COLORADO
Office of State Planning
& Budgeting

June | 2016

# The Colorado Economic Outlook

## Economic and Fiscal Review

## Table of Contents

Summary ........ 3
The Economy: Issues, Trends, and Forecast ........ 4
Summary of Key Economic Indicators ........ 32
General Fund and State Education Fund Revenue Forecast ........ 38
General Fund and State Education Fund Budget ........ 44
Cash Fund Revenue Forecast ........ 52
Taxpayer's Bill of Rights: Revenue Limit ........ 59
Governor's Revenue Estimating Advisory Committee ........ 63
Appendix – Reference Tables ........ 64

**John W. Hickenlooper**
Governor

**Henry Sobanet**
Director

**Jason Schrock**
Chief Economist

**Luke Teater**
Economist

**Michael Yeadon**
Economist

For additional information about the Governor's Office of State Planning and Budgeting, and to access this publication electronically, please visit www.colorado.gov/ospb.

To sign up for economic updates from the Governor's Office of State Planning and Budgeting, visit https://sites.google.com/a/state.co.us/ospb-live/live-form.

Follow the Governor's Office of State Planning and Budgeting on Twitter @COBudgetOffice.

Connect with us on Facebook by searching *CO Budget Office*.

Front page photos courtesy of Colorado Tourism.

**Summary**

- With most of the revenue now collected this fiscal year, General Fund revenue is projected to increase 1.6 percent in FY 2015-16. Despite continued solid economic growth in Colorado, several factors combined to generate the low revenue growth this fiscal year, including the large drop in spending and income due to the downturn in the oil and gas sector; weaker stock market gains; and the sluggish global economic activity and strong appreciation in the dollar that reduced corporate profits. These factors will place less downward pressure on General Fund revenue in FY 2016-17 when we expect revenue growth of 6.0 percent. Continued growth in economic activity across most sectors will support this revenue growth.

- The General Fund revenue forecast for FY 2016-17 is lower relative to March by $58.0 million, or 0.6 percent. With the FY 2016-17 enacted budget and the new forecast, the General Fund reserve will be $10.5 million below the required amount of 6.5 percent of appropriations. This forecast incorporates a projected diversion of $44 million in income tax revenue in FY 2016-17 to a severance tax reserve fund. These diversions occur under Senate Bill 16-218 to help cover refunds associated with the April 2016 Colorado Supreme Court's decision in BP America v. Colorado Department of Revenue that allowed severance taxpayers to claim additional severance tax deductions.

- Under this forecast and current law, General Fund appropriations subject to the limit in FY 2017-18 can grow 3.7 percent. Total General Fund and State Education Fund expenditures combined can grow 3.4 percent in FY 2017-18, assuming that the negative factor in the School Finance Act is maintained at its current level.

- Cash fund revenue subject to TABOR in FY 2015-16 is projected to be $133.9 million, or 4.8 percent, higher than FY 2014-15, primarily as a result of growth in revenue from the Hospital Provider Fee and miscellaneous cash funds. This growth will offset a sharp decline in revenue from severance taxes. Cash fund revenue will decrease 5.3 percent in FY 2016-17. The forecast for FY 2016-17 is $137.5 million, or 4.8 percent, lower compared with projections in March. This decrease is due mostly to the reduction in Hospital Provider Fee revenue per House Bill 16-1405 (the Long Bill), as well as the shifting forward of the transfer from the Unclaimed Property Fund to the Adult Dental Fund pursuant to House Bill 16-1409.

- TABOR revenue is projected to come in $80.7 million below the cap in FY 2015-16 and $46.0 million under the cap in FY 2016-17. TABOR revenue is expected to be above the cap in FY 2017-18 by $257.5 million. For FY 2017-18, the total projected TABOR refund amount of $277.1 million includes the projected $257.5 million exceeding the Referendum C cap plus $19.6 million that needs to be refunded from FY 2014-15 due to the reclassification of the revenue transferred to the Adult Dental Fund from the Unclaimed Property Fund.

- Colorado's economy continues to perform solidly overall, especially considering the persistent challenges faced by the oil and gas industry and the sluggish global economy. Colorado's favorable economic attributes have helped the state perform much better than the other leading oil and gas producing states. The state had the 4th lowest unemployment rate in the country in April and demand for workers among Colorado businesses remains strong. However, tight labor market conditions are making it more difficult for businesses to grow, acting as a constraint on the state's economy. Areas tied to agriculture and dependent on minerals extraction continue to experience weaker economic activity. Economic growth for the nation overall continues to be softer than in previous expansions. Subdued business investment, new business formation, and productivity growth are main factors in the slower growth. Nonetheless, the U.S. economy is performing better than most other developed country economies.

- Although there are no clear indications of an economic downturn in the United States, the global economy continues to show signs of weakness as growth remains slow and vulnerable to downside risks, which could threaten the current expansion. We note the following items of concern: The path of China's slowing economy is particularly uncertain; the June 23 referendum in the United Kingdom on staying in the European Union has affected the economic outlook in Europe; and in the U.S., job growth has slowed and business investment remains soft.

# The Economy: Issues, Trends, and Forecast

The following section discusses overall economic conditions in Colorado, nationally, and around the world. The OSPB forecast for most economic conditions is largely unchanged from the March 2016 Colorado Economic Outlook. This section includes an analysis of:

- Economic and labor market conditions in Colorado (page 5)
- Housing costs (page 17)
- Oil and gas industry conditions (page 19)
- Economic and labor market conditions for the nation (page 23)
- International economic conditions and trade (page 28)

***Trends and forecasts for key economic indicators*** **—** A summary of key economic indicators with their recent trends and statistics, as well as forecasts, is provided at the end of this section. The summary of indicators is intended to provide a snapshot of the economy's performance and OSPB's economic projections, which are informed by the following analysis of the economy.

***Summary*** **—** Although growth has moderated, Colorado's economy continues to perform solidly overall, especially considering the persistent challenges faced by the oil and gas industry and the sluggish global economy. Colorado's favorable economic attributes have helped the state perform much better than the other leading oil and gas producing states. The state has among the lowest unemployment rates in the country and demand for workers among Colorado businesses remains strong. However, tight labor market conditions are making it more difficult for businesses to grow, acting as a constraint on the state's economy.

Rising home values and rents, along with a high rate of in-migration, is causing housing construction to ramp up, which will add employment and spending going forward. Further, after slowing during the course of 2015, growth in new business formation appears to have picked up in the state at the beginning of 2016. Persistent low prices for certain crops and livestock, along with weaker agricultural exports, continue to dampen economic activity in many rural areas of Colorado. Furthermore, in the midst of continued low energy prices, the oil and gas industry continues to contract. Employment in the industry in Colorado decreased by over 25 percent through the end of 2015 and will likely decrease by another 15 to 20 percent by the end of 2016.

Economic growth for the nation overall continues to be weaker than in previous expansions. Subdued business investment, new business formation, and productivity growth are main factors in the slower growth. Nonetheless, the U.S. economy is performing better than most other developed country economies. Financial conditions remain better than the beginning of the year, signaling a more positive outlook. As the labor market continues to tighten, employment has been growing at a slightly slower pace recently, though there is some indication that wage growth has gained some momentum. The manufacturing sector appears to have improved somewhat over recent months, but growth remains subdued due to sluggish global conditions and the stronger dollar. Other sectors, such as professional and business services and construction, which make up a much larger portion of the U.S. economy, continue to perform relatively better.

***Economic risks*** **—** Although there are no clear indications of an economic downturn in the United States, the global economy continues to show signs of weakness as growth remains slow and vulnerable to downside risks, which could threaten the current expansion. We note the following items of concern: The path of China's slowing economy is particularly uncertain; the June 23 referendum in the United Kingdom on staying in the European Union has affected the economic outlook in Europe; stateside, job growth has slowed and business investment remains soft.

## Colorado Economy

Although growth has moderated over the past year, Colorado's economy continues to perform solidly overall, especially considering the persistent challenges faced by the oil and gas industry and sluggish global economy. Colorado's unemployment rate is at a lower level than a year ago, and was the 7th lowest among states in May.

The state has weathered the contraction in the oil and gas industry better than other states with large oil and gas presences. Businesses outside of sectors tied to oil and gas continue to grow their sales in markets for their products and services, which is supporting continued economic momentum for the state. Many of Colorado's products are supplied to markets within the U.S. domestic economy, which is performing better than the global economy. However, sectors dependent on energy production and exports continue to struggle.

Colorado's stronger population growth, fueled by the influx of younger, higher-skilled workers into the state, is also supporting stronger growth than the nation overall. This population growth, along with growth in home values and rents, is also causing housing construction to ramp up, which will boost the economy going forward.

**Housing construction in the state is ramping up, which will boost the economy going forward.**

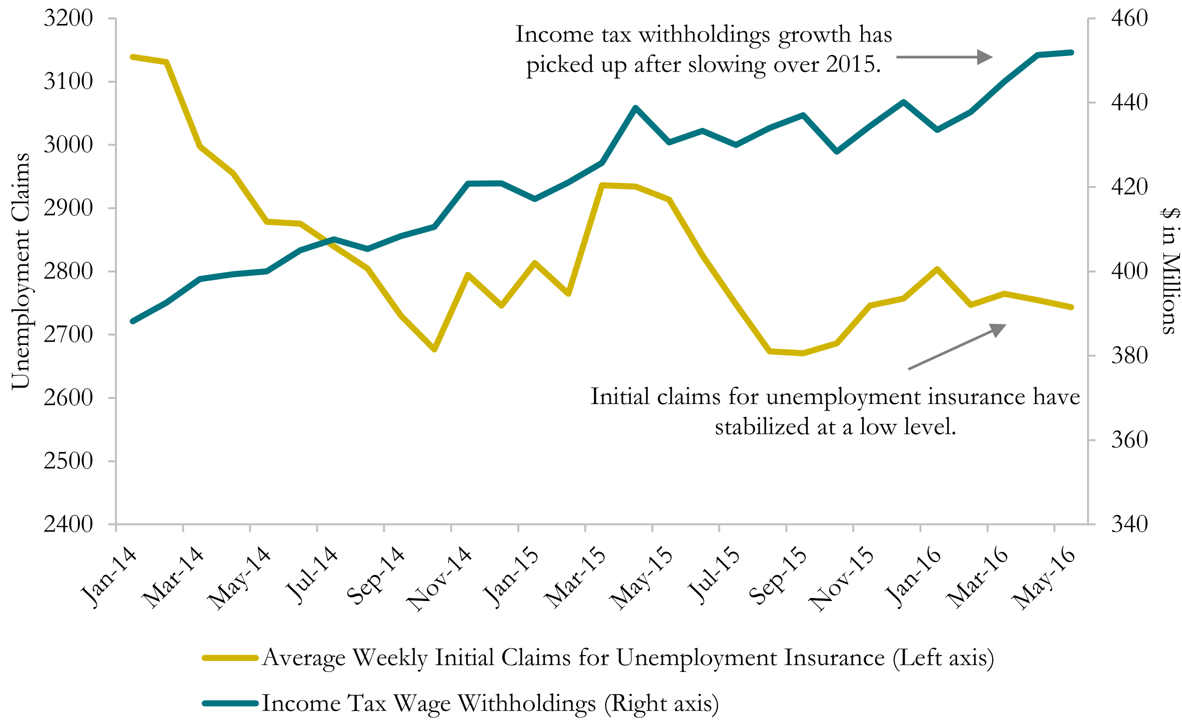
Colorado's economic growth in recent years has led to tight labor market conditions. Although this means that Coloradans continue to have more job opportunities relative to the rest of the nation, it is making it difficult for businesses seeking to expand to grow their business, which is acting as a constraint on the state's economy.

**Colorado's economic growth in recent years has led to tight labor market conditions, making it difficult for businesses to grow and acting as a constraint on the state's economy.**

The state is expected to add 63,500 jobs in 2016, a growth rate of 2.5 percent, slower than the 3.5 percent and 3.0 percent growth in 2014 and 2015, respectively, but still above the national job growth rate of 1.8 percent. Colorado's unemployment rate is expected to average 3.3 percent in 2016, below the nationwide level of 4.8 percent.

***Reliable indicators on the underlying health of the economy show some recent improvement after slowing through 2015 and the first part of 2016 —*** Figure 1 shows the trends in initial unemployment insurance claims and income tax wage withholdings, two near-real-time reliable indicators of broad economic performance. After moderating in 2015 and the first part of 2016, wage withholdings growth has recently picked up. Much of the slower growth starting in 2015 can be attributed to the loss of the high wages tied to the oil and gas industry's activity that combined with a slowdown in overall job growth. Furthermore, after ticking up during the first half of 2015 and again in the first part of 2016, mostly due the oil and gas contraction, initial claims for unemployment insurance have stabilized and remain at a low level. This indicates that demand for workers among Colorado businesses remains strong.

**Figure 1. Indicators of Colorado's Economic Performance***

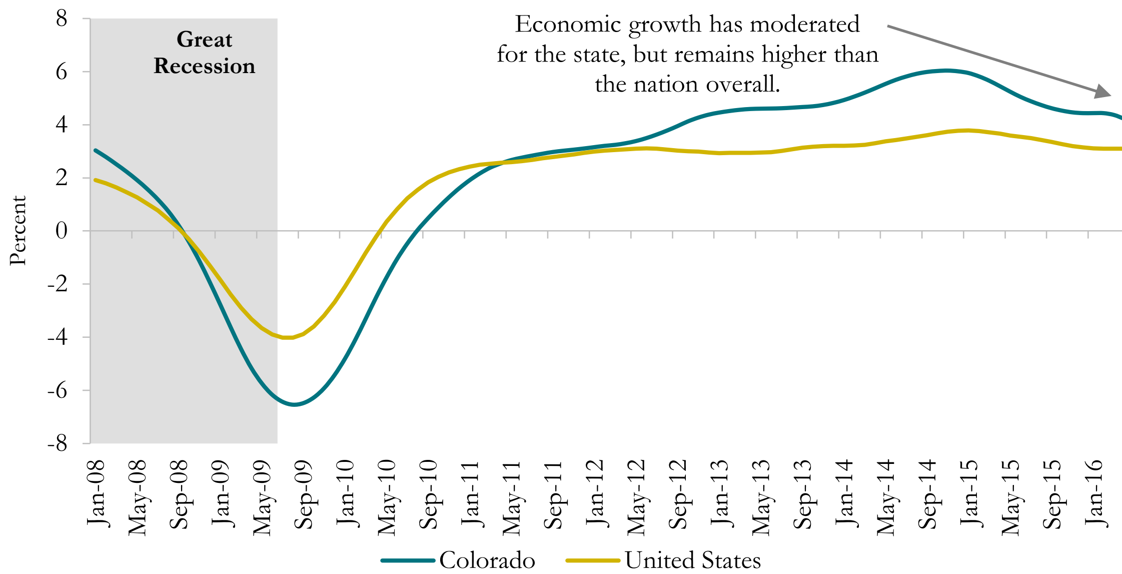



*Seasonally Adjusted, Three-month moving average
Source: Colorado Department of Revenue, Colorado Department of Labor and Employment, and OSPB calculations

***Other measures of broad statewide economic activity show moderated growth for the state, but continued better performance than the nation overall* —** Colorado's economy has moderated overall as measured by the Federal Reserve Bank of Philadelphia's monthly State Coincident Economic Activity Index. This index is one of the most up-to-date broad measures of state economic activity. The index tends to match growth in a state's gross domestic product (GDP) over time by combining four state-level indicators to track current economic conditions – employment, average hours worked in manufacturing, the unemployment rate, and inflation-adjusted wage and salary disbursements.

Figure 2 shows Colorado's economy measured by the State Coincident Economic Activity Index compared to the U.S. overall since the Great Recession. Although economic growth has slowed from its robust pace over 2014 and the beginning of 2015, it remains stronger than the nation through April of this year, the month from which the latest data is available. To help corroborate this data, a recent US Bank survey of small businesses in the U.S. showed that 57 percent of Colorado small businesses indicated that conditions are stronger in the state than the rest of the country, the highest percentage of any of the 11 states surveyed.

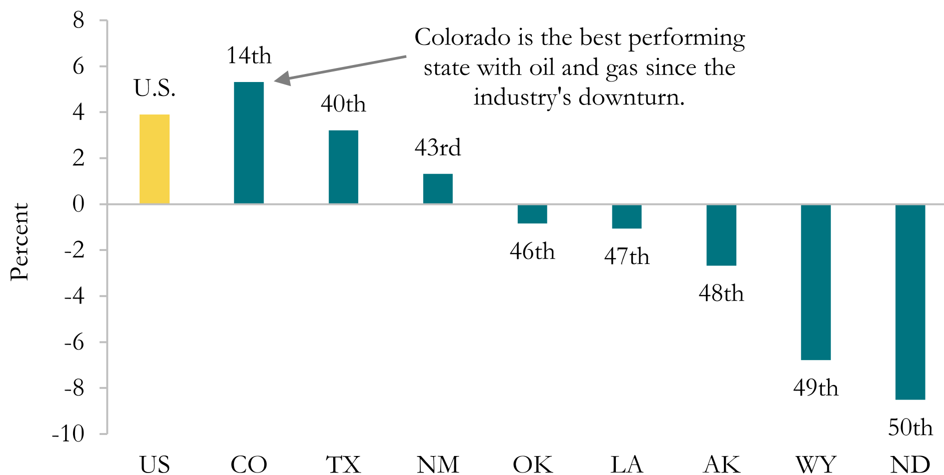
**Figure 2. Coincident Economic Activity Index, Year over Year % Change**




Source: Philadelphia Federal Reserve Branch

***Colorado has weathered the oil and gas industry contraction better than other oil and gas states*** — The loss of wages, investment, and spending from the downturn in the oil and gas industry has reduced economic activity in the state. However, Colorado's favorable economic attributes have helped the state perform much better than the other leading oil and gas producing states.[1] Figure 3 compares the economic performance of each of the leading oil and gas producing states since the beginning of 2015. More discussion on the oil and gas industry starts on page 19.

**Figure 3. State Coincident Economic Activity Index among Largest Oil and Gas Producing States, % Change January 2015 to April 2016, with Ranking among All States**




Source: Philadelphia Federal Reserve Branch, OSPB calculations

[1] The selection of largest oil and gas producing states is based on each state's share of total household earnings directly resulting from the oil and gas industry.

***New business formation picked up in first part of this year, after growth slowed in 2015*** **—** New business formation is vital for economic vibrancy and job growth. Data on net job creation by age of business from the U.S. Census Bureau, Business Dynamics Statistics (BDS) shows that new firms are responsible for almost all net new jobs in the economy every year. New businesses are also important for productivity gains and innovations in an economy.

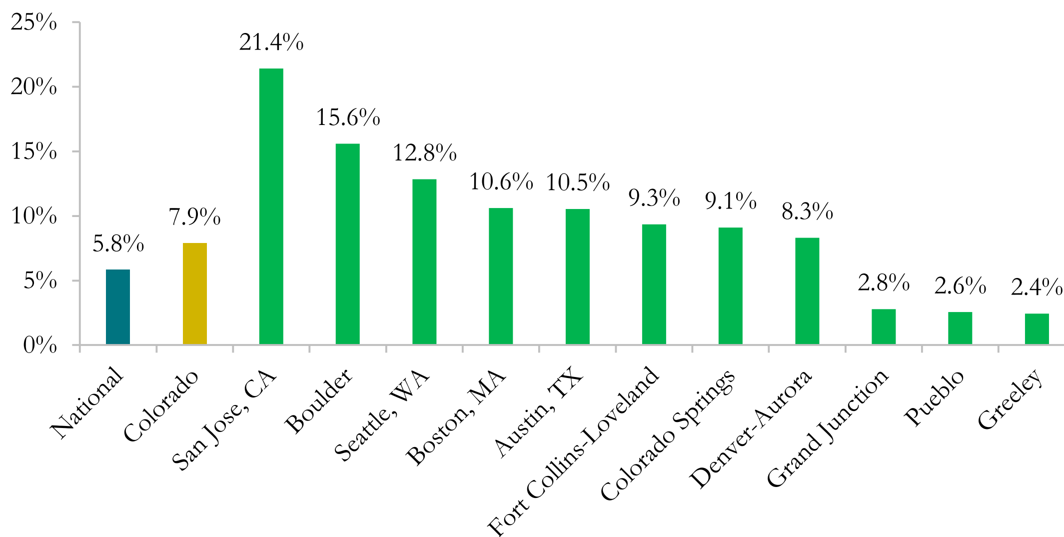
**New business formation appears to have picked up in the state at the beginning of 2016, an important development for ongoing job and economic growth.**

After slowing during the course of 2015, growth in new business formation appears to have picked up in the state in the first quarter of 2016, the latest information available. Data from the Colorado Secretary of State showed that filings of new entities, which mostly consist of limited liability companies and corporations, increased 5.8 percent above the first quarter of 2015. This is an important signal of continued job and economic growth for the state in the near term as it indicates that more people are pursuing entrepreneurial opportunities in the economy.

***High-tech activity is less robust, but continues to be positive, helping fuel Colorado's economic expansion*** **—** An important driver of our economy, both now and in the future, is economic activities surrounding ideas, information, and technology. The high-tech sector, comprising of industries with high concentrations of workers skilled in science, technology, engineering, and mathematics (STEM), is the main sector that is developing products using these components. The state's high-tech firms are involved with a wide-range of activities, such as computing and software, data processing, aerospace, medical-related products and services, communications, architecture, engineering, and other professional and technical services. Much of the recent growth in the high-tech sector is being driven by the emergence of mobile devices, social media, cloud computing, and internet search engines.

Colorado has a high concentration of technology-related firms and workers, especially along the Front Range. Figure 4 shows the concentration of workers in high-tech occupations in 2015 in select metro areas across the country and the state. Areas with higher amounts of high-tech activity generally have better performing economies. Smaller concentrations of high-tech workers in the state's areas outside of the Front Range are one reason they are experiencing less economic growth.

**Figure 4. Proportion of Workers in High Tech Occupations, Select U.S. and Colorado Regions, 2015**




Source: Colorado Department of Labor and Employment, U.S. Bureau of Labor Statistics

The high-tech industries and the economic activity associated with them have been an important part of the state's growth in the current expansion. Because of their innovative activities and higher paying jobs, growth in high-tech industries leads to job growth in other sectors, from doctors and lawyers to services providers. The high-tech sector average wage in 2015 was $76,260, nearly 50 percent higher than the statewide average for all jobs.

**The high-tech sector has been an important part of the state's economic growth in the current expansion, contributing an estimated nearly 20 percent to total wage growth.**

Growth in total wages paid to workers in the high-tech sector comprised about 14 percent of the growth in all wages that occurred in the state from 2010 to 2015, based on Quarterly Census of Employment and Wages data. However, considering the multiplier effect of the sector, which includes economic activity within the high tech sector's supply chain as well as in other industries throughout the economy, the sector contributed an estimated 19 percent to total wage growth over the period.[2] Consequently, any changes in investment and employment in the sector will affect the state's overall economic performance.

**Recent data indicate continued job growth in the high-tech sector. The pace of innovation in the sector appears to be strong and the demand for high-tech products and services is expected to continue.**

The professional, scientific, and technical services industry combined with the information industry provides a proxy measure of recent employment changes in the high-tech sector. Like with overall job growth, the sector's job growth has moderated in the state from the robust pace during 2014, but remains solid through April of this year, the month from which the latest data is available.

Recently, however, some firms in the high-tech sector are having more difficulty raising capital and finding workers for expansion. It also appears that investors are reevaluating some of the valuations of companies in the sector. These trends will act as a constraint on growth in the sector, but they do not signal an imminent downturn. The pace of innovation in the sector appears to continue to be strong and the demand for high-tech products and services is expected to continue.

***Nonurban areas tied to agricultural economies continue to experience weaker economic activity –*** After having robust years during the 2010 to 2014 period, persistent low prices for certain crops and livestock, along with weaker agricultural exports tied to sluggish global conditions and a strong dollar, continue to dampen economic activity in many rural areas of Colorado. Most commodity prices remain below levels considered to be profitable, and the price of corn and wheat are especially low. Reduced earnings in farming and ranching also impact urban areas, such as Denver, that have food processing and marketing activities. However, the recent reprieve in dollar appreciation should provide some relief to crop and livestock exporters and agricultural-dependent economies by supporting earnings from sales in foreign markets.

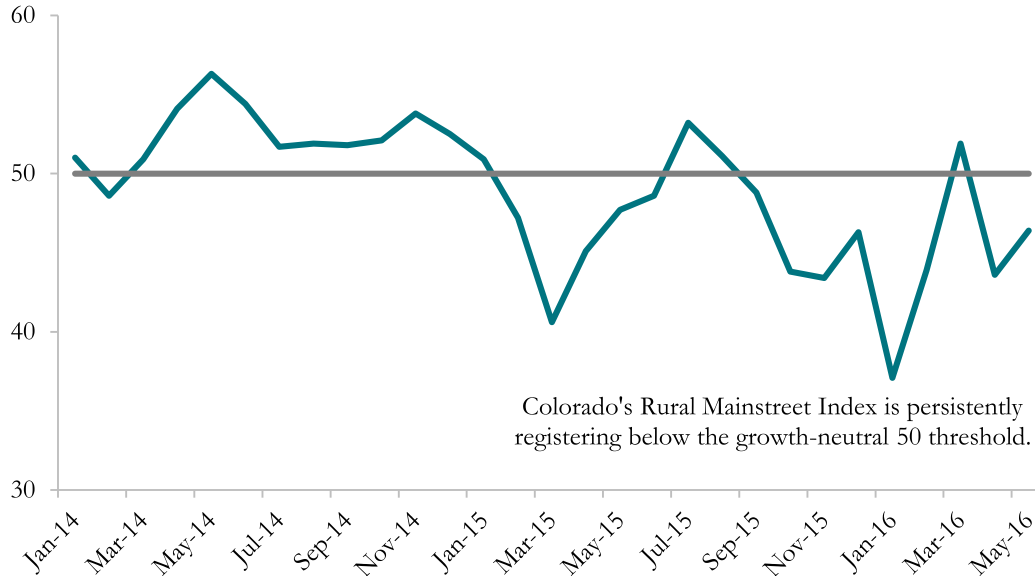
**Nonurban agricultural and energy sector-dependent areas of Colorado continue to face challenges due to weaker exports, lower crop prices, and the deep contraction of the oil and gas industry.**

Colorado's Rural Mainstreet Index, published by Creighton University, measures economic activity in rural areas by surveying community banks on current economic conditions and their economic outlooks. The index has posted readings below the 50 level that signifies growth for much of 2015 and 2016 thus far, as shown in Figure 5. The index in May registered 46.4, up from 43.6 in April. The index posted a low of 37.1 in January,

[2] The multiplier effects are based on EMSI's (Economic Modeling Specialists International) input-output model for Colorado.

and thus conditions have improved somewhat since that time. In addition to weaker agricultural income, some energy industry dependent rural areas have been adversely affected by the challenging conditions in the oil and gas and coal industries.

**Figure 5. Colorado's Rural Mainstreet Index**



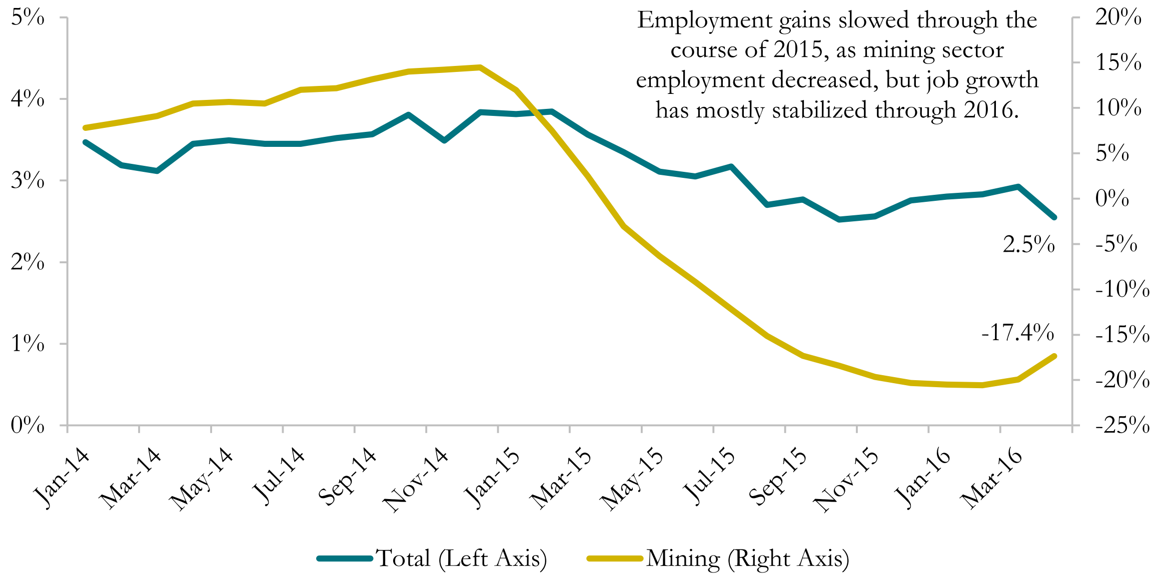

Source: Creighton University

***After moderating through most of 2015, Colorado employment growth appears to have stabilized –*** Employment gains in Colorado slowed over the course of 2015 but have remained relatively stable during the first half of 2016. The downturn in the energy sector and slowdown in manufacturing negatively impacted employment gains across the country, particularly the states that are more heavily energy dependent such as Colorado. However, Colorado's overall labor market was less impacted by the energy and manufacturing downturns and continues to post employment gains that are larger than the nation overall.

Colorado is experiencing a tight labor market, as evidenced by having the 7th lowest unemployment rate out of all states in May. Boulder, Fort Collins, and Denver all have unemployment rates that rank in the lowest 15 percent of all metro areas across the country in April, the latest month from which data is available. Furthermore, according to a report from the Conference Board concerning online help-wanted ads, the ratio of unemployed persons to online ads was 0.68 in April, the 2nd lowest in the country, behind South Dakota, and roughly half the nationwide average. A ratio below one indicates there are more job openings posted online than unemployed individuals, and is a measure of labor market tightness. The ratio has continued to decline over the past year, despite the state's moderating growth and contraction in the oil and gas industry.

As shown in Figure 6, monthly year-over-year job growth rates peaked in February 2015 at 3.8 percent. However, as mining sector employment decreased through 2015, overall employment growth slowed through the year. Employment growth appears to have mostly weathered the job losses in the mining sector as employment gains have remained relatively steady this year. The April year-over-year growth rate in Colorado of 2.5 percent remained higher than the national rate of 1.9 percent and ranks Colorado 12th out of the 50 states and Washington, D.C.

**Figure 6. Colorado Overall and Mining Sector Year-over-Year Employment Growth by Month**



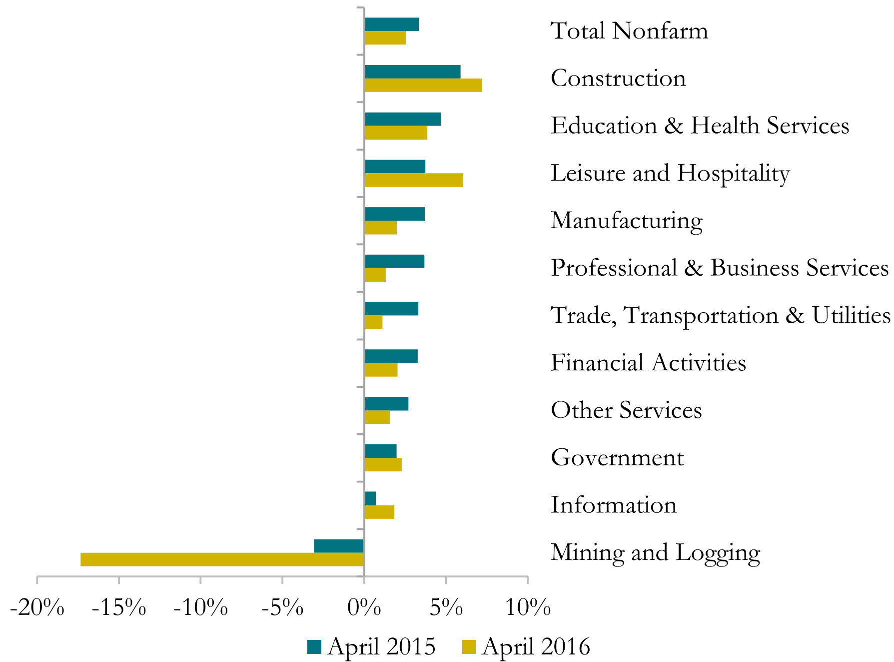

Source: U.S. Bureau of Labor Statistics, OSPB calculations

***Employment growth slowing across most sectors in Colorado*** **–** Job growth continues in all sectors outside of mining, but growth rates are lower this year than they were last year in most of the sectors, as shown in Figure 7. In contrast to the national trend, where manufacturing jobs are declining, manufacturing jobs in Colorado grew 2.0 percent year-over-year in April 2016. Colorado's relatively healthy manufacturing sector can be attributed in part to the higher amount of in-demand, advanced products that tend to be produced in the state, such as renewable energy-related and aerospace-related products. Employment in the construction industry grew at the fastest rate, 7.2 percent, as demand for construction workers remains high for residential and non-residential construction projects. Construction jobs nationally grew 4.2 percent over the same time frame.

**Jobs in the services sectors, such as professional and business services and financial activities, grew by 3.1 percent year-over-year in April, driving overall job growth of 2.5 percent.**

Service related industries, such as professional and business services, education and health services, leisure and hospitality, and financial and information activities, have fared much better than manufacturing and other goods producing industries recently. However these sectors have shown some indication of slowing recently. Service jobs, which account for over half of all nonfarm employment in Colorado, continued to grow year-over-year at a 3.1 percent clip in April 2016, though that was lower than the 3.6 percent growth in April 2015. Growth in the services sector helped dampen the impact of losses in the mining and logging industry, where employment is down nearly 18 percent since last April.

**Figure 7. Colorado Year-over-Year Employment Growth by Sector**

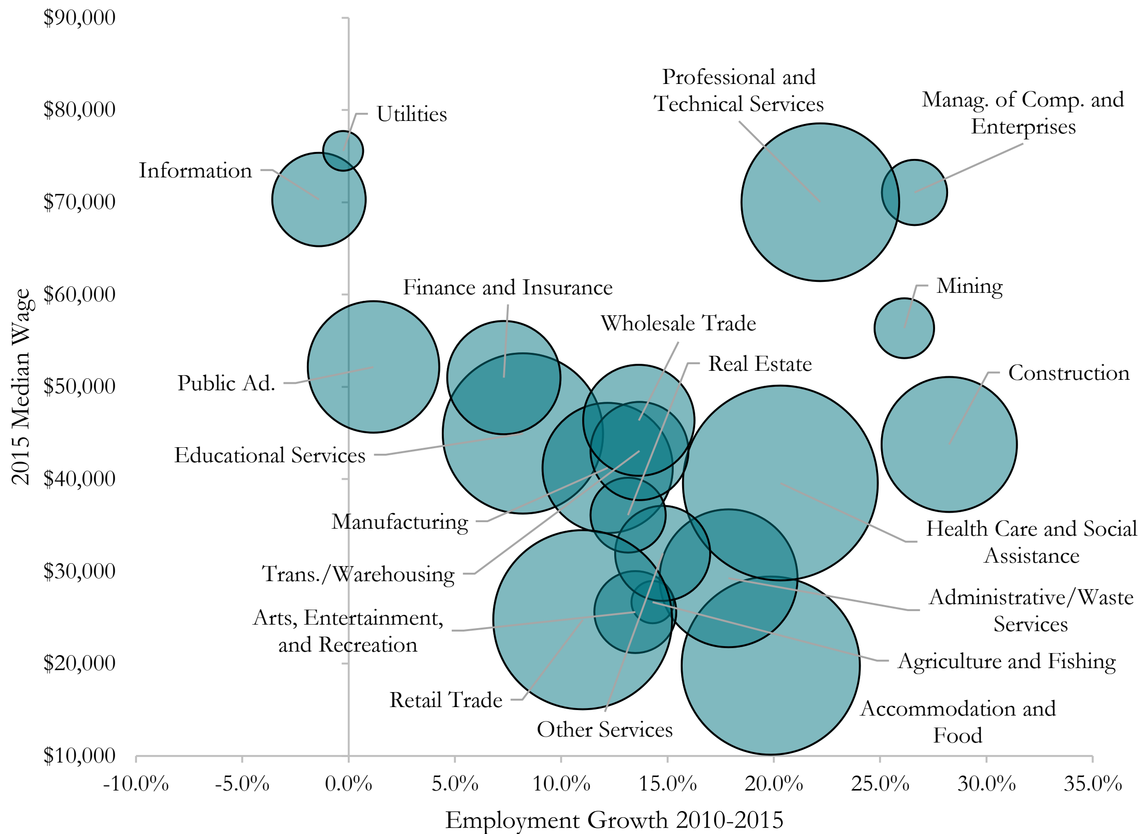



Source: U.S. Bureau of Labor Statistics, OSPB Calculations

***Employment growth has occurred across most Colorado industries during the current expansion –*** Looking at a longer run trend of employment growth by industry during the entire expansion thus far, most industries in Colorado have been growing, albeit at varied rates. Figure 8 illustrates industries in Colorado showing employment growth rates over a five-year period, median wages in the industry in 2015 and the size of the industry based on number of jobs in 2015.

Industries across all wage levels have grown, with construction having the fastest growth in the middle-wage industries and management of companies having the fastest growth in higher-wage industries. The professional and technical services industry, one of the largest industries in Colorado, also was one of the faster-growing and highest-paying industries. The information and utilities industries, both higher-paying, experienced a slight decline in employment over the past five years and public administration had slight growth.

**Figure 8. Employment Growth (2010-2015) and Median 2015 Wages by Colorado Industries**
**Size of Bubble Represent Size of Industry as Measured by Employment in 2015**




Source: Colorado Department of Labor, Quarterly Census of Employment and Wages Data, OSPB Calculations

***Job growth has occurred at similar levels across higher-, middle-, and lower-wage paying industries, but wage growth has mostly occurred in higher-paying industries*** – The above analysis shows that there are many middle-wage industries that grew on pace with higher- and lower-wage industries over the past five years. The following figures assess the trends in employment and wage growth broken out into lower- ($35,000 and below), middle- ($35,000-$65,000) and higher- ($65,000 and above) paying industries using median annual wage data.

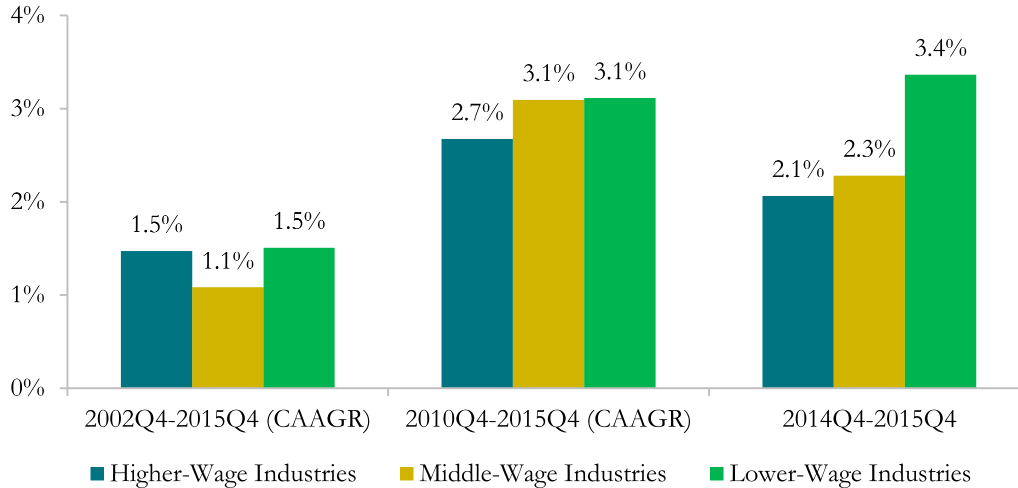
**Although employment growth has been relatively equal across wage groups, growth in wages has mostly occurred in the higher-wage industries.**

Figure 9 looks at employment growth for industries broken up by wage groups. There is some indication that the industries that fall into the middle-wage group have been growing slower than those in the lower- and higher-wage industries over the longer term. However, during the current expansion period, middle-wage and lower-wage industries have grown at a slightly higher pace than higher-wage industries.

Over the past year, employment in lower-wage industries grew at a rate of 3.4 percent, a full percentage point higher than industries in the other two wage groups. Oil and gas related industries, which tend to fall into the higher-wage group, have declined over the past year. Additionally, some middle-wage industries that are related to manufacturing and mining also declined over the year. These declines were counteracted by growth in some

higher-wage industries such as financial and data-related industries, and in some mid-wage industries related to health care and real estate. Employment in almost all of the 29 industries that fall into the lower-wage group increased over the last year except agriculture and forestry support and apparel manufacturing.

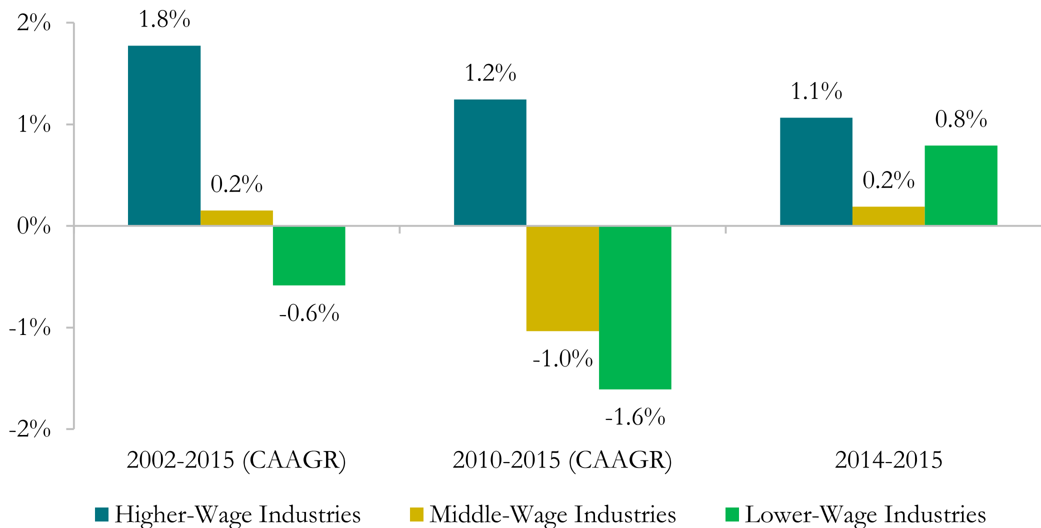
**Figure 9. Percent Growth in Employment across Lower-, Middle-, and Higher-Wage Industries**




CAAGR: Compound average annual growth rate
Source: U.S. Bureau of Labor Statistics, Colorado Department of Labor, OSPB Calculations

Wage growth has been less equally distributed across industries. Figure 10 illustrates the average inflation-adjusted wages (real wages) in lower-wage, middle-wage and higher-wage industries. Real wages in lower-wage industries, on average, have declined over the past 13-year period from 2002 to 2015 while those in middle-wage industries have increased just slightly. Over the past five years, real wages in both of these wage groups have declined. On the other hand, real wages have increased by nearly 2 percent, on an annual average growth rate basis, for the higher-wage industries over the past 13 years. Average real wages for each of the three groups have seen an improvement over the past year.

**Figure 10. Percent Growth in Real Wages across Lower-, Middle-, and Higher-Wage Industries**

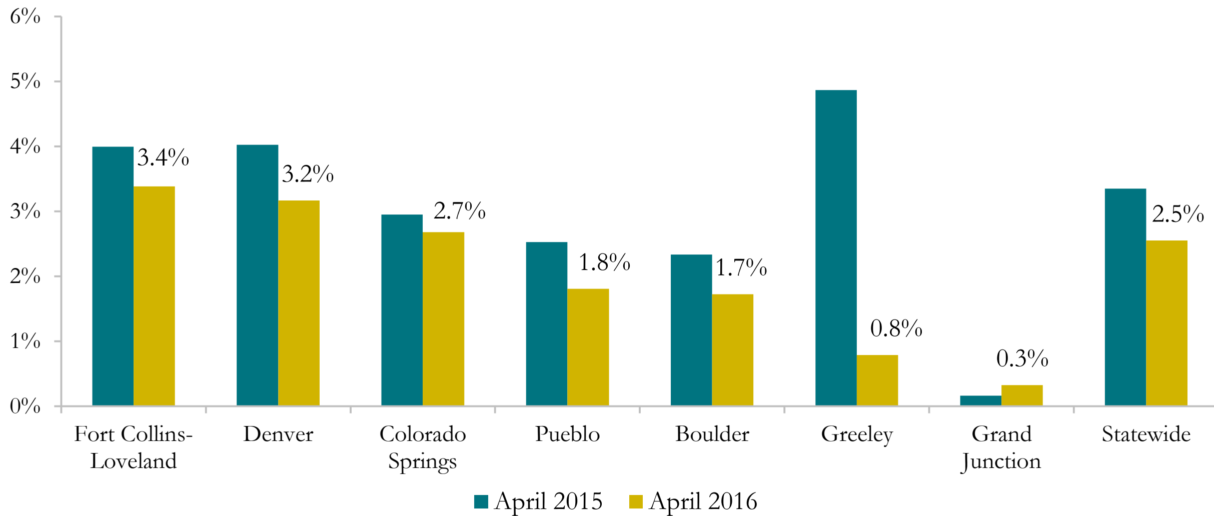



Source: U.S. Bureau of Labor Statistics, Colorado Department of Labor, OSPB Calculations

**Larger urban centers are accounting for most of the job growth in Colorado. Job growth has decreased significantly in Greeley due to the energy sector.**

***Job growth has moderated in all areas of Colorado since last year and growth has been concentrated in the central and northern Front Range regions –*** Job growth over the past year was driven by gains in the Front Range cities. As shown in Figure 11, these metro areas together accounted for nearly all of the employment gains over the year. After experiencing among the fastest job growth in the country in 2014 attributable to the oil and gas boom, Greeley now has among the slowest growth largely due to the pullback in oil and gas jobs over the past year.

**Figure 11. Average Year-over-Year Employment Growth by Colorado Metro Area**

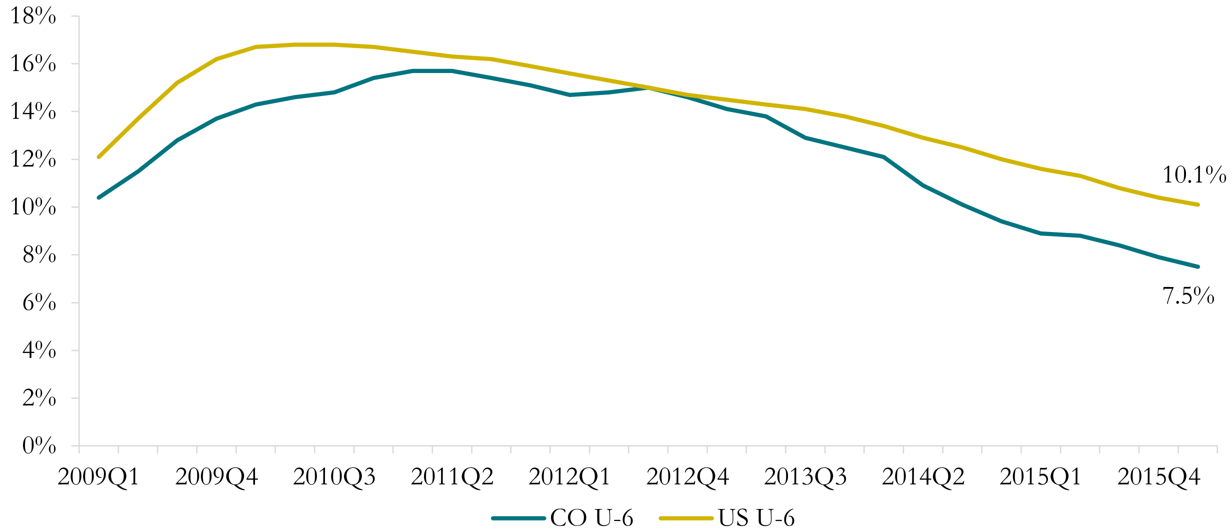



Source: Colorado Department of Labor and Employment

***Unemployment measures in Colorado continue to outperform the national trends –*** Although the official unemployment rate (U-3) ticked up slightly to 3.4 percent in May, it remains over a percentage point lower than the national average and ranks as the 7th lowest among all states. In addition, as Figure 12 illustrates, the broader U-6 measure, which includes marginally attached workers – workers who currently are not working nor looking for work but indicate that they would like to work and have looked within the past 12 months - and people working part-time for economic reasons, continues to drop at a faster rate than the national average. Colorado's average U-6 rate over the second quarter of 2015 through first quarter of 2016 was 2.6 percentage points lower than the national average over this time period.

**Colorado's U-3 unemployment rate ticked up slightly in May to 3.4 percent but remains the 7th lowest out of all states.**

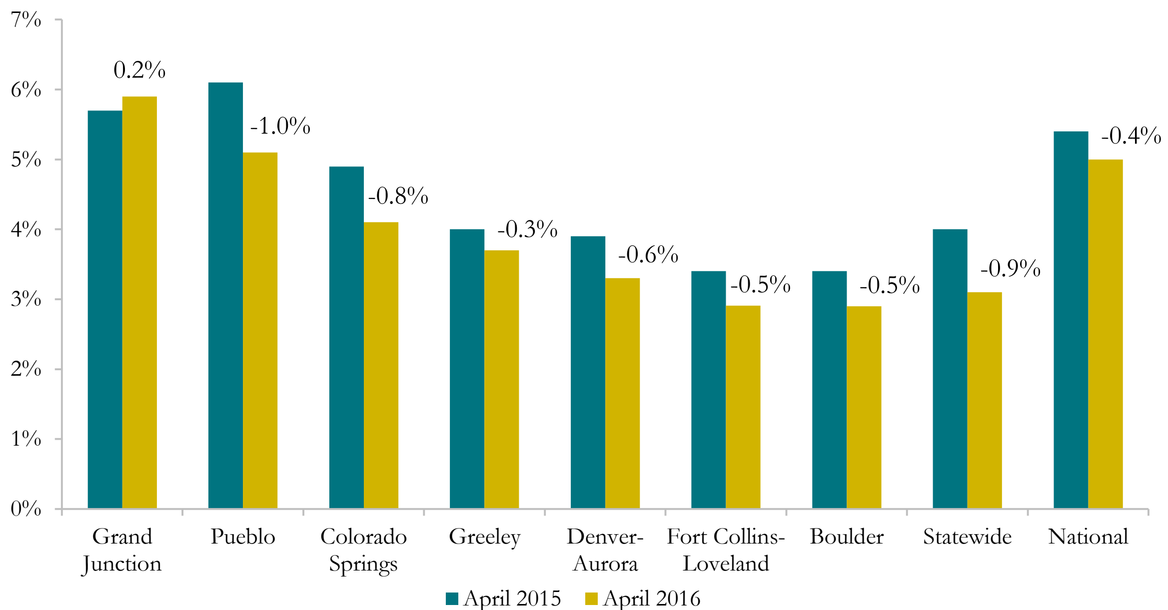
**Figure 12. Broad Measure of Unemployment (4-quarter moving average)**




Source: U.S. Bureau of Labor Statistics

Figure 13 shows unemployment rates across Colorado metro areas for April 2015 and 2016. As the figure demonstrates, most of Colorado's larger cities have seen a drop in their unemployment rate, though the magnitude of the change varies across the state. For instance, Pueblo and Colorado Springs saw the greatest improvement in unemployment over the past year, but also started with higher levels than cities along the northern Front Range. Boulder and Fort Collins have among the lowest unemployment rates in the country, both ranking in the lowest 10 percent of all 387 metro areas and Denver ranks in the lowest 15 percent.

**Figure 13. Unemployment Rates by Colorado Metro Area (Change from year ago shown above bars)**




Source: U.S. Bureau of Labor Statistics

## Housing Costs

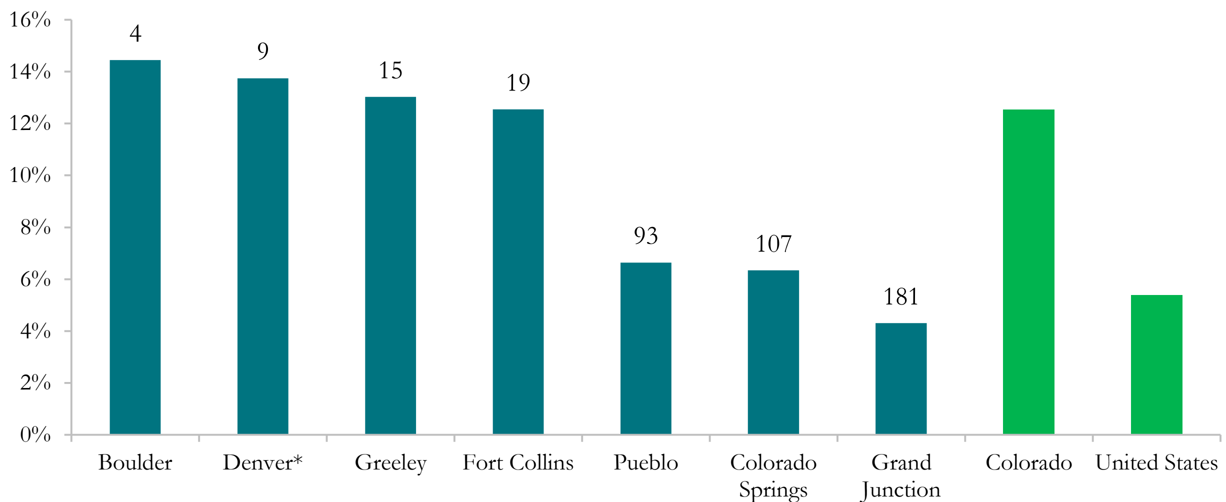
***Home prices continue to appreciate at strong rates across Colorado –*** Home prices and rental rates continue to increase across most areas of the state at faster than national trends. Furthermore, home prices in the Denver Metro area have grown at the fastest rate among large cities since pre-recession peaks. Population growth fueled by high levels of in-migration, as well as low supply, have contributed to the strong appreciation. Colorado in general, and the Front Range in particular, continues to attract a younger and well educated population. In addition to the outdoor amenities Colorado offers, the labor market is exceptionally tight and the Front Range has relatively high concentrations of high-tech and higher paying employment opportunities.

**Low supply of housing in the midst of robust in-migration levels continues to put upward pressure on housing prices in many areas across the state.**

New housing permit activity increased through the latter half of 2015 and is expected to be strong over the next few years, with housing permits growing by 18.9 percent in 2016 and 9.1 percent in 2017. However, household formation is expected to outpace the level of new homes, which will continue to put upward pressure on house prices. For example, in 2015, Colorado's population increased by over 100,000 individuals while only an estimated 25,143 new homes, condos and apartments were added, according to the U.S. Census Bureau. With an average household size of 2.6 people in Colorado, the state would have needed an additional 38,500 units to accommodate the population increase in 2015, leaving a shortfall of over 13,000 units. Furthermore, these new homes and condos coming on the market, particularly in the Denver Metro area, are priced well above the price that would be achievable by many younger individuals looking to purchase their first house.

The Federal Housing Finance Agency's House Price Index shows that home prices in all of the largest Colorado cities, except Grand Junction, continued to grow faster than the national average in the first quarter of 2016. Four of these cities ranked in the top 20 for home-price appreciation with Boulder and Denver both in the top ten. According to the National Association of Realtors, Boulder's median sales price of existing single-family homes of $479,700 in the first quarter of 2016 was the sixth highest of the 178 large cities tracked by the organization. Denver's median home price was $369,000 and Colorado Springs' was $239,800 in the same period.

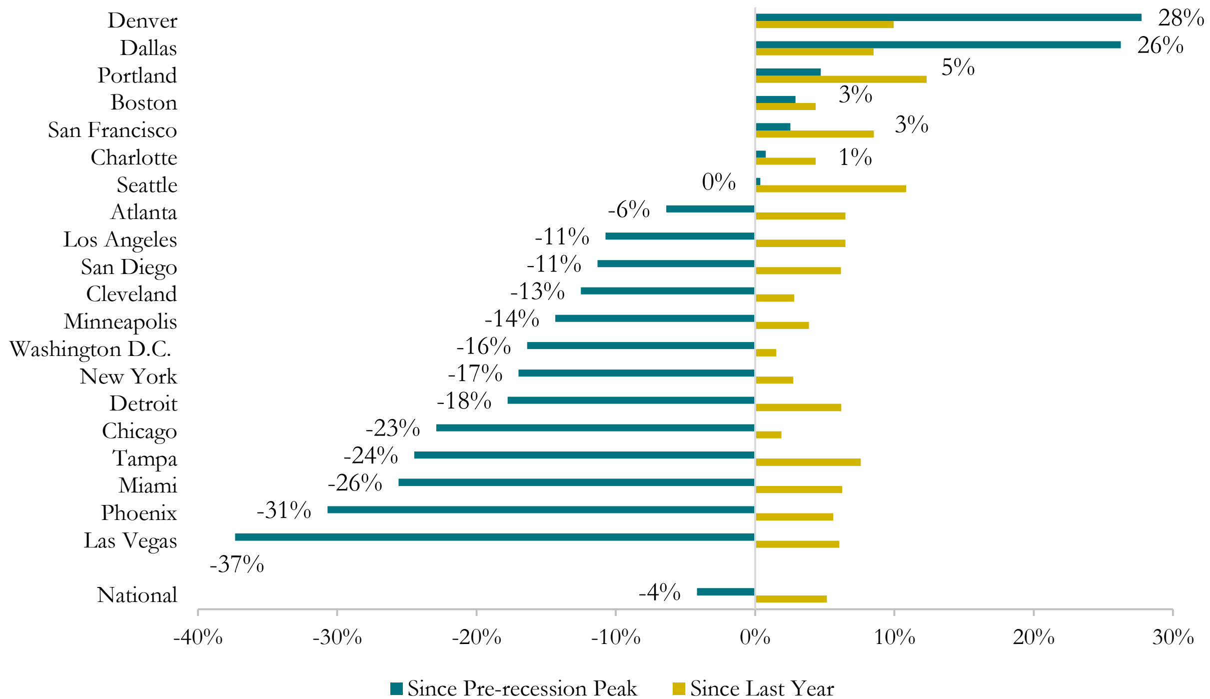
**Figure 14. Percent Change in Home Prices, First Quarter 2015 to First Quarter 2016, Rank among 402 large U.S. cities shown above bars**




*Includes Aurora and Lakewood
Source: Federal Housing Finance Administration, OSPB Calculations

As shown in Figure 15, according to the Case-Shiller Home Price Index, Denver home prices have surpassed their pre-recession levels by the most out of the 20 largest cities that the index tracks. Many of the cities have yet to reach their pre-recession peak levels, with some still over 30 percent below their peak. In many cases, these cities had a much larger housing boom and bust than did Denver. Denver homes tended to not appreciate as rapidly during the national housing boom but have been appreciating much faster during the past few years than most other areas around the nation. Over the past year, only Seattle and Portland home prices appreciated faster than Denver's home prices.

**Figure 15. Percent Change in Home Prices in March 2016, Since Pre-Recession Peak (shown next to bars) and Since March 2015**



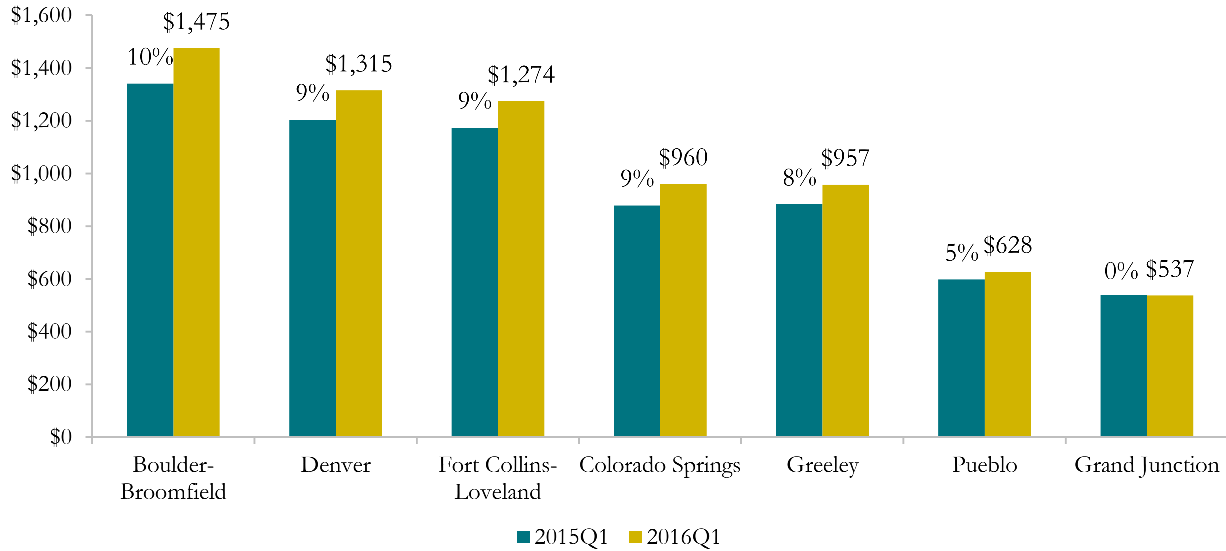

Source: S&P/Case-Shiller Home Price Index- S&P Dow Jones Indices LLC

***Rents continue to rise in most metropolitan areas with growing disparity across regions –*** As shown in Figure 16, rents in most large Colorado cities rose over the past year, however growth rates varied dramatically across regions. The Boulder/Broomfield area saw both the strongest growth and highest average rents. Most cities across the Front Range continue to experience rapidly appreciating rent prices.

**Average rents rose by 5 percent or more in six of Colorado's largest cities. New rental inventory in the Denver and Boulder area could lead to tempered rent growth through the remainder of the year.**

Recent increases in vacancy rates in the Denver and Boulder Metro areas, mostly due to increased supply of multi-family housing units, may temper rental growth rates. However, robust in-migration and new household formation should continue to lead to growth in rent prices. Vacancy rates in Colorado Springs, Pueblo and Grand Junction all decreased in the first quarter of 2016 which may put upward pressure on rental rates in these cities.

**Figure 16. Average Rent in First Quarter of 2015 and First Quarter of 2016, Percent Change in Rent and Average Rent in First Quarter 2016 Shown Above Bars**




Source: Colorado Division of Housing, Apartment Association of Metro Denver

## Oil and Gas Industry Conditions

In the midst of continued low energy prices, the oil and gas industry continues to contract. Although the outlook for oil prices has improved since the March forecast, the increase in oil prices is expected to be gradual through the remainder of the year and into 2017. Further, absent a major shock, such as heightened political upheaval in the Middle East, prices will likely not return to their 2014 levels for many years. Employment in the oil and gas industry in Colorado decreased by over 25 percent through the end of 2015 and will likely decrease by another 15 to 20 percent by the end of 2016.

**Employment in the oil and gas industry contracted by over 25 percent in 2015 and could decrease another 15 to 20 percent in 2016.**

Although employment in the oil and gas industry makes up a small share of overall employment in Colorado, the industry and its associated activity made a strong contribution to Colorado's overall growth during the current expansion, helping it to outpace national growth. The industry invests large sums of money and pays high wages, increasing the amount of money circulating in the economy. Average earnings in the industry are more than twice the average earnings in Colorado. Therefore, there can be material impacts on the state from growth or contraction in the industry.

The decrease in investment and employment in the industry has contributed to the moderating overall growth in the state during the latter half of 2015 and beginning of 2016. However, Colorado's economy has been more resilient than other oil and gas intensive states because of its economic diversity and growth in other industries. In addition, lower gasoline prices have given consumers and businesses more money to spend on other goods and services, softening some of the shock. On average, gasoline prices are around 20 percent lower than last year and around 35 percent lower than they were two years ago.

***Oil prices remain suppressed due to oversupply but have improved recently ―*** Oil prices dropped to around $25 per barrel during the first few months of 2016 but have since improved and are currently just below $50 per barrel. Production in the U.S. has slowed through the year and oil disruptions in Canada, Nigeria and

other parts of the world have put upward pressure on prices. Price projections for the remainder of the year suggest a gradual increase and are generally expected to remain in the $50-$60 range through 2017, although there is a high degree of uncertainty in the trajectory of oil prices.

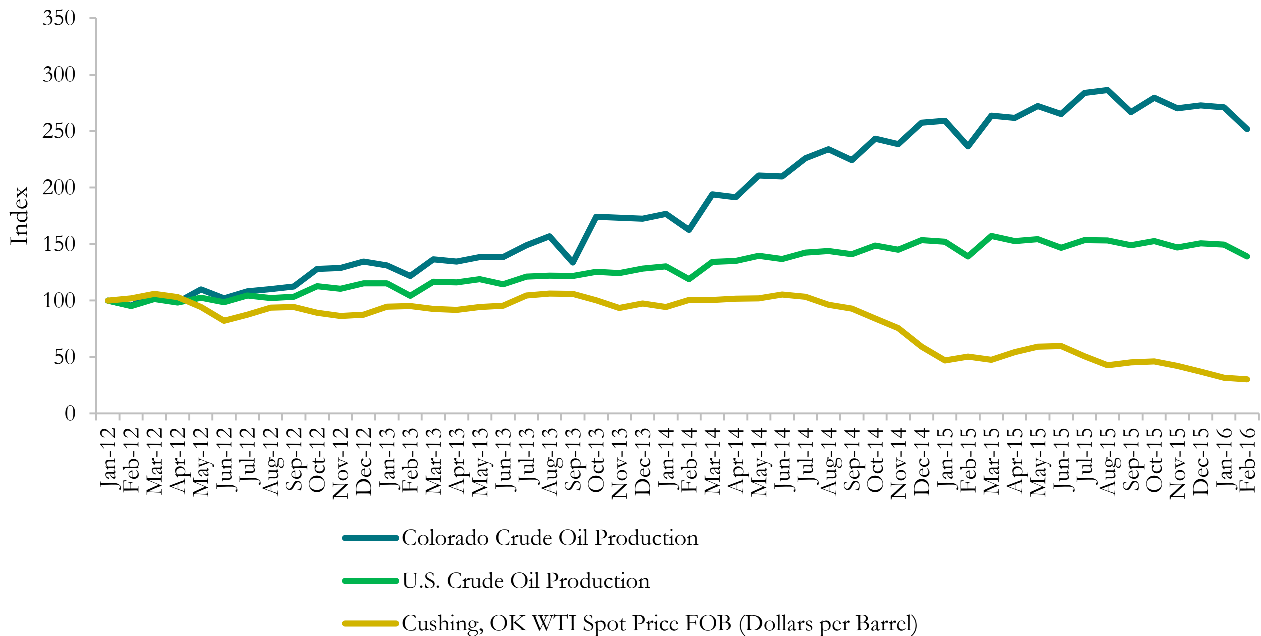
Natural gas prices are currently over 50 percent lower than their 2014 levels, due to oversupply and slower demand. The warmer winter contributed to lower demand putting further downward pressure on prices over the past six months. Natural gas prices are expected to remain low through at least the remainder of 2016 and will likely remain below their 2014 levels through the end of 2017.

Production of oil increased rapidly through mid-2015 despite lower energy prices, with U.S. production peaking around this time last year. However, production has been slowing since April 2015, as shown in Figure 17. Oil production in Colorado increased to a greater extent and has been slower to reverse course, but production began to slow during the first half of 2016. Colorado produced an estimated 126 million barrels of oil in 2015, according to the Colorado Oil and Gas Conservation Committee, an increase of 32 percent over 2014 production. This compares with an 8 percent increase nationally. Production in Weld County accounted for nearly all of Colorado's growth; the county makes up nearly 90 percent of oil production in the state.

**Production of oil in Colorado reached record highs in 2015 with a 32 percent increase over 2014 levels.**

Energy firms have become increasingly efficient as they focus on the most productive areas to drill new wells and technology advances have allowed them to produce more oil using fewer resources. The Denver-Julesburg Basin in northeast Colorado has been identified as one of the nation's more productive and cost-effective areas to extract oil, which has contributed to the robust increase in Colorado's production over the past few years.

**Figure 17. Crude Oil Production and Price Indices (January 2010=100)**




Source: U.S. Energy Information Administration

U.S. production is expected to decrease by about 9 percent, on average, in 2016. Decreases will vary greatly by region and firm, though, as they require different price levels to remain profitable. Average breakeven prices – the price necessary to remain profitable – have continued a downward trend over the past few years as firms

become more efficient. Breakeven prices vary greatly by firm and region, with some firms reporting breakeven prices as low as $30 per barrel while others are as high as $80 per barrel. According to the Kansas City Federal Reserve's 2016 1st Quarter Energy Survey, energy firms in the 10th District, which includes Colorado, require an oil price of $51 per barrel, on average, to remain profitable, this is down from $60 in the fall of 2015.

**Firms require $51 oil prices, on average, to remain profitable in the Colorado region; oil prices are currently just below this level.**

The energy companies that can remain profitable in this lower price environment will be those that continue to adapt and focus on the areas that are the most efficient and cost-effective, such as the Denver-Julesburg Basin. As a result, production levels in Colorado may not decrease as significantly as other areas around the nation in 2016.

***The oil and gas industry's employment base continues to contract*** **—** Based on the latest estimates of labor market data, employment in the oil and gas industry was over 25 percent, or approximately 8,000 jobs, lower in the fourth quarter of 2015 compared with the fourth quarter of 2014. Given continued expectations of lower prices and trends in operating rigs around the state, the state could experience another 15 to 20 percent decrease in employment by the end of 2016.

On a more positive note, the prospects for these displaced workers is better than in the previous downturn in the industry during the Great Recession. This is especially the case in Colorado's robust labor market and growing economy. Recent research conducted at the national level indicated that although the amount of layoffs in the industry has been larger during this downturn than in the late 2000's, oil and gas workers are having an easier time finding work in other industries.[3] Of the individuals surveyed in the oil and gas industry in 2008, 7.3 percent were unemployed the following year. Of the individuals surveyed from September 2014 to September 2015, only 4.2 percent were unemployed. Furthermore, the individuals laid off in the oil and gas industry during the current downturn have been able to move into a broader range of other industries and have been able to maintain or even increase their level of earnings.

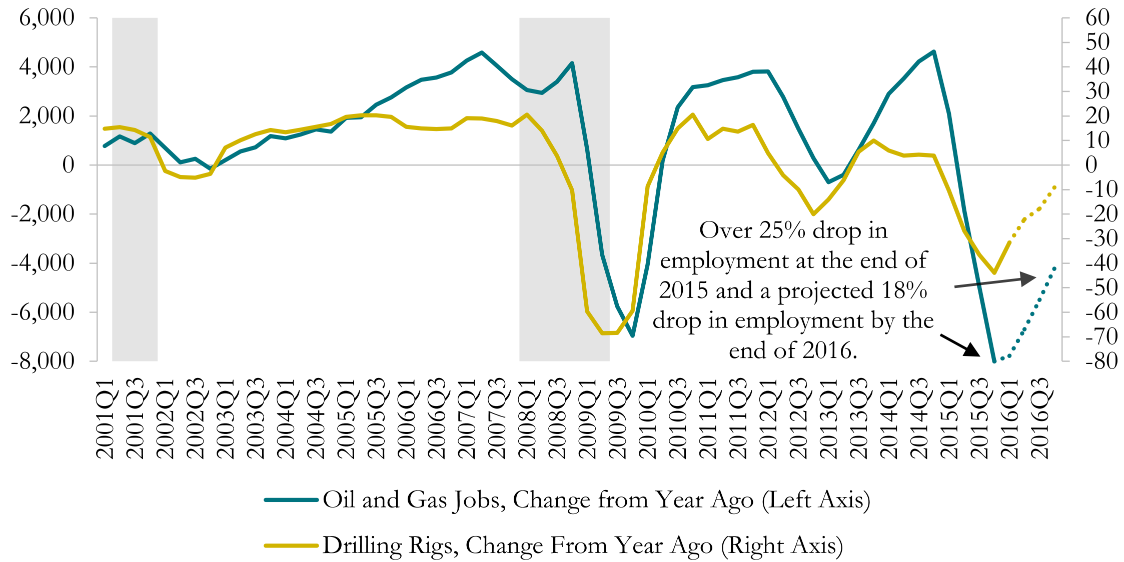
**Due to lower oil and gas prices, employment in the oil and gas industry in Colorado dropped over 25 percent through the end of 2015.**

The number of oil and gas rigs operating in Colorado continues to track closely with the trend in oil prices. After averaging 68 rigs in 2014 and 38 rigs in 2015, rigs in operation around the state have declined to just 16 rigs, but have stabilized around this level for the past two months.

Figure 18 examines the relationship between drilling rigs and oil and gas employment, both historically and projected through the end of 2016. Historically, the change in drilling rigs is highly correlated with the change in employment in the oil and gas industry. The decline in rigs and employment is expected to continue through 2016, but at a slower rate than 2015. Although prices are expected to gradually improve this year, energy firms continue to struggle in the current environment. Many firms in the industry are deeply indebted as they became highly leveraged during the boom years when prices were well over $100 a barrel. As reduced earnings have made it difficult to make debt payments, many small and medium sized Colorado energy firms have already filed for bankruptcy and expectations are for more mergers and acquisitions as well as bankruptcies to occur through the end of the year.

[3] Brown, Jason P. & Kodaka, Andres. 2016. "The Reallocation of Energy-Sector Workers after Oil Price Booms and Busts." Federal Reserve Bank of Kansas City.

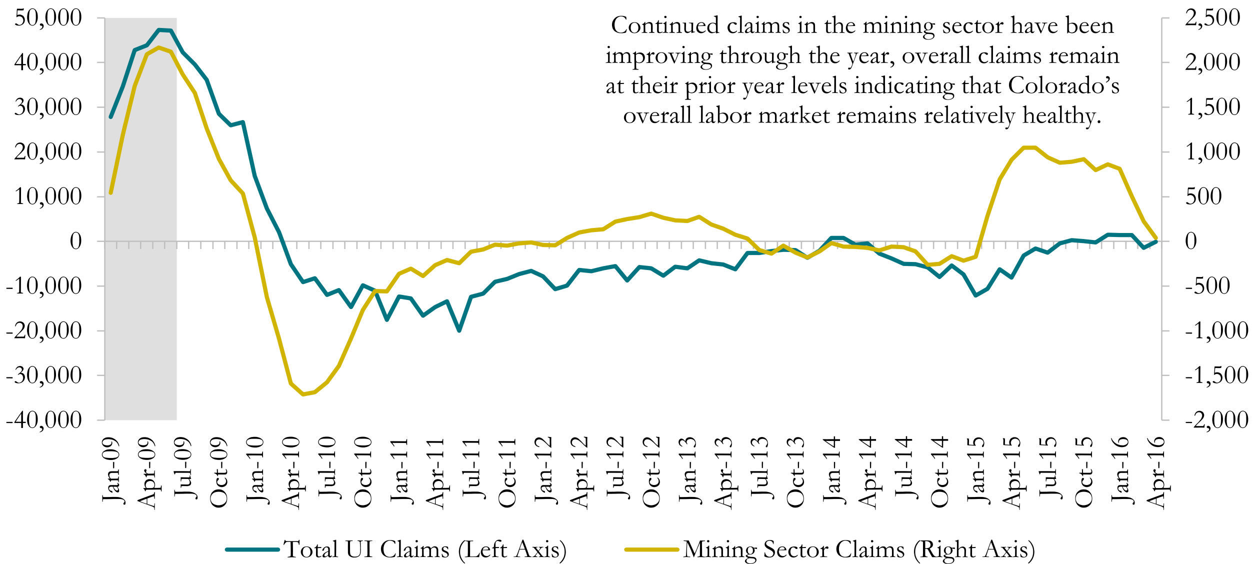
**Figure 18. Year over Year Change in Oil and Gas Employment and Operating Drilling Rigs in Colorado***




*Actual data on drilling rigs through the first quarter of 2016, actual employment data through the fourth quarter of 2015. The dotted lines show projections for employment and drilling rigs.
Source: Colorado Department of Labor and Employment; Baker Hughes

Recent trends in unemployment claims in the mining industry indicate layoffs in the industry have slowed since the beginning of 2016, as shown in Figure 19. Overall unemployment claims in Colorado remain right around their previous year levels indicating that Colorado's job market has been able to withstand the slowdown in the energy sector.

**Figure 19. Continued Unemployment Claims in Colorado, Change from Prior Year**




Source: Colorado Department of Labor and Employment

## National Economy

***The national economy continues to grow modestly*** – Although growth continues to be weaker than growth in previous expansions, the U.S. economy is performing better than most other developed country economies. Growth in service-oriented industries, such as professional and business services and financial activities continue to support the expansion.

**The U.S. economy continues to grow modestly, driven mostly by the stronger services sector. An aging workforce, combined with slower productivity growth and business creation, among other factors, continue to temper economic growth.**

Domestic demand has been growing consistently faster than global demand, which has enabled service-oriented industries and manufacturing firms that sell products domestically to continue to outperform firms focused on selling products internationally. Recent indicators of consumer spending have been mixed with some indicators showing slowing growth, while others, namely demand for housing, showing continued strength. As the labor market continues to tighten, employment has been growing at a slightly slower pace recently but there is some indication that wage growth has gained more momentum.

According to the Federal Reserve's May "Beige Book," businesses and other contacts across the economy indicated that economic activity continued to expand modestly across most regions and industries in recent months, although the Chicago and Kansas City districts indicated that the pace of growth slowed. Overall, manufacturing activity was mixed, with some regions indicating flat to moderate growth while others indicated slight declines. The energy sector remained weak and oil drilling continued to decrease in the Minneapolis, Kansas City, and Dallas districts. Although employment only grew modestly, tighter labor market conditions were indicated in many districts, which have put upward pressure on wages. Consumer spending and tourism were up in many districts, but others reported mixed or flat activity. Construction and real estate activity generally expanded and the overall outlook remained positive.

Growth during the current expansion continues to underperform relative to previous expansion periods. There are a number of factors contributing to this trend. A few necessary ingredients for economic growth have been generally weaker over the past decade. Growth in business investment continues to come in below historical norms and has been trending even lower recently. Additionally, new business formation, a key ingredient to spur innovation and growth, is at lower levels. The businesses that are being formed have been concentrated in fewer regions across the U.S., which is contributing to the large disparity in growth rates across regions.

The continued slower trend in measured productivity growth has also contributed to the slower growth in the U.S. and other developed countries during this recovery period. Productivity growth is essential for long-run growth in an economy, as it allows economies to use their current level of resources more efficiently. Particularly when coupled with the slowdown in the growth of the workforce, mostly due to changing demographics, a lack of productivity gains inhibit economies from experiencing more robust activity.

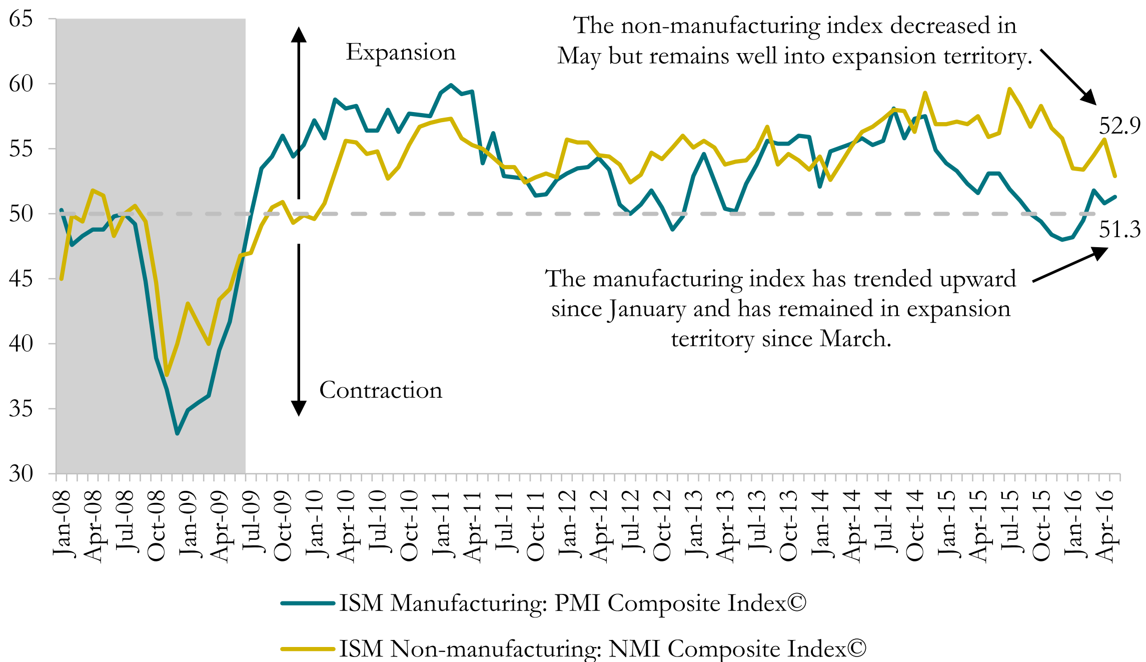
***Broad measures of economic activity show continued moderate growth*** —The Manufacturing Composite Index and the Non-manufacturing Composite Index, both published by the Institute for Supply Management (ISM), give an indication of how the overall national economy is performing. The most recent May indices show that both the manufacturing and non-manufacturing sector continued to expand, with both indices remaining in expansion territory. These two indices use data collected from business surveys that gauge activity by tracking key behaviors, such as placing new orders, increasing production volume, hiring new employees, and making deliveries.

As shown in Figure 20, the non-manufacturing index, which covers the largest portion of economic activity in the U.S., covering industries ranging from agriculture to professional, scientific, and technical services, and from retail to construction, dropped to 52.9 in May from 55.7 in April. Despite the decline, the index remains above the 50 threshold, indicating that the nonmanufacturing sector of the economy continues to expand, just at a slower pace. Nearly all of the components of the index moderated over the month with the employment component entering contraction territory. This may indicate some moderation in overall growth in the services sector. However, prior to May's decrease, the index was generally trending upward and May marked the 76th consecutive month of expansion in the services sector.

**The ISM non-manufacturing index, which looks at the largest portion of U.S. economic activity, shows continued but slower expansion in the sector. The manufacturing index continues to regain ground and has remained in expansion territory for the past three months.**

After falling into contraction territory at the end of 2015 and into the beginning of this year, the manufacturing sector has remained in expansion territory for three months, according to the ISM manufacturing index. May's index of 51.3 was a welcome increase from April's 50.8. The new orders component of the index remained strong indicating that U.S. factories continue to rebound from the slump. However, the employment component in the manufacturing index was in contraction territory. Overall, the report indicates that the manufacturing sector has been showing signs of improvement. Furthermore, the manufacturing businesses that focus more on supplying domestically demanded goods continue to perform better than those that rely on international demand.

**Figure 20. ISM Manufacturing and Non-Manufacturing Indices***



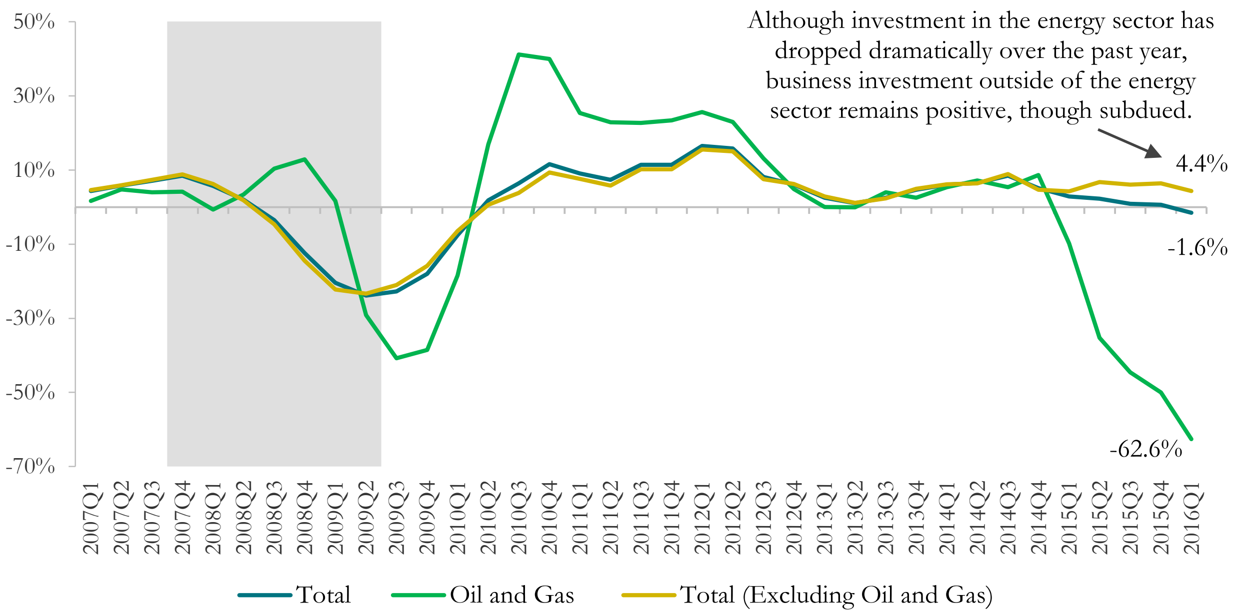

*Readings above 50 indicate expansion in the industry while readings below 50 indicate contraction.
Source: Institute for Supply Management

***Business investment remains weak, largely due to the slowdown in the energy sector –*** Many indicators of business investment indicate overall business investment has remained weaker during this expansion period than in previous expansion periods. Recently, investment has been trending into negative territory, as shown in

Figure 21, which shows non-residential business investment. However, the large drop in investment in the energy sector has driven the majority of the downturn as illustrated in the figure. Business investment outside of the energy industry has remained positive throughout the last year, giving some indication that investment in other sectors remains more stable.

Business investment is vital for the overall economy in that it enables continued growth and job creation. Furthermore, business investment is critical for enabling greater productivity growth, which allows for a higher sustained level of longer-run growth in an economy. The recent, subdued trends in business investment suggest that the slower pace of growth for the U.S. overall in the current expansion is likely to continue, at least in the near term.

**Figure 21. Non-residential Business Investment**
**(Percent change from same quarter one year prior)**




Source: U.S. Bureau of Economic Analysis

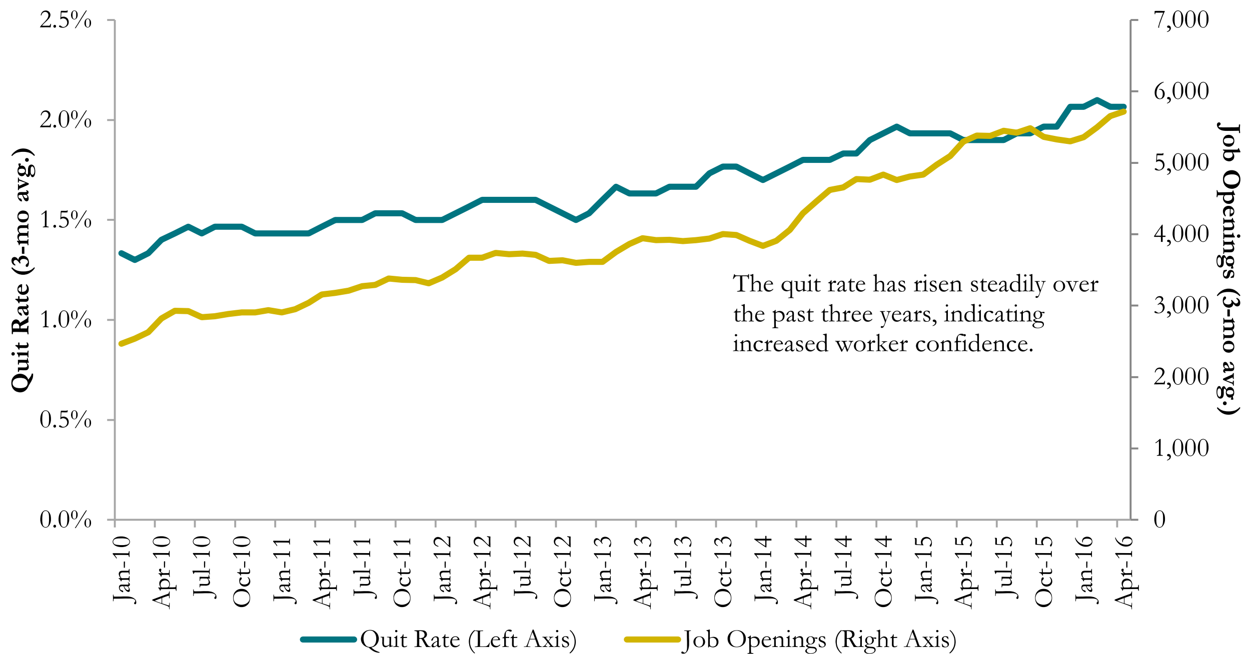
***The national labor market continues to improve, but at a slower rate –*** The May employment report from the U.S. Bureau of Labor Statistics suggested that hiring slowed during the month, but other indicators still point to mostly positive labor market conditions. For example, employers are reporting difficulty filling positions and there are signs of upward pressure in wages, along with a rising quit rate, which signals greater worker confidence in the labor market.

***Unemployment has continued to fall –*** The U-3 rate, the most commonly reported unemployment metric, was 4.7 percent in May, down from 5.5 percent in the same month last year. The U-6 rate, which includes people not in the labor force who want and are available for work, as well as people working part-time for economic reasons, dropped to 9.7 percent in May, a decline of 1.1 percentage points since May 2015. Both indicators are still above their pre-recession lows, but the marked improvement over the last year points to a tightening labor market. On the other hand, as an indication of less positive conditions in the jobs market, the labor force participation rate fell in both April and May after posting six straight months of increases, and now stands at 62.6 percent.

Data from the U.S. Bureau of Labor Statistics' Job Openings and Labor Turnover Survey (JOLTS) shows the long-term trend towards a strengthening labor market. As job growth has continued, the quit rate has risen. Generally, a low quit rate indicates that employees feel that they may not be able to find another opportunity, so they stay at their current jobs rather than leaving. A rising quit rate, as has been seen over the last few years, indicates that employees are increasingly confident that they will be able to find new positions after they leave their current ones. Workers can often receive higher wages when they move to new positions, and thus the rising quit rate, or the percent of workers leaving their jobs voluntarily, should also bolster overall wage growth. In April, the quit rate registered 2.0 percent and represented 58 percent of all employment separations. For context, in the previous business cycle the quit rate hit a low of 1.8 percent in 2003, then peaked at 2.3 percent in 2007, whereas in this cycle the quit rate fell all the way to 1.3 percent in 2010 and has slowly risen since.

**The quit rate was 2.0 percent in April as it continues to rise from a low of 1.3 percent in 2010 towards the previous cycle peak of 2.3 percent.**

**Figure 22. Quit Rate and Job Openings**




Source: U.S. Bureau of Labor Statistics

***Worker compensation is rising*** **–** U.S. workers as a group saw their average inflation-adjusted hourly compensation rise from $24.97 in May 2015 to $25.59 in May 2016. Compensation trends are important because higher pay and benefits can help sustain economic growth by creating greater consumer confidence and higher levels of spending. Rising wages can signify greater gains in productivity, which helps boost living standards.

As Figure 23 shows, wage growth slowed significantly in 2008 and 2009, and has only recovered at a slow pace. Wage growth began to accelerate again in mid-2014 and has now been above 3 percent for all but one month since January 2015, hitting a high of 3.4 percent in April of this year, still below what has been seen in most recent expansion periods.

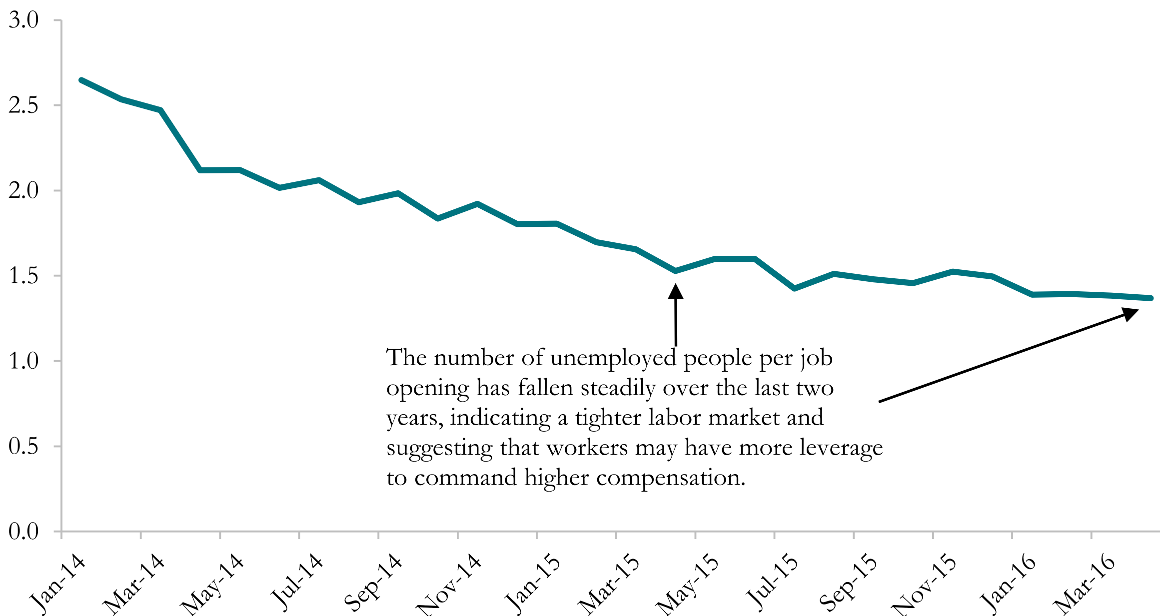
**Wages grew by 3.4 percent in April, likely due to a tightening labor market.**

**Figure 23. Atlanta Fed Wage Growth Tracker, 3-Month Moving Average**

Source: Federal Reserve Bank of Atlanta

One potential explanation for the recent wage increases is a tightening labor market. As employers find it harder to fill new positions, they are likely to pay higher wages in order to better recruit and retain talented employees among a smaller pool of job candidates. Figure 24 gives support to this explanation, as it shows that the number of unemployed persons per job opening has been falling. As of April 2016, there were 1.37 unemployed people per job opening, a notable drop from the 2.63 unemployed people per job opening at the beginning of 2014.

**Figure 24. Unemployed Persons per Job Opening**

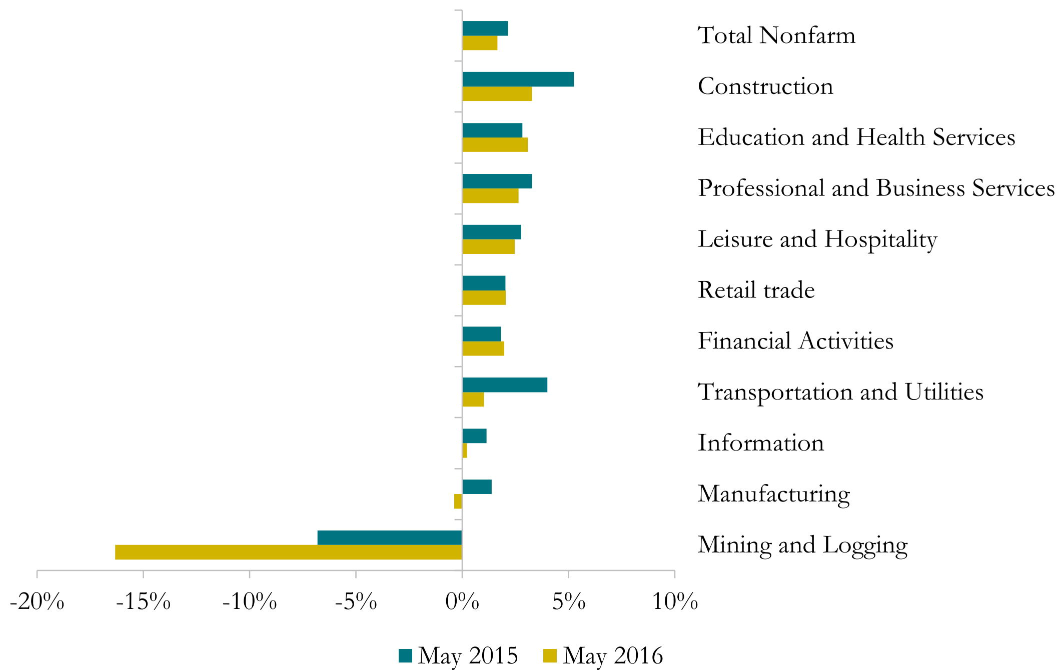



Source: U.S. Bureau of Labor Statistics, OSPB calculations

***Employment growth is slowing –*** As Figure 25 shows, year-over-year job growth slowed from 2.2 percent in May 2015 to 1.7 percent in the same month this year. While job growth accelerated in the financial activities, education and health, and retail trade sectors, it was not enough to offset job losses in the manufacturing and mining and logging sectors. Other sectors saw employment growth, but at a slower rate than in previous months. Mining and logging has been hit especially hard by low oil and commodity prices as firms have shed over 16 percent of their workforce since May 2015. Mining and logging industries represent less than one percent of U.S. nonfarm employment, so the impact of these losses on the broad national economy has been minimal.

**Over-the-year job growth slowed to 1.7 percent in May of this year from 2.2 percent in May 2015.**

**Figure 25. Year-over-Year National Job Growth by Sector**




Source: U.S. Bureau of Labor Statistics, OSPB calculations

## International Economic Conditions and Trade

The global economy continues to show signs of weakness, as growth remains slow and vulnerable to downside risks, which could threaten the current expansion. In light of the continued slow growth and downside risks, the World Bank has recently revised their forecast for 2016 world GDP growth downward from 2.9 percent to 2.4 percent. In general, advanced economies are expected to fare better than commodity-exporting emerging economies, which are currently facing headwinds due to declining commodity prices and unfavorable exchange rates.

The J.P. Morgan Global All-Industry Output Index declined from 51.6 in April to 51.1 in May, both well below the cycle high of 55.5 in July 2014. Ratings above 50 indicate economic expansion, while ratings below 50 indicate contracting activity is expected. The decline to 51.1 in May suggests that while the global economy is still expanding, economic activity remains sluggish.

**The dollar remains strong but has moderated slightly in recent months, offering some relief to U.S. exporters and multinational businesses.**

The dollar has softened slightly, depreciating in value compared with a basket of foreign currencies, but remains in a strong position. A strong dollar can adversely affect American exporters by making their products and services more expensive to foreign buyers. While a strong dollar also makes imports cheaper, benefiting consumers and businesses buying from other countries, U.S. imports have not grown as expected. This may be due to worldwide trading trends, as global export values have now fallen for seven consecutive quarters and global import values for eight quarters.

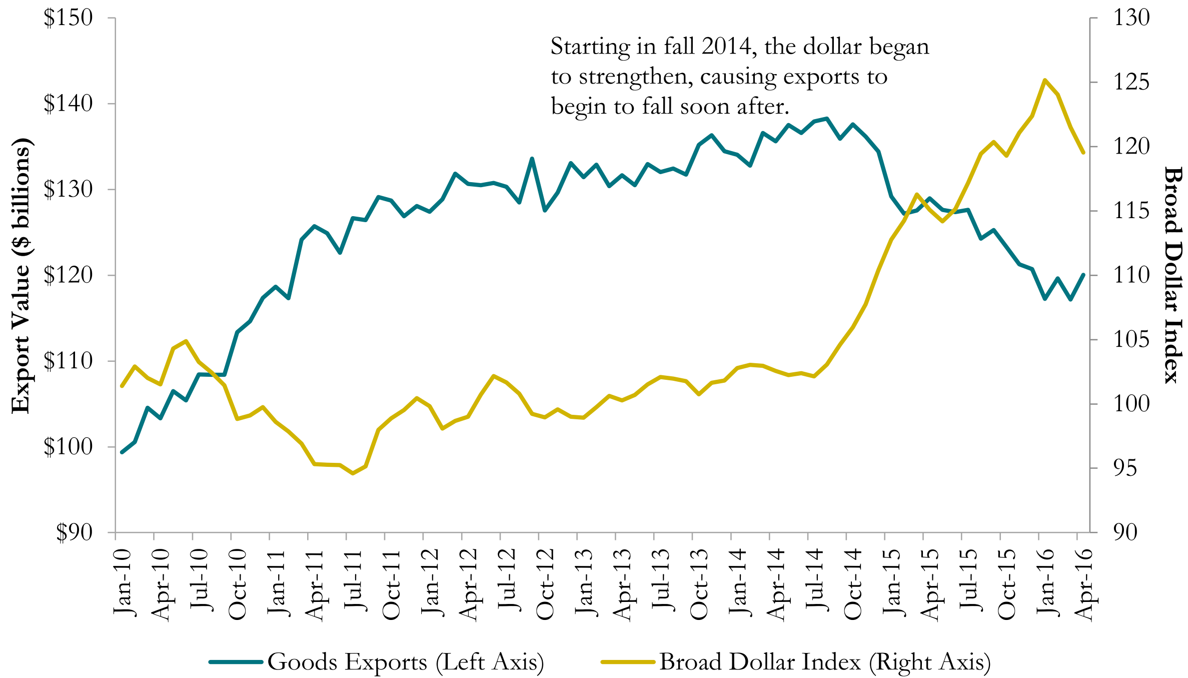
In addition, there is political uncertainty in the Eurozone regarding the outcome of Britain's referendum on whether to exit the European Union, scheduled for June 23. A vote to leave the EU could further weaken economic growth in that region.

***China's economic rebalancing continues –*** While China's economy has stabilized somewhat in the first quarter of 2016, recent indicators have suggested that this stabilization may not persist. China's transition from an economy driven by industrial production toward one based on domestic consumption is having spillover effects around the world, specifically in trade, commodities, and manufacturing.

China accounts for more than 10 percent of all global trade and is a top-10 trading partner with more than 100 nations. As a result, any reduction in China's demand for imports will have an effect on countries around the world. This is seen most clearly in the commodities market. China is a major commodities importer, accounting for about 40 percent of global demand for metals in 2014. China's slowing economy and declining demand for commodities have contributed to falling prices, causing harm to commodities exporters, which tend to be developing nations. At the same time, excess industrial capacity has contributed to an oversupply of steel and certain other manufactured goods, lowering prices below what is needed in order for industrial producers to remain viable.

***International trade continues to slow worldwide, but U.S. exports are stabilizing –*** Globally, total trade values have been declining for about two years. This can be attributed to the slowdown in China, the strong U.S. dollar, weak global economic growth, and the decline in oil and other commodity prices. The dollar's value in terms of other currencies has moderated slightly since January, but remains strong. This recent softening relative to major trading partners has provided some relief to U.S. goods manufacturers who have been struggling to sell their products overseas. Figure 26 shows the relationship between U.S. goods exports and the strength of the dollar since 2010. Note that exports fall as the value of the dollar rises and U.S. goods become more expensive to foreign buyers.

**Figure 26. U.S. Goods Exports and Broad Dollar Index**

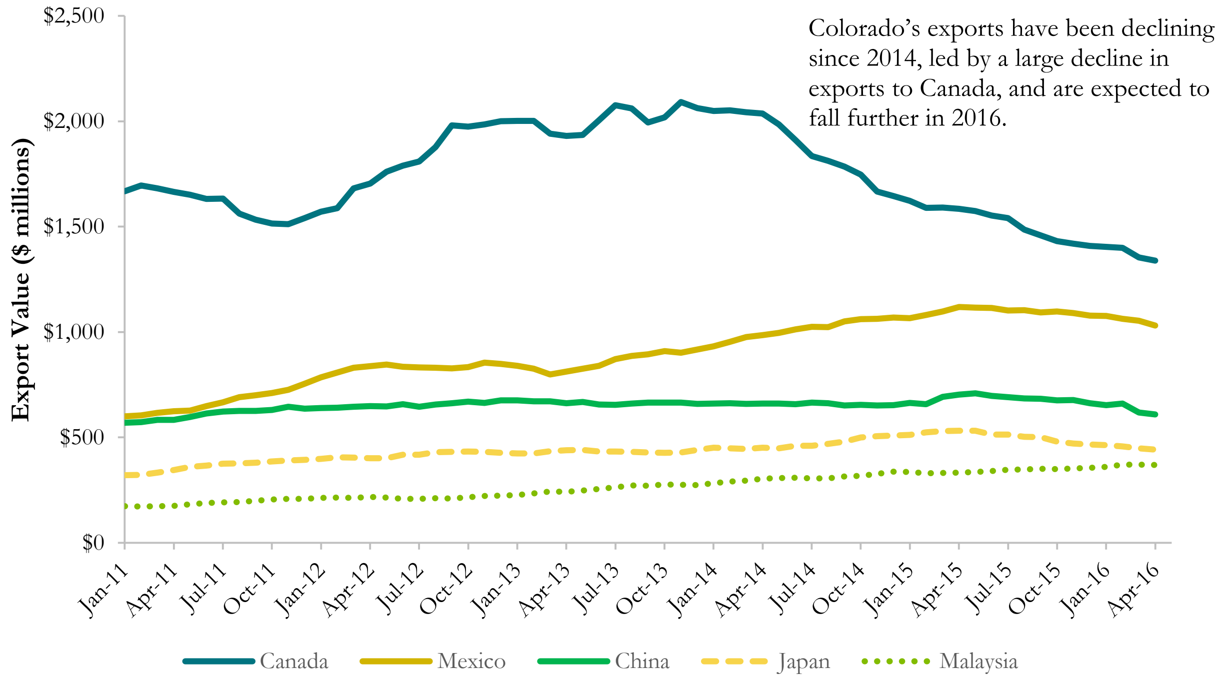



Source: Federal Reserve Bank of St. Louis

This decline in trade is seen in Colorado's export sector as well – Colorado's goods export value declined nearly $600 million from 2013-2015, and the first four months of 2016 saw state goods exports declined 11 percent as compared to the same period last year. Exports to China have declined 21 percent so far this year, representing about 18 percent of the total decline in Colorado exports. Figure 27 shows the values of Colorado's goods exports to the top five trading partners since 2010. A portion of the decline in the value of Colorado's exports can be attributed to the sharp fall in oil and gas and other commodity prices.

**Colorado export values have been falling since 2014, and through April were 11 percent below where they were at the same point in 2015.**

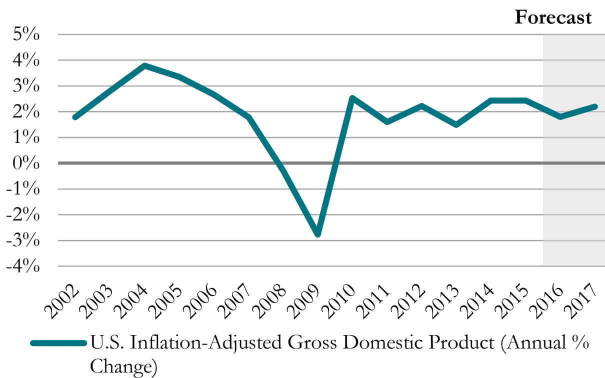
**Figure 27. Export Value to Colorado's Top 5 Trading Partners, Trailing 12 Months**




Source: WISERTrade

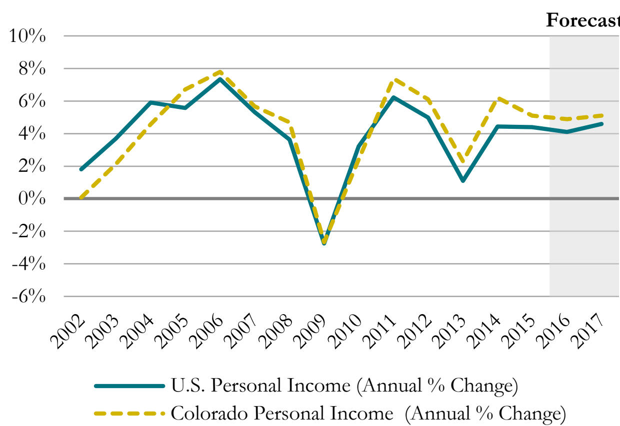
# Summary of Key Economic Indicators
## Actual and Forecast

### U.S. Gross Domestic Product (GDP)



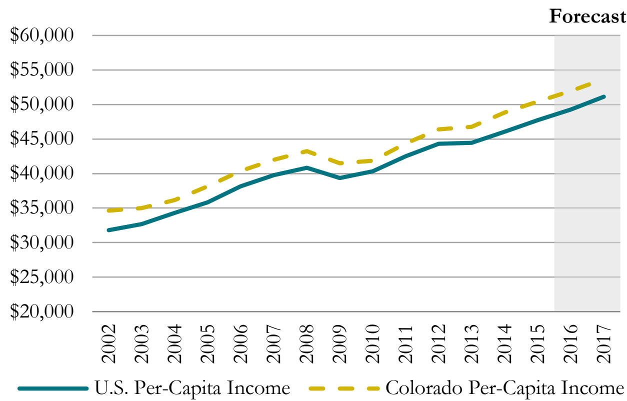

- GDP is a barometer for the economy's overall performance and reflects the value of final output in the U.S.
- The U.S. economy posted a moderate expansion of 2.4 percent in 2015 in the face of slow global growth. The pace of growth will moderate further in 2016 to 1.8 percent.

### U.S. and Colorado Personal Income



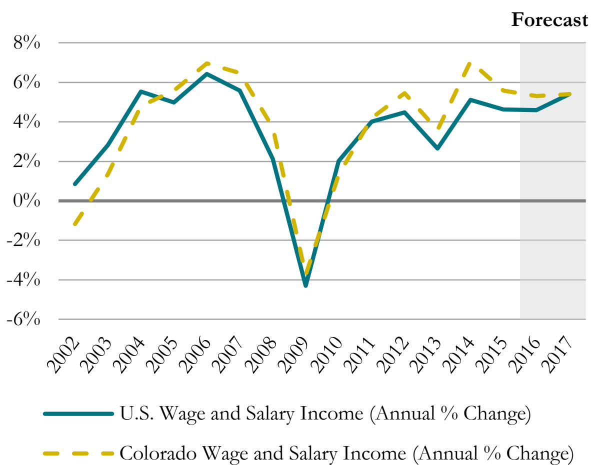

- Personal income growth in Colorado slowed to 5.1 percent in 2015 from a 6.2 percent rate in 2014, largely due to slowing employment growth and especially the oil and gas slowdown. Personal income growth will moderate further in 2016 as the energy sector continues to contract.
- Nationwide, personal income growth remained steady at 4.4 percent in 2015. A tighter labor market and gradual wage increases will allow personal income growth to remain steady through the forecast period.

### U.S. and Colorado Per-Capita Income



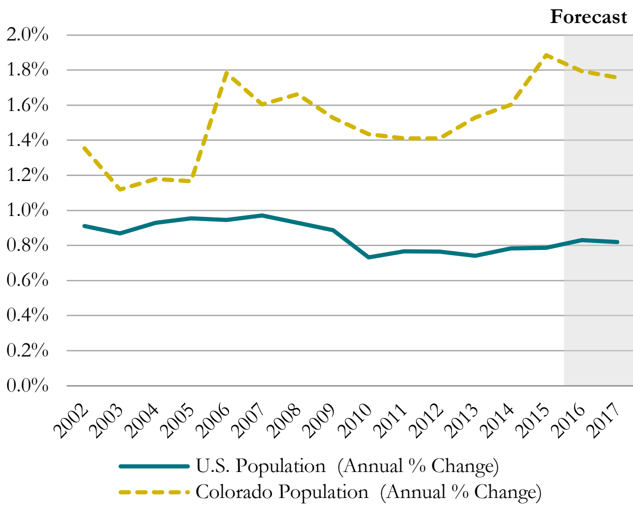

- Per-capita income in Colorado increased to $50,418 in 2015 and will grow 3.1 percent to $51,956 in 2016.
- In the U.S., per-capita income increased to $47,727 in 2015 and will grow 3.2 percent to $49,275 in 2016.

### U.S. and Colorado Wage and Salary Income



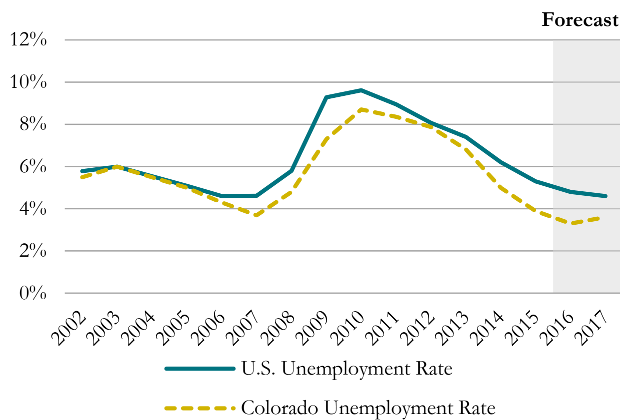

- Wage and salary growth in Colorado moderated in 2015 to 5.6 percent, largely due to the loss of relatively high-paying oil and gas jobs. Growth will decrease slightly in 2016 to 5.3 percent.
- Wage and salary income for the nation increased 4.6 percent in 2015. Moderating employment growth will be countered by quicker wage growth allowing wages and salary to grow around the same amount in 2016.

**U.S. and Colorado Population**



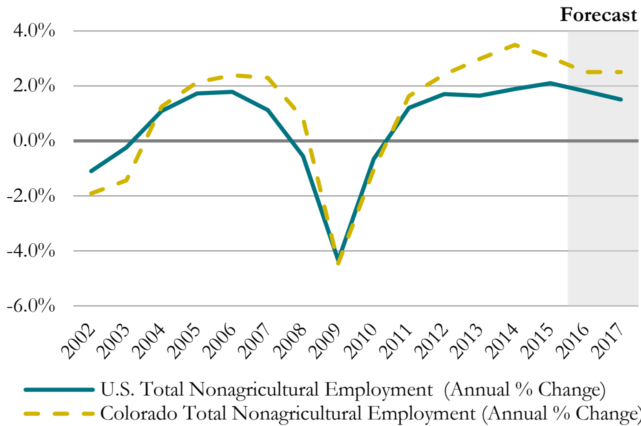

- Relatively high in-migration rates pushed Colorado's population growth rate to 1.9 percent in 2015, over double the national rate. A similar trend will continue in 2016, as the state is expected to add 66,000 people through net migration alone. The state's total population is expected to reach 5.75 million by 2018.
- The nation's population growth rate will remain steady at about 0.8 percent per year, and the population will reach 329.4 million people by 2018.

**U.S. and Colorado Unemployment**



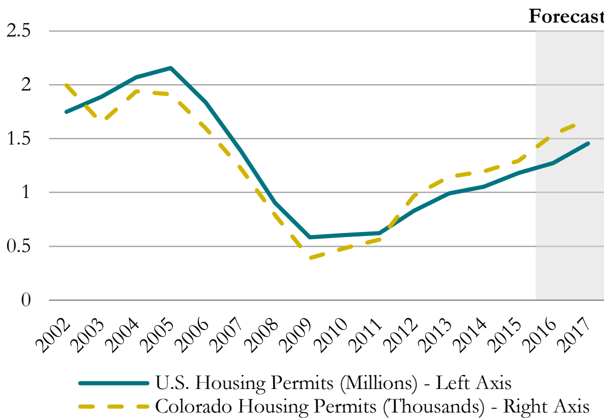

- The unemployment rate in Colorado averaged 3.9 percent in 2015, down over a full percentage point from 2014 despite the oil and gas slowdown. Unemployment is expected to average 3.3 percent in 2016.
- The national unemployment rate followed a similar trend in 2015, but remained more than a percentage point higher than in Colorado, averaging 5.3 percent in 2015. Continued improvements in the labor market will cause the rate to drop to 4.8 percent in 2016.

## U.S. and Colorado Total Nonagricultural Employment



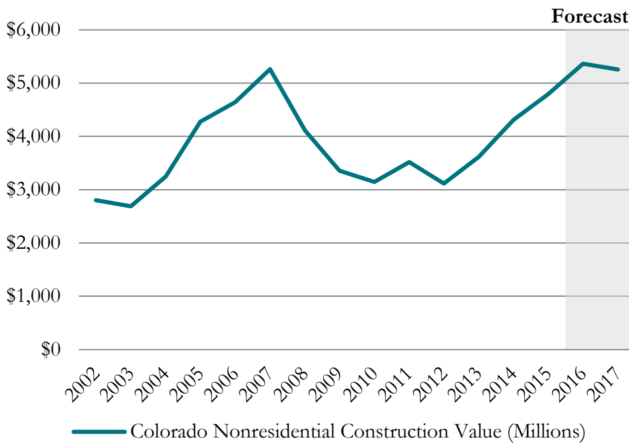

- Despite slowing job growth throughout the year, average employment in Colorado grew 3.0 percent in 2015, slightly lower than in 2014. Continued weakness in the energy sector and a tighter labor market will result in slower growth of 2.5 percent in 2016.
- In contrast to Colorado, U.S. nonfarm payroll jobs in 2015 increased at a faster rate than in 2014 — 2.1 percent versus 1.9 percent. Job growth has slowed nationwide, and OSPB forecasts an increase of 1.8 percent in 2016.

## U.S. and Colorado Housing Permits Issued



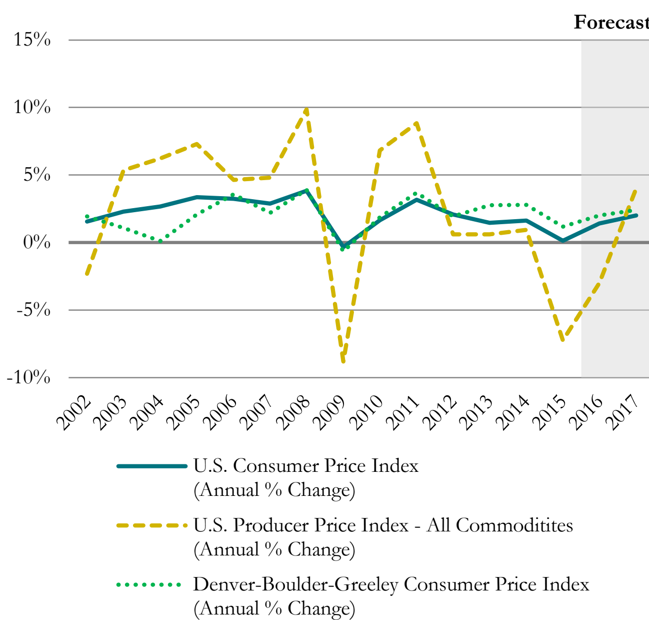

- In 2014, housing permits grew at their slowest rate since the Great Recession and only picked up moderately in 2015. In 2016, Colorado permits will increase 18.9 percent, when 36,943 permits will be issued. The increases will be driven by population growth and continued strength in the state's metro housing markets.
- U.S. housing permits posted growth of 12.4 percent in 2015, but the rate will moderate to 7.7 percent in 2016.

**Colorado Nonresidential Construction Value**



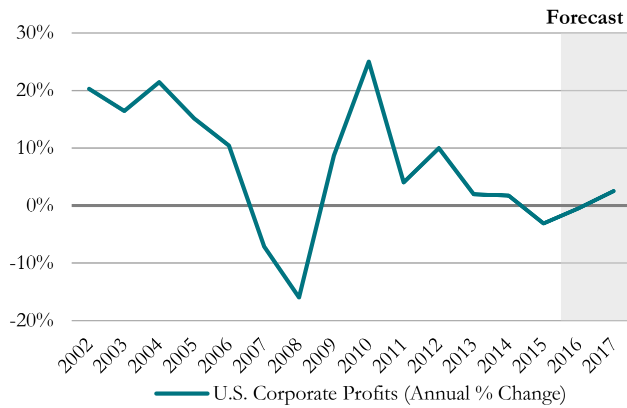

- Growth in nonresidential construction value was 11.1 percent in 2015, following 19.3 percent growth in 2014, the highest rate since before the Great Recession. Nonresidential construction in the state will have another strong year in 2016 with a growth rate of 12.0 percent.

**Consumer Price Index and Producer Price Index**



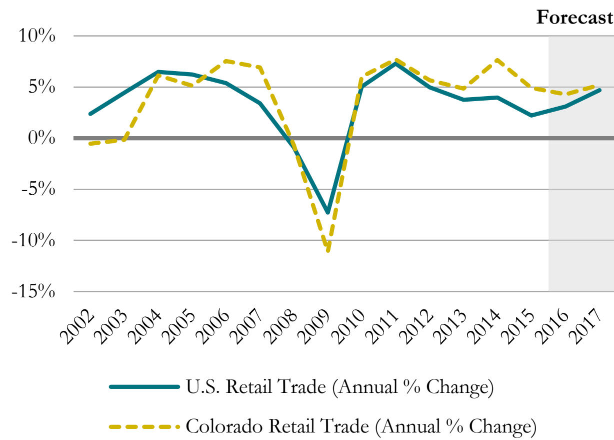

- National consumer prices remained essentially flat through 2015, growing only 0.1 percent, largely due to falling gas prices. OSPB expects prices to rise 1.4 percent in 2016, still lower than most years since the Great Recession.
- The national Producer Price Index fell 7.3 percent in 2015, largely due to low fuel and commodity prices. This trend will continue in 2016 when the index will fall another 3.0 percent before recovering to moderate growth in 2017.
- The Denver-Boulder-Greeley CPI grew more than the national index in 2015, though the 1.2 percent increase was still low by historical standards. Growth will recover in 2016 to 2.0 percent as the impact of lower gas prices will be less pronounced.

## U.S. Corporate Profits




- U.S. corporate profits fell 3.1 percent in 2015 as a weak global economy and a strong dollar impacted earnings.
- Profit growth will remain low in 2016 with another decrease of 0.5 percent as firms continue to face international headwinds and increased downward pressure from rising wages.

## Retail Trade




- Retail sales in Colorado will grow 4.3 percent in 2016 after 4.9 percent growth in 2015.
- Nationwide retail trade increased 2.2 percent in 2015, the lowest rate since the Great Recession. Sales will grow 3.1 percent in 2016.
- The lower growth rates for both the nation and the state in 2015 were due in part to the lower value of sales at gas stations from the sharp drop in gas prices.

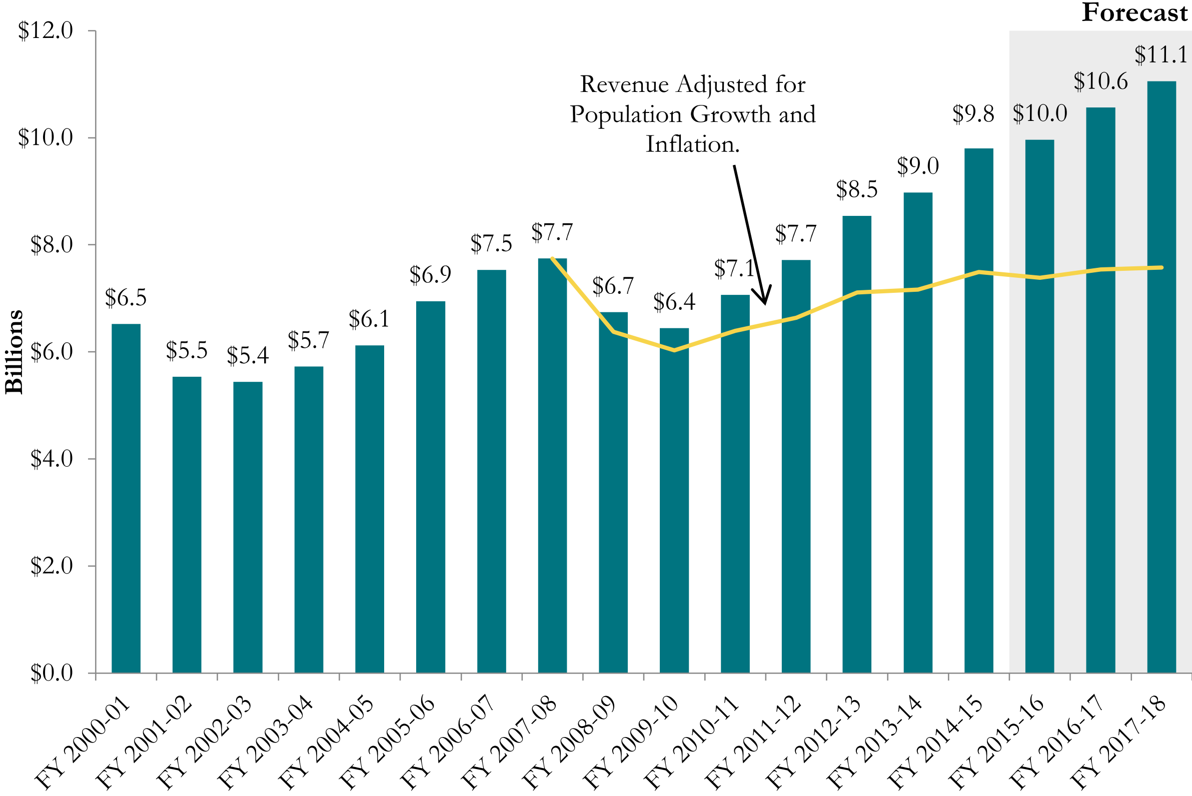
# General Fund and State Education Fund Revenue Forecast

With most of the revenue now collected this fiscal year, General Fund revenue is projected to increase 1.6 percent in FY 2015-16. This growth rate is similar to the March forecast, though projected revenue is $15.1 million, or 0.2 percent, lower. Despite continued solid economic growth in Colorado, several factors combined to generate the low revenue growth this fiscal year. The largest of these were: the large drop in spending and income in the state due to the downturn in oil and gas sector; weaker stock market gains; and the sluggish global economic activity and strong appreciation in the dollar that reduced corporate profits.

These factors will place less downward pressure on General Fund revenue in FY 2016-17 when revenue growth of 6.0 percent is forecasted. Continued solid economic activity in the state that will generate further employment and income gains will support this revenue growth. OSPB's assessment and forecast for the economy can be found starting on page 4 in this report. Relative to the March projections, the FY 2016-17 forecast was lowered by $58.0 million, or 0.6 percent. Weaker expectations for sales tax and capital gains income taxes were the biggest adjustments.

Figure 28 shows actual and projected total General Fund revenue from FY 2000-01 through FY 2017-18. The figure includes a line reflecting revenue adjusted for inflation and population growth since FY 2007-08. A more detailed forecast of General Fund revenue by source is provided in Table 3 in the Appendix.

**Figure 28. General Fund Revenue, Actual and Forecast, with Revenue Adjusted for Population Growth and Inflation**




Source: Office of the State Controller and OSPB

## Discussion of Forecasts for Major General Fund Revenue Sources

The following section discusses the forecasts for the three major General Fund revenue sources that together make up 95 percent of the total: individual income taxes, corporate income taxes, and sales and use taxes. General Fund revenue from the remaining group of miscellaneous sources ─ such as taxes paid by insurers on premiums and excise taxes on tobacco products and liquor ─ will grow modestly over the forecast period.

***Individual income tax*** – Individual income tax collections in FY 2015-16 have come in as expected in the forecasts from both December and March. These collections are growing just 2.2 percent in FY 2015-16. Individual income tax revenue is expected to rebound with growth of 6.3 percent in FY 2016-17.

**Growth in individual income tax collections is projected at 2.2 percent in FY 2015-16 due to the reduction in income from the oil and gas contraction as well as weaker stock market gains. Individual income tax revenue is expected to grow 6.3 percent in FY 2016-17 when these factors have less downward influence on tax collections.**

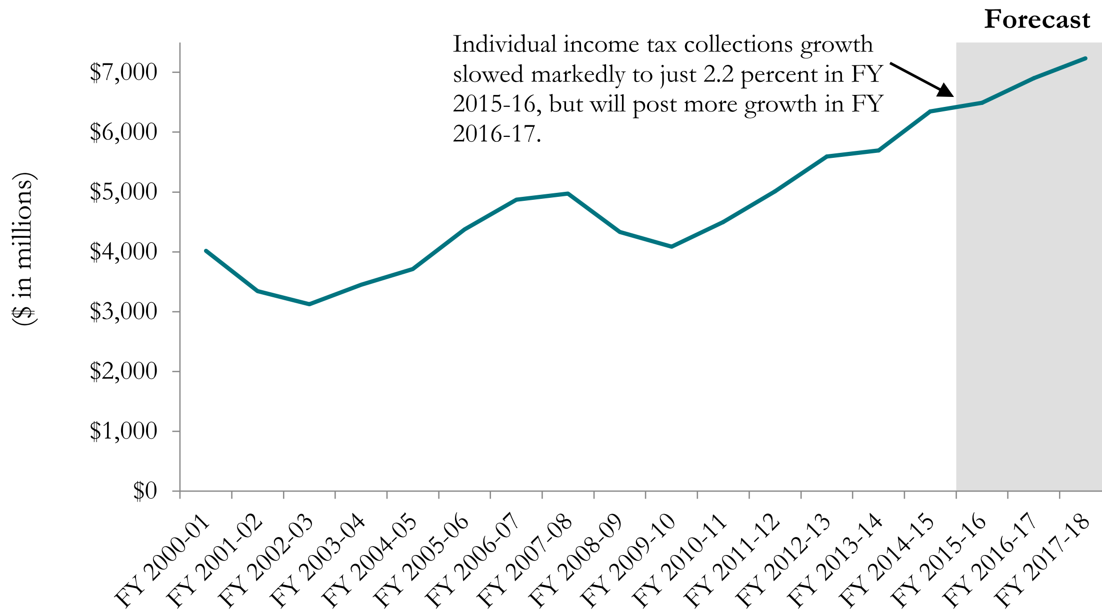
A convergence of factors markedly slowed income tax revenue growth this fiscal year from the robust gains in FY 2014-15. The deep contraction in the oil and gas industry caused a loss of high wage jobs as well as business income and oil and gas royalty payments to mineral rights owners in the state. On top of these income reductions, tepid stock market gains dampened income tax revenue.

These factors are expected to have less downward influence on income tax revenue growth for FY 2016-17, when collections are forecasted to rebound moderately with a 6.3 percent growth rate. The largest contributor to this increase is growth in wage withholdings as a result of continued job and wage gains in the state. Withholdings are expected to increase 6.7 percent in FY 2016-17, though this growth rate overstates actual growth because a portion of the increase is due to an expected larger-than-typical accrual accounting adjustment tied to the end of June's pay period that year.

Estimated income tax payments are expected to post moderate growth over the forecast period as continued tepid stock market gains and persistent weakness in oil and gas royalty payments will temper revenue increases; gains in business and rental income, however, will help support continued growth. Estimated income tax payments are taxes paid on income that is not subject to withholding, such as earnings from self-employment, rents, interest, and dividends. Capital gains account for the largest proportion of these income sources, accounting for about 30 to 35 percent of the total. Income from rents and royalties comprise around 25 to 30 percent, while business income accounts for about 15 percent of the total.

Changes in tax deductions and credits also are impacting revenue collections over the forecast period; the largest of these is the State Earned Income Tax Credit. After becoming a TABOR refund mechanism in FY 2014-15, the credit is available on an ongoing basis starting in tax year 2016. This credit will lower FY 2015-16 income tax collections by an estimated $45.0 million ─ half of the full-year impact of the credit ─ by $94.0 million in FY 2016-17 and a similar amount in FY 2017-18.

**Figure 29. Individual Income Tax Revenue, Actual and Forecast**



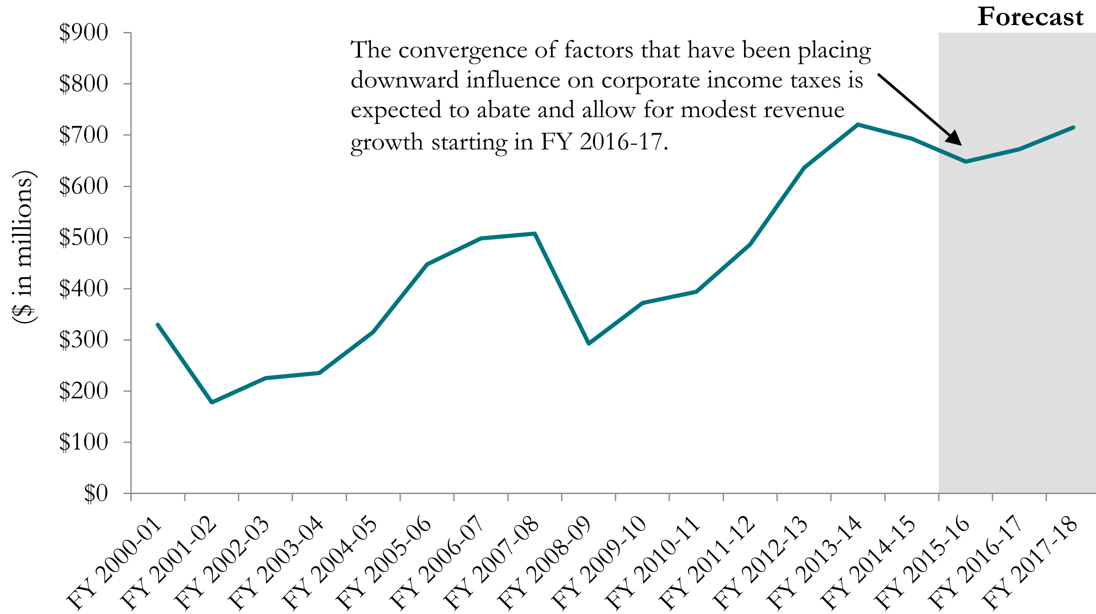

Source: Office of the State Controller and OSPB

***Corporate income tax*** **–** Corporate income tax collections came in essentially as expected in March. Collections are projected to decrease 6.5 percent in FY 2015-16, the second consecutive annual drop. Corporate income tax revenue will rebound with growth of 3.8 percent in FY 2016-17. The convergence of factors that have been placing downward influence on corporate income taxes is expected to abate and allow for the modest revenue growth.

The strong appreciation of the dollar against other currencies was a primary factor in the weakness in corporate profits, the primary driver behind corporate income tax revenue. A stronger dollar makes U.S. products more expensive in global markets, thus reducing sales, and earnings in dollar terms. The dollar is not expected to appreciate to the same degree over the forecast period, which will help support corporate earnings. Further, less contraction in the oil and gas industry and other commodity producers will alleviate downward pressure on corporate tax collections. However, higher costs for corporations from rising wages and debt payments will temper revenue growth.

**After declining for two consecutive years, corporate income tax revenue is projected to rebound modestly in FY 2016-17.**

**Figure 30. Corporate Income Tax Revenue, Actual and Forecast**




Source: Office of the State Controller and OSPB

***Sales and use tax –*** Sales tax revenue is coming in below expectations in March, and is now expected to grow 1.9 percent in FY 2015-16. We reduced the forecast for FY 2015-16 by $31.7 million, or 1.2 percent, compared with the March forecast as sales tax collections continued to slow over the past few months. Slowing collections are perhaps due in part to the drop in spending tied to the oil and gas industry's contraction; however, a slowdown in sales tax collections has been occurring in non-oil and gas intensive states across the country as well. Therefore, a moderation in overall spending is likely a key reason for the slower growth. Other contributing factors could be shifting preferences toward less purchases of taxable goods as well more online purchases, which are not all subject to sales tax collections.

Without the downward pressure from the contraction in oil and gas industry spending, and with continued wage and employment growth, sales taxes will grow 6.3 percent in FY 2016-17. In addition, next fiscal year's sales tax collections will be boosted by sales tax collections by the online retailer Amazon. On February 1, 2016, Amazon began collecting state sales taxes on items purchased directly from the company and shipped to Colorado addresses. OSPB estimates that this new corporate policy will increase State sales tax revenues by $22.0 million in FY 2016-17, after adding roughly $7.0 million this fiscal year. These amounts represent less than 1 percent of total state sales tax revenue.

**Rising wages and continued job growth will help lead to a rebound in sales tax revenue growth in FY 2016-17 after modest growth of 1.9 percent in FY 2015-16.**

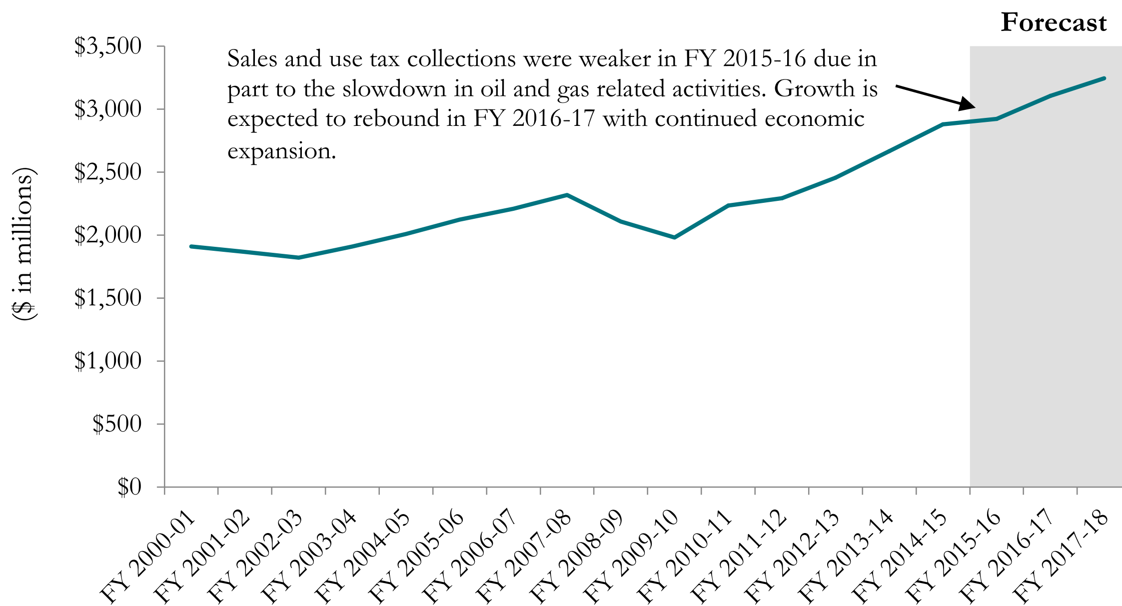
Sales tax revenue to the General Fund includes the 10 percent sales tax on retail marijuana. Growth in this revenue source is also contributing to the stronger sales tax growth in FY 2016-17. Revenue from the retail marijuana sales tax, approved by voters in 2013 under Proposition AA, goes first to the General Fund and is then transferred to the Marijuana Tax Cash Fund to support regulation and enforcement. A portion is also distributed to local governments in localities where retail marijuana sales occur. House Bill 15-1367 reduces the 10 percent tax rate to 8 percent starting in FY 2017-18. Revenue from the regular 2.9 percent sales tax on

marijuana sales does not go to the General Fund but is credited to the Marijuana Tax Cash Fund, which is included in the Miscellaneous Cash Funds category in Table 6 in the Appendix.

After growing 7.8 percent in FY 2014-15, use tax revenue is projected to decrease 2.5 percent in FY 2015-16, mostly as a result of the decline in business spending tied to the oil and gas industry. Collections will rebound with 5.8 percent growth in FY 2016-17. The use tax is a companion to the sales tax and is paid by Colorado residents and businesses on purchases that did not include a Colorado sales tax. Use taxes bring in a much smaller amount of revenue than sales taxes and are often more volatile. Much of the State's use tax revenue comes from Colorado businesses paying the tax on transactions involving out-of-state sellers.

Beginning with the 2015 individual income tax return form, individuals are asked about the total value of purchases made over the previous year for which sales or use taxes were not previously paid. For most individuals, this is related to online purchases for vendors without a Colorado presence. Individuals are then required to pay the use tax due with their return. This process is expected to collect about $2.2 million in FY 2015-16 and a projected $2.9 million in FY 2016-17.

**Figure 31. Sales and Use Tax Revenue, Actual and Forecast**




Source: Office of the State Controller and OSPB

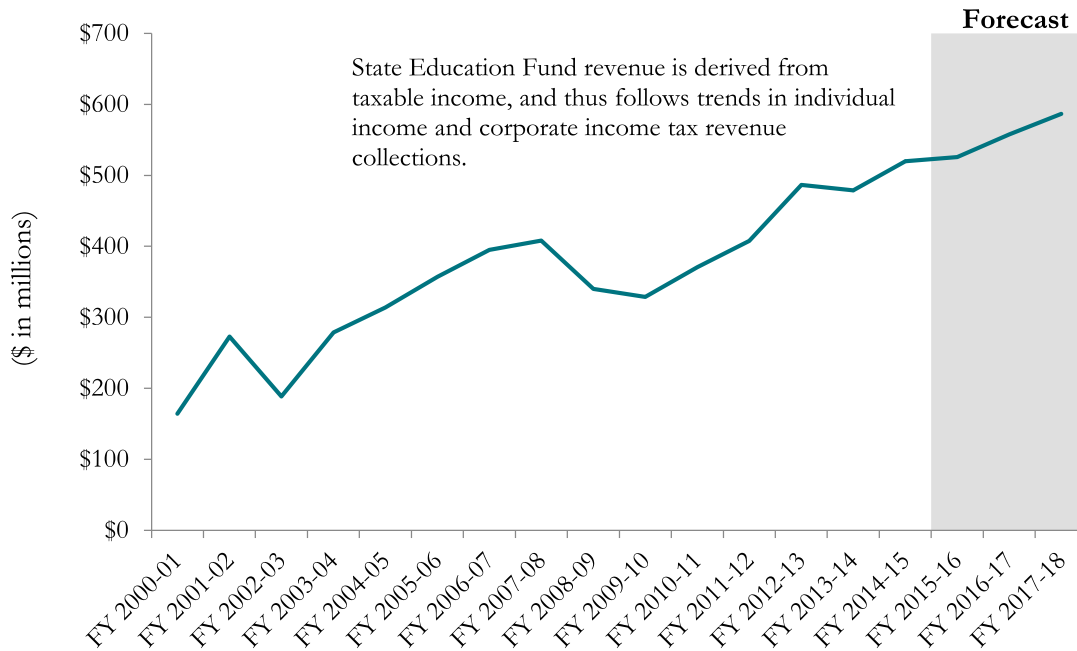
## State Education Fund Revenue Forecast

**Tax revenue to the State Education Fund will increase 1.1 percent in FY 2015-16 and 6.1 percent in FY 2016-17. State Education Fund revenue is derived from taxable income, and thus follows trends in individual income and corporate income tax revenue collections.**

Tax revenue to the State Education Fund will increase 1.1 percent in FY 2015-16 and 6.1 percent in FY 2016-17. Because this revenue is derived from taxable income, it follows the trends in individual income and corporate income tax revenue collections discussed above. The deep contraction in the oil and gas industry reduced income in the state but the reduction will occur to a lesser degree for FY 2016-17. Further, the reprieve in the dollar's appreciation will help support taxable income from corporations. Nonetheless, growth in revenue to the State Education Fund will be tempered.

The state constitution requires that one-third of one percent of taxable income from Colorado taxpayers be credited to the State Education Fund. In addition to this money, policies enacted over the past few years have transferred other General Fund money to the State Education Fund.

**Figure 32. State Education Fund Revenue from One-Third of One Percent of Taxable Income, Actual and Forecast**



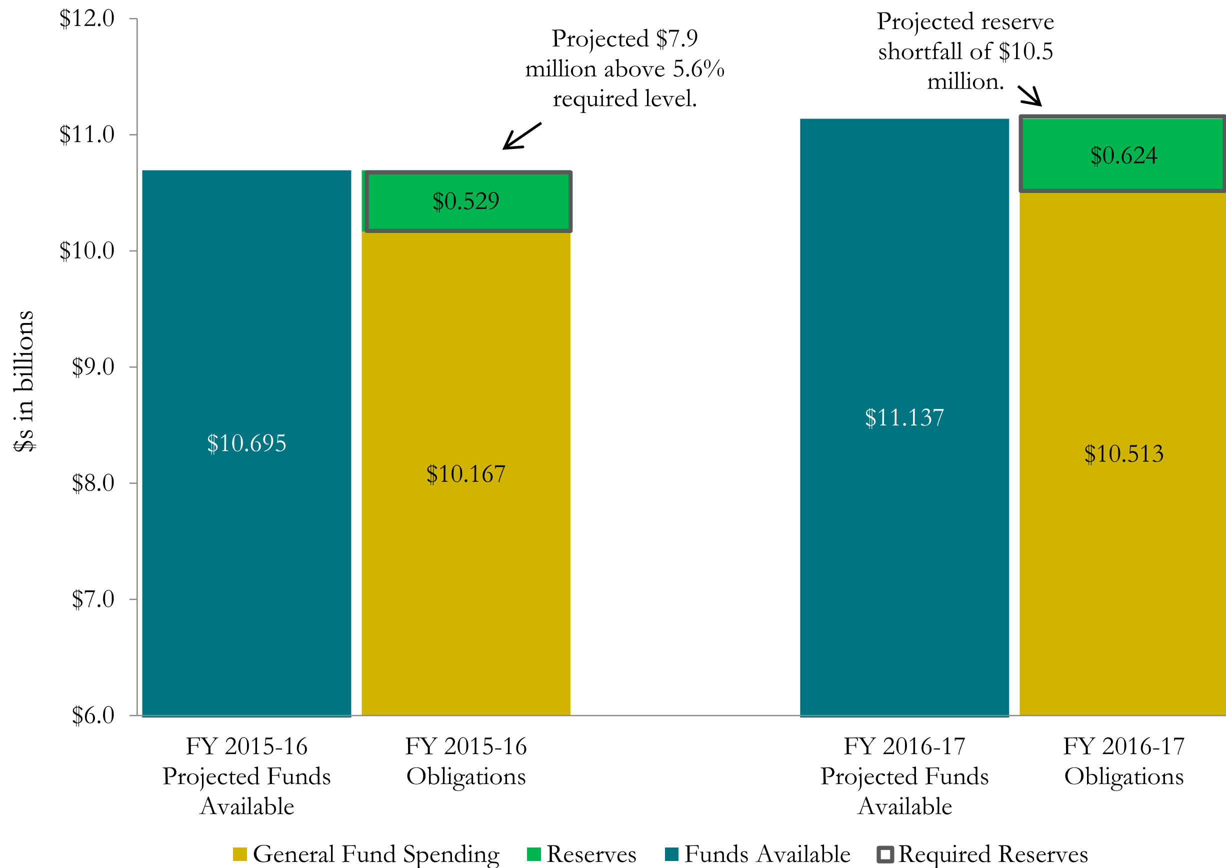

Source: Office of the State Controller and OSPB

# General Fund and State Education Fund Budget

***General Fund*** – As discussed in the "General Fund Revenue Forecast" section starting on page 38, projections for General Fund revenue for FY 2015-16 are $15.1 million, or 0.2 percent, lower than in the March 2016 forecast. The forecast for FY 2016-17 is lower by $58.0 million, or 0.6 percent. For FY 2015-16, which ends June 30th, the State's General Fund reserve is projected to be $7.9 million above the required amount of 5.6 percent of appropriations. This required reserve level was temporarily reduced from 6.5 percent pursuant to House Bill 16-1419 for just FY 2015-16.

Figure 33 summarizes total projected General Fund revenue available, total obligations, and reserve levels for FY 2015-16 and FY 2016-17 based on current law. These amounts will change based on future budgeting decisions and updates to the revenue forecast.

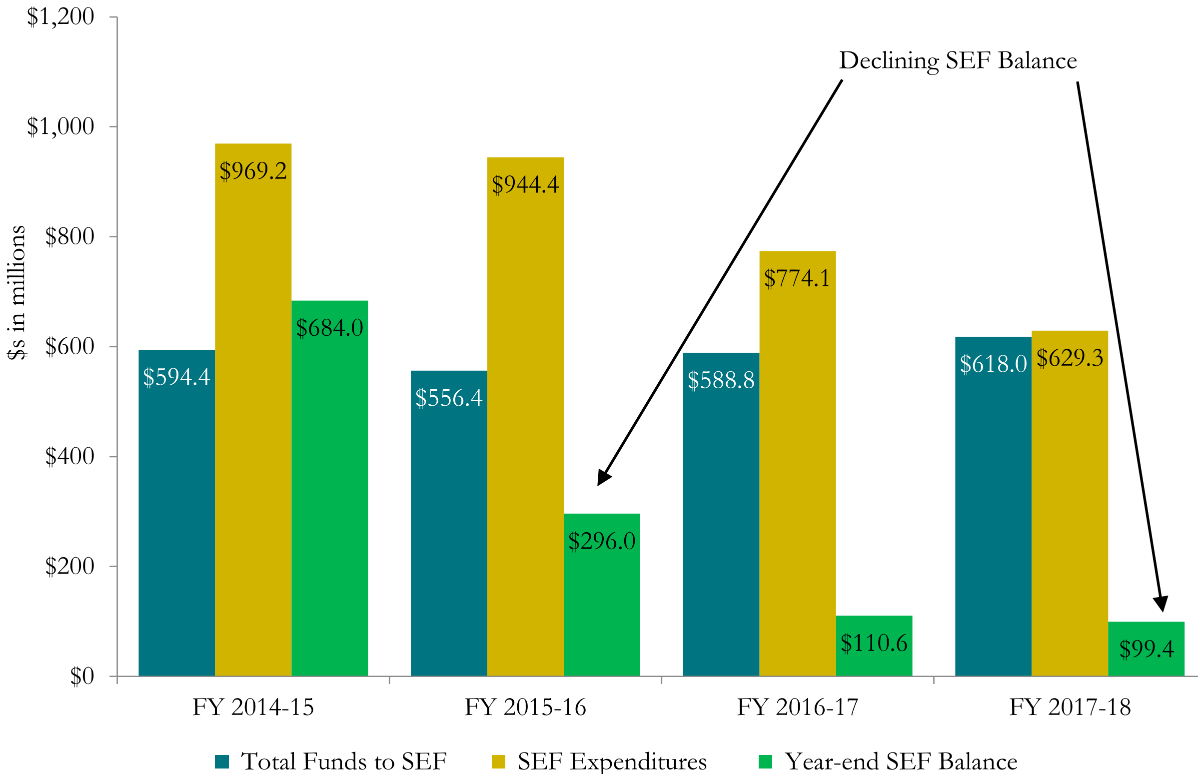
**Figure 33. General Fund Money, Obligations, and Reserves**




***State Education Fund*** – The State Education Fund continues to support a larger share of education funding than it has historically, which is drawing down its fund balance. Figure 34 summarizes total State Education Fund revenue available, total spending, and balance levels from FY 2014-15 through FY 2017-18. In FY 2015-16, the year-end balance in the Fund is dropping 57.0 percent from its level in FY 2014-15, and a larger drop of 63.0 percent is expected in FY 2016-17 when the projected ending balance will be just over $100 million. Under current law, total General Fund and State Education Fund expenditures combined are budgeted to

increase 1.6 percent in FY 2016-17. These expenditures are projected to be able to grow 3.4 percent in FY 2017-18, assuming that the negative factor in the School Finance Act is maintained at its current level.

**Figure 34. State Education Fund Money, Spending, and Reserves**




*Actual expenditures from the State Education Fund for FY 2017-18 will be adopted in future budget legislation. Therefore, the expenditures and fund balance projections shown are illustrative only.

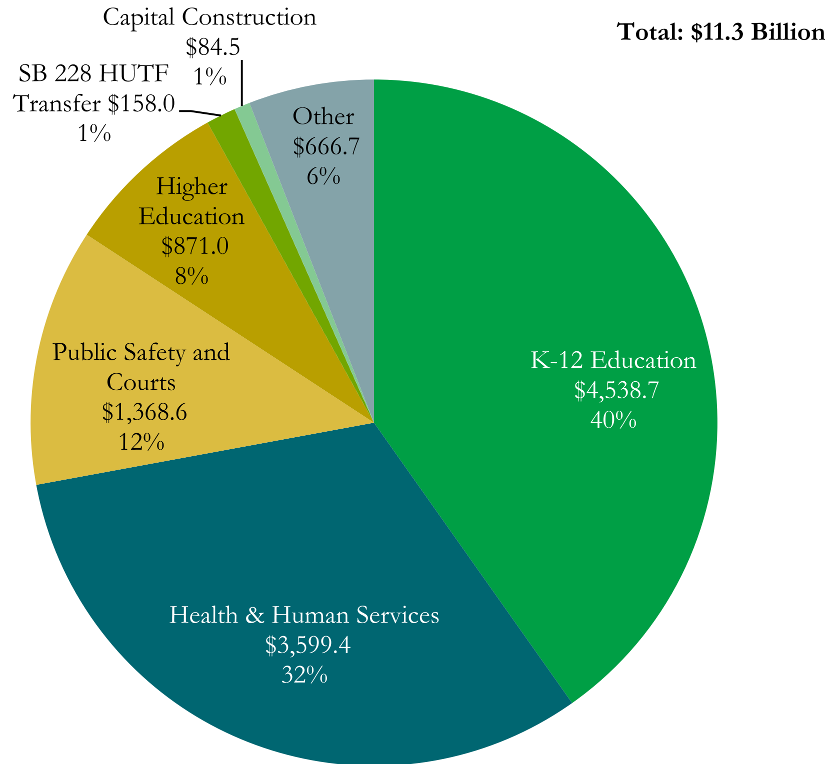
***Detailed Overview Tables –*** A detailed overview of the amount of money available in the General Fund and State Education Fund, expenditures, and end-of-year reserves are provided in the overview tables in the Appendix at the end of this document. These overviews are discussed further starting on page 47.

**Spending by Major Department or Program Area**

The General Fund provides funding for the State's core programs and services, such as preschool through 12th grade education, higher education, services for low-income populations, the disabled and elderly, courts, and public safety. It also helps fund capital construction and maintenance needs for State facilities and, in some years, transportation projects. Under the state constitution, the State Education Fund helps fund preschool through 12th grade education and annually receives one-third of one percent of taxable income. In recent years, it has also received supplemental money from the General Fund as authorized by statute.

Figure 35 shows the allocation of General Fund and State Education Fund spending for FY 2016-17 by major department or program area under current law. As shown above in Figure 33, the current forecast projects the reserve amount for FY 2016-17 to be $10.5 million below the required General Fund reserve amount.

**Figure 35. Composition of FY 2016-17 General Fund and State Education Fund Budget under Current Law**




***Risks to the Outlook and Budget Implications***

This budget outlook is based on OSPB's economic analysis and forecast, discussed in more detail in the section titled "The Economy: Issues, Trends, and Forecast," beginning on page 4. Changes in the economy determine revenue to the General Fund and State Education Fund. In addition to revenue, changes in economic conditions impact the budget outlook through associated changes in the use of many state services, including higher education, Medicaid, and other human services. In times of weaker economic conditions, the use of government services increases as incomes decline, unemployment grows, and more people seek education and training to better their job prospects.

As noted elsewhere in this document, although still solid with among the lowest unemployment in the country, Colorado's economic growth has moderated. Nationally, job growth has slowed and business investment, manufacturing, and exports remain sluggish. The global economy continues to show signs of weakness, as growth remains slow and vulnerable to downside risks, which could threaten the current expansion. A large enough adverse shock could result in a downturn in broad economic activity, causing revenue to the State to decline. Even relatively small changes in the projected growth rate of revenue sources can have large implications for the budget.

Because TABOR refunds are paid out of the General Fund, fluctuations in cash fund revenue (outside of the General Fund) subject to TABOR can have a large impact on General Fund obligations. For example, this forecast assumes that no TABOR refund obligation will occur for FY 2016-17, but revenue is projected to be just $46.0 million, or 0.35 percent, below the Referendum C revenue cap for that fiscal year. This amount is

well within typical forecast error. Severance tax revenue is a particularly difficult source of revenue to forecast, and especially so with the recent Supreme Court ruling affecting severance tax collections (for more information on this issue, see page 55 in the section on the cash fund forecast). Future revisions to the forecast for this and other revenue sources could result in material changes to total revenue subject to TABOR and, therefore, to TABOR refunds and General Fund obligations.

Further, although the Senate Bill 09-228 transfers to transportation and capital construction (for more details on Senate Bill 09-228 transfers, see page 49) were set at fixed amounts for FY 2015-16 and FY 2016-17, the size of the transfers starting in FY 2017-18 are still subject to fluctuations based on the size of any TABOR refunds. The size of these transfers have major implications for the General Fund budget. As an example, this forecast assumes that the amount of the TABOR refund for FY 2017-18 will result in these transfers being reduced by half. However, an increase of just 0.4 percent, or $54.5 million, in revenue subject to TABOR would result in these transfers being eliminated.

**General Fund Overview Table**

Table 4 in the Appendix presents the General Fund Overview for the June 2016 OSPB revenue forecast, providing details on forecasts for available General Fund money, expenditures, and end-of-year-reserves. The following section discusses the information presented in Table 4, and includes figures showing each section of the detailed overview found in the Appendix.

**Revenue**

The top portion of the overview, shown in Figure 36, indicates the amount of General Fund money available for spending. The forecast for General Fund revenue is discussed in further detail in the "General Fund and State Education Fund Revenue Forecast" section starting on page 38. In addition to General Fund revenue, the General Fund receives money transferred from other State funds each fiscal year (shown in line 3 below).

**Figure 36. General Fund Revenue Available, $ in Millions**

| Table 4 Line No. | | FY 2015-16 | FY 2016-17 | FY 2017-18 |
|---|---|---|---|---|
| *1* | Beginning Balance | $709.2 | $528.6 | $624.4 |
| *2* | General Fund Revenue | $9,961.6 | $10,562.5 | $11,056.1 |
| *3* | Transfers to the General Fund | $24.3 | $46.1 | $18.2 |
| *4* | **Total General Funds Available** | **$10,695.2** | **$11,137.1** | **$11,698.7** |
| | *Dollar Change from Prior Year* | $391.8 | $442.0 | $561.6 |
| | *Percent Change from Prior Year* | 3.8% | 4.1% | 5.0% |

**Expenditures**

***Spending subject to the appropriations limit –*** The middle portion of the General Fund overview in Table 4 shows General Fund spending. Each year, by statute, the total of most General Fund spending cannot exceed 5 percent of the aggregate level of personal income received by Coloradans. This limit is projected to be $12.3 billion in FY 2015-16 and $13.1 billion in FY 2016-17. Therefore, the General Fund appropriations shown in Figure 37 are about $2.9 billion and $3.3 billion under the limit in these two years, respectively.
The amounts subject to the limit shown below and in Table 4 for FY 2015-16 and FY 2016-17 reflect current law, while the FY 2017-18 amount represents the level of spending that can be supported by projected revenue

while maintaining the General Fund's required reserve amount. These amounts will change based on future budgeting decisions and updates to the revenue forecast.

### Figure 37. General Fund Spending Subject to the Appropriations Limit, $ in Millions

| Table 4 Line No. | | FY 2015-16 | FY 2016-17 | FY 2017-18 |
|---|---|---|---|---|
| *5* | **Appropriations** | **$9,335.6** | **$9,813.3** | **$10,175.0** |
| *6* | Dollar Change from Prior Year | $466.6 | $477.7 | $361.7 |
| *7* | Percent Change from Prior Year | 5.3% | 5.1% | 3.7% |

***Spending and outlays not subject to the appropriations limit*** – Figure 38 summarizes General Fund spending that does not count under the General Fund appropriations limit. More information about each line item is presented below the table.

### Figure 38. General Fund Spending Not Subject to the Appropriations Limit, $ in Millions

| Table 4 Line No. | | FY 2014-15 | FY 2015-16 | FY 2016-17 | FY 2017-18 |
|---|---|---|---|---|---|
| *9* | TABOR Refund under Art. X, Section 20, (7) (d) | $153.7 | $0.0 | $0.0 | $277.1 |
| *10* | Set Aside for Potential TABOR Refund under Art. X, Section 20, (3) (c) | $58.0 | -$58.0 | $0.0 | $0.0 |
| | *Cigarette Rebate to Local Governments* | *$12.3* | *$9.5* | *$9.2* | *$9.0* |
| | *Marijuana Rebate to Local Governments* | *$5.9* | *$10.0* | *$11.7* | *$11.9* |
| | *Old-Age Pension Fund/Older Coloradans Fund* | *$111.0* | *$117.7* | *$113.3* | *$118.5* |
| | *Aged Property Tax & Heating Credit* | *$5.7* | *$6.2* | *$6.0* | *$6.5* |
| | *Homestead Exemption* | *$116.9* | *$127.1* | *$147.6* | *$155.4* |
| | *Interest Payments for School Loans* | *$0.7* | *$1.2* | *$1.2* | *$1.3* |
| | *Fire/Police Pensions* | *$4.2* | *$4.2* | *$4.3* | *$4.3* |
| | *Amendment 35 General Fund Expenditure* | *$0.9* | *$0.9* | *$0.8* | *$0.8* |
| *11* | **Total Rebates and Expenditures** | **$257.4** | **$276.8** | **$294.1** | **$307.7** |
| *12* | Transfers to Capital Construction | $248.5 | $271.2 | $84.5 | $68.3 |
| *13* | Transfers to Highway Users Tax Fund | $0.0 | $199.2 | $158.0 | $110.6 |
| *14* | Transfers to State Education Fund per SB 13-234 | $25.3 | $25.3 | $25.3 | $25.3 |
| *15* | Transfers to Other Funds | $42.2 | $116.5 | $137.5 | $76.5 |
| | **Total** | **$785.7** | **$831.0** | **$699.5** | **$865.5** |
| | *Dollar Change from Prior Year* | $240.2 | $45.2 | -$131.5 | $166.1 |
| | *Percent Change from Prior Year* | 44.0% | 5.8% | -15.8% | 23.7% |

**Lines 9 and 10:** Revenue exceeded the Referendum C cap in FY 2014-15 and is not projected to exceed the cap again until FY 2017-18. TABOR revenue is projected to come in $80.7 million below the cap in FY 2015-16 and $46.0 million under the cap in FY 2016-17. TABOR revenue is expected to be above the cap in FY 2017-18 by $257.5 million. Spending not subject to the limit includes any TABOR refunds funded from the General Fund, which occur when State revenue exceeds its cap as defined in Article X, Section 20 (7) of the Colorado Constitution ("TABOR") and Section 24-77-103.6, C.R.S. ("Referendum C").

The FY 2017-18 refund amount shown of $277.1 million includes the projected $257.5 million exceeding the Referendum C cap plus $19.6 million that needs to be refunded from FY 2014-15. The $19.6 million from FY 2014-15 is due to the reclassification of the revenue transferred to the Adult Dental Fund from the Unclaimed Property Fund. The legal analysis and audit review on this occurred after FY 2014-15 refund amounts were established on state income tax forms. Such adjustments and audit findings have occurred in the past and the process calls for the money to be refunded in the next year a refund is due. For more information on the TABOR refund, see the "Taxpayer's Bill of Rights: Revenue Limit" section later in this report.

The $58.0 million shown in line 10 for FY 2014-15 reflects money set aside by House Bill 15-1367 in a special account to cover a potential refund relating to the passage of Proposition AA, which created excise and sales taxes on retail marijuana. House Bill 15-1367 submitted Proposition BB to voters in November 2015 to ask if the State can retain and spend the money. Because voters approved Proposition BB, the State was able to use the money for the uses outlined in House Bill 15-1367. Therefore, a reversal of the $58 million set aside is shown in line 10 under FY 2015-16 which made it available for spending.

**Line 11**: "Rebates and Expenditures" account for a large portion of General Fund spending not subject to the appropriations limit. The primary programs under rebates and expenditures are: (1) the Cigarette Rebate, which distributes money from a portion of State cigarette tax collections to local governments that do not impose their own taxes or fees on cigarettes; (2) the Marijuana Rebate, which distributes 15 percent of the retail marijuana sales tax to local governments based on the percentage of retail marijuana sales in local areas; (3) the Old-Age Pension program, which provides assistance to low-income elderly individuals who meet certain eligibility requirements; (4) the Aged Property Tax, Heat, and Rent Credit, which provides property tax, heating bill, and rent assistance to qualifying low-income, disabled, or elderly individuals; and (5) the Homestead Property Tax Exemption, which reduces property-tax liabilities for qualifying seniors and disabled veterans.

**Lines 12 and 13**: Transfers to the Capital Construction Fund (CCF) and Highway Users Tax Fund (HUTF) are required if growth in statewide personal income exceeds 5 percent. This 5 percent trigger and the associated transfers are commonly referred to as "228" transfers because they were put into law by Senate Bill 09-228. Personal income growth exceeded 5 percent in the 2014 calendar year, which triggered the required transfers starting in FY 2015-16 and through FY 2019-20. For fiscal years 2017-18 through 2019-20, the transfers are reduced by half if there is a TABOR refund in the same fiscal year in an amount between 1 and 3 percent of total General Fund revenue. The transfers are suspended in full if there is a TABOR refund in excess of 3 percent of total General Fund revenue.

Pursuant to House Bill16-1416, the dollar amount of the transfers to the HUTF and CCF are at fixed amounts in FY 2015-16 and FY 2016-17 regardless of the level of any TABOR refund. The transfer amounts to the HUTF are equal to $199.2 million in FY 2015-16 and $158.0 million in FY 2016-17. The transfer amounts to the CCF are $49.8 million in FY 2015-16 and $52.7 million in FY 2016-17.

According to current projections, transfers to the HUTF and CCF will be reduced by half in FY 2017-18 because the TABOR refund is expected to be 2.5 percent of total General Fund revenue. Transfers to HUTF will be reduced from $221.1 million to $110.6 million and transfers to CCF will be reduced from $110.6 million to $55.3 million. However an increase of just 0.4 percent, or $54.5 million, in revenue subject to TABOR would push the refund amount above 3 percent, reducing transfers to zero in FY 2017-18.

The capital construction transfer amounts in FY 2015-16 through FY 2017-18 shown in line 12 also include transfers of General Fund money in addition to the Senate Bill 09-228 transfers and therefore the amount shown in Line 12 differ from the the amount of money transferred related to Senate Bill 09-228. The FY 2017-18 capital construction transfer reflects the needed funding level for "Level I" building-maintenance projects, as well as the continuation of projects funded in prior years.

**Line 14**: Senate Bill 13-234 requires annual General Fund transfers to the State Education Fund from FY 2013-14 through FY 2018-19. The transfer in each fiscal year through FY 2017-18 is $25.3 million.

**Line 15**: State law requires transfers of General Fund money to various other State cash funds. Generally, the largest transfer in this line is money from the 10 percent special sales tax on retail marijuana tax (reduced to 8 percent starting in FY 2017-18) credited to the General Fund, 85 percent of which is transferred to the

Marijuana Tax Cash Fund. For FY 2015-16 only, $40.0 million of the "Transfer to Other Funds" amount is a transfer to public school capital construction related to the passage of Proposition BB.

For FY 2016-17 only, this line also includes a diversion of income tax revenue out of the General Fund to a separate severance tax fund pursuant to Senate Bill 16-218. This bill accounts for potentially large expected severance tax refunds related to the April 2016 Colorado Supreme Court's decision in BP America v. Colorado Department of Revenue that allows for taxpayers to claim additional severance tax deductions. Senate Bill 16-218 creates a reserve fund and diverts income tax revenue to the fund to help pay the refunds. This forecast projects that about $44 million in income tax revenue will be diverted from the General Fund to the reserve fund to pay severance tax refunds in FY 2016-17. More discussion on Senate Bill 16-218 and the impacts of the court decision can be found starting on page 55 in this report's section discussing the cash fund revenue forecast.

**Line 16**: This line includes any expenditures for certain programs that have exceeded their appropriated amount for a fiscal year, called "overexpenditures."

**Reserves**

The final section of the overview table in the Appendix ("Reserves") shows the amount of General Fund money remaining at the end of each fiscal year —the "Year-End General Fund Balance." This amount reflects the difference between total funds available and total expenditures. The section shows the statutorily determined reserve requirement and whether the amount of funds is above or below the requirement ("Money Above/Below Statutory Reserve").

Under current law, the FY 2015-16 reserve is required to be 5.6 percent of General Fund appropriations subject to the appropriations limit (excluding Certificates of Participation payments), minus any diversions of income tax revenue pursuant to Senate Bill 16-218. However, no diversions are expected under this forecast in FY 2015-16, only in FY 2016-17, as discussed above. The required reserve is 6.5 percent of appropriations (excluding Certificates of Participation payments) for FY 2016-17 and for subsequent fiscal years.

With the budget for FY 2015-16, the State's General Fund reserve is projected to be $7.9 million above the required amount. The budget under current law for FY 2016-17 is $10.5 million below the required reserve. The FY 2017-18 amount in the table represent the required reserve level supported by projected General Fund available.

Starting in FY 2015-16, General Fund appropriations for "lease-purchase" payments, called Certificates of Participation, for certain capital projects were made exempt from the reserve calculation requirement by Senate Bill 15-251. These appropriations amount to $38.0 million in FY 2015-16 and $46.0 million in FY 2016-17. Figure 39 provides information on the General Fund ending balance.

**Figure 39. General Fund Reserves, $ in Millions**

| Table 4 Line No. | | FY 2015-16 | FY 2016-17 | FY 2017-18 |
|---|---|---|---|---|
| *20* | Year-End General Fund Balance | $528.6 | $624.4 | $658.1 |
| *21* | Balance as a % of Appropriations | 5.7% | 6.4% | 6.5% |
| *22* | **General Fund Statutory Reserve** | **$520.7** | **$634.9** | **$658.1** |
| *23* | Money Above/Below Statutory Reserve | $7.9 | -$10.5 | $0.0 |

**State Education Fund Overview**

Figure 40 summarizes State Education Fund annual revenue and spending. It also includes projected beginning and ending fund balances. As Figure 40 shows, lower revenue to the Fund and higher expenditures have been placing increasing strain on the Fund. By the end of FY 2015-16, the balance is projected to fall 57.0 percent, to $296.0 million, from levels a year earlier. The trend is projected to continue into FY 2016-17, as the year-end balance drops another 63.0 percent to $110.6 million.

State Education Fund expenditures for FY 2015-16 and FY 2016-17 reflect current law. The FY 2017-18 expenditure amount projects spending needed to keep the negative factor in the School Finance Act at the current law dollar amount of $830.7 million, while maintaining a balance in the Fund of about $100 million.

**Figure 40. State Education Fund Revenue, Spending, and Reserves*, $ in Millions**

| State Education Fund ($ in Millions) | | | |
|---|---|---|---|
| | **FY 2015-16** | **FY 2016-17** | **FY 2017-18** |
| **Beginning Balance** | ***$684.0*** | ***$296.0*** | ***$110.6*** |
| *One-third of 1% of State Taxable Income* | *$525.5* | *$557.6* | *$586.6* |
| *Transfers under SB 13-234* | *$25.3* | *$25.3* | *$25.3* |
| *Other* | *$5.5* | *$5.8* | *$6.1* |
| **Total Funds to State Education Fund** | **$556.4** | **$588.8** | **$618.0** |
| **State Education Fund Expenditures** | **$944.4** | **$774.1** | **$629.3** |
| **Year-end Balance** | **$296.0** | **$110.6** | **$99.4** |

*Actual FY 2017-18 expenditures from the State Education Fund will be adopted in future budget legislation. Therefore, the expenditures and fund balance projections are illustrative only.

The State Education Fund plays an important role in the State's General Fund budget. Under the state constitution, the State Education Fund helps fund preschool through 12th-grade education, the largest General Fund program. Therefore, higher or lower spending from the State Education Fund generally affects General Fund appropriations in order to support the targeted level of school funding. Decisions in one year affect the range of choices in the next year because they impact the available balance in the State Education Fund for future spending and General Fund availability for other programs.

Table 5 in the Appendix incorporates all of the same information from the General Fund overview in Table 4, but also includes spending, revenue, and fund-balance information for the State Education Fund. Given the budget implications of the balance of funding between the State Education Fund and General Fund, a unified and multi-year view provides important insight into the sustainability of budgeting decisions. As shown in Table 5, under current law, total General Fund and State Education Fund expenditures combined are budgeted to increase 1.6 percent in FY 2016-17. These expenditures are projected to be able to grow 3.4 percent in FY 2017-18, assuming that the negative factor in the School Finance Act is maintained at its current level. These lower growth rates are due to the smaller amount of funding available from the State Education Fund to support school finance.

# Cash Fund Revenue Forecast

A wide array of state programs collect taxes, fees, fines, and interest to fund services. When fees or other revenue are designated for a particular program, they typically are directed to a cash fund used to fund the program. OSPB's forecast of cash fund revenue subject to TABOR is shown in Table 6 in the Appendix.

Cash fund revenue in FY 2015-16 is projected to be $133.9 million, or 4.8 percent, higher than FY 2014-15, primarily as a result of growth in revenue from the Hospital Provider Fee and miscellaneous cash funds. This growth will offset a sharp decline in revenue from severance taxes. The forecast for FY 2015-16 is $13.6 million, or 0.5 percent, higher than projections from the March forecast, due in large part to the shifting forward of the revenue transferred from the Unclaimed Property Fund to the Adult Dental Fund from FY 2016-17 into FY 2015-16 pursuant to House Bill 16-1409.

Cash fund revenue will decrease 5.3 percent in FY 2016-17 as a projected decrease in revenue from the Hospital Provider Fee and miscellaneous cash funds will offset growth in revenue from many of the other major categories of cash funds. The forecast for FY 2016-17 is $137.5 million, or 4.8 percent, lower compared with projections in March. This decrease is due mostly to the reduction in Hospital Provider Fee revenue per House Bill 16-1405 (the Long Bill), as well as the aforementioned shifting forward of the transfer to the Adult Dental Fund.

Table 6 shows only the outlook for revenue that is subject to the TABOR provisions in the Colorado Constitution that place a limit on the amount of revenue that can be retained by the state each year. Cash fund revenue that is not subject to TABOR generally includes revenue exempt by Colorado voters, federal money, and revenue received by entities designated as enterprises, such as public universities and colleges, that receive most of their money from sources other than the state. More information on TABOR revenue and the revenue limit can be found on page 59.

***Transportation-related cash funds*** **—** Transportation-related cash fund revenue is forecast to grow 1.3 percent in FY 2015-16 and 1.5 percent in FY 2016-17. In FY 2014-15, transportation-related cash fund revenue subject to TABOR grew $28.9 million, or 2.5 percent, to $1.16 billion.

Transportation-related cash funds include the Highway Users Tax Fund (HUTF), the State Highway Fund (SHF), and several smaller cash funds. HUTF collections, which account for roughly 85 percent of revenue in this category, are distributed by statutory formula to the Colorado Department of Transportation, local counties and municipalities, and the Colorado State Patrol.

**The shift in consumer preference towards buying larger, less fuel-efficient vehicles will help support growth in revenue from vehicle registrations and fuel taxes.**

Through April of this fiscal year, revenue from HUTF vehicle fuel taxes and vehicle registrations grew 1.2 and 2.3 percent, respectively, from their levels in FY 2014-15. Changes in these revenue streams have a substantial influence on overall transportation-related cash funds because they account for approximately 80 percent of HUTF revenue and three-quarters of all transportation-related revenue.

HUTF vehicle registration revenues are driven primarily by auto sales, which have been growing at a robust rate since the end of the Great Recession in 2009. As unemployment and interest rates are expected to remain low, auto sales should continue to grow. Used vehicle sales may supplant some new sales because a large number of previously leased vehicles will become available over the next several quarters. The continuing shift in

consumer preference towards more expensive SUVs and light trucks should offset any registration revenue lost due to the expected lower growth of new vehicle sales, while also contributing to increased revenue from vehicle fuel taxes. As a result of these trends, HUTF revenue growth is expected to average 1.5 percent over the next three fiscal years.

***Limited Gaming —*** Limited gaming revenue is forecast to grow by $8.2 million, or 7.3 percent, in FY 2015-16, after increasing 3.3 percent in FY 2014-15. Revenue from gaming will grow an additional $4.4 million, or 3.6 percent, to $123.9 million in FY 2016-17.

The Colorado gaming industry was hit hard by the Great Recession and has been slowly recovering ever since, with limited gaming revenue yet to return to its pre-recession peak of $122 million in FY 2006-07. As growth in the gaming industry is primarily driven by economic conditions, a growing Colorado economy has resulted in an increase in gaming tax revenue of 5.0 percent in FY 2014-15 and a projected increase of 7.3 percent in FY 2015-16. Continued growth in revenue is expected over the forecast period. In addition, transitions in the gaming industry will contribute to limit gaming tax revenues as smaller gaming venues close and larger operations absorb market demand. Because casinos pay taxes on a progressive scale based on proceeds, this consolidation will support increases in limited gaming revenue for the State.

**Continued growth in the Colorado economy will contribute to increases in limited gaming revenue.**

Of the total expected limited gaming revenue of $119.6 million in FY 2015-16, $102.4 million will be subject to TABOR, as reflected in Figure 41. Of this amount, $101.0 million is classified as "base limited gaming revenue" as designated by State law after the passage of Amendment 50 in 2008. This revenue is distributed by formula in State statute to the State General Fund, the State Historical Society, cities and counties affected by gaming activity, and economic development-related programs.

Gaming revenue attributable to Amendment 50, which is not subject to TABOR, is distributed mostly to community colleges, with a smaller portion going to local governments with communities affected by gaming. These distributions will grow along with overall gaming revenue, totaling $14.2 million and $15.4 million in FY 2015-16 and FY 2016-17, respectively. Figure 41 shows the distribution of limited gaming revenues in further detail.

**Figure 41. Distribution of Limited Gaming Revenues**

| Distribution of Limited Gaming Revenues | Actual FY 14-15 | Forecast FY 15-16 | Forecast FY 16-17 | Forecast FY 17-18 |
|---|---|---|---|---|
| **A. Total Limited Gaming Revenues** | **$111.4** | **$119.6** | **$123.9** | **$127.8** |
| Annual Percent Change | 3.3% | 7.3% | 3.6% | 3.1% |
| | | | | |
| **B. Base Limited Gaming Revenues (max 3% growth)** | **$98.1** | **$101.0** | **$104.0** | **$107.2** |
| Annual Percent Change | 3.0% | 3.0% | 3.0% | 3.0% |
| | | | | |
| **C. Gaming Revenue Subject to TABOR** | **$99.3** | **$102.4** | **$105.5** | **$108.7** |
| Annual Percent Change | 1.1% | 3.1% | 3.0% | 3.0% |
| | | | | |
| **D. Total Amount to Base Revenue Recipients** | **$87.3** | **$91.3** | **$94.3** | **$96.2** |
| Amount to State Historical Society | $24.5 | $25.6 | $26.4 | $26.9 |
| Amount to Counties | $10.5 | $11.0 | $11.3 | $11.5 |
| Amount to Cities | $8.7 | $9.1 | $9.4 | $9.6 |
| Amount to Distribute to Remaining Programs (State Share) | $43.7 | $45.7 | $47.1 | $48.1 |
| Amount to Local Government Impact Fund | $5.0 | $5.0 | $5.0 | $5.0 |
| Colorado Tourism Promotion Fund | $15.0 | $15.0 | $15.0 | $15.0 |
| Creative Industries Cash Fund | $2.0 | $2.0 | $2.0 | $2.0 |
| Film, Television, and Media Operational Account | $0.5 | $0.5 | $0.5 | $0.5 |
| Advanced Industries Acceleration Fund | $5.5 | $5.5 | $5.5 | $5.5 |
| Innovative Higher Education Research Fund | $2.0 | $2.0 | $2.0 | $2.0 |
| Transfer to the General Fund | $13.7 | $15.7 | $17.1 | $18.1 |
| | | | | |
| **E. Total Amount to Amendment 50 Revenue Recipients** | **$9.9** | **$14.2** | **$15.4** | **$16.3** |
| Community Colleges, Mesa and Adams State (78%) | $7.7 | $11.1 | $12.0 | $12.7 |
| Counties (12%) | $1.2 | $1.7 | $1.8 | $2.0 |
| Cities (10%) | $1.0 | $1.4 | $1.5 | $1.6 |

***Hospital Provider Fee —*** Hospital Provider Fee (HPF) revenue is expected to increase 52.2 percent, or $276.2 million, to $805.0 million in FY 2015-16. HPF revenue will then decrease 18.5 percent, or by $148.8 million, to $565.3 million in FY 2016-17 and grow 22.4 percent, or by $147.0 million, in FY 2017-18. As a result of House Bill 16-1405 (the Long Bill) restricting HPF revenue collections, the forecast for FY 2016-17 is $73.2 million, or 10.0 percent, lower compared with projections in March, and the forecast for FY 2017-18 is $31.4 million, or 4.1 percent, higher compared with projections in March.

The projections for HPF revenue are influenced by federal funding levels associated with the Affordable Care Act as well as changes in the population receiving medical care support under the Medicaid program. The large increase in FY 2015-16 is due to continued caseload growth associated with expansion of the Medicaid program, as well as later-than-expected federal approval of the HPF funding levels associated with higher program costs. This later approval prevented the higher fee collections from taking effect earlier, shifting the higher collections to FY 2015-16. The decrease in FY 2016-17 is a result of House Bill 16-1405, which restricted HPF revenue collections to $656.3 million. There is no budget restriction in FY 2017-18 thereby HPF revenue collections are projected up to the federal limit as authorized under current law.

The Hospital Provider Fee is paid by Colorado hospitals and is used, together with matching federal funds, to help cover the cost of the Medicaid program. The amount of Hospital Provider Fee collected each year is calculated by a formula that considers the anticipated cost of care for certain Medicaid populations with each hospital's individual fee allocation based on inpatient days and outpatient revenue.

***Severance tax revenue*** **—** Severance tax revenue will decrease 77.6 percent, or $218.3 million, to $63.0 million in FY 2015-16 due to the sharp decline in oil and natural gas prices and a recent Colorado Supreme Court ruling related to severance tax deductions allowed to taxpayers, discussed in more detail below. However, severance tax revenue has come in higher than expected throughout the current fiscal year and the outlook for commodity prices has slightly improved, which will offset some of the adverse impact of the Supreme Court ruling on severance tax revenue. Compared to the March forecast, this forecast's projection for severance tax revenue is $9.3 million lower in FY 2015-16.

**Continued low prices for natural gas and oil, combined with ad valorem tax credits and a recent Supreme Court decision affecting severance tax deductions, will result in a decline of $218.3 million in severance taxes in FY 2015-16.**

Robust severance tax revenue growth in the last few fiscal years resulted from the higher price environment for natural gas and oil prior to the summer of 2014. The substantial decline in prices for both natural gas and oil since that time has caused a large decrease in severance tax revenue in FY 2015-16. A modest and gradual rebound in prices will lead to an increase of $26.3 million, or 41.7 percent, in severance tax revenue for FY 2016-17. The ad valorem credit for State severance taxes is contributing to the large swings in revenue collections.

**Revenue collections will increase $26.3 million in FY 2016-17 with gradually increasing prices and smaller ad valorem tax credits that will reduce tax liabilities to a lesser degree.**

Average oil prices in 2015 were nearly 50 percent lower than they were in 2014 as growing production in the United States boosted oil inventories and a sluggish global economy dampened demand. Oil prices dropped further in the beginning of 2016 but have since recovered back to just below $50 per barrel and are projected to gradually increase through 2017. However, it is important to note that there is a high degree of uncertainty in the trajectory of oil prices. Thus, the actual amount of severance tax revenue could materially differ from the present forecast depending on the direction of future energy prices.

The price of natural gas also remains well below the previous few years as supply has outpaced demand. Natural gas prices in 2015 were 40 percent below 2014 levels and prices are expected to remain low through 2016. More discussion of the oil and gas industry is included in "The Economy: Issues, Trends, and Forecast" section of this forecast, which starts on page 4.

In FY 2015-16, the impact of ad valorem tax credits is exacerbating the decline of severance tax revenue from lower oil and natural gas prices. Severance taxpayers claim ad valorem tax credits based on the local property taxes they pay on the value of mineral extraction in the prior year. Although the prices of natural gas and oil were low in 2015, taxpayers will mostly claim ad valorem credits based on the value of oil and gas in 2014, when prices were much higher. This difference in timing greatly increases the impact of lower prices on severance tax liabilities, thus the 77.6 percent forecasted decline in FY 2015-16 severance taxes. Along with gradual increases in prices, the lower ad valorem credit from 2015 production, when prices were low, will contribute to the projected rebound in severance taxes in FY 2016-17.

The amount of oil and natural gas produced in Colorado, known as production volume, also influences severance tax collections. A decline in production is expected to continue through 2016 as prices are projected

to remain suppressed for both oil and gas. The pullback in new production will further contribute to lower severance tax revenue growth over the forecast period.

As a result of the April 2016 Colorado Supreme Court's decision in *BP America v. Colorado Department of Revenue (*DOR*)*, taxpayers can claim additional severance tax deductions related to their transportation, manufacturing, and processing costs incurred in their oil and gas extraction activities. In addition to lowering the severance tax collections in the future, this decision also increased the refunds that will be made to severance taxpayers for the current and past tax years.

Senate Bill 16-218 accounts for potentially large expected severance tax refunds by creating a reserve fund and diverting income tax revenue to the fund to help pay the refunds. Senate Bill 16-218 also places a restriction on $77.4 million on severance tax money allocated to the Department of Natural Resources and the Department of Local Affairs, preventing the money from being expended in case the money is needed to help cover the refunds. The restriction may be lifted in whole or in part upon a majority vote of the members of the Joint Budget Committee.

The most recent figure available for the known impact of the Supreme Court ruling for past tax years (2014 and earlier) is a reduction of $16.3 million based on tax returns already received by the Department of Revenue. These refunds will reduce severance tax revenue in FY 2015-16. The amount includes refunds related to a deduction for the "cost of capital," or return on investment, directly addressed in the court ruling, as well as other deductions related to transportation, manufacturing, and processing costs that the Department of Revenue believes can now be claimed by severance taxpayers. However, the amount of the refunds may increase by approximately $24 million if other deductions are allowed.

Severance taxpayers may also file additional amended tax returns for past tax years (2014 and earlier) to claim refunds as a result of the court ruling. The amount of these refunds is highly uncertain, and the current estimate from the Department of Revenue ranges from an additional $22 million to $67 million. Whether or not all of these additional refunds for deductions fall under the scope of the recent ruling is yet to be determined, and legislation may be needed to address the question. The fiscal year in which these possible additional refunds reduce revenue in, either FY 2015-16 or FY 2016-17 or later, depends on when returns are filed. The lower range of this estimate is included in this forecast as it is based on allowable deductions that the Department of Revenue believes are now required as a result of the court ruling. The majority of these additional reductions are expected to occur in FY 2016-17 as taxpayers will likely not file their amended returns before the current fiscal year ends. As more information becomes available, the estimate of the revenue impact and timing may change substantially.

Under Senate Bill 16-218, severance tax revenue collected in June of FY 2015-16 will be diverted to the reserve to pay $2.4 million in refunds directly related to the court ruling in the current fiscal year. Any severance tax refund amount in excess of severance revenue received in June will be paid through a diversion of income tax revenue. However, OSPB expects that there will not need to be a diversion of income taxes in FY 2015-16 to cover the refunds.

Senate Bill 16-218 also created a mechanism for income tax revenue to be diverted to the reserve fund to pay a portion of severance tax refunds that occur in FY 2016-17. During any month in which severance tax refunds are larger than 15 percent of gross severance revenue, income tax is diverted to the reserve to pay the portion of the refund amount that exceeds the 15 percent threshold. This forecast assumes that $44.4 million in income taxes will be diverted from the General Fund to the reserve fund to cover severance tax refunds paid out in FY 2016-17. This amount may change materially in subsequent forecasts as new information becomes available.

The above refund amounts are related to past tax year (2014 and earlier) impacts of the Supreme Court ruling. Taxpayers will also claim more deductions for 2015 and subsequent tax years, which will reduce severance taxes on an ongoing basis. This forecast assumes that the additional deductions will reduce annual severance tax collections by 6 percent each year. However, the estimated amount of the reduction to ongoing severance tax revenue in the future may change materially as more information becomes available regarding which additional specific severance tax deductions will be allowed and the revenue impacts of those deductions.

***Federal Mineral Leasing revenue*** — Colorado's share of Federal Mineral Lease (FML) revenue will fall 35.6 percent to $93.5 million in FY 2015-16. This follows a decline of 16.4 percent in FY 2014-15. FML revenue continues to decline due to the persistent lower oil and natural gas prices and the refund of FML "bonus" payments to mineral extraction leaseholders on the Roan Plateau. As commodity prices gradually increase, FML revenue is expected to rebound 10.8 percent to $103.6 million in FY 2016-17 and an additional 20.1 percent in FY 2017-18.

FML royalties are assessed as a percentage of the value of resources produced on leased federal lands. FML activity includes production of natural gas and oil as well as propane, carbon dioxide, coal, and other mineral resources. The Bureau of Land Management (BLM) sells leases to extract mineral resources from federal lands. Producers then remit royalties and other payments to the federal government that are shared with the state where production occurred.

**FML revenue will fall 35.6 percent in FY 2015-16 due to lower oil and gas prices and one-time refunds to leaseholders, but will rebound in FY 2016-17 and FY 2017-18 with gradual increases in commodity prices.**

A portion of the reduced levels in FML revenue in FY 2015-16 through FY 2017-18 are a result of refunds to holders of cancelled leases on land for mineral extraction on the Roan Plateau in Colorado. The BLM carried out auctions for leases to produce natural gas on the Roan Plateau in 2008, collecting significant "bonus" payments. The BLM later revisited these leases and determined a need to re-negotiate or cancel several of them. As a result, the BLM will refund nearly $50 million of the bonus payments that were originally made. Colorado's share of this amount, $23.4 million, will be recouped from the State's share of FML revenue.

The federal government is withholding $7.8 million of Colorado's FML payments in FY 2015-16 and each of the next two fiscal years to complete the required refund. As a result, the distributions of FML revenue to the State Public School Fund, the Colorado Water Conservation Board Construction Fund, and the Local Government Mineral Impact Fund would be proportionately reduced; however, Senate Bill 15-244 transfers money from the General Fund to these funds in each of the three fiscal years in order to backfill the decline in FML distributions.

The impact of lower oil and gas prices on FML revenue was larger than initially estimated in FY 2015-16, thus the forecast for this fiscal year is $6.8 million lower than in March. Although FML revenue is declining in FY 2015-16, the decline is not nearly as severe as the drop in severance tax revenue. The impact of lower energy prices on FML revenue is much smaller than the impact on severance taxes because the revenue stream is not affected by the ad valorem tax credits that impact severance tax gross liabilities.

A portion of FML revenue is allocated to the Higher Education FML Revenues Fund (Revenues Fund) to pay for lease purchase agreements (COP's) that fund capital construction projects at institutions of higher education and the Higher Education Maintenance and Reserve Fund (Reserve Fund) to maintain reserve funds. House Bill 16-1229 transfers money in the Reserve Fund into the Revenues Fund and then eliminates the Reserve Fund. All FML revenue previously deposited into the Reserve Fund will be directed to the Revenues Fund.

**Figure 42. Federal Mineral Leasing (FML) Payments, $ in Millions**

| Fiscal Year | Bonus | Non-Bonus | Total FML | % Change |
|---|---|---|---|---|
| FY 2014-15 | $1.1 | $144.0 | $145.1 | -16.4% |
| FY 2015-16 | $3.4 | $90.0 | $93.5 | -35.6% |
| FY 2016-17 | $1.6 | $102.0 | $103.6 | 10.8% |
| FY 2017-18 | $1.9 | $122.6 | $124.4 | 20.1% |

FY 2014-15 figures are actual collections, and FY 2015-16 through FY 2017-18 are projections.

***Other cash funds*** **—** Cash fund revenue to the Department of Regulatory Agencies (DORA) will increase 2.0 percent to $67.0 million in FY 2015-16 after decreasing 4.1 percent in FY 2014-15. Cash fund revenue related to regulatory agencies will grow another 6.5 percent to $71.3 million in FY 2016-17. A portion of the growth in FY 2016-17 is related to legislation passed during the 2016 legislative session. DORA oversees businesses and professionals in certain industries through licensing, rulemaking, enforcement, and approval of rates charged to consumers. The Department is responsible for oversight of a wide variety of professions, ranging from landscape architects and psychologists to hunting guides. Revenue from licensing fees and other services fund many of the Department's activities.

Insurance-related cash fund revenue is obtained largely from a surcharge on workers' compensation insurance programs. Revenue from this source will decrease 27.3 percent to $14.5 million in FY 2015-16 as a result of a reduction in the surcharge used to fund the Division of Workers' Compensation (DOWC), as well as the Major Medical Insurance Fund and Subsequent Injury Fund. These funds were created to absorb costs for workers injured prior to 1981. Each year, the DOWC is required to perform a review to determine the funding needed to operate its programs. The DOWC determined that a 50 percent reduction in premium surcharges would generate sufficient funding to pay and administer claims for FY 2015-16.

The category called Other Miscellaneous Cash Funds in Table 6 includes revenue from over 300 cash funds that generally collect revenue from fines, fees, and interest earnings. However, approximately 75 percent of the revenue comes from the largest 30 funds. These larger funds include such things as the Employment Support Fund, Medicaid Nursing Facility Cash Fund, and the Marijuana Tax Cash Fund. Total revenue to miscellaneous cash funds is expected to be $674.7 million in FY 2015-16, an increase of 10.2 percent, after growth of 7.4 percent the prior year. Revenue to these funds is expected to decrease 8.5 percent in FY 2016-17.

The FY 2015-16 projection is $28.7 million higher than the March forecast, due mostly to the shifting forward of the revenue transferred from the Unclaimed Property Fund to the Adult Dental Fund which helps fund dental services for adults under the Medicaid program. The transfer that was slated to occur in FY 2016-17, estimated to be $34.8 million, will instead be transferred in FY 2015-16, as per House Bill 16-1409, increasing the revenue estimate for FY 2015-16 by this amount and decreasing the revenue estimate in FY 2016-17.

Revenue from the 2.9 percent sales tax on retail and medical marijuana, as well as fees related to regulation of the marijuana industry, is reflected in the Miscellaneous Cash Funds category in Table 6. However, the table does not include the proceeds from marijuana taxes authorized by Proposition AA in November 2013 as they are not subject to TABOR. Proposition AA taxes are transferred to the Marijuana Tax Cash Fund, local governments, and school construction.

Revenue from the retail marijuana sales tax in Proposition AA goes first to the General Fund — and is included under sales tax revenue in Table 3 in the Appendix — before it is transferred to the Marijuana Tax Cash Fund and local governments. Proposition AA also included an excise tax of 15 percent on retail marijuana that is credited to public school cash funds, a majority of which goes to a cash fund for public school capital construction projects.

# Taxpayer's Bill of Rights: Revenue Limit

***Background on TABOR –*** Provisions in the Taxpayer's Bill of Rights (TABOR) – Article X, Section 20 of the Colorado Constitution – limit the growth of a large portion of State revenue to the sum of inflation and population growth. Revenue collected above the TABOR limit must be returned to taxpayers unless voters decide the State can retain the revenue.

In November 2005, voters approved Referendum C, which allowed the State to retain all revenue through FY 2009-10 during a five-year TABOR "time out." Referendum C also set a new cap on revenue starting in FY 2010-11. Starting with FY 2010-11, the amount of revenue that the State may retain under Referendum C (line 9 of Table 7 found in the Appendix) is calculated by multiplying the revenue limit between FY 2005-06 and FY 2009-10 associated with the highest TABOR revenue year (FY 2007-08) by the allowable TABOR growth rates (line 6 of Table 7) for each subsequent year.

Most General Fund revenue and a portion of cash fund revenue are included in calculating the revenue cap under Referendum C. Revenue that is not subject to TABOR includes revenue exempt by Colorado voters; federal money; and revenue received by entities designated as enterprises, such as public universities and colleges. Table 7 found in the Appendix summarizes the forecasts of TABOR revenue, the TABOR revenue limit, and the revenue cap under Referendum C.

***TABOR refunds are occurring for FY 2014-15 and are projected again for and FY 2017-18 –*** TABOR revenue exceeded the Referendum C cap by $169.7 million in FY 2014-15. Of this amount, $150.1 is being refunded to taxpayers when taxpayers file their 2015 tax return, along with an additional $3.6 million owed related to refunds from prior years, for a total of $153.7 million. The remaining $19.6 million of the $169.7 million is from reclassifying the revenue transferred from the Unclaimed Property Fund to the Adult Dental Fund as subject to TABOR. This money helps fund dental services for adults under the Medicaid program. Previously, the money was not counted as TABOR revenue. However, the legal analysis and audit review on this occurred after refund amounts were established for state income tax forms. Such adjustments and audit findings have occurred in the past and the process calls for the money to be refunded in the next year a refund is due, which, according to this forecast, is FY 2017-18, as discussed below.

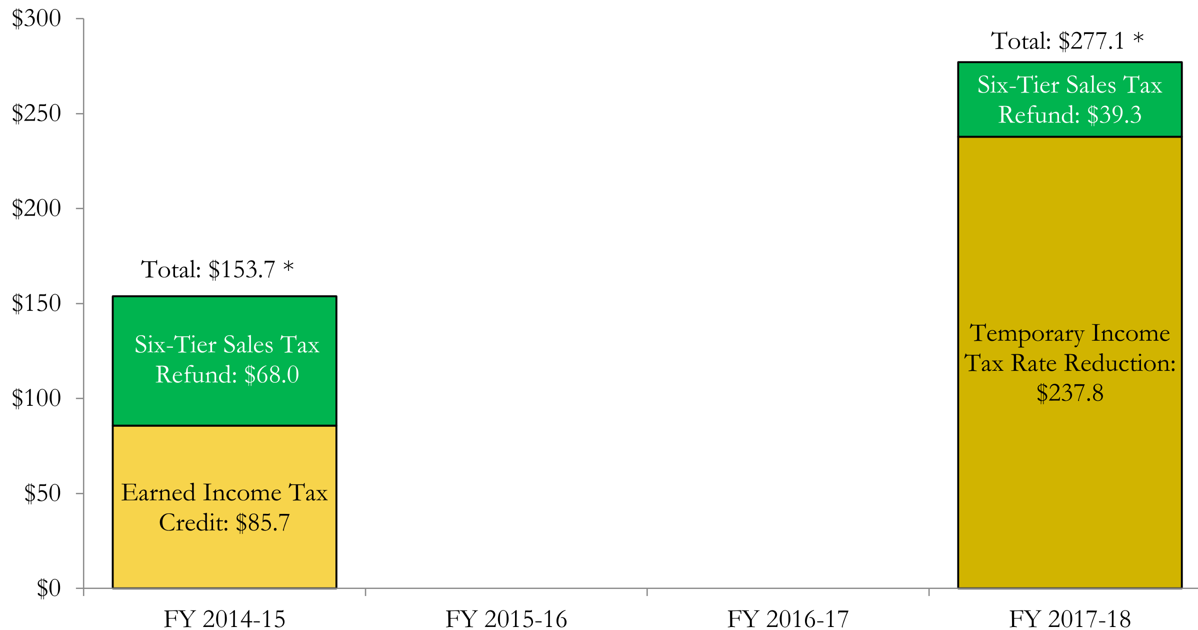
TABOR revenue is projected to come in $80.7 million below the cap in FY 2015-16 and $46.0 million under the cap in FY 2016-17. TABOR revenue is expected to be above the cap in FY 2017-18 by $257.5 million. The amount above the cap in FY 2017-18 includes a projected $37.3 million for transfers from the Unclaimed Property Fund to the Adult Dental Fund now subject to TABOR. The $34.8 million transfer slated for FY 2016-17 was shifted forward into FY 2015-16, as per House Bill 16-1409, increasing TABOR revenue for FY 2015-16 and decreasing TABOR revenue in FY 2016-17.

Colorado law currently specifies three mechanisms by which revenue in excess of the cap is refunded to taxpayers: a sales tax refund to all taxpayers ("six-tier sales tax refund"), the Earned Income Tax Credit (EITC) to qualified taxpayers, and a temporary income tax rate reduction. The refund amount determines which refund mechanisms are used. Figure 43 shows the anticipated refund that will be distributed through each mechanism according to the revenue projections in this forecast and the statutorily defined refund mechanisms.

In FY 2014-15, the amount needed to be refunded exceeded the threshold that activates the state EITC, as specified by Section 39-22-123, C.R.S. Colorado taxpayers who qualify for the federal EITC can claim 10 percent of the amount they claim on their federal tax return on their state tax return for the 2015 tax year. The

amount refunded through this mechanism is estimated to be $85.7 million and the credit is estimated to average about $217 per qualifying household. The state EITC is only a TABOR refund mechanism for one year because it becomes permanent after the year it is used as a refund. After the use of the EITC as a refund mechanism for FY 2014-15, it becomes available to qualifying taxpayers on an ongoing basis and will reduce revenue to the General Fund through a reduction in income tax liabilities and higher income tax refunds.

**Figure 43. Projected Distribution of TABOR Refunds, $ in Millions**




* The FY 2014-15 amount includes $150.1 million in revenue above the Referendum C cap in FY 2014-15, as well as $3.6 million in pending amounts owed related to refunds from prior years. These pending amounts are the result of (a) adjustments that were made to State accounting records for years in which TABOR refunds occurred that resulted in additional required refunds to taxpayers, and (b) the refund in previous years was less actual money than required. Such refunds are held by the State until a future year in which a TABOR refund occurs when they are added to the total refund amount and distributed to taxpayers. The FY 2017-18 amount includes $257.5 million in revenue above the Referendum C cap for FY 2017-18, as well as $19.6 million from FY 2014-15 due to the determination that revenue transferred from the Unclaimed Property Fund to the Adult Dental Fund is subject to TABOR. The legal analysis and audit review on this occurred after refund amounts were established for state income tax forms and therefore the additional refund amount for FY 2014-15 is to be refunded during the next year a refund is due which, according to this forecast, is FY 2017-18.

The remaining $68.0 million of the refund for FY 2014-15 is being distributed through the six-tier sales tax refund, as specified by Section 39-22-2002, C.R.S., when taxpayers file their state tax return for the 2015 tax year. The amount of the refund that can be claimed by each taxpayer is calculated according to a statutory formula that includes six adjusted gross income tiers and the total amount to be refunded. Figure 44 shows per-taxpayer refund estimates by income tier for the six-tier sales tax refund. Based on preliminary data on refunds claimed thus far from the Department of Revenue, the total amount of refunds claimed may end up being slightly lower than was projected. Any amount not refunded to taxpayers will be added to refunds the next year a refund is due which, according to this forecast, is FY 2017-18.

For FY 2017-18, the TABOR refund amount of $277.1 million includes the projected $257.5 million exceeding the Referendum C cap plus the $19.6 million that needs to be refunded from FY 2014-15, as shown in Figure 43. The $19.6 million from FY 2014-15 is due to the reclassification of the revenue transferred to the Adult Dental Fund from the Unclaimed Property Fund. Revenue in excess of the cap in FY 2017-18 is projected to meet the refund threshold to activate the temporary income tax rate reduction refund mechanism as specified by Section 39-22-627, C.R.S. This refund mechanism will reduce the state income tax rate from 4.63 to 4.5

percent for tax year 2018. This would reduce the income tax liability for individual income taxpayers by about $51 for tax year 2018 on average per taxpayer, though the amount will vary greatly based on a taxpayer's taxable income level as shown in Figure 44. The total amount refunded through this mechanism is estimated to be $237.8 million in FY 2017-18 with the remaining portion, $39.3 million, to be refunded through the six-tier sales tax refund mechanism. When the average six-tier sales tax refund is below $15 per taxpayer on average, as is projected for FY 2017-18, each taxpayer across income tiers is refunded the same amount equal to the average sales tax refund amount. The average amount per taxpayer is projected to be $11 for FY 2017-18.

### Figure 44. Projected Distribution of Refunds per Taxpayer by Fiscal Year

| FY 2014-15 TABOR Refund per Taxpayer | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| | Individual Returns | | | | Joint Returns | | | |
| Adjusted Gross Income Tier | Earned Income Tax Credit* | Six-Tier Sales Tax | Income Tax Rate Cut | Total | Earned Income Tax Credit* | Six-Tier Sales Tax | Income Tax Rate Cut | Total |
| Up to $36,000 | $234 | $13 | $0 | $247 | $234 | $26 | $0 | $260 |
| $36,001 - $77,000 | $137 | $18 | $0 | $155 | $137 | $36 | $0 | $173 |
| $77,001 - $120,000 | $0 | $21 | $0 | $21 | $0 | $42 | $0 | $42 |
| $120,001 - $163,000 | $0 | $23 | $0 | $23 | $0 | $46 | $0 | $46 |
| $163,001 - $204,000 | $0 | $24 | $0 | $24 | $0 | $48 | $0 | $48 |
| $204,001 and Up | $0 | $41 | $0 | $41 | $0 | $82 | $0 | $82 |

*EITC applies per household, while the sales tax and income tax refunds are per return. Only households qualifying for the federal EITC will qualify for the state EITC and thus not all households in these income brackets will necessarily qualify. For tax years after 2015, the EITC will no longer be a TABOR refund mechanism and will become a permanent credit. The number of taxpayers and adjusted gross income tiers for FY 2014-15 are the Colorado Department of Revenue's projections.

**No TABOR surplus is projected for FY 2015-16**

**No TABOR surplus is projected for FY 2016-17**

| FY 2017-18 TABOR Refund per Taxpayer | | | | | | |
|---|---|---|---|---|---|---|
| | Individual Returns | | | Joint Returns | | |
| Adjusted Gross Income Tier | Six-Tier Sales Tax | Income Tax Rate Cut | Total | Six-Tier Sales Tax | Income Tax Rate Cut | Total |
| Up to $39,000 | $11 | $8 | $19 | $22 | $2 | $24 |
| $39,001 - $82,000 | $11 | $48 | $59 | $22 | $30 | $52 |
| $82,001 - $128,000 | $11 | $106 | $117 | $22 | $77 | $99 |
| $128,001 - $173,000 | $11 | $156 | $167 | $22 | $128 | $150 |
| $173,001 - $217,000 | $11 | $194 | $205 | $22 | $180 | $202 |
| $217,001 and Up | $11 | $594 | $605 | $22 | $550 | $572 |

***TABOR refund amounts will affect transfers to transportation and capital construction (Senate Bill 09-228 transfers)*** – In addition to activating distributions of refunds to taxpayers, projected revenue in excess of the Referendum C cap affects the transfers to transportation and capital construction created by Senate Bill 09-228, as specified by Section 24-75-219, C.R.S. Because total personal income in Colorado grew by more than 5 percent in 2014, this statute requires transfers of General Fund revenue to the Highway Users Tax Fund (HUTF) and the Capital Construction Fund (CCF) for five years starting in FY 2015-16. For fiscal years 2017-

18 through 2019-20, the transfers are reduced by half if there is a TABOR refund in the same fiscal year in an amount between 1 and 3 percent of total General Fund revenue. The transfers are suspended in full if there is a TABOR refund in excess of 3 percent of total General Fund revenue.

Pursuant to House Bill 16-1416, the dollar amount of the transfers to the HUTF and CCF are at fixed amounts in FY 2015-16 and FY 2016-17 regardless of the level of any TABOR refund. The transfer amounts to the HUTF are equal to $199.2 million in FY 2015-16 and $158.0 million in FY 2016-17. The transfer amounts to the CCF are $49.8 million in FY 2015-16 and $52.7 million in FY 2016-17.

According to current projections, transfers to the HUTF and CCF will be reduced by half in FY 2017-18 because the TABOR refund is expected to be 2.5 percent of total General Fund revenue. Transfers to HUTF will be reduced from $221.1 million to $110.6 million and transfers to CCF will be reduced from $110.6 million to $55.3 million. However a small increase in revenue subject to TABOR would push the refund amount above 3 percent, reducing transfers to zero in FY 2017-18.

## Governor's Revenue Estimating Advisory Committee

The Governor's Office of State Planning and Budgeting would like to thank the following individuals that provided valuable feedback on key national and Colorado-specific economic indices included in this forecast. All of these individuals possess expertise in a number of economic and financial disciplines and were generous with their time and knowledge.

- Tucker Hart Adams – Senior Partner, Summit Economics LLC
- Alison Felix – Vice President and Denver Branch Executive, Denver Branch – Federal Reserve Bank of Kansas City
- Elizabeth Garner – State Demographer, Colorado Department of Local Affairs
- Alexandra Hall – Labor Market Information Director, Colorado Department of Labor and Employment
- Ronald New – Capital Markets Executive
- Patricia Silverstein – President, Development Research Partners
- Richard Wobbekind – Associate Dean, Leeds School of Business; University of Colorado, Boulder

# Appendix – Reference Tables

## Table 1. History and Forecast for Key Colorado Economic Variables
## Calendar Year 2010-2018

| Line No. | | Actual | | | | | | June 2016 Forecast | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | | 2010 | 2011 | 2012 | 2013 | 2014 | 2015 | 2016 | 2017 | 2018 |
| | **Income** | | | | | | | | | |
| 1 | Personal Income (Billions) /A | $211.4 | $227.1 | $240.9 | $246.4 | $261.7 | $275.1 | $288.6 | $303.3 | $319.1 |
| 2 | Change | 2.4% | 7.4% | 6.1% | 2.3% | 6.2% | 5.1% | 4.9% | 5.1% | 5.2% |
| 3 | Wage and Salary Income (Billions) | $113.8 | $118.6 | $125.0 | $129.5 | $138.7 | $146.4 | $154.2 | $162.5 | $171.4 |
| 4 | Change | 1.3% | 4.2% | 5.4% | 3.6% | 7.1% | 5.6% | 5.3% | 5.4% | 5.5% |
| 5 | Per-Capita Income ($/person) /A | $41,880 | $44,351 | $46,402 | $46,754 | $48,871 | $50,418 | $51,956 | $53,663 | $55,509 |
| 6 | Change | 0.9% | 5.9% | 4.6% | 0.8% | 4.5% | 3.2% | 3.1% | 3.3% | 3.4% |
| | **Population & Employment** | | | | | | | | | |
| 7 | Population (Thousands) | 5,048.3 | 5,119.5 | 5,191.7 | 5,271.1 | 5,355.6 | 5,456.6 | 5,554.5 | 5,652.0 | 5,748.2 |
| 8 | Change | 1.5% | 1.4% | 1.4% | 1.5% | 1.6% | 1.9% | 1.8% | 1.8% | 1.7% |
| 9 | Net Migration (Thousands) | 37.5 | 36.0 | 39.8 | 47.9 | 50.8 | 67.8 | 66.0 | 65.0 | 63.0 |
| 10 | Unemployment Rate | 8.7% | 8.4% | 7.9% | 6.8% | 5.0% | 3.9% | 3.3% | 3.6% | 3.8% |
| 11 | Total Nonagricultural Employment (Thousands) | 2,222.3 | 2,258.6 | 2,313.0 | 2,381.9 | 2,464.9 | 2,539.9 | 2,603.4 | 2,668.4 | 2,732.5 |
| 12 | Change | -1.0% | 1.6% | 2.4% | 3.0% | 3.5% | 3.0% | 2.5% | 2.5% | 2.4% |
| | **Construction Variables** | | | | | | | | | |
| 13 | Total Housing Permits Issued (Thousands) | 11.6 | 13.5 | 23.3 | 27.5 | 28.7 | 31.1 | 36.9 | 40.3 | 43.1 |
| 14 | Change | 23.9% | 16.5% | 72.6% | 18.1% | 4.2% | 8.3% | 18.9% | 9.1% | 7.1% |
| 15 | Nonresidential Construction Value (Millions) /B | $3,146.7 | $3,516.2 | $3,112.3 | $3,614.0 | $4,312.2 | $4,790.2 | $5,365.0 | $5,252.4 | $5,459.3 |
| 16 | Change | -6.2% | 11.7% | -11.5% | 16.1% | 19.3% | 11.1% | 12.0% | -2.1% | 3.9% |
| | **Prices & Sales Variables** | | | | | | | | | |
| 17 | Retail Trade (Billions) /C | $70.5 | $75.9 | $80.2 | $84.1 | $90.5 | $95.0 | $99.0 | $104.2 | $109.4 |
| 18 | Change | 6.0% | 7.7% | 5.7% | 4.8% | 7.6% | 4.9% | 4.3% | 5.2% | 5.0% |
| 19 | Denver-Boulder-Greeley Consumer Price Index (1982-84=100) | 212.4 | 220.3 | 224.6 | 230.8 | 237.2 | 240.0 | 244.8 | 250.7 | 255.7 |
| 20 | Change | 1.9% | 3.7% | 1.9% | 2.8% | 2.8% | 1.2% | 2.0% | 2.4% | 2.0% |

**/A** Personal Income as reported by the federal Bureau of Economic Analysis includes: wage and salary disbursements, supplements to wages and salaries, proprietors' income with inventory and capital consumption adjustments, rental income of persons with capital consumption adjustments, personal dividend income, personal interest income, and personal current transfer receipts, less contributions from government social insurance.

**/B** Nonresidential Construction Value is reported by Dodge Analytics (McGraw-Hill Construction) and includes new construction, additions, and major remodeling projects predominately at commercial and manufacturing facilities, educational institutions, medical and government buildings. Nonresidential does not include non-building projects (such as streets, highways, bridges and utilities).

**/C** Retail Trade includes motor vehicles and automobile parts, furniture and home furnishings, electronics and appliances, building materials, sales at food and beverage stores, health and personal care, sales at convenience stores and service stations, clothing, sporting goods/books/music, and general merchandise found at warehouse stores and internet purchases. In addition, the above dollar amounts include sales from food and drink vendors (bars and restaurants). E-commerce retail trade and other sales by a retailer that does not have a state sales tax account are not included in these figures.

## Table 2. History and Forecast for Key National Economic Variables
## Calendar Year 2010 – 2018

| Line No. | | Actual | | | | | | June 2016 Forecast | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | | 2010 | 2011 | 2012 | 2013 | 2014 | 2015 | 2016 | 2017 | 2018 |
| | **Inflation-Adjusted & Current Dollar Income Accounts** | | | | | | | | | |
| 1 | Inflation-Adjusted Gross Domestic Product (Billions) /A | $14,783.8 | $15,020.6 | $15,354.6 | $15,583.3 | $15,961.7 | $16,348.9 | $16,643.2 | $17,009.3 | $17,349.5 |
| 2 | Change | 2.5% | 1.6% | 2.2% | 1.5% | 2.4% | 2.4% | 1.8% | 2.2% | 2.0% |
| 3 | Personal Income (Billions) /B | $12,477.1 | $13,254.5 | $13,915.1 | $14,068.4 | $14,694.2 | $15,340.4 | $15,969.4 | $16,703.9 | $17,438.9 |
| 4 | Change | 3.2% | 6.2% | 5.0% | 1.1% | 4.4% | 4.4% | 4.1% | 4.6% | 4.4% |
| 5 | Per-Capita Income ($/person) /B | $40,334 | $42,521 | $44,301 | $44,460 | $46,077 | $47,727 | $49,275 | $51,122 | $52,938 |
| 6 | Change | 2.4% | 5.4% | 4.2% | 0.4% | 3.6% | 3.6% | 3.2% | 3.7% | 3.6% |
| 7 | Wage and Salary Income (Billions) | $6,377.5 | $6,633.2 | $6,930.3 | $7,114.4 | $7,477.8 | $7,824.0 | $8,183.9 | $8,625.8 | $9,074.4 |
| 8 | Change | 2.0% | 4.0% | 4.5% | 2.7% | 5.1% | 4.6% | 4.6% | 5.4% | 5.2% |
| | **Population & Employment** | | | | | | | | | |
| 9 | Population (Millions) | 309.3 | 311.7 | 314.1 | 316.4 | 318.9 | 321.4 | 324.1 | 326.7 | 329.4 |
| 10 | Change | 0.8% | 0.8% | 0.8% | 0.7% | 0.8% | 0.8% | 0.8% | 0.8% | 0.8% |
| 11 | Unemployment Rate | 9.6% | 8.9% | 8.1% | 7.4% | 6.2% | 5.3% | 4.8% | 4.6% | 4.6% |
| 12 | Total Nonagricultural Employment (Millions) | 130.4 | 131.9 | 134.2 | 136.4 | 139.0 | 141.9 | 144.4 | 146.6 | 148.6 |
| 13 | Change | -0.7% | 1.2% | 1.7% | 1.6% | 1.9% | 2.1% | 1.8% | 1.5% | 1.4% |
| | **Price Variables** | | | | | | | | | |
| 14 | Consumer Price Index (1982-84=100) | 218.1 | 224.9 | 229.6 | 233.0 | 236.7 | 237.0 | 240.3 | 245.1 | 250.0 |
| 15 | Change | 1.6% | 3.2% | 2.1% | 1.5% | 1.6% | 0.1% | 1.4% | 2.0% | 2.0% |
| 16 | Producer Price Index - All Commodities (1982=100) | 184.7 | 201.0 | 202.2 | 203.4 | 205.3 | 190.4 | 184.7 | 192.1 | 198.8 |
| 17 | Change | 6.8% | 8.8% | 0.6% | 0.6% | 0.9% | -7.3% | -3.0% | 4.0% | 3.5% |
| | **Other Key Indicators** | | | | | | | | | |
| 18 | Corporate Profits (Billions) | $1,746.4 | $1,816.6 | $1,998.2 | $2,037.4 | $2,072.9 | $2,008.6 | $1,998.6 | $2,048.6 | $2,132.6 |
| 19 | Change | 25.0% | 4.0% | 10.0% | 2.0% | 1.7% | -3.1% | -0.5% | 2.5% | 4.1% |
| 20 | Housing Permits (Millions) | 0.605 | 0.624 | 0.830 | 0.991 | 1.052 | 1.183 | 1.274 | 1.456 | 1.561 |
| 21 | Change | 3.7% | 3.2% | 32.9% | 19.4% | 6.2% | 12.4% | 7.7% | 14.3% | 7.2% |
| 22 | Retail Trade (Billions) | $4,285.8 | $4,597.6 | $4,826.4 | $5,001.2 | $5,211.5 | $5,327.4 | $5,492.5 | $5,750.7 | $6,009.5 |
| 23 | Change | 5.4% | 7.3% | 5.0% | 3.6% | 4.2% | 2.2% | 3.1% | 4.7% | 4.5% |

**/A** U.S. Bureau of Economic Analysis, National Income and Product Accounts. Inflation-adjusted, in 2009 dollars.

**/B** Personal Income as reported by the U.S. Bureau of Economic Analysis includes: wage and salary disbursements, supplements to wages and salaries, proprietors' income with inventory and capital consumption adjustments, rental income of persons with capital consumption adjustments, personal dividend income, personal interest income, and personal current transfer receipts, less contributions from government social insurance.

## Table 3. General Fund – Revenue Estimates by Tax Category
## (Accrual Basis, Dollar Amounts in Millions)

| Line No. | Category | Actual FY 2014-15 | % Chg | June 2016 Estimate by Fiscal Year FY 2015-16 | % Chg | FY 2016-17 | % Chg | FY 2017-18 | % Chg |
|---|---|---|---|---|---|---|---|---|---|
| | *Excise Taxes:* | | | | | | | | |
| 1 | Sales | $2,619.2 | 8.0% | $2,668.8 | 1.9% | $2,836.8 | 6.3% | $2,964.5 | 4.5% |
| 2 | Use | $260.3 | 7.8% | $253.8 | -2.5% | $268.4 | 5.8% | $280.7 | 4.6% |
| 3 | Cigarette | $37.9 | 3.6% | $37.2 | -1.8% | $36.0 | -3.1% | $35.0 | -2.9% |
| 4 | Tobacco Products | $17.8 | 5.3% | $21.3 | 19.5% | $19.5 | -8.2% | $20.0 | 2.5% |
| 5 | Liquor | $41.5 | 2.8% | $43.7 | 5.3% | $43.8 | 0.2% | $44.8 | 2.4% |
| **6** | **Total Excise** | **$2,976.7** | **7.8%** | **$3,024.8** | **1.6%** | **$3,204.5** | **5.9%** | **$3,345.1** | **4.4%** |
| | *Income Taxes:* | | | | | | | | |
| 7 | Net Individual Income | $6,350.1 | 11.5% | $6,492.5 | 2.2% | $6,903.8 | 6.3% | $7,233.1 | 4.8% |
| 8 | Net Corporate Income | $692.9 | -3.9% | $647.9 | -6.5% | $672.7 | 3.8% | $715.2 | 6.3% |
| **9** | **Total Income** | **$7,043.0** | 9.8% | **$7,140.4** | **1.4%** | **$7,576.5** | **6.1%** | **$7,948.3** | **4.9%** |
| *10* | *Less: State Education Fund Diversion* | *$519.8* | *8.6%* | *$525.5* | *1.1%* | *$557.6* | *6.1%* | *586.6* | *5.2%* |
| **11** | **Total Income to General Fund** | **$6,523.1** | **9.9%** | **$6,614.9** | **1.4%** | **$7,018.9** | **6.1%** | **$7,361.7** | **4.9%** |
| | *Other Revenue:* | | | | | | | | |
| 12 | Insurance | $256.7 | 7.4% | $289.5 | 12.8% | $299.0 | 3.3% | $307.1 | 2.7% |
| 13 | Interest Income | $8.9 | -41.7% | $9.4 | 5.5% | $12.8 | 37.2% | $13.6 | 5.6% |
| 14 | Pari-Mutuel | $0.6 | 0.2% | $0.6 | -3.0% | $0.6 | -3.0% | $0.6 | -2.0% |
| 15 | Court Receipts | $2.6 | 0.3% | $2.5 | -4.2% | $2.4 | -1.0% | $2.3 | -4.1% |
| 16 | Other Income | $34.0 | 59.3% | $20.1 | -41.0% | $24.3 | 21.2% | $25.8 | 6.1% |
| **17** | **Total Other** | **$302.7** | **8.4%** | **$322.0** | **6.4%** | **$339.1** | **5.3%** | **$349.3** | **3.0%** |
| 18 | GROSS GENERAL FUND | $9,802.6 | 9.2% | $9,961.6 | 1.6% | $10,562.5 | 6.0% | $11,056.1 | 4.7% |

## Table 4. General Fund Overview under Current Law /A
## (Dollar Amounts in Millions)

| Line No. | | Actual FY 2014-15 | June 2016 Estimate by Fiscal Year FY 2015-16 | FY 2016-17 | FY 2017-18 |
|---|---|---|---|---|---|
| **Revenue** | | | | | |
| 1 | **Beginning Reserve** | **$435.9** | **$709.2** | **$528.6** | **$624.4** |
| 2 | **Gross General Fund Revenue** | **$9,802.6** | **$9,961.6** | **$10,562.5** | **$11,056.1** |
| 3 | *Transfers to the General Fund* | *$64.9* | *$24.3* | *$46.1* | *$18.2* |
| 4 | **TOTAL GENERAL FUND AVAILABLE FOR EXPENDITURE** | **$10,303.4** | **$10,695.2** | **$11,137.1** | **$11,698.7** |
| **Expenditures** | | | | | |
| 5 | **Appropriation Subject to Limit** | **$8,869.0** | **$9,335.6** | **$9,813.3** | **$10,175.0** |
| 6 | *Dollar Change (from prior year)* | *$650.3* | $466.6 | $477.7 | $361.7 |
| 7 | *Percent Change (from prior year)* | 7.9% | 5.3% | 5.1% | 3.7% |
| 8 | **Spending Outside Limit** | **$785.7** | **$831.0** | **$699.5** | **$865.5** |
| 9 | *TABOR Refund under Art. X, Section 20, (7) (d)* | *$153.7* | *$0.0* | *$0.0* | *$277.1* |
| 10 | *Set Aside for Potential TABOR Refund under Art. X, Section 20, (3) (c)* | *$58.0* | *-$58.0* | *$0.0* | *$0.0* |
| 11 | *Rebates and Expenditures* | *$257.4* | $276.8 | $294.1 | $307.7 |
| 12 | *Transfers for Capital Construction* | *$248.5* | $271.2 | $84.5 | $68.3 |
| 13 | *Transfers to Highway Users Tax Fund* | $0.0 | $199.2 | $158.0 | $110.6 |
| 14 | *Transfers to State Education Fund under SB 13-234* | $25.3 | $25.3 | $25.3 | $25.3 |
| 15 | *Transfers to Other Funds* | $42.2 | $116.5 | $137.5 | $76.5 |
| *16* | *Other Expenditures Exempt from General Fund Appropriations Limit* | $0.5 | $0.0 | $0.0 | $0.0 |
| 17 | **TOTAL GENERAL FUND OBLIGATIONS** | **$9,654.7** | **$10,166.6** | **$10,512.8** | **$11,040.6** |
| 18 | *Percent Change (from prior year)* | 10.2% | 5.3% | 3.4% | 5.0% |
| 19 | Reversions and Accounting Adjustments | *-$60.6* | $0.0 | $0.0 | $0.0 |
| **Reserves** | | | | | |
| 20 | **Year-End General Fund Balance** | **$709.2** | **$528.6** | **$624.4** | **$658.1** |
| 21 | *Year-End General Fund as a % of Appropriations* | *8.0%* | 5.7% | 6.4% | 6.5% |
| 22 | *General Fund Statutory Reserve* | $576.49 | $520.7 | $634.9 | $658.1 |
| 23 | *Above (Below) Statutory Reserve* | $132.7 | $7.9 | -$10.5 | $0.0 |

**/A** See the section discussing the General Fund and State Education Fund Budget starting on page 44 for information on the figures in this table.

## Table 5. General Fund and State Education Fund Overview under Current Law /A
## (Dollar Amounts in Millions)

| Line No. | | Actual FY 2014-15 | June 2016 Estimate by Fiscal Year FY 2015-16 | FY 2016-17 | FY 2017-18 |
|---|---|---|---|---|---|
| **Revenue** | | | | | |
| 1 | **Beginning Reserves** | **$1,484.9** | **$1,393.2** | **$824.5** | **$735.0** |
| 2 | *State Education Fund* | $1,048.9 | $684.0 | $296.0 | $110.6 |
| 3 | *General Fund* | $435.9 | $709.2 | $528.6 | $624.4 |
| 4 | **Gross State Education Fund Revenue** | **$594.4** | **$556.4** | **$588.8** | **$618.0** |
| 5 | **Gross General Fund Revenue /B** | **$9,867.4** | **$9,985.9** | **$10,608.6** | **$11,074.3** |
| 6 | **TOTAL FUNDS AVAILABLE FOR EXPENDITURE** | **$11,946.7** | **$11,935.5** | **$12,021.9** | **$12,427.4** |
| **Expenditures** | | | | | |
| 7 | General Fund Expenditures /C | $9,654.7 | $10,166.6 | $10,512.8 | $11,040.6 |
| 8 | State Education Fund Expenditures | *$969.2* | *$944.4* | *$774.1* | *$629.3* |
| 9 | **TOTAL OBLIGATIONS** | **$10,624.0** | **$11,111.0** | **$11,286.9** | **$11,669.8** |
| 10 | *Percent Change (from prior year)* | 11.8% | 4.6% | 1.6% | 3.4% |
| 11 | *Reversions and Accounting Adjustments* | *($70.5)* | *$0.0* | *$0.0* | *$0.0* |
| **Reserves** | | | | | |
| 12 | **Year-End Balance** | **$1,393.2** | **$824.5** | **$735.0** | **$757.5** |
| 13 | State Education Fund | $684.0 | $296.0 | $110.6 | $99.4 |
| 14 | General Fund | $709.2 | $528.6 | $624.4 | $658.1 |
| 15 | *General Fund Above (Below) Statutory Reserve* | $132.7 | $7.9 | -$10.5 | $0.0 |

**/A** See the section discussing the General Fund and State Education Fund Budget starting on page 44 for information on the figures in this table.
**/B** This amount includes transfers to the General Fund shown in line 3 in Table 4.
**/C** General Fund expenditures include appropriations subject to the limit of 5.0% of Colorado personal income shown in line 5 in Table 4 as well as all spending outside the limit shown in line 8 in Table 4.

## Table 6. Cash Fund Revenue Subject to TABOR Forecast by Major Category
## (Dollar amounts in Millions)

| Category | Actual | June 2016 Estimate by Fiscal Year | | |
|---|---|---|---|---|
| | FY 2014-15 | FY 2015-16 | FY 2016-17 | FY 2017-2018 |
| **Transportation-Related /A** | **$1,164.6** | **$1,180.3** | **$1,198.1** | **$1,218.0** |
| Change | 2.5% | 1.3% | 1.5% | 1.7% |
| **Limited Gaming Fund /B** | **$99.3** | **$102.4** | **$105.5** | **$108.7** |
| Change | 1.1% | 3.1% | 3.0% | 3.0% |
| **Capital Construction - Interest** | **$5.6** | **$4.7** | **$4.7** | **$3.6** |
| Change | 134.2% | -16.2% | -0.5% | -23.8% |
| **Regulatory Agencies** | **$65.6** | **$67.0** | **$71.3** | **$72.9** |
| Change | -4.1% | 2.0% | 6.5% | 2.2% |
| **Insurance-Related** | **$19.9** | **$14.5** | **$13.8** | **$13.9** |
| Change | -3.5% | -27.3% | -5.2% | 0.7% |
| **Severance Tax /C** | **$281.3** | **$63.0** | **$89.2** | **$175.9** |
| Change | 4.7% | -77.6% | 41.7% | 97.1% |
| **Hospital Provider Fee /D** | **$528.8** | **$805.0** | **$656.3** | **$803.3** |
| Change | -6.7% | 52.2% | -18.5% | 22.4% |
| **Other Miscellaneous Cash Funds /E** | **$612.4** | **$674.7** | **$617.2** | **$676.1** |
| Change | 7.4% | 10.2% | -8.5% | 9.6% |
| ***TOTAL CASH FUND REVENUE*** | **$2,777.6** | **$2,911.5** | **$2,756.0** | **$3,072.2** |
| *Change* | 1.7% | 4.8% | -5.3% | 11.5% |

**/A** Includes revenue from Senate Bill 09-108 (FASTER) which began in FY 2009-10. Roughly 40% of FASTER-related revenue is directed to two State Enterprises. Revenue to State Enterprises is exempt from TABOR and is thus not included in the figures reflected by this table.

**/B** Excludes tax revenue from extended gaming as allowed by Amendment 50 to the Colorado Constitution as this revenue is exempt from TABOR. The portion of limited gaming revenue that is exempt is projected based on the formula outlined in House Bill 09-1272.

**/C** FY 2014-15 figure includes the impact of Senate Bill 15-255 which credits severance tax collections between May 1st and June 30th, 2015, up to $20 million, into the General Fund. Actual collections were equal to $16.2 million.

**/D** Figures include the impact of Senate Bill 13-200 which put into statute the expansion of Colorado's Medicaid program beginning on January 1, 2014, as allowed by the federal law known as the Affordable Care Act.

**/E** Figures include the additional revenue related to the recent determination that the revenue transferred from the Unclaimed Property Fund to Adult Dental Fund is subject to TABOR.

## Table 7. TABOR Revenue & Referendum C Revenue Limit
## (Dollar Amounts in Millions)

| Line No. | | Actual FY 2014-15 | June 2016 Estimate by Fiscal Year FY 2015-16 | FY 2016-17 | FY 2017-18 |
|---|---|---|---|---|---|
| | **TABOR Revenues:** | | | | |
| 1 | General Fund /A | $9,753.1 | $9,895.0 | $10,484.8 | $10,977.0 |
| | Percent Change from Prior Year | 8.8% | 1.5% | 6.0% | 4.7% |
| 2 | Cash Funds /A | $2,777.6 | $2,911.5 | $2,756.0 | $3,072.2 |
| | Percent Change from Prior Year | 1.7% | 4.8% | -5.3% | 11.5% |
| **3** | **Total TABOR Revenues** | **$12,530.8** | **$12,806.6** | **$13,240.8** | **$14,049.2** |
| | Percent Change from Prior Year | 7.2% | 2.2% | 3.4% | 6.1% |
| | **Revenue Limit Calculation:** | | | | |
| 4 | Previous calendar year population growth | 1.5% | 1.6% | 1.9% | 1.8% |
| 5 | Previous calendar year inflation | 2.8% | 2.8% | 1.2% | 2.0% |
| **6** | **Allowable TABOR Growth Rate** | **4.3%** | **4.4%** | **3.1%** | **3.8%** |
| 7 | TABOR Limit /B | $9,976.9 | $10,398.3 | $10,720.6 | $11,128.0 |
| 8 | General Fund Exempt Revenue under Ref. C /C | $2,384.1 | $2,408.3 | $2,520.1 | $2,663.7 |
| **9** | **Revenue Cap Under Ref. C /B, /D** | **$12,361.0** | **$12,887.3** | **$13,286.8** | **$13,791.7** |
| **10** | **Amount Above/(Below) Cap** | **$169.7** | **-$80.7** | **-$46.0** | **$257.5** |
| 11 | TABOR Reserve Requirement | $370.8 | $384.2 | $397.2 | $413.8 |

**/A** Amounts differ from the General Fund and Cash Fund revenues reported in Table 3 and Table 6 due to accounting adjustments and because some General Fund revenue is exempt from TABOR. Cash Funds amounts include the additional revenue related to the determination that the revenue transferred from the Unclaimed Property Fund to the Adult Dental Fund is subject to TABOR.

**/B** The TABOR limit and Referendum C cap are adjusted to account for changes in the enterprise status of various state entities.

**/C** Under Referendum C, a "General Fund Exempt Account" is created in the General Fund. The account consists of money collected in excess of the TABOR limit in accordance with voter-approval of Referendum C.

**/D** The revenue limit is calculated by applying the "Allowable TABOR Growth Rate" to either "Total TABOR Revenues" or the "Revenue Cap under Ref. C," whichever is smaller. Beginning in FY 2010-11, the revenue limit is based on the highest revenue total from FY 2005-06 to 2009-10 plus the "Allowable TABOR Growth Rate." FY 2007-08 was the highest revenue year during the Referendum C timeout period.