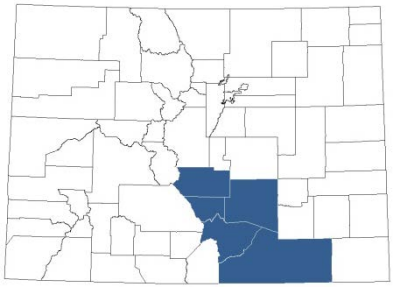
Figure 38
Colorado Springs
Nonresidential Projects
Thousands of Square Feet



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

Pueblo – Southern Mountains Region

Economic indicators for the Pueblo ─ Southern Mountains region, which consists of Pueblo, Fremont, Custer, Huerfano and Las Animas counties, continue to show improvement through the first half of 2016. Recent success in attracting new high tech businesses appears to be aiding the economic recovery in the region, particularly in Pueblo Country. Regional employment has increased thus far in 2016 over year-ago levels. Retail sales rose in 2015, and construction activity continues to rebound. Table 19 shows several economic indicators for the region.



Employment growth in the Southern Mountains region has lagged other areas of the state over the past few years. Recently, however, the region is showing encouraging signs of employment growth. Employment in the larger five-county Pueblo region increased 3.0 percent in the first half of 2016, while the Pueblo MSA, which includes Pueblo County, added jobs at a pace of 2.2 percent (Figure 39). Progress has been broad-based across all major industries, with the education and health services and professional business services sectors reporting the strongest gains over the year. An increased presence of several new business announcements in 2015 should add more momentum to employment numbers. New developments in the region include a new research and development office for United Launch Alliance, construction of the nation's largest hemp oil processing facility, and the development of the state's largest solar farm.

The unemployment rate in the region has gradually declined since 2013 (Figure 40). The average unemployment rate through the first half of 2016 was 5.0 percent, down 1.2 percentage points from the same period one year ago. The rate did tick up slightly in May and June, primarily from an increase in the region's labor force. Although the area unemployment rate has shown significant improvement, it remains above the statewide rate of 3.7 percent.

Table 19
Pueblo Region Economic Indicators
Custer, Fremont, Huerfano, Las Animas, and Pueblo Counties

	2012	2013	2014	2015	YTD 2016
Employment Growth					
Pueblo Region[1]	-1.0%	-0.8%	1.0%	0.9%	3.0%
Pueblo MSA[2]	-0.2%	0.8%	1.5%	2.2%	2.2%
Unemployment Rate[1]	10.9%	10.1%	7.4%	5.7%	5.0%
Housing Permit Growth[3]					
Pueblo MSA Total	125.4%	-40.6%	-0.6%	69.4%	-13.3%
Pueblo MSA Single-Family	50.9%	-8.1%	-0.6%	29.9%	32.2%
Nonresidential Construction Growth[4]					
Value of Projects	717.4%	-75.3%	192.7%	14.6%	23.5%
Square Footage of Projects	390.8%	-72.2%	197.9%	2.3%	-19.6%
Level (*Thousands*)	109,397	30,389	90,527	92,620	12,513
Number of Projects	-31.7%	7.1%	96.7%	-22.0%	38.1%
Level	28	30	59	46	29
Retail Trade Sales Growth[5]	3.2%	1.5%	4.9%	2.9%	N/A

MSA = Metropolitan statistical area. NA = Not Available.
[1]U.S. Bureau of Labor Statistics, CES (establishment survey). Seasonally adjusted. Data through July 2016.
[2]U.S. Bureau of Labor Statistics, LAUS (household survey). Data prior to 2010 adjusted by Legislative Council Staff. Seasonally adjusted. Data through June 2016.
[3]U.S. Census. Growth in the number of residential building permits. Data through July 2016.
[4]F.W. Dodge. Data through July 2016.
[5]Colorado Department of Revenue. Data through December 2015.

Area retail trade rose by 2.9 percent in 2015, down from the 4.9 percent growth rate in 2015. Despite an improving labor market and an increase in construction, area consumer spending underperformed statewide trends in 2015 (Figure 41).

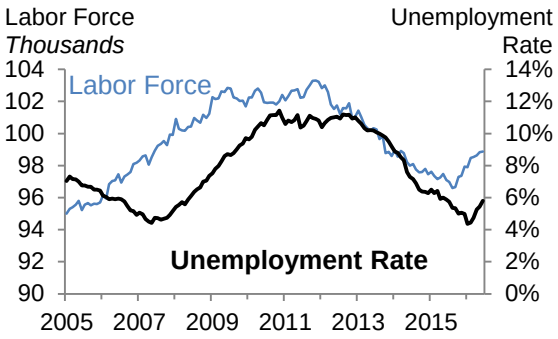
The area residential construction market continues to bounce back. Residential construction activity picked up in 2015 and has continued in the first part of 2016. Although the total number of Pueblo county permits issued for all residential types is down through July, single-family housing permits rose by 32.2 percent compared with the same period last year (Figure 42). However, relative to pre-recessionary levels, residential construction activity remains subdued.

Strong demand for commercial and industrial buildings continues to boost nonresidential construction in the region. In 2015, the region added over 92,000 square feet to their nonresidential inventory. The number of nonresidential projects is up 38 percent through July compared with the same period one year ago. Marijuana entrepreneurs are acquiring warehouse and large building space.

Figure 39
Pueblo MSA Employment
Thousands of Jobs

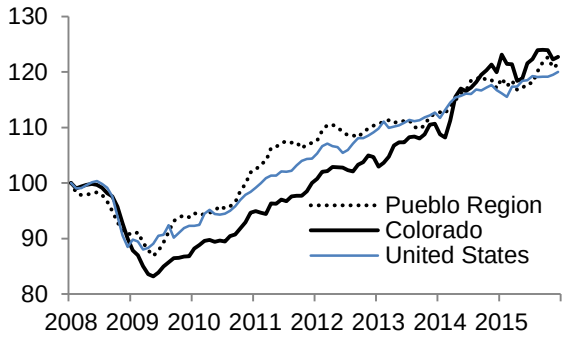
Source: U.S. Bureau of Labor Statistics; CES. Data are seasonally adjusted and are through July 2016.

Figure 40
Labor Market Trends



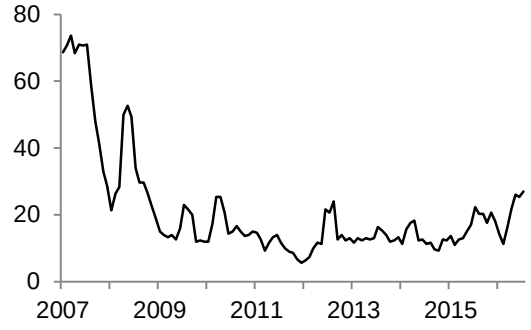
Source: U.S. Bureau of Labor Statistics; LAUS. Data prior to 2010 are adjusted by Legislative Council Staff. Data are seasonally adjusted and are through June 2016.

Figure 41
Retail Trade Trends
Index 100 = January



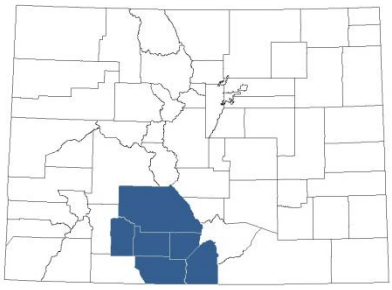
Source: Colorado Department of Revenue and U.S. Census Bureau. Data are shown as a three-month moving averages. Data are seasonally adjusted and are through December 2015.

Figure 42
Pueblo County
Single-Family Residential Building Permits
Number of Housing Units



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

San Luis Valley Region



The San Luis Valley is Colorado's smallest regional economy, accounting for just 0.9 percent of the state population. The region produces agricultural commodities, principally barley and potatoes, while also providing regional services and welcoming tourists. By most available metrics, the regional economy improved in 2015 with mixed economic data thus far in 2016. Employers added jobs, the unemployment rate fell, and agricultural conditions improved. Economic indicators for the region are presented in Figure 20.

Agriculture is the most important industry in the San Luis Valley. The region produces barley, potatoes, alfalfa hay, vegetables, and quinoa, while also furnishing grazing land to livestock producers. In 2015, regional producers harvested over 52,000 acres of barley worth an average of $878.50 per acre, both increases of over 20 percent relative to the prior year. Potato cultivation acreage dropped by 3.9 percent in 2015. However, while potato prices dropped statewide during the year, the value of an acre of San Luis Valley potatoes ticked up slightly. Additional moisture brought to Southern Colorado during the El Niño winter is expected to curry favorable farming and ranching conditions through 2016.

Regional employment grew by 5.5 percent in the first half of 2016 compared with year-ago levels. If this pace continues, 2016 employment growth will be the fastest since 2009. Major employers in this region include various government agencies and the San Luis Valley Medical Center. Employment growth has driven the unemployment rate down to 4.6 percent in June 2016. Regional labor market indicators are illustrated in Figure 43.

Retail sales growth in the San Luis Valley increased 11.5 percent in 2015 and 3.7 percent in 2014. Part of this increase in retail sales was due to a spike in sales in the first half of 2015, as shown in Figure 44.

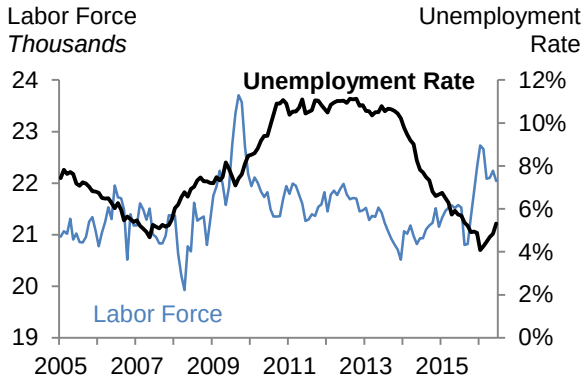
Table 20
San Luis Valley Region Economic Indicators
Alamosa, Conejos, Costilla, Mineral, Rio Grande, and Saguache Counties

	2012	2013	2014	2015	YTD 2016
Employment Growth [1]	0.2%	-2.2%	2.6%	4.4%	5.5%
Unemployment Rate [1]	10.9%	10.5%	8.0%	5.7%	4.6%
San Luis Valley Agriculture District [2]					
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 [3]	41.5%	15.0%	-25.0%	21.5%	-2.8%
Retail Trade Sales Growth [4]	4.4%	0.6%	3.7%	11.5%	N/A

NA = Not Available.
[1]U.S. Bureau of Labor Statistics, LAUS (household survey). Data prior to 2010 adjusted by Legislative Council Staff. Seasonally adjusted. Data through June 2016.
[2]National Agricultural Statistics Service. Barley through December 2015; potatoes through November 2015.
[3]F.W. Dodge. Data through July 2016.
[4]Colorado Department of Revenue. Data through December 2015.

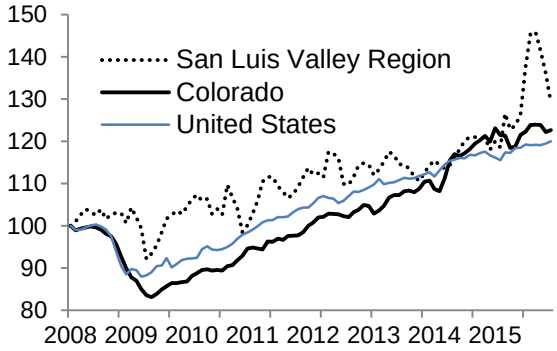
The number of new housing permits issued in the region declined by 2.8 percent in the first seven months of 2016, compared with the same period in 2015. Because the region is small and has relatively few housing permits, annual average growth is volatile. Building permits increased by 15.0 percent in 2013, fell 25.0 percent in 2014, and increased 21.5 percent in 2015. These are large swings in percentage terms, but only represent a difference of 48 construction permits between the year with the most construction (2013, 192 units) and least (2014, 144 units).

Figure
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 June 2016.

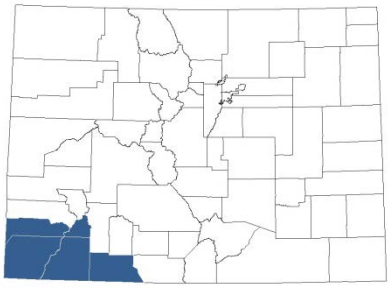
Figure
Retail Trade Trends
Index 100 = January 2008



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

Southwest Mountain Region

Economic activity in the southwest mountain region continues to expand in spite of several headwinds. This regional economy relies heavily on tourism, agriculture, and natural resource extraction. While tourism remains robust, low commodity prices for agriculture and natural resources continue to dampen growth in the regional economy. Further reflecting these trends, retail trade sales growth remain weak, while housing market and construction activity improved, bolstered by tourism activity. Economic indicators for the region are summarized in Table 21.



Tourism remains robust in the southwest mountain region. Visits to Mesa Verde National Park and Hovenweep National Monument increased 8.1 percent between January and July relative to the same period last year. This follows two consecutive years of strong increases in visitations.

Low crop and natural gas prices continue to depress both agricultural and energy industry activity in the region. Generally, agricultural prices are expected to remain low in 2016 as supply continues to outpace demand for agricultural goods. Similarly, the price of natural gas is expected to remain low throughout 2016, softening employment prospects in the area energy industry.

Following slow growth in 2015, the regional labor market has improved in 2016 to date. Employment growth is up 2.8 percent in the first half of the year over the same period last year. The regional unemployment rate averaged 3.7 percent year-to-date through June, compared to a statewide rate of 3.4 percent. As demonstrated in Figure 45, labor market data can be volatile for areas with smaller populations due to sampling error. Looking past this volatility, the trend in both employment and labor force growth suggests continued positive improvement in the regional labor market.

Regional consumer spending, as measured by retail trade sales, grew only modestly in 2015. Retail sales rose only 1.7 percent, relative to a statewide growth of 5.4 percent. Similar to nationwide trends, some of the weakness is attributable to lower gasoline prices. Retail trade indices for the region, state, and nation are shown in Figure 46. The southwest mountain region continues to underperform the nation and Colorado.

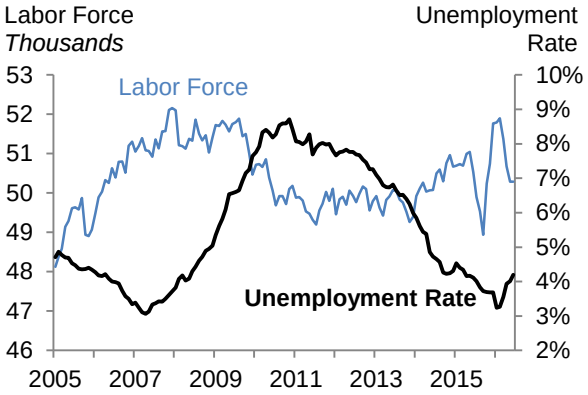
Table 21
Southwest Mountain Region Economic Indicators
Archuleta, Dolores, La Plata, Montezuma, and San Juan Counties

	2012	2013	2014	2015	YTD 2016
Employment Growth [1]	0.7%	0.8%	3.2%	1.1%	2.8%
Unemployment Rate[1]	7.6%	6.6%	4.8%	4.0%	3.7%
Housing Permit Growth [2]	2.4%	44.7%	14.2%	-6.1%	8.7%
Retail Trade Sales Growth [3]	7.2%	5.0%	3.0%	1.7%	N/A
National Park Recreation Visits[4]	-13.8%	-5.9%	8.9%	10.2%	8.1%

NA = Not Available.
[1]U.S. Bureau of Labor Statistics, LAUS (household survey). Seasonally adjusted. Data prior to 2010 adjusted by Legislative Council Staff. Data through June 2016.
[2]F.W. Dodge. Data through July 2016.
[3]Colorado Department of Revenue. Data through December 2015.
[4]National Park Service. Data through July 2016. Recreation visits for Mesa Verde National Park and Hovenweep National Monument.

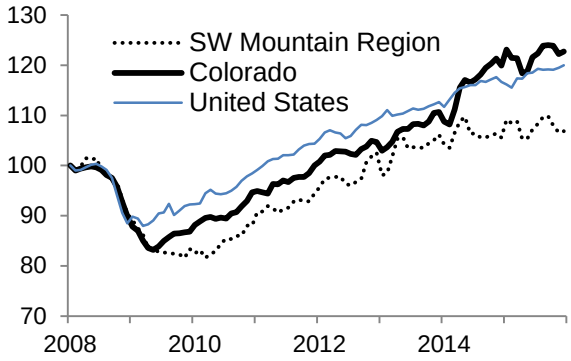
Residential construction activity has picked up in 2016. Housing permits rose 8.7 percent year-to-date through July, relative to the same period in 2015. Area rental vacancies have declined as homeowners are increasingly choosing to rent their properties to tourists on vacation rental by owner (VRBO) websites, rather than putting homes on the market for sale. These trends are contributing to a tighter housing market and raising demand for new home construction, particularly in La Plata and Archuleta counties.

Figure
Labor Market Trends



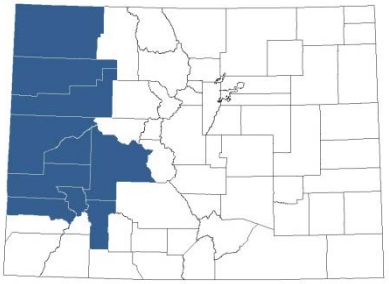
Source: U.S. Bureau of Labor Statistics; LAUS. Data prior to 2010 are adjusted by Legislative Council Staff. Data are seasonally adjusted and are through June 2016.

Figure
Retail Trade Trends
Index 100 = January 2008



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

Western Region



The western region, which is heavily dependent on energy extraction services and tourism, showed mixed performance in the first half of 2016. Persistently low natural gas prices and a struggling coal industry have impeded economic growth in many parts of the region, particularly in Garfield, Rio Blanco, and Delta counties. On the other hand, popular tourist destinations, such as Ouray and San Miguel counties, continued to show employment growth. Economic indicators for the region are summarized in Table 22.

The labor market is slowly improving in the region, despite weakness in the energy sector. Regional employment growth increased 2.4 percent in the first seven months of 2016 compared with the same period in 2015. Employment growth in Grand Junction, the largest town in the region, grew at a more modest rate, 0.4 percent. In June 2016, the regional unemployment rate was 4.6 percent after declining since 2010, as shown in Figure 47.

Declining natural gas production resulting from relatively low prices is dampening employment in Garfield and Rio Blanco counties. The region's natural gas production is concentrated in the Piceance Basin, primarily in Garfield County. Natural gas production in the western region has declined each year since 2013 and this trend has continued so far in 2016. Through April 2016, regional gas production was down 11.5 percent compared with the same period in 2015. While statewide natural gas production has remained relatively stable, production in the western region has steadily declined since its peak in 2012 (Figure 48).

Meanwhile, low prices and low demand continue to affect the coal industry. Between 2013 and January 2016, three coal mines in the region announced plans to close. In September 2016, it was announced that the New Horizon Mine will close when the Nucla Station power plant closes. In 2013, employment in coal mines averaged 2,017 employees. Through the first six months of 2016, average monthly employment was 1,244.

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

	2012	2013	2014	2015	YTD 2016
Employment Growth					
Western Region[1]	0.3%	-0.6%	2.1%	-0.2%	1.6%
Grand Junction MSA[2]	0.8%	0.6%	2.5%	0.0%	0.4%
Unemployment Rate[1]	9.2%	8.2%	5.9%	4.9%	4.6%
Natural Gas Production Growth[3]	3.5%	-8.8%	-5.3%	-12.8%	-11.5%
Housing Permit Growth [4]	22.4%	-1.0%	7.9%	21.2%	16.8%
Nonresidential Construction Growth [4]					
Value of Projects	13.2%	-24.7%	221.9%	-37.9%	-29.2%
Square Footage of Projects	26.0%	-42.0%	157.9%	-41.0%	-35.2%
Level (*Thousands*)	682	396	1,021	602	189
Number of Projects	16.7%	-28.6%	21.8%	-17.9%	24.1%
Level	77	55	67	55	36
Retail Trade Sales Growth [5]	2.3%	2.4%	4.7%	7.4%	N/A

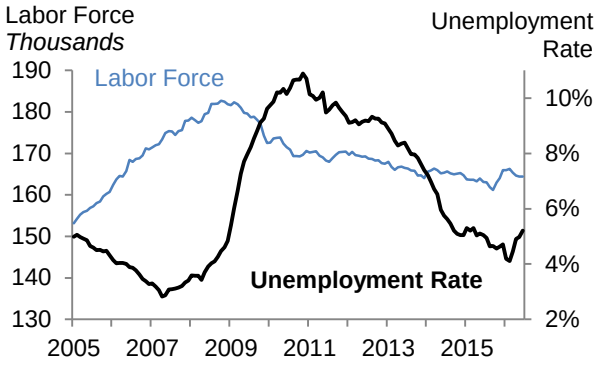
MSA = Metropolitan statistical area. NA = Not Available.
[1] U.S. Bureau of Labor Statistics, LAUS (household survey). Data prior to 2010 adjusted by Legislative Council Staff. Seasonally adjusted. Data through June 2016.
[2] U.S. Bureau of Labor Statistics, CES (establishment survey). Seasonally adjusted. Data through July 2016.
[3] Colorado Oil and Gas Conservation Commission. Data through April 2016.
[4] F.W. Dodge. Data through July 2016.
[5] Colorado Department of Revenue. Seasonally adjusted. Data through December 2015.

Regional residential construction continued to grow through the first seven months of 2016, as housing permits increased by 16.8 percent. Approximately half of this improvement is within 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 in the region has been mixed in the region through the first seven months of 2016. There have been more projects, but they have been smaller and cheaper to build. The number of projects under construction increased 24.1 percent between January and July 2016 compared with the same period in 2015, while the value and square footage of those projects declined by 29.2 percent and 35.2 percent, respectively.

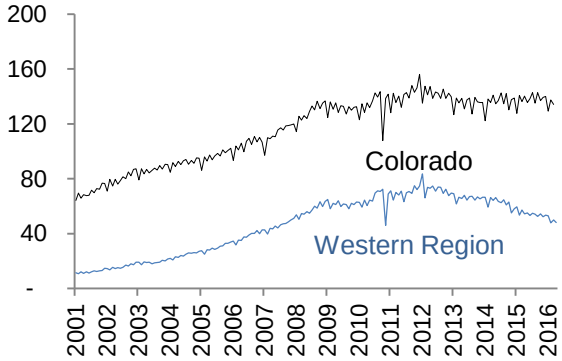
Consumer spending, as measured by retail trade sales, increased 7.4 percent in 2015. Retail sales continue to lag well behind other areas of the state. As shown in Figure 49, retail trade sales in the western region fell further than sales statewide during the recession and have yet to reach pre-recession levels.

Figure 47
Labor Market Trends



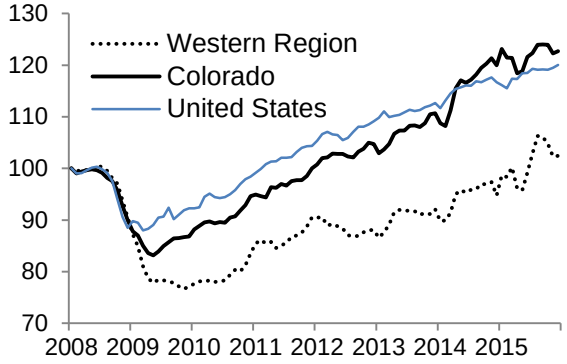
Source: U.S. Bureau of Labor Statistics; LAUS. Data prior to 2010 are adjusted by Legislative Council Staff. Data are seasonally adjusted and are through June 2016.

Figure 48
Natural Gas Production
Millions of MCF



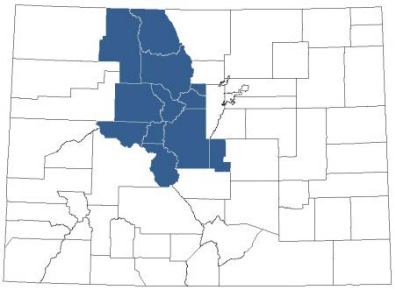
Source: Colorado Oil and Gas Commission. Data through April 2016.

Figure 49
Retail Trade Trends
Index 100 = January 2008



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

Mountain Region



The twelve Colorado counties of the mountain region are heavily reliant on tourism, which has been robust in 2016. Regional employment has been strong, and consumer spending continues to outpace statewide and national trends. Area construction activity remains mixed on supply constraints. Economic indicators for the mountain region are presented in Table 23.

Regional employment rose 5.0 percent through the first half of 2016, compared with the same period last year. After nearly a decade, employment has finally returned to pre-recessionary highs (Figure 50). On strong job growth, the regional unemployment rate averaged 2.8 percent in the first half of the year (Figure 51). Comparatively, the six-month statewide rate averaged 3.4 percent.

Tourism is vital for the economy of the mountain region, and year-to-date visitations have been strong. According to Colorado Ski Country USA, skier visits reached a record 13 million during the 2015-16 ski season. During the spring and summer months, new recreational attractions, hot Colorado weather, and stronger Colorado and national economies boosted mountain travel.

Consumer spending, as measured by retail trade sales, rose 6.7 percent in 2015 over the prior year, compared to statewide growth of 5.4 percent. Figure 52 indexes growth in retail sales for the region, state, and U.S. since January 2008. Over the past three years, the mountain region has outpaced state and nationwide growth in consumer spending.

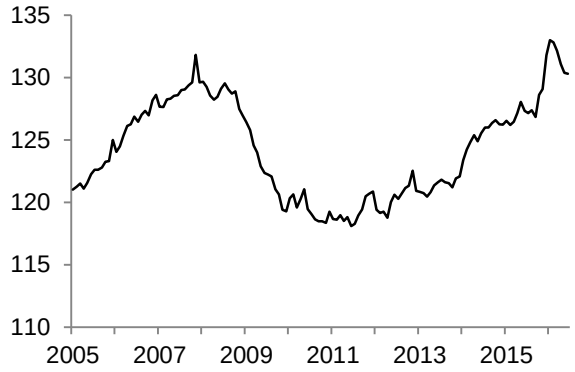
Construction activity has been mixed in the mountain region, with constraints from a shortage of readily buildable lots, high infrastructure costs, and a tight labor market for construction workers. Construction of new residential units rose 30.9 percent year-to-date through July, following declines in 2015 (Figure 53). Nonresidential construction remained mixed with the number of projects up, but value and square footage of projects down.

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

	2012	2013	2014	2015	YTD 2016
Employment Growth [1]	1.0%	0.8%	3.4%	1.8%	3.7%
Unemployment Rate[1]	7.1%	6.1%	4.3%	3.3%	2.8%
Housing Permit Growth[2]	6.9%	63.6%	2.2%	-17.5%	30.9%
Nonresidential Construction Growth [2]					
Value of Projects	-57.4%	-8.6%	84.8%	15.1%	-59.0%
Square Footage of Projects	-29.6%	-19.6%	206.5%	-56.5%	-55.2%
Level (*Thousands*)	548	441	1,352	588	233
Number of Projects	11.4%	2.0%	20.0%	-36.7%	8.0%
Level	49	50	60	38	27
Retail Trade Sales Growth[3]	6.3%	6.1%	8.5%	6.7%	N/A

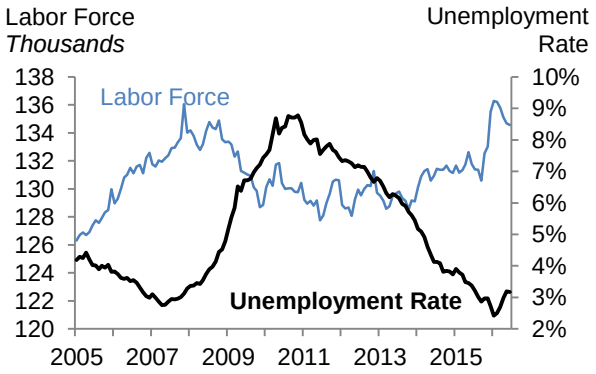
NA = Not Available.
[1]Bureau of Labor Statistics. LAUS (household) survey. Seasonally adjusted. Data prior to 2010 adjusted by Legislative Council Staff. Data through June 2016.
[2]F.W. Dodge. Data through July 2016.
[3]Colorado Department of Revenue. Seasonally adjusted. Data through December 2015.

Figure 50
Mountain Region Employment
Thousands of Jobs



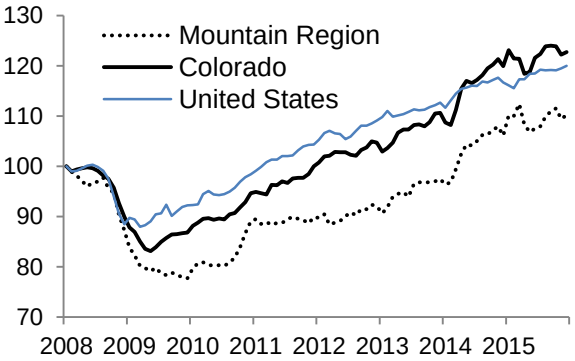
Source: U.S. Bureau of Labor Statistics; CES. Data are seasonally adjusted and are through July 2016.

Figure 51
Labor Market Trends



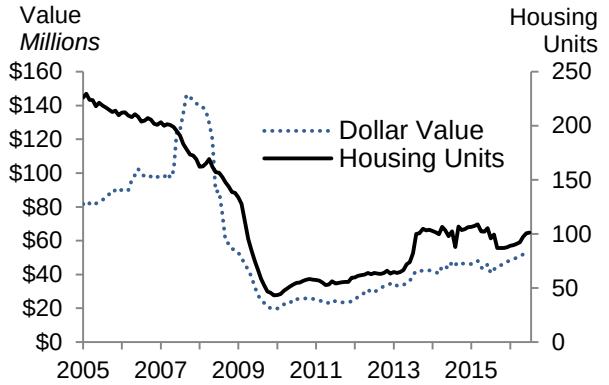
Source: U.S. Bureau of Labor Statistics; LAUS. Data prior to 2010 adjusted by Legislative Council Staff. Data are seasonally adjusted and are through June 2016.

Figure 52
Retail Trade Trends
Index 100 = January 2008



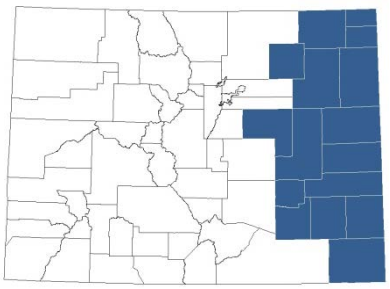
Source: Colorado Department of Revenue and U.S. Census Bureau. Data are shown as a three-month moving averages. Data are seasonally adjusted and are through December 2015.

Figure 53
Mountain Region
Residential Building



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

Eastern Region



The sixteen counties that comprise the eastern region are largely reliant on the agricultural sector. Stubbornly low commodity prices, specifically for corn and cattle, continue to drag down farm profits. Nevertheless, the dairy industry in the northeastern section of the region has partly offset some of these losses. In addition, several counties have recently been working to diversify their economic base. These efforts are beginning to show positive signs in the nonfarm sector of the economy. Economic indicators for the region are presented in Table 24.

Farmers and ranchers in the eastern region produce a myriad of crops and livestock products, including primarily beef, wheat, and corn. Figure 54 shows the prices received for Colorado wheat, corn, and alfalfa hay, which have fallen consistently since mid-2013. Falling crop prices reflect excess production and weak demand, the latter of which is sensitive to trade conditions with Canada, Mexico, and, particularly for meat products, Asia. However, the dairy industry has offset some of these loses. Higher demand for dairy products, especially from local based international cheese manufacturer Leprino Foods, has buoyed the industry in the region. Leprino announced at the beginning of the year that it would move forward on its Phase 3 expansion. The operation will require the milk of about 80,000 dairy cows every day.

Year-to-date through the first half of 2016, the number of nonfarm jobs in the eastern region rose 3.3 percent over the same period last year, while the average regional unemployment rate through the first six months of 2016 was 3.1 percent, down 0.4 percent from the same period last year. Nonfarm jobs in the eastern regional are primarily in health care and social assistance, public administration, and educational services industries.

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

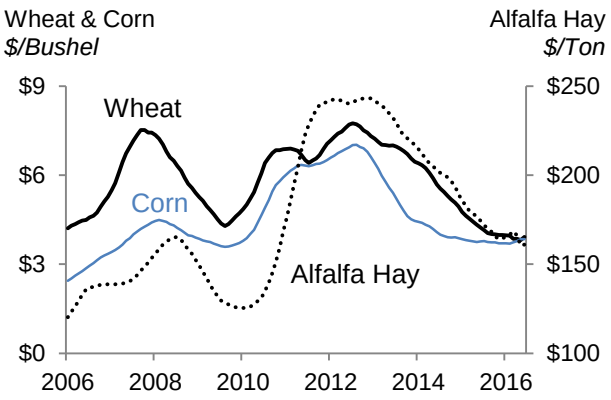
	2012	2013	2014	2015	YTD 2016
Employment Growth [1]	-0.8%	-1.3%	3.0%	2.4%	3.3%
Unemployment Rate [1]	6.7%	6.1%	4.4%	3.5%	3.1%
Crop Price Changes [2]					
Wheat ($/Bushel)	4.2%	0.8%	-11.5%	-25.6%	-23.8%
Corm ($/Bushel)	9.2%	-2.8%	-31.0%	-13.1%	-3.5%
Alfalfa Hay (Baled, $/Ton)	37.0%	-0.1%	-11.3%	-13.9%	-14.5%
Livestock [3]					
State Cattle and Calf Inventory Growth	-3.4%	-8.7%	-4.2%	-4.4%	-0.2%
Milk Production	7.1%	3.5%	7.9%	3.9%	4.3%
Retail Trade Sales Growth [4]	5.1%	2.3%	9.7%	-5.4%	N/A

NA = Not Available.
[1]U.S. Bureau of Labor Statistics, LAUS (household survey). Seasonally adjusted. Data prior to 2010 adjusted by Legislative Council Staff. Data through June 2016.
[2]National Agricultural Statistics Service. Price data through June 2016.
[3]National Agricultural Statistics Service. Data through July 2016.
[4]Colorado Department of Revenue. Data through December 2015.

In recent years, several counties in the region have been working to diversify their nonagricultural base, especially in the development of renewable energy sources. Logan County has 527 wind turbines in operation and Lincoln and Kit Carson counties have announced several plans for additional wind farms. Labor market indicators for the Eastern Region are shown in Figure 55.

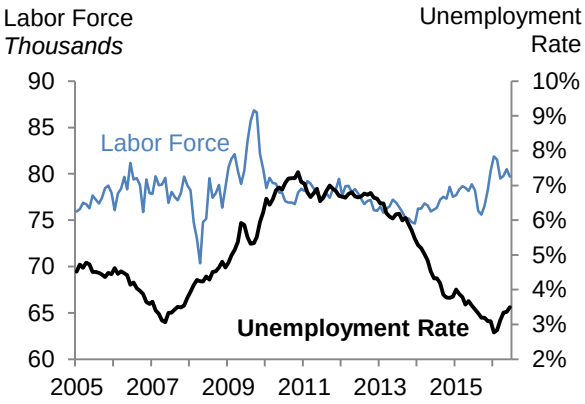
Regional retail sales were up down 5.4 percent in 2015 compared with the previous year. Declining retail trade may reflect weaker household incomes, particularly for farm proprietors. Retail trade indices for the Eastern Region, the state, and the nation are shown in Figure 56.

Figure 54
Prices Received for Colorado Crops



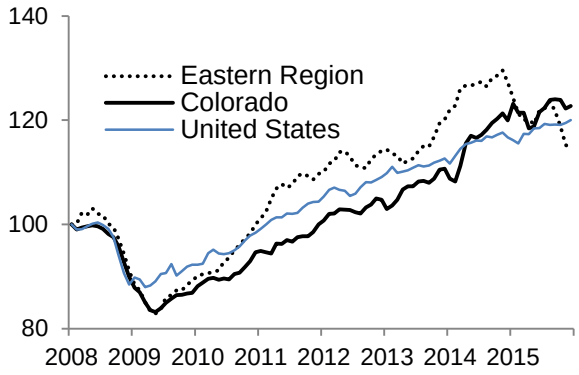
Source: National Agricultural Statistics Service. Data are twelve-month moving averages and are through June 2016.

Figure 55
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 June 2016.

Figure 56
Retail Trade Trends
Index 100 = January 2008



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

National Economic Indicators

Calendar Years	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	20112	2013	2014	2015
GDP ($ *Billions*) [1]	10,621.8	10,977.5	11,510.7	12,274.9	13,093.7	13,855.9	14,477.6	14,718.6	14,418.7	14,964.4	15,517.9	16,155.3	16,691.5	17,393.1	18,036.7
Percent Change	3.3%	3.3%	4.9%	6.6%	6.7%	5.8%	4.5%	1.7%	-2.0%	3.8%	3.7%	4.1%	3.3%	4.2%	3.7%
Real GDP ($ *Billions*) [1]	12,682.2	12,908.8	13,271.1	13,773.5	14,234.2	14,613.8	14,873.7	14,830.4	14,418.7	14,783.8	15,020.6	15,354.6	15,612.2	15,982.3	16,397.2
Percent Change	1.0%	1.8%	2.8%	3.8%	3.3%	2.7%	1.8%	-0.3%	-2.8%	2.5%	1.6%	2.2%	1.7%	2.4%	2.6%
Unemployment Rate [2]	4.7%	5.8%	6.0%	5.5%	5.1%	4.6%	4.6%	5.8%	9.3%	9.6%	8.9%	8.1%	7.4%	6.2%	5.3%
Inflation [2]	3.4%	2.8%	1.6%	2.3%	2.7%	3.4%	3.2%	2.9%	3.8%	-0.3%	1.6%	3.1%	2.1%	1.5%	1.6%
10-Year Treasury Note [3]	5.0%	4.6%	4.0%	4.3%	4.3%	4.8%	4.6%	3.7%	3.3%	3.2%	2.8%	1.8%	2.4%	2.5%	2.1%
Personal Income ($ *Billions*) [1]	8,991.6	9,153.9	9,491.1	10,052.9	10,614.0	11,393.9	12,000.2	12,502.2	12,094.8	12,477.1	13,254.5	13,915.1	14,073.7	14,809.7	15,458.5
Percent Change	4.1%	1.8%	3.7%	5.9%	5.6%	7.3%	5.3%	4.2%	-3.3%	3.2%	6.2%	5.0%	1.1%	5.2%	4.4%
Wage & Salaries ($ *Billions*) [1]	4,954.4	4,996.4	5,137.9	5,421.9	5,692.0	6,057.4	6,395.2	6,531.9	6,251.4	6,377.5	6,633.2	6,930.3	7,116.7	7,476.3	7,854.8
Percent Change	2.7%	0.8%	2.8%	5.5%	5.0%	6.4%	5.6%	2.1%	-4.3%	2.0%	4.0%	4.5%	2.7%	5.1%	5.1%
Nonfarm Employment (*Millions*) [2]	132.1	130.6	130.3	131.8	134.0	136.5	138.0	137.2	131.3	130.4	131.9	134.2	136.4	138.9	141.8
Percent Change	0.0%	-1.1%	-0.2%	1.1%	1.7%	1.8%	1.1%	-0.5%	-4.3%	-0.7%	1.2%	1.7%	1.6%	1.9%	2.1%

Sources

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

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

[3]Federal Reserve Board of Governors.

Colorado Economic Indicators

Calendar Years	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015
Nonfarm Employment (*Thousands*) [1]	2,227.1	2,184.7	2,152.6	2,179.4	2,225.9	2,279.7	2,331.1	2,350.6	2,245.5	2,222.3	2,259.0	2,313.2	2,382.3	2,464.7	2,545.9
Percent Change	0.6%	-1.9%	-1.5%	1.2%	2.1%	2.4%	2.3%	0.8%	-4.5%	-1.0%	1.7%	2.4%	3.0%	3.5%	3.3%
Unemployment Rate[1]	3.8	5.6	6.0	5.5	4.9	4.2	3.8	4.9	7.6	8.8	8.3	7.8	6.7	4.9	3.8
Personal Income ($ *Millions*) [2]	$155,992	$157,173	$160,369	$167,794	$179,090	$192,162	$203,035	$213,342	$206,385	$211,420	$227,052	$240,905	$246,448	$261,735	$275,061
Percent Change	5.3%	0.8%	2.0%	4.6%	6.7%	7.3%	5.7%	5.1%	-3.3%	2.4%	7.4%	6.1%	2.3%	6.2%	5.1%
Per Capita Personal Income ($) [2]	$35,247	$35,002	$35,412	$36,676	$38,665	$40,709	$42,265	$43,631	$41,508	$41,877	$44,349	$46,402	$46,746	$48,869	$50,410
Percent Change	3.0%	-0.7%	1.2%	3.6%	5.4%	5.3%	3.8%	3.2%	-4.9%	0.9%	5.9%	4.6%	0.7%	4.5%	3.2%
Wage & Salary Income ($ *Millions*) [2]	$89,130	$88,089	$89,281	$93,569	$98,787	$105,664	$112,506	$116,678	$112,297	$113,786	$118,558	$125,014	$129,509	$138,654	$146,403
Percent Change	3.1%	-1.2%	1.4%	4.8%	5.6%	7.0%	6.5%	3.7%	-3.8%	1.3%	4.2%	5.4%	3.6%	7.1%	5.6%
Retail Trade Sales ($ *Millions*) [3]	$59,014	$58,850	$58,689	$62,288	$65,492	$70,437	$75,329	$74,760	$66,345	$70,738	$75,548	$80,073	$83,569	$90,653	$94,920
Percent Change	1.8%	-0.3%	-0.3%	6.1%	5.1%	7.5%	6.9%	-0.8%	-11.3%	6.6%	6.8%	6.0%	4.4%	8.5%	4.7%
Residential Housing Permits [4]	55,007	47,871	39,569	46,499	45,891	38,343	29,454	18,998	9,355	11,591	13,502	23,301	27,517	28,698	31,871
Percent Change	0.8%	-13.0%	-17.3%	17.5%	-1.3%	-16.4%	-23.2%	-35.5%	-50.8%	23.9%	16.5%	72.6%	18.1%	4.3%	11.1%
Nonresidential Construction (*Millions*) [5]	$3,476	$2,805	$2,686	$3,245	$4,275	$4,641	$5,259	$4,114	$3,354	$3,147	$3,923	$3,695	$3,624	$4,315	$4,781
Percent Change	-0.6%	-19.3%	-4.2%	20.8%	31.7%	8.6%	13.3%	-21.8%	-18.5%	-6.2%	24.7%	-5.8%	-1.9%	19.1%	10.8%
Denver-Boulder-Greeley Inflation [1]	4.6%	2.0%	1.0%	0.1%	2.1%	3.6%	2.2%	3.9%	-0.6%	1.9%	3.7%	1.9%	2.8%	2.8%	1.2%
Population (*Thousands, July 1*) [4]	4,426	4,490	4,529	4,575	4,632	4,720	4,804	4,890	4,972	5,049	5,120	5,192	5,272	5,356	5,457
Percent Change	2.3%	1.5%	0.9%	1.0%	1.2%	1.9%	1.8%	1.8%	1.7%	1.5%	1.4%	1.4%	1.5%	1.6%	1.9%

NA = Not available.

[1]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.

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

[3]Colorado Department of Revenue.

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

[5]F.W. Dodge.