COLORADO
Office of State Planning & Budgeting

December | 2018

The Colorado Outlook

Economic and Fiscal Review

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Summary

- The General Fund revenue forecast for FY 2018-19 is higher by $93.0 million, or 0.8 percent, compared to the September 2018 forecast. These revisions are largely in response to year-to-date collections that have been stronger than anticipated. The forecast for FY 2019-20 is higher by $91.2 million, or 0.7 percent.

- After a strong 14.1 percent increase in FY 2017-18, General Fund revenue is forecast to increase at a more moderate 6.5 percent rate in FY 2018-19. General Fund revenue is projected to increase at a rate of 5.9 percent in FY 2019-20.

- Under the Governor's November 2018 budget request, the State's General Fund reserve is projected to be $289.0 million above the required statutory reserve amount of 7.25 percent of appropriations in FY 2018-19. The Governor's November budget request raises the reserve requirement to 8.0 percent of appropriations beginning in FY 2019-20. Under this forecast and the November budget request, the State's General Fund reserve is projected to be $2.6 million above the higher required reserve amount.

- Cash fund revenue subject to TABOR decreased 15.8 percent in FY 2017-18 as the Hospital Provider Fee was replaced with the Healthcare Affordability and Sustainability Fee program, which is a TABOR-exempt enterprise in accordance with SB 17-267. Cash fund revenue in FY 2018-19 is forecast to increase 6.8 percent. This forecast is $40.9 million, or 1.7 percent, higher compared with projections in September due primarily to an increase in expectations for severance tax revenue and other "miscellaneous" cash funds. Cash fund revenue is expected to decrease 0.1 percent in FY 2019-20 as larger ad valorem tax credits reduce severance tax collections.

- TABOR revenue was above the State's revenue cap by $18.5 million in FY 2017-18. TABOR revenue is expected to exceed the cap by $394.4 million in FY 2018-19 and $525.8 million in FY 2019-20. This represents an increase in the projected TABOR surplus compared to the September forecast of $133.9 million in FY 2018-19 and $144.5 million in FY 2019-20.

- Colorado's economic expansion has continued at a healthy pace in 2018. Employment growth has been strong, while wage growth has outpaced inflation each month for the past year. Oil and gas production continues to set record highs, but recent price declines may limit growth. Housing price growth has slowed in recent months, in part due to rising mortgage rates, but rental rates remain stable. Colorado's economic activity is forecast to remain positive over the forecast period, but growth will moderate under tighter labor market conditions and constraints on construction activity.

- The U.S. economy continued to expand in the third quarter, driven by ongoing business investment and increases in consumer spending. Although financial market data have been mixed, consumer expectations remain at some of the highest levels of the expansion and industrial production remains at solid levels. Recession risk remains low, but has increased since the September forecast as concerns of slower global growth and the ongoing trade dispute cause increased caution among investors. However, certain developments could change this outlook. Overtightening of monetary policy as growth moderates is a risk. Moreover, a worsening of the ongoing trade dispute continues to be a risk factor to business costs and agricultural prices. A larger slowdown in global economic growth or a geopolitical crisis could also have an unforeseen adverse impact on the U.S. economy.

The Economy: Issues, Trends, and Forecast

The following section discusses overall economic conditions in Colorado, nationally, and internationally. The OSPB forecast for economic conditions is slightly revised from the September 2018 Colorado Outlook. The economy has performed as expected in recent months. However, recent financial market volatility and lower oil prices, as well as expectations of a slowing global economy, suggest a more cautious outlook. This section includes an analysis of:

- Economic and labor market conditions in Colorado (page 5)
- Housing market conditions for Colorado and the nation (page 13)
- Economic, financial, and labor market conditions for the nation (page 15)
- International economic conditions (page 21)

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. This 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 **—** Colorado has continued to experience strong growth in the second half of 2018. Employment growth has continued at a healthy pace, but an increase in the labor force without a proportionate increase in job growth has pushed up the unemployment rate slightly in recent months. Oil and gas production continue to set record highs, but recent price declines may slow growth. Business confidence has slipped in recent months as expectations of national economic conditions slipped below neutral, but expectations of the Colorado economy remain firmly positive. Housing price growth has slowed in recent months, in part due to rising mortgage rates, but rental rates remain stable. Colorado's economic activity is expected to remain positive over the forecast period, but growth will moderate from its recent robust pace.

The U.S. economy continued to expand at a robust pace in the third quarter, driven by ongoing business investment and increases in consumer spending. Although financial market data have been mixed with some indicators suggesting ongoing expansion and other signals indicating a slowdown, consumer expectations remain at some of the highest levels of the expansion. Industrial production also remains at solid levels, while corporate profits continue to display strong year-over-year growth. However, overall U.S. economic growth is expected to moderate over the remainder of the forecast period as the economy reaches full employment, labor force growth slows, and the Federal Reserve reduces monetary support for the economy. These factors are contributing to the recent pessimism and volatility in financial markets.

Economic risks **—** Most indicators suggest ongoing expansion, but at a moderating pace. Recession risk has increased since the September forecast as concerns of slower global growth and the ongoing trade dispute cause increased caution among investors, but still remains low. Certain developments, however, could change this outlook. A worsening of the ongoing trade dispute continues to be a risk factor to business costs and agricultural prices. Moreover, the uncertainty of trade policy has heightened anxiety among investors, and could cause a harmful reduction in spending and investment in the economy. Overtightening of monetary policy amidst the moderating economic activity is now a risk. On the other hand, the Federal Reserve has recently signaled consideration of possibly adopting a lower path of target interest rate increases, which could alleviate concerns of slowing business investment and a faltering housing market. A larger slowdown in global economic growth or a geopolitical crisis could have an adverse impact on the U.S. economy. As the current economic expansion nears the record for longest historical expansion, recession risk rises.

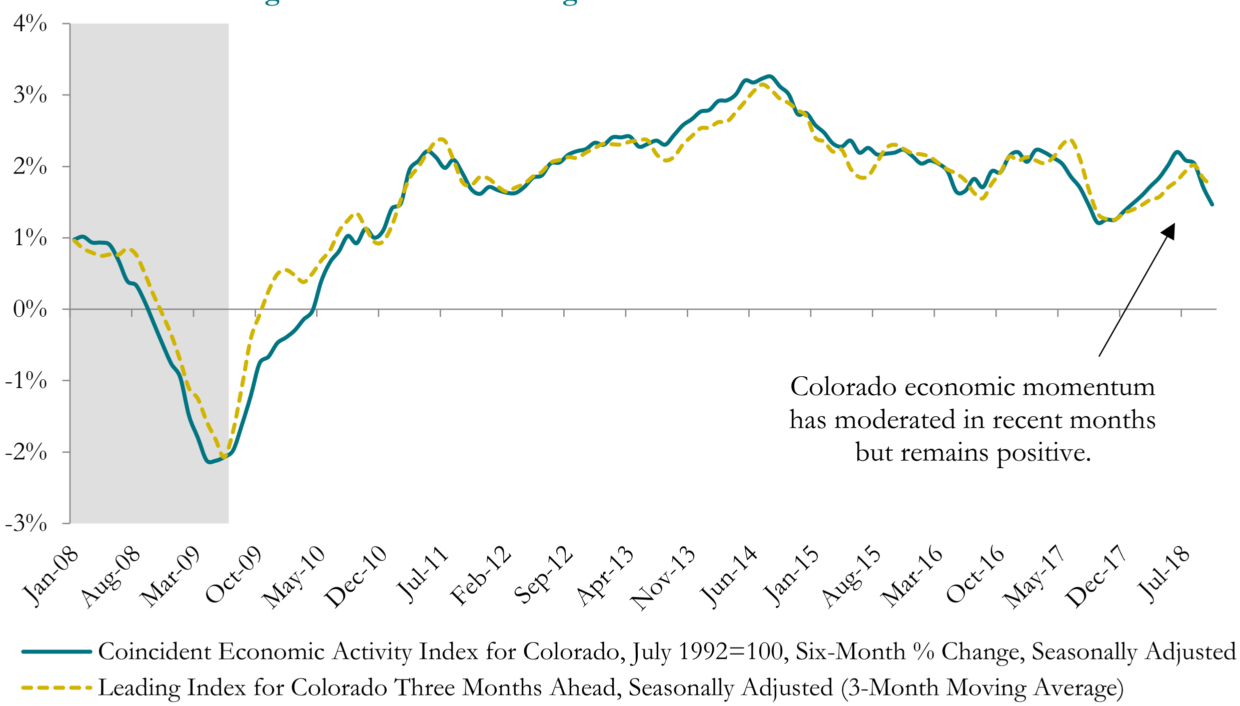
Colorado Economic Conditions

Indices that measure Colorado's economy show moderating growth in recent months – As shown in Figure 1, the Federal Reserve Bank of Philadelphia's monthly Leading Index for Colorado indicates moderating growth for Colorado's economy in the near term. The Leading Index combines economic indicators found to precede changes in overall economic momentum. These include housing permits, initial unemployment insurance claims, and delivery times from vendors to producers.

Economic indices that measure broad economic activity show moderating growth for Colorado in recent months.

Another index of broad economic activity for Colorado shows that economic growth has lost some momentum but remains positive. The Federal Reserve Bank of Philadelphia's Coincident Economic Activity Index provides a broad, up-to-date measure of state economic activity and matches growth in a state's gross domestic product (GDP) over time. It combines 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. Movement in the Coincident Economic Activity Index is predicted by the Leading Index. To show this relationship, Figure 1 overlays the leading index (yellow dashed line), advanced three months ahead, with the coincident index (blue solid line).

Figure 1. Colorado Leading and Coincident Economic Indices



Source: Federal Reserve Bank of Philadelphia

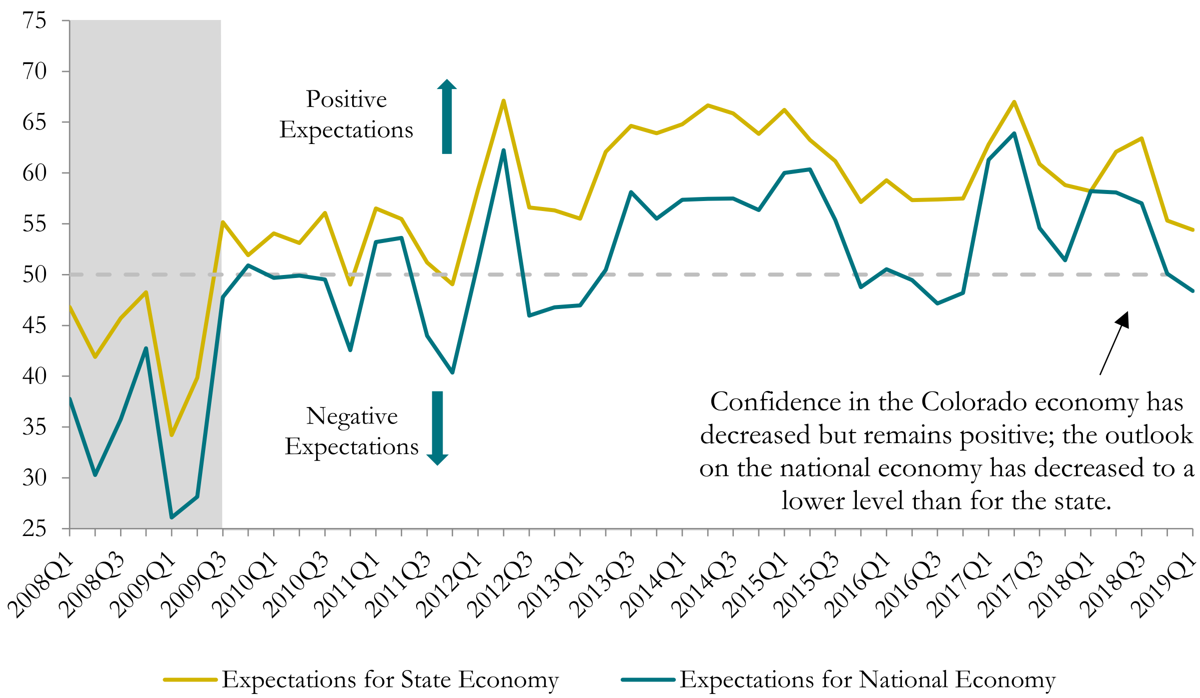
Businesses' expectations for the state economy remain positive, but businesses express less confidence in the national economy – The Leeds Business Confidence Index, published by the University of Colorado at Boulder's Leeds School of Business, measures business expectations for the two upcoming quarters. Figure 2 shows the index for business expectations for the overall state economy as well as for capital expenditures since the Great Recession and through the first quarter of 2019.

Businesses' expectations for the Colorado economy are cautiously optimistic.

Expectations for Colorado's economic growth have decreased in recent quarters but remain positive. Colorado has experienced strong employment and income growth in 2018, which is contributing to the optimistic expectations. Survey panelists are less confident in national economic conditions with this component of the index slipping below 50 in the first quarter of 2019, indicating negative expectations for the beginning of next year. Panelists have noted some relaxing of hiring requirements as qualified employees become increasingly difficult to find.

Expectations for the economy are a key factor for future performance. When expectations for the economy are positive, businesses are more likely to hire and invest, which in turn facilitates economic growth. The recent trend in the index suggests that economic growth will likely slow but will remain positive in the near term.

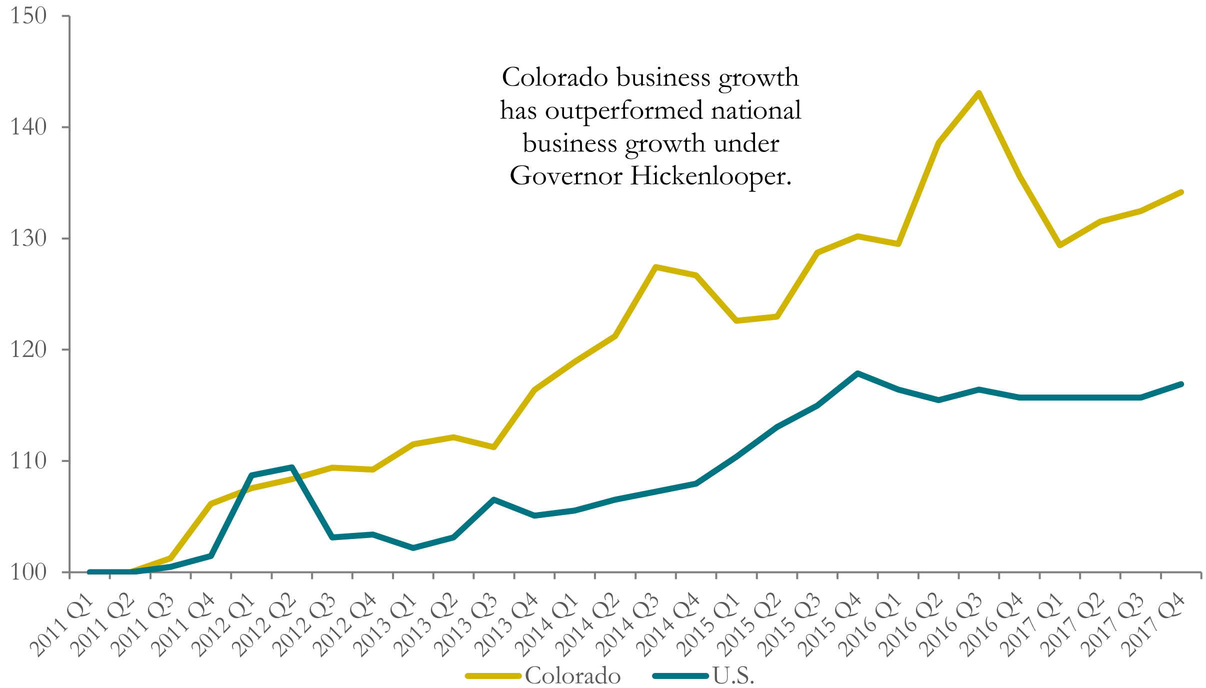
Figure 2. CU Leeds Business Confidence Index*



* Readings above 50 indicate positive expectations, with higher readings signifying greater business confidence, while readings below 50 represent negative expectations.
Source: CU Leeds School of Business, Business Research Division

Colorado business growth surpassed national growth under the Hickenlooper Administration **–** Colorado has been one of the best performing economies over the past eight years. The state experienced a faster economic recovery, supported by a diverse and highly skilled workforce and business-friendly environment. One of the Governor's priorities has been to make Colorado the best place to start and grow a business. As shown in Figure 3, Colorado has experienced a faster rate of new business formation than the U.S. overall since January 2011 and boasts the 8th highest growth rate in new business establishments during this time period.

Figure 3. New Business Growth, Indexed to Second Quarter 2011



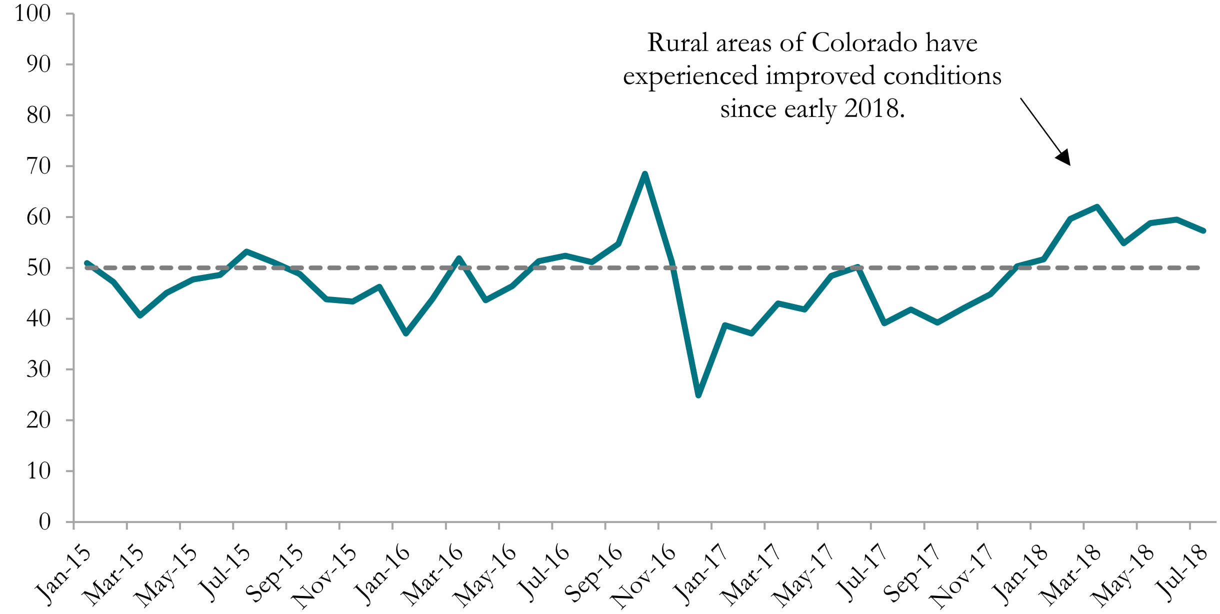
Seasonally Adjusted, Two-Quarter Moving Average
Index 100=2011 Q2
Source: U.S. Bureau of Labor Statistics

***Economic conditions in Colorado's rural areas continue to show improvement despite decreasing commodity prices* —** Colorado's rural economies, as measured by Colorado's Rural Mainstreet Index published by Creighton University, continued to experience improved economic conditions in October, as shown in Figure 4. The index measures economic activity in rural areas by surveying community banks on current and expected future economic conditions. Index readings above 50 signify growth.

Colorado's agriculture sector continues to weather weak commodity prices.

The index climbed to a 16-month high of 59.6 in February but has since declined with a reading of 54.6 in October. Rural economies have generally experienced positive hiring conditions, which posted a reading of 65.7 in the latest month, while low agriculture prices continue to constrain further growth. The farmland prices index registered a dismal 35.1 in October, as increased supply expectations and U.S. trade policy pushed down prices. Lower farm income has increased demand for farm loans, which experienced the fastest growth since the second quarter of 2016. In September, the U.S. Department of Agriculture began a $12 billion subsidy program to assist farmers affected by the trade dispute. Some of the largest product recipients of that program include hogs and dairy, which should help some Colorado farmers.

Figure 4. Colorado's Rural Mainstreet Index



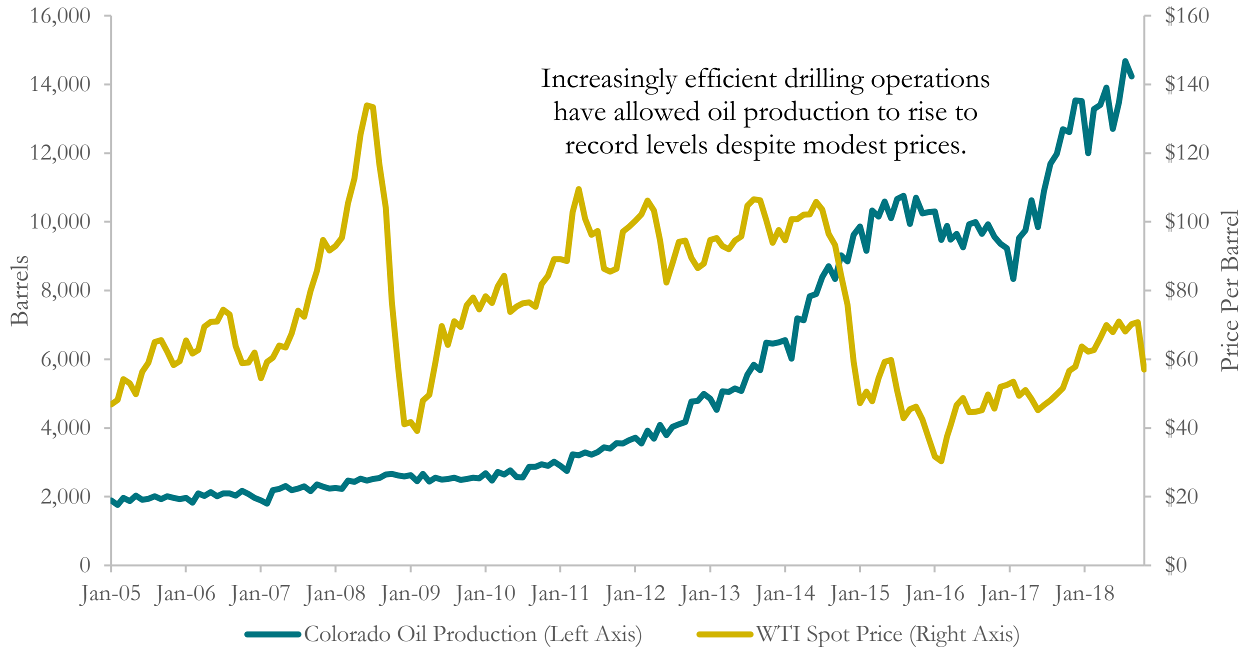
Source: Creighton University

Colorado oil production remains at record levels despite a drop in prices – Colorado oil production was at its highest level on record in August despite muted oil price growth during that time period, as seen in Figure 5. New drilling techniques have made oil production more efficient, allowing oil drillers to increase production and remain profitable even at lower price levels. In the third quarter of 2014, regional oil prices averaged more than $95 per barrel, while producers reported needing a price of at least $79 per barrel to remain profitable, on average. Four years later, oil prices averaged less than $70 per barrel, but producers reported profitability at only $55 per barrel, on average. Monthly production increased by 70 percent over that period despite a 30 percent decline in prices.

Oil pipeline and processing capacity is expected to increase in 2019 and 2020, allowing continued growth in Colorado oil production despite the recent decline in oil prices.

Since early October, the price for West Texas Intermediate has fallen from around $70 per barrel to around $50 per barrel. The decline was primarily driven by expectations of increased oil supply, as the U.S., Saudi Arabia, and Russia – the world's three largest oil producing nations – are all at record production levels. At the same time, demand expectations have declined due to slower global economic growth. Despite these lower prices, Colorado oil production is expected to remain positive, as infrastructure constraints have caused producers to increase output more slowly than market conditions warranted. These infrastructure constraints are expected to ease in 2019 and 2020 as more pipeline and processing capacity comes online.

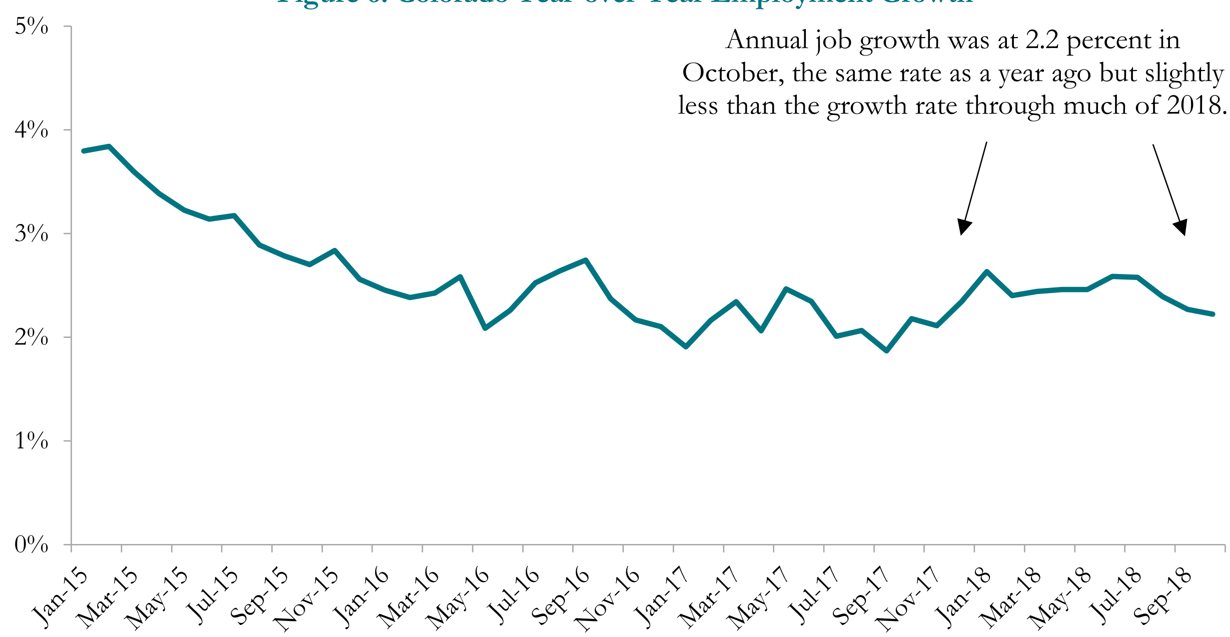
Figure 5. Colorado Oil Production and Prices



Source: U.S. Energy Information Administration

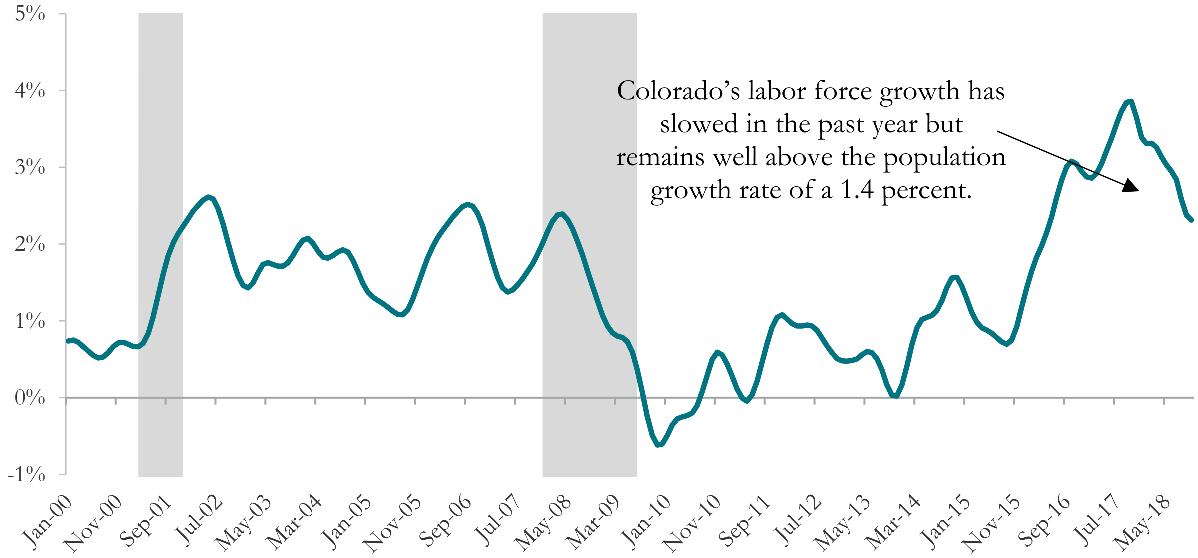
Higher Colorado labor force participation rates have supported continued job growth despite a tighter labor market – Colorado's year-over-year job growth was 2.2 percent in October, the same rate as a year ago, as seen in Figure 6. Employment has continued to increase as more workers enter the labor force. The labor force in Colorado has grown by 2.3 percent over the last year, as shown in Figure 7, while the population has grown by only 1.4 percent. This robust labor force growth is expected to slow in coming years to a rate slightly less than population growth, with lower employment growth anticipated as well.

Figure 6. Colorado Year-over-Year Employment Growth



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

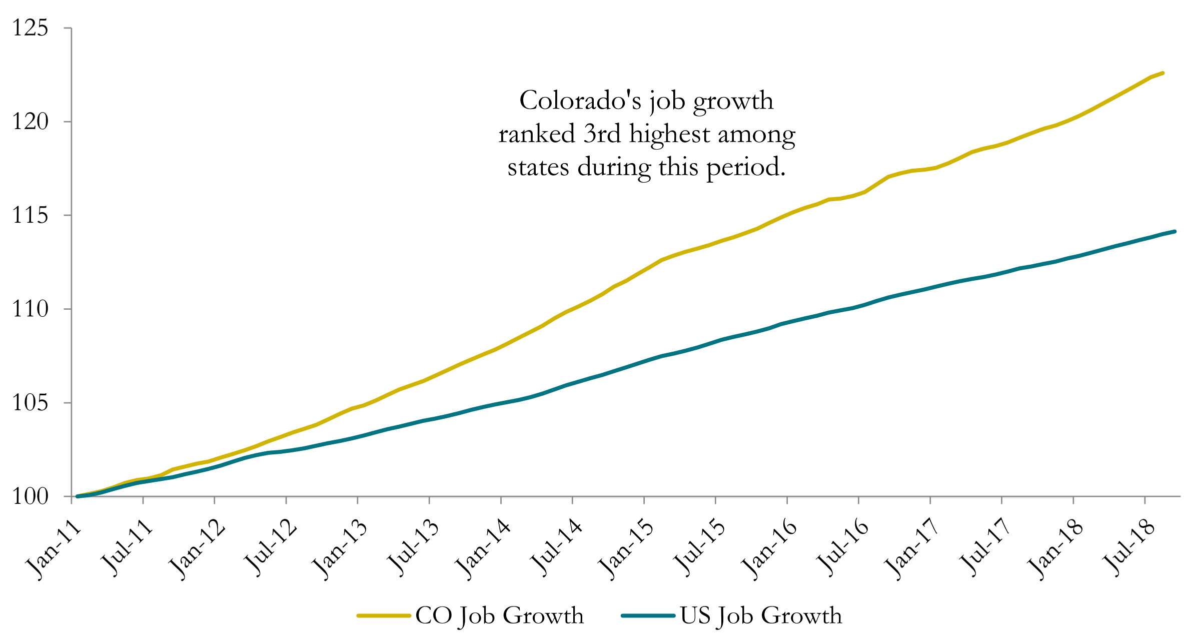
Figure 7. Colorado Year-over-Year Labor Force Growth



Source: U.S. Bureau of Labor Statistics

Colorado's labor market has grown significantly faster than national employment under the Hickenlooper Administration – Colorado's labor market recovered faster than the U.S. average from the high unemployment experienced during the Great Recession. The state's job growth ranked 3rd among all states during this time period, while the unemployment rate sank to the lowest rate in the nation in recent years. New business activity has been a main reason for Colorado's strong employment growth and robust economic performance.

Figure 8. Colorado and U.S. Job Growth, Indexed to January 2011



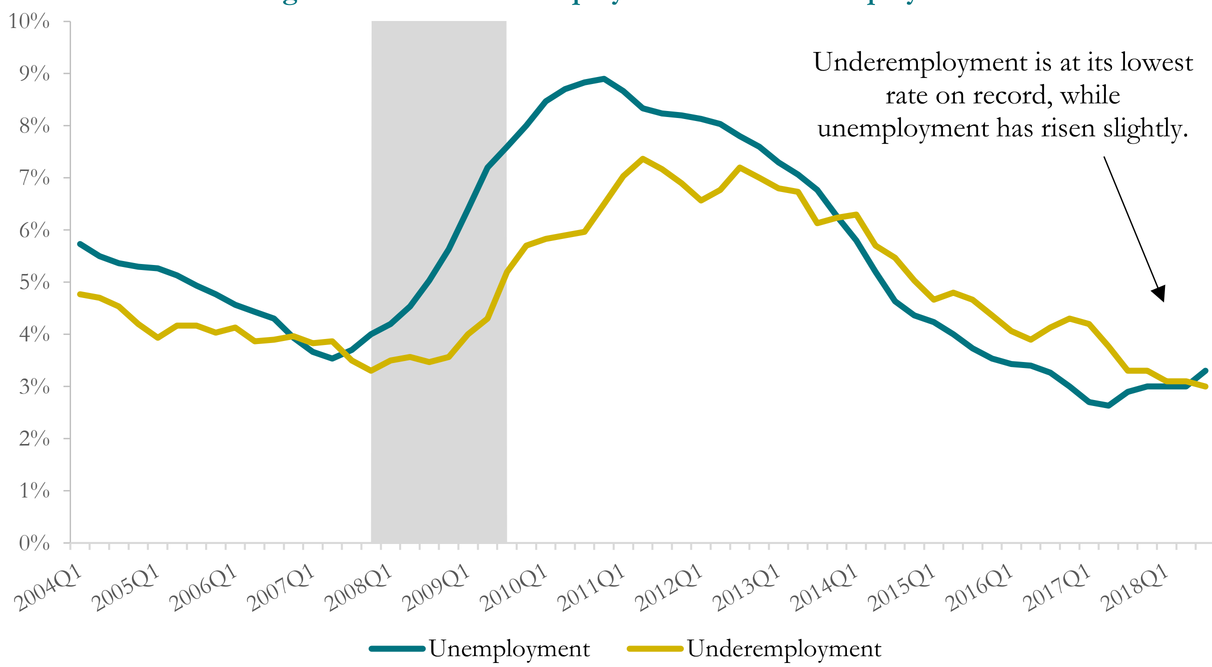
The graph compares the change in the number of jobs nationally and in Colorado since January 2011 using a three month moving average.
Index: January 2011=100
Source: U.S. Bureau of Labor Statistics

Colorado's unemployment rate has risen slightly as more workers enter the labor force, while underemployment continues to decline – The unemployment rate in Colorado rose to 3.2 percent in October, continuing to rise slightly from its 2018 low of 2.7 percent in June as the size of the labor force continues to grow faster than employment. Despite the recent increase in the unemployment rate, underemployment continues to fall.

While Colorado unemployment has ticked up, underemployment continues to decline, hitting a record low of 3.0 percent in the year leading up to the third quarter of 2018.

A useful measure of underemployment is the difference between the "U-3" rate and the "U-6" rate. The U-6 rate is a measure of unemployment that also counts individuals who would like to work but have not looked for a job in the prior four weeks, along with part-time workers who would like full-time employment. The difference between the U-3 rate and the U-6 rate was at 3.0 percent in the 12 months leading up to the third quarter of 2018, below the pre-recession low of 3.3 percent in 2007.

Figure 9. Colorado Unemployment and Underemployment



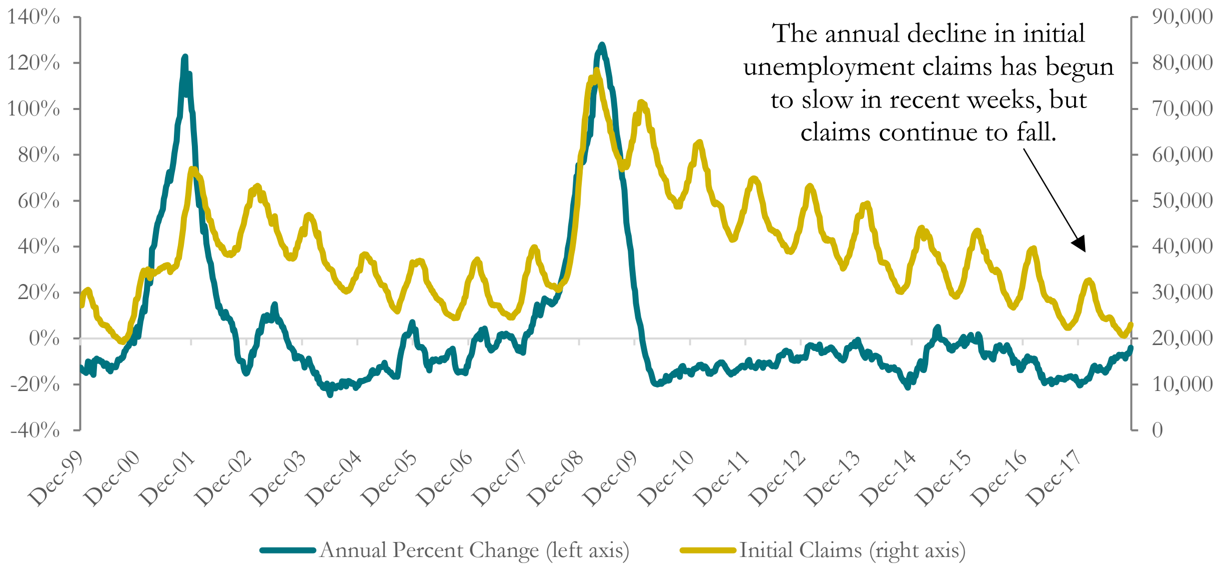
Source: U.S. Bureau of Labor Statistics

Initial claims for unemployment are still near historical lows, but year-over-year declines have begun to slow — Initial claims for unemployment benefits averaged 2,079 per week in November, a slight decline from the 2,170 average weekly claims in November 2017. Rising initial unemployment claims are often considered an early indicator of economic slowing as businesses begin to lay off workers in response to falling demand. This typically occurs before most other major economic indicators begin to reflect weaker conditions.

Initial claims for unemployment benefits began leveling out in recent months after experiencing years of substantial annual declines.

Data from the Colorado Department of Labor and Employment indicates that the year-over-year decline in initial claims for unemployment has begun to slow. This leveling out reflects Colorado's tight labor market. However, a sustained year-over-year increase in initial claims could signal weakening economic conditions.

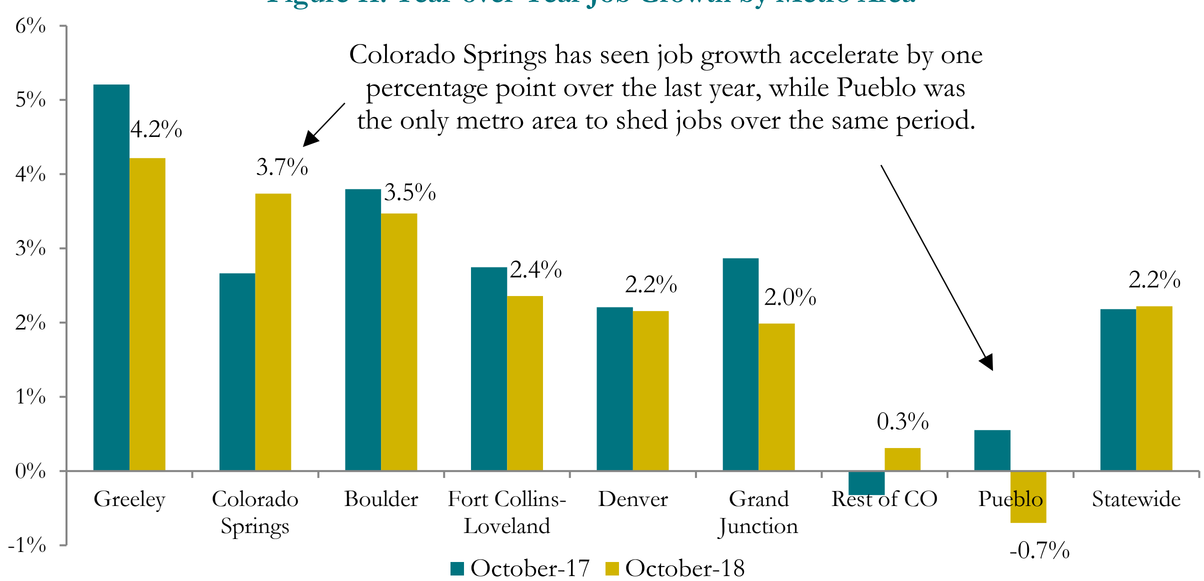
Figure 10. Colorado Initial Unemployment Claims, 13-Week Moving Average



Source: Colorado Department of Labor and Employment

Most parts of Colorado experienced moderating job growth over the last 12 months – Among metro areas, Greeley has experienced the most job growth over the past 12 months, increasing 4.2 percent, reflecting continued growth in the energy industry. Colorado Springs and Boulder each experienced growth above 3 percent. Pueblo was the only metro area to shed jobs over the last 12 months. Most metro areas experienced slower job growth in the last 12 months than in the year before, as seen in Figure 11.

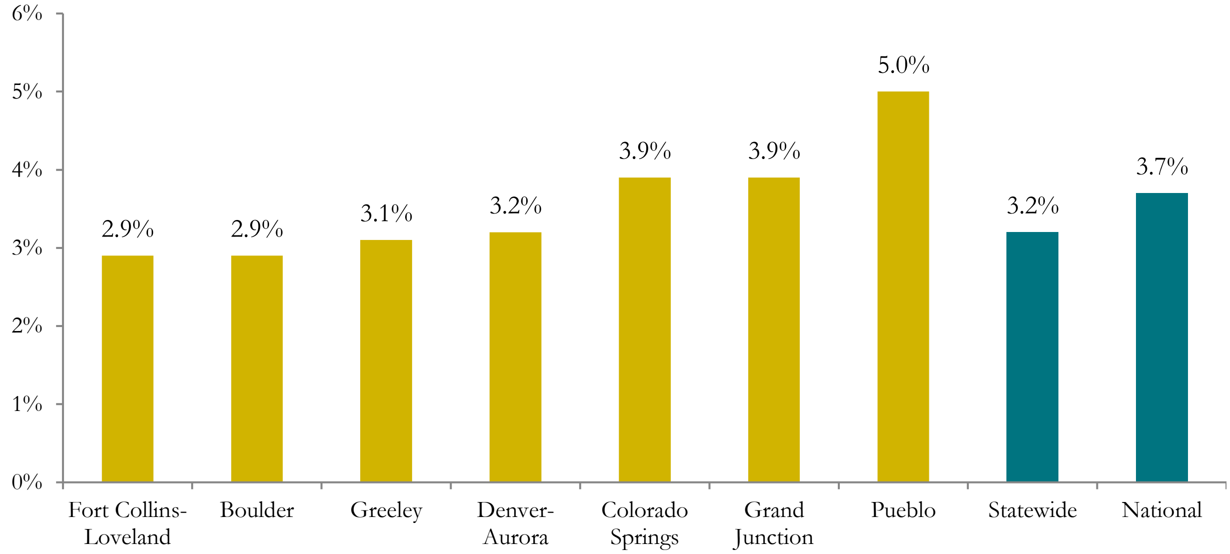
Figure 11. Year-over-Year Job Growth by Metro Area



Source: Colorado Department of Labor and Employment modified estimates

Pueblo also had the highest unemployment rate in October at 5.0 percent, and is the only metro area with an unemployment rate above 4.0 percent. Fort Collins and Boulder have the lowest unemployment in the state, with rates below 3.0 percent, while Greeley and Denver have unemployment rates below the national average of 3.7 percent.

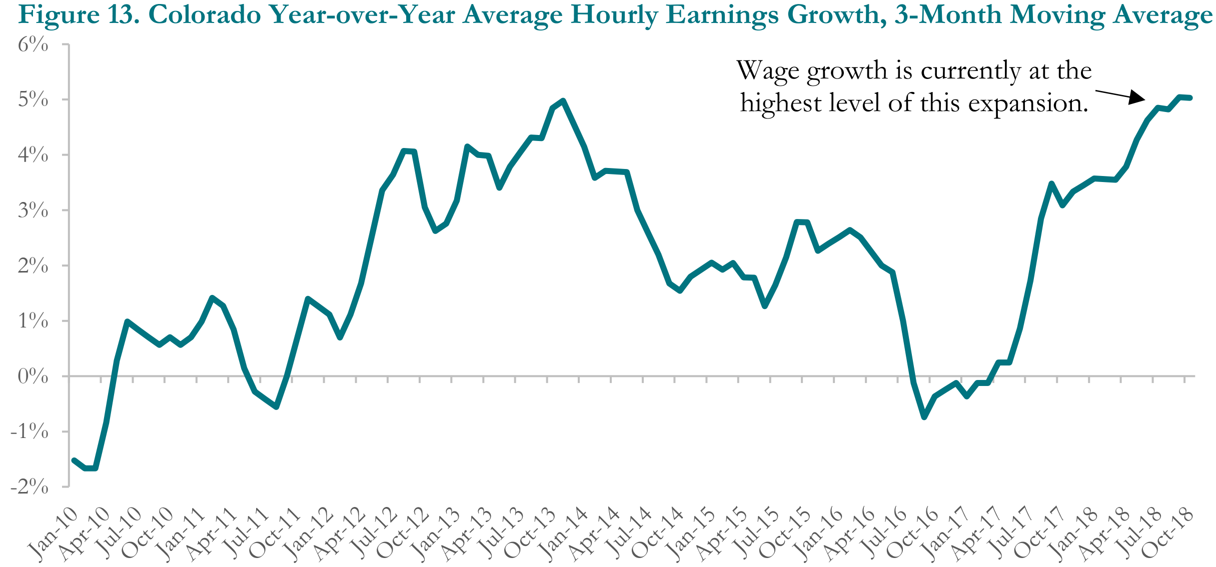
Figure 12. Unemployment Rates by Metro Area, October 2018



Source: U.S. Bureau of Labor Statistics

Colorado wage growth continues to exceed inflation – The 3-month average of Colorado's year-over-year average hourly wage growth remained at 5.0 percent in October and has been above 3.0 percent for more than a year. This increase is due to the state's acceleration in economic growth over this period as well as the lack of available workers. As employers struggle to fill positions, they often need to raise wages in order to recruit and retain employees.

Figure 13. Colorado Year-over-Year Average Hourly Earnings Growth, 3-Month Moving Average



Source: U.S. Bureau of Labor Statistics

U.S. and Colorado housing markets have slowed in recent months, but new construction and price growth are expected to continue – U.S. and Colorado housing prices continued to accelerate to new highs in the third quarter, but sales growth has slowed in recent months as mortgage interest rates rise. As shown in Figure 14, the U.S. Federal Housing Finance Authority's House Price Indices indicate that home values have been growing in the U.S. and Colorado since 2011. This is due to increased demand amidst low housing inventory and record-low interest rates. As interest rates rise, buyers are facing reduced affordability, which is slowing demand, especially in high home price areas. Potential buyers are choosing to remain in rental housing for longer periods, while trade-up buyers are opting for renovations and remodels rather than relinquish their low-rate mortgage.

Although mortgage rates remain at historically low levels, greater student loan debt combined with higher housing prices have discouraged some potential buyers from entering the market – a situation that is not likely to change in the near term. U.S. new home sales fell 8.9 percent in October, despite a 1.1 percent decrease in the median price. U.S. existing home sales are down 5 percent compared to the same period the prior year. U.S. homebuilders are reporting weaker sentiment as buyers pause, resulting in an 8 point loss in November in the National Association of Home Builders/Wells Fargo Housing Market Index. Sentiment is now at the lowest level since August 2016, but remains well above the 50 mark that is considered positive, with a raw score of 60.

At the national level, price increases for existing homes have moderated to just 4.4 percent year-over-year but remain higher than wage growth. In Colorado, housing prices are expected to continue to increase in 2019, though at a slower rate of 6.8 percent, while sales are expected to fall 6.7 percent. Realtor.com attributes the continued run up in prices to trade-up buyers, as entry-level buyers sit out of the market.

Figure 14. Colorado and U.S. Housing Price Index and 30-Year Fixed Rate Mortgage

Source: U.S. Federal Housing Finance Agency and Freddie Mac

U.S. Economic Conditions

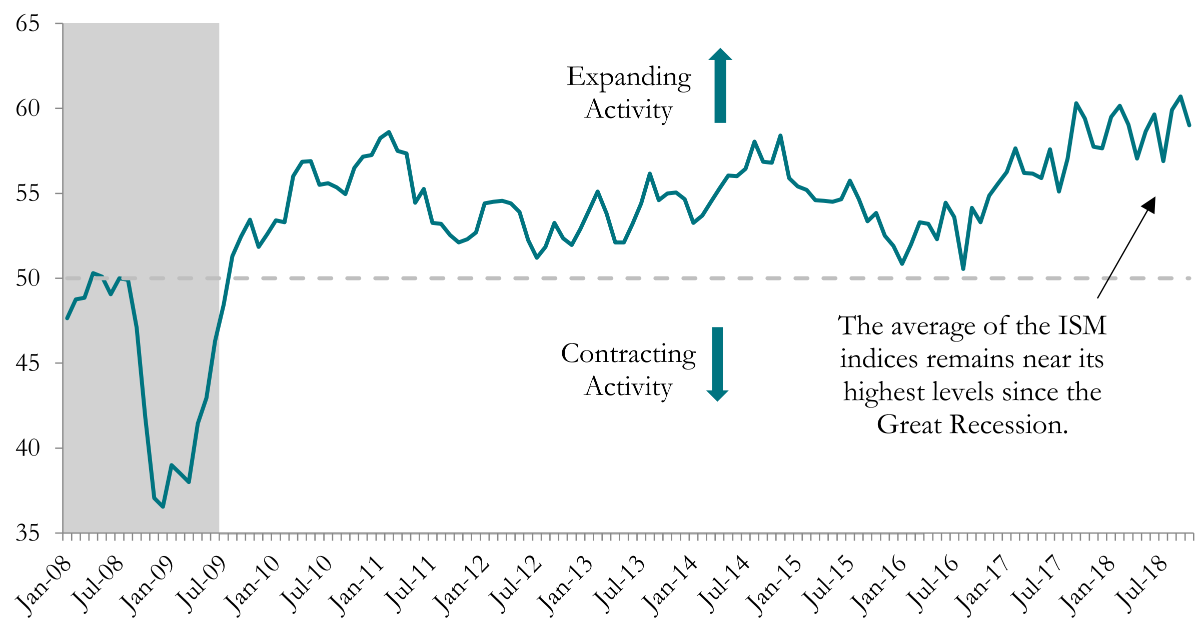
U.S. economic momentum remains strong, despite recent pessimism in financial markets – The average of the Manufacturing Composite Index and the Non-Manufacturing Composite Index, both published by the Institute for Supply Management (ISM), remained at the highest levels of the current expansion in October after reaching a post-recession peak in September at 60.7. The indices capture the momentum of economic activity as assessed by businesses across the country and in most industries. These 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. An average of the two indices, reported in Figure 15, provides a reliable barometer of overall U.S. economic activity. In October, the most recent month of data available, both the manufacturing and non-manufacturing sectors experienced continuing expansion.

The ISM manufacturing index shows continued production growth and ongoing confidence in the U.S. economy.

The Non-Manufacturing Composite Index tracks the largest portion of economic activity in the U.S., covering wide-ranging industries such as agriculture, professional, scientific, and technical services, retail, and construction. This Index registered 60.3 in October, representing 105 consecutive months of growth. A reading above 50 indicates improving conditions. Survey respondents continue to be concerned about capacity constraints, logistics, and tariffs, but they expressed confidence in business conditions and the economy.

The ISM manufacturing sector index registered 57.7 in October, representing a slight decline from September. Of the 18 manufacturing industries surveyed, 13 reported growth in production activity from the prior month. The four industries reporting a contraction include manufacturers of wood products, primary metals, nonmetallic mineral products, and fabricated metal products. Those surveyed noted that supplier labor issues and transportation continue to serve as bottlenecks to production, but at "more manageable levels". Multiple respondents noted concerns that tariffs are inflating materials costs.

Figure 15. Average of 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

Financial markets are signaling expectations of slower economic growth **—** U.S. financial markets have been volatile in recent months, with declining equity values, lower commodity prices, and decreasing long-term interest rates. Financial indicators appear to be signaling expectations of slower economic growth as the Federal Reserve reduces monetary support for the economy.

Figure 16 shows trends in key financial indicators that tend to be associated with future economic growth – the S&P 500 stock market index, 5-year Treasury inflation-protected securities (TIPS) spreads, copper prices, 3-month Treasury bill yields, 2-year Treasury yields, the U.S. dollar index, and oil price futures.

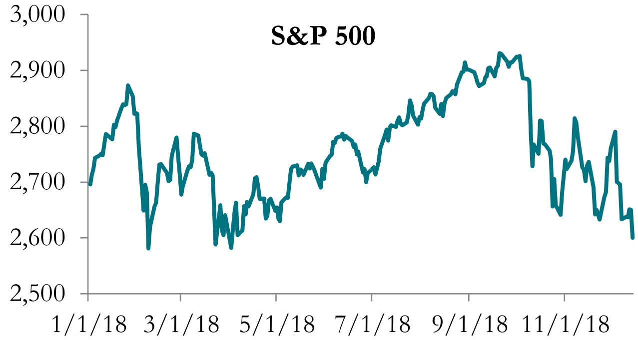
Financial markets are volatile, generally signaling expectations for slower economic growth. Expectations are an important factor in how the economy will actually perform.

The combination of lower equity values and lower commodity prices, along with declining interest rates, suggests slower economic growth going forward. While real economic activity appears to be stable, recent trends in financial markets add a note of caution to the outlook. However, these signals can change quickly based on new information and updated assessments on the expected path of the economy.

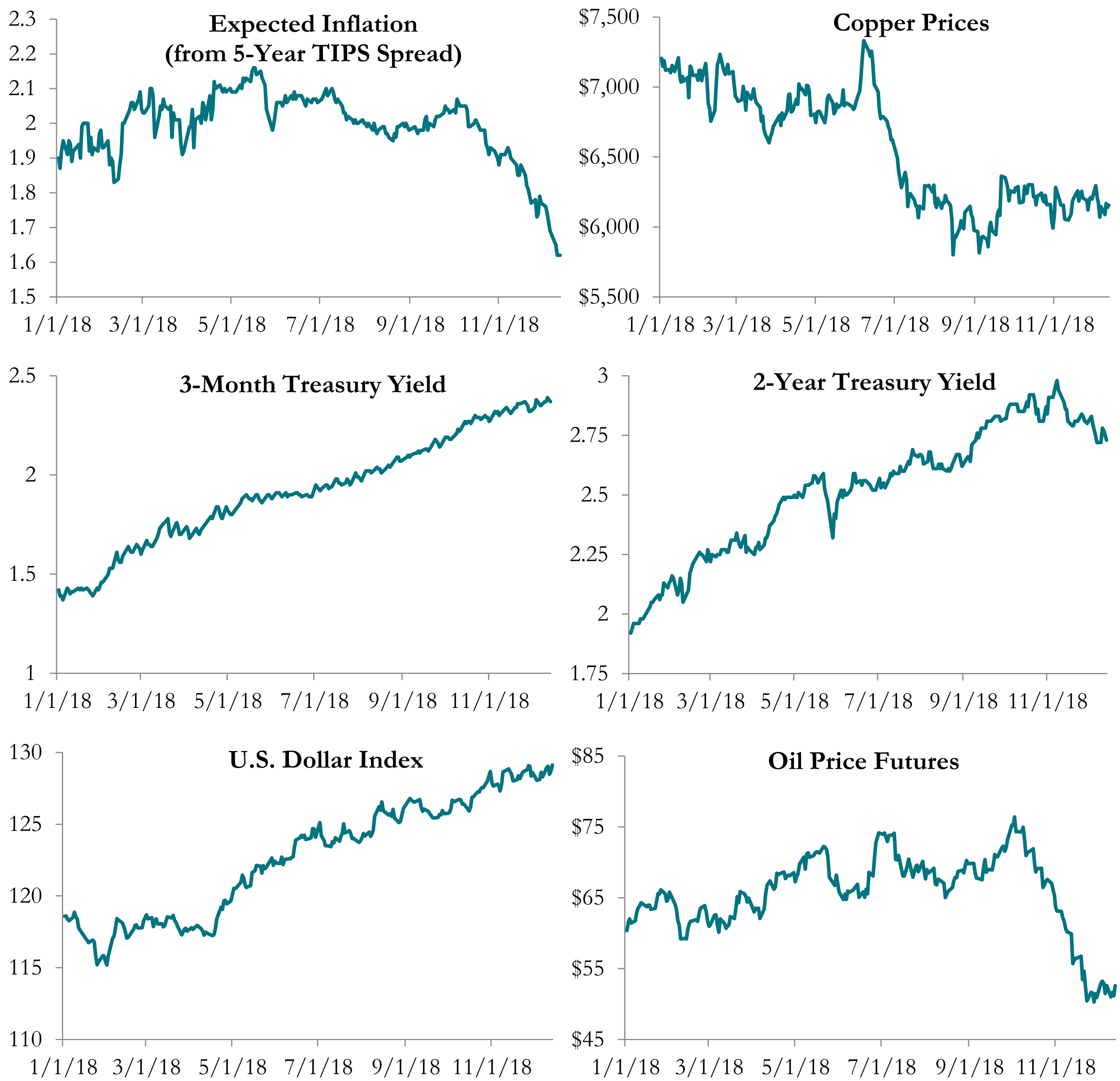
OSPB utilizes financial market information to help inform its forecast. Financial markets are forward-looking, reflecting expectations for the future path of the economy **—** which are an important factor in determining how the economy will actually perform. In addition, financial conditions determine businesses' access to funding to meet their needs for operations and expansion. Further, financial markets incorporate sound forecasting principles. They reflect the many different perspectives of investors and risk managers who are evaluating a large amount of information, and are powerful aggregators of information on the condition of the economy. Moreover, financial market indicators are continually updated based on new information, and investors have a financial incentive to make accurate assessments.

There are concerns that monetary policy, which can exert a large influence on economic conditions, may become too restrictive to support continued expansion **—** Indications from financial markets can also be used to determine the appropriate stance of monetary policy. Monetary policy can have a large influence on economic conditions by helping ensure a stable flow of money in the economy and by setting expectations for future growth. The U.S. Federal Reserve raised its target for the federal funds rate three times so far in 2018, and at print time was expected to raise target interest rates a fourth time at their December meeting. The Federal Reserve has also signaled that additional rate increases are likely, depending upon future economic data. Tightening financial conditions amidst these recent monetary policy changes indicate that the expected path of monetary policy may be too restrictive given anticipated economic conditions.

Figure 16. Key Financial Market Indicators on Expectations for Economic Growth, Daily since January 2018



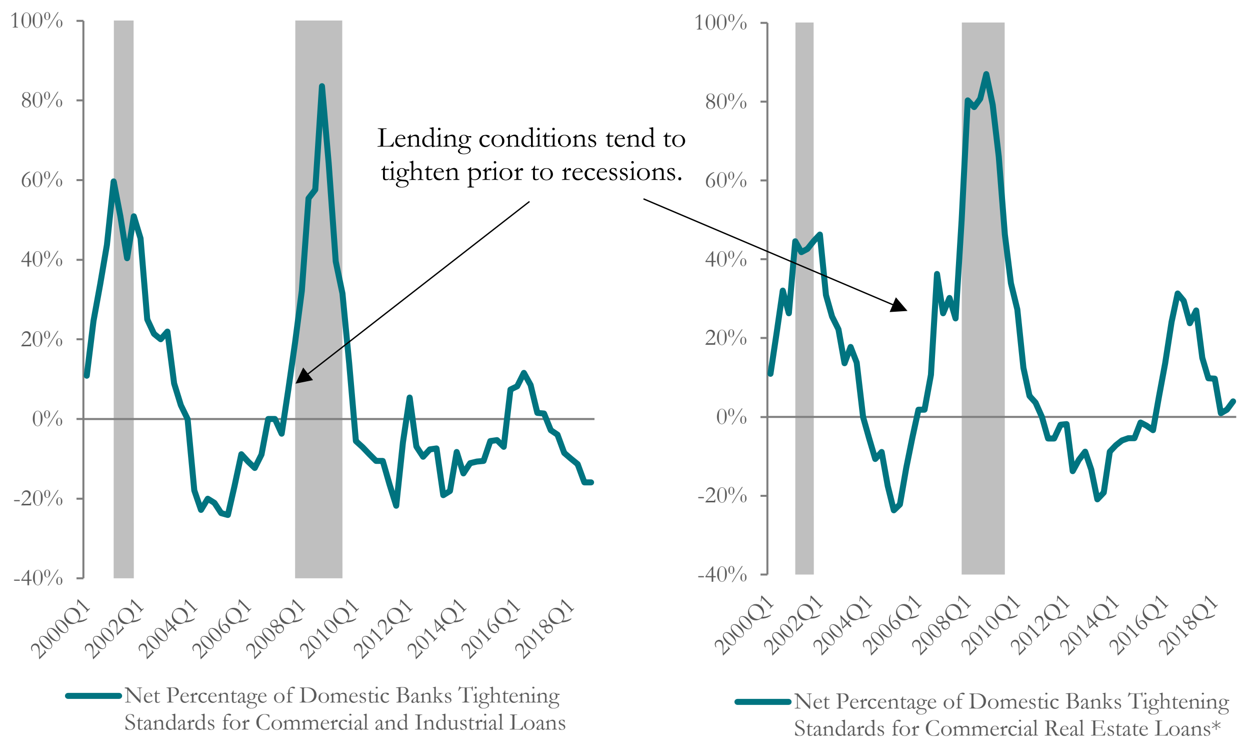
Trends in equity values and commodity prices currently signal expectations for slowing growth in the economy, though interest rates and the U.S. Dollar's value continue to rise. Combined, these indicators can be reliable predictors of future economic activity.



Source: Board of Governors of the Federal Reserve System and Bloomberg

Lending standards continue to loosen for business operations and are neutral for commercial real estate **—** Lending standards for business operations overall have continued to loosen since the middle of 2016. This indicates that lenders see more positive growth prospects and less risk for businesses, which will help fuel continued expansion. Lending standards for commercial real estate development, however, have been tightening since 2015 and have recently returned to neutral. This tightening has recently abated and, in the last two quarters, almost as many banks have loosened lending standards for commercial real estate as have tightened them. Lending standards are important to monitor to assess economic conditions and the prospects for continued growth. They provide information on the economic expectations of banks and risk assessment managers as well as the availability of funding for businesses. Bank lending standards for commercial operations and real estate loans are shown in Figure 17.

Figure 17. Measures of Commercial Lending Conditions



*Data on lending standards for commercial real estate loans overall was discontinued in 2013, thus the data in the figure starting in the last quarter of 2013 represent an average of bank lending standards for loans with construction and land development purposes, loans secured by nonfarm nonresidential structures, and loans secured by multifamily residential structures.

Source: Board of Governors of the Federal Reserve System

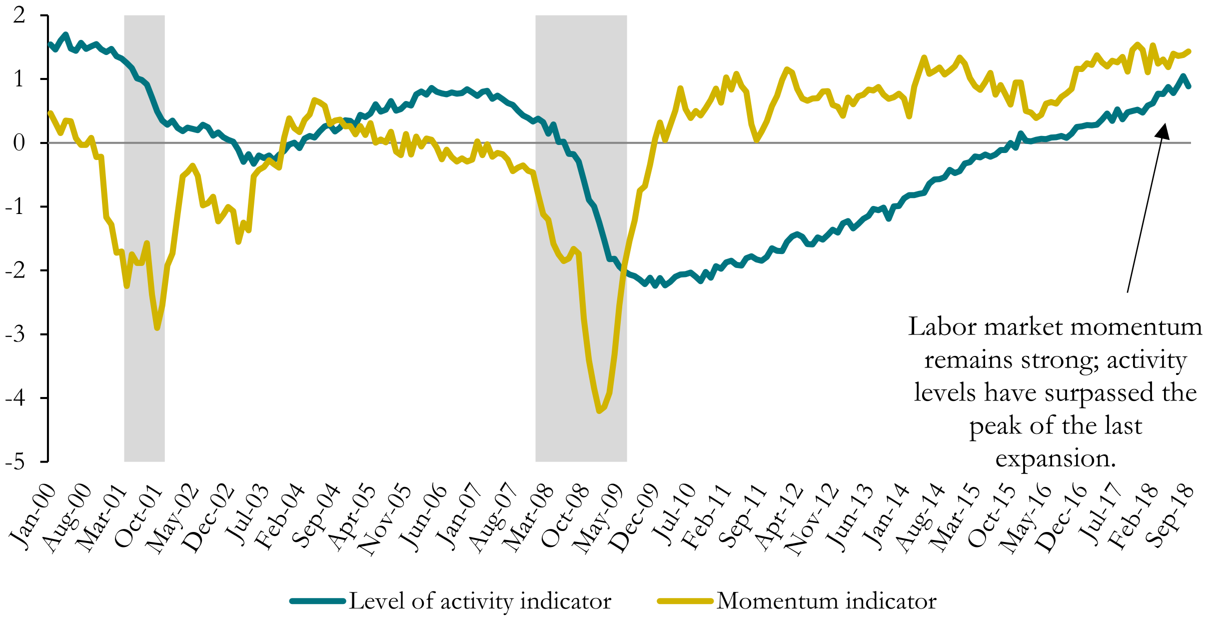
Strong labor market momentum continues to benefit from historically low unemployment and stabilizing labor force participation.

Labor market momentum continues at robust levels as the economy continues to expand **–** The official U.S. unemployment rate – known as the "U-3" rate – fell to an historical low of 3.7 percent in September and remained at that level through November. The low unemployment rate indicates the U.S. labor market is nearing full employment, or the level of employment that can be sustained without causing increased inflation.

The Federal Reserve Bank of Kansas City tracks labor market conditions with a proprietary index measuring both momentum and activity levels. The momentum index measures how rapidly conditions are improving compared to their historical average, while the level of activity index measures how far labor market conditions are from their historical average. The index shows that labor market momentum has continued at the highest levels experienced under the current expansion. This momentum is fueled by ongoing decreases in initial claims for jobless benefits and a stabilizing labor force participation rate following a long period of decline.

In Figure 18 below, positive values indicate that labor market conditions are above their long-run average, while negative values indicate that conditions are below their long-run average.

Figure 18. Kansas City Fed Labor Market Conditions Indices

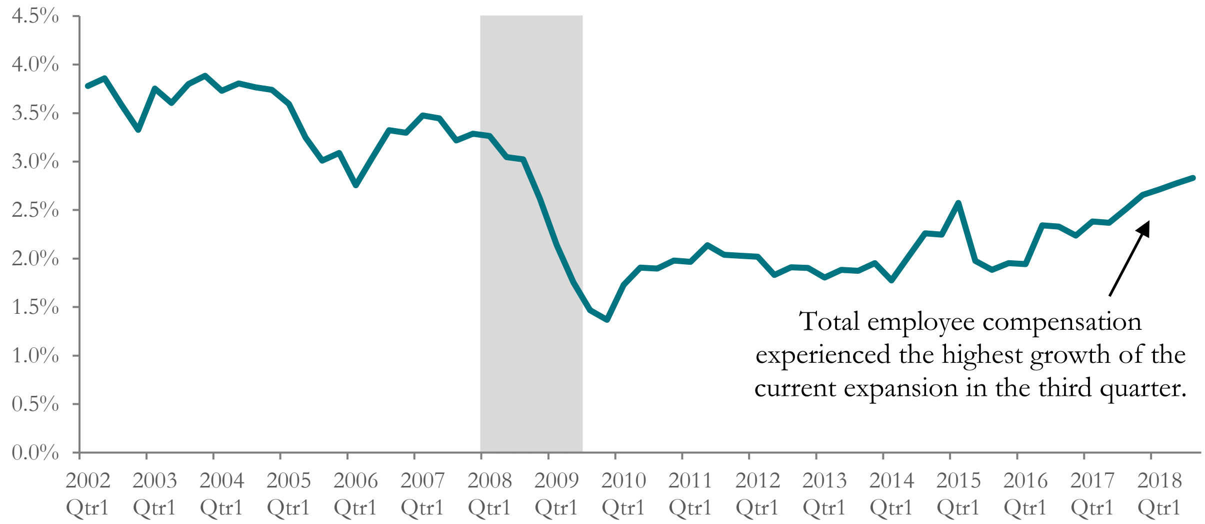


Source: Federal Reserve Bank of Kansas City

> **Growth in total employee compensation in the third quarter was at the highest level since the Great Recession.**

Employee compensation continued to increase in the third quarter, driven primarily by stronger wage and salary growth – The Employment Cost Index, which is the U.S. Labor Department's broadest measure of employee compensation, showed continued growth in the third quarter, led by the strongest year-over-year increase in wage and salary growth since 2008, increasing 2.9 percent over the prior year. Benefits grew 2.6 percent in the third quarter, leading to a third-quarter gain in total compensation of 2.8 percent over the year. The Employment Cost Index provides a snapshot of labor costs for businesses and, as such, can be an early indicator of potential future price inflation.

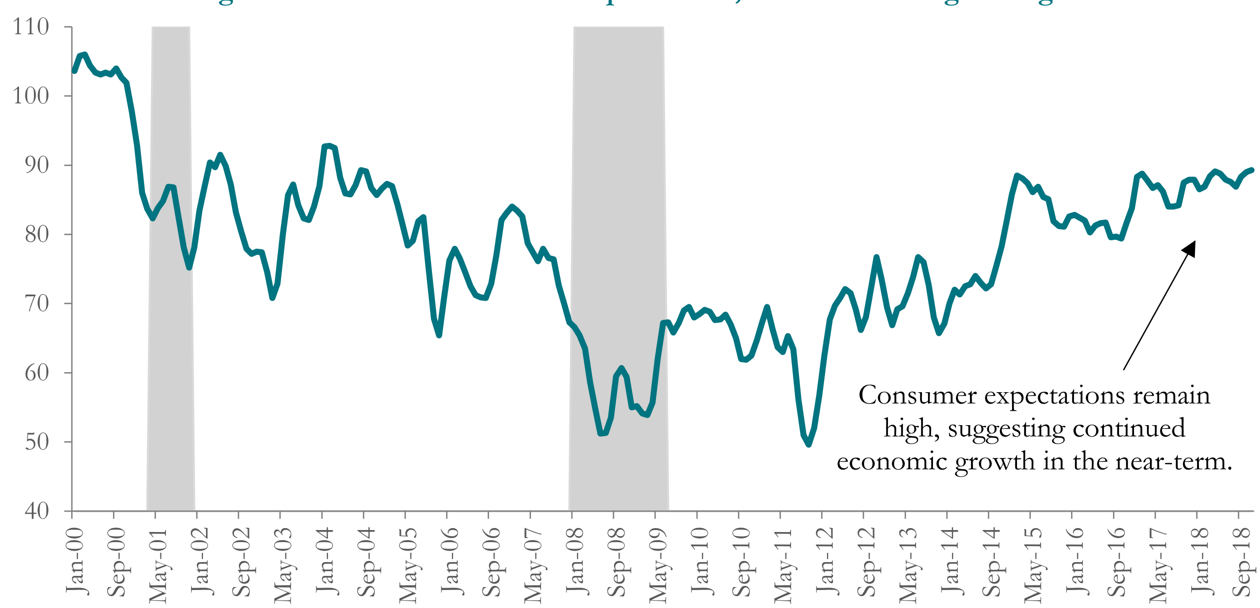
Figure 19. Employment Cost Index, Year-Over-Year Change



Source: U.S. Bureau of Labor Statistics

Consumer confidence remains high with steady growth – As shown in Figure 20, the Michigan Index of Consumer Expectations shows continued consumer optimism about the economy, as consumer expectations on income and employment growth remain positive despite pessimistic expectations of higher inflation and interest rates. Consumer expectations in 2018 are on pace for their best year since 2000. In November, the index's 3-month moving average reached a new post-Great Recession peak at 89.3. Since consumer spending represents the largest component of gross domestic product (GDP), strong consumer confidence in the U.S. economy suggests continued economic growth in the near term.

Figure 20. Index of Consumer Expectations, 3-Month Moving Average



Source: University of Michigan

***Corporate profits experienced continued growth in the third quarter*—** According to the U.S. Commerce Department, U.S. corporate pre-tax profits increased by 3.4 percent in the third quarter, one of the strongest quarter-over-quarter growth rates since 2014. After-tax profits increased 3.3 percent, a slight increase from the second quarter, but significantly less than the robust growth seen in the first quarter of 2018. According to the *Wall Street Journal*, third-quarter corporate earnings grew 24 percent from a year earlier, near the strong growth of the prior two quarters. This was largely a result of the 2017 federal tax law changes, which lowered corporate income tax rates and allowed more accelerated expensing of equipment and other purchases. However, analysts are predicting a slowdown in earnings growth to 6 percent in each of the first two quarters of 2019 as the impact of the tax law fades.

Strong and stable economic growth pushed up corporate earnings in the third quarter.

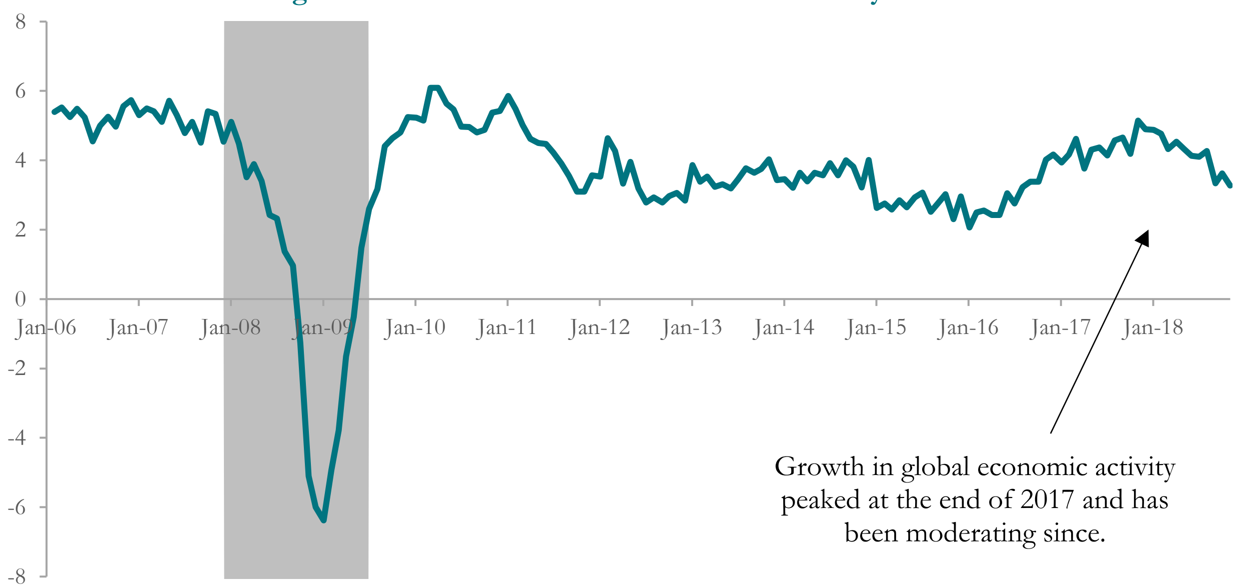
International Economic Conditions

***Global economic growth is slowing* –** In October, the International Monetary Fund (IMF) reduced its forecast for global economic growth from 3.9 percent to 3.7 percent for both 2018 and 2019. This reduction was due to the impacts of trade policy and uncertainty, especially with respect to the ongoing U.S. tariffs and trade disputes and the negotiations surrounding the United Kingdom's pending exit from the European Union.

Global economic growth is expected to continue at a slower rate over the next few years.

In addition to these political risks, there are also concerns regarding a potential slowdown in China's economy. The moderating global economy is captured by the Goldman Sachs Global Current Activity Index, which is a measure of real-time economic activity, which indicates that current global economic growth is at its lowest level since 2016.

Figure 21. Goldman Sachs Global Current Activity Index

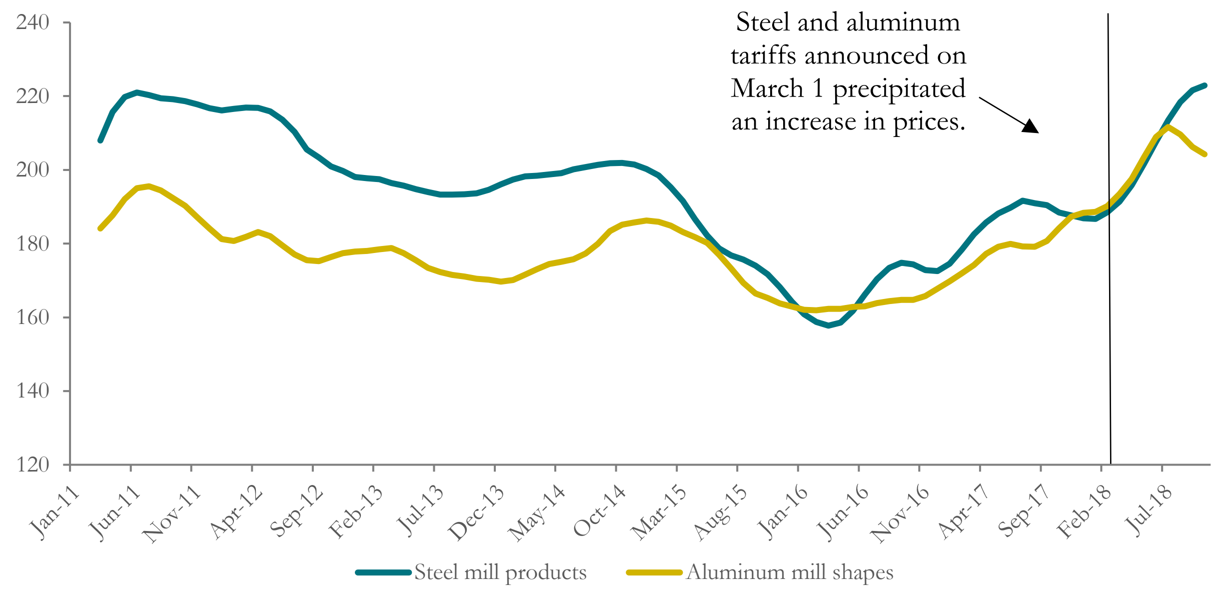


Source: Goldman Sachs

Construction labor and materials cost increases are reducing contractors' profits.

Steel and aluminum product prices climb following imposition of tariffs — Steel products have experienced double-digit price growth in each month since June, when U.S. tariffs on certain steel and aluminum products went into effect. Aluminum products also saw an acceleration in price growth during this period, though that increase has slowed in the most recent month. The price inflation for metals has led to higher input costs for construction, particularly in non-residential building and the extraction industry. The producer price index for final demand construction jumped 4.7 percent in October over the same period last year. Craft laborer shortages and higher diesel costs have added to the challenge faced by contractors. According to data provided by the Associated General Contractors of America, materials costs have been rising faster than bid prices, reducing contractors' profits.

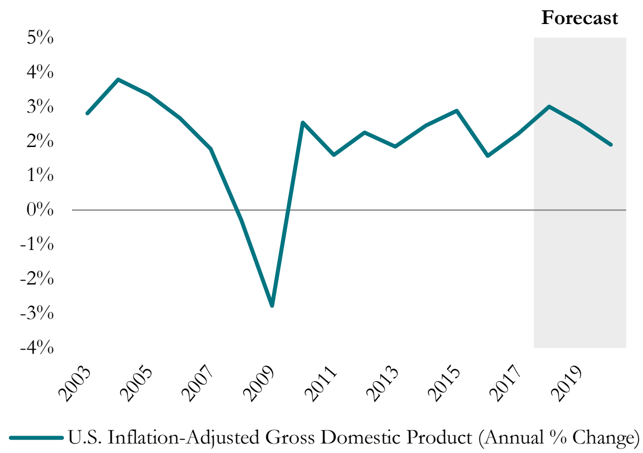
Figure 22. Producer Price Index for Steel and Aluminum Products, 3-Month Moving Average



Source: U.S. Bureau of Labor Statistics

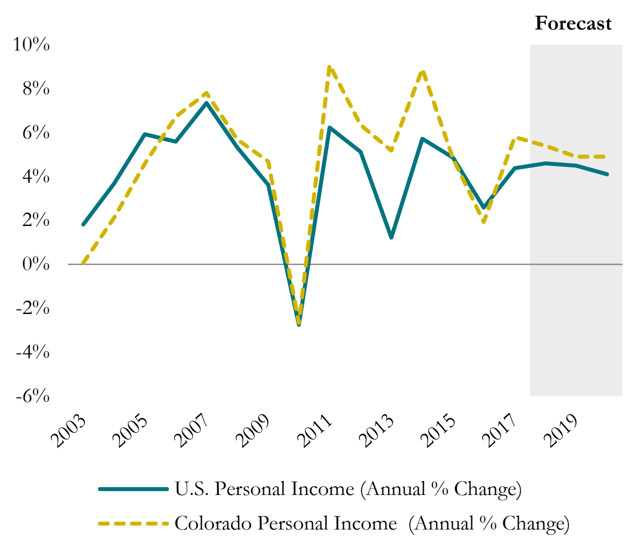
Summary of Key Economic Indicators
Actual and Forecast

U.S. Gross Domestic Product (GDP)



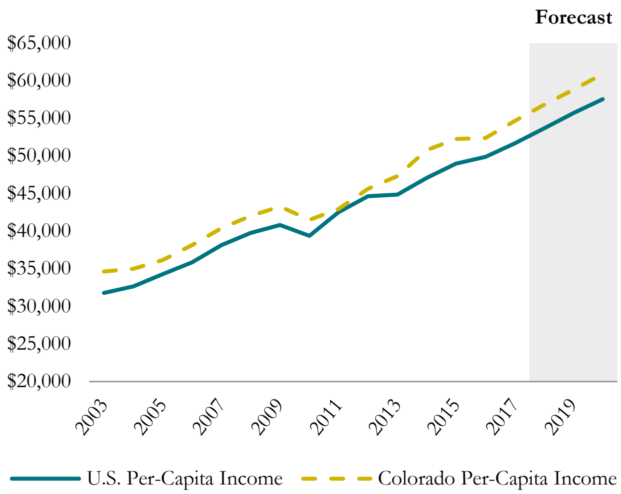
- GDP is a standard barometer for the economy's overall performance and reflects the value of final output produced in the U.S.
- The U.S. economy is expected to grow 3.0 percent in 2018 and 2.5 percent in 2019 as the economic expansion continues at a more moderate rate. GDP growth is expected to continue to decline in 2020 primarily due to slower labor force growth.

U.S. and Colorado Personal Income



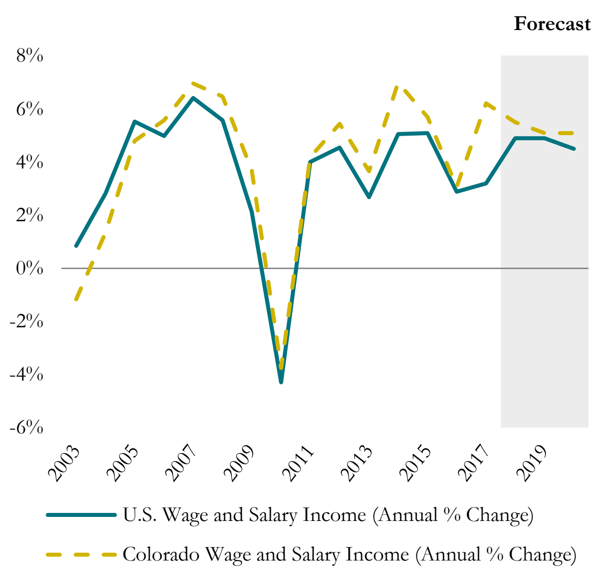
- Colorado personal income growth is expected to reach 5.4 percent in 2018, and then increase 4.9 percent in 2019 and 2020 as lower energy prices and a tighter labor market contribute to moderating economic growth.
- U.S. personal income growth is expected to rise to 4.6 percent in 2018 due to continued job and wage growth, before slowing to 4.5 percent in 2019 and to 4.1 percent in 2020 as national labor market growth moderates.

U.S. and Colorado Per-Capita Income



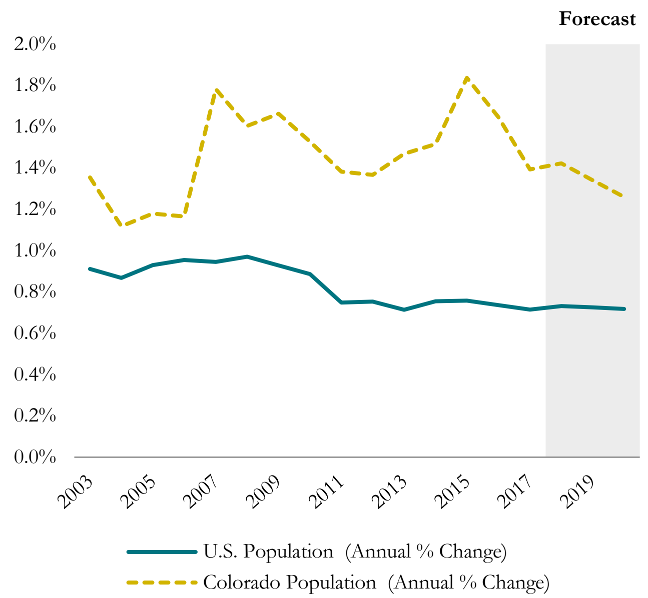
- Colorado per-capita income is expected to grow slightly faster than the nation overall in 2018, rising to an estimated $56,790. The forecast predicts per capita growth of 3.5 percent to $58,784 in 2019 and 3.6 percent to $60,897 in 2020.
- U.S. per-capita income is expected to grow 3.8 percent in 2018 to $53,658, then increase 3.7 percent in 2019 and 3.4 percent in 2020 to $55,669 and $57,538, respectively.

U.S. and Colorado Wage and Salary Income



- Colorado wage and salary growth is expected to increase at a slightly slower pace in 2018, rising 5.5 percent. Continued growth in employment and wages is driving this increase. Wage and salary growth for the state is expected to moderate to 5.1 percent in 2019 and 2020.
- U.S. wages and salaries are expected to rise by 4.9 percent in 2018 and in 2019. In 2020, U.S. wage and salary growth is expected to moderate to 4.5 percent.

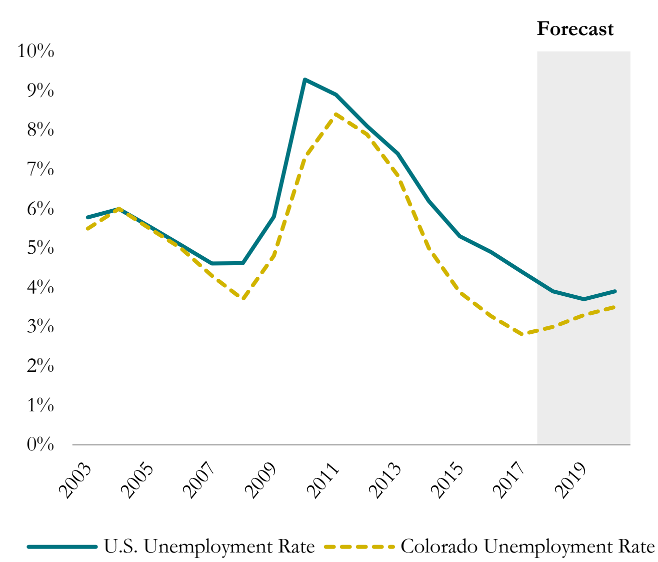
U.S. and Colorado Population



- After an increase of 1.6 percent in 2016, Colorado's population growth increased at a lower rate of 1.4 percent in 2017, as net migration decreased from prior elevated levels. Population growth is expected to continue at the same rate in 2018 before slowing to 1.3 percent in 2019 and 2020. The state's total population is expected to reach 5.8 million by 2020.

- The national population is expected to grow by 0.7 percent each year throughout the forecast, reaching 332.9 million by 2020.

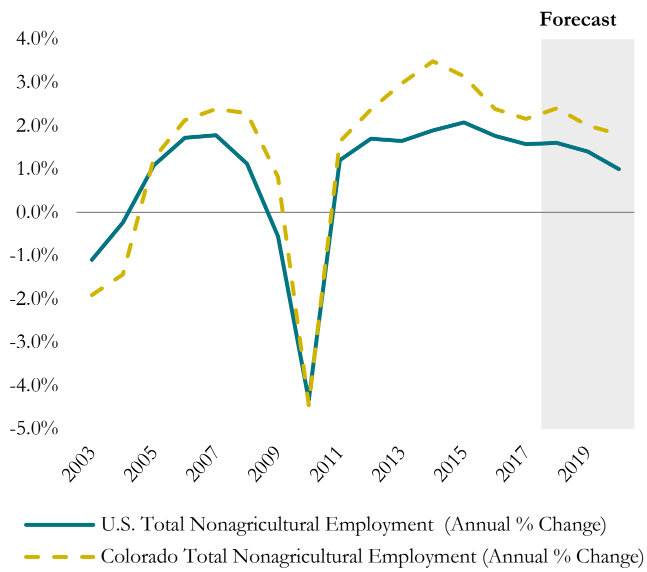
U.S. and Colorado Unemployment



- Colorado's unemployment rate reached a post-recession low of 2.8 percent in 2017. Colorado unemployment is projected to increase slowly over the next few years, to 3.0 percent in 2018, 3.3 percent in 2019, and 3.5 percent in 2020.

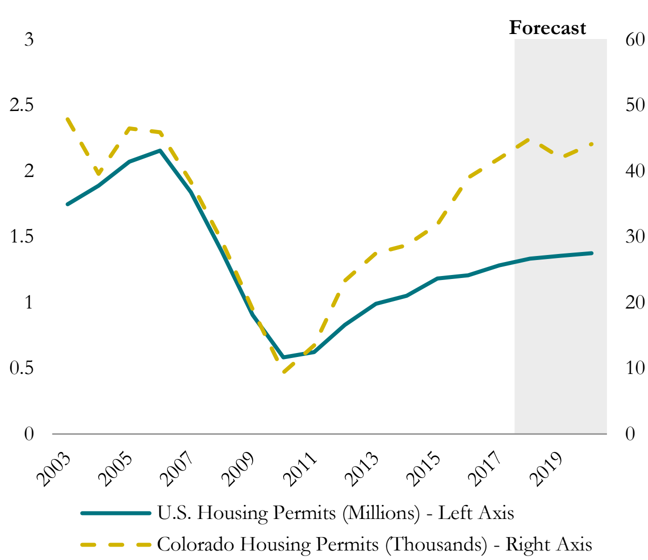
- The national unemployment rate is expected to fall to 3.9 percent in 2018 due to strong employment growth, and to 3.7 percent in 2019, before rising to 3.9 percent in 2020.

U.S. and Colorado Total Nonagricultural Employment



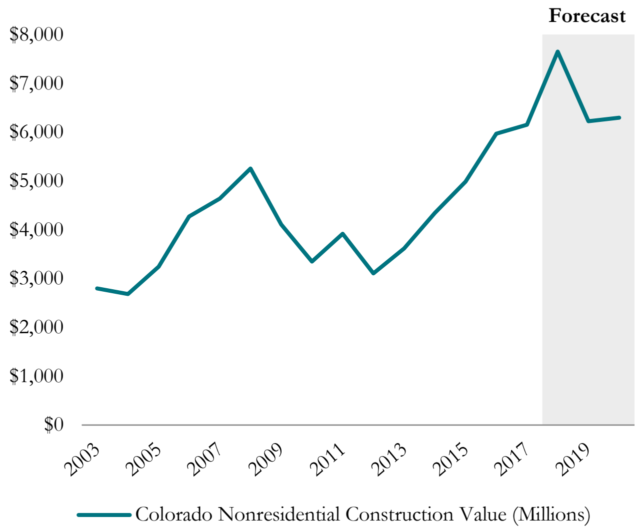
- Total employment in Colorado is expected to increase 2.4 percent in 2018 before moderating to 2.0 percent in 2019 and 1.8 percent in 2020 as a slower growth in the labor force constrains job growth.
- National job growth is expected to slow as the labor market approaches full employment, growing 1.6 percent in 2018, 1.4 percent in 2019, and 1.0 percent in 2020.

U.S. and Colorado Housing Permits Issued



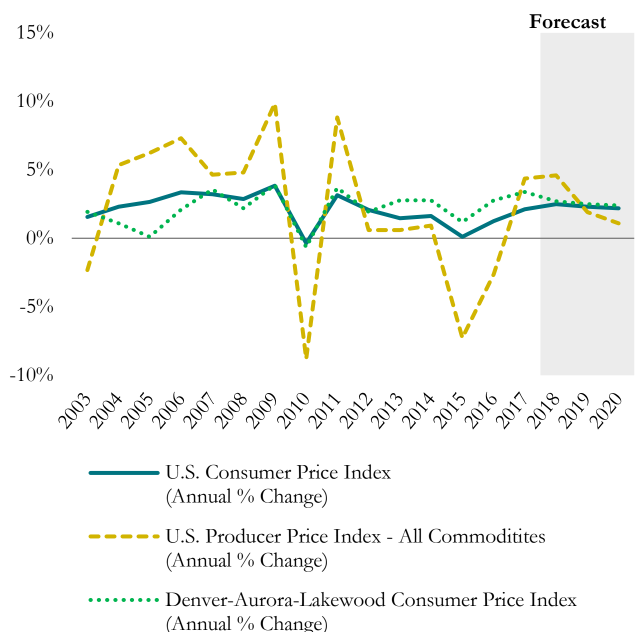
- Colorado housing permits are projected to increase 7.1 percent to 44,900 in 2018, driven by continued demand for new housing construction. Housing permit growth is expected to decline 6.5 percent to 42,000 permits in 2019 before returning to 44,100, a growth rate of 5.0 percent, in 2020.
- U.S. housing permits are expected to grow 4.1 percent to 1.3 million in 2018. Growth is then expected to slow to 1.5 percent in each of 2019 and 2020.

Colorado Nonresidential Construction Value



- Colorado's nonresidential construction value is expected to reach double-digit growth at 24.4 percent in 2018 before moderating in 2019 and 2020. The slowdown in nonresidential construction will be slightly offset by the $937 million in construction projects authorized through the Denver bond package approved by voters in November 2017.

Consumer Price Index and Producer Price Index

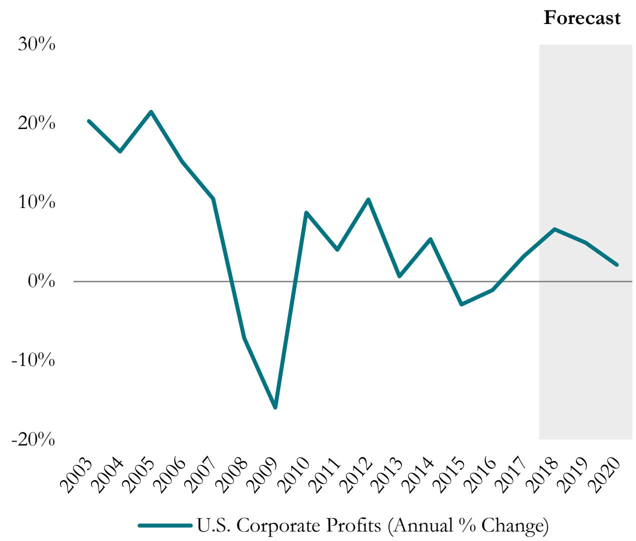


- National consumer prices are expected to rise 2.5 percent in 2018 and 2.3 percent in 2019 before slowing to 2.2 percent in 2020.

- Producer prices are expected to grow by 4.6 percent in 2018 followed by more moderate gains of 1.9 percent in 2019 and 1.1 percent in 2020.

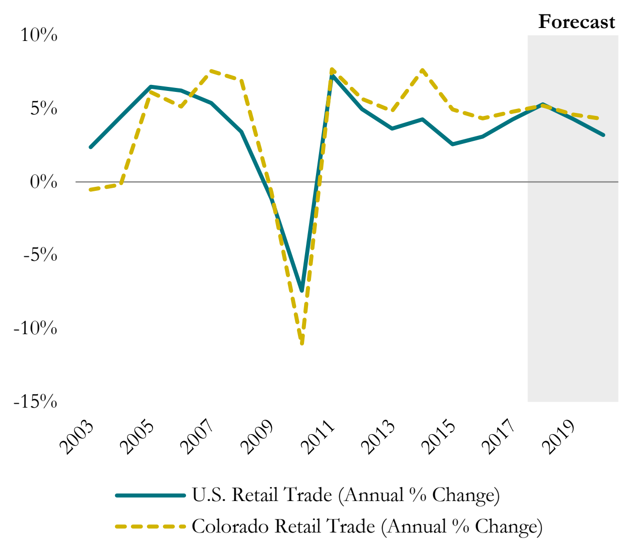
- The Denver-Aurora-Lakewood Consumer Price Index (formerly the Denver-Boulder-Greeley Consumer Price Index) is projected to grow faster than the national average, with 2.7 percent growth in 2018, before moderating to 2.5 percent in 2019 and 2.4 percent in 2020.

U.S. Corporate Profits



- Pre-tax U.S. corporate profits grew 3.2 percent in 2017 as global economic growth and stronger energy prices increased earnings.
- Pre-tax profit growth is expected to peak at 6.6 percent in 2018 before slowing to 4.9 percent and 2.1 percent in 2019 and 2020 as tariffs, higher wages, and higher interest rates reduce profit margins.

Retail Trade



- Colorado retail sales are expected to grow, with projected increases of 5.2 percent in 2018. Retail sales will experience a slight moderation to 4.6 percent in 2019 and 4.3 percent in 2020 as employment and wage growth increase at a lower rate.
- Nationwide retail trade is expected to grow 5.3 percent in 2018 and 4.3 percent in 2019 as the economic expansion continues. Retail sales growth is expected to slow to 3.2 percent in 2020 in response to more moderate economic growth.

General Fund and State Education Fund Revenue Forecast

Relative to the September projections, the revenue forecast for FY 2018-19 is higher by $93.0 million, or 0.8 percent. General Fund revenue increased at a robust rate of 14.1 percent in FY 2017-18 due to an acceleration in economic growth and several one-time factors. Ongoing, though moderating, economic expansion and the increasing impacts of federal tax reform implementation will lead to a revenue growth rate of 6.5 percent in FY 2018-19 followed by a 5.9 percent increase in FY 2019-20.

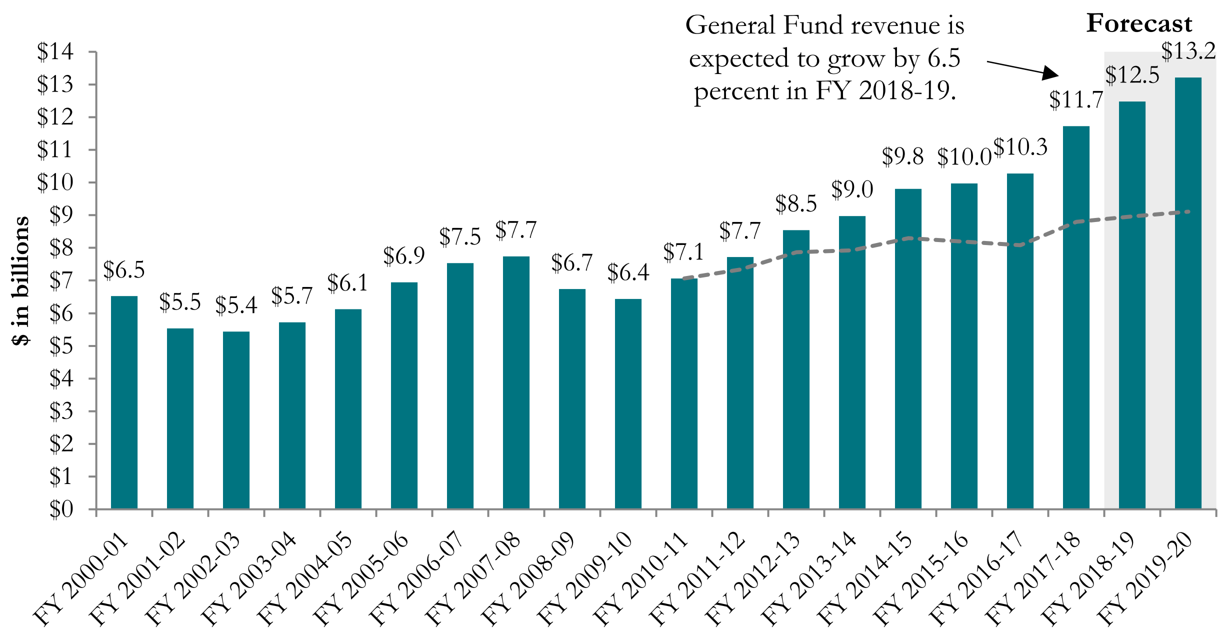
Individual and corporate income taxes continue to benefit from strong employment growth and an expanding economy. After the robust increase experienced in FY 2017-18, revenue will continue to grow in FY 2018-19 and FY 2019-20 at moderate rates, as economic growth continues at a slower rate.

Revenue growth will increase 6.5 percent in FY 2018-19 as the economic expansion continues, and will moderate to 5.9 percent in FY 2019-20.

The revenue growth in FY 2017-18 and subsequent years can partly be attributed to an increase in Colorado taxable income resulting from the repeal of certain deductions and exemptions under the 2017 federal Tax Cuts and Jobs Act (TCJA). Beginning in FY 2018-19, General Fund revenue will also grow as result of the *South Dakota vs. Wayfair, Inc.* U.S. Supreme Court decision, which allows states to collect sales tax from out-of-state online retailers that were previously not required to collect the tax.

Figure 23 shows actual and projected total General Fund revenue from FY 2000-01 through FY 2019-20. A more detailed forecast of General Fund revenue by source is provided in Table 3 in the Appendix. For more details on the economy, the main determinant of General Fund revenue, see "The Economy: Issues, Trends, and Forecast" section of this forecast, which starts on page 4.

Figure 23. General Fund Revenue*



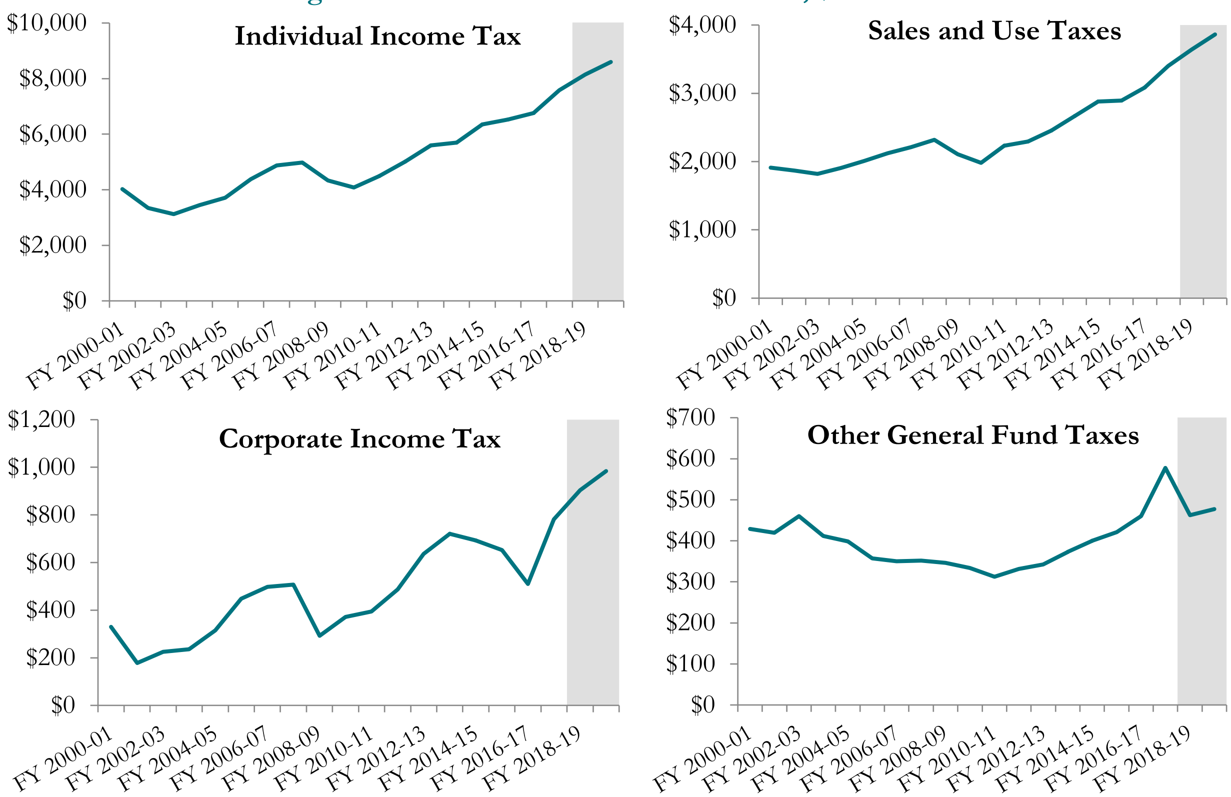
Source: Office of the State Controller and OSPB forecast

*Dotted line represents revenue growth adjusted for inflation and population growth. Totals shown include revenue in excess of the Referendum C revenue limit.

Discussion of Forecasts for Major General Fund Revenue Sources

The following section discusses the forecasts for the three major revenue sources that together make up 95 percent of total General Fund revenue: individual income taxes, corporate income taxes, and sales and use taxes. General Fund revenue from the other remaining General Fund sources — such as interest earnings, taxes paid by insurers on premiums, and excise taxes on tobacco products and liquor — remain largely unchanged from the September forecast. Figure 24 shows actual revenue collections as well as the forecast for General Fund revenue from FY 2000-01 through FY 2019-20.

Figure 24. General Fund Revenue Sources, $ in Millions



Source: Office of the State Controller and OSPB forecast

Individual income tax – Individual income tax collections grew at a robust rate of 12.1 percent in FY 2017-18. Individual income tax revenue growth is projected to increase 7.5 percent in FY 2018-19 and will moderate to a 5.6 percent rate in FY 2019-20.

Individual income tax revenue is expected to increase 7.5 percent in FY 2018-19 due to strong employment and wage growth before moderating to 5.6 percent growth FY 2019-20.

The strong growth in individual income tax collections in FY 2017-18 was due to a combination of factors, some of which are contributing to growth in FY 2018-19 as well. Stronger employment and wage growth, increases in business activity in an expanding economy, and an increase in taxable income resulting from federal tax changes have bolstered FY 2018-19 income tax revenue. However, the recent declines in equity values is expected to temper income tax revenue growth this fiscal year. Individual income tax revenue is expected to grow at a more moderate pace in FY 2019-20 as economic and job growth slow.

FY 2018-19 and FY 2019-20 individual income tax revenue projections were revised upwards as a result of sizeable year-over-year increases in collections through November and expectations for stronger wage withholdings and estimated payments, along with lower tax refunds.

The enactment of the federal Tax Cuts and Jobs Act in December 2017 is expected to increase individual and corporate income tax revenue. This is because the legislation on balance increases federal taxable income, upon which Colorado taxable income is based. It is important to note that there is a high degree of uncertainty surrounding the current forecast of individual income tax collections. The effects of the federal Tax Cuts and Jobs Act on state individual income tax revenue may differ from our estimates due to possible delays in timing or potential taxpayer responses to the tax law changes that may be unforeseen at this time.

Corporate income tax – Corporate income tax collections are projected to increase 15.5 percent in FY 2018-19 and 8.9 percent in FY 2019-20 after increasing 53.5 percent in FY 2017-18. Corporate income tax receipts are expected to rise modestly throughout the forecast period due to continued economic expansion and the effects of the federal Tax Cuts and Jobs Act.

Corporate income tax revenue will continue to grow as the economic expansion continues, increasing by 15.5 percent in FY 2018-19 and 8.9 percent in FY 2019-20.

Corporate income tax revenue is among the most volatile General Fund revenue sources as it is influenced by special economic factors and the structure of the corporate income tax code. Trends in corporate profits are a primary determinant of corporate income tax collections. Corporate profits weakened starting in 2015, leading to a decline in corporate income tax revenue. While corporate profits began to grow again in the second half of 2016, corporate income tax revenue continued to decline as corporations deferred tax liabilities in anticipation of favorable federal tax law changes.

With the passage of the Tax Cuts and Jobs Act in December 2017, state corporate income tax payments rebounded and are expected to continue to grow with higher corporate earnings and the ongoing economic expansion. Although renewed growth in corporate income tax collections is expected, future increases will be constrained by higher business costs, especially for employee compensation and borrowing, which will reduce profit margins and lower tax liabilities.

Sales and use tax – Sales tax revenue increased 9.5 percent in FY 2017-18 and is expected to increase an additional 5.9 percent in FY 2018-19 and 6.4 percent in FY 2019-20.

Colorado's strong economic growth is providing consumers with more disposable income, which, combined with more business spending, is causing sales tax revenue to grow. Auto sales, a major source of sales tax revenue, remain at a high level even as growth has slowed. In addition, the composition of auto sales is shifting from cars towards higher-priced light trucks, SUVs, and minivans, which result in more sales tax revenue to the State.

A portion of the 9.5 percent increase in FY 2017-18 was due to the higher net tax rate on retail marijuana sales pursuant to SB 17-267. This legislation increased the special tax rate on retail sales from 10 percent to 15 percent while exempting retail marijuana from the state's 2.9 percent sales tax, making the net tax rate increase 2.1 percentage points.

Increased consumer and business activity and online sales tax collections will drive sales tax revenue increases. Sales tax revenue is forecast to increase 5.9 percent in FY 2018-19.

The growth rates in FY 2018-19 and subsequent years are bolstered partially by online sales tax collections from certain out-of-state retailers, which the U.S. Supreme Court allowed states to begin collecting with its June 2018 ruling in *South Dakota v. Wayfair, Inc.* Colorado is expected to begin enforcing online sales tax collections in June 2018. This will result in an estimated sales tax revenue increase of about $7 million in FY 2018-19 and $67 million in FY 2019-20, the first full fiscal year of implementation.

The use tax is a companion to the sales tax and is paid by Colorado residents and businesses on purchases that did not include the State 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.

Use tax collections increased 19.4 percent in FY 2017-18 and are projected to increase another 17.3 percent in FY 2018-19. Much of the increase in use tax collections is due to stronger economic growth and the rebound in the oil and gas industry. However, a portion of the FY 2017-18 increase is due to the implementation of reporting requirements on online sales, pursuant to House Bill 10-1193. This law requires out-of-state retailers that do not collect Colorado sales tax to notify the purchasers of their tax liability as well as the Colorado Department of Revenue. Implementation of this law was delayed due to litigation that has now been resolved. The revenue impact of this law will be temporary, as these retailers will now be required to collect sales taxes as allowed by the *Wayfair* decision.

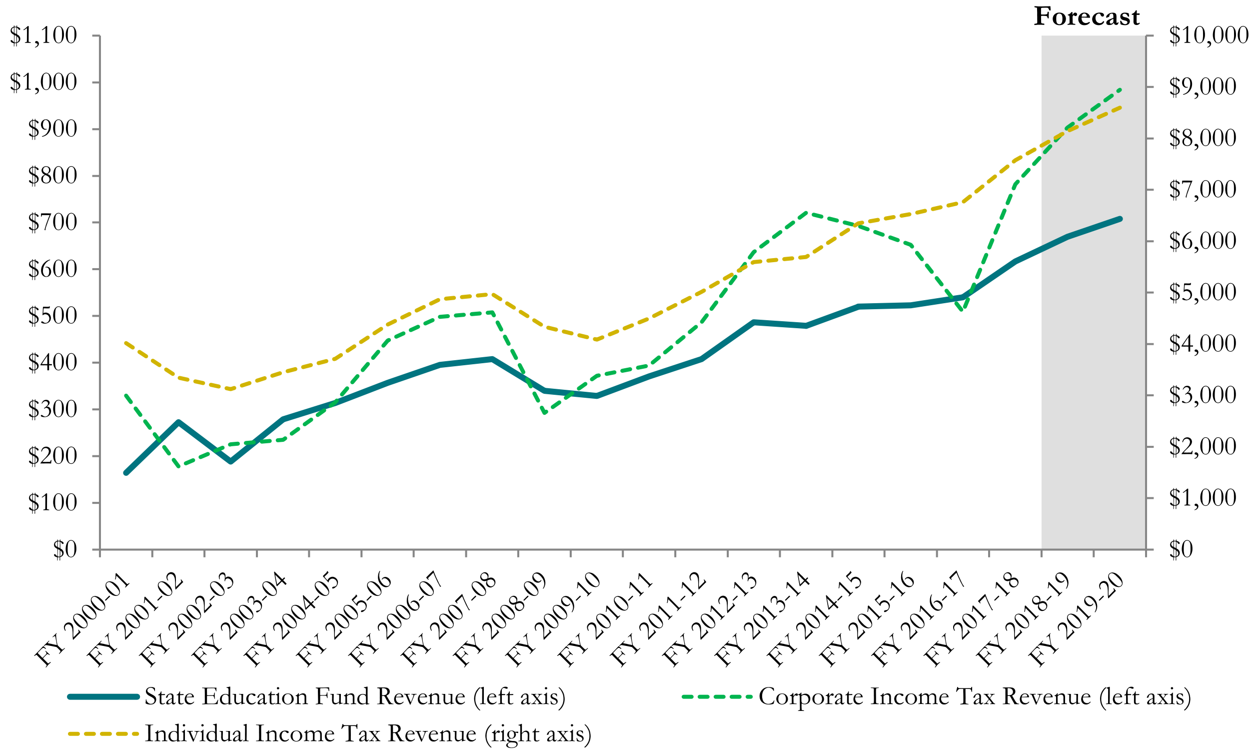
State Education Fund Revenue Forecast

Revenue to the State Education Fund increased 14.3 percent in FY 2017-18 and is expected to grow another 8.5 percent in FY 2018-19 and 5.7 percent in FY 2019-20.

Tax revenue to the State Education Fund will increase 8.5 percent and 5.7 percent in FY 2018-19 and FY 2019-20, respectively.

The Colorado Constitution requires that one-third of one percent of taxable income from Colorado taxpayers be credited to the State Education Fund. Because State Education Fund revenue is derived from taxable income, it follows the trends in individual income and corporate income tax revenue collections discussed above. The strong growth rate in FY 2017-18 was due to the robust gain in corporate income tax collections as well as higher individual income tax collections driven by the strong economy, labor conditions, and the stock market. The revenue impact of federal tax law changes is also contributing to the growth seen in FY 2017-18 and throughout the forecast period.

Figure 25. State Education Fund Revenue from One-Third of One Percent of Taxable Income, $ in Millions



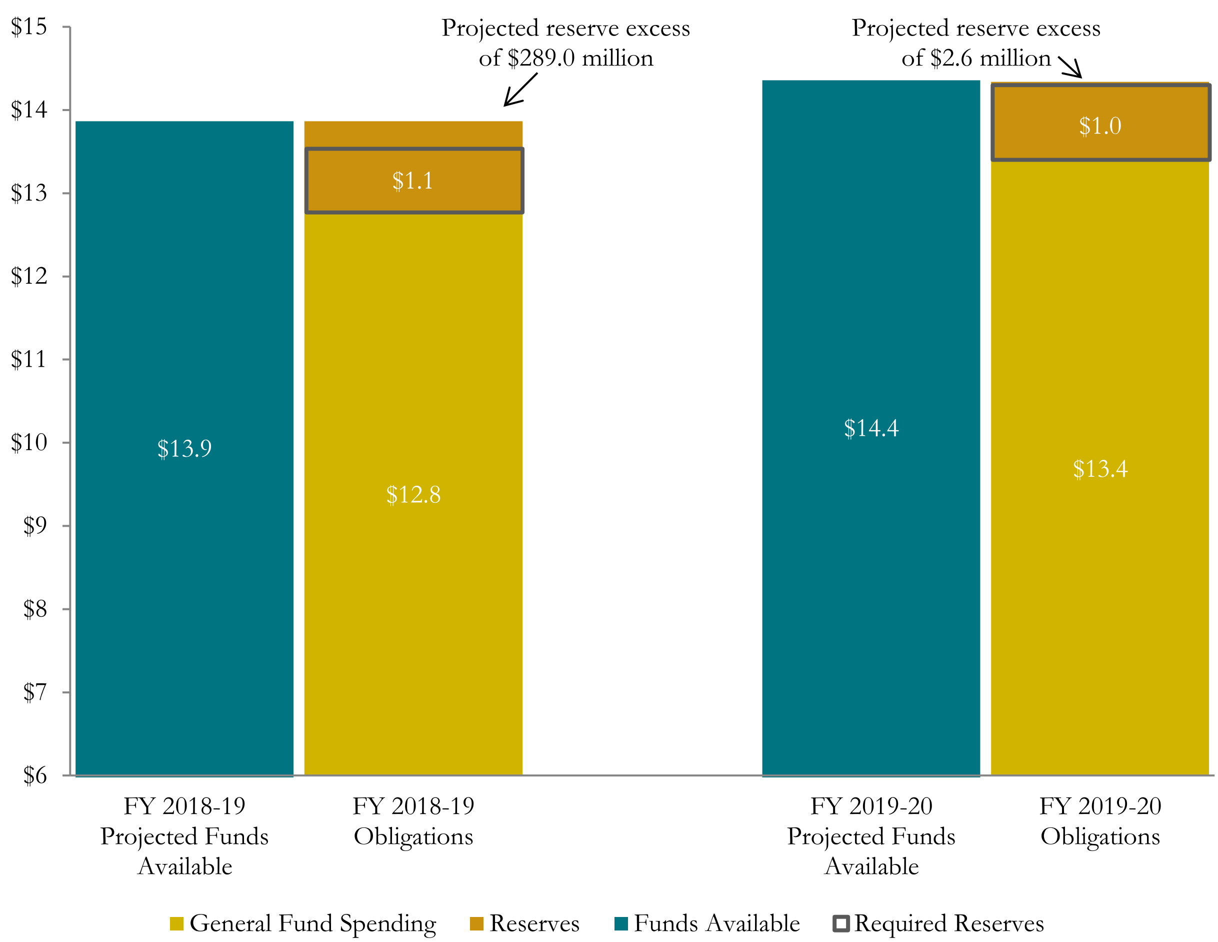
Source: Office of the State Controller and OSPB forecast

General Fund and State Education Fund Budget

General Fund – As discussed in the "General Fund and State Education Fund Revenue Forecast" section starting on page 39, the General Fund revenue forecast for FY 2018-19 is $93.0 million, or 0.8 percent, higher than estimated in the September forecast. The forecast for FY 2019-20 is $91.2 million higher, or 0.7 percent. With the Governor's November 2018 budget request, the State's General Fund reserve is projected to be $280.1 million above the required statutory reserve amount of 7.25 percent of appropriations in FY 2018-19. The Governor's November budget request raises the reserve requirement to 8.0 percent of appropriations beginning in FY 2019-20. Under this forecast and the Governor's November budget request, the State's General Fund reserve is projected to be $2.6 million above the higher required statutory reserve amount. These projections do not reflect the forthcoming budget adjustments for FY 2018-19 and FY 2019-20 that will be submitted to the legislature in January.

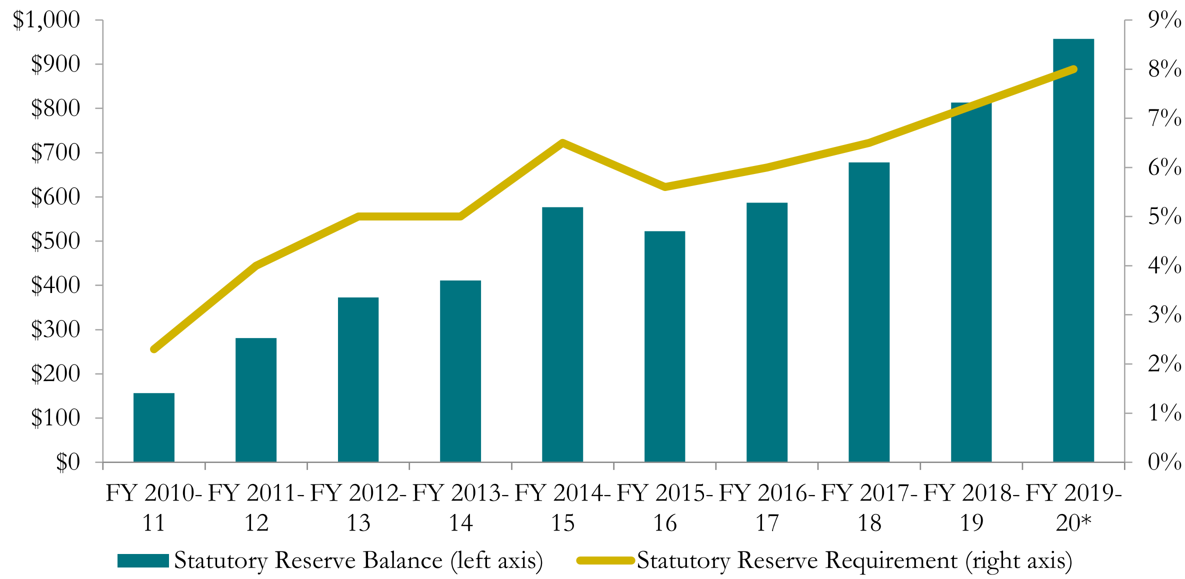
Figure 26 summarizes total projected General Fund revenue available, total obligations, and reserve levels for FY 2018-19 and FY 2019-20 under the Governor's November budget request.

Figure 26. General Fund Available, Obligations, and Reserves under the Governor's November Budget Request, $ in Billions



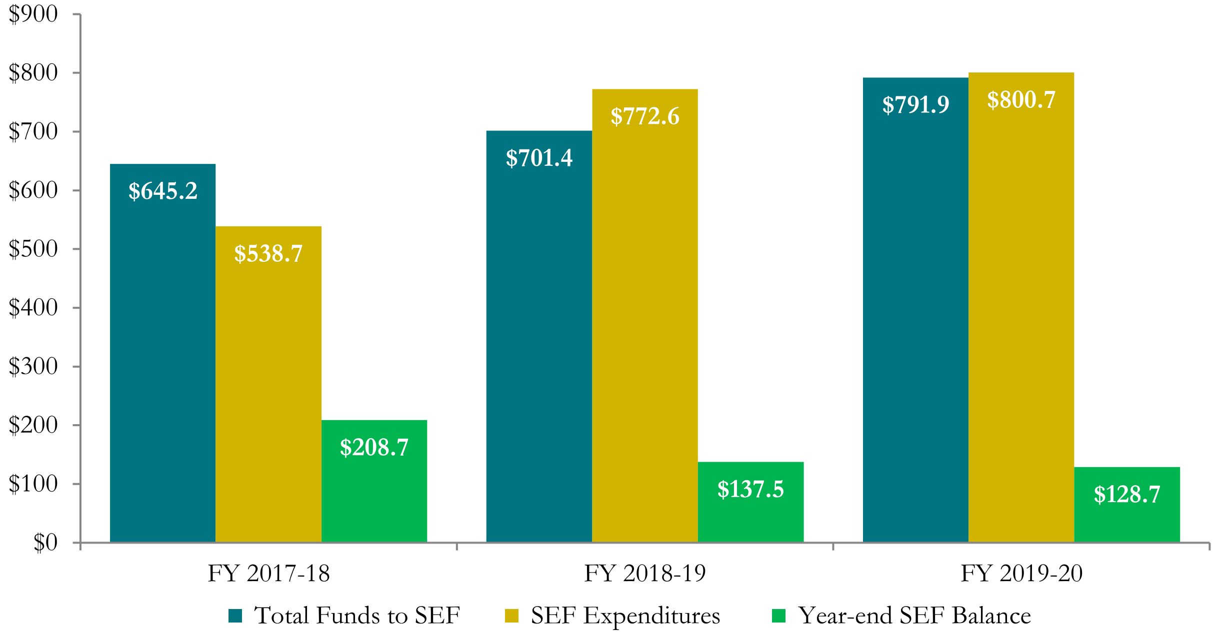
Under the Hickenlooper Administration, the General Fund statutory reserve requirement more than tripled from 2.3 percent of appropriations in FY 2010-11 to 7.25 percent in FY 2018-19. The Governor's November budget request raises the reserve requirement to 8.0 percent of appropriations beginning in FY 2019-20 to help the State be better prepared for a potential future economic downturn. The revenue loss to the General Fund during the prior two recessions was about 17 percent.

Figure 27. Statutory Reserve Requirement as a Percent of Appropriations and Statutory Reserve Balance, $ in Millions



State Education Fund **–** In FY 2018-19, the State Education Fund's year-end balance is projected to decrease from its FY 2017-18 level of $208.7 million to $137.5 million. This decrease is the result of a higher level of State Education Fund expenditures in FY 2018-19, which reduced the need for General Fund appropriations for funding K-12 public education. However, FY 2018-19's lower ending balance leaves less funding available for FY 2019-20, resulting in an increased need for General Fund next fiscal year. The Governor's November 1, 2018, budget request includes a General Fund increase of $261.1 million in FY 2019-20 for K-12 education. Further, the request includes a $77 million transfer from the General Fund to the State Education Fund for FY 2019-20 in order to further pay down the Budget Stabilization Factor. Figure 28 summarizes total State Education Fund revenue available, total spending, and ending balance levels for FY 2017-18 through FY 2019-20 under the Governor's November budget request.

Figure 28. State Education Fund Money, Spending, and Balances under the Governor's November Budget Request, $ in Millions



FY 2018-19 appropriations reflect current law and FY 2019-20 appropriations represent the Governor's November 2018 budget request. The request will be updated in January to reflect new information on local school property tax revenue and student enrollment.

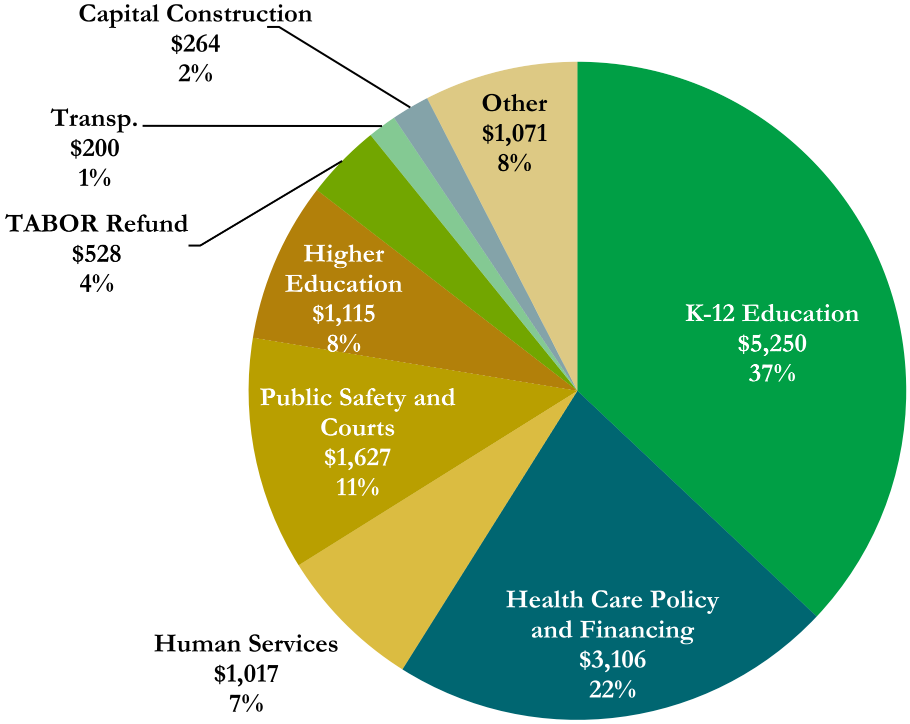
Overview Tables – An overview of the amount of money available in the General Fund and State Education Fund, expenditures, and end-of-year reserves is provided in Tables 4 and 5 in the Appendix at the end of this document beginning on page 50. A discussion of the information presented in these tables can be found on the Office of State Planning and Budgeting's website at this link: https://bit.ly/2S6ghmQ.

Spending by Major Department or Program Area

The General Fund provides funding for the State's core programs and services, including K through 12th grade education, higher education, services for low-income populations, including 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 K through 12th grade education and annually receives one-third of one percent of taxable income. In some years, it has also received supplemental money from the General Fund as authorized by statute.

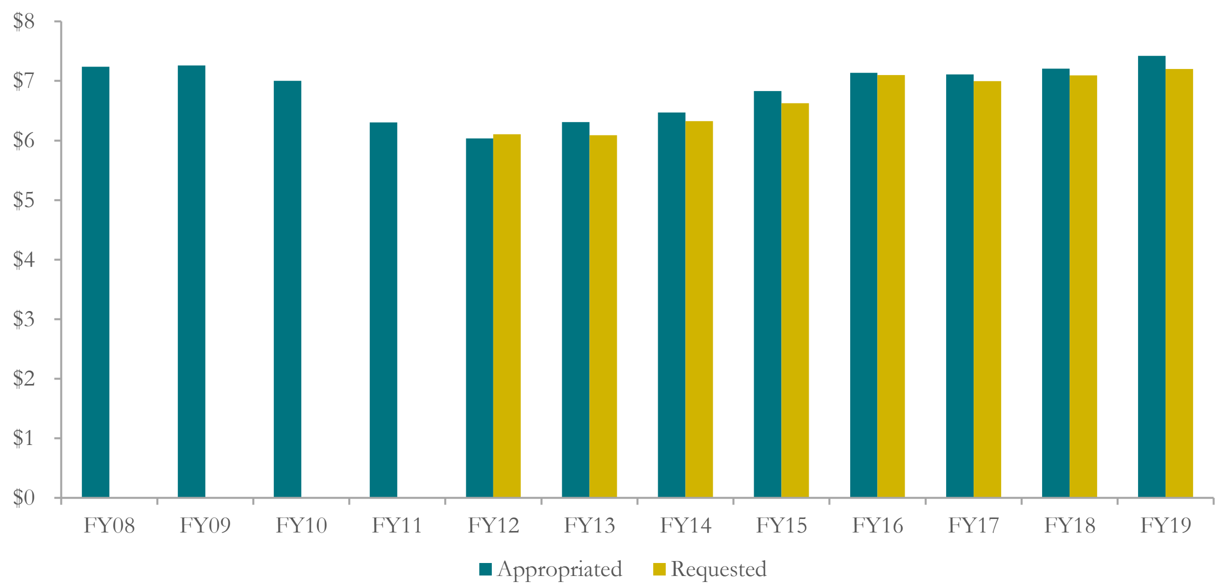
Figure 29 depicts the major areas of the combined General Fund and State Education Fund FY 2019-20 budget as reflected in the Governor's November 2018 budget request. Approximately 85 percent of General Fund and State Education Fund spending encompasses the following areas: K through 12th grade education, Medicaid and related costs at the Department of Health Care Policy and Financing, human services, public safety, the correctional system, courts, and higher education. More detail on the Governor's November Budget Request can be found on the Office of State Planning and Budgeting's website.

Figure 29. FY 2019-20 General Fund and State Education Fund Budget under the Governor's November Budget Request and the December Revenue Forecast, $ in Millions



As shown in Figure 30, strong revenue growth during Governor Hickenlooper's time in office has helped the State's General Fund operating budget to recover from recessionary levels, having only recently exceeded its pre-recession peak, adjusted for population and inflation. The figure shows both Governor Hickenlooper's annual budget requests and actual appropriations enacted.

Figure 30. General Fund Operating Budget, Adjusted for Population and Inflation Growth, $ in Billions



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 to the Colorado 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, such as higher education and Medicaid.

Colorado's economic expansion continued at a healthy pace in 2018. Colorado's employment growth has been strong but expected to slow, while wage growth continues to outpace inflation. Recession risk has increased since the September forecast due to concerns about the ongoing trade dispute and slower global growth, but remains low. However, potential unforeseen developments could change this outlook. Trade policy continues to be a risk factor to business costs and agricultural prices. Overtightening of monetary policy amidst the moderating economic activity is now a risk. A larger slowdown in global economic growth or a geopolitical crisis could have an adverse impact on the U.S. economy.

Cash Fund Revenue Forecast

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

FY 2017-18 cash fund revenue decreased by 15.8 percent as the Hospital Provider Fee was replaced with the Healthcare Affordability and Sustainability Fee program, which is a TABOR-exempt enterprise in accordance with SB 17-267. In addition to the change in the Hospital Provider Fee, cash fund revenue was also reduced by the exemption of retail marijuana sales from the 2.9 percent state sales tax pursuant to SB 17-267.

Forecasted cash fund revenue collections for FY 2018-19 are $40.9 million, or 1.7 percent, higher than projections in September, largely due to higher-than-expected revenue to severance tax cash funds and to the large group of cash funds referred to as "other miscellaneous cash funds." Cash fund revenue collections for FY 2019-20 are higher than the September forecast by $10.1 million, or 0.4 percent.

Transportation-related cash funds **—** Transportation-related cash fund revenue is forecast to grow 3.4 percent in FY 2018-19 and 2.7 percent in FY 2019-20 after growing by 4.4 percent in FY 2017-18. The December forecast for FY 2018-19 is 0.3 percent, or $4.1 million, higher than the September forecast.

Transportation-related cash funds include the Highway Users Tax Fund (HUTF), the State Highway Fund (SHF), and a number of smaller cash funds including emissions fees and professional licenses. HUTF collections are distributed by statutory formula to the Colorado Department of Transportation, local counties and municipalities, and the Colorado State Patrol. The primary revenue sources for the HUTF cash funds are motor fuel taxes and registration fees, but also include special transport permits and DUI fines.

After accounting for the effects of inflation and improved automotive fuel efficiency, fuel tax revenues provide for less road construction and maintenance than they did in 1991.

State gasoline taxes, which have remained at 22 cents per gallon since their last increase in 1991, represent more than 75 percent of motor fuel tax revenue. Fuel tax revenue to the HUTF has averaged 2.0 percent growth per year during the current economic expansion. As inflation has averaged 2.8 percent per year since the fuel tax was last increased, current fuel taxes allow for less road construction and maintenance than they did in 1991. Growth is expected to continue at a modest rate, with improvements in fuel-efficiency and growing numbers of electric vehicles largely offset by the state's strong economic activity, population growth, and an increasing consumer preference for larger vehicles.

Vehicle registration revenue growth is driven by auto sales and in-migration to the state. Auto sales grew steadily from the end of the Great Recession in 2009 through 2017. As interest rates rise and the pent-up demand experienced since the Great Recession decreases, new auto sales are leveling off. Colorado vehicle sales are expected to remain slightly stronger than nationwide sales due to greater economic and population growth.

Figure 31. Transportation Funds Forecast by Source, $ in Millions

Transportation Funds Revenue	Actual FY 17-18	Forecast FY 18-19	Forecast FY 19-20	Forecast FY 20-21
Highway Users Tax Fund (HUTF)				
Motor and Special Fuel Taxes	**$654.4**	**$682.4**	**$696.6**	**$711.2**
Change	4.0%	4.3%	2.1%	2.1%
Total Registrations	**$265.7**	**$275.1**	**$282.2**	**$290.3**
Change	5.9%	3.5%	2.6%	2.9%
Other HUTF Receipts	**$187.2**	**$195.8**	**$200.5**	**$204.8**
Change	1.9%	4.5%	2.4%	2.1%
Total HUTF	**$1,107.3**	**$1,153.3**	**$1,179.3**	**$1,206.2**
Change	4.1%	4.1%	2.3%	2.3%
State Highway Fund	**$40.6**	**$43.9**	**$48.0**	**$49.1**
Change	5.9%	8.0%	9.3%	2.5%
Other Transportation Funds	**$127.4**	**$121.4**	**$126.8**	**$129.1**
Change	7.3%	-4.7%	4.4%	1.9%
Total Transportation Funds	***$1,275.4***	***$1,318.5***	***$1,354.0***	***$1,384.5***
Change	*4.4%*	*3.4%*	*2.7%*	*2.3%*

*Totals may not sum due to adjustments from recent policy changes that impact revenue.

***Limited gaming revenue* —** Revenue from limited gaming grew $8.0 million, or 6.7 percent, in FY 2017-18, reaching a total of $127.1 million. It is projected to reach $129.6 million in FY 2018-19 and $132.5 million in FY 2019-20, growth rates of 2.0 percent and 2.2 percent, respectively.

Of the $127.1 million total limited gaming revenue in FY 2017-18, $106.8 million is subject to TABOR, as reflected in Figure 32. Of this amount, $105.0 million is classified as "base limited gaming revenue" in accordance with Amendment 50. In FY 2018-19, $109.0 million is subject to TABOR, with $107.1 million classified as "base limited gaming revenue." Base limited gaming revenue is distributed by statutory formula to the State General Fund, the State Historical Society, cities and counties affected by gaming activity, and programs related to economic development. In FY 2019-20, $111.4 million of the total projected limited gaming revenue is subject to TABOR, with $109.5 million designated as base limited gaming revenue.

Gaming revenue attributable to Amendment 50 is not subject to TABOR. This revenue is distributed mostly to community colleges, with a smaller portion going to local governments with communities affected by gaming. These distributions totaled $16.7 million in FY 2017-18 and are projected to total $17.9 million in FY 2018-19, and $18.4 million in FY 2019-20. Figure 32 shows the distribution of limited gaming revenue in further detail.

Figure 32. Distribution of Limited Gaming Revenues, $ in Millions

Distribution of Limited Gaming Revenues	Actual FY 17-18	Forecast FY 18-19	Forecast FY 19-20	Forecast FY 20-21
A. Total Limited Gaming Revenues	**$127.1**	**$129.6**	**$132.5**	**$135.6**
Annual Percent Change	6.7%	2.0%	2.2%	2.3%
B. Base Limited Gaming Revenues (max 3% growth)	**$105.0**	**$107.1**	**$109.5**	**$112.0**
Annual Percent Change	3.0%	2.0%	2.2%	2.3%
C. Gaming Revenue Subject to TABOR	**$106.8**	**$109.0**	**$111.4**	**$114.0**
Annual Percent Change	3.0%	2.0%	2.2%	2.3%
D. Total Amount to Base Revenue Recipients	**$94.8**	**$96.6**	**$98.9**	**$101.5**
Amount to State Historical Society	$26.5	$27.0	$27.7	$28.4
Amount to Counties	$11.4	$11.6	$11.9	$12.2
Amount to Cities	$9.5	$9.7	$9.9	$10.2
Amount to Distribute to Remaining Programs (State Share)	$47.4	$48.3	$49.4	$50.8
Amount to Local Government Impact Fund	$5.4	$5.7	$6.1	$6.4
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	$2.1	$2.1	$2.1	$2.1
Transfer to the General Fund	$16.9	$17.5	$18.3	$19.2
E. Total Amount to Amendment 50 Revenue Recipients	**$16.7**	**$17.9**	**$18.4**	**$18.8**
Community Colleges, Mesa and Adams State (78%)	$13.1	$14.0	$14.3	$14.7
Counties (12%)	$2.0	$2.2	$2.2	$2.3
Cities (10%)	$1.7	$1.8	$1.8	$1.9

Severance tax revenue **—** Severance tax revenue totaled $143.0 million in FY 2017-18 and is expected to grow by 45.0 percent to $207.3 million in FY 2018-19 before falling to $131.6 million in FY 2019-20. This forecast reflects increased oil and gas production and slightly lower commodity prices. Larger ad valorem credits coupled with slightly lower oil and gas price projections are expected to cause the decline in severance tax revenue in FY 2019-20.

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

Federal Mineral Leasing (FML) revenue **—** FML revenue decreased in FY 2017-18, declining 5.3 percent to $86.2 million. It is expected to grow 23.8 percent to $106.6 million in FY 2018-19 and 5.1 percent to $112.1 million in FY 2019-20. The rebound in growth in FY 2018-19 is a result of increased production and the end of refunds of FML "bonus" payments to mineral extraction leaseholders on the Roan Plateau. Note that while FML revenue is exempt from TABOR, it is included here because a portion of the money is used for the State's share of K-12 school finance.

FML royalties are derived from a percentage of the value of resources produced on leased federal lands. FML activity includes the 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 then shared with the state in which production occurs.

On March 13, 2018, the U.S. Department of the Interior announced that $18.2 million of previously withheld FML revenue would be disbursed to the State. HB 18-1249 changed the distribution of this disbursement. Instead of being deposited into the State's Mineral Leasing Fund, the revenue was distributed to the affected counties – Garfield, Rio Blanco, Mesa, and Moffat – to return funding that the federal government had previously withheld from them in order to pay for the cleanup of the Anvil Points oil shale site.

Figure 33. Federal Mineral Leasing (FML) Payments, $ in Millions

Fiscal Year	Bonus	Non-Bonus	Total FML	% Change
FY 2017-18	$0.4	$85.8	$86.2	-5.3%
FY 2018-19	$4.1	$102.6	$106.6	23.8%
FY 2019-20	$4.3	$107.8	$112.1	5.1%
FY 2020-21	$4.5	$113.0	$117.4	4.8%

FY 2017-18 figures are actual collections, FY 2018-19 through FY 2020-21 are projections.
Figures do not include $18.2 million of previously withheld revenue disbursed in accordance with HB18-1249.

Other cash funds — Cash fund revenue to the Department of Regulatory Agencies (DORA) increased 6.5 percent to $80.5 million in FY 2017-18. This revenue is projected to decrease 4.2 percent to $77.1 million in FY 2018-19 and to increase 3.4 percent to $79.8 million in FY 2019-20. DORA regulates businesses and professionals in certain industries through licensing, rulemaking, enforcement, and approval of rates charged to consumers. 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. Following a general trend of increasing insurance premiums, the surcharge rate, which is determined through a series of rule hearings, was revised up by 0.4 percentage points in FY 2017-18. Revenue from this source grew 72.5 percent to $17.8 million in FY 2017-18 due to the increased surcharge rate and is estimated to grow 15.6 percent to $20.6 million in FY 2018-19 before falling 14.4 percent to $17.6 million in FY 2019-20. Each year, the Division of Workers' Compensation performs a comprehensive review to determine the funding needed to operate its programs.

The "Other Miscellaneous Cash Funds" category in Table 6 in the Appendix includes revenue from over 300 cash funds, which generally collect revenue from fines, fees, and interest earnings. Approximately 75 percent of the revenue comes from the largest 30 of these funds. Included among these are the Employment Support Fund, Medicaid Nursing Facility Cash Fund, and cash funds that collect marijuana industry-related revenue.

Revenue to miscellaneous cash funds totaled $676.1 million in FY 2017-18, an increase of 4.6 percent. In FY 2018-19, revenue to these funds is expected to increase 6.9 percent to $722.4 million, followed by an estimated increase of 5.1 percent to $759.3 million in FY 2019-20. Of the FY 2018-19 increase, $6.4 million can be attributed to the impacts of legislation passed during the 2018 legislative session.

Marijuana-related revenue — Figure 34 shows revenue from the special taxes on the legal marijuana industry authorized by Proposition AA in November 2013, along with revenue from the 2.9 percent sales tax collected on marijuana sales.

Figure 34. Tax Revenue from the Marijuana Industry, $ in Millions

Tax Revenue from the Marijuana Industry	Actual FY 17-18	Forecast FY 18-19	Forecast FY 19-20	Forecast FY 20-21
Proposition AA Taxes				
Retail Marijuana 15% Special Sales Tax	$167.2	$187.0	$198.2	$205.4
Retail Marijuana 15% Excise Tax	$68.0	$55.6	$50.5	$48.2
Total Proposition AA Taxes	**$235.1**	**$242.6**	**$248.7**	**$253.7**
2.9% Sales Tax (Subject to TABOR)				
Medical Marijuana 2.9% State Sales Tax	$10.6	$8.7	$8.1	$7.6
Retail Marijuana 2.9% State Sales Tax	$5.2	$0.4	$0.4	$0.4
Total 2.9% Sales Taxes	**$15.8**	**$9.1**	**$8.5**	**$8.0**
Total Marijuana Taxes	**$251.0**	**$251.7**	**$257.2**	**$261.7**

*Totals may not sum due to rounding.

SB 17-267 made changes to marijuana taxation and revenue beginning in FY 2017-18. The bill exempted retail marijuana from the 2.9 percent state sales tax, while increasing the special sales tax rate on retail marijuana from the prior 10 percent to 15 percent in FY 2017-18 and subsequent years. Note that the table above shows some revenue from the 2.9 percent state sales tax on retail marijuana in FY 2017-18 and later years. This is because marijuana accessories and other non-marijuana items sold in marijuana shops were not exempted from the 2.9 percent tax.

Revenue from the 2.9 percent sales tax on marijuana and fees related to regulation of the marijuana industry are included in the Miscellaneous Cash Funds category in Table 6 in the Appendix. The table does not include the proceeds from marijuana taxes authorized by Proposition AA, as they are not subject to TABOR.

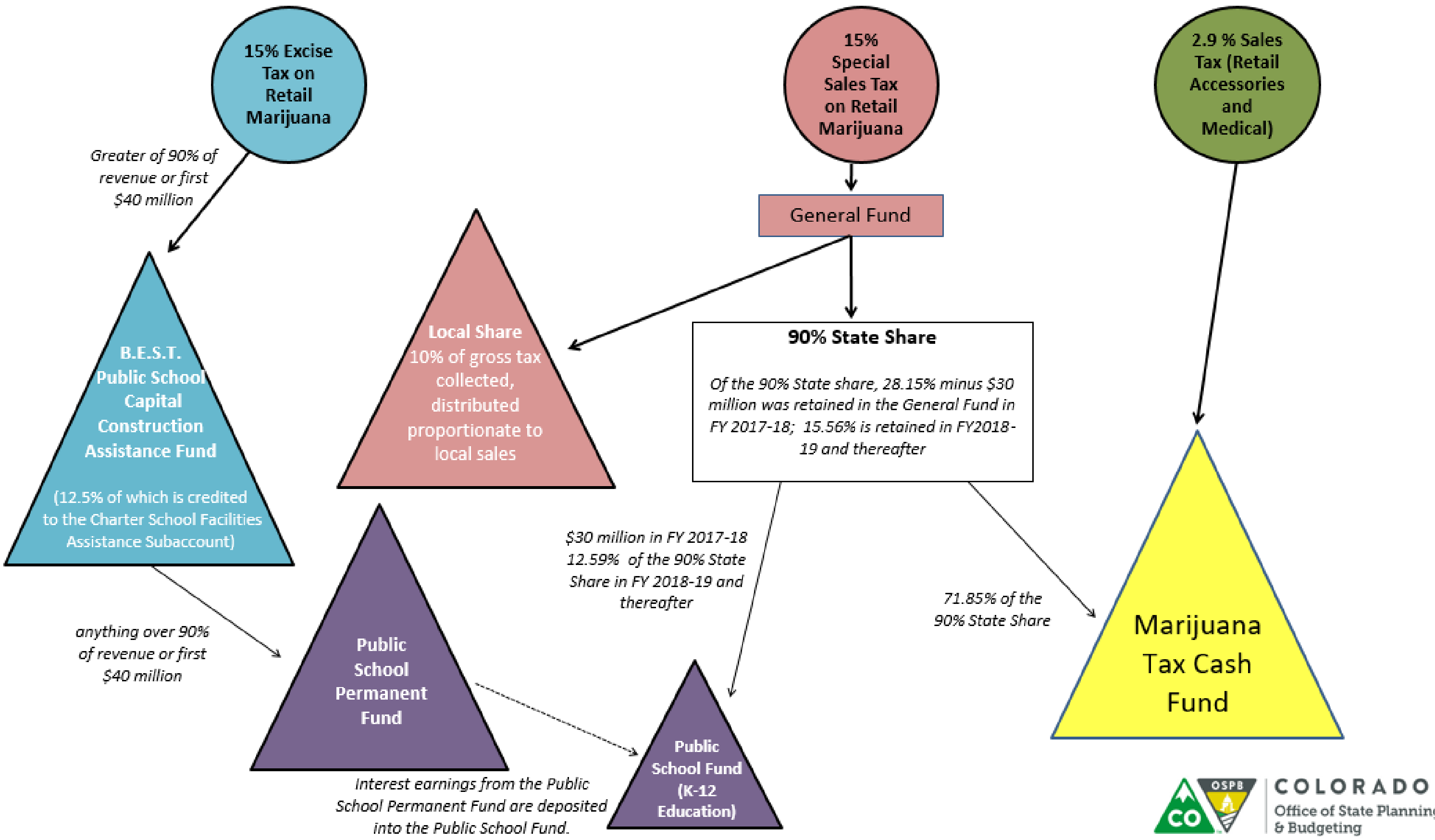
The revenue from the retail marijuana sales tax in Proposition AA goes first to the General Fund ─ and is included as sales tax revenue in Table 3 in the Appendix ─ before being transferred to the Marijuana Tax Cash Fund, local governments, and the Public School Fund. The remaining amount after these transfers stays in the General Fund. Proposition AA also included an excise tax of 15 percent on retail marijuana that is credited to public school cash funds. Figures 35 and 36 show the distribution of marijuana tax revenue.

Figure 35. Distributions from Marijuana Tax Revenues, $ in Millions

Fiscal Year	Total Marijuana Revenue	Local Share	General Fund	BEST School Capital Construction	Public School Permanent Fund	Public School Fund	Marijuana Tax Cash Fund
FY 2017-18	$251.0	$16.7	$12.4	$40.0	$28.0	$30.0	$123.9
FY 2018-19	$251.7	$18.7	$26.2	$50.0	$5.6	$21.2	$130.0
FY 2019-20	$257.2	$19.8	$27.8	$45.5	$5.1	$22.5	$136.7

*Totals may not sum due to rounding.
*FY 2017-18 figures are actual distributions, FY 2018-19 and FY 2019-20 are projections.

Figure 36. Distribution of Tax Revenue from the Marijuana Industry Starting in FY 2018-19



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 certain 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 received 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. The passage of SB 17-267 during the 2017 legislative session reduced the Referendum C cap by $200 million in FY 2017-18. The lower cap then grows by the sum of inflation and population growth in subsequent years.

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 revenue exceeded the revenue cap in FY 2017-18 and will remain above the cap throughout the forecast period – TABOR revenue came in $18.5 million above the cap in FY 2017-18 and is projected to be above the cap by $394.4 million in FY 2018-19 and $525.8 million in FY 2019-20.

TABOR revenue is expected to be above the Referendum C cap by $394.4 million in FY 2018-19 and $525.8 million in FY 2019-20.

TABOR revenue last exceeded the Referendum C cap in FY 2014-15, by $169.7 million. Of this amount, $153.7 million was scheduled to be refunded to taxpayers via their 2015 tax returns, which included $3.6 million in outstanding refunds from prior years. The remaining $19.6 million of the $169.7 million in excess FY 2014-15 revenue resulted from a reclassification of revenue transferred from the Unclaimed Property Fund to the Adult Dental Fund as subject to TABOR. The legal analysis and audit review on the correct classification of this revenue occurred after refund amounts had been established for state income tax forms. In situations like this the reclassified revenue is to be refunded in the next year a refund is due, which is FY 2017-18, as discussed below.

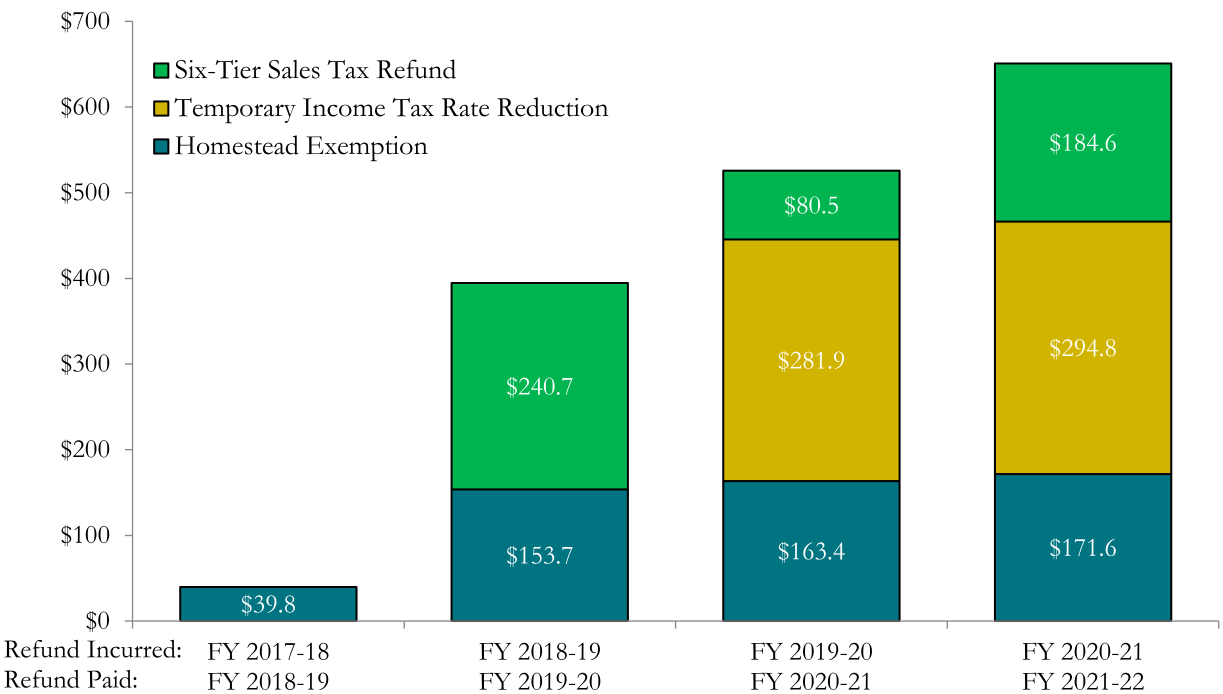
In addition to this $19.6 million adjustment, after the close of FY 2014-15, a net $14.2 million in FY 2014-15 revenue previously treated as nonexempt was reclassified as exempt from TABOR. This reclassification offsets a portion of the aforementioned $19.6 million due to be refunded to taxpayers in the next year a refund is due.

Under this forecast, TABOR refunds of $39.8 million are required for FY 2017-18, as shown in the table below and in line 11 in Table 7. This amount includes the $18.5 million in excess of the Referendum C cap in FY 2017-18, plus a net $5.4 million outstanding from the FY 2014-15 refund requirement due to those adjustments discussed above, plus $15.9 million in FY 2014-15 refunds that remain unclaimed by taxpayers. Any TABOR refund amount that is not refunded is required to be refunded the next year a refund is due. The following table illustrates these adjustments.

Projected FY 2017-18 TABOR Refund with Adjustments	
Revenue Above the Referendum C Cap	$18.5
Adjustments from Prior Fiscal Years	
Reclassification of Transfer to Adult Dental Fund	$19.6
Other Reclassifications	-$14.2
Remaining Amount not Refunded from 2015 Tax Returns	$15.9
Total Adjustments	$21.2
Total Refund	**$39.8**

Colorado law specifies three mechanisms by which revenue in excess of the cap needs to be refunded to taxpayers in future years: the senior homestead and disabled veterans property tax exemptions, a sales tax refund to all taxpayers ("six-tier sales tax refund"), and a temporary income tax rate reduction. The refund amount determines which refund mechanisms are used. The Governor's November budget request proposed to change the TABOR refund mechanism. Figure 37 shows the anticipated refund that will be distributed through each statutorily defined refund mechanism under current law, while the Governor's request is presented in Figure 39.

Figure 37. Distribution of TABOR Refunds, $ in Millions*



* The FY 2017-18 total includes the amount above Referendum C cap in FY 2017-18 plus adjustments from prior years. TABOR refunds are paid in the fiscal year following the fiscal year in which they are obligated.

As specified by Section 39-22-627, C.R.S, the refund of the FY 2017-18 excess revenue will occur through paying $39.8 million of the total $140.7 million senior homestead and disabled veterans property tax exemption expenditures in FY 2018-19. The refund amount is not sufficient to trigger a sales tax refund or temporary income tax rate reduction.

In FY 2018-19, the excess revenue is not sufficient to trigger a temporary income tax rate reduction, and refunds in excess of the homestead exemption will instead be refunded via a six-tier sales tax refund. The sales tax refund is estimated to average $68 per taxpayer.

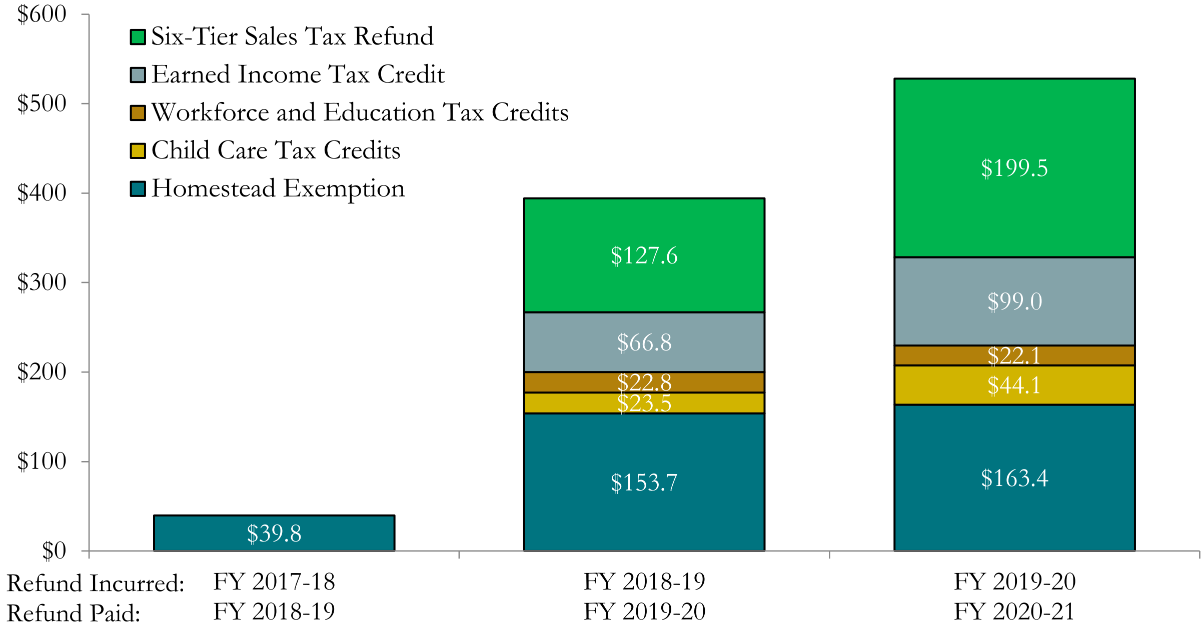
In FY 2019-20 and FY 2020-21, required refunds will exceed homestead exemption refund expenditures by an amount sufficient to fund a temporary income tax rate cut, from 4.63 percent to 4.5 percent. In FY 2019-20, this rate reduction will reduce income tax payments by an average of $44 for taxpayers filing single returns and an average of $152 for taxpayers filing joint returns. In FY 2020-21, the rate reduction will reduce income tax payments by $45 for single returns and $160 for joint returns, on average. The income tax rate reduction leaves additional required refunds of $80.5 million in FY 2019-20 and $184.6 million in FY 2020-21. These amounts will be disbursed via a six-tier sales tax refund according to Section 39-22-2002 C.R.S., and will average $23 per taxpayer in FY 2019-20 and $51 per taxpayer in FY 2020-21.

Figure 38. Average TABOR Refund per Taxpayer by Fiscal Year Paid Under Current Law (Excluding Homestead Exemption)

Average Refund Paid	FY 2018-19	FY 2019-20	FY 2020-21	FY 2021-22
Single Filers	0	$68	$67	$97
Joint Filers	0	$137	$197	$263

The November 1, 2018, budget request proposes changing TABOR refund mechanisms to strategically target benefits to middle-class Coloradans – The Governor's November 1, 2018 budget request proposed using the TABOR surplus to fund targeted tax credits to assist working families. The proposal expands tax credits for child care, expands the Earned Income Tax Credit, and creates two new state tax credits that assists individuals with education and job training costs. Combined, these credits would represent $113.1 million in TABOR refunds in FY 2018-19 and $165.2 million in FY 2019-20. As the revenue forecast has increased beyond what was included as the basis for the November budget request, anticipated TABOR refunds are now large enough to allow a full implementation of the tax credits for distribution of the FY 2018-19 refund, rather than the phased-in implementation proposed in November. These credits would be utilized after applying the TABOR refund to homestead exemption expenditures, but before applying the temporary income tax rate reduction and sales tax refund, as shown in Figure 39.

Figure 39. Distribution of TABOR Refunds under Governor's November 1, 2018 Budget Request $ in Millions*



* FY 2017-18 total includes the amount above Referendum C cap in FY 2017-18 plus adjustments from prior years. TABOR refunds are paid in the fiscal year following the fiscal year in which they are obligated.

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.

- 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 –Director, Division of Labor Standards and Statistics, Colorado Department of Labor and Employment
- David Kelly – Chief Risk Officer, FirstBank
- Ronald New – Capital Markets Executive
- Jessica Ostermick – Director, Capital Markets, Industrial and Logistics, CBRE
- Paul Rochette – Senior Partner, Summit Economics
- Patricia Silverstein – President, Development Research Partners
- Richard Wobbekind – Associate Dean, Leeds School of Business; University of Colorado, Boulder

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Appendix – Reference Tables

Table 1. History and Forecast for Key Colorado Economic Variables
Calendar Year 2012-2020

Line No.		Actual						December 2018 Forecast		
		2012	2013	2014	2015	2016	2017	2018	2019	2020
	Income									
1	Personal Income (Billions) /A	$236.7	$249.0	$271.1	$284.1	$289.6	$306.4	$323.0	$338.8	$355.4
2	Change	6.3%	5.2%	8.9%	4.8%	1.9%	5.8%	5.4%	4.9%	4.9%
3	Wage and Salary Income (Billions) /A	$124.9	$129.5	$138.6	$146.5	$151.0	$160.4	$169.2	$177.8	$186.9
4	Change	5.4%	3.7%	7.0%	5.7%	3.1%	6.2%	5.5%	5.1%	5.1%
5	Per-Capita Income ($/person) /A	$45,637	$47,308	$50,746	$52,228	$52,372	$54,646	$56,790	$58,784	$60,897
6	Change	5.0%	3.7%	7.3%	2.9%	0.3%	4.3%	3.9%	3.5%	3.6%
	Population & Employment									
7	Population (Thousands)	5,186.3	5,262.6	5,342.3	5,440.4	5,530.1	5,607.2	5,686.2	5,762.5	5,835.1
8	Change	1.4%	1.5%	1.5%	1.8%	1.6%	1.4%	1.4%	1.3%	1.3%
9	Net Migration (Thousands)	38.7	45.3	47.7	69.1	59.6	47.6	52.0	50.0	47.0
10	Unemployment Rate	7.9%	6.9%	5.0%	3.9%	3.3%	2.8%	3.0%	3.3%	3.5%
11	Total Nonagricultural Employment (Thousands)	2,312.2	2,381.1	2,464.2	2,541.7	2,602.4	2,658.6	2,722.4	2,776.9	2,826.8
12	Change	2.4%	3.0%	3.5%	3.1%	2.4%	2.2%	2.4%	2.0%	1.8%
	Construction Variables									
13	Total Housing Permits Issued (Thousands)	23.3	27.5	28.7	31.9	39.0	41.9	44.9	42.0	44.1
14	Change	72.6%	18.1%	4.3%	11.1%	22.3%	7.5%	7.1%	-6.5%	5.0%
15	Nonresidential Construction Value (Millions) /B	$3,112.3	$3,624.0	$4,350.9	$4,988.3	$5,972.4	$6,157.6	$7,657.7	$6,229.4	$6,305.5
16	Change	-5.8%	16.4%	20.1%	14.6%	19.7%	3.1%	24.4%	-18.7%	1.2%
	Prices & Sales Variables									
17	Retail Trade (Billions) /C /D	$80.2	$84.1	$90.5	$95.0	$99.1	$103.9	$109.3	$114.3	$119.2
18	Change	5.7%	4.8%	7.6%	4.9%	4.3%	4.8%	5.2%	4.6%	4.3%
19	Denver-Aurora-Lakewood Consumer Price Index (1982-84=100) /E	224.6	230.8	237.2	240.0	246.6	255.0	261.9	268.4	274.9
20	Change	1.9%	2.8%	2.8%	1.2%	2.8%	3.4%	2.7%	2.5%	2.4%

/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. 2017 data represent OSPB estimates.

/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, and 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.

/ D 2016 and 2017 data are not final and represent OSPB's estimates.

/ E In 2018 the geography and data frequency of this series were revised. 2017 and prior years represent Denver-Boulder-Greeley regional prices.

Table 2. History and Forecast for Key National Economic Variables
Calendar Year 2012 – 2020

Line No.		Actual 2012	Actual 2013	Actual 2014	Actual 2015	Actual 2016	Actual 2017	December 2018 Forecast 2018	December 2018 Forecast 2019	December 2018 Forecast 2020
	Inflation-Adjusted & Current Dollar Income Accounts									
1	Inflation-Adjusted Gross Domestic Product (Billions) /A	$16,197.0	$16,495.4	$16,899.8	$17,386.7	$17,659.2	$18,050.7	$18,592.2	$19,057.0	$19,419.1
2	Change	2.2%	1.8%	2.5%	2.9%	1.6%	2.2%	3.0%	2.5%	1.9%
3	Personal Income (Billions) /B	$14,010.1	$14,181.1	$14,991.8	$15,719.5	$16,125.1	$16,830.9	$17,605.1	$18,397.4	$19,151.6
4	Change	5.1%	1.2%	5.7%	4.9%	2.6%	4.4%	4.6%	4.5%	4.1%
5	Per-Capita Income ($/person)	$44,619	$44,844	$47,052	$48,964	$49,860	$51,673	$53,658	$55,669	$57,538
6	Change	4.3%	0.5%	4.9%	4.1%	1.8%	3.6%	3.8%	3.7%	3.4%
7	Wage and Salary Income (Billions) /B	$6,928	$7,113.2	$7,473.2	$7,854.4	$8,080.7	$8,453.8	$8,868.0	$9,302.6	$9,721.2
8	Change	4.6%	2.7%	5.1%	5.1%	2.9%	3.2%	4.9%	4.9%	4.5%
	Population & Employment									
9	Population (Millions)	314.0	316.2	318.6	321.0	323.4	325.7	328.1	330.5	332.9
10	Change	0.8%	0.7%	0.8%	0.8%	0.7%	0.7%	0.7%	0.7%	0.7%
11	Unemployment Rate	8.1%	7.4%	6.2%	5.3%	4.9%	4.4%	3.9%	3.7%	3.9%
12	Total Nonagricultural Employment (Millions)	134.2	136.4	139.0	141.8	144.4	146.6	149.0	151.1	152.6
13	Change	1.7%	1.6%	1.9%	2.1%	1.8%	1.6%	1.6%	1.4%	1.0%
	Price Variables									
14	Consumer Price Index (1982-84=100)	229.6	233.0	236.7	237.0	240.0	245.1	251.2	257.0	262.7
15	Change	2.1%	1.5%	1.6%	0.1%	1.3%	2.1%	2.5%	2.3%	2.2%
16	Producer Price Index - All Commodities (1982=100)	202.2	203.4	205.3	190.4	185.4	193.5	202.4	206.2	208.5
17	Change	0.6%	0.6%	0.9%	-7.3%	-2.6%	4.4%	4.6%	1.9%	1.1%
	Other Key Indicators									
18	Corporate Profits (Billions)	$1,997.4	$2,010.7	$2,118.8	$2,057.3	$2,035.0	$2,099.3	$2,237.9	$2,347.5	$2,396.8
19	Change	10.4%	0.7%	5.4%	-2.9%	-1.1%	3.2%	6.6%	4.9%	2.1%
20	Housing Permits (Millions)	0.830	0.991	1.052	1.183	1.207	1.282	1.335	1.355	1.375
21	Change	32.9%	19.4%	6.2%	12.4%	2.0%	6.2%	4.1%	1.5%	1.5%
22	Retail Trade (Billions)	$4,826.4	$5,001.8	$5,215.7	$5,349.5	$5,514.9	$5,750.4	$6,055.1	$6,315.5	$6,517.6
23	Change	5.0%	3.6%	4.3%	2.6%	3.1%	4.3%	5.3%	4.3%	3.2%

/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 2017-18	% Chg	December 2018 Estimate by Fiscal Year FY 2018-19	% Chg	FY 2019-20	% Chg	FY 2020-21	% Chg
	Excise Taxes:								
1	Sales	$3,093.6	9.5%	$3,276.7	5.9%	$3,487.0	6.4%	$3,661.9	5.0%
2	Use	$309.9	19.4%	$363.6	17.3%	$375.0	3.1%	$387.5	3.3%
3	Cigarette	$34.6	-5.5%	$32.9	-4.9%	$31.7	-3.7%	$30.7	-3.0%
4	Tobacco Products	$16.4	-22.7%	$23.6	43.8%	$24.6	4.2%	$25.8	4.9%
5	Liquor	$46.5	3.3%	$48.1	3.6%	$48.3	0.2%	$47.4	-1.7%
6	**Total Excise**	**$3,501.0**	**9.8%**	**$3,744.9**	**7.0%**	**$3,966.5**	**5.9%**	**$4,153.3**	**4.7%**
	Income Taxes:								
7	Net Individual Income	$7,577.2	12.1%	$8,143.2	7.5%	$8,597.8	5.6%	$8,951.5	4.1%
8	Net Corporate Income	$781.9	53.5%	$903.4	15.5%	$984.1	8.9%	$1,065.7	8.3%
9	**Total Income**	**$8,359.1**	**15.0%**	**$9,046.6**	**8.2%**	**$9,581.9**	**5.9%**	**$10,017.2**	**4.5%**
10	*Less: State Education Fund Diversion*	*$617.0*	*14.3%*	*$669.4*	*8.5%*	*$707.8*	*5.7%*	*$751.3*	*6.1%*
11	**Total Income to General Fund**	**$7,742.1**	**15.0%**	**$8,377.2**	**8.2%**	**$8,874.1**	**5.9%**	**$9,265.9**	**4.4%**
	Other Revenue:								
12	Insurance	$303.6	4.5%	$315.3	3.9%	$327.8	4.0%	$341.0	4.0%
13	Interest Income	$19.5	32.4%	$14.2	-27.1%	$15.2	6.6%	$15.8	4.1%
14	Pari-Mutuel	$0.5	-10.7%	$0.5	-2.0%	$0.5	-2.0%	$0.5	-2.0%
15	Court Receipts	$4.4	7.6%	$4.5	2.3%	$4.6	2.2%	$4.6	0.0%
16	Other Income	$152.2	221.7%	$23.4	-84.6%	$24.4	4.4%	$25.4	4.1%
17	**Total Other**	**$480.2**	**34.4%**	**$357.9**	**-25.5%**	**$372.5**	**4.1%**	**$387.3**	**4.0%**
18	**GROSS GENERAL FUND**	**$11,723.2**	**14.1%**	**$12,480.0**	**6.5%**	**$13,213.0**	**5.9%**	**$13,806.5**	**4.5%**

Table 4. General Fund Overview under the Governor's November Budget Request /A /B
(Dollar Amounts in Millions)

Line No.		Actual FY 2017-18	December 2018 Estimate by Fiscal Year FY 2018-19	FY 2019-20	FY 2020-21
Revenue					
1	**Beginning Reserve**	**$614.5**	**$1,366.0**	**$1,103.8**	**$956.8**
2	**Gross General Fund Revenue**	**$11,723.2**	**$12,480.0**	**$13,213.0**	**$13,806.5**
3	*Transfers to the General Fund*	$98.6	$19.2	$20.1	$21.1
4	**TOTAL GENERAL FUND AVAILABLE**	**$12,436.3**	**$13,865.2**	**$14,336.9**	**$14,784.3**
Expenditures					
5	**Appropriation Subject to Limit**	**$10,430.9**	**$11,239.1**	**$11,926.9**	**$12,660.3**
6	*Dollar Change (from prior year)*	$646.4	$808.2	$687.8	$733.4
7	*Percent Change (from prior year)*	6.6%	7.7%	6.1%	6.1%
8	**Spending Outside Limit**	**$784.0**	**$1,522.3**	**$1,453.3**	**$1,111.2**
9	*TABOR Refund under Art. X, Section 20, (7) (d)*	$39.8	$394.4	$528.1	$650.9
10	*Rebates and Expenditures*	$290.7	$244.8	$149.2	$155.1
11	*Transfers for Capital Construction*	$112.1	$180.0	$264.4	$89.4
12	*Transfers for Transportation*	$79.0	$495.0	$200.0	$50.0
13	*Transfers to State Education Fund under SB 13-234*	$25.3	$25.0	$0.0	$0.0
14	*Transfers to Other Funds*	$208.2	$183.1	$311.6	$165.8
15	*Other Expenditures Exempt from General Fund Appropriations Limit*	$29.0	$0.0	$0.0	$0.0
16	**TOTAL GENERAL FUND OBLIGATIONS**	**$11,214.9**	**$12,761.4**	**$13,380.1**	**$13,771.5**
17	*Percent Change (from prior year)*	7.6%	13.8%	4.8%	2.9%
18	Reversions and Accounting Adjustments	-$144.6	$0.0	$0.0	$0.0
Reserves					
19	**Year-End General Fund Balance**	**$1,366.0**	**$1,103.8**	**$956.8**	**$1,012.8**
20	*Year-End General Fund as a % of Appropriations*	13.1%	9.8%	8.0%	8.0%
21	*General Fund Statutory Reserve*	$674.9	$814.8	$954.1	$1,012.8
22	*Above/Below Statutory Reserve*	$691.1	$289.0	$2.6	$0.0

/A See the section discussing the General Fund and State Education Fund Budget starting on page 34 for information on the figures in this table.
/B FY 2019-20 revenues and expenditures reflect the Governor's November Budget Request. FY 2020-21 expenditures will be adopted in future budget legislation. Therefore, the expenditures and fund balance projections shown are illustrative only.

Table 5. General Fund and State Education Fund Overview under the Governor's November Budget Request /A
(Dollar Amounts in Millions)

Line No.		Actual	December 2018 Estimate by Fiscal Year		
		FY 2017-18	FY 2018-19	FY 2019-20	FY 2020-21
Revenue					
1	**Beginning Reserves**	**$716.6**	**$1,574.7**	**$1,241.3**	**$1,085.5**
2	*State Education Fund*	$102.2	$208.7	$137.5	$128.7
3	*General Fund*	$614.5	$1,366.0	$1,103.8	$956.8
4	**Gross State Education Fund Revenue**	**$645.2**	**$701.4**	**$791.9**	**$758.8**
5	**Gross General Fund Revenue /B**	**$11,821.8**	**$12,499.2**	**$13,233.1**	**$13,827.5**
6	**TOTAL FUNDS AVAILABLE FOR EXPENDITURE**	**$13,183.7**	**$14,775.3**	**$15,266.3**	**$15,671.8**
Expenditures					
7	General Fund Expenditures /C	$11,214.9	$12,761.4	$13,380.1	$13,771.5
8	State Education Fund Expenditures	$540.7	$772.6	$800.7	$753.5
9	**TOTAL OBLIGATIONS**	**$11,755.7**	**$13,534.0**	**$14,180.8**	**$14,525.0**
10	*Percent Change (from prior year)*	5.0%	15.1%	4.8%	2.4%
11	*Reversions and Accounting Adjustments*	-$146.6	$0.0	$0.0	$0.0
Reserves					
12	**Year-End Balance**	**$1,574.7**	**$1,241.3**	**$1,085.5**	**$1,146.8**
13	State Education Fund	$208.7	$137.5	$128.7	$134.0
14	General Fund	$1,366.0	$1,103.8	$956.8	$1,012.8
15	*General Fund Above/Below Statutory Reserve*	$691.1	$289.0	$2.6	$0.0

/A See the section discussing the General Fund and State Education Fund Budget starting on page 34 for information on the figures in this table.
/B This amount includes transfers to the General Fund shown in line 3 of 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.
/D FY 2019-20 expenditures reflect the Governor's November Budget Request. FY 2020-21 expenditures will be adopted in future budget legislation. Therefore, the expenditures and fund balance projections shown are illustrative only.

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

Category	Actual FY 2017-18	December 2018 Estimate by Fiscal Year FY 2018-19	FY 2019-20	FY 2020-21
Transportation-Related /A	**$1,275.4**	**$1,318.5**	**$1,354.0**	**$1,384.5**
Change	4.4%	3.4%	2.7%	2.3%
Limited Gaming Fund /B	**$106.8**	**$109.0**	**$111.4**	**$114.0**
Change	3.0%	2.0%	2.2%	2.3%
Capital Construction - Interest	**$4.7**	**$6.5**	**$6.0**	**$5.5**
Change	-0.5%	39.9%	-7.7%	-8.3%
Regulatory Agencies	**$80.5**	**$77.1**	**$79.8**	**$81.8**
Change	6.5%	-4.2%	3.4%	2.6%
Insurance-Related	**$17.8**	**$20.6**	**$17.6**	**$16.6**
Change	72.5%	15.6%	-14.4%	-5.7%
Severance Tax /C	**$143.0**	**$207.3**	**$131.6**	**$176.9**
Change	634.3%	45.0%	-36.5%	34.4%
Other Miscellaneous Cash Funds	**$676.1**	**$722.4**	**$759.3**	**$787.4**
Change	4.6%	6.9%	5.1%	3.7%
TOTAL CASH FUND REVENUE	***$2,304.2***	***$2,461.5***	***$2,459.7***	***$2,566.8***
Change	-15.8%	6.8%	-0.1%	4.4%

/A Includes revenue from Senate Bill 09-108 (FASTER) which began in FY 2009-10. Roughly 40% of FASTER-related revenue is directed to 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.

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

Line No.		Actual FY 2017-18	December 2018 Estimate by Fiscal Year FY 2018-19	FY 2019-20	FY 2020-21
	TABOR Revenues:				
1	General Fund /A	$11,416.6	$12,293.0	$13,014.9	$13,601.0
	Percent Change from Prior Year	12.4%	7.7%	5.9%	4.5%
2	Cash Funds /A	$2,304.2	$2,461.5	$2,459.7	$2,566.8
	Percent Change from Prior Year	-15.8%	6.8%	-0.1%	4.4%
3	**Total TABOR Revenues**	**$13,720.9**	**$14,754.5**	**$15,474.6**	**$16,167.8**
	Percent Change from Prior Year	6.4%	7.5%	4.9%	4.5%
	Revenue Limit Calculation:				
4	Previous calendar year population growth	1.7%	1.4%	1.4%	1.3%
5	Previous calendar year inflation	2.8%	3.4%	2.7%	2.5%
6	**Allowable TABOR Growth Rate**	4.5%	4.8%	4.1%	3.8%
7	TABOR Limit /B	$11,220.7	$11,759.3	$12,241.5	$12,706.7
8	General Fund Exempt Revenue Under Ref. C /C	$2,481.6	$2,600.7	$2,707.4	$2,810.2
9	**Revenue Cap Under Ref. C /B, /D**	**$13,702.4**	**$14,360.1**	**$14,948.8**	**$15,516.9**
10	***Amount Above/Below Cap***	**$18.5**	**$394.4**	**$525.8**	**$650.9**
11	***Revenue to be Refunded including Adjustments from Prior Years /E***	**$39.8**	**$394.4**	**$525.8**	**$650.9**
12	TABOR Reserve Requirement	$411.1	$430.8	$448.5	$465.5

/A Amounts differ from the General Fund and Cash Fund revenue reported in Table 3 and Table 6 due to accounting adjustments and because some General Fund revenue is exempt from 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 Revenue" 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. SB 17-267 reduced the Referendum C cap by $200 million in FY 2017-18. The lower cap then grows by inflation and population growth in subsequent years.

/E These adjustments are the result of: (a) changes that were made to State accounting records for years in which TABOR refunds occurred that resulted in changes in required refunds to taxpayers, and (b) the refund to taxpayers in previous years was different than the actual amount required. Such adjustments are held by the State until a future year in which a TABOR refund occurs when they adjust the total refund amount distributed to taxpayers.