Colorado
Economic & Fiscal Outlook

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STATE OF COLORADO

Governor's Office of State Planning & Budgeting

COLORADO
Governor Jared Polis

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Jared Polis – Governor
Lauren Larson – Budget Director
Meredith Moon – Deputy Director
Bryce Cooke – Chief Economist
Alex Carlson – Senior Economist
Will Mixon – Senior Economist
Edward Crandall - Economist

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Forecast in Brief

NATIONAL ECONOMIC OUTLOOK

The U.S. economy is expected to rebound in the second half of 2022, after GDP shrank in the first half of the year as a result of disruptions in supply chains and inventories. This rebound is driven by a re-emergence of services spending and strong household finances buoyed by fast rising wage growth and higher demand for workers than can be met. However, greater headwinds are anticipated in 2023 due to persistent inflationary pressures and the impact of the monetary policy response on aggregate demand. The effects are expected to limit consumer spending and firms hiring in 2023, causing a slowdown in growth. In 2024, strong economic fundamentals allow for spending, job growth and economic stability to re-emerge.

COLORADO ECONOMIC OUTLOOK

Colorado's job growth is expected to remain strong in 2022, exceeding 2021 growth. Job growth slows in the outyears but continues to outpace the nation, because the local economy has a higher concentration of service sectors that are expected to fare better over the forecast period. The primary Colorado inflation rate is expected to face additional upward pressure from shelter and service prices relative to the nation as a whole. Real retail sales growth remains positive in 2022 at a pace slightly higher than the U.S., but then similar to the country as a whole, turns negative in 2023 in the face of rising inflation.

GENERAL FUND REVENUE

General Fund revenue in FY 2021-22 is estimated to have grown 23.7 percent, to $17.7 billion, as income and excise revenues grew at 20 percent or more. The projection for FY 2022-23 is $130.8 million lower than the June forecast, as reduced withholdings and estimated payment income revenue expectations more than offset increased sales tax revenue. This results in revenues falling by 7.2 percent in FY 2022-23, before growing again by 1.7 percent in FY 2023-24. The downward revision in FY 2023-24 of $551.1 million is largely due to reduced expectations in future individual withholdings and estimated payments as consumer and labor demand begin to fall. In FY 2024-25, revenues are expected to grow more quickly, at 5.6 percent, as the economy's rebalancing is mostly complete.

CASH FUND REVENUE

In FY 2021-22, cash fund revenue subject to TABOR increased by 20.0 percent to $2.69 billion. In FY 2022-23, revenue is expected to fall 3.6 percent, followed by a 0.5 percent increase in FY 2022-23 and 4.0 percent growth in FY 2024-25. Forecasts are revised up in FY 2022-23 by $19.2 million and down $80.7 million in FY 2023-24.

TABOR

In FY 2021-22, revenue exceeds the Referendum C cap (as restored by S.B. 21-260) by $3,734.6 million. Additionally, revenue subject to TABOR is expected to remain above this cap through the duration of the forecast period. Current projections show that revenue will be $1,898.3 million above the cap in FY 2022-23, $685.1 million above the cap in FY 2023-24, and $742.4 million above the cap in FY 2024-25, triggering the temporary income tax rate reduction in each year.

GENERAL FUND RESERVE

Under this forecast, the General Fund ending balance is projected to be $1,696.6 million above the statutory reserve level of 13.4 percent of appropriations in FY 2021-22 and $40.7 million above the statutory reserve level of 15 percent in FY 2022-23. The statutory reserve remains at 15 percent of appropriations beyond FY 2022-23.

Economic Outlook

While the labor market continues its strong recovery, high inflation and tightening monetary conditions are expected to dampen economic growth for the US and Colorado. This forecast expects economic activity to rebound in the second half of 2022, averaging 1.6 percent growth for 2022. The revision down from the June 2022 forecast's 2.5 percent GDP growth in 2022 is largely due to the second quarter's unexpected contraction as a result of businesses overstocking inventories. However, a pullback on spending as a result of tightening monetary policy and a rebalancing from goods to services is expected to lead to another quarter-over-quarter decline in real GDP in mid-2023 and average growth of 0.7 percent in calendar year 2023 (previously 1.8 percent). The economy is expected to rebound by the end of 2023 and return to historical growth in 2024. Recession risk is higher than in June and sits at approximately 50 percent over the next 18 months. If a recession does occur, it would likely be mild because 1) excess demand of labor and goods suggest that demand declines will affect prices more than output, 2) there will be a more limited impact on real income if a slowdown in hiring coincides with lower inflation, and 3) strong household finances.

In 2022, the labor market remains strong as GDP rebounds through the end of the year, with continued above average wage growth and flat unemployment. High services and shelter price growth are expected to sustain inflation slightly higher for longer than anticipated in June, with U.S. and Colorado inflation now expected to average 8.3 percent, instead of 8.1 and 8.2 percent respectively in the prior forecast. As monetary policy continues to tighten quickly through the end of the year, elevated mortgage rates begin to cool housing market demand and durable goods purchases alongside it. Corporate profits are also expected to moderate in the second half of the current year as consumer demand shifts away from goods.

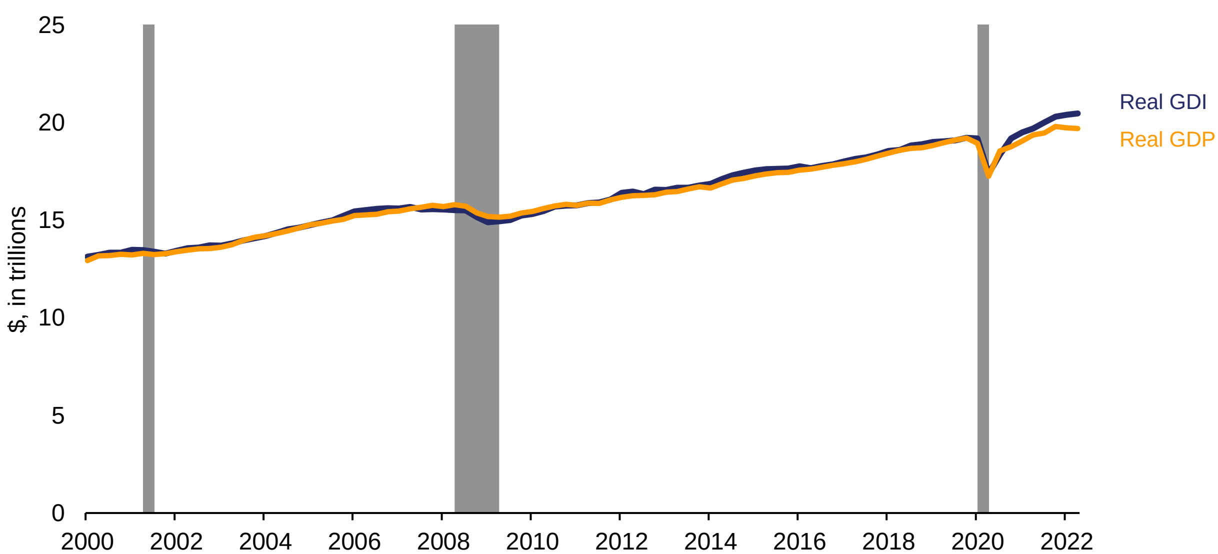
Consumer and corporate spending are projected to be a further drag on growth in 2023, as high prices and rising interest rates curb consumption. Consumer spending habits are expected to shift towards services over the next year, while durable goods spending is forecasted to fall until the end of 2023. Falling corporate investment is expected to shrink labor demand to just above labor supply in 2023, pulling down wage growth to more historical norms. Additionally, the unemployment rate is expected to rise slightly in 2023 as labor demand falls, with the U.S. unemployment rate averaging 4.1 percent in 2023 and 2024, while Colorado's unemployment rate is expected to rise to an average 3.9 percent in 2023 before falling to 3.8 percent in 2024. Given that Colorado's economic makeup is slightly more tilted towards service industries, the shift in demand to services is expected to keep Colorado's labor market and consumer spending levels healthier than the nation as a whole.

Gross Domestic Product

Nationally, real gross domestic product contracted by 0.6 percent in the second quarter of 2022, after a 1.6 percent contraction in the first quarter. Although recessions generally coincide with two consecutive quarters of GDP contraction, the National Bureau of Economic Research (NBER) has yet to declare a recession. On average, the NBER declares recessions 6 to 9 months after GDP data is published, after carefully considering a variety of indicators including total U.S. payrolls, real income, real consumption, and industrial production. Currently, many economists, including U.S. Treasury Secretary Janet Yellen, believe the economy has not entered a recession at this time, given levels of job creation, strong household finances, and real growth in consumer spending.

Instead, supply chain disruptions and slowing goods spending have primarily driven economic decline during the first two quarters of 2022. The first quarter contraction in GDP was due to a significant trade deficit, as net exports hit historic lows and companies miscalculated consumer demand for goods and overstocked their inventories. Consequently, the second quarter decline was driven by reduced inventory growth as retailers purchased fewer items for their shelves. Also driving the second quarter decline were shrinking structural investments (particularly those related to the housing market) as a result of rising interest rates.

Figure 1. Gross domestic income still growing despite falling GDP

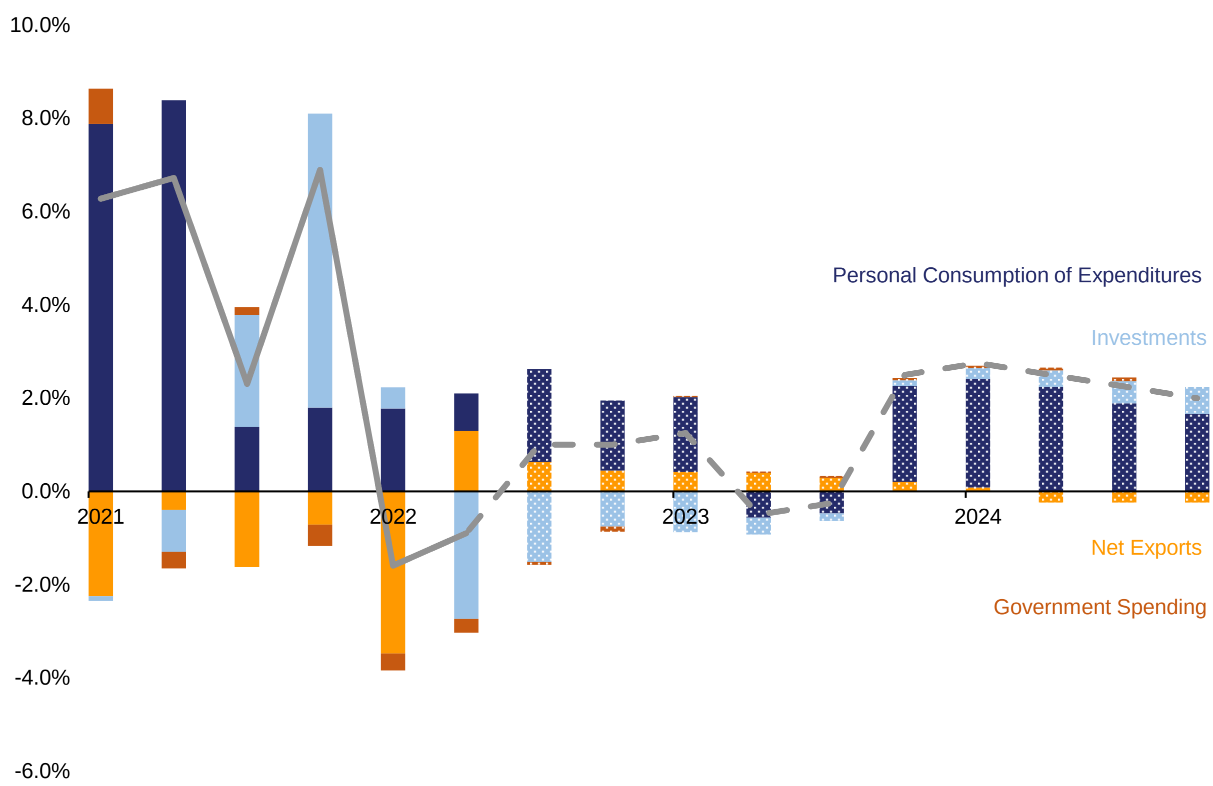


Note: Shaded areas denote recession
Source: Bureau of Economic Analysis

Because GDP is reflecting hiccups in supply chains and inventory purchases, it may not be an appropriate reflection of how households are currently faring. Looking at gross domestic income (GDI), measured through wages, salaries and other income earned in production, there is growth of 1.8 and 1.4 percent in the first two quarters of 2022. In fact, the current gap between GDI and GDP is the largest in the history of the measures. While the GDI measure is more closely linked to the labor market, which is healthy with rising wages, GDP measures the final demand of products, including international purchases of goods, which are impacted by an increasingly strong dollar and high fuel prices.

Overall, US real GDP growth for 2022 is forecasted at 1.6 percent, before slowing to 0.7 percent in 2023 and rebounding to 1.9 percent in 2024. Figure 2 depicts quarter-over-quarter annualized growth in real GDP, where the line represents GDP growth and the bars depict the four respective drivers of GDP growth/contraction: 1) Personal Consumption Expenditures (PCE), 2) inventories and investments, 3) net exports, and 4) government spending.

Figure 2. GDP Forecast and Component Contribution



Source: U.S. Bureau of Economic Analysis; OSPB September Forecast

PCE, the largest component of GDP, has expectedly continued to shift towards services, though this shift has been more muted than anticipated as a result of extended inflationary pressures, tightening monetary policy, and an elevated recession risk among consumers. Services spending is expected to ramp up in the second half of 2022 before overshooting pre-pandemic trends in the first half of 2023 and returning to pre-pandemic trends in 2024. As for other components of PCE, both durable and nondurable goods expenditures are expected to return to their pre-pandemic shares of total consumption by the beginning of 2023 before undershooting and returning to trend by 2024. In total, PCE growth is likely to be muted in response to inflationary pressures and interest rate hikes.

Moderate inventory growth is expected as retailers and manufacturers will likely rebuild supplies now that the apparent overshoot in orders has resolved itself. However, inventory growth is more than offset by falling investments, particularly in the real estate sector, as a consequence of tightening monetary policy. Overall, inventories and investments are anticipated to drag GDP through the first half of 2023, before reaching a net zero impact during the second half of the year, and exerting slight upward pressure on GDP in 2024.

Net exports, after record trade deficits during the first quarter of 2022, are expected to boost GDP through the end of 2023. However, in 2024, the deficit is forecasted to again be a drag on GDP in response to growing international demand and a normalization of purchasing power. The demand growth reflects expected higher global economic growth in 2024 while a normalization of purchasing power signifies a reversal of the current period of a strong dollar. As the dollar weakens and global GDP growth grows, exports also grow which increases the trade deficit.

Finally, government spending will likely continue to place a small drag on growth as federal stimulus funds from the American Rescue Plan Act (ARPA) continue to roll off. Effects from the recently signed Inflation Reduction Act are likely to have little impact on growth due to counteracting effects. While this act is likely to reduce the drag on government spending as the resulting revenues are larger than spending increases, it is offset by lower return of investment as a result of increased taxes on business activity. Likewise, the Biden administration's recent student debt relief announcement is likely to have limited impact on GDP as the future resumption of monthly payments offset the small boost in consumption from debt relief.

During the second half of 2023, the full impact of monetary policy tightening, particularly its effect on investments, is expected to subside. Likewise, inflation is predicted to return to more normal growth, thus spurring growth in PCE. The overall effect is stronger expected GDP growth in the second half of 2023. Over the coming months, Institute for Supply Management (ISM) surveys, consumer confidence surveys, and financial market movements (in particular yield curve inversion and equity markets) are all worth watching as key indicators of the state of the economy. The most recent ISM services survey shows a rebound where a decline was expected, reinforcing the U.S. Bureau of Economic Analysis' PCE report on services spending growth at the beginning of the third quarter of 2022.

Though the NBER generally takes 6 to 9 months to make a determination as to the state of the economy, the strong labor market could aid in avoiding a recession call. Job Openings and Labor Turnover Survey (JOLTS) data indicate both elevated quits rates as well as a high degree of job openings. Such substantial, non-recessionary job growth during the first half of 2022, paired with the divergence between gross domestic product and gross domestic income, as illustrated in Figure 1, may suggest that the declining GDP figures overstate real economic weakness.

Assuming the war in Ukraine continues, chances of a recession over the next 18 months can be estimated at 50%. On the one hand, tightening monetary policy and inflation appear likely to eat into labor demand and thus dampen job openings. Similarly, personal consumption expenditures (PCE) are also expected to slow in the face of inflationary pressures. Meanwhile, Federal Reserve policy may cool down the housing market too quickly, as higher interest rates both slow residential investment and lower housing demand.

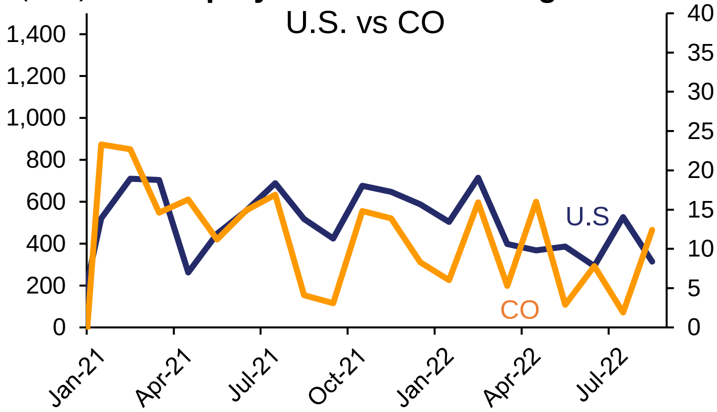
On the other hand, household finances are doing well, due to excess savings as a result of government transfers remaining at over $2 trillion while the household debt-to-GDP ratio remains at healthy levels reflective of the second half of the last economic expansion. The high existing savings combined with current access to available credit serves as a buffer during a potential economic downturn. While a recent acceleration in revolving credit balances has occurred as households begin to re-leverage, these balances as a share of disposable income would remain below their pre-pandemic levels until mid-2023 if growth remains at its current pace. However, once balances do normalize, the potential for tightening credit constraints on households will likely negatively impact future consumption.

Furthermore, it appears likely that supply-related constraints, which have exerted upward pressure on inflation throughout much of the year (particularly affecting gas, food, and vehicles), will abate during the remainder of 2022, thereby lowering inflation expectations. Contributing to this are energy prices, which hit historic highs in June but are now trending downwards. Finally, strong underlying fundamentals may counteract slowing demand pressures for services and shelter, thereby averting a significant downturn. It is expected that demographic pressures increasing the number of first-time homebuyers should stabilize demand and prices, while the large gap between job openings and availability of unemployed workers is expected to shrink, thereby lowering wage growth without necessarily leading to large reductions in the workforce.

Labor Market

The labor market in the U.S. and Colorado remains tight due to strong job growth and falling unemployment rates. In August, the unemployment was 3.7 percent for the U.S., up 0.2 percent from July. Similarly, Colorado unemployment notched up 0.1 percent in August from 3.3 percent in July to 3.4 percent in August. The small increases in the unemployment rate on both the U.S. and Colorado side aren't from job losses, but rather large increases in labor force participation that exceeded more moderate job growth. Job growth, strong year-to-date in 2022 and above pre-pandemic growth rates, is anticipated to continue through the rest of the year and into early 2023, prior to cooling in mid-2023. Accordingly, OSPB expects Colorado's unemployment rate to stay consistent with its current trajectory through the end of 2022, with average unemployment anticipated at 3.5 percent for the state and 3.6 percent nationally for the year. Moving into 2023, the labor market is expected to stay relatively tight, though a rebalancing of supply and demand is expected to eventually push unemployment up to peaks of 4.5 percent for the U.S. and 4.3 percent for Colorado by the end of 2023.

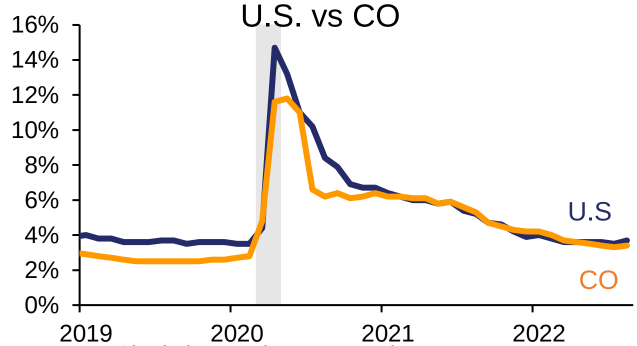
Figure 3. Nonfarm Payroll Employment - MoM Change
U.S. vs CO



Note: Shaded areas denote recession.
Source: Bureau of Labor Statistics, retrieved from FRED

Labor force participation has continued to exceed pre-pandemic levels in Colorado, rising to 69.7% in August, as compared to 62.1% for the U.S. Colorado's high participation rate can likely be attributed to demographic factors, lower birth rates, higher educational attainment, and higher costs of living relative to the rest of the nation. OSPB expects U.S. labor force participation to continue growth through the end of the year as the U.S. rate still lags pre-pandemic labor force participation by 1.3 percentage points.

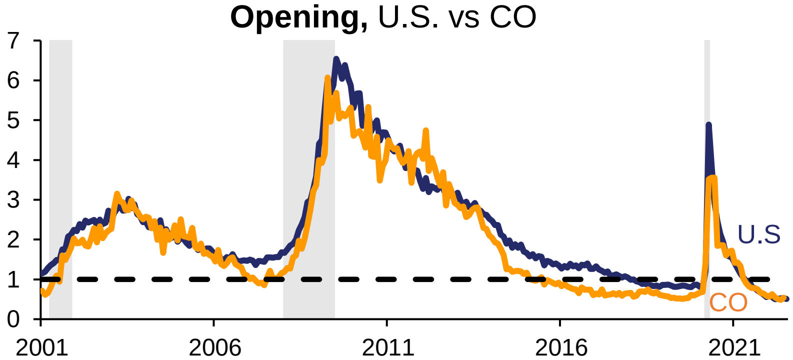
Figure 4. Unemployment Rate
U.S. vs CO



Note: Shaded areas denote recession.
Source: Bureau of Labor Statistics

Labor demand (measured by number of job openings) remains higher than additional labor supply (measured by number of unemployed persons). According to the Bureau of Labor Statistics, the number of unemployed persons per job opening is at 0.5 for both the U.S. and Colorado, signifying that there are approximately two job openings per unemployed individual. Compared to pre-pandemic, openings are particularly elevated in manufacturing, educational services, health care and social assistance, and leisure and hospitality.

Figure 5. Number Unemployed per Job Opening, U.S. vs CO



Note: Shaded areas denote recession.

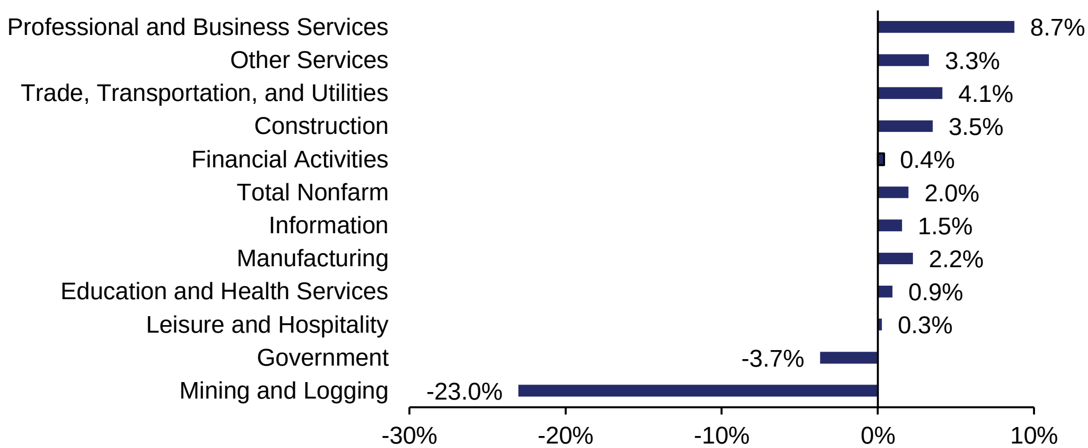
As a result of labor market tightness, three competing trends are worth considering as they play out over the next year to two years:

1. While it is possible that some employees will be attracted to the labor market from the small pool of unemployed persons, the majority of new hires may instead be

comprised of people drawn to other firms through wage incentives. This is supported by the fact that thus far in 2022, quits have remained elevated (at 2.7 percent in the U.S. and 3.2 percent in Colorado) and wage growth for job switchers across the U.S. is at a historic high of 8.5%.

2. Moderate growth in the labor participation rate has increased the overall labor supply in Colorado, but this increase has not led to a significantly tighter labor market than that of the U.S. as a whole. Likely due to a high number of early retirees, nationwide labor supply has been slow to rebound in the aftermath of the pandemic. However, should these early retirees return to the workforce, a slackened labor market would be more likely.
3. A sizeable reduction in the rate of job openings has yet to occur in either the U.S. or Colorado. However, an ease in demand is expected to occur in late 2022 and early 2023 as current Federal Reserve rate hikes begin to take effect. Current monetary policy is expected to slow business activity and result in employers cutting back on hiring.

Figure 6. CO Percent Change in Employment since Feb 2020



Source: Bureau of Labor Statistics, Current Employment Statistics

In aggregate, job growth trends are well above pre-pandemic levels, and monthly job growth for Colorado continues to exceed pre-pandemic rates. The gains have been driven primarily by hiring in the professional and business services sector, trade and transportation, and construction. As the economy rebalances, it is likely that these sectors will see a decline in hiring, with the potential exception of construction due to the persistence of high demand in the sector. On the other hand, the mining and logging industry in particular has not recovered to pre-pandemic levels, and it is likely that significant growth in this sector will continue to lag amid an expected GDP slowdown and an uptick in the unemployment rate. Likewise, government sector jobs have also been a drag on been a lag on overall employment, remaining 3.7 percent down from February 2020.

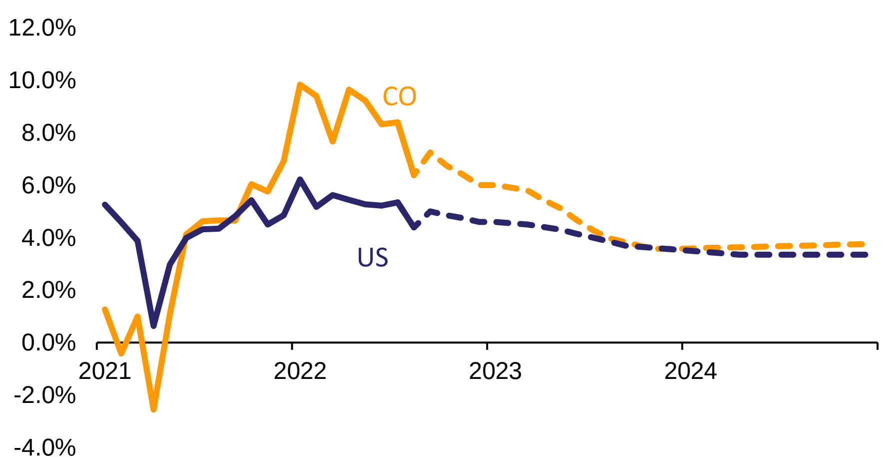
Wages and Income

Nominal wage growth continues to be historically high due to rapid employment growth and continued labor shortages relative to job openings, thus pushing businesses to raise wages. Sustained wage growth in 2022 has led OSPB to revise up aggregate wages and salaries expectations to be 0.2 percent higher than 2021, yielding a growth rate of 9.7 percent for the U.S. and 10.4 percent for Colorado. This aggregate measure captures not only hourly wage growth, but also job growth. When focusing on just average hourly earnings per employee, growth is expected to be 7.9 percent, as discussed below and shown in Figure 7.

In 2023, nominal aggregate wage income growth is projected to return to more historical rates of 4.1 percent for Colorado and 3.2 percent for the U.S. This normalization of growth is due to falling labor demand brought about by higher interest rates and a heightened recession risk perception among businesses seeking to limit future investments and hiring. Fewer job openings combined with an expected temporary increase in unemployed persons both contribute to the expectations of slowing aggregate wage and salary growth.

Average wages in Colorado tend to be higher than the national average. According to the Bureau of Labor Statistics, the most recent reported average per hour wage was $34.17 for Colorado and $32.36 for the U.S. Furthermore, Colorado's average hourly wage growth is currently outpacing the national average. OSPB expects this is due to Colorado's labor supply quickly rebounding to exceed pre-pandemic levels, while the nationwide labor force participation rate is approximately 1 percent below its pre-pandemic level. With local labor supply more than fully returned, local businesses are likely having to increase wages further to attract those already in the labor force to switch jobs. This is reinforced by higher quits rates in recent months in Colorado compared to the nation, per the Bureau of Labor Statistics. In 2022, average hourly wages in Colorado are forecast to grow 7.9 percent, significantly higher than a 5.2 percent projected national average. In real terms, though inflation eats into wage gains, real wages in Colorado as measured by average hourly earnings are forecast to only decrease by 0.4 percent as compared to a 3.1 percent national average.

Figure 7. Growth in Average Hourly Earnings

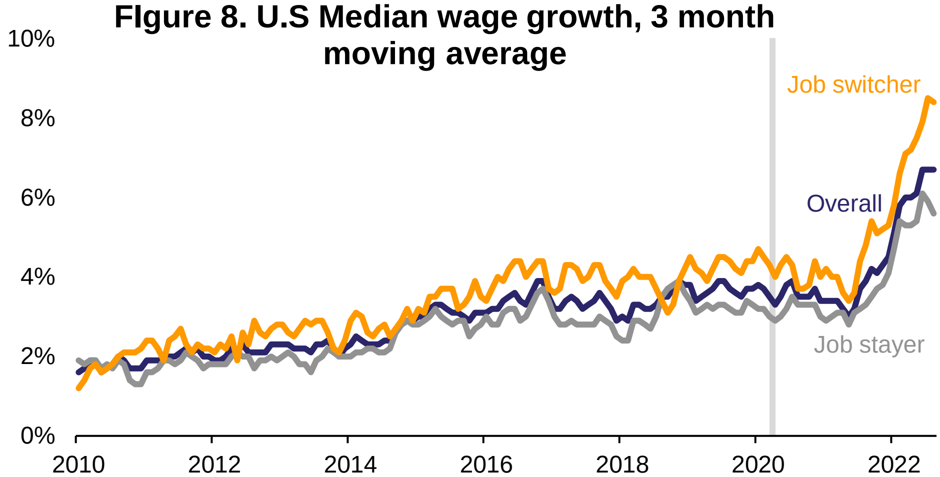


Source: Bureau of Labor Statistics, OSPB September Forecast

Upward pressure on an individual's wage growth, as measured by average hourly earnings, is expected to moderate yet remain above the national average as labor demand continues to fall in line with labor supply. In 2023, average hourly wages are projected at 4.7 percent for Colorado as opposed to 4.1 percent for the U.S. By 2024, average hourly wages are expected to experience a stable growth rate of 3.7 percent for Colorado and 3.4 percent for the U.S.

According to data from the Federal Reserve Bank of Atlanta, nominal hourly wage growth in the U.S. sustained 6.7 percent growth in August, matching June and July for the highest wage growth on record for the series. As an alternative nationwide measure of hourly wage growth, this series measures the median percent change in hourly wage of individuals observed 12 months apart, thereby making the figure less susceptible to composition effects – such as changes in industry makeup of the workforce – than other measures.

FIgure 8. U.S Median wage growth, 3 month moving average

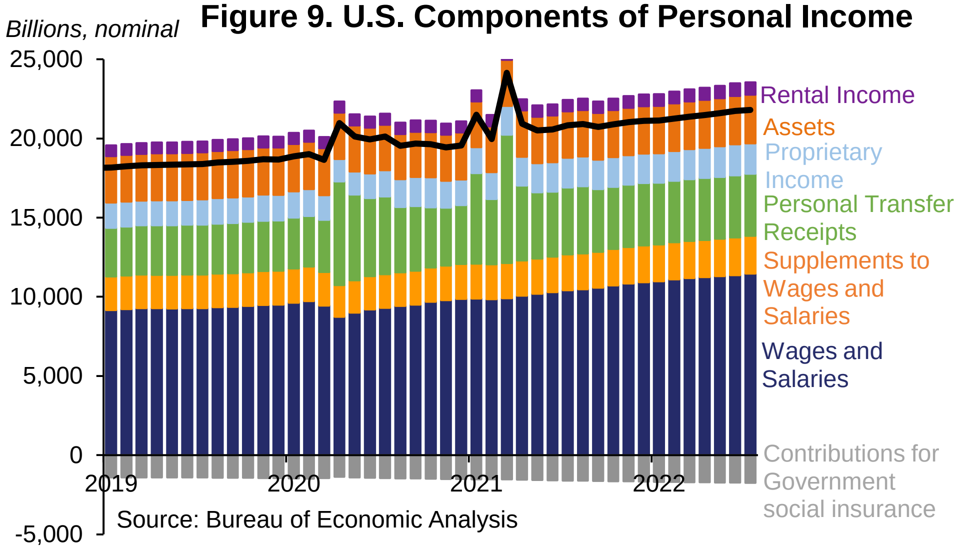


Note: Shaded area indicates recession
Source: Federal Reserve Bank of Atlanta

Though data is only available nationally, it does include both private and public sector wages. Particularly noteworthy is that the gap in wage growth between job switchers and job stayers has widened to a record 2.8 percent (8.4 percent for job switchers and 5.6 percent for job stayers). This data supports the idea that workers may be increasingly likely to seek new jobs to compensate for higher inflation rates as average hourly wage growth trails inflation nationwide. Additionally, despite layoff announcements, there is growing evidence in media reports that workers who lose their jobs are quickly able to find new ones at higher pay.

Wages and salaries growth, as the biggest component of income, have primarily driven the growth in personal income, comprising just over half of all income in the second quarter of 2022. However, the slower expected pace of growth in personal income in 2022 is due to the roll-off of personal transfer receipts from 2021 stimulus payments and unemployment benefits provided by the American Rescue Plan Act (ARPA). While growth is expected to slow in 2022, OSPB revised

Figure 9. U.S. Components of Personal Income



Source: Bureau of Economic Analysis

up personal income growth from 3.0 to 3.6 percent in Colorado as a result of higher wages and salaries and rental income expectations.

In 2023, personal income growth is expected to again grow at a slower pace than wages and salaries, as drags on consumer spending limit proprietor income and equities markets limit opportunities for growth in income from assets. Upside risks to personal income include stronger-than-expected wage growth in the face of tightening monetary policy and more moderate declines in asset prices. Downside risks include further slowdowns in corporate profits and a softening rental market, limiting future growth in proprietor and rental income.

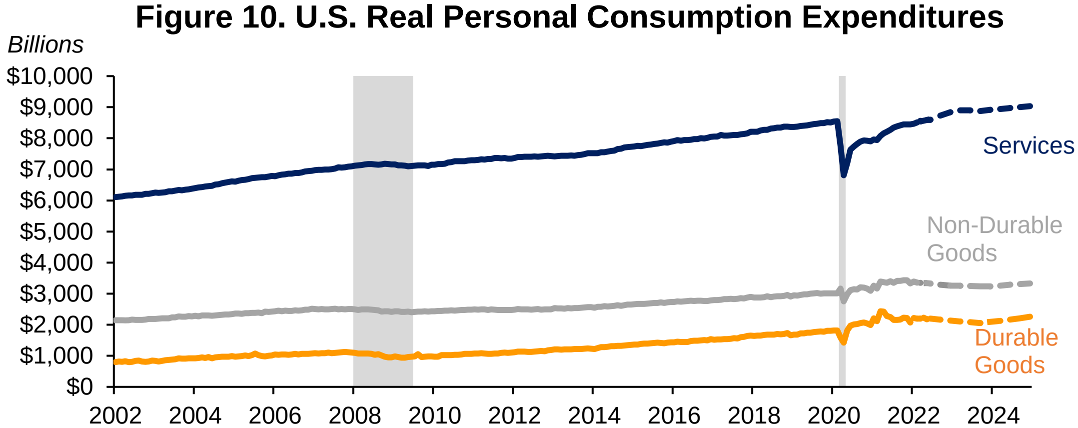
Consumer Spending

Consumer spending through the first half of 2022 has been strong and is expected to grow at a slower pace during the second half of the year in the face of higher interest rates and inflationary pressures. Despite contractions in real GDP during the first two quarters of 2022, real personal consumption expenditures (PCE) have grown at annualized rates of 1.8 percent and 1.5 percent for the first and second quarter, respectively. PCE growth over the first two quarters has been buoyed by services spending as goods spending has recorded negative annualized growth over the first two quarters. In Colorado, nominal consumer spending remains strong, well outpacing the inflation rate. Looking toward 2023, spending at the both the national and state levels are expected to slow as part of a broader economic slowdown.

After above-average growth in PCE during 2021, real spending growth has ticked downward but maintains strength due to elevated services spending buoying growth and outpacing diminished goods spending. Similar to the first quarter of 2022, second quarter goods spending contracted at an annualized rate of 2.4 percent, whereas services spending grew at an annualized rate of 3.6 percent. With services spending outpacing goods spending, it indicates that consumer spending behavior is correcting back to pre-pandemic spending trends as consumers fully re-engage with the services sector amid the pandemic's waning effect on spending. At the same time, consumers are broadly pulling back from goods purchases due to inflation and increased interest rates.

Throughout the remainder of 2022 and the first half of 2023, services spending is expected to remain positive and maintain real positive growth in PCE, while goods spending will continue to drag on consumer spending. In the middle of 2023, as services spending rebalances to expected trend levels and goods spending continues to drag, overall PCE growth is expected to slow. However, by 2024, spending across all goods and services categories is forecast to be positive, as consumer spending normalizes back to pre-pandemic trajectories. Figure 10 depicts these forecast trends.

Figure 10. U.S. Real Personal Consumption Expenditures



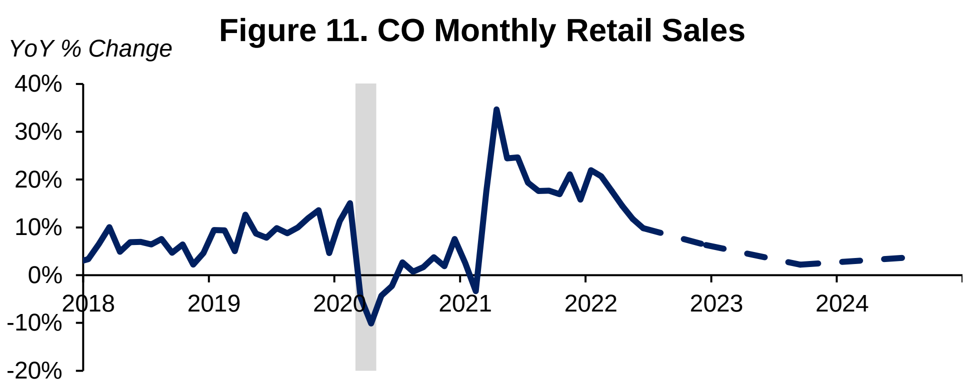
Note: Shaded areas denote recession

Source: Bureau of Economic Analysis; OSPB September 2022 forecast

National nominal retail sales have also been strong in 2022 headlined by significant year-over-year growth in the restaurant sector. Gasoline sales have also been a large contributor due to elevated prices, and broad-based inflation as a whole has been the primary driver of nominal retail sales growth. Over the first eight months of the year, nominal growth of 10.3 percent for retail sales has been recorded versus the same period last year, compared to the most recent year-over-year inflation rate of 8.5 percent. However, retail sales are expected to slow to 1.9 percent in 2023 before rebounding to 3.1 percent in 2024.

In Colorado, nominal retail sales growth continues at elevated levels, recording 15.5 percent growth over the first half of the year as compared with the first half of 2021. When compared with Colorado's year-over-year inflation rate of 8.2 percent, this figure is particularly strong and translates to $141.4 billion in retail sales over the first half of 2022, compared to $122.4 billion over the same period last year.

Statewide retail sales growth is expected to slow but remain strong over the second half of the year and is forecast to end the year at 10.5 percent year-over-year growth. In 2023, nominal growth is expected to weaken to 2.2 percent as consumer spending retreats, with real growth



Note: Shaded areas denote recession
Source: Colorado Department of Revenue

turning negative before rebounding in 2024 to 3.8 percent nominal growth and anticipated real positive growth. It is worth noting that Colorado retail data includes services that are not accounted for in national data, which can act as a slight boost to state growth given the strength of current spending in services.

Two recent federal policy changes may impact consumer spending throughout the forecast period: the passage of the Inflation Reduction Act and the executive order to cancel between $10,000 and $20,000 in student loan debt for individuals making $125,000 or less. While full impacts are unknown, the Inflation Reduction Act could have a marginally positive impact on consumer spending from provisions related to consumer tax credits and rebates for electric vehicles and to make houses more energy efficient. The cancellation of student debt may allow individuals to make purchases that they otherwise would not have over the long term, but there may also be an offsetting short-term marginal drag in spending once payments restart in January after a nearly three-year pause in loan payments.

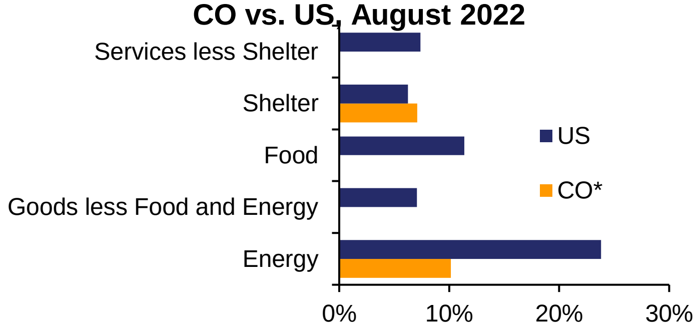
After two years of strong consumer spending, downside risk outweighs the upside as a result of heightened inflation, interest rate increases, and dwindling individual savings. Services spending will still likely continue to buoy consumer spending in the near-term while goods spending drops; however, overall spending growth is expected to slow in 2023.

Inflation

Nationally, Consumer Price Index (CPI) inflation hit a high of 9.1 percent year over year in June before coming back down to 8.5 and 8.3 percent in July and August, respectively. The unanticipated June spike in U.S. inflation was driven by a significant increase in energy prices. The August U.S. reading of 8.3 percent also exceeded the expectations of many forecasters but is consistent with OSPB expectations for an August food price peak, strong shelter readings, and increased service inflation going forward. In Colorado specifically, inflation has declined from a high of 9.1 percent in March to 8.2 percent in July. Full Colorado data is not published for August, but data on energy and shelter came in consistent with the U.S. reflecting shelter growth and significantly reduced energy price growth.

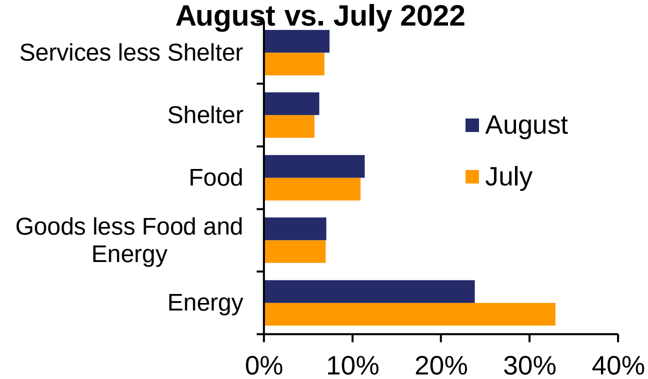
Over the remainder of the year, inflation is expected to moderate, with shelter and services expected to exert the largest share of upward pressure on prices by early 2023. Meanwhile, lingering uncertainty over energy markets means that energy prices could once again push inflation higher. As a result of these projections, 2022 CPI figures for have been revised up to 8.2 percent and 8.3 percent for the U.S. and Colorado respectively, whereas 2024 inflation is expected to sit at 4.2 percent and 4.5 percent. As indicated in figures 12 and 13 below, CPI change in Colorado closely follows inflation numbers nationwide.

Figure 12. YoY Inflation by Major Component CO vs. US, August 2022



Source: Bureau of Labor Statistics; Author's Calculations.
*CO only receives services, goods, and food data every other month.

Figure 13. US YoY Inflation by Major Component August vs. July 2022



Source: Bureau of Labor Statistics; Author's Calculations.

Though energy remains significantly more elevated than other categories, inflation continues to be broad-based in both the U.S. and in Colorado, with food, goods, shelter, and services all above historical levels. Going forward, the shift away from energy and towards these other categories, specifically shelter and services, will likely become more pronounced. Colorado shelter inflation, for example, is 0.9 percentage points higher than that in the U.S. and is driving more of the inflationary pressure in Colorado than energy prices. As this shift continues and elevates the importance of shelter inflation, which is also weighted more heavily in Colorado than in the U.S. as a whole, Colorado CPI is likely to remain elevated for longer than the U.S. and ultimately settle at a higher level, consistent with the historical relationship between the two.

Energy

- *<u>Recent Data:</u>* Energy-driven inflation has significantly outpaced other drivers in 2022, with year-over-year prices having peaked in June at 41.6 percent and 31.7 percent for the U.S. and Colorado respectively. The June peak for energy inflation was largely driven by gas prices, which rose 11.5 percent in June over May figures and were up 60.7 percent over June 2021. Energy inflation in the U.S. has since settled to 23.8 percent in August, consistent with a 24.8 percent decline in gas prices from $4.76 per gallon in June to $3.82 in August.[1] Year over year energy inflation in Colorado settled even further than the U.S., from 23.8 percent in June to 10.1 percent in August.

- *Factors Driving Prices:* Energy inflation has primarily been driven by the ramifications of the conflict in Ukraine, which has constrained supply at the same time that consumer demand has resumed its pre-pandemic trajectory.
- *Expectations:* Energy prices are expected to remain elevated, but energy-driven inflation is predicted to decline to 5 percent both nationwide and in Colorado by early 2023. Uncertainty over European supply and demand continues to impact domestic energy prices. If energy flows between Russia and the rest of Europe slow, and if the winter is particularly cold, prices could be pushed upwards as a result of heightened demand. However, should U.S. production ramp up more quickly than anticipated or if winter energy demand is below expectations, energy may exert downward price pressure.

Shelter

- *Recent Data:* Nationwide, shelter inflation hit a 12-month percentage change of 6.2 percent in July, while Colorado shelter inflation in August was at 7.1 percent.
- *Factors Driving Prices:* Though housing prices influence shelter inflation, the figure is derived from rent and rent-equivalent prices. Mismatched supply and demand continue to exert upward pressure on shelter inflation, particularly in Colorado where underlying demand continues to be strong. Furthermore, Federal Reserve interest rate hikes and their impact on consumer demand should eventually place downward pressure on shelter inflation.
- *Expectations:* Despite, recent interest rate hikes, shelter-driven inflation is expected to peak at 8.0 percent and 6.3 percent year-over-year for the U.S. and Colorado respectively. However, higher interest rate hikes, combined with increasing mortgage rates, are expected to thereafter dampen consumer demand and place downward pressure on shelter inflation.

Goods minus Food/Energy

- *Recent Data:* Nationally, goods inflation peaked at 12.3 percent in February, whereas Colorado-specific goods inflation peaked at 10.7 percent in January. However, goods price pressures have since alleviated, with U.S. goods inflation at 7.1 percent in August.
- *Factors Driving Prices:* Supply-chain disruptions, including zero-COVID policies in Asia, have placed significant upward pressure on goods inflation earlier in the year. The decline since has been driven by an easing of consumer demand and the alleviation of supply chain issues.[2]

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[1] U.S. Energy Information Administration, available at https://www.eia.gov/petroleum/gasdiesel/.

[2] Reference Federal Reserve Supply Chain Surveys.

- *Expectations:* By January 2023, goods inflation is expected to decline to 4.1 percent for the U.S. and 3.2 percent for Colorado. However, prices may remain elevated should zero-COVID policies persist in Asia and thus generate supply chain issues.

Food

- *Recent Data:* August food price inflation hit its highest level yet in the U.S, at 11.4 percent, similar to 12.0 percent in Colorado in July.
- *Factors Driving Prices:* The supply chain for agricultural products has been particularly hit by the conflict in Ukraine, placing supply constraints on corn and wheat. However, commodity prices for these items are expected to fall and it is expected that food price pressure going forward will be driven more significantly by animal products like eggs and beef.
- *Expectations:* Commodity prices are expected to peak in August for the US and July for Colorado. Price pressures on the agricultural supply chain are likely to subside as markets adjust to the impact of the conflict in Ukraine and agricultural exports from that part of the globe have begun to resume, thus placing downward pressure on commodity prices.

Services

- *Recent Data:* Services inflation has been increasing throughout 2022 and reached a new peak of 7.4 percent in the U.S. in August.
- *Factors Driving Prices:* Inflation in services has been driven by the shift in spending away from goods and in favor of services as part of the broader rebalancing from the pandemic economy. Increased labor costs in multiple sectors adds to the price pressure from this shift, thus placing upward pressure on prices in labor-heavy service sector industries.
- *Expectations:* CPI for services is expected to peak in quarter four of 2022, and this category is expected to comprise a significant share of total inflation in 2023, alongside shelter. However, services inflation may not be as high as expected if services spending is lower than anticipated.

Federal Reserve Action

As a consequence of the inflation rates seen year-to-date in 2022, the Federal Reserve has pursued a tightened monetary policy by gradually raising interest rates, which is expected to continue through the end of the year. Federal Reserve Chair Jerome Powell has expressed the Fed's commitment to using interest rate hikes as a mechanism to slow inflation despite the effects it may have on consumer spending and the labor market.

The first interest rate hike of 25 basis points (0.25 percent) occurred in March, followed by a 50 basis point increase in May, then three consecutive 75 basis point hikes in June, July, and September. This has brought the upper bound of the federal funds rate to 3.25 percent. By the end of the year, this figure is expected to be above 4.0 percent.

Energy

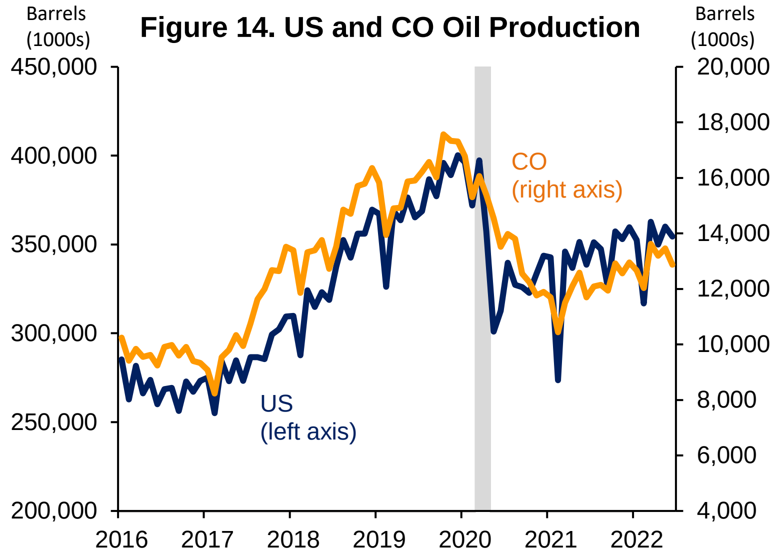
The energy forecast remains highly uncertain and subject to above-average volatility. While energy-related commodity prices have mostly dropped from their summer peaks as global and domestic energy production has picked up, low global inventories persist and continue to place upward price pressure on the energy sector. Furthermore, supply constraints and possible shocks may yet emerge due to the Russian invasion of Ukraine. Demand continues to remain relatively strong, though it has fallen some due to inflationary pressures and could continue to see downward pressure with economic activity expected to slow in 2023.

Domestically, unleaded gas hit a record high in June when West Texas Intermediate (WTI), the U.S. oil market benchmark, registered prices at over $120 per barrel and consumers faced an average of $5 per gallon. Upward pressure on retail gas prices were further exacerbated by lowered refinery capacity following the closure and idling of refineries nationwide in response to depressed demand over 2020 and much of 2021. WTI and retail gas prices have since abated, as the average WTI price in August was $93.67 and unleaded gas prices have fallen under $4 per gallon nationally. Average unleaded gas prices in Colorado remain below the national average. Prices have dropped as a result of increased supply as gasoline production ramped up with refineries consistently running at 90 to 95 percent capacity over the summer, and inventories were replenished. Demand destruction caused by higher gas prices and overall, broad-based inflation also took place.

Rising production of oil and natural gas is also bringing the market closer to equilibrium. According to the Energy Information Administration, US oil production in the first half of 2022 increased 5.4 percent over 2021 – a figure which is likely to jump higher during the second half of the year. Meanwhile, Colorado oil production has increased 11.5 percent over the first half of 2022 compared to last year. Production is trending upwards and is currently three percent higher than 2018 – a year that ended as the second highest statewide oil production year on record.

Detailed national and state oil production levels over time are depicted in Figure 14 and Figure 15.

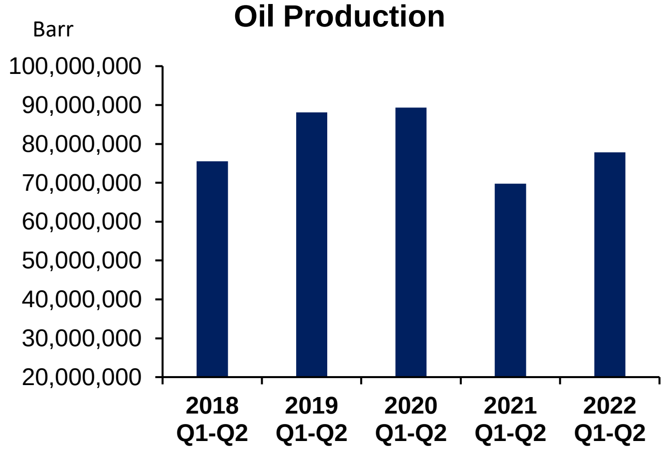
Figure 14. US and CO Oil Production



Note: Shaded area denotes recession.
Source: Energy Information Administration

As of August, the Colorado rig count stood at 21, a 75 percent increase since the beginning of the year when the rig count was 12. This is the highest rig count recorded in the state since December 2019. Rig counts have historically been a leading indicator for production levels, and this increase likely points to a production ramp-up through the remainder of 2022 and the first half of 2023 largely in response to sustained high price levels. However, after the 2015 and 2020 oil and market contractions, firms nationwide appear slower to invest in increased production compared to recent high commodity price environments due to increased labor costs, intensive capital costs for production, current debt levels, and a fiscal incentive to maintain stable investment levels resulting in higher profit margins due to elevated WTI prices. Moreover, investor preference for public firms to focus on debt reduction and dividends in lieu of growth is also factored into production decisions. Nonetheless, production is expected to increase, and the EIA forecasts that U.S. oil production in 2023 will surpass 2019 as the highest year on record. However, even with slowing demand forecast, WTI prices are expected to remain above average in this new, tempered production environment.

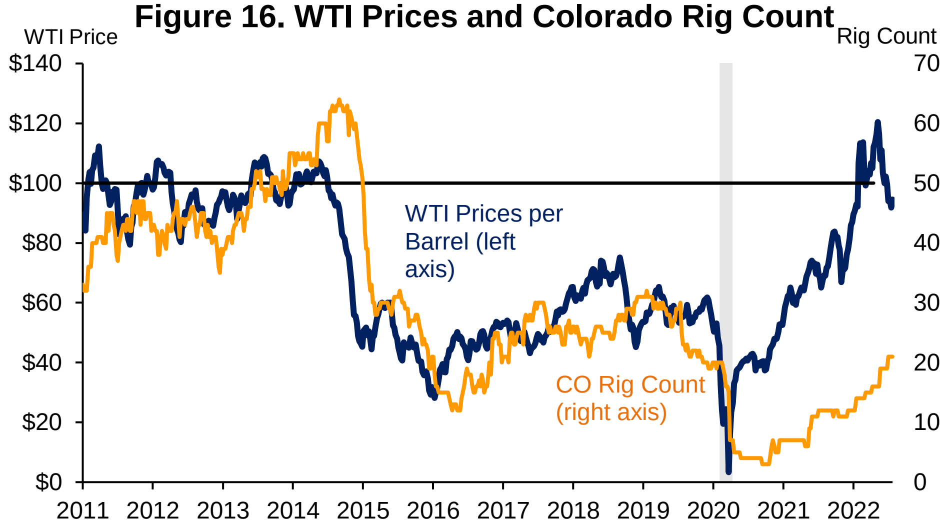
Figure 15. January - June Colorado Oil Production



Note: This chart depicts the top six oil-producing counties in Colorado which make up approximately 98% of production.
Source: Colorado Oil and Gas Conservation Commission.

Nationally, natural gas production has met and exceeded pre-pandemic levels, even as Colorado production continues to lag that of the nation. Statewide natural gas production through the first half of 2022 is down 3.6 percent compared to 2021, however, with the majority of Colorado natural gas production predicated upon oil production, natural gas production is expected to increase over the second half of the year as oil production continues to tick up.

Figure 16. WTI Prices and Colorado Rig Count

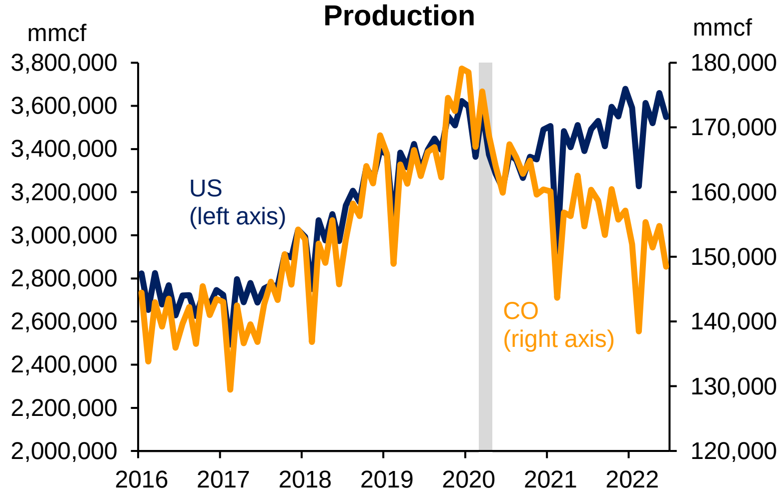


Source: Energy Information Administration and Baker Hughes

Moving forward, the Inflation Reduction Act, passed and signed into law in August, will have impacts on the energy sector. The bill provides an estimated $369 billion over ten years to renewable and clean energy investments. These provisions include investments in decarbonizing electric power production targeted towards states and electric utilities and tax credits for investment in and production of solar panels, wind turbines, and batteries for electric cars. It also offers incentives such as consumer tax credits and rebates to make homes more energy efficient and for the purchase of electric vehicles. Market effects related to these provisions and specifically how they impact the oil and gas sector will continue to be analyzed.

Despite the recent industry hesitancies to invest in production, according to the 10th District Federal Reserve energy survey (which includes Colorado), expectations for drilling and business activity in the oil and gas industry is at its highest level since December 2016. When coupled with rig count data and recent production trends, oil and gas production is expected to increase over the next year. However, lingering uncertainty remains

Figure 17. US and CO Natural Gas Production



Note: Shaded area denotes recession
Source: Energy Information Administration; Baker Hughes.

on the demand side going into 2023 when consumer activity and overall economic activity is expected to moderate. In the near-term, however, continued below-average inventories, as well as the potential for the war in Ukraine to generate unforeseen supply shocks on European energy markets could place upward price pressure on the energy sector.

Forecast Risks

OSPB forecasts point estimates for both the economic and revenue forecasts each quarter, rather than a range of scenarios. However, these economic forecasts are subject to both upside and downside risks that would alter the eventual path of the economy. Economic conditions currently underlying this forecast are weighted evenly.

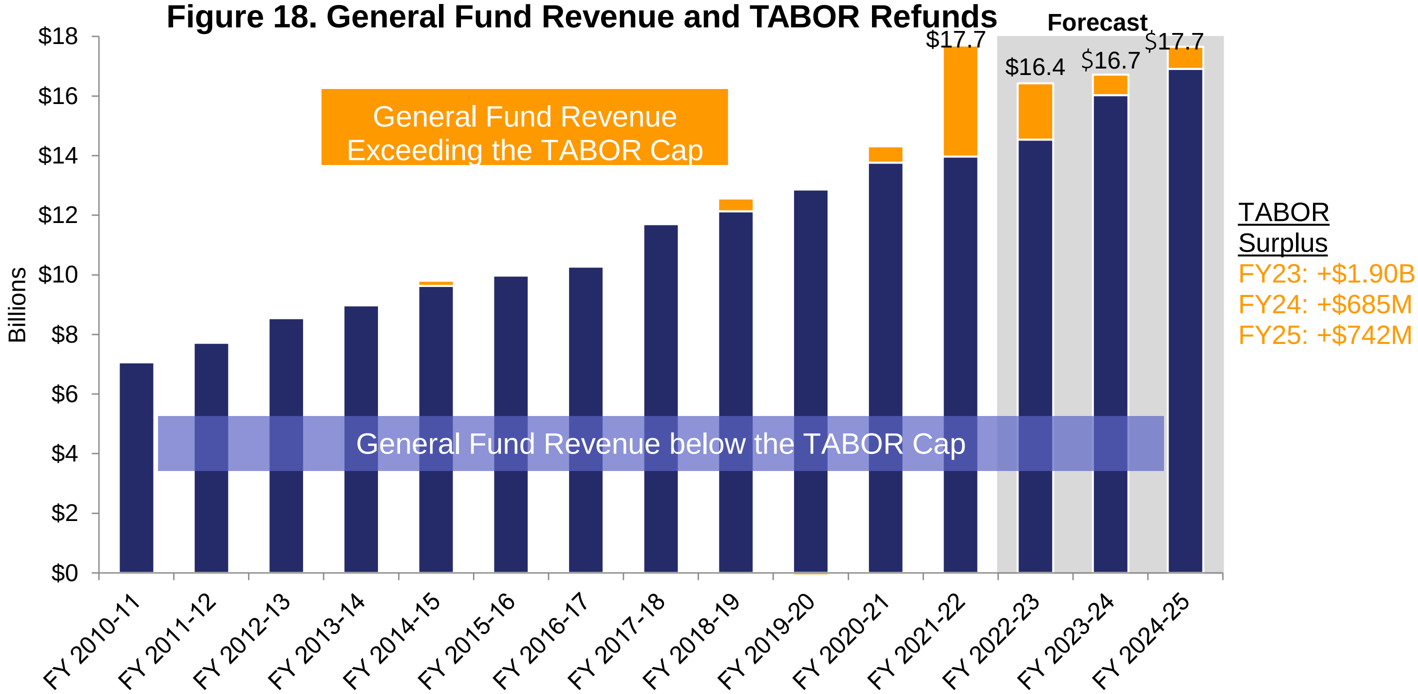
On the **upside**, strong household finances may spur consumer spending on services higher and above trend for longer than expected in the baseline (where it fades within a year). Additionally, labor demand, currently at historically high levels, may remain more resilient than anticipated in the face of slowing economic growth, avoiding a uptick in unemployment altogether in the outyears.

Prolonged inflation is the main **downside** risk, as continued high inflation may increase the nominal value of sales but also eat into aggregate demand, thereby slowing economic growth. An aggressive monetary tightening response will slow demand, but risks pushing the economy into a small recession.

General Fund Outlook

General Fund revenue increased 23.7 percent in FY 2021-22 to $17,697.9 million. OSPB has revised General Fund expectations to reflect a rebalancing in the economy and state revenue coming off the highest growth in several decades. In FY 2022-23, revenue is expected to decline by 7.2 percent before rebounding by 1.7 percent in FY 2023-24 and 5.6 percent in FY 2024-25. General Fund revenue for FY 2021-22 is $489.4 million, or 2.8 percent, higher than was estimated in June, driven by particularly strong individual income revenue collections. The forecast for FY 2022-23 is $130.8 million lower than estimated in June, as slowing individual income withholdings and revenues from both individual and corporate filings more than offset rising sales tax revenue collections. The forecast in FY 2023-24 is revised down $551.1 million from June, as a result of the growing differences in wage growth and corporate profits by mid-2023 relative to the previous forecast.

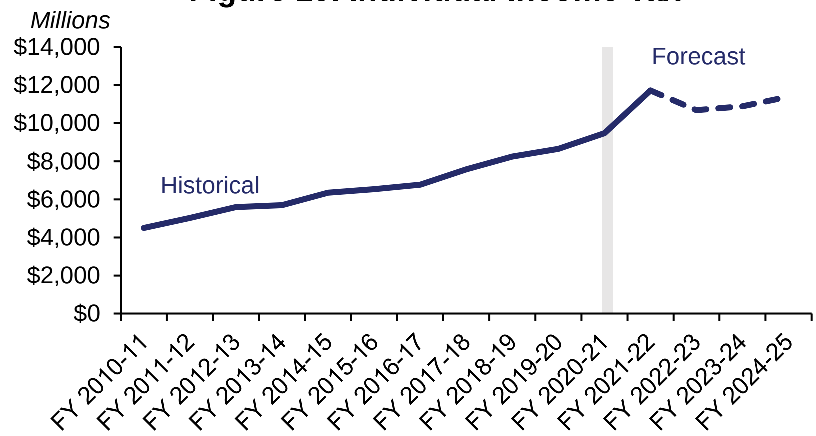
Figure 18. General Fund Revenue and TABOR Refunds



General Fund revenue is projected to exceed the TABOR cap throughout the forecast period. Revenue exceeded the cap by $3.7 billion in FY 2021-22, which is $0.3 billion more than was forecast in June. Going forward, General Fund revenue above the cap is projected to be $1.9 billion in FY 2022-23, $685.1 million in FY 2023-24, and $742.4 million in FY 2024-25, all below the levels from the June forecast due to a slowdown in revenue growth in FY 2023-24.

Individual Income Tax

Figure 19. Individual Income Tax



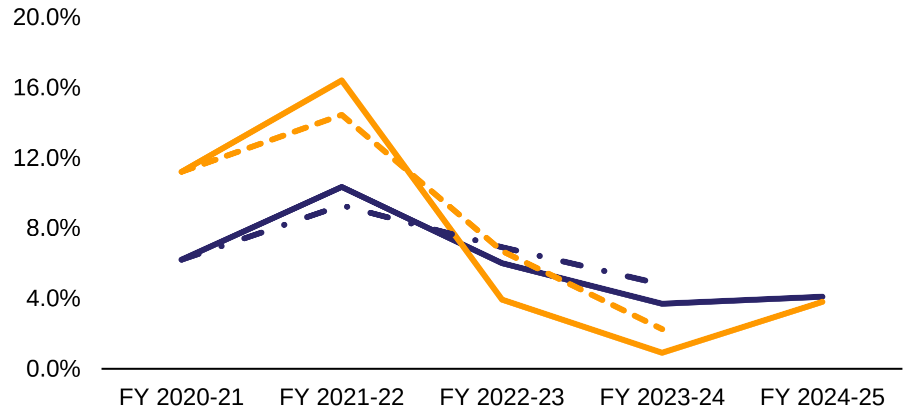
Source: Colorado Department of Revenue, OSPB Forecast

Individual income tax receipts in FY 2021-22 increased by 23.6 percent compared to the prior fiscal year, to $11.7 billion. This reflects an upward revision from the prior forecast of $249.8 million. The record growth was driven by 16.4 percent growth in withholdings as a result of a strong labor market, in addition to record estimated payments and cash with returns as the economy rebounded quickly from the pandemic recession. Estimated payments drastically exceeded expectations because pass-through businesses made significant adjustments to estimated earnings up from the required levels (100 percent of last year's taxes or 90 percent of estimated current year taxes owed) to account for a continuation of growing record profits to start 2022. This business decision was also motivated by firms owing a significant amount in cash with returns in April as a result of underreporting previous estimated payments. Cash with returns also increased on a rise in capital gains owed on equity sales during the stock market boom in 2021.

In FY 2022-23, net individual income revenue is expected to decrease by 8.8 percent but is buoyed by a strong labor market and services spending that keeps proprietor's income elevated through the rest of this calendar year. However, recent estimated payments serve as a form of prepay for businesses, lessening the need for future cash with returns. During the second half of FY 2022-23 and into FY 2023-24, revenue is expected to continue to slow as the full weight of tightening monetary policy drags on economic growth causing withholding revenue to slow and estimated payments to continue to fall. By the end of FY 2023-24, the economy is expected to stabilize at near equilibrium growth, offsetting the slowdown at the start of the fiscal year and leading to a 1.9 percent growth in individual income revenue over the course of the year. In FY 2024-25, overall individual income revenue returns to approximately historical growth of 4.6 percent as the economy is fully stabilized.

Individual income tax withholdings account for more than 80 percent of net individual income tax receipts and are closely linked to aggregate wages and salaries. Colorado aggregate wages and salaries are currently strong in response to a historically tight labor market, but the pace of growth has been revised down in 2023 because a more aggressive monetary policy path will further limit labor demand. As seen in Figure 20, aggregate wages and salaries are revised up in

Figure 20. Wages and Salaries downward revision in the outyears negatively impacts withholdings



2022, but down in the outyears. Therefore, withholdings are revised down in FY 2022-23 by $87.9 million while FY 2023-24 withholdings revenue are revised down $216.5 million from June.

In FY 2021-22, estimated payments hit a new record, alongside record business earnings. However, as the economy is projected to slow in 2023, pass-through business are expected to respond by reversing course and reducing estimates to account for the new environment. The slowing economy is a result of depressed aggregate demand in the face of higher interest rates, which impacts small businesses and C-corps alike. As a result, estimated payments are revised down by $25.2 million in FY 2022-23 and $208.3 million in FY 2023-24. The resulting decline in FY 2022-23 is more pronounced, falling 35.2 percent, but unlike the June forecast, growth is expected to contract a further 6.2 percent in FY 2023-24. In FY 2024-25, the economy is expected to be on much more stable footing and as a result, estimated payments are forecasted to grow 13.0 percent.

Cash with returns are little changed from the last forecast in FY 2022-23, as large recent growth in estimated payments is expected to act as a pre-payment for future taxes owed as profits begin to decline. Additionally, the drop in cash with returns next fiscal year is a result of an expected compression of asset price growth as the economic slowdown sets in. In FY 2023-24, cash with returns increase by 18.9 percent to account for the pullback in estimated payments in FY 2022-23 and the expected rebound in equity markets. Finally, refunds are expected to stabilize at FY 2021-22 levels during FY 2022-23 and FY 2023-24 to match the growth of combined withholdings and estimated payments revenue.

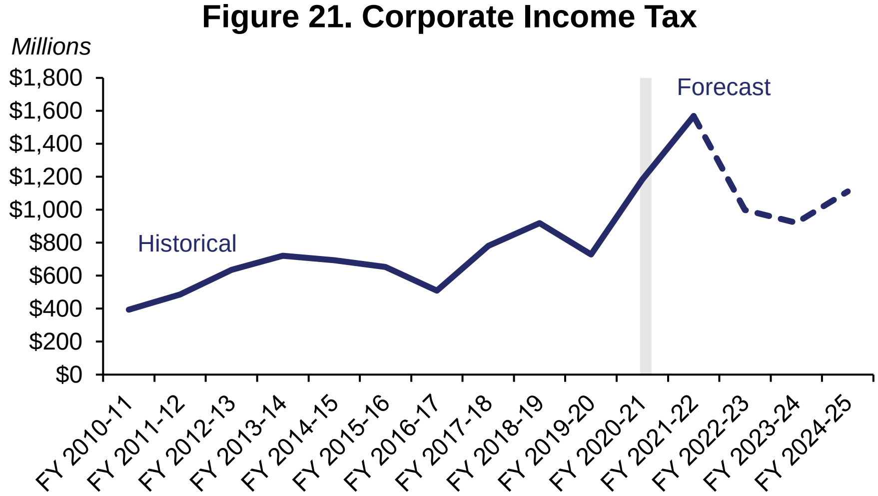
In addition to the above economic drivers, there are additional policy impacts from the last two State legislative sessions. From the 16 bills with a revenue impact in the most recent session, HB22-1205 (Senior Housing Income Tax Credit) has the largest effect. This bill creates a new one-time refundable income tax credit for seniors who own a home but don't qualify for the Homestead Exemption. From the 2021 legislative session, portions of HB21-1311 and -1312 have increasing impacts in FY 2022-23 and beyond.

Finally, there are two federal bills driving policy adjustments. First, the Inflation Reduction Act (IRA) has a minimal, positive impact on revenue, mostly as a result of increased IRS audit enforcement. This minimal impact is due to the fact that the base of Colorado's income tax is federal taxable income, so changes to existing federal credits or the creation of new credits that don't affect taxable income need no adjustment for the forecast period. Similarly, the IRA's creation of a new 15 percent corporate minimum tax on certain large corporations doesn't result in a state revenue impact because Colorado imposes its own state tax rate (4.55%). Only three provisions in the IRA affect state income tax revenues in the forecast period. The largest comes from increased funding for IRS tax enforcement activities, which should increase collections from state audits given the IRS often shares audit results with states but those impacts are delayed and OSPB's initial expectations are that those amount to less than one percent of overall revenue by FY 2024-25. The IRA also expands a federal deduction (reducing taxable income) and provides for a variety of grants (increasing taxable income), which will affect the tax liabilities of certain state taxpayers. The IRA extended a limitation on the excess business losses of noncorporate taxpayers as well, but that won't result in state revenue impacts until FY27. Second, the Infrastructure Investment and Jobs Act, also has a minimal impact through the forecast period.

Corporate Income Tax

In FY 2021-22, corporate income tax receipts are estimated to have grown 32.5 percent off the previous fiscal year's historic highs as corporate profits growth have continued to outpace expectations. Preliminary actuals are $160.5 million above the June forecast, due to a sustained healthy business environment that kept estimated payments and cash with returns coming in above expectations similar to individual income revenue. Corporate profits are expected to decline in 2023 as rising inflation and interest rates slows aggregate demand. Therefore, in FY 2022-23, the expected drop in corporate tax revenue is now 36.4 percent. Corporate profits in 2023 have been revised down since June and are also a drag on corporate tax revenues in FY 2023-24, driving a further contraction of 7.7 percent for the fiscal year in total despite a better outlook by the end of the fiscal year. In FY 2024-25, a newly rebalanced and stable economic environment allow for 20.6 percent revenue growth.

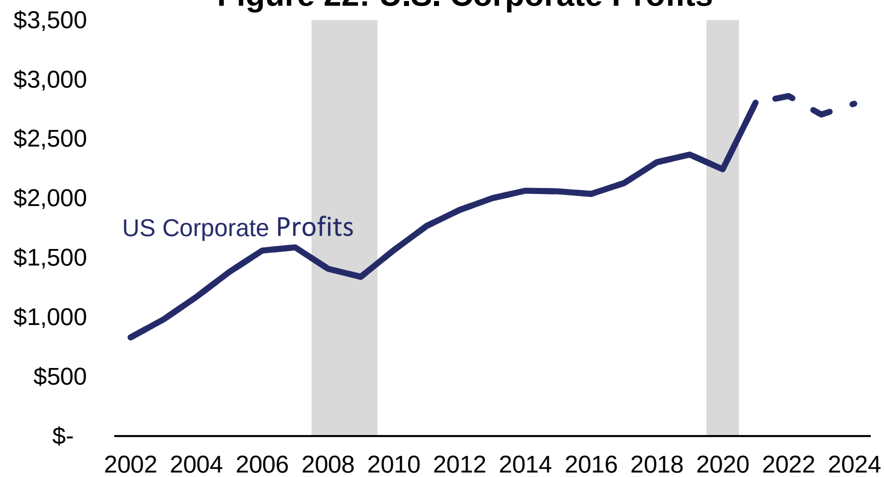
Figure 21. Corporate Income Tax



Source: Colorado Department of Revenue, OSPB Forecast

When developing expectations on future corporate income revenue, an important variable to consider is corporate profits before taxes accounting for inventory and capital adjustments. In the most recent quarter, these profits nationwide hit a new record high of $3.05 trillion. Prior to the pandemic, the record was $2.41 trillion, but that mark has been broken every quarter for the last two years. However, as the consumer basket shifts away from durable goods towards services, growth in profits from these historic highs is expected to slow in 2022 to 2.0% growth. Then, with reduced consumer demand driving a slowdown in 2023, corporate profits fall by 5.5 percent before rebounding with the economy in 2024.

Figure 22: U.S. Corporate Profits



Source: Bureau of Economic Analysis, OSPB Forecast

The resulting impact on corporate estimated payments and cash with returns is similar to the corresponding individual income revenue streams. In FY 2022-23, estimated payments are expected to fall 21.4 percent as economic grows slows. Additionally, cash with returns next fiscal year fall further, by 52.5 percent, as C-corps more accurately estimate payments, in line with FY 2018-19 instead of more recent years affected by the pandemic economy. In FY 2023-24, further expected drops in estimated payments more than offset increases in cash with returns as the economy begins to rebalance by the end of the fiscal year. In FY 2024-25, estimated payments and cash with returns are expected to grow by double digits while refunds stabilize.

In addition to the above economic drivers, there are additional policy impacts from the last two state legislative sessions. From the bills with a revenue impact in the most recent session, HB22-1026 (Alternative Transportation Options Tax Credit) has the largest effect. This bill replaces an existing income tax deduction for employers who provide ridesharing, transit, or other transportation options with an expanded credit. The bill reduces cash with returns revenue by an accrued $6.6 million in FY 2022-23 and $14.1 million in FY 2023-24.

Sales and Use Taxes

Sales Tax

In FY 2021-22, $4.1 billion in sales tax revenue was collected, representing 19.6 percent growth over FY 2020-21. Sales tax revenue is forecast to grow by 4.2 percent in FY 2022-23 to $4.3 billion. Compared to the June forecast, this is an upward revision of $29.9 million, though the growth rate is revised down by 0.9 percent. The upward revision is due to above-expectation collections at the end of FY 2021-22 elevating the base. FY 2023-24 is revised downward from June by $25.8 million to $4.4 billion, while FY 2024-25 is forecast to register 4.9 percent growth to $4.6 billion.

Consumer spending is expected to slow over the course of 2023, which will cause downward pressure on sales tax revenue and result in negative to flat real sales tax growth in FY 2022-23 and FY 2023-24. Growth in both FY 2022-23 and FY 2023-24 is expected to be a product of inflation before real growth materializes again in FY 2024-25 when consumer spending is expected to rebound and normalize. Sales tax growth is largely predicated upon nominal state retail sales growth which grew by 17.3 percent in calendar year 2021 and is forecast to grow by 10.5 percent in 2022, 2.2 percent in 2023, and 3.8 percent in 2024.

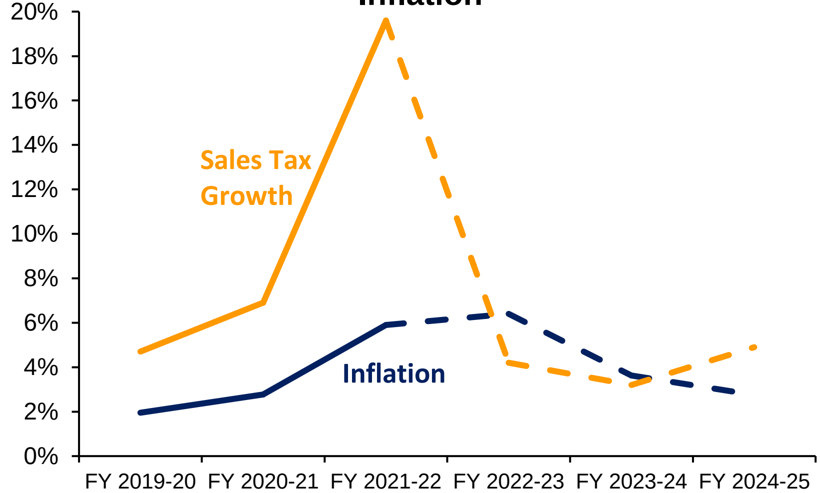
Figure 23. Sales and Use Tax Revenue Forecast

Fiscal Year	Sales Revenue (billions)	Growth	Use Revenue (millions)	Growth	Total Revenue (billions)	Growth
FY 2021-22 (prelim)	$4,089.0	19.6%	$232.6	8.6%	$4,321.6	19.0%
FY 2022-23	$4,260.3	4.2%	$243.1	4.5%	$4,503.4	4.2%
FY 2023-24	$4,397.1	3.2%	$242.7	-0.1%	$4,639.8	3.0%
FY 2024-25	$4,612.6	4.9%	$257.4	6.1%	$4,870.0	5.0%

This forecast also takes into account policy adjustments due to recent legislative action that are not fully incorporated into the broader sales tax base trend. These adjustments are forecast to result in a sales tax revenue reduction of $22.4 million in FY 2022-23 and an increase of $21.3 million in FY 2023-24. The most significant policy impact comes from HB22-1406, Qualified Retailer Retain Sales Tax, which allows certain businesses in the food services sector to deduct up to $70,000 from net taxable sales for up to five locations each month. This deduction is only allowed over the first quarter of FY 2022-23 and will result in an estimated sales tax revenue reduction of $39.3 million.

While sales tax growth in FY 2021-22 of 19.6 percent came in well above inflation levels, the forecast growth in FY 2022-23 of 4.2 percent is below inflation expectations on a fiscal year basis of 6.4 percent. With that, while an average nominal growth of 4.2 percent is forecast in FY 2022-23, it is a product of inflation, meaning that negative real growth is forecast for the fiscal year. This is illustrated in Figure 24 depicting forecast sales tax growth falling below forecast inflation in FY 2022-23 and FY 2023-24. Real sales tax growth has consistently been recorded over FY 2019-20, FY 2020-21, and FY 2021-22 with sales tax growth remaining higher than the inflation rate

Figure 24. Nominal Sales Tax Growth vs. Inflation

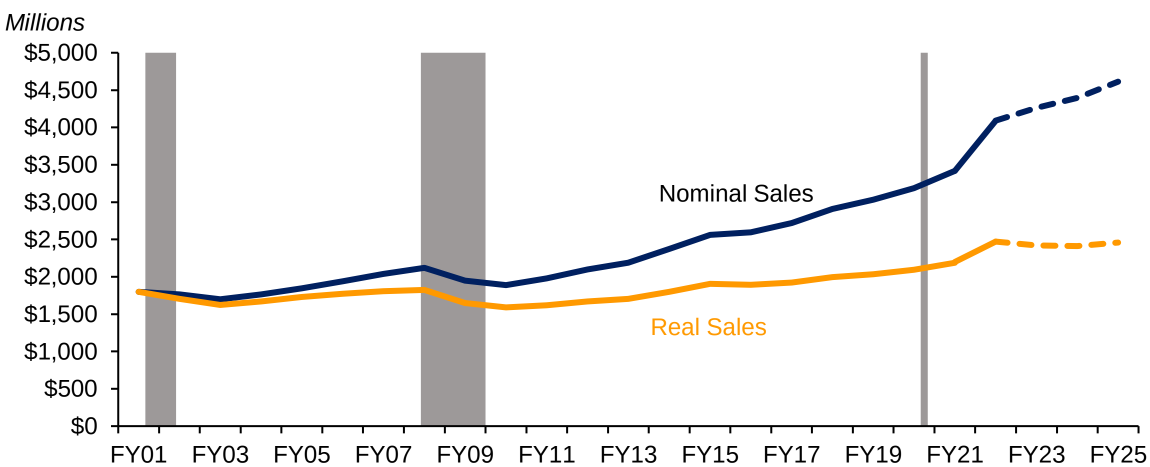


Note: Inflation levels shown on a fiscal year basis. Dotted line reflects forecast.
Source: Colorado Department of Revenue, Bureau of Labor Statistics, and OSPB September Forecast

over that time period. In FY 2024-25, sales tax growth is expected to exceed the inflation rate again with sales tax growth forecast at 4.9 percent and an expected inflation rate of 2.8 percent. This dynamic is further illustrated in Figure 25 which depicts nominal and real sales tax growth over time. While nominal sales growth is expected to remain on its historic, positive growth trajectory over the forecast period, real sales is expected to be negative to flat. Over the past two fiscal years, the separation between nominal and real sales has accelerated with elevated inflation levels.

After historic sales tax strength in FY 2021-22, revenue growth is expected to weaken in the forecast out-years around the long-term average of four to five percent. With consumer spending

Figure 25. Sales Tax Forecast (Nominal vs. Real, Indexed to FY 2001)



Note: Dotted line indicates forecast.
Source: Colorado Department of Revenue, Bureau of Labor Statistics, and OSPB September Forecast

and retail sales expected to soften from current levels, nominal sales tax growth in the out-years will largely be a product of inflation with negative to flat real growth.

Use Tax

Use tax revenue increased 8.6 percent to $232.6 million in FY 2021-22 and is forecast to increase by an additional 4.5 percent in FY 2022-23 to $243.1 million. In FY 2023-24, revenue is expected to fall by 0.1 percent to $242.7 million. This is a downward revision of $11.3 million from the June forecast for FY 2022-23 and a $20.5 million downward revision for FY 2023-24. These downward revisions come after below-expectation collections over the past six months and an overall economic slowdown expected in 2023. With an elevated oil price forecast, higher levels of capital investment in the oil and gas industry are expected to buoy use tax growth to some extent, but an expected overall consumer activity slowdown is forecast to outweigh the upside and create downward pressure on revenue. Use tax growth is expected to rebound in FY 2024-25 with collections forecast to grow 6.1 percent to $257.4 million. These projections continue to assume that the trade-off between sales and use tax revenue as a result of HB 19-1240, which codified the state's sales tax rules in response to the South Dakota v. Wayfair ruling, has largely leveled off to a new equilibrium relationship between sales and use tax collections.

Marijuana Sales

After a 27.4 percent increase to $245.5 million in FY 2019-20, the 15 percent special sales tax on marijuana retail sales increased by another 17.4 percent to $288.2 million in FY 2020-21 before falling by 10.2 percent in FY 2021-22. Revenue is expected to decline slightly by 1.9 percent in FY 2022-23 then resume slower growth in FY 2023-24 and FY 2024-25. Further analysis of marijuana tax collections can be found in the Revenue Outlook – Cash Funds section of this report.

Proposition EE and Other Excise Taxes

Proposition EE, approved in 2020 and effective in 2021, imposes additional taxes on cigarettes and tobacco products and charges a new tax on other nicotine products such as e-cigarettes.

Through FY 2022-23, revenue from the Proposition EE-imposed taxes is largely transferred to the State Education Fund. In FY 2023-24 and onward, revenue will be transferred almost entirely into the Preschool Programs Cash Fund aside from a small transfer, $11.0M, to the Tobacco Education Programs Fund. In total, these taxes brought in $49.0 million in FY 2020-21 and $210.9 million in FY 2021-22, their first full year of implementation. The amounts are expected to grow slightly in FY 2022-23 and FY 2023-24 to $213.5 million and $213.9 million respectively before jumping up

21.3 percent to $259.4 million in FY 2024-25 as a result of additional tax increases for tobacco, cigarettes, and nicotine. Figure 26 summarizes the new taxes levied on these products through FY 2025. Taxes on all three types of product will also increase once more in FY 2028.

Figure 26. Proposition EE Tax Rates

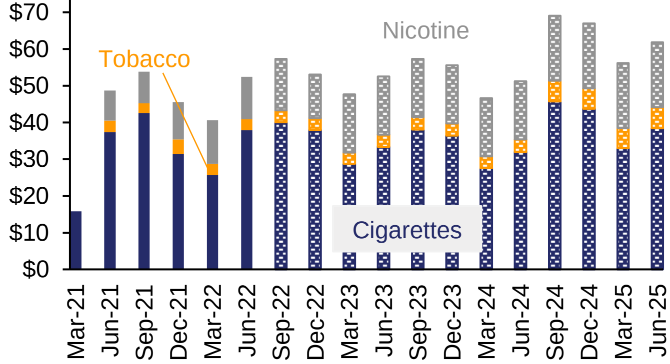
Cigarettes	FY 2020-21	FY 2021-22	FY 2022-23	FY 2023-24	FY 2024-25	
Original Tax	$0.20	$0.20	$0.20	$0.20	$0.20	
Amendment 35	$0.64	$0.64	$0.64	$0.64	$0.64	
Proposition EE	$1.10	$1.10	$1.10	$1.10	$1.40	
Total Cigarette Taxes	**$1.94**	**$1.94**	**$1.94**	**$1.94**	**$2.24**	
Tobacco	**FY 2020-21**	**FY 2021-22**	**FY 2022-23**	**FY 2023-24**	**FY 2024-25**	
Original Tax	20%	20%	20%	20%	20%	
Amendment 35	20%	20%	20%	20%	20%	
Proposition EE	10%	10%	10%	10%	16%	
Total Tobacco Taxes	**50%**	**50%**	**50%**	**50%**	**56%**	
Nicotine	**2021**	**2022**	**2023**	**2024 (Jan-Jun)**	**2024 (Jul-Dec)**	**2025**
Proposition EE	30%	35%	50%	50%	56%	56%
Total Nicotine Taxes	**30%**	**35%**	**50%**	**50%**	**56%**	**56%**

As noted above, the bulk of these taxes are for the purposes of the implementation of universal preschool and will be deposited primarily in the preschool programs cash fund starting in FY 2023-24. The specific distributions are summarized below.

Figure 27. Proposition EE Distribution Amounts

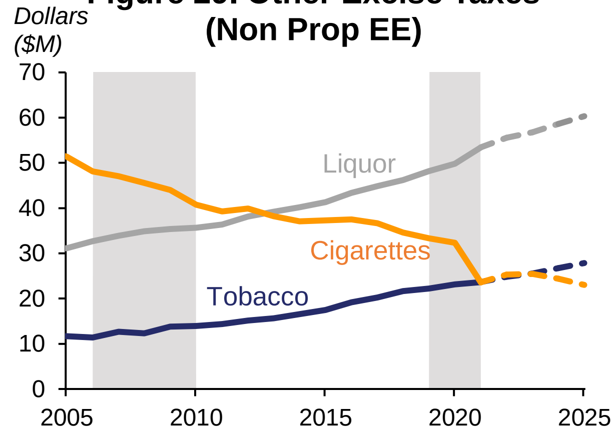
	FY 2021-22	FY 2022-23	FY 2023-24	FY 2024-25
Total	**$210.9**	**$213.5**	**$213.9**	**$259.4**
State Education Fund	$152.4	$149.9	$0.0	$0.0
Rural Schools Cash Fund	$30.0	$35.0	$0.0	$0.0
Housing Development Grant Fund	$11.2	$11.2	$0.0	$0.0
Tobacco Tax Cash Fund	$11.0	$11.0	$11.0	$11.0
General Fund	$4.6	$4.6	$4.6	$4.6
Eviction Legal Defense Fund	$0.5	$0.5	$0.0	$0.0
Preschool Programs Cash Fund	$1.4	$1.4	$198.4	$243.9

Figure 28. Quarterly Proposition EE Revenue



Note: Dotted region indicates forecast period.
Source: Colorado Department of Revenue; OSPB Forecast

Figure 29. Other Excise Taxes (Non Prop EE)



Sources: Department of Revenue; OSPB Forecast

The bulk of Proposition EE revenue (73.6 percent in FY 2021-22) currently comes from taxes on cigarettes, for which the long term consumption trends are negative. Throughout the forecast period and going forward, the percentage of revenue coming from cigarette taxes will decrease (down to 63 percent by FY 2024-25) and the percentage stemming from nicotine will increase considerably, with nicotine consumption increasing over time.

In addition to Proposition EE which is largely not subject to TABOR and is transferred out to other funds, the state collects other excise taxes that are credited directly to the General Fund. These other excise taxes include the initial statutory taxes on cigarettes and tobacco, as well as revenue from liquor taxes. Liquor and tobacco taxes, which are each charged as a percentage rate, have increased slowly over time while cigarette taxes, charged at a flat per pack amount, have fallen consistently.

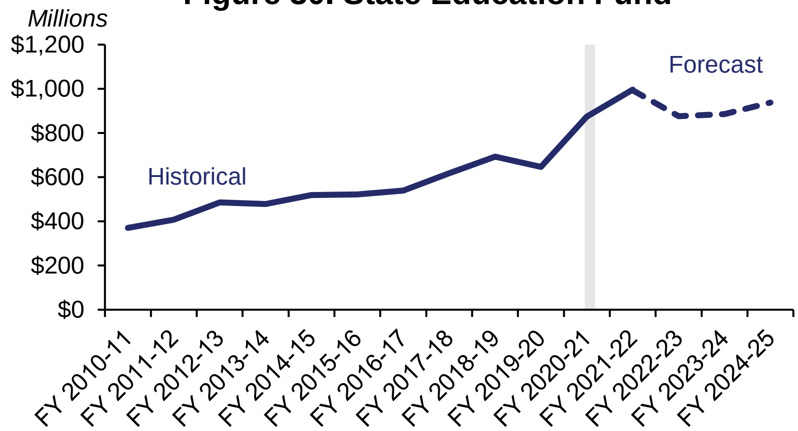
Other General Fund Revenue

Other General Fund revenue includes insurance premium tax revenue, interest/investment income, and court receipts. Other General Fund revenue is estimated to have increased by 15.2 percent to $507.8 million in FY 2021-22 due to increases to insurance premium tax and interest income. Revenue is expected to increase by 7.9 percent in FY 2022-23 and 3.5 percent in FY 2023-24. The FY 2022-23 estimate was revised up from the June forecast mainly due to growth in interest income due to higher receipts and increased interest rate expectations. The FY 2022-23 interest income estimate would otherwise be about $60 million higher if not for the early return of $2.7 billion in TABOR refunds through SB22-233, but this was also accounted for in the June forecast. In 2023-24, higher interest income revenue expectations are more than offset by reduced growth expectations in insurance revenue. Insurance revenue in FY 2023-24 is expected to normalize after 18 percent growth in FY 2022-23. The current fiscal year's growth is a result of 2021 legislation, which reduced the size of the annuities exemption and the regional home office rate reduction.

State Education Fund

Revenue to the State Education Fund (SEF) from income taxes is expected to be 13.6 percent higher in FY 2021-22 than in FY 2020-21, reaching $993.5 million. This is due to a very strong recovery of the economy in FY 2021-22, which drove revenue up, but also to the truing up of a technical error, which delayed a transfer of $75.6 million into the SEF from FY 2020-21 to FY 2021-22. In FY 2022-23, an 11.8 percent decrease in revenue is expected, with revenues at $876.2 million, which is due in part to a return to the mean after the delayed transfer, and in part to a slowing of economic activity as inflation remains high and interest rates rise. In FY 2023-24, growth in revenue is expected to slow to 1.1 percent increase, as falling corporate income is expected to partially offset rising individual income growth. In FY 2024-25, an expected growth of 5.9 percent increases revenue to $937.6 million in the out year.

Figure 30. State Education Fund



Source: Colorado Department of Revenue, OSPB Forecast

The Colorado Constitution requires that a third of a percent of Colorado taxable income be credited to the State Education Fund. As the State Education Fund revenue is derived from taxable income, it generally follows the trends in individual income and corporate income tax revenue collections. However, the State Education Fund deviates from the steadily rising trend in income tax revenue, with the delayed transfers from revenue collections mentioned above driving the break in the relationship.

Revenue Outlook – Cash Funds

Cash funds are taxes, fees, fines, and interest collected by various state programs to fund services and operations. These revenue sources are designated by statute for a particular program and as such are distinct from General Fund revenue, which is available for general purpose expenditures. The following section highlights those cash fund revenues that are subject to TABOR or that have significant fiscal implications.

Cash Fund Revenue Subject to TABOR

Total cash fund revenue subject to TABOR was $2.69 billion in FY 2021-22, an increase of 20.0 percent from the prior fiscal year. Approximately 70 percent of the overall increase was driven by severance collections increasing $310.3 million year-over-year. In FY 2022-23, cash fund revenue is projected to decrease by 3.6 percent to $2.59 billion, followed by a 0.5 percent increase in FY 2023-24, and 4.0 percent growth in FY 2024-25.

As compared to the June forecast, revenue came in $68.9 million, or 2.6 percent, higher than estimated, largely the result of greater than expected severance revenue and miscellaneous cash fund revenue. For FY 2022-23, revenue is forecast higher than the June forecast by $19.2 million, or 0.7 percent, with an upward revision to miscellaneous cash fund revenue driving most of the increase. Forecast revenue for FY 2023-24 is revised down by $80.7 million, 3.0 percent, as a result of decreased severance revenue on lowered oil price expectations, transportation-related revenue on lowered road usage fee revenue, and miscellaneous cash fund revenue due to slowing economic activity.

Transportation

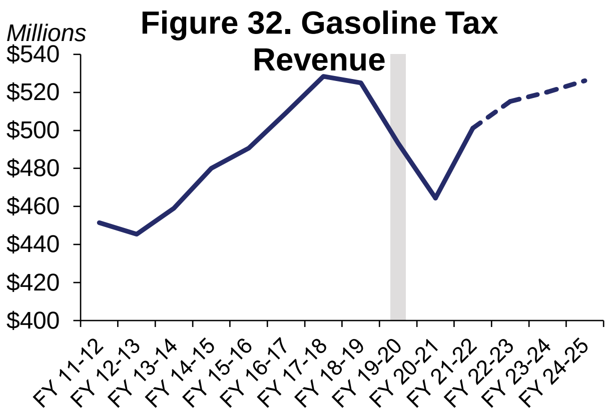
Transportation-related cash funds include the Highway Users Tax Fund (HUTF), the State Highway Fund (SHF), and a handful of smaller cash funds. Transportation-related cash fund revenue was affected substantially by the pandemic, falling by 6.1 percent in FY 2019-20 and another 3.5 percent in FY 2020-21. This decline was driven primarily by lower revenue coming from gas, transportation permits, and aviation. Most of these revenue streams are beginning to return to pre-pandemic levels as transportation patterns rebound. In addition to a rebound in these revenue streams, S.B. 21-260

Sustainability of the Transportation System is expected to bring in substantially more transportation-related cash fund revenue in the long run.

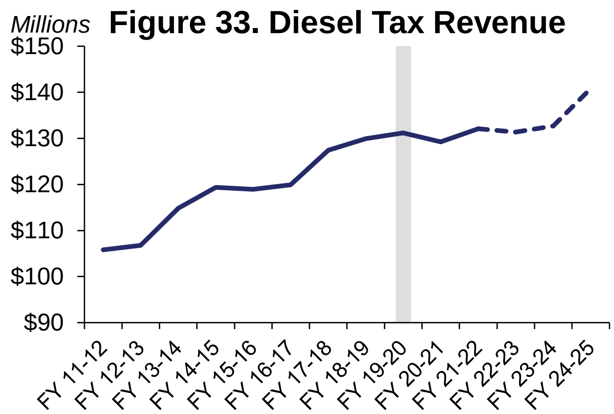
Figure 31. Detailed Transportation Cash Fund Forecast

	Actual FY 21-22	Forecast FY 22-23	Forecast FY 23-24	Forecast FY 24-25
Highway Users Tax Fund (HUTF)				
Motor and Special Fuel Taxes	$633.3	$646.6	$652.9	$667.0
Percent Change	*1.4%*	*2.1%*	*1.0%*	*2.2%*
Road Usage Fees	$0.0	$15.3	$60.2	$61.6
Percent Change	*N/A*	*N/A*	*N/A*	*2.2%*
Total Registrations	**$382.6**	**$336.6**	**$377.9**	**$426.4**
Percent Change	***0.2%***	***-12.0%***	***12.3%***	***12.8%***
Registrations	$244.4	$240.1	$246.5	$258.0
Road Safety Surcharge	$105.0	$68.3	$102.0	$137.3
Late Registration Fees	$33.2	$28.2	$29.4	$31.2
Other HUTF	$57.0	$71.8	$73.5	$74.3
Percent Change	*-9.3%*	*25.9%*	*2.4%*	*1.1%*
Total HUTF	**$1,072.8**	**$1,070.3**	**$1,164.5**	**$1,229.2**
Percent Change	***0.3%***	***-0.2%***	***8.8%***	***5.6%***
Non-HUTF				
State Highway Fund	$21.3	$24.1	$24.7	$16.7
Percent Change	*-28.9%*	*13.4%*	*2.3%*	*-32.5%*
Other Transportation Funds	$135.3	$125.8	$132.3	$123.5
Percent Change	*33.5%*	*-7.0%*	*5.2%*	*-6.7%*
Total Transportation Revenue				
Total Transportation	**$1,229.4**	**$1,220.2**	**$1,321.5**	**$1,369.4**
Percent Change	***6.4%***	***-0.7%***	***8.3%***	***3.6%***

The Highway Users Tax Fund is the largest transportation-related cash fund, with revenues primarily coming from motor fuel taxes and motor vehicle registrations. Motor fuel taxes make up over half of the HUTF and are comprised of both gas and diesel tax revenue. Revenue from the gas tax is expected to increase more slowly in future years than before the pandemic due to slower population growth, reduced commuter travel from increased remote work, and more fuel efficient vehicles. Revenue from diesel taxes set a record high in FY 2021-22 as high demand for goods has resulted in a higher need for shipping. As demand for goods slows, diesel revenue is expected to wane in FY 2022-23 and FY 2023-24, before rebounding to trend in FY 2024-25. Despite modest growth in gas and diesel consumption, Road Usage Fees from S.B. 21-260 will substantially bolster HUTF revenue in future years. The Road Usage fees were initially expected to go into effect on July 1, 2022, but H.B. 22-1351 delayed implementation such that the fee of two cents per gallon will go into effect on April 1, 2023 and increase in later years according to the original schedule.



Note: Dotted line indicates forecast; shading denotes recession.
Source: Colorado Department of Revenue



Note: Dotted line indicates forecast; shading denotes recession.
Source: Colorado Department of Revenue

Vehicle purchases started to rebound in 2021, which bolstered registration-related collections in FY 2021-22. However, OSPB revised the forecast down slightly from June due to higher interest rates from monetary policy tightening reducing the amount of cars sold. OSPB forecasts a decline in registration revenue going forward due to changes in SB21-260 that will temporarily reduce the road safety surcharge beginning in January 2022, which is expected to reduce revenue from the Road Safety Surcharge by an estimated $32.8 million in FY 2021-22 and $49.5 million in FY 2022-23. Further, H.B. 22-1351 reduced the road safety surcharge by an additional $5.50 for 2023, decreasing revenue by an expected $16.7 million in FY 2022-23 and $17.0 million in FY 2023-24.

Figure 34 illustrates HUTF distributions based on the first and second stream allocation formulas with the current forecast for HUTF revenue. Off-the-top deductions for Colorado State Patrol and Division of Revenue include the FY 2022-23 appropriation and are assumed to be held flat in future years.

Figure 34. HUTF Distributions

	Preliminary FY 21-22	Forecast FY 22-23	Forecast FY 23-24	Forecast FY 24-25
First Stream				
Off-the-Top Deductions	$165.8	$181.2	$191.3	$191.3
State Highway Fund (65%)	$185.6	$193.6	$183.8	$190.0
Counties (26%)	$74.2	$77.5	$73.5	$76.0
Cities (9%)	$25.7	$26.8	$25.4	$26.3
Total First Stream	**$451.3**	**$479.1**	**$474.1**	**$483.6**
Second Stream				
State Highway Fund (60%)	$372.9	$354.7	$414.2	$447.4
Counties (22%)	$136.7	$130.1	$151.9	$164.0
Cities (18%)	$111.9	$106.4	$124.3	$134.2
Total Second Stream	**$621.5**	**$591.2**	**$690.4**	**$745.6**
Total HUTF Distributions				
Total HUTF	**$1,072.8**	**$1,070.3**	**$1,164.5**	**$1,229.2**

Other transportation-related funds includes the State Highway Fund (SHF) and other miscellaneous revenue, which make up a smaller portion of total revenue than the HUTF. Revenue to the SHF is made up of various smaller revenue streams including sales of state property and earned interest. The State Highway fund has declined over the past two years, but OSPB expects the fund to rebound over the next few years as permits and other services return to normal. Changes in the "Other Transportation Funds" category are often driven by fluctuation in aviation revenue. Aviation revenue was very low in FY 2019-20 and FY 2020-21, but rebounded substantially in FY 2021-22 as travel began to resume. OSPB expects aviation revenue to remain elevated above FY 2018-19 levels in the current fiscal year as consumers shift spending habits towards services and travel.

Limited Gaming

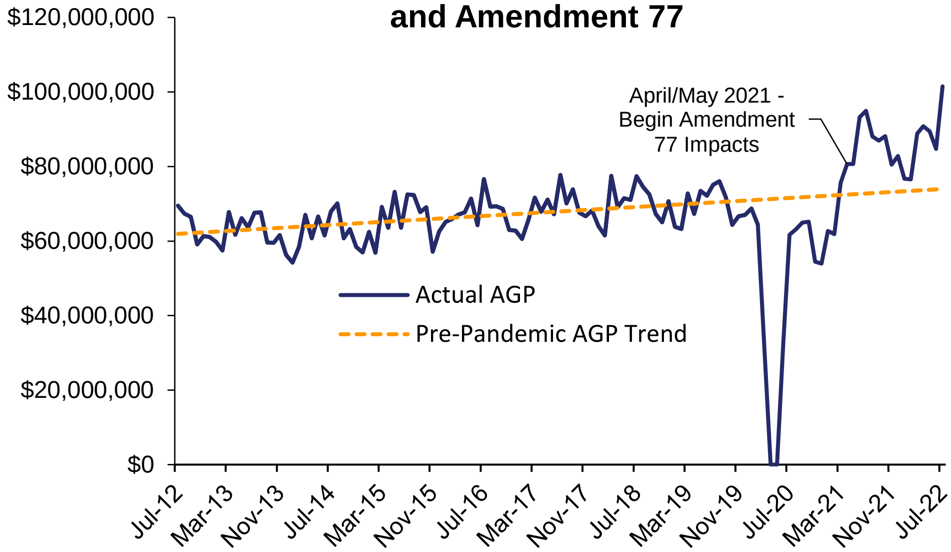
Total gaming revenue rebounded to $121.7 million in FY 2020-21, 48.2 percent above pandemic lows and nearly back to its pre-pandemic level of $127.2 million in FY 2018-19. Continued strength in demand and the impacts of Amendment 77 on gaming revenue have driven total gaming revenue up an additional 34.3 percent to $163.4 million in FY 2021-22, consistent with OSPB's June forecast of $163.9 million. As in June and despite strong July revenue, a minor correction downward in gaming revenue is expected in FY 2022-23, 0.04 percent year over year, to account for a slight retraction in demand compared to the first year of the Amendment 77 impacts. After the slight correction in demand in FY 2022-23, it is expected that out-year gaming revenue will grow at or below pre-Amendment 77 trend levels of 1.0 to 1.5 percent per year in FY 2023-24 and FY 2024-25. These numbers and the corresponding distributions are shown in Figure 35 below.

Figure 35. Limited Gaming Distributions

Distribution of Limited Gaming Revenues	Preliminary FY 21-22	Forecast FY 22-23	Forecast FY 23-24	Forecast FY 24-25
A. Total Limited Gaming Revenues (Includes Fees and Interest)	**$163.4**	**$163.3**	**$165.0**	**$167.0**
Annual Percent Change	34.3%	0.0%	1.0%	1.2%
B. Gaming Revenue Exempt from TABOR (Extended Limited)	**$48.0**	**$48.0**	**$48.5**	**$49.1**
Annual Percent Change	142.0%	0.0%	1.0%	1.2%
C. Gaming Revenue Subject to TABOR (Limited)	**$115.4**	**$115.3**	**$116.5**	**$117.9**
Annual Percent Change	13.3%	0.0%	1.0%	1.2%
D. Total Amount to Base Revenue Recipients	**$105.9**	**$105.8**	**$106.9**	**$108.3**
Amount to State Historical Society (28%)	$29.6	$29.6	$29.9	$30.3
History Colorado (80% of 28%)	$23.7	$23.7	$24.0	$24.3
Grants to Cities for Historical Preservation (20% of 28%)	$5.9	$5.9	$6.0	$6.1
Amount to Counties (12%)	$12.7	$12.7	$12.8	$13.0
Amount to Cities (10%)	$10.6	$10.6	$10.7	$10.8
Amount to Distribute to Remaining Programs (State Share) (50%)	$52.9	$52.9	$53.5	$54.2
Local Government Impact Fund	$5.7	$5.7	$5.8	$5.8
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
Bioscience Discovery Evaluation Fund	N/A	N/A	N/A	N/A
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	$22.1	$22.1	$22.6	$23.2
E. Total Amount to Amendment 50 Revenue Recipients	**$44.1**	**$44.0**	**$44.5**	**$45.1**
Community Colleges, Mesa and Adams State (78%)	$34.4	$34.4	$34.7	$35.2
Counties (12%)	$5.3	$5.3	$5.3	$5.4
Cities (10%)	$4.4	$4.4	$4.5	$4.5

Strength in gaming revenue in FY 2022-23 and the out-years is a result of a continuation in elevated tax collections and adjusted gross proceeds (AGP) after the passage and implementation of Amendment 77. Specifically, AGP in FY 2021-22 was up 22.4 percent over FY 2018-19. These trends in AGP pre and post Amendment 77 are shown in Figure 36. Going forward, it is expected that AGP, and thus revenue, will continue to come in at a relatively consistent level now that the revenue impacts of Amendment 77 expanding gaming revenue have been fully incorporated.

Figure 36. Adjusted Gross Proceeds (AGP) and Amendment 77



Source: Colorado Department of Revenue; Division of Gaming.

Severance

Following the lowest severance tax revenue collection since 1990 in FY 2020-21 of $14.7 million, collections sharply rebounded in FY 2021-22 and reached $325.0 million – the highest collection since FY 2008-09. The upward shift in revenue was primarily caused by increased oil and gas prices over the past 12 months, coupled with increased production. This shift comes after demand fell sharply during the height of the pandemic in FY 2020-21, which led to lower prices and depressed production.

Oil and gas prices are expected to remain elevated through the end of 2022 and into the beginning of 2023; however, severance tax revenue in FY 2022-23 is forecast to drop by 28.3 percent to $233.2 million largely due to increased ad valorem credit claims, which are described in more detail below. Despite stronger than anticipated July and August collections, revenue is revised upward only slightly from the June forecast by $3.8 million as expectations for the remainder of the fiscal year remain similar to June. With oil and gas prices projected to drop more than previously anticipated going into FY 2023-24 and ad valorem credit claims expected to remain high, forecast revenue is revised downward by $27.2 million to $141.9 million. Revenue in FY 2024-25 is forecast to tick back upward by 5.4 percent to $149.7 million.

Figure 37. Severance Tax Revenue

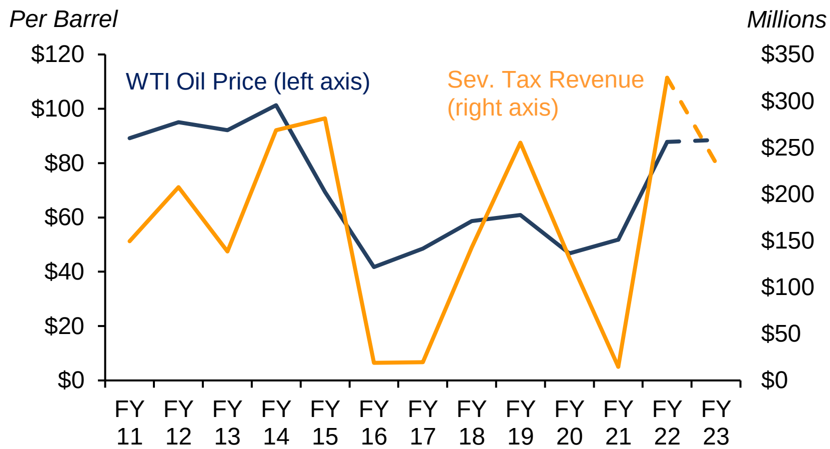
	Preliminary FY 2021-22	Forecast FY 2022-23	Forecast FY 2023-24	Forecast FY 2024-25
Oil & Gas	$310.4	$218.0	$126.8	$135.2
Coal	$3.2	$3.1	$2.9	$2.8
Moly & Metals	$2.7	$2.6	$2.5	$2.3
Interest	$8.6	$9.6	$9.7	$9.4
Total	**$325.0**	**$233.2**	**$141.9**	**$149.7**
Change	***2110.7%***	***-28.3%***	***-39.1%***	***5.4%***

Source: OSPB forecast

Oil and gas severance tax revenue, which accounts for 97 to 98 percent of overall collections throughout the forecast period, is primarily dependent on production levels multiplied by price. West Texas Intermediate (WTI) oil prices are expected to remain between $85 to $100 per barrel for the remainder of 2022 and then range from $80 to $90 per barrel in 2023. These sustained high oil and gas prices are also expected to spur increases in production, though these effects have been slower to materialize compared to prior high-price runs. More details on price and production can be found in the energy section of the economic outlook.

The increased price levels will also lead to increased ad valorem credit claims by taxpayers, which are based on local property tax assessments of the value of oil and gas production. Oil and gas taxpayers can use the credit to reduce their severance tax liability by up to 87.5 percent of the real property taxes they most recently paid to their local governments, school districts, and special districts. That said, there is a one-to-two-year lag between when the production is valued by county assessors and when the credit is applied against state severance taxes. Thus, increased ad valorem credit claims are expected to drag on revenue in FY 2022-23 and FY 2023-24, though revenue is still expected to remain above average in FY 2022-23 due to an elevated price forecast. In FY 2023-24, revenue is forecast to drop just below long-term average levels with prices expected to drop from current highs and ad valorem credit claims projected to have a greater, overall net-negative effect on revenue.

Figure 38. Severance Tax Collections & WTI Oil Price per Barrel



Source: Colorado Department of Revenue; Energy Information Administration.

To demonstrate the relationship between WTI oil prices and severance tax collections, Figure 38 depicts WTI price by fiscal year and corresponding severance tax revenue. In general, there is typically a six-to-nine-month lag in severance tax collections responding to the change in WTI prices. This dynamic often results in the WTI shift driving severance tax revenue outcomes in the following fiscal year, especially when there is a dramatic swing in price, although it is sometimes reflected in the same fiscal year, depending on timing. For FY 2022-23, though WTI prices are forecast to resemble the prior fiscal year, ad valorem credit claims are expected to reduce severance tax revenue collections.

Looking forward, industry sentiment is relatively optimistic as reported in the most recent energy survey administered by the 10th District of the Federal Reserve (which includes Colorado). Since the beginning of the year, business activity has increased, and the industry has indicated that it will continue to increase throughout the remainder of the year and into 2023. Operators in the region reported that $65 per barrel is the current breakeven price, though they noted that $98 per barrel would lead to a substantial increase in drilling. With prices expected to remain well above breakeven numbers throughout 2022 and 2023 though mostly below $98, a tempered uptick in production is also expected. This expected uptick will likely be slower than prior periods with elevated WTI prices as the industry, especially publicly listed firms, has maintained a sharper focus on capital discipline thus far. Firms have also encountered higher input and labor costs which could create some hesitancies to rapidly increase production.

Taking all these considerations into account, severance tax revenue collections should remain well above long-term average levels in FY 2022-23 before returning closer to average levels in FY 2023-24 and FY 2024-25.

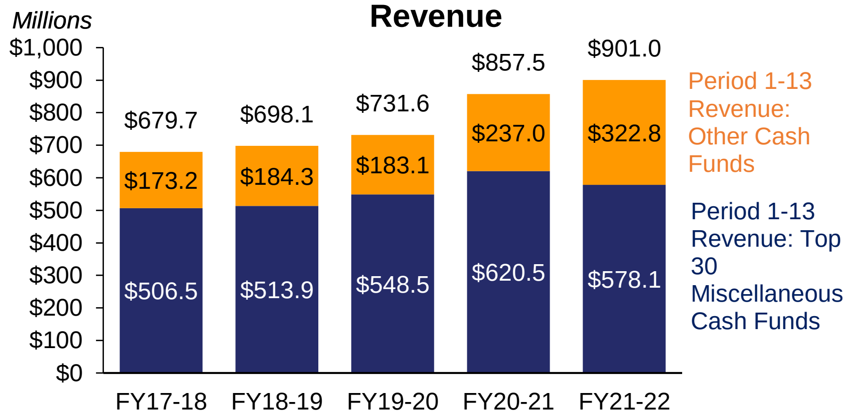
Other Cash Funds Subject to TABOR

The State receives revenue from a variety of other, smaller cash funds subject to TABOR. This includes non-exempt cash fund revenue to the Department of Regulatory Agencies (DORA), which is made up of revenue from professional and occupational licensing, the Public Utilities Commission, and other sources. DORA's revenue in FY 2021-22 came in at $92.3 million, $0.6 million above the June forecast, as end of year accruals were above historical trends. OSPB expects a decline in revenue for FY 2022-23 as a result of fee reductions for nurses and mental health professionals for two years passed in H.B. 22-1298 *Fee Relief Nurses Nurse Aides and Technicians* and H.B. 22-1299 *License Registration Fee Relief for Mental Health Professionals*. These two bills are expected to reduce revenue by $6.8 million in FY 2022-23 and $8.6 million in FY 2023-24. As a result, FY 2022-23 drops 6.3 percent to $86.4 million, and remains depressed at $87.7 million in FY 2023-24. In FY 2024-25, revenue is expected to bounce back to $99.3 million as these fee reductions roll off.

The category of "Other Miscellaneous Cash Funds" includes revenue from over 300 cash fund programs that collect revenue from fines, fees, and interest earnings. Aggregate revenue in FY 2021-22 is estimated to have totaled $901.0 million, $42.0 million above the June forecast. There are two reasons for the higher-than-expected revenue: 1) a rising proportion of total revenue outside the top 30 funds and 2) upside surprises in funds that have closer ties to economic conditions.

First, OSPB breaks out this forecast into the 30 funds that tend to have the largest revenue from the rest of the smaller cash funds. The top 30 funds made up 76 percent of total miscellaneous cash fund revenue on average between FY 2017-18 and FY 2019-20. However, funds with smaller balances tend to be growing, and furthermore, new cash fund creation is eating into the share of top 30 funds. Between FY 2017-18 and FY 2021-22, the number of funds with $0 to $1 million in revenue each year has grown from 199 to 261 funds. Meanwhile, the number of funds with more than $1 million in revenue has been stable, dropping slightly from 81 to 79.

Figure 39. Miscellaneous Cash Funds Revenue



Source: Colorado Department of Revenue

Second, this broad category of funds is less sensitive to general economic conditions than revenue sources like income and severance taxes, but some of the larger cash funds do relate to economic conditions, such as the Oil and Gas Conservation Fund and the Employment Support Fund. With high energy prices and a strong labor market, revenue collections in these funds beat OSPB expectations for FY 2021-22.

In FY 2022-23, revenue is revised up $12.1 million to $913.3 million, as funds outside the top 30 are expected to remain elevated, though slightly below their FY 2021-22 share. In FY 2023-24, revenue is revised down $24.6 million to $915.1 million as slowing economic conditions in 2023 lead to near zero growth in cash funds. In FY 2024-25, miscellaneous cash funds are expected to grow 3.9 percent.

TABOR Exempt Funds with Significant Fiscal Implications

Outside of the cash funds subject to TABOR discussed above, OSPB also forecasts marijuana and federal mineral lease (FML) revenues because of the significant budgetary implications of these revenues. In particular, these revenues impact the General Fund, Marijuana Tax Cash Fund, distributions to local governments, BEST funding for school capital construction, and the Public School Fund, each of which is shown in more detail below.

Marijuana

After sales and revenue spiked in FY 2020-21 at the height of the pandemic, revenue has continued at historically high levels, but has dropped below the levels seen over the course of FY 2020-21 due to sustained low prices as a result of oversupply and slowing growth in the quantity of marijuana sold. As a result, total marijuana revenue fell by 13.7 percent in FY 2021-22. In June, it was expected that these low prices would rise back to more sustainable levels over the course of the summer; however, the low prices have proven more persistent both for retail and wholesale marijuana. It is expected that the price increases will now be delayed until later into FY 2022-23 and into FY 2023-24 as supply returns to an equilibrium with demand, thus OSPB expects another 5.7 percent reduction in revenue in FY 2022-23, moderate growth of 5.7 percent in FY 2023-24 and slow growth of 2.2 percent in FY 2024-25. Figures 40, 41, and 42 below summarize these projections and their impacts on each of the distributions as compared to the June forecast.

Figure 40.

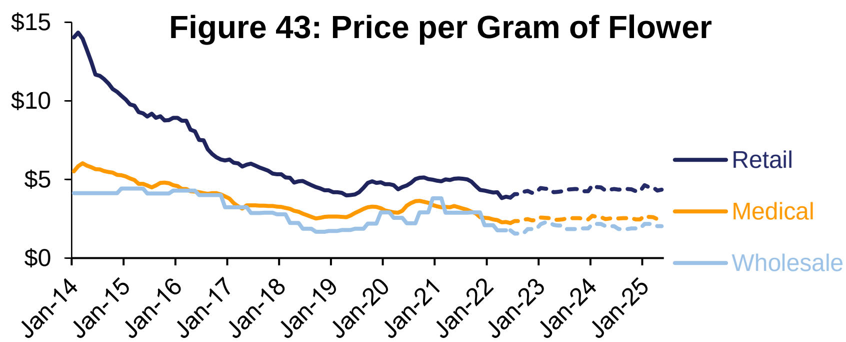
Tax Revenue from the Marijuana Industry	Preliminary FY 21-22	Forecast FY 22-23	Forecast FY 23-24	Forecast FY 24-25
Proposition AA Taxes (Not Subject to TABOR)				
Retail Marijuana 15% Special Sales Tax	$256.0	$253.7	$267.5	$272.8
Retail Marijuana 15% Excise Tax	$97.7	$81.3	$87.0	$90.5
Total Proposition AA Taxes	**$353.7**	**$335.0**	**$354.5**	**$363.3**
2.9% Sales Tax & Interest (Subject to TABOR)				
Medical Marijuana 2.9% State Sales Tax	$9.9	$7.7	$8.1	$7.7
Retail Marijuana 2.9% State Sales Tax	$2.3	$2.4	$2.4	$2.3
Interest Earnings	$0.4	$0.4	$0.4	$0.0
Total 2.9% Sales Taxes & Interest	**$12.6**	**$10.5**	**$10.9**	**$10.1**
Total Marijuana Taxes	**$366.3**	**$345.5**	**$365.4**	**$373.4**

Figure 41.

Tax Revenue from Marijuana Industry by Recipient	Total Marijuana Revenue	Local Share	General Fund	BEST School Capital Construction	Public School Fund	Marijuana Tax Cash Fund
FY 2021-22 Projected	$366.3	$25.6	$35.9	$97.7	$29.0	$178.2
FY 2022-23 Projected	$345.5	$25.4	$35.5	$81.3	$28.7	$174.6
FY 2023-24 Projected	$365.4	$26.7	$37.5	$87.0	$30.3	$183.8
FY 2024-25 Projected	$373.8	$27.3	$38.2	$90.5	$30.9	$186.9

Figure 42.

Change from June	Total Marijuana Revenue	Local Share	General Fund	BEST School Capital Construction	Public School Fund	Marijuana Tax Cash Fund
FY 2021-22 Preliminary	-$1.7	-$0.1	-$0.1	-$1.1	-$0.1	-$0.3
FY 2022-23 Projected	-$12.9	-$0.7	-$1.0	-$5.0	-$0.8	-$5.3
FY 2023-24 Projected	-$1.2	-$0.1	-$0.1	-$0.6	-$0.1	-$0.4
FY 2024-25 Projected	N/A	N/A	N/A	N/A	N/A	N/A



Colorado Division of Revenue; Colorado MED Dashboard; Author's Calculations.

In June, prices for both retail and wholesale marijuana were expected to return from historically low levels back to more stable price points in the early summer. For retail marijuana, for which prices are historically much more stable, this means a return to prices near $4.50 per gram of flower. For wholesale marijuana, for which prices are relatively more volatile in response to supply and demand trends, this means an average market rate nearing $1,000 per pound, or approximately $2.20 per gram. However, the market has seen more protracted effects of oversupply after an influx of product during the height of the pandemic as producers ramped up to meet skyrocketing demand. These effects have kept prices low for longer than anticipated. This issue has not been limited to the Colorado market. In fact, these price discounts have been seen across all of the more mature marijuana markets in the U.S., including California, Nevada, Michigan, Oregon, Washington, and Colorado, with flower prices down on average 16.7 percent from January 2021 to January 2022.[3] That said, these downward price pressures are expected to ease, allowing prices to return to near the levels discussed above by late 2022 to early 2023, hence the relatively flat FY 2023-24 forecast as compared to June.

[3] Headset, "An analysis of declining growth in recent US cannabis sales," August 4, 2022, available at https://www.headset.io/industry-reports/an-analysis-of-declining-growth-in-recent-us-cannabis-sales#form.

Federal Mineral Lease

Federal Mineral Lease (FML) revenue increased by 52.5 percent to $125.1 million in FY 2021-22 and is forecast to increase by an additional 10.6 percent in FY 2022-23 to $138.4 million due to continued elevated oil and gas prices throughout the fiscal year. This is an upward revision of $20.2 million from the June forecast largely predicated upon higher natural gas price expectations due to low inventories and strong consumption. Oil price expectations for FY 2022-23 remain in line with the June forecast. Revenue derived from natural gas production on federal leases accounts for roughly 50 percent of total FML revenue, so natural gas price fluctuations drive FML revenue collections much more than severance tax revenue, which is more reliant on oil prices.

FML revenue is expected to tick downward over the forecast period. FY 2023-24 revenue is expected to drop by 35.0 percent to $89.9 million and revenue in FY 2024-25 is forecast to drop 8.0 percent to $82.7 million. The FY 2023-24 forecast remains relatively static from June despite higher natural gas price expectations, because oil price expectations for that fiscal year are lowered, negating any upward revision from natural gas. Oil prices are expected to drop from 2022 levels in 2023 with overall economic activity expected to slow, and while natural gas prices are expected to drop in 2023 as well, they are forecast to remain higher than previously expected. Detailed FML revenue forecast expectations can be found in Figure 44.

Figure 44. FML Forecast Distribution Table	Preliminary FY 2021-22	Forecast FY 2022-23	Forecast FY 2023-24	Forecast FY 2024-25
Total FML Revenue	**$125.1**	**$138.4**	**$89.9**	**$82.7**
Change	52.5%	10.6%	-35.0%	-8.0%
Bonus Payments (portion of total FML revenue)	$0.8	$1.2	$1.0	$1.0
Local Government Perm Fund	$0.4	$0.6	$0.5	$0.5
Higher Ed FML Revenues Fund	$0.4	$0.6	$0.5	$0.5
Other (non-bonus) FML Revenue	$124.4	$137.2	$89.0	$81.8
State Public School Fund	$60.1	$66.3	$43.0	$39.5
Colorado Water Conservation Board	$12.4	$13.7	$8.9	$8.2
DOLA Grants	$24.9	$27.4	$17.8	$16.4
DOLA Direct Distribution	$24.9	$27.4	$17.8	$16.4
School Districts	$2.1	$2.3	$1.5	$1.4
Total Higher Ed Maintenance Reserve Fund	$0.4	$0.6	$0.5	$0.5

Overall, there has been a long-term, downward-to-flattening oil and gas lease trend as industry investment interest on federal land has waned. Leases have dropped from above 5,000 annually during federal fiscal years 2006 to 2012 to below 3,900 annually since federal FY 2016-17. During the forecast period, the number of leases is expected to remain relatively flat to slightly negative.

In August, the Inflation Reduction Act was signed into law, which includes provisions related to federal oil and gas leases. While the act mandates additional oil and gas lease offerings before allowing wind or solar energy developments on federal land, it also increases minimum rental rates, increases royalty rates on new leases, prohibits lease sales on a noncompetitive basis, and requires royalties paid for all gas produced on leased land (including gas lost onsite). At this time, it is not expected that the act will have a significant impact on federal mineral lease revenue within the forecast period, and the long-term downward trend of oil and gas leases is expected to continue.

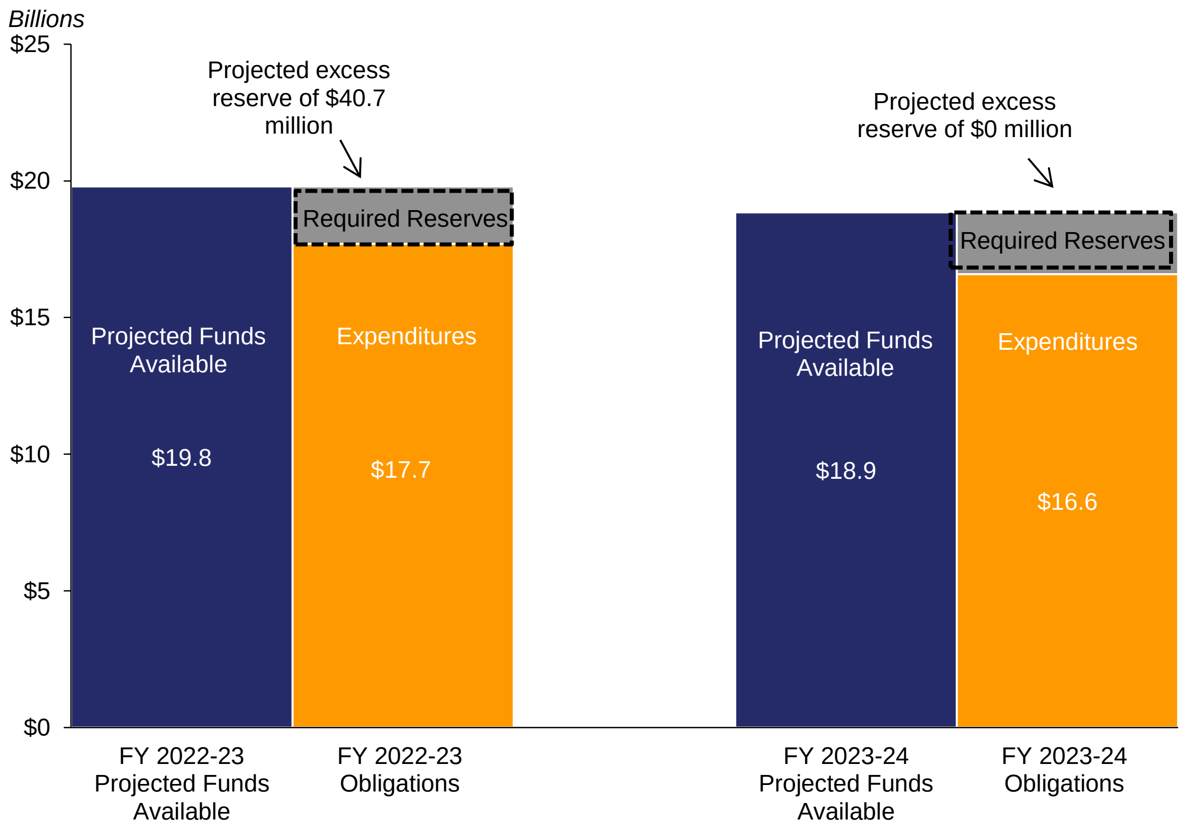
While FML revenue is exempt from TABOR, it is included here because a portion of the money is distributed to the Public School Fund.

Budget Outlook

General Fund

General Fund revenue increased 23.7 percent in FY 2021-22 to $17,697.6 million. In FY 2022-23, however, revenue is expected to decline by 7.2 percent before rebounding by 1.7 percent in FY 2023-24 and 5.6 percent in FY 2024-25. General Fund revenue for FY 2021-22 is $489.4 million, or 2.8 percent higher, than was estimated in June, driven by particularly strong individual income revenue collections. The forecast for FY 2022-23 is $130.8 million lower than estimated in June, as slowing individual income withholdings and revenues from both individual and corporate filings more than offset rising sales tax revenue collections as a result of increased inflation growth. The forecast in FY 2023-24 is revised down $551.1 million from June, as a result of the growing differences in wage growth and corporate profits by mid-2023 relative to the previous forecast.

Figure 45. Revenues, Expenditures, and Reserves



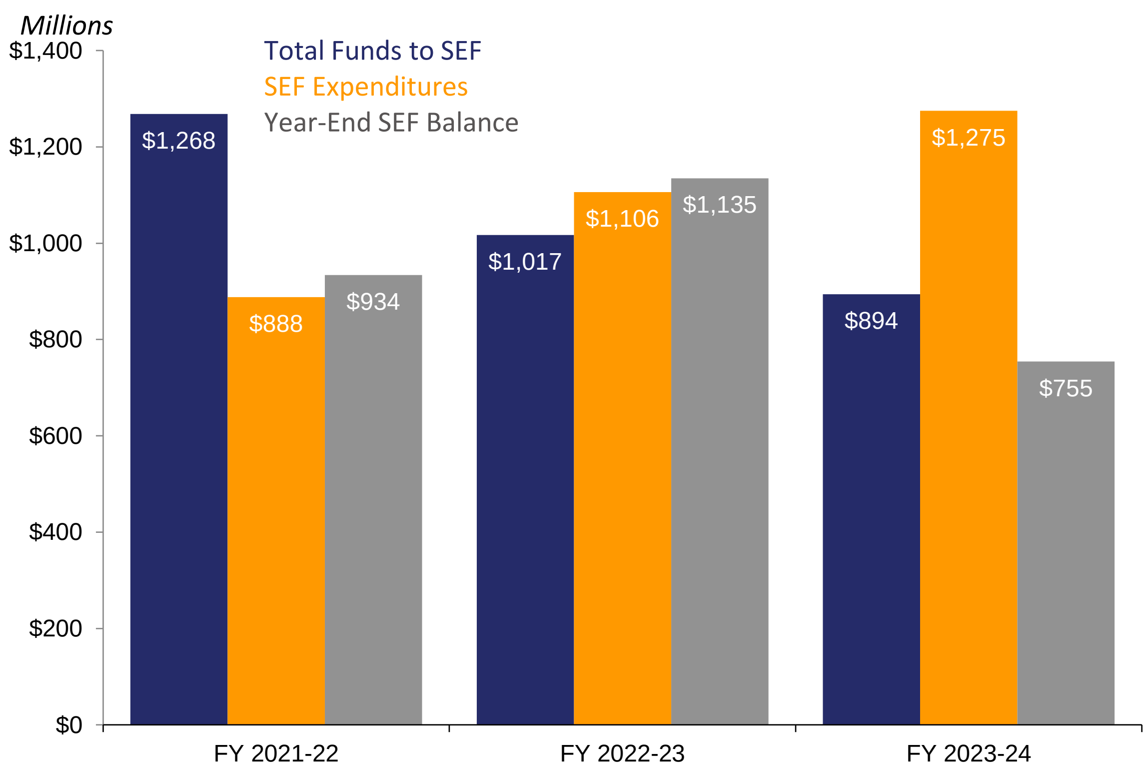
The General Fund estimated ending balance is $1,696.6 million above the statutory reserve level of 13.4 percent of appropriations in FY 2021-22 and estimated to be $40.7 million above the statutory reserve level of 15.0 percent of appropriations in FY 2022-23. Figure 45 summarizes total projected General Fund revenue available, total obligations, and reserve levels for FY 2022-23 and FY 2023-24 under current law.

State Education Fund

The State Education Fund's year-end balance is estimated to be $934.1 million in FY 2021-22, including transfers. This is $28.1 million higher than expected in the June 2022 forecast, due to higher-than-expected income tax revenues.

In FY 2022-23, the year-end balance is projected to grow to $1,134.9 million, $36.2 million above the June forecast, largely due to an increased ending balance the prior year flowing through given that expenditures are unchanged. Note, these ending balances including the $290 million transfer to the SEF in FY 2022-23 as legislated in HB22-1390, as edited by SB22-202. In FY 2023-24, the year-end balance is expected to fall to $754.6 million given increased costs to the School Finance formula as a result of inflation. Figure 46 summarizes total State Education Fund revenue, expenditures, and ending balances for FY 2021-22, FY 2022-23, and FY 2023-24.

Figure 46. SEF Revenue, Expenditures, and Ending Balances



Forecast Risks

This budget outlook is based on OSPB's economic forecast as detailed in Tables 1 and 2 of the Reference Tables at the end of this document. This economic forecast is subject to both upside and downside risks.

On the upside, healthy household finances may still spur consumer spending on services above trend for longer than expected in the baseline despite tightening monetary policy, thereby increasing state excise revenue. Additionally, labor demand may remain resolute in the face of slowing economic growth and strengthen withholdings revenue more than expected in the baseline. Prolonged inflation is the main downside risk, as continued high inflation may increase the nominal value of sales but also eat into aggregate demand, thereby slowing economic growth and state general fund revenue further. Conditions currently underlying this forecast are weighted evenly.

Supplemental Materials

An overview of General Fund and State Education Fund revenue, expenditures, and end-of-year reserves is provided in the Reference Tables at the end of this document. A more detailed discussion of the information presented in the Reference Tables can be found at the Office of State Planning and Budgeting's website: www.colorado.gov/governor/economics.

TABOR Outlook

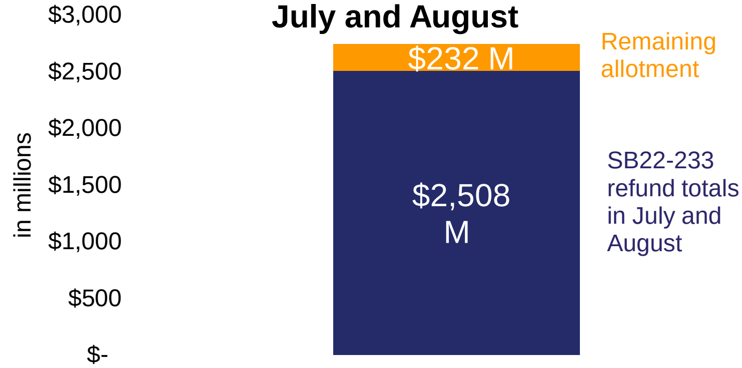
Under Article X, Section 20 of the State Constitution, the Taxpayer's Bill of Rights (TABOR), revenue received from certain sources is subject to an annual limit determined by the prior year's limit after adjustments for inflation and population growth. Any TABOR revenue received above the cap is to be refunded to taxpayers in the subsequent fiscal year.

Revenue subject to TABOR is expected to exceed the cap in each of the forecast years, but the highest refund amount is expected to have occurred in the most recent completed fiscal year. In that year, FY 2021-22, revenue is estimated to be $3,734.6 million due primarily to upward revisions in individual income tax revenue. Note, that there are an additional $133.8 in TABOR refunds from prior years' adjustments, which are not included in the table below but do bring the total refund amount incurred in FY 2021-22 to $3,868.4 million. In FY 2022-23, revenue is projected to be $1,898.3 million above the cap as reduced income revenue more than offsets increases in sales tax revenue when compared with previous expectations. In FY 2023-24, the amount above the cap lowers to $685.1 million as current high inflation allows for further growth in the Referendum C limit, while individual and corporate income is expected to fall by $505.3 million from the June forecast. In FY 2024-25, the refunds are expected to stabilize, totaling $742.4 million.

Current law specifies three mechanisms by which revenue in excess of the cap is to be refunded to taxpayers: the senior homestead and disabled veterans property tax exemptions, a temporary income tax rate reduction (from 4.55 percent to 4.50 percent), and a sales tax refund. The size of the refund determines which refund mechanisms are utilized. In addition to these mechanisms, SB22-233, Tabor Refund Mechanism for FY 2021-22 Only, refunded $750 checks to single filers and $1,500 to joint filers as a part of the Colorado Cash Back program. Finally, SB22-238, 2023 and 2024 Property Tax, provides $225 million in refunds to backfill local governments' losses as a result of reduced property tax revenue.

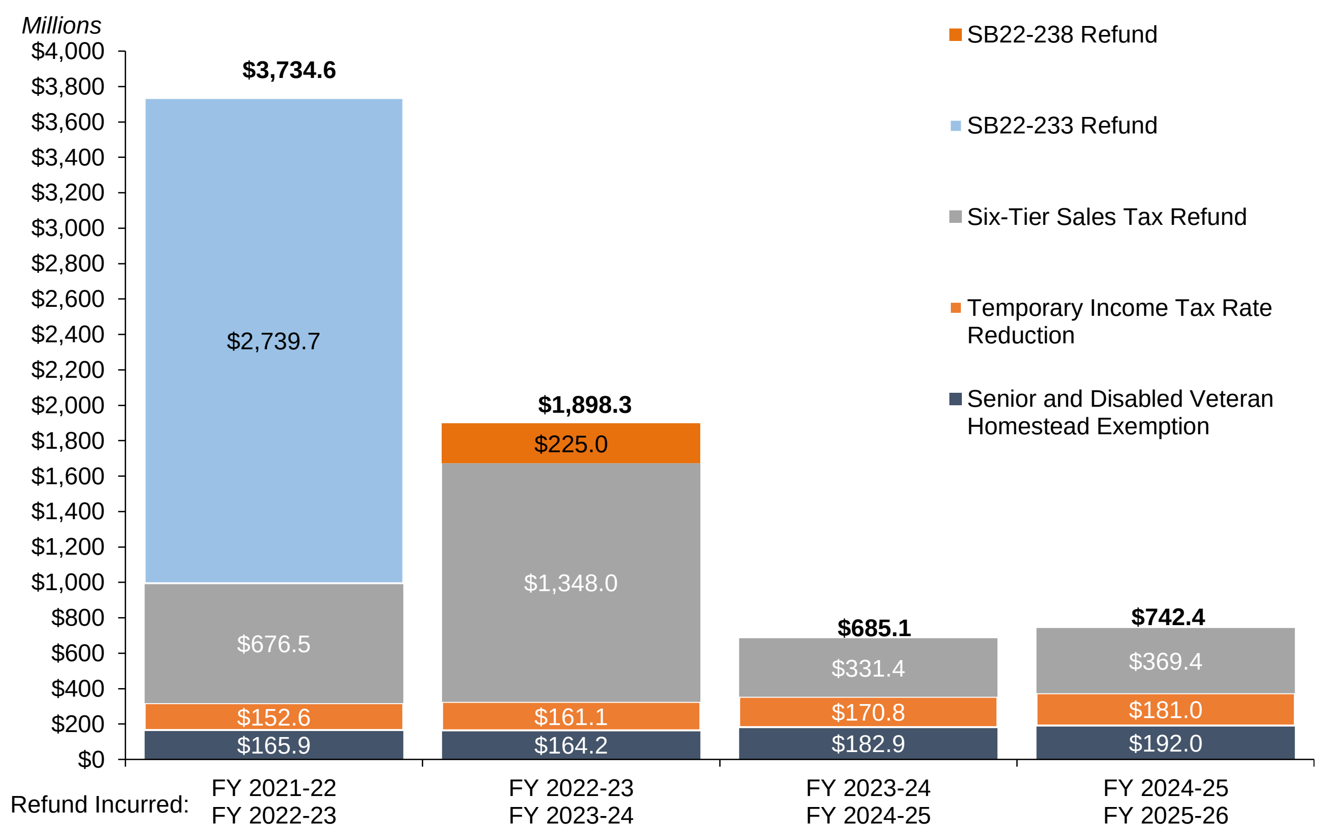
An estimated $2,739.7 million of the $3,734.6 million refund obligation is paid out as a part of the Colorado Cash Back program. Figure 47 illustrates the current estimate of those refunds sent out, out of the total expected amount. Approximately $232 million of the allotted refunds have not been sent out, either due to delayed tax filings or refunds after accounting for owed balances. Additionally, $152.6 million will be paid out as an income tax rate reduction, while $165.9 million will be refunded via the senior homestead and disabled veterans property tax exemption expenditures and $676.5 million via a sales tax refund in FY 2022-23. Any difference between estimated refunds and actual refunds will be corrected in the next fiscal year in which a refund is owed, which is incurred in FY 2022-23 in this forecast.

Figure 47. Share of Refunds Sent in July and August



*Note: Refund amounts reported after taking into account any intercepts and/or balances owed

Figure 48. TABOR Refunds



Reference Tables

Table 1: Colorado Economic Variables – History and Forecast

		Actual 2016	Actual 2017	Actual 2018	Actual 2019	Actual 2020	Actual 2021	Forecast 2022	Forecast 2023	Forecast 2024
	Income									
1	Personal Income (Billions) /A	$289.7	$309.7	$332.0	$350.4	$370.4	$402.2	$416.7	$431.7	$450.3
2	Change	1.7%	6.9%	7.2%	5.6%	5.7%	8.6%	3.6%	3.6%	4.3%
3	Wage and Salary Income (Billions)	$151.2	$161.0	$170.9	$182.9	$187.1	$206.3	$227.8	$237.1	$246.8
4	Change	3.1%	6.5%	6.2%	7.0%	2.3%	10.2%	10.4%	4.1%	4.1%
5	Per-Capita Income ($/person) /A	$52,386.0	$55,300.0	$58,475.0	$61,098.0	$64,036.0	$69,057.0	$71,007.0	$72,835.0	$75,186.0
6	Change	0.2%	5.6%	5.7%	4.5%	4.8%	7.8%	2.8%	2.6%	3.2%
	Population & Employment									
7	Population (Thousands)	5,529.6	5,599.6	5,676.9	5,734.9	5,784.2	5,814.7	5,857.5	5,913.0	5,974.0
8	Change	1.5%	1.3%	1.4%	1.0%	0.9%	0.5%	0.7%	0.9%	1.0%
9	Net Migration (Thousands)	53.3	42.4	51.8	34.2	28.6	15.1	30.0	35.0	40.0
10	Unemployment Rate	3.1%	2.6%	3.0%	2.6%	6.9%	5.4%	3.5%	3.9%	3.8%
11	Total Nonagricultural Employment (Thousands)	2,601.7	2,660.3	2,727.3	2,790.1	2,651.1	2,744.0	2,853.8	2,885.2	2,919.8
12	Change	2.4%	2.3%	2.5%	2.3%	-5.0%	3.5%	4.0%	1.1%	1.2%
	Construction Variables									
13	Total Housing Permits Issued (Thousands)	39.0	40.7	42.6	38.6	40.5	56.5	54.5	53.5	54.3
14	Change	22.3%	4.4%	4.8%	-9.4%	4.8%	39.7%	-3.5%	-2.0%	1.5%
15	Nonresidential Construction Value (Millions) /B	$5,987.8	$6,150.7	$8,151.0	$5,167.6	$5,551.4	$5,550.0	$5,522.3	$5,312.4	$5,429.3
16	Change	20.0%	2.7%	32.5%	-36.6%	7.4%	0.0%	-0.5%	-3.8%	2.2%
	Price Variables									
17	Retail Trade (Billions) /C	$184.7	$194.6	$206.1	$224.6	$228.8	$268.3	$296.5	$303.0	$314.5
18	Change	1.0%	5.4%	5.9%	9.0%	1.9%	17.3%	10.5%	2.2%	3.8%
19	Denver-Aurora-Lakewood Consumer Price Index (1982-84=100)	246.6	255.0	262.0	267.0	272.2	281.8	305.2	319.0	327.9
20	Change	2.8%	3.4%	2.7%	1.9%	2.0%	3.5%	8.3%	4.5%	2.8%

/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. 2022 data is not final and represents OSPB's 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, 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). 2022 data is not final and represents OSPB's estimates.

Table 2: National Economic Variables – History and Forecast

		Actual 2016	Actual 2017	Actual 2018	Actual 2019	Actual 2020	Actual 2021	Forecast 2022	Forecast 2023	Forecast 2024
	Inflation-Adjusted & Current Dollar Income Accounts									
1	Inflation-Adjusted Gross Domestic Product (Billions) /A	$17,680.3	$18,079.1	$18,606.8	$19,032.7	$18,384.7	$19,427.3	$19,738.1	$19,869.7	$20,240.6
2	Change	1.7%	2.3%	2.9%	2.3%	-3.4%	5.7%	1.6%	0.7%	1.9%
3	Personal Income (Billions) /B	$16,096.9	$16,850.2	$17,706.0	$18,424.4	$19,627.6	$21,092.8	$21,704.5	$22,290.5	$23,092.9
4	Change	2.6%	4.7%	5.1%	4.1%	6.5%	7.5%	2.9%	2.7%	3.6%
5	Per-Capita Income ($/person) /B	$49,880	$51,861	$54,129	$55,950	$59,208	$63,553	$65,331	$66,961	$69,164
6	Change	1.9%	4.0%	4.4%	3.4%	5.8%	7.3%	2.8%	2.5%	3.3%
7	Wage and Salary Income (Billions)	$8,091.2	$8,474.7	$8,900.5	$9,323.5	$9,444.1	$10,343.8	$11,347.1	$11,710.2	$12,108.4
8	Change	2.9%	4.7%	5.0%	4.8%	1.3%	9.5%	9.7%	3.2%	3.4%
	Population & Employment									
9	Population (Millions)	322.7	324.9	327.1	329.3	331.5	331.9	332.2	332.9	333.9
10	Change	0.7%	0.7%	0.7%	0.7%	0.7%	0.1%	0.1%	0.2%	0.3%
11	Unemployment Rate	4.9%	4.4%	3.9%	3.7%	8.1%	5.4%	3.6%	4.1%	4.1%
12	Total Nonagricultural Employment (Millions)	144.3	146.6	148.9	150.9	142.2	146.1	152.0	153.0	154.6
13	Change	1.8%	1.6%	1.6%	1.3%	-5.8%	2.8%	4.0%	0.7%	1.0%
	Other Key Indicators									
14	Consumer Price Index (1982-84=100)	240.0	245.1	251.1	255.7	258.8	271.0	293.5	305.8	313.4
15	Change	1.3%	2.1%	2.4%	1.8%	1.2%	4.7%	8.3%	4.2%	2.5%
16	Corporate Profits (Billions)	$2,037.7	$2,128.9	$2,305.0	$2,367.8	$2,243.8	$2,805.8	$2,861.9	$2,704.5	$2,796.5
17	Change	-1.1%	4.5%	8.3%	2.7%	-5.2%	25.0%	2.0%	-5.5%	3.4%
18	Housing Permits (Millions)	1.210	1.280	1.330	1.390	1.470	1.740	1.750	1.720	1.770
19	Change	2.0%	6.3%	3.6%	4.3%	6.1%	18.1%	1.0%	-1.8%	2.6%
20	Retail Trade (Billions)	$5,506.0	$5,732.9	$5,987.4	$6,175.0	$6,219.6	$7,441.4	$8,133.4	$8,288.0	$8,544.9
21	Change	2.9%	4.1%	4.4%	3.1%	0.7%	19.6%	9.3%	1.9%	3.1%

/A U.S. Bureau of Economic Analysis, National Income and Product Accounts
/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 /A

	Category	Preliminary FY 2021-22	Percent Change	Estimate FY 2022-23	Percent Change	Estimate FY 2023-24	Percent Change	Estimate FY 2024-25	Percent Change
	Excise Taxes								
1	Sales	$4,088.968	19.6%	$4,260.3	4.2%	$4,397.1	3.2%	$4,612.6	4.9%
2	Use	$232.6	8.6%	$243.1	4.5%	$242.7	-0.1%	$257.4	6.1%
3	Retail Marijuana Sales- Special Sales Tax	$258.7	-10.2%	$254	-1.9%	$267.5	5.4%	$267.5	0.0%
4	Cigarette	$26.0	-13.8%	$25.4	-2.1%	$24.4	-4.2%	$23.0	-5.6%
5	Tobacco Products	$26.6	-8.3%	$25.3	-5.2%	$27.3	8.1%	$28.5	4.5%
6	Liquor	$56.3	5.6%	$57.0	1.2%	$58.8	3.1%	$60.5	2.9%
7	Total Proposition EE	$208.0	324.3%	$213.5	2.7%	$213.9	0.2%	$257.3	20.3%
	Cigarette	$153.1	306.0%	$140.3	-8.4%	$134.1	-4.4%	$161.1	20.1%
	Tobacco Products	$12.7	309.9%	$15.8	24.2%	$16.5	4.5%	$25.4	54.1%
	Nicotine	$42.2	413.4%	$57.5	36.3%	$63.3	10.1%	$70.8	11.8%
8	**Total Excise**	**$4,897.2**	**20.0%**	**$5,078.3**	**3.7%**	**$5,231.6**	**3.0%**	**$5,506.9**	**5.3%**
	Income Taxes								
9	Net Individual Income	$11,717.8	23.6%	$10,684.3	-8.8%	$10,884.8	1.9%	$11,390.1	4.6%
10	Net Corporate Income	$1,568.6	32.5%	$997.7	-36.4%	$921.1	-7.7%	$1,110.6	20.6%
11	**Total Income**	**$13,286.4**	**24.6%**	**$11,682.1**	**-12.1%**	**$11,805.9**	**1.1%**	**$12,500.7**	**5.9%**
12	*Less: State Education Fund Diversion*	*$993.5*	*13.6%*	*$876.2*	*-11.8%*	*$885.4*	*1.1%*	*$937.6*	*5.9%*
13	**Total Income to General Fund**	**$12,292.9**	**25.6%**	**$10,805.9**	**-12.1%**	**$10,920.4**	**1.1%**	**$11,563.2**	**5.9%**
	Other Revenue								
14	Insurance	$390.2	16.0%	$460.4	18.0%	$480.9	4.5%	$502.3	4.5%
15	Interest Income	$69.2	38.3%	$54.3	-21.6%	$56.3	3.6%	$45.5	-19.0%
16	Pari-Mutuel	$0.4	34.8%	$0.4	-4.4%	$0.4	10.6%	$0.4	-13.4%
17	Court Receipts	$2.4	-31.4%	$3.5	44.9%	$3.6	2.3%	$3.2	-9.1%
18	Other Income	$45.6	-10.1%	$29.3	-35.7%	$25.9	-11.7%	$30.4	17.5%
19	**Total Other**	**$507.8**	**15.2%**	**$547.8**	**7.9%**	**$567.0**	**3.5%**	**$581.9**	**2.6%**
20	**GROSS GENERAL FUND**	**$17,697.9**	**23.7%**	**$16,432.1**	**-7.2%**	**$16,719.1**	**1.7%**	**$17,651.9**	**5.6%**

/A Dollars in millions.

Table 4: General Fund Overview /A

		Preliminary FY 2021-22	Estimate FY 2022-23	Estimate FY 2023-24	Estimate FY 2024-25
Revenue					
1	**Beginning Reserve**	**$3,181.5**	**$3,308.8**	**$2,094.5**	**$2,261.8**
2	**Gross General Fund Revenue**	**$17,697.9**	**$16,432.1**	**$16,719.1**	**$17,651.9**
3	*Transfers to the General Fund*	$29.199	$59.087	$28.735	$27.806
4	**TOTAL GENERAL FUND AVAILABLE**	**$20,908.6**	**$19,800.0**	**$18,842.3**	**$19,941.6**
Expenditures					
5	**Appropriation Subject to Limit**	**$12,031.21**	**$13,691.95**	**$15,079.0**	**$16,060.3**
1	**General Fund Expenditures Requested / Possible Under the Limit**	**$13,409.4**	**$13,727.4**	**$15,079.0**	**$16,060.3**
6	*Dollar Change (from prior year)*	$1,052.1	$1,660.7	$1,387.0	$981.3
7	*Percent Change (from prior year)*	9.6%	13.8%	10.1%	6.5%
8	**Spending Outside Limit**	**$5,702.4**	**$4,013.5**	**$1,501.5**	**$1,472.3**
9	*TABOR Refund under Art. X, Section 20, (7) (d)*	$3,868.4	$1,898.3	$685.1	$742.4
10	*Homestead Exemption (Net of TABOR Refund)*	$0.0	$0.0	$0.0	$0.0
11	*Other Rebates and Expenditures*	$141.8	$140.1	$141.7	$142.4
12	*Transfers for Capital Construction*	$354.0	$482.2	$50.0	$50.0
13	*Transfers for Transportation*	$400.4	$200.5	$0.0	$0.0
14	*Transfers to State Education Fund*	$123.0	$290.0	$0.0	$0.0
15	*Transfers to Other Funds*	$814.8	$1,002.5	$624.7	$537.5
16	**TOTAL GENERAL FUND OBLIGATIONS**	**$17,733.6**	**$17,705.5**	**$16,580.5**	**$17,532.5**
17	*Percent Change (from prior year)*	33.0%	-0.2%	-6.4%	5.7%
18	Reversions and Accounting Adjustments	-$133.8	$0.0	$0.0	$0.0
Reserves					
19	**Year-End General Fund Balance**	**$3,308.8**	**$2,094.5**	**$2,261.8**	**$2,409.0**
20	*Year-End General Fund as a % of Appropriations*	27.5%	15.3%	15.0%	15.0%
21	*General Fund Statutory Reserve*	$1,612.2	$2,053.8	$2,261.8	$2,409.0
22	*Statutory Reserve %*	13.4%	15.0%	15.0%	15.0%
23	*Above/Below Statutory Reserve*	$1,696.6	$40.7	$0.0	$0.0

/A. FY 2021-22 and FY 2022-23 expenditures reflect all legislation that has passed through both the Colorado House and Senate as of June 21, 2022. FY 2023-24 appropriations will be adopted in future budget legislation. Therefore, FY 2023-24 expenditures and fund balance projections shown are illustrative only. Dollars in millions.

Table 5: General Fund and State Education Fund Overview /A

		Preliminary FY 2021-22	Estimate FY 2022-23	Estimate FY 2023-24	Estimate FY 2024-25
	Revenue				
1	**Beginning Reserves**	**$3,735.2**	**$4,242.9**	**$3,229.5**	**$3,016.4**
2	*State Education Fund*	$553.7	$934.1	$1,134.9	$754.6
3	*General Fund*	$3,181.5	$3,308.8	$2,094.5	$2,261.8
4	**Gross State Education Fund Revenue**	**$1,268.4**	**$1,017.1**	**$894.3**	**$946.9**
5	Transfer to State Education Fund	$0.0	$290.0	$0.0	$0.0
6	**Gross General Fund Revenue /B**	**$17,727.1**	**$16,491.2**	**$16,747.8**	**$17,679.7**
7	**TOTAL FUNDS AVAILABLE FOR EXPENDITURE**	**$22,730.7**	**$21,751.2**	**$20,871.6**	**$21,643.1**
	Expenditures				
8	General Fund Expenditures /C	$17,733.6	$17,705.5	$16,580.5	$16,790.2
9	State Education Fund Expenditures	$888.0	$1,106.2	$1,274.7	$1,561.5
10	**TOTAL OBLIGATIONS**	**$18,621.6**	**$18,811.7**	**$17,855.2**	**$18,351.6**
11	*Percent Change (from prior year)*	33.2%	1.0%	-5.1%	2.8%
12	*Reversions and Accounting Adjustments*	-$133.8	$0.0	$0.0	$0.0
	Reserves				
13	**Year-End Balance**	**$4,242.9**	**$3,229.5**	**$3,016.4**	**$3,291.4**
14	State Education Fund	$934.1	$1,134.9	$754.6	$140.0
15	General Fund	$3,308.8	$2,094.5	$2,261.8	$3,151.4
16	*General Fund Above/Below Statutory Reserve*	$3,393.3	$81.5	$0.0	$1,484.8

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

Table 6: Cash Fund Revenue Subject to TABOR /A

	Category	Preliminary FY 2021-22	Estimate FY 2022-23	Estimate FY 2023-24	Estimate FY 2024-25
1	**Transportation-Related /A**	**$1,229.4**	**$1,220.2**	**$1,321.5**	**$1,369.4**
2	Change	6.4%	-0.7%	8.3%	3.6%
3	**Limited Gaming Fund /B**	**$115.4**	**$115.3**	**$116.5**	**$117.9**
4	Change	13.3%	0.0%	1.0%	1.2%
7	**Regulatory Agencies**	**$92.3**	**$86.4**	**$87.7**	**$99.3**
8	Change	3.6%	-6.3%	1.4%	13.3%
9	**Insurance-Related**	**$24.3**	**$22.5**	**$21.5**	**$21.9**
10	Change	15.4%	-7.3%	-4.4%	1.9%
11	**Severance Tax**	**$325.0**	**$233.2**	**$141.9**	**$149.7**
12	Change	2113.0%	-28.3%	-39.1%	5.4%
13	**Other Miscellaneous Cash Funds**	**$901.0**	**$913.3**	**$915.1**	**$950.9**
14	Change	5.1%	1.4%	0.2%	3.9%
15	**TOTAL CASH FUND REVENUE**	**$2,687.3**	**$2,591.0**	**$2,604.2**	**$2,709.1**
16	Change	20.0%	-3.6%	0.5%	4.0%

/A Includes revenue from Senate Bill 09-108 (FASTER) which began in FY 2009-10. Roughly 40 percent 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. Dollars in millions. Additionally, includes the impact of SB 21-260 which dedicates funding and creates new state enterprises to enable the planning, funding, development, construction, maintenance, and supervision of a sustainable transportation system.

/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 and the Referendum C Revenue Limit/A

		Preliminary FY 2021-22	Estimate FY 2022-23	Estimate FY 2023-24	Estimate FY 2024-25
	TABOR Revenues				
1	General Fund /A	$17,075.4	$15,964.9	$16,237.7	$17,170.5
2	Cash Funds /A	$2,671.6	$2,591.0	$2,604.2	$2,709.1
3	**Total TABOR Revenues**	**$19,747.0**	**$18,555.9**	**$18,841.9**	**$19,879.7**
	Revenue Limit Calculation				
4	Previous calendar year population growth	0.3%	0.7%	0.7%	0.9%
5	Previous calendar year inflation	2.0%	3.5%	8.3%	4.5%
6	**Allowable TABOR Growth Rate**	**2.2%**	**4.2%**	**9.0%**	**5.4%**
7	TABOR Limit /B	$12,929.8	$13,445.5	$14,655.6	$15,447.0
8	General Fund Exempt Revenue Under Ref. C /C	$3,082.6	$3,212.1	$3,501.2	$3,690.2
9	**Revenue Cap Under Ref. C /B /D**	**$16,012.4**	**$16,657.6**	**$18,156.8**	**$19,137.3**
10	***Amount Above/Below Cap***	**$3,734.6**	**$1,898.3**	**$685.1**	**$742.4**
11	***Revenue to be Refunded including Adjustments from Prior Years /E***	**$3,868.4**	**$1,898.3**	**$685.1**	**$742.4**
12	TABOR State Emergency Reserve Requirement	$480.4	$499.7	$544.7	$574.1

/A Amounts differ from the General Fund and Cash Fund revenues reported in Table 3 and Table 6 due to accounting adjustments and because some General Fund revenue is exempt from TABOR.
/B The TABOR limit and Referendum C Cap is adjusted to account for changes in the enterprise status of various State entities.
/C Under Referendum C, a "General Fund Exempt Account" is created in the General Fund. The account consists of money collected in excess of the TABOR limit in accordance with voter-approval of Referendum C.
/D The revenue limit is calculated by applying the "Allowable TABOR Growth Rate" to either "Total TABOR Revenues" or the "Revenue Cap Under Ref. C," whichever is smaller. Beginning in FY 2010-11, the revenue limit is based on the highest revenue total from FY 2005-06 to 2009-10 plus the "Allowable TABOR Growth Rate." FY 2007-08 was the highest revenue year during the Referendum C timeout period.
/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 the total refund amount distributed to taxpayers is adjusted.