March 17, 2022

STATE OF COLORADO

Governor's Office of State Planning and Budgeting

COLORADO ECONOMIC AND FISCAL OUTLOOK

COLORADO
Governor Jared Polis

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Forecast in Brief

NATIONAL ECONOMIC OUTLOOK

The U.S. economy continues to rebound in 2022, but faces greater headwinds than previously expected due to inflationary pressures expanding beyond supply chain disruptions. Broad-based price growth currently also includes energy and food prices, the cost of shelter, and growing services inflation as companies pass higher input prices onto consumers. Wage growth continues at a rapid pace, due to a tight labor market where job openings outnumber unemployed workers.

COLORADO ECONOMIC OUTLOOK

Colorado's job growth is expected to remain strong in 2022, nearly matching 2021 growth. The inflation rate is expected to face additional upward pressure from wage growth, shelter prices and supply chain constrained goods. The unemployment rate is expected to equal the U.S. in 2022, while the state's labor force participation rate continues to be top five in the nation and closes in on pre-pandemic levels.

GENERAL FUND REVENUE

General Fund revenue is projected to increase to $16.2 billion in FY 2021-22, a 13.1 percent change from the prior fiscal year. The projection for FY 2021-22 is $205.9 million higher than the December forecast. The growth rate is expected to moderate to 2.8 percent in FY 2022-23 and 3.2 percent in FY 2023-24. This upward revision is due to high expected individual income and sales tax revenue collections, driven by wage and inflation growth.

CASH FUND REVENUE

Total cash fund revenue subject to TABOR was $2.2 billion in FY 2020-21. In FY 2021-22, cash fund revenue is projected to increase by 12.0 percent followed by 1.8 percent growth in FY 2022-23 and 4.4 percent growth in FY 2023-24. The FY 2021-22 increase is attributable to an uptick in fee collections coming off of low levels during the pandemic. Cash fund revenue is not typically as susceptible to inflationary pressures, since many of the fees are set in statute.

TABOR

After exceeding the Referendum C cap (as restored by S.B. 21-260) by $547.9 million in FY 2020-21, 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 $2,229.2 million above the cap in FY 2021-22, $2,029.2 million above the cap in FY 2022-23, and $1,328.2 million above the cap in FY 2023-24, 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 $2,116.8 million above the statutory reserve level of 13.4 percent of appropriations in FY 2021-22.

Economic Outlook

The economic growth forecast has been revised down throughout the three-year horizon as inflationary pressures translate to a drag on consumer demand and supply chain disruptions continue to be more persistent than previous expectations. However, personal income and retail spending, reported in nominal terms, are revised up as wages continue to rise due to continued labor market tightness as well as real and expected inflationary pressures. Wage growth and reduced perceived barriers to enter the job market are expected to increase job growth more than previously anticipated. Long run demographic constraints on labor force participation remain, as population growth is declining due to both reduced net migration in the short run and declining birth rates in the long term.

Inflation

The U.S. consumer price index (CPI) continues to rise rapidly, with 7.9 percent inflation growth over the course of the 12 months preceding February, the highest in 40 years. Growth was broad-based, due to rising food and energy prices, shelter categories picking up to 35-year highs, non-shelter services prices accelerating since the last forecast, and durable goods price growth remained strong despite tempering growth in auto prices. The local Denver metropolitan area CPI report is bi-monthly, so the most recent available data is through January instead of February. For January, Denver inflation growth exceeded the nation with 7.9 percent inflation over the last 12 months compared with 7.5 percent nationally for the same period. Denver core inflation also exceeded the nation, 7.0 versus 6.0 percent, as shelter and supply-chain-constrained goods inflation all outpaced the nation. Given continued U.S. price acceleration reported in February, Denver prices are also expected to grow faster in the next release, out in April.

Figure 1. Major Components Driving Denver and U.S. 12 month Inflation Growth

	Denver YoY CPI Growth	U.S. YoY CPI Growth	Growth Difference	Denver Component Weight (out of 100)	U.S. Component Weight (out of 100)	Component % Difference
Shelter	5.2%	4.4%	0.8%	36.291	32.946	10.2%
Services less shelter	4.7%	4.7%	0.0%	28.409	28.354	0.2%
Transportation	21.1%	20.8%	0.3%	16.591	17.404	-4.7%
Food	7.3%	7.0%	0.3%	11.490	13.370	-14.1%
Energy	24.9%	27.0%	-2.1%	5.489	7.348	-25.3%

Source: Bureau of Labor Statistics

The shelter component of CPI is the largest weight of the basket of goods, accounting for a higher share in Denver than the nation by 10.2 percent, as seen in Figure 1. Since October 2021, national shelter rent has shown strength not seen since the early 1990s, with U.S. growth at 4.4 percent, while Denver rent inflation accelerated at a faster pace with a 5.2 percent increase. Faster recent house price appreciation, strong wage growth, and a low unemployment rate suggest that the underlying shelter inflation trend should remain firm through 2023 but peak in the current year. Upside surprises on house price appreciation or wage growth could provide additional upward pressure for longer.

Non-shelter related services price growth in Denver is equal to the U.S., at 4.7 percent year-over-year growth in January. It is likely that some services price growth is due to rising wages that businesses are passing onto consumers. This pass-through effect, combined with high inflation expectations, has led to questions about the probability of a wage-price spiral, occurring when workers demand higher wages to compensate for higher inflation which in turn raises prices further. While the risk of a wage-price spiral is possible, OSPB sees wage and price pressures calming down somewhat this year as easing supply chain constraints should help bring down inflation, along with the Federal Reserve successfully managing long-term inflation expectations.

Supply-chain-constrained goods price inflation has begun to show signs of moderation, as U.S. auto prices began to fall in month-over-month terms to start the year. Compared with forward looking expectations for most of last year, inventories of products are still low for many durable goods products, leading to further price growth which is not expected to revert by as much or as quickly. As an example, used car prices remain well above normal price growth, at 43.4 percent locally compared to 40.5 percent in the U.S. over the last 12 months. This growth in used car prices is a major reason why total transportation inflation is also higher locally, as seen in Figure 1. Local goods inflation is possibly elevated due to additional transportation costs and obstacles compared with cities closer to major ports, though there are signs of easing pressure there.

Food price inflation is higher in Denver than the U.S. as well over the past 12 months, due to faster rising prices of food bought at restaurants as rising wages are likely being passed through to menu prices. U.S. grocery prices have increased 11 percent over the last two years, the highest since the financial crisis of 2008, due to a combination of bad weather, poor crop yields, elevated demand, and historically tight inventories. Local grocery prices are still growing quickly, but at a slower pace than the nation, recording nearly 8 percent over that two-year period. However, weather-related spikes are volatile and a local risk, while the soaring costs of certain farming inputs like fertilizer prices will limit the extent to which commodity prices can meaningfully revert. Furthermore, Ukraine is one of the world's largest producers and exporters of wheat and corn, which is expected to have limited upward pressure on grains prices in 2022.

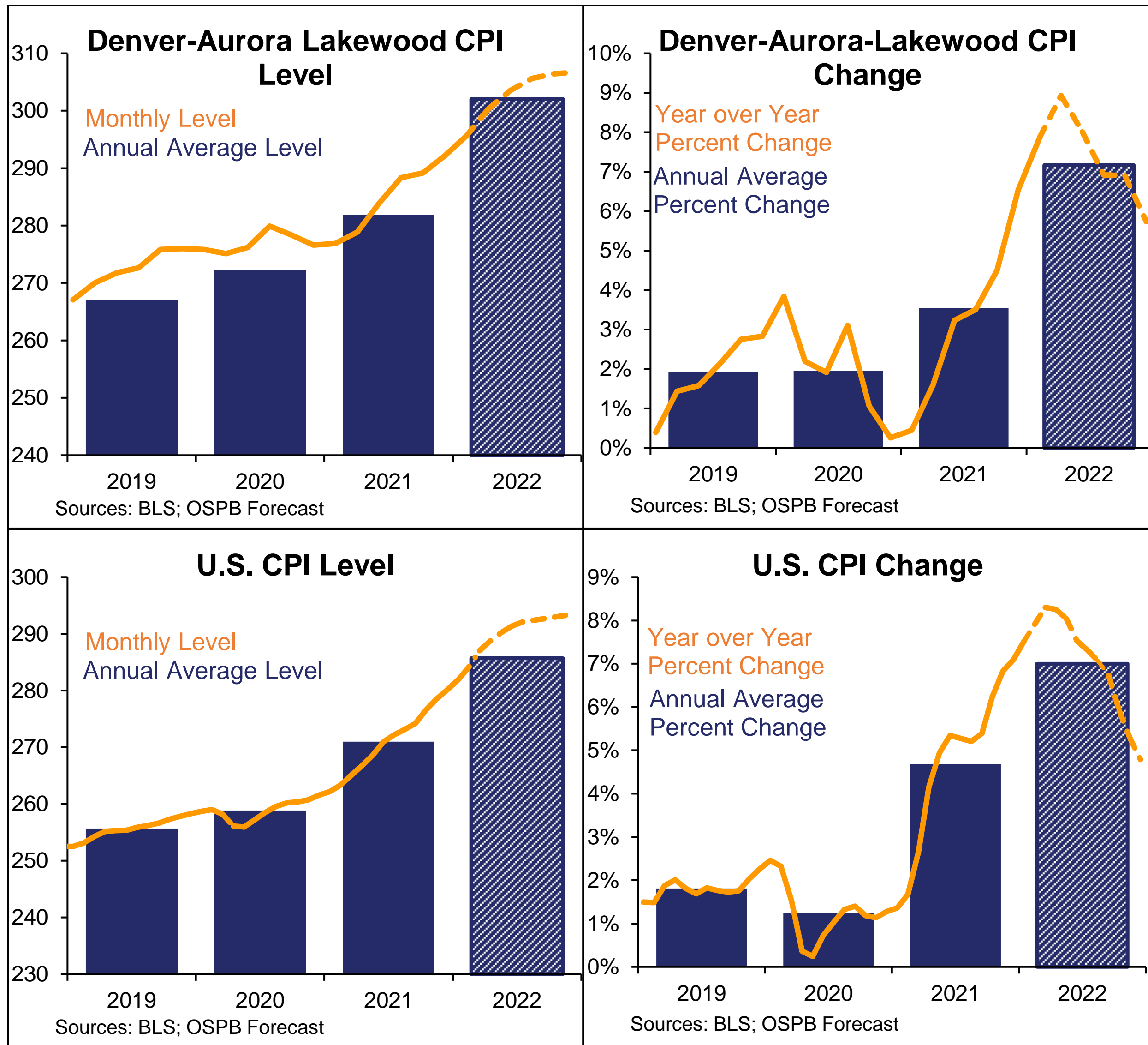
Energy prices were quickly on the rise, even prior to the ongoing conflict between Russia and Ukraine. Absent the geopolitical shock, oil prices were already expected to rise further as oil inventories and spare capacity remain low and demand continues to be robust. Russia-Ukraine

tensions have added additional upward pressure on oil prices, with Russia supplying 11 and 17 percent of the world's oil and gas supply, respectively. Note that the primary expected economic impact of the geopolitical conflict is on inflation of food and energy prices. Beyond that, U.S. short term inflation expectations tend to be closely tied to energy prices, but those expectations are not expected to meaningfully change wage or consumer spending growth. While the U.S. and Colorado are not as reliant on energy imports as the EU, the U.S. became a net importer in 2021 after net exporting in 2020, so an inability to quickly ramp up domestic production would put further pressure on prices.

Overall, OSPB expects that shelter and supply-constrained goods inflation will all be somewhat elevated locally due to the extension of existing trends described above. Food, energy, and non-shelter service prices are expected to grow at about the same rate as the nation overall. Also, component weights for the U.S. and Denver are not identical, which is expected to have a slight upward push on local inflation relative to the U.S. The basket of goods and services is broken down by component in Figure 1, which reflects the expenditures locally and that of the country as a whole. Denver spends relatively more on shelter and recreation as a percent of total expenditures, therefore the basket of goods for CPI places higher weights on those components. On the other hand, Denver spends less on energy and food, and about the same on services overall.

OSPB has revised its expected Denver inflation for 2022 from 3.3 percent to 7.2 percent, due to firmer shelter growth, growing service inflation from rising wage passthrough, prolonged supply chain disruptions and material costs, and increasing food and energy prices, largely due to underlying economic drivers and exacerbated by geopolitical issues. The U.S. inflation path is similar but less pronounced in 2022, as the projection is revised from 3.5 percent in December to 7.0 percent now. See Figure 2 below for the expected path across months that align with these expectations.

Figure 2.



Consumer Spending and Retail Sales

Against the backdrop of the Omicron surge, continued supply chain issues, and other inflationary pressures, real personal consumption expenditures (PCE) remained relatively strong through the end of 2021, though the last two months of the year saw a slight goods-driven reduction. Real spending fell by annualized rates of 6.6 percent and 2.8 percent for durable and nondurable goods respectively from October through December 2021. As anticipated in December, durable goods spending has decelerated, likely resulting from continued supply chain and inflationary pressures on purchases of large items such as cars and home appliances. This has not been sufficient to derail these purchases altogether as goods spending remains more than 12 percent above its February 2020 level.

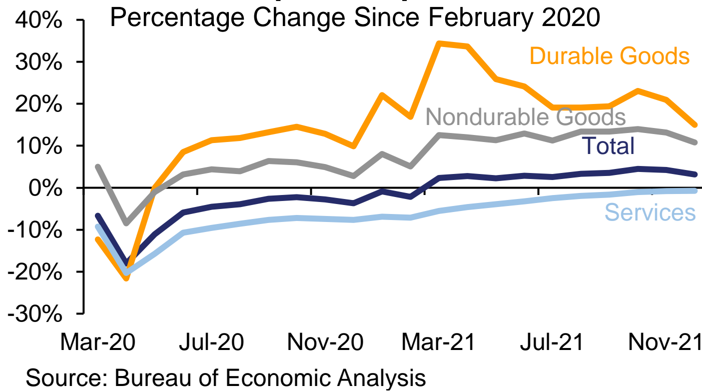
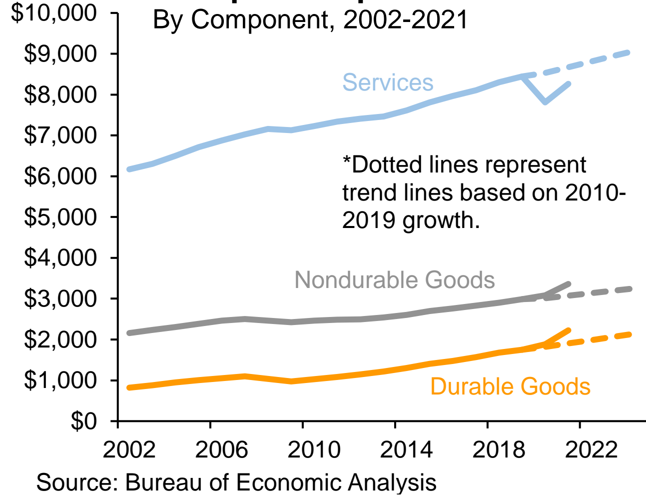
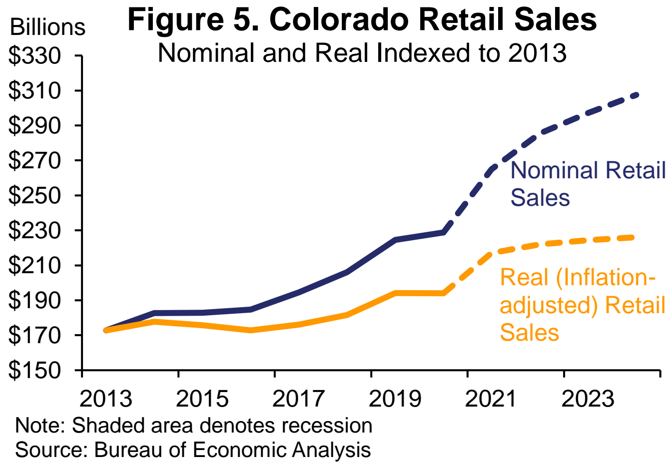


Figure 3 demonstrates these trends, expressed as percentage changes since pre-pandemic (February 2020) levels for each component of PCE. The recent declines are also likely indicative of a broader, albeit slow, return toward pre-pandemic consumption as the simultaneous headwinds of declining accumulated savings and a steady return to services spending persist.

Figure 4 shows longer term pre-pandemic trend growth for each component and the extent to which pandemic consumption levels strayed from historical growth rates. While it is still unclear the extent to which spending on each component will revert to annual pre-pandemic trends over the next couple of years, a target to rejoin pre-pandemic trends by 2022 for services and 2023-2024 for goods spending is a reasonable baseline. In order to return to trend by these target dates, services spending would need to grow by 6.7 percent in 2022, slightly faster than the 5.8 percent 2021 growth rate. In contrast, durable goods spending would need to decline by 7.0 percent total between 2021 and 2023, or by 3.3 percent total between 2021 and 2024.

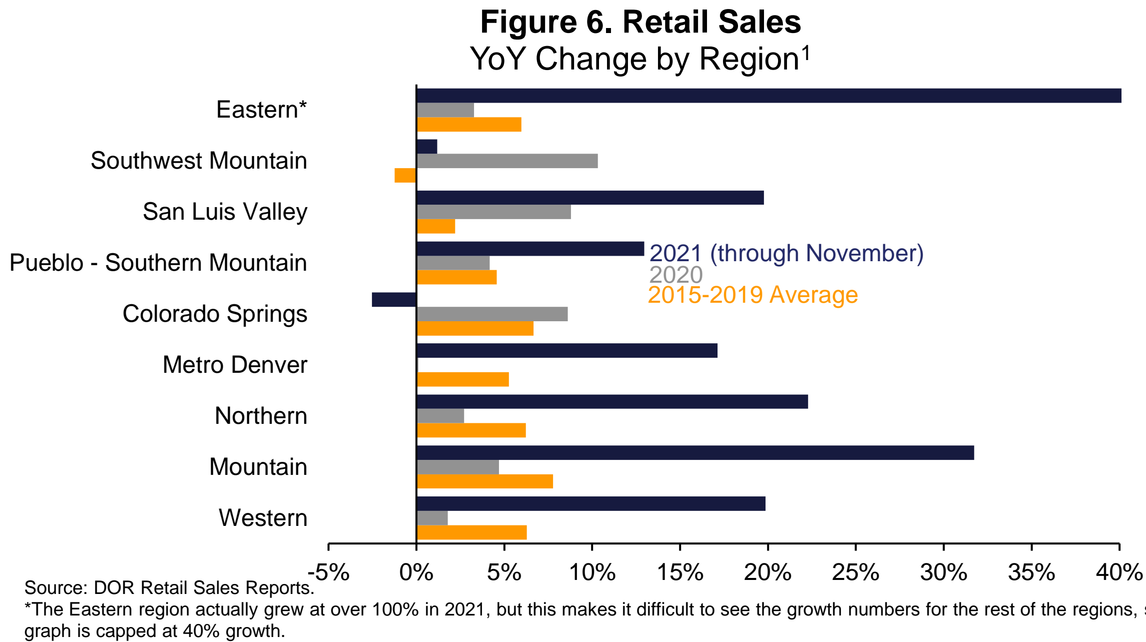


These trends around U.S. PCE components are also present in the Colorado and U.S. retail sales data. As Figure 5 demonstrates, OSPB anticipates that real retail sales, which largely consist of goods purchases, will close out 2021 strong, followed by a return to pre-pandemic growth trends in the out years as a result of slowing demand for goods purchases and increasing demand for services. The figure also demonstrates the anticipated gap between nominal retail sales and real retail sales, as price increases, as opposed to purchase volume increases, will



continue to inflate aggregate retail sales. This expected inflation effect on retail sales is particularly important as sales tax revenue collections are based on nominal sales, which has resulted in an upward revision to the revenue forecast.

Finally, Figure 6 observes retail sales growth rates by region,[1] comparing 2020 and 2021 growth rates to the pre-pandemic average. Notably, with the exception of Metro Denver, most regions experienced retail sales growth within the range of pre-pandemic trends from 2019-2020, likely the result of the shift from goods to services spending discussed above, stronger online purchases, and potentially higher consumption in more rural areas of the state. In addition, nearly all regions experienced considerable growth in 2021, with statewide retail sales forecasted to grow by 16.5 percent in 2021.

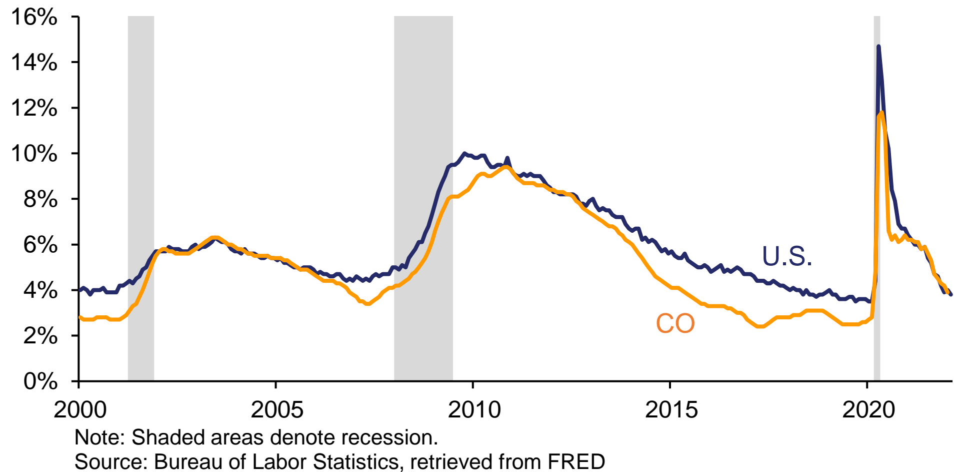


[1] Regions are created using the county level mapping used by the Legislative Council Staff.

Labor Force

Labor market conditions in the United States and in Colorado continue to be tight, with employers searching for more workers than are available. The unemployment rate dropped throughout 2021 as labor market conditions tightened, reaching 4.1 percent for Colorado in January and 3.8 percent for the nation in February. Data for Colorado's unemployment rate was recently revised by the Bureau of Labor of Statistics, resulting in downward revisions of roughly 0.5 percentage points per month throughout 2021. Previously, the unemployment rate in Colorado was higher than the nation's, but the revisions signal that unemployment in Colorado and the U.S. are actually nearly identical over the past year. OSPB expects Colorado's unemployment rate to continue to fall in 2022, down to an annual average of 3.7 percent, as the effects of expanded unemployment benefits and stimulus payments on household savings decline, and concerns about COVID-19 decline after the recent peak in cases. Additionally, OSPB expects that strong labor demand and healthy wage growth will cause more unemployed people to move into employment going forward.

Figure 7. Unemployment Rate
U.S. vs CO

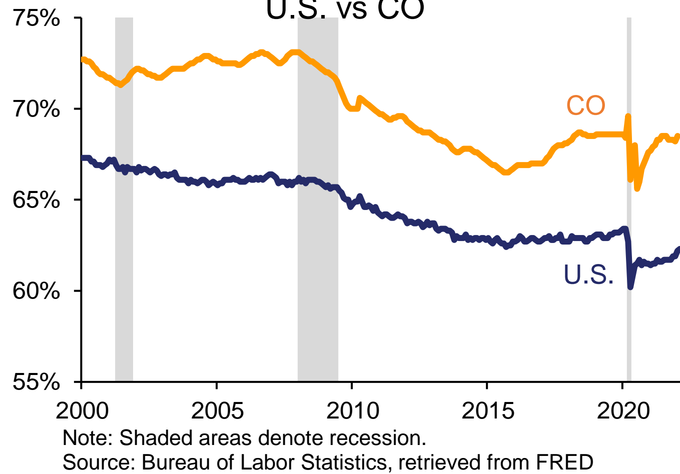


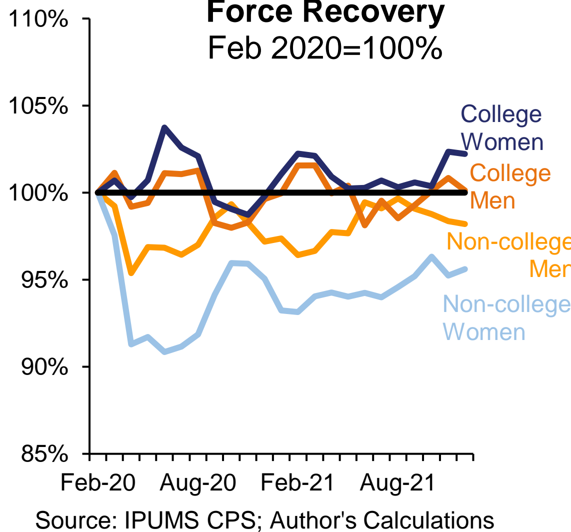
Note: Shaded areas denote recession.
Source: Bureau of Labor Statistics, retrieved from FRED

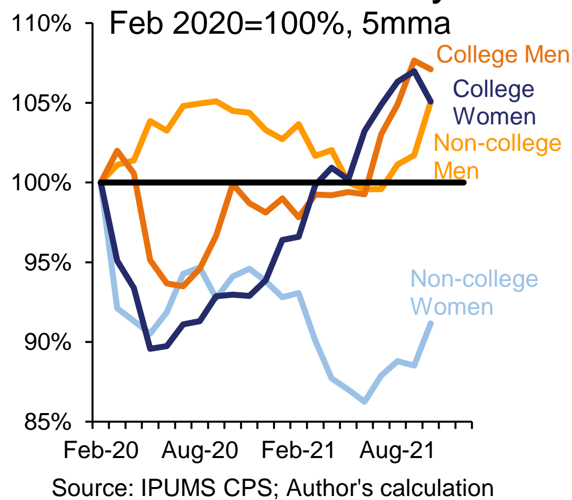
Colorado's labor force participation rate sits at 68.5 percent in January, just below its pre-pandemic level of 68.9 percent. This is in contrast to the U.S., whose labor force participation rate is still 1.1 percentage points below its pre-pandemic level, at 62.3 percent. OSPB expects the labor force participation rate to stay fairly flat moving forward as some workers have left the labor force indefinitely due to structural changes caused by the pandemic, as well as a growing share of the population being of retirement age. The lower labor force participation rate reduces the available labor supply for businesses, which exacerbates the labor shortage. Some common

explanations for the labor shortage include an increase in the number of people retiring or staying retired, childcare constraints, and virus concerns.

Access to childcare has been cited as a significant reason for the decline in labor force participation, particularly among women. As kids were more likely to attend school remotely and access to child care became more difficult or inconsistent, many women dropped out of the labor force. According to Tuzeman (2021),[2] prime-age women without a college degree have seen the slowest recovery in the labor force participation rate compared to women with a college degree and men with or without that degree. Additionally, they find that Hispanic women and non-Hispanic Black women without a college degree who have children have been slower to return to the labor force than their non-Hispanic white counterparts, suggesting that childcare concerns are a greater obstacle on average for mothers of color than for white mothers.

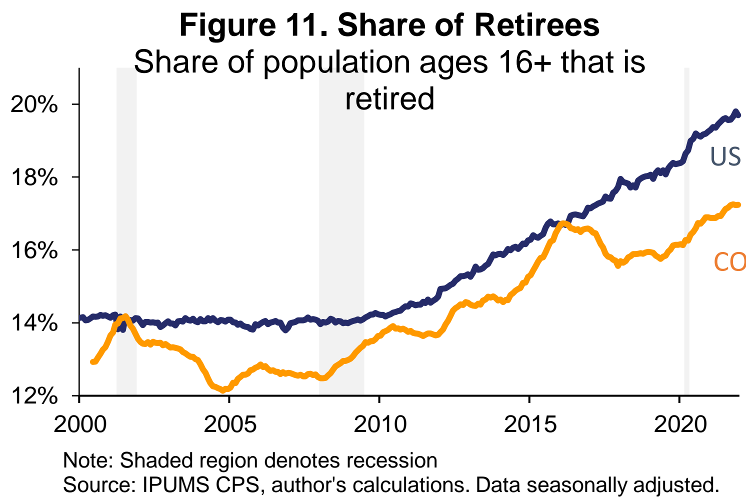






[2] Tuzeman, Didem. 2021. "Women without a College Degree, Especially Minority Mothers, Face a Steeper Road to Recovery." Federal Reserve Bank of Kansas City. https://www.kansascityfed.org/research/economic-review/women-without-a-college-degree-especially-minority-mothers-face-a-steeper-road-to-recovery/

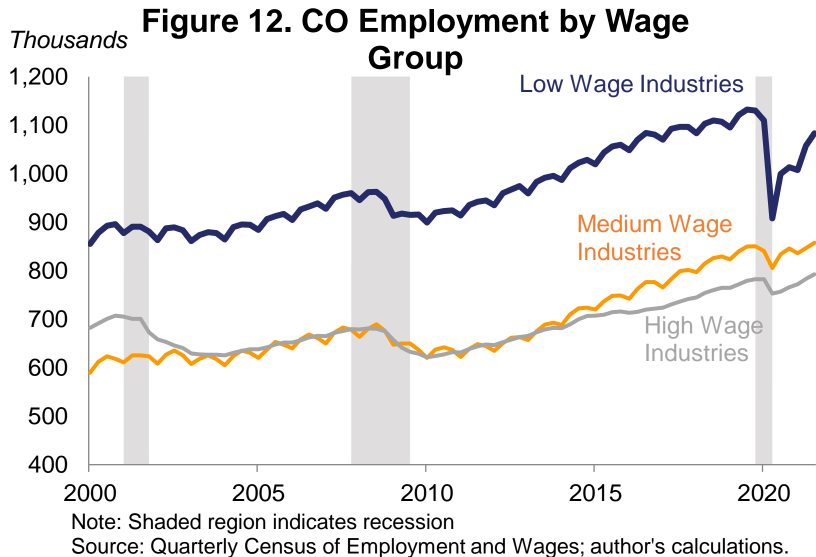
Figures 9 and 10 show the current labor force as a percentage of the February 2020 labor force, by sex and educational attainment for the U.S. and for Colorado. In the U.S. the size of the labor force for college men and women is slightly higher than it was pre-pandemic, and for non-college men it is just below pre-pandemic levels. In contrast, the number of non-college women in the labor force is roughly five percent below pre-pandemic levels. In Colorado, however, the labor force for college men, college women, and non-college men is over five percent larger than it was before the pandemic. At the same time, the gap for non-college women is even greater in Colorado, with the labor force nine percent smaller than it was before the pandemic. This means that the majority of the prime-age labor force has fully recovered, but women without a college degree are lagging significantly behind. This may be an indication that childcare concerns are greater in Colorado than in the rest of the nation.



Another cause for lower labor force participation is an increase in retirees as asset prices have increased and virus concerns remained throughout the pandemic. The share of retirees in the population has been growing over the past decade as the population ages, but this trend picked up early in the pandemic. This increase in retirements is likely to be a more permanent change to the labor force as retirees are less likely to return to work in the future. Figure 11 shows the share of retirees in the U.S. and Colorado over time, showing that both the U.S. and Colorado saw an increase of roughly one percentage point in the share of retirees during the pandemic. Colorado's lower share of retirees overall is attributable to its younger population.

Additionally, employment gains in Colorado have varied by wage groups over the past two decades, but particularly during the pandemic. During the expansion following the great recession, low-wage industries added the most jobs, followed by medium-wage industries. During the pandemic, high- and medium-wage industries only had minor impacts on employment and have more than fully recovered in this data. Conversely, low-wage industries saw major drop-offs in employment early in the pandemic and have recovered only 79 percent of jobs lost by the third quarter of 2021. The trend in low-wage employment during the pandemic is driven primarily by the leisure and hospitality sector, which has reported widespread labor shortages as businesses struggle to find workers, despite offering bonuses and raising wages.

Figure 12. CO Employment by Wage Group

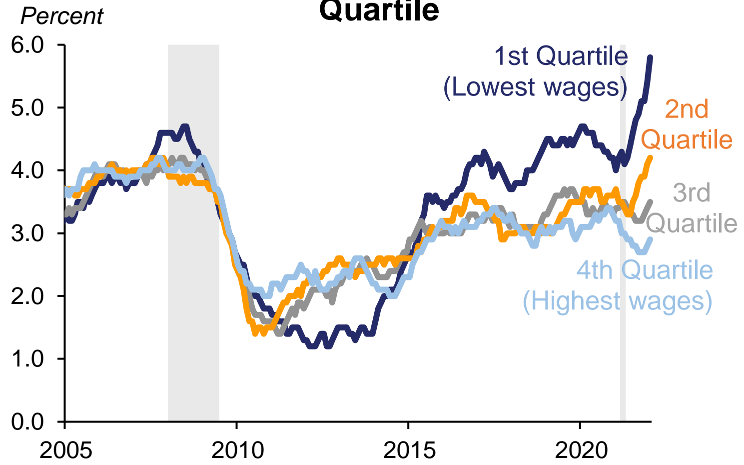


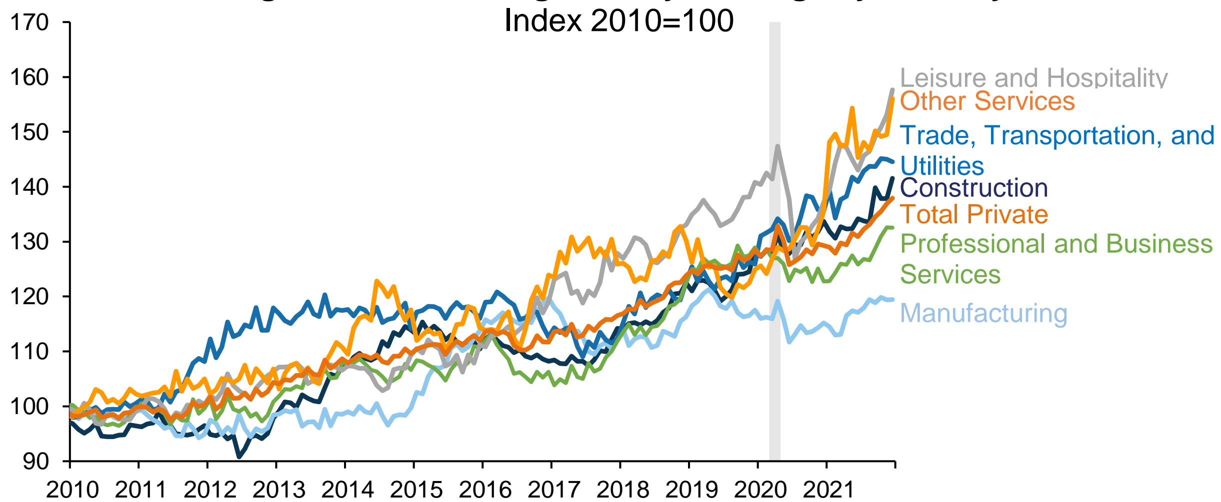
Note: Shaded region indicates recession
Source: Quarterly Census of Employment and Wages; author's calculations.

Wages and Income

Wage growth was particularly strong in 2021 as the labor shortage caused businesses to compete for workers by raising wages and salaries at a faster pace than historical trends. The Employment Cost Index (ECI) measures wages and salaries for a fixed basket of jobs. Growth in the ECI dropped at the start of the pandemic as labor demand fell sharply but came in historically high in 2021. Prior to the pandemic, wages and salaries were growing at a rate of roughly 3 percent annually. The year-over-year percent change in the ECI in 2021 was historically high, coming in at 5.0 percent at the end of the year. This high wage growth should help households keep up with rising prices due to inflation but may also contribute to inflation as high labor costs get passed on to consumers through higher prices. OSPB expects wage growth to remain high but revert towards normal growth by the end of 2022, as the Federal Reserve policy actions begin to lower labor demand, though not enough to converge with supply. The resulting labor market imbalance still favors workers seeking high wage increases, but less so than the current environment.

Wage growth has not been uniform across all groups. The Federal Reserve Bank of Atlanta calculates wage growth for each quartile of wages. The first and second quartiles with lowest wages experienced the biggest hit to wage growth during the Great Recession, but they have recovered since and have had the highest wage growth out of all four quartiles since 2015. This trend picked up in 2021. All four wage quartiles have seen some acceleration in wage growth in the second half of 2021, but the group with the lowest wages has seen the greatest, reaching wage growth of 5.8 percent in January 2022. Although the lowest wage earners have seen the highest wage growth over the past year, these workers have also experienced the biggest decline in employment and labor force participation, particularly early in 2020, and have been the slowest to return to the labor force. However, OSPB expects that rising wages in the lowest quartile will encourage workers to rejoin the labor force, thereby improving the employment recovery for this group going forward.



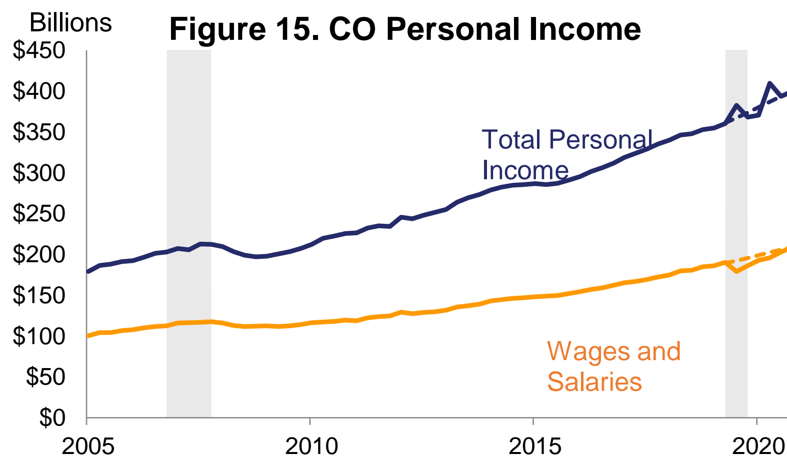


High wage growth for the lowest wage earners can be attributed to the variation in wage growth across industries. In Colorado, Leisure and Hospitality has had the highest wage growth (measured by Average Hourly Earnings) in percentage terms since 2010. This is significant because Leisure and Hospitality is the lowest-wage sector in the state and makes up a significant

share of employment. Similarly, Trade, Transportation, and Utilities and Other Services are the next lowest wage sectors and have experienced above average wage growth since 2010. Wages in this sector, among others, have risen above trend during the pandemic as businesses compete over a limited labor supply. Separately, Professional and Business Services and Manufacturing are two of the highest wage sectors with the lowest wage growth.

Personal Income

Total personal income remains elevated over its pre-pandemic level, even after the pandemic government benefits have declined with the end of enhanced unemployment benefits and household transfers. Wages and salaries—the largest component of personal income—continued to rise steadily through the third quarter of 2021 as wages grew at a rapid pace. Notably, total wages and salaries in Colorado has exceeded the pre-pandemic trend, despite total employment remaining below its pre-pandemic level. In addition to wage growth, high inflation and asset appreciation in 2021 also contributed to strong growth in personal income throughout the year.



Personal income ebbed and flowed during the pandemic largely with the receipt of household stimulus checks in 2020 and early 2021. These transfers also resulted in a higher savings rate during these periods, and a higher level of savings overall particularly as households were unable to spend on services. Spending on goods and services was very strong by the end of 2021 as households spent off some of these excess savings, leaving consumer checking accounts only slightly higher than pre-pandemic by September of 2021.[3] Higher income households were more likely to have more savings relative to pre-pandemic levels, particularly as lower income households were more likely to have lost their jobs during the pandemic and have a higher propensity to consume. OSPB expects personal income growth to remain strong through 2022, primarily driven by growth in wages and salaries and above-trend inflation.

[3] Greig, Fiona, Erica Deadman, and Tanya Sonthalia. 2021. "Household Cash Balance Pulse: Family Edition." JPMorgan Chase Institute. https://www.jpmorganchase.com/institute/research/household-cash-balance-pulse-families

Energy

The energy sector recovery from the pandemic-induced drop in demand has been slow, despite prices increasing steadily over the past six months, as oil inventories and spare capacity remain low while demand increases. Recovery now faces significant upside risk and volatility with the ongoing conflict in Ukraine, which threatens the supply of oil and natural gas to Europe. Prices have spiked, however, it will take time to determine what levels prices will reach and whether production levels, particularly in Colorado, will follow the upward price trend.

Figure 16. WTI Prices per Barrel

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

Oil demand, as measured by U.S. petroleum products supplied, surged over the last nine months (Figure 17) hitting its highest level over the past ten years in February 2022, as latent economic activity regained momentum over the summer. Travel, commutes, the purchase of consumer and intermediate goods all drove prices up to levels not seen since 2014. The conflict in Ukraine has put further upward pressure on both oil and natural gas prices, with some trade routes already cut off. Russian energy producers have only officially sanctioned by the U.S., but in practice many countries and firms are cutting ties with Russian energy. In 2020, Russia was the world's third largest producer of petroleum and the second largest producer of natural gas, supplying much of Europe with most of its energy.

West Texas Intermediate oil prices per barrel, the benchmark for U.S. oil, ended at $106.80 for the week on March 5, while Henry Hub Natural Gas prices ended at $4.57, a 71.5 percent and 63.8 percent increase year-over-year, respectively. The expectations for WTI prices per barrel for 2022 are $105 and $87 for 2023, although a significant amount of volatility is expected depending on how the conflict in Ukraine proceeds. Henry Hub natural gas prices, per MMBtu, are expected to end at $4.00 in 2022 and $3.85 in 2023, which is also subject to significant uncertainty and volatility.

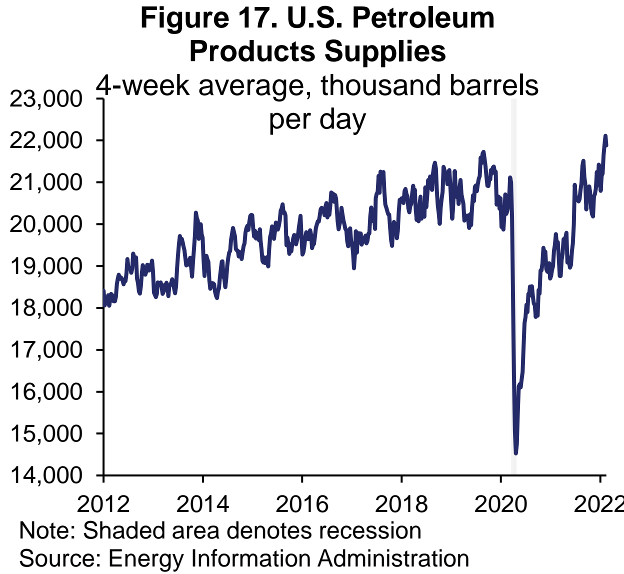


Figure 17. U.S. Petroleum Products Supplies

Note: Shaded area denotes recession
Source: Energy Information Administration

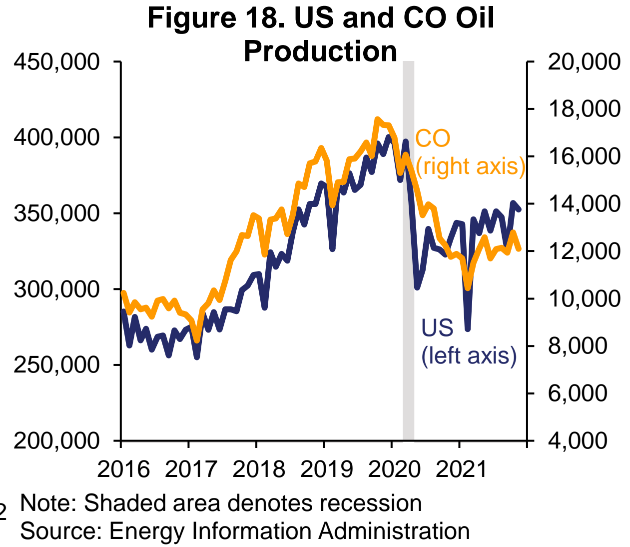


Figure 18. US and CO Oil Production

Note: Shaded area denotes recession
Source: Energy Information Administration

Oil and natural gas production in Colorado peaked before the pandemic, falling by 24.7 percent and 11.4 percent, respectively, between March 2020 and December 2021. The drop in production has been more pronounced in Colorado than in the U.S., which has seen more of a rebound in production levels. U.S. natural gas production exceeds pre-pandemic levels as of December 2021, while U.S. oil production did not drop as far as Colorado's levels but has also not rebounded to pre-pandemic levels. The drilling rig count typically serves as a leading indicator of both oil and gas production of shale wells, which may be an ominous sign for production in 2022. Drilling rates typically lag increases in prices by about four to five months, as seen in Figure 16 above. WTI prices per barrel hit pre-pandemic levels in April 2021, but even as of March 2022, Colorado rig counts are only at 70 percent of their pre-pandemic levels.

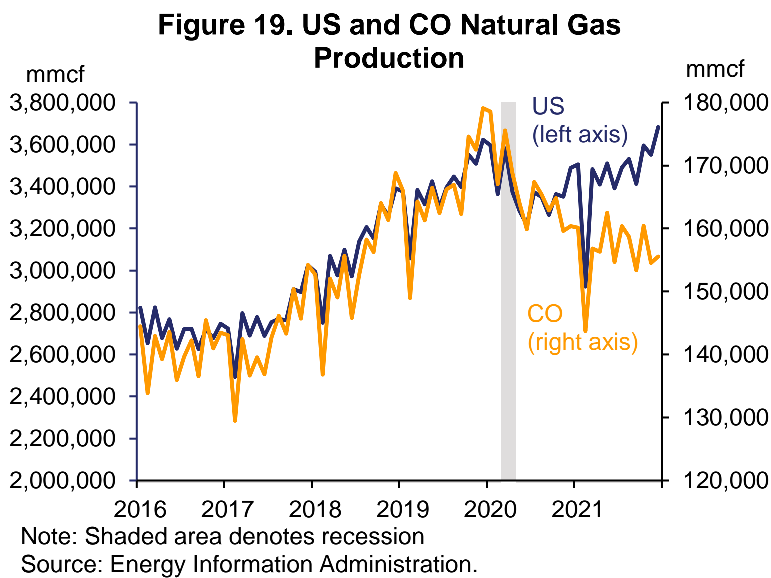


Figure 19. US and CO Natural Gas Production

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

These data indicate that production levels are not ramping up in accordance with prices, as is typically the case. Investment in drilling and production has been sluggish since the shale boom busted in 2015, leaving energy firms with high debt levels. Currently, companies are hesitant to invest due to the increasing cost of labor and equipment necessary for production, their current debt levels and the financial benefit of reaping higher profits from higher

prices with stable investment levels, and the uncertainty about how long the higher prices will persist. Even if drilling investment picks up, there will be a several month to year lag when the supply will increase enough to mitigate the inflationary pressures from rising demand given the time necessary to drill, refine, and transport. In the meantime, the U.S. administration is releasing strategic oil reserves and negotiating with currently sanctioned nations Venezuela and Iran, as OPEC+ countries have been sluggish to agree to increasing production levels.

Supply Chains

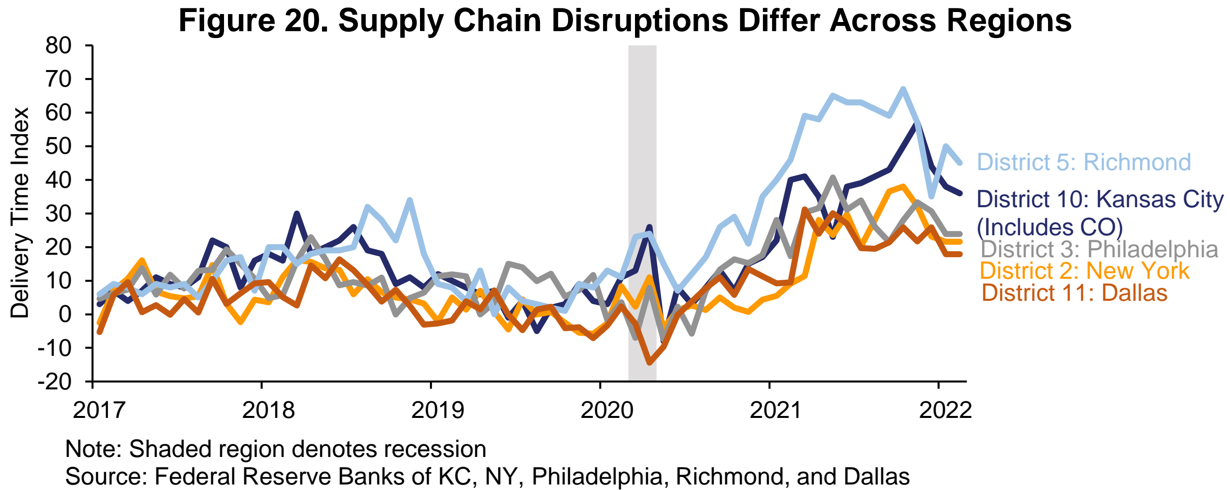
Supply chain disruptions continue to remain a major challenge, despite some improvement in the last two months, as these pressures still significantly constrain production and trade. OSPB has identified three major supply chain contributors to the lower-than-anticipated growth: (1) labor constraints, (2) new COVID-19 variant related slowdowns abroad, and (3) shipping difficulties including port congestion and trucking shortages.

Domestic contributors to supply constraints include inventory and labor supply. In the U.S., the Omicron variant increased temporary labor shortages and delayed the rebound from supply-chain disruptions. Unpaid absences from work jumped in the January jobs report, during the worst of the variant outbreak.

In major manufacturing countries abroad, including China, new variant spread risk has been less tolerated thus far than it is domestically. Therefore, the Omicron variant has amplified goods supply shortages, interrupting domestic production and further weighing on inventory accumulation and exports up through the current quarter. Inventory levels are putting increased price pressure on material costs as well, constraining possible profits and further limiting domestic production capacity. Later this spring, however, increases in vaccination rates of foreign trade partners should start to limit the scope for severe supply disruptions.

With regard to international trade delays, congestion at ports likely peaked in early January, when there were a record 109 ships in the port of Los Angeles, according to the Marine Exchange of Southern California. Since that time, congestion has been almost cut in half at that port in part due to reduced congestion during the Lunar New Year slowdown in China. However, part of this decline in congestion at this and other West Coast ports is due to ships diverting to East Coast ports to avoid existing West Coast gridlock. This has further delayed the flow of goods to consumers and continues to place upward pressure on costs. Furthermore, once goods pass through customs, there are additional delays as a result of the transportation and warehousing labor market, though these delays are showing signs of subsiding. The Trade, Transportation, and Utilities labor market sector has had a higher quits rate and higher hires rate than the average industry, due in part to long haul truckers shifting into short haul trucking which may have contributed to further delays in 2021. However, wages in the sector have grown from 3.4 percent to over 6 percent over the course of the year in order to attempt to retain workers, and it appears that this has eased constraints, as seen below.

Figure 20. Supply Chain Disruptions Differ Across Regions



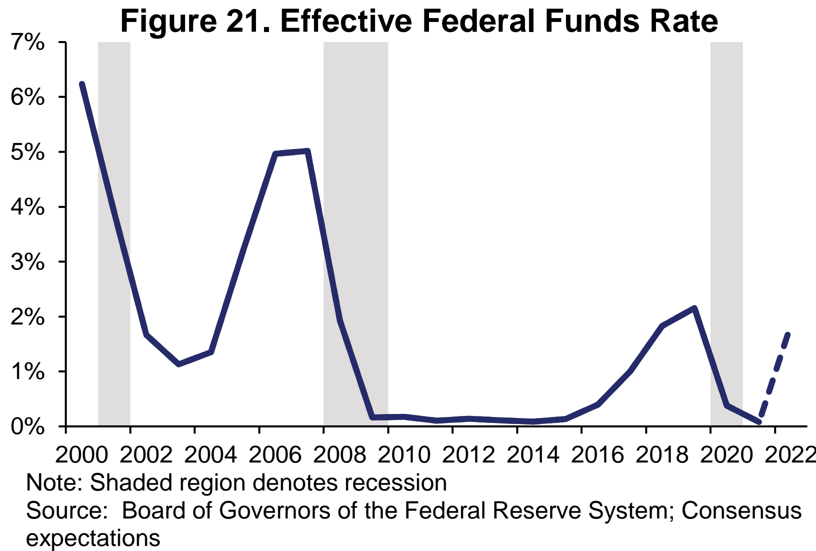
Note: Shaded region denotes recession
Source: Federal Reserve Banks of KC, NY, Philadelphia, Richmond, and Dallas

Figure 20 compares the five regional Federal Reserve manufacturing surveys, focusing on the differences in delivery time between the regions since the start of the pandemic. Higher values on the index indicate more respondents are experiencing longer wait times to receive orders than the previous month. During the December forecast, the Kansas City region, which includes Colorado, had all-time highs in longer delivery times, but this has since eased to levels similar to the second quarter of 2021. The local decline over the last three months has been larger than any other region, likely tied to improvements in the transportation and warehousing labor market.

Given additional information since the last forecast, OSPB expects all three contributors to supply chain disruptions to be largely, but not completely, resolved by the end of 2022. International port congestion has already begun to ease and may normalize by the summer of 2022. U.S. labor supply is expected to continue to improve as individuals' excess savings continue to fall, but the future labor market recovery pace will likely be slower than its recent rate. Finally, over the course of 2022, higher global vaccination rates will limit the drag of foreign production constraints pulling down input and final product inventories.

Financial Conditions

Recent favorable financial conditions have led to very low debt service payments for both the federal government and private firms. The inflationary pressures that have been building over the last few months resulted in an upward revision to the federal funds rate on March 16 of 25 basis points. Given the persistent inflationary pressures in the economy, this first hike will be soon followed by quantitative tightening that is expected to occur more quickly than the period following the Great Recession.



Note: Shaded region denotes recession
Source: Board of Governors of the Federal Reserve System; Consensus expectations

Currently, the consensus expectation is that the Fed will hike seven times this year, which would raise the federal funds target range from 0-0.25 percent to 1.75-2 percent, still remaining below the estimated neutral rate. During the December forecast, the Fed was expected to hike three times in 2022 due to less concern over inflation at that time. The Fed has committed to the pre-pandemic consensus that inflation generally does not deviate from 2 percent, and consequently, has focused on jobs and not inflation until recently. However, with a now-tight labor market and persistently high inflation, there is uncertainty whether the Fed will pursue a quick response to tamp down inflation expectations. The speed of the future hikes may depend on inflation outcomes in the first half of the year, as entrenched high inflation expectations would require accelerated intervention.

Current expectations from a recent University of Michigan Consumer Sentiment survey show five-year ahead inflation at 3.1 percent, a 10 year high, while the year-ahead inflation expectation increased to almost 5 percent. This resulted in a decline in consumer sentiment as rapidly rising prices are limiting the spending power of consumers despite strong wage growth, as inflation-adjusted wages may fall. Consumers may limit spending behavior on goods purchases as a result, creating a drag on economic growth. OSPB expects this drag to be mild, due to the Federal Reserve's ability to respond to market conditions flexibly as it implements an appropriate pace of Federal Funds hikes and quantitative tightening policies.

If inflation continues to run above expectations, the Fed may have to consider raising rates more sharply than currently anticipated to choke off inflation growth. Such a tightening could negatively impact the labor market if the relationship between inflation and unemployment, known as the Phillips curve, remains similar to pre-COVID years. OSPB assumes that inflation growth fades over the course of the year, avoiding the need for a more aggressive Federal Reserve hiking cycle than the current consensus expectations of seven hikes in 2022, which would avoid a large drag on employment.

While monetary policy does not directly impact long-term interest rates for mortgages or car loans, there has been a directional impact on rising long-term rates since the Federal Reserve has switched its focus towards inflation containment. Thirty-year fixed mortgage rates now top 4 percent for the first time since the beginning of the pandemic, up from 3.03 percent in mid-September, when many Fed participants called for no hikes in 2022. Additionally, equity markets are likely to have downside risks as rates begin to rise, as the difference between risk-free

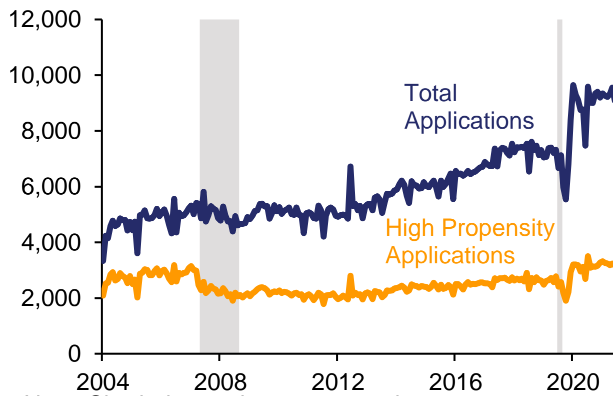
Treasury assets and equity returns shrink. This is expected to limit the growth in personal income not related to wages in 2022.

Small Business

Small businesses experienced mixed results over the past two years. On the one hand, strong consumer demand for goods vastly increased business sales and profits, and business starts, and the diversity of businesses owners, are up. On the other, many corporate retailers reaped most of the rewards while small businesses without the infrastructure to succeed shuttered. Difficulties persist for both large and small businesses with a tight labor supply, input price inflation, pandemic-induced uncertainty, and supply chain delays.

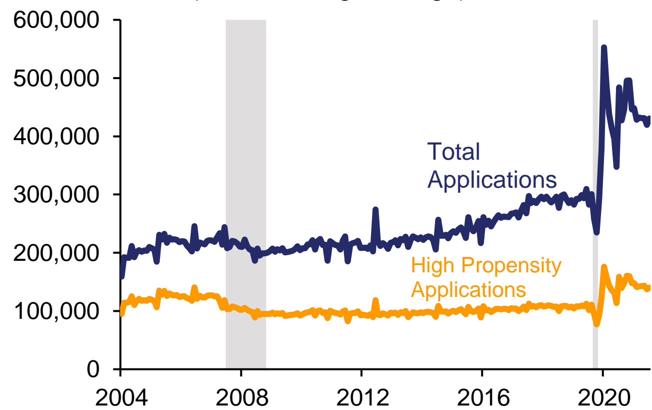
Business formations have performed very well since mid-2020. As Figures 22 and 23 demonstrate, both general business applications and high propensity applications—those that have a "high propensity" to turn into businesses with payroll—rapidly rebounded to record levels after a small initial pandemic downturn in March 2020. Similar trends have not occurred in previous recessions; in fact, during the Great Recession, business applications actually declined. Thus, strong business formation numbers are likely a result of factors that have differentiated

Figure 22. CO Business Applications
(3-Mo Moving Average)



Note: Shaded area denotes recession
Source: U.S. Census Bureau, Business Formation

Figure 23. US Business Applications
(3-Mo Moving Average)



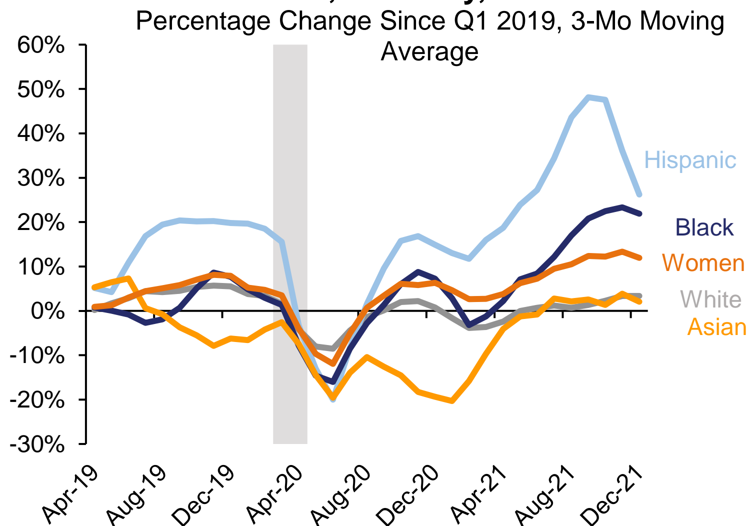
Note: Shaded area denotes recession
Source: U.S. Census Bureau, Business Formation

the COVID-19 pandemic-induced recession from other recessions, such as substantial growth in non-store retailers, soaring unemployment rates, pandemic-specific innovation, and changes in lifestyles. These new business formations, especially the high propensity applications, are a reason for optimistic economic expectations, as they may create additional job opportunities. Figures 22 and 23 also show that trends have been remarkably similar in the U.S. and Colorado, with the caveat that Colorado applications have increased by a slightly smaller percentage due to a higher baseline as a result of significantly stronger growth in the years leading up to the pandemic.

While the Census Bureau does not collect information on these applications by demographic, the number of business owners identifying as Black, Hispanic, or women has increased significantly at a faster rate than white and Asian-owned (men and women) businesses, which have been relatively more stable.[4] Specifically, Figure 24 shows that the number of Hispanic-, Black-, and women-owned businesses have increased by 26 percent, 22 percent, and 12 percent, respectively, compared to Q1 2019 levels. Over that same period, the number of white-owned businesses has remained effectively flat, up just 3 percent over Q1 2019. As demonstrated by Figure 25, these trends in business ownership correlate with the peak pandemic unemployment rates for each of these groups. For instance, Hispanic individuals, who saw the largest increase in business formation, also experienced the highest peak unemployment rate at 18.8 percent in April 2020 as compared to peak White unemployment of 14.1 percent.

Figure 24. Business Owners by Race, Ethnicity, Gender

Percentage Change Since Q1 2019, 3-Mo Moving Average



Note: Shaded area denotes recession
Source: Current Population Survey; Analyis of Microdata by Professor Robert Fairlie, UC Santa Cruz.

Figure 25.
Unemployment Rates by Demographic

Demographic	Peak Pandemic Unemployment	Current (February) Unemployment
Hispanic	18.8%	4.4%
Black	16.8%	6.6%
Women	16.1%	3.9%
Asian	14.8%	3.1%
White	14.1%	3.3%

Note: Peak pandemic unemployment rates for each group occurred in either April or May 2020.
Source: Bureau of Labor Statistics, retrieved from FRED.

Contrary to these trends in business formation, the broader business environment faces a number of difficulties. January 2022 surveys from the National Federation of Independent Businesses (NFIB) indicate the following challenges related to supply chains, inflation, and labor supply:

- 34 percent of businesses cited either labor costs (11 percent) or labor quality (23 percent) as their top business problem, both at record high levels;

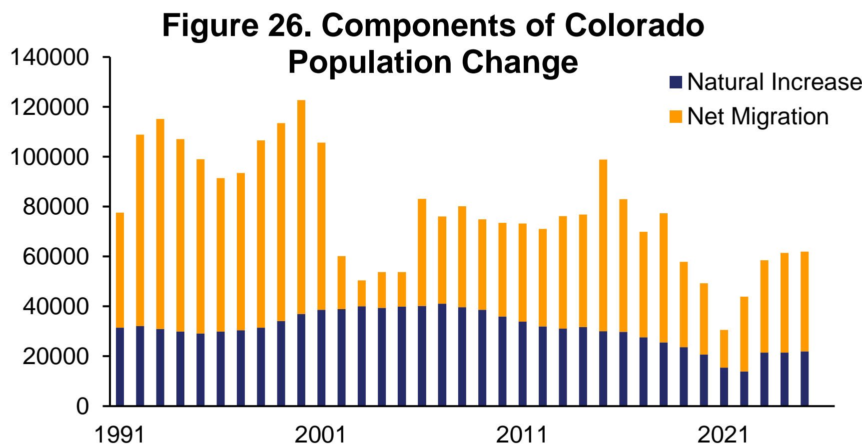
[4] This data comes from an analysis of Current Population Survey employment microdata by Professor Robert Fairlie at University of California Santa Cruz, who in addition to teaching at UC Santa Cruz has testified in front of Congress on numerous occasions related to this small business research.

- 47 percent of owners reported job openings that they could not fill in the current period;
- 50 percent of businesses reported raising compensation in the past three months, also a record high; and
- 61 percent of owners raised average selling prices in the past three months; these price hikes were most prevalent in wholesale, manufacturing, retail, and construction.

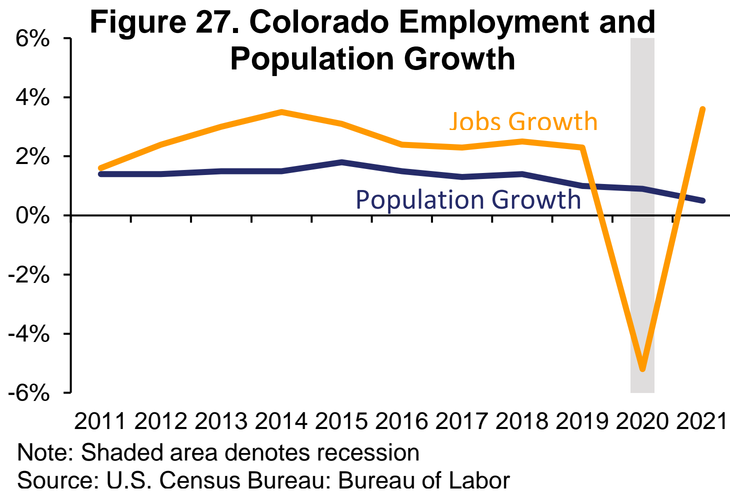
Figures 22 and 23 demonstrate that U.S. and Colorado business applications are 52 percent and 34 percent above pre-pandemic levels, respectively. While the economy will likely see positive long-term effects of these new businesses, business formation levels are expected to soften from their pandemic highs through the forecast period. The tight labor market and inflationary pressures will continue to drive up wages, pulling many who became self-employed over the course of the pandemic back into the labor market. Similarly, the easing of supply chain pressures, Federal Reserve interest rate hikes, and labor market stabilization will eventually ease many of the pressures cited above.

Demographics

The changing shape of the Colorado population is an important factor driving the economy and state government resource allocation decisions alike. Germane to considerations around revenue forecasting, the TABOR cap growth calculation depends on the sum of inflation growth plus population growth. Population growth is slowing, which will decrease allowable revenue growth under the cap.

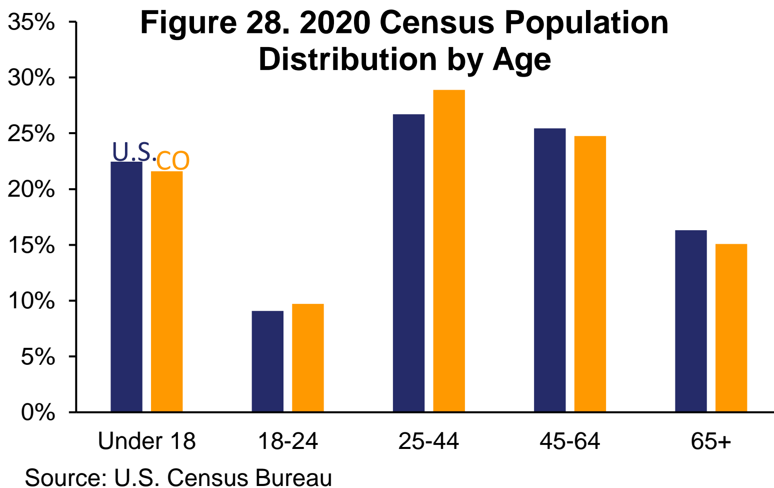


Population growth is slowing largely due to decreasing birth rates. In 2020, births hit an all-time low, below a 1.5 percent total fertility rate in Colorado and 1.6 percent for the U.S. A slowing birth rate has already begun to have an impact on declining expected pupil counts, which feed into the school finance formula. Furthermore, this trend will begin to have an impact on the labor force in five to six years and continue to be an additional drag on the availability of labor thereafter.



A more immediate contributor to slowing population growth is the moderation of net migration. The migration slowdown into Colorado can be explained by both domestic and international drivers. Domestic migration has slowed as the state has become more expensive than some of its competitors. Meanwhile, international migration, which accounts for about a fifth of total state migration, has tempered due to changes in national immigration policy and the pandemic.

Overall population dynamics are highly correlated with the labor force, especially during calmer economic times. From 2011-2014, jobs growth was increasingly outpacing population growth due to recovery in the unemployment rate after the Great Recession. However, in recent years, labor force growth has started to moderate, in line with that broad population growth trend.



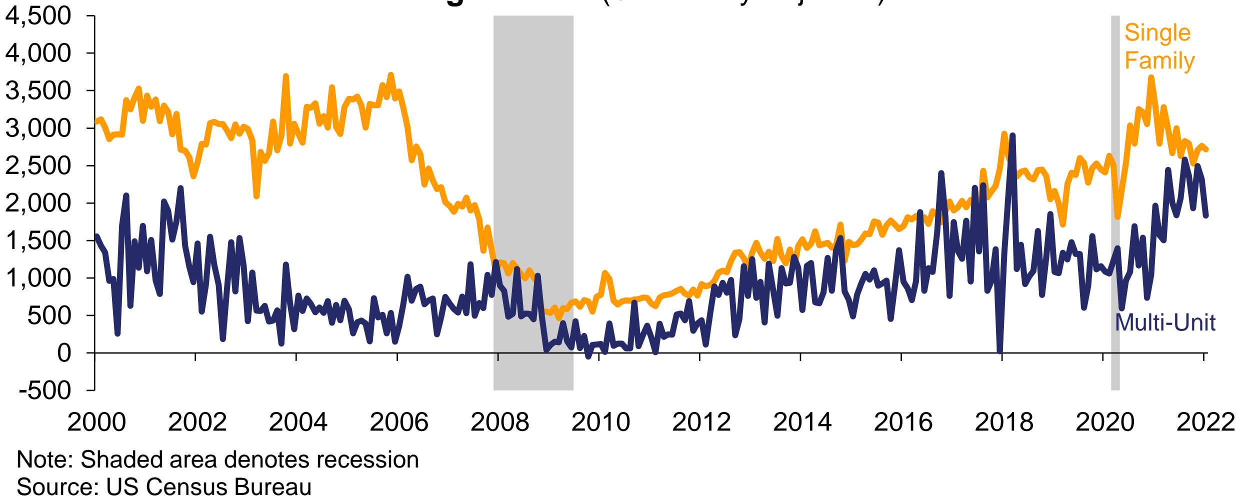
In the coming years, population growth is expected to remain below historical averages of the last 30 years. This is primarily due to a continuation of the trend of slowing natural increase in population, calculated as births minus deaths. The future of net migration growth provides more uncertainty, and largely will depend on the future path of U.S. international migration policy.

Housing and Rental Market

Colorado housing construction was strong at the beginning of 2021 before dropping off, potentially due to rising labor and material costs. Nationally, construction material prices have increased 41 percent between November 2020 and January 2022, according to the Bureau of Labor Statistics. Single-family home construction has dipped since reaching historic highs in December 2020; however, this has been partially offset by a significant increase in multifamily

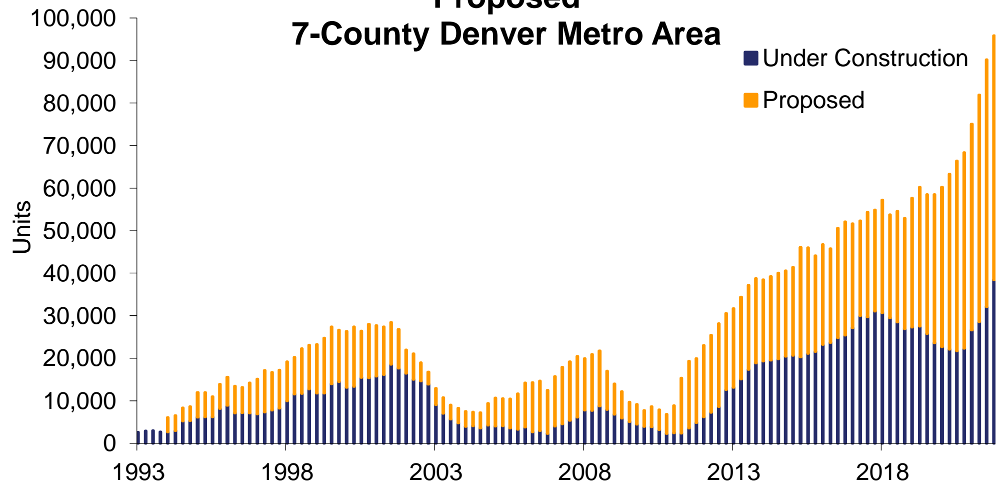
building. As of January 2022, 47 percent of permits issued in Colorado have been for multi-unit construction, well above the monthly average of 26 percent since data was compiled in 1988.

Figure 29. Colorado Private Housing Units Authorized by Building Permits (Seasonally Adjusted)



Metro Denver has especially seen an increase in building permits, which increased from 22,700 in 2020 to 36,500 in 2021, the highest level since 1972, mainly due to growth in apartment permits. At the same time, the time it takes to build an apartment complex has increased significantly, from under 19 months in 2010 to 29 months in 2021 in Metro Denver, potentially due to increased costs, more neighborhood opposition, and slower permit processing times at city planning departments.

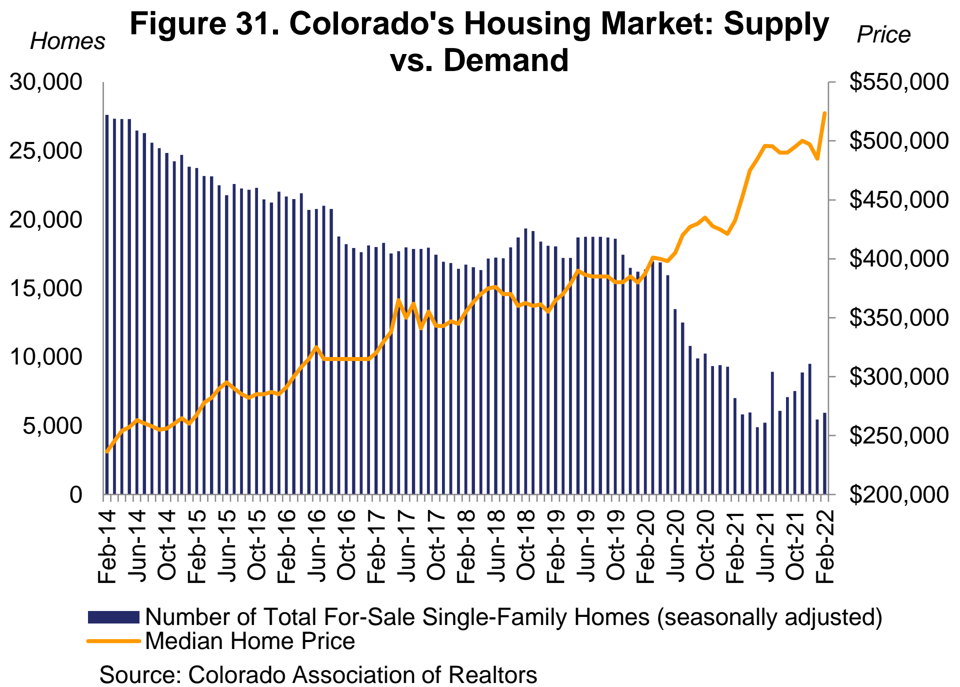
Figure 30. Apartments Under Construction + Proposed 7-County Denver Metro Area



Source: Apartment Appraisers & Consultants and Apartment Insights

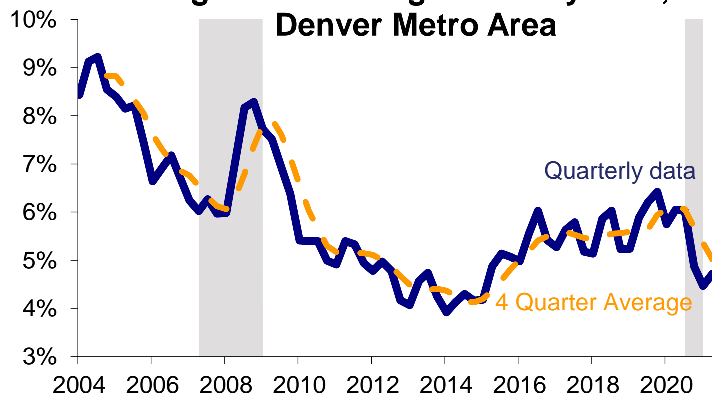
Delays in housing supply, combined with continued elevated demand in Colorado has led to an inventory shortage. Just 5,162 homes were listed for sale in January, by far the lowest monthly total since the Colorado Association of Realtors began tracking in 2010. Year-over-year, inventory dropped by 44 percent for single-family homes and 67 percent for townhomes and condos. As of January, there is only 0.5 months' worth of inventory on the market in Colorado (0.3 months' in the Denver metro area). According to the Colorado Association of Realtors, a balanced market has a 4 months supply on the market at once.

This has resulted in Colorado home prices recently reaching their highest values ever in February, with the median selling price of a single-family home and townhouse/condo reaching $556,000 and $402,000, respectively. Year-over-year, these median prices have increased by 19 percent for single-family homes and 17 percent for townhomes and condos, a trend which is expected to increase further as buyers look to close before expected interest rate hikes, those impacted by the Marshall Fire look for replacement homes, and out-of-state residents continue to purchase homes in mountain communities. And while historically weak population growth in the state may eventually dampen future price increases, demand looks set to remain high since the biggest single age cohort in Colorado is 30 years old, just four years before the average age someone buys their first home. As of the fourth quarter of 2021, median home prices in Denver and Colorado Springs were 13th and 30th highest, respectively, out of the 184 largest cities in the US.



According to a recent study, the Colorado rental market fared relatively well during the pandemic, with 77 percent of their rent payments being paid in full in December 2020, which increased to 88 percent one year later in December 2021. At both points in time Colorado landlords had the highest full rent payment rate in the country.

For apartment listings, vacancy rates are at relative lows in many parts of the state, making it difficult for would-be-renters to find units and putting upward pressure on rents. As of January, Metro Denver, Colorado Springs, and Pueblo’s respective vacancy rates were 3.8 percent, 3.6 percent, and 2.3 percent, compared to the national average of 5.6 percent, the lowest national level since 1984 (vacancy rates include units being prepared for the next tenant). According to the Colorado Apartment Association, a vacancy rate of about 8 percent is required to prevent rent growth, and 2-3 percent essentially means no vacancies due to a small amount of units always being prepared or refurbished.



Note: Shaded region denotes recession.
Source: Apartment Appraisers & Consultants and Apartment Insights

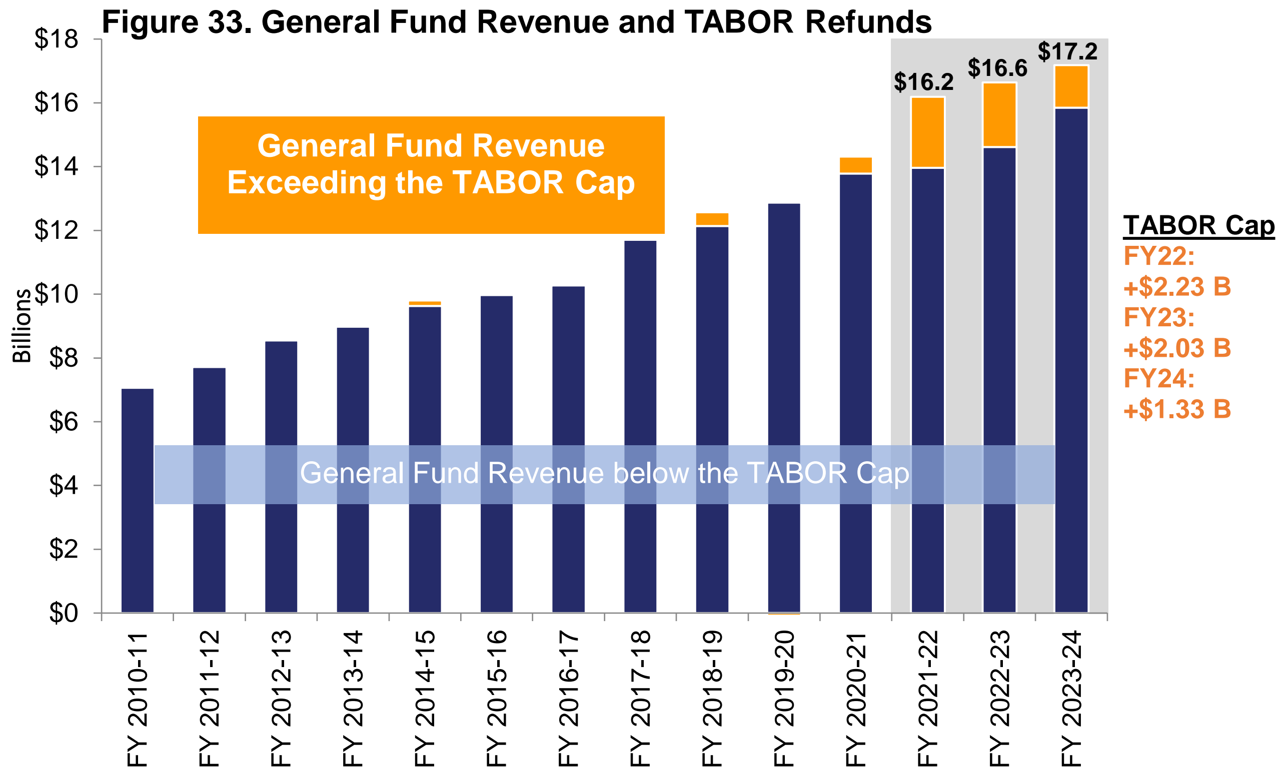
The build-to-rent (BTR) market continues to grow as investors pile into the sector and the pandemic increases the number of renters demanding more space and privacy. The top five Colorado cities with the most single-family home rentals are Greenwood Village (300), Littleton (280), Thornton (240), Aurora (160), and Brighton (140). In fact, the Denver Metro area ranks 18th on a list of the top 20 US metro areas with the most BTR homes according to a recent study. While BTR and single-family rentals comprise a relatively small share of the overall rental market and a significant percentage of them eventually become owner-occupied, we expect this trend to continue, potentially diverting some home construction that would otherwise result in sales. Nationally, detached homes (properties with a free-standing residential building) have experienced significantly larger rent growth than attached homes as would-be homebuyers who want the space traditionally associated with a single-family home currently find it difficult to purchase.

Forecast Risks

There is upside risk to the forecast as consumers are more tolerant of high inflation and dip into excess savings instead of reducing demand. Additionally, the Fed may be able control inflation quickly, boosting confidence in the economy. However, there is more than offsetting downside risk to the forecast due largely to inflationary pressures. Overall, inflation has become broad-based instead of largely driven by supply-constrained goods. That being said, extended supply chain disruptions remain a drag on growth longer than previously expected. Additionally, the geopolitical conflict in Ukraine will push up food and energy prices, with potentially lasting effects that could leave inflation higher for longer. If inflation expectations are not contained, there is the possibility of a wage-price spiral, though OSPB currently considers the risk low. Finally, as the Federal Reserve raises rates to ease inflation, there is a small risk that an aggressive hiking cycle unfolds, which could lower consumer demand more than anticipated.

Revenue Outlook – General Fund

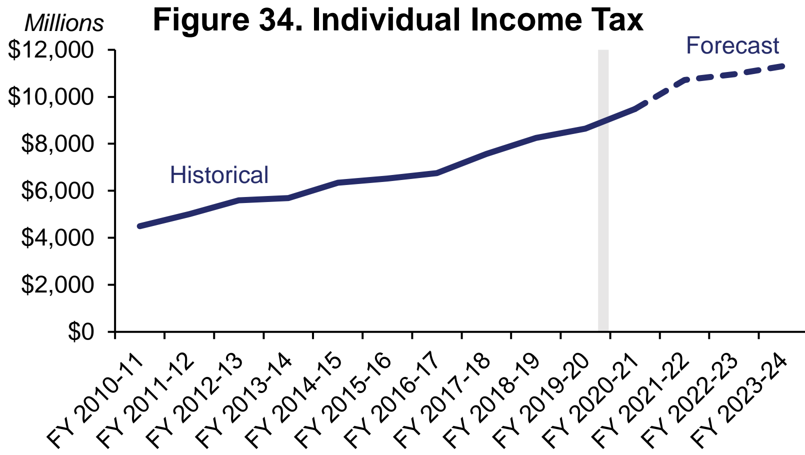
General Fund revenue is projected to increase to $16.2 billion in FY 2021-22, a 13.1 percent change from the prior fiscal year. The projection for FY 2021-22 is $205.9 million higher than the December forecast. The growth rate is expected to moderate to 2.8 percent in FY 2022-23 and 3.2 percent in FY 2023-24, though these are still upward revisions of $344.7 and $247.6 million respectively. The upward revisions to the forecast horizon reflects continued strong growth in wages and retail sales.



General Fund revenue is projected to exceed the TABOR cap in the current fiscal year and throughout the forecast period. Revenue is expected to exceed the cap by $2.229 billion, which is $233.1 million more than forecasted in December. General Fund revenue above the cap is projected to be $2.029 billion in FY 2022-23, and $1.328 billion in FY 2023-24.

Individual Income Tax

Individual income tax receipts in FY 2021-22 are projected to increase by 13.1 percent compared to the prior fiscal year to $10.7 billion. This is reflects an upward revision from the prior forecast of approximately $213.9 million. Aggregate wages and salaries, which have been revised upward by $1.5 billion in 2021 and $7.9 billion in 2022 compared to the prior Colorado economic forecast, strongly impact the withholdings estimate within this revenue stream. In FY 2022-23 and FY 2023-24, individual income revenue growth is expected to moderate to 2.5 percent and 3.2 percent. Expected trends in estimated payments and cash with returns relative to the previous forecast limit further growth, but are more than offset by relatively strong withholdings.



Note: Shaded region denotes recession.
Source: Colorado Department of Revenue; OSPB

Individual income tax receipts have exhibited resilience throughout the pandemic and recovery. This is particularly true of individual income tax withholdings, which account for more than 80 percent of net individual income tax receipts. Tax withholdings are closely tied to aggregate wages and salaries, which have recovered relatively well, despite slow recovery in certain sectors of Colorado's economy. One reason for this is the economic sectors with the highest wages and salaries—and thus the largest contribution to individual income taxes—have not been as severely impacted as other sectors. Furthermore, as referenced in the Economic Outlook section under Labor Market and Wages, high wage sectors are adding jobs at a faster rate than lower wage jobs, while the lowest wage jobs are experiencing the largest growth in average weekly salary. Wages and salaries were revised up by 3.1 percent in 2022 this forecast due to these trends, which are expected to contribute to a 2.5 percent upward revision in withholdings resulting in 13.5 percent growth in FY 2021-22. As wages and salary growth is expected to decline towards historical growth rates, withholdings growth follows suit with 7.6 percent growth in FY 2022-23 and 3.5 percent in FY 2023-24.

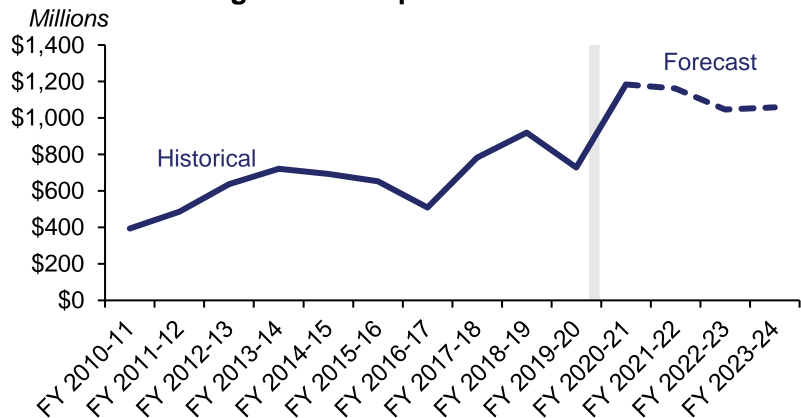
Meanwhile, estimated payments are revised down from the previous forecast as small business growth is expected to have already peaked, though creation is expected to remain at an elevated level. Current increasing wages and material input costs are a drag on new businesses as those same growing wages tempt individuals back to work at larger firms. Profits and earnings for small businesses also fade in the face of slightly depressed aggregate demand, which impact expected earnings of small businesses and C-corps alike. Estimated payments in FY 2021-22 are expected

to grow by 8.3 percent, a $124.5 million reduction since the December forecast. Similar to corporate revenue, individual estimated payments are expected to decline by 7.7 percent in FY 2022-23.

Finally, cash with returns and refunds are expected to drop 3.6 and 5.5 percent respectively in FY 2021-22. Cash with returns are expected to continue to moderate back towards historical averages, declining by 12.5 percent then 1.3 percent in the out years. Expected refunds, however, increase by 4.4 percent in FY 2022-23 and then stabilize below $1.7 billion.

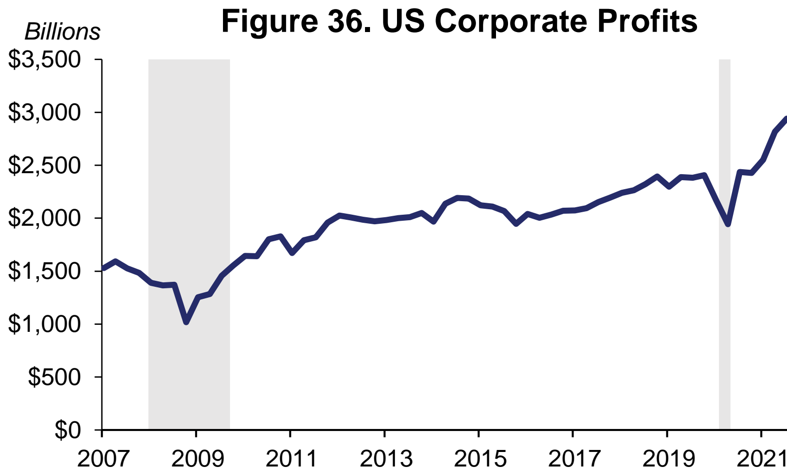
Corporate Income Tax

In FY 2020-21, corporate income tax revenue set a record of $1,183.7 million on the heels of government support and record corporate profits. In FY 2021-22, corporate income tax receipts are projected to fall by 0.6 percent from these historic highs as corporate profits decelerate at the start of 2022. Corporate profits are expected to decline slightly in 2023 as rising inflation and interest rates slows aggregate demand, resulting in another drop of 9.9 percent in FY 2022-23. Finally, in FY 2023-24, corporate tax revenues are projected to grow by 0.9 percent and total $1,057.4 million.



Note: Shaded region denotes recession.
Source: Colorado Department of Revenue; OSPB

Corporate profits are the largest and most direct driver of corporate income tax revenue. In the third quarter of 2021, corporate profits nationwide hit a new record high of $2.94 trillion. Previously the record was $2.41 trillion, but that mark has been broken five times since the beginning of the pandemic. Furthermore, corporate profits have not just kept up with rapidly growing GDP, they are increasing as a share of GDP. The third quarter of 2021 was the highest share of gross domestic product derived from corporate profits going back to 1950. As businesses try to retain workers,



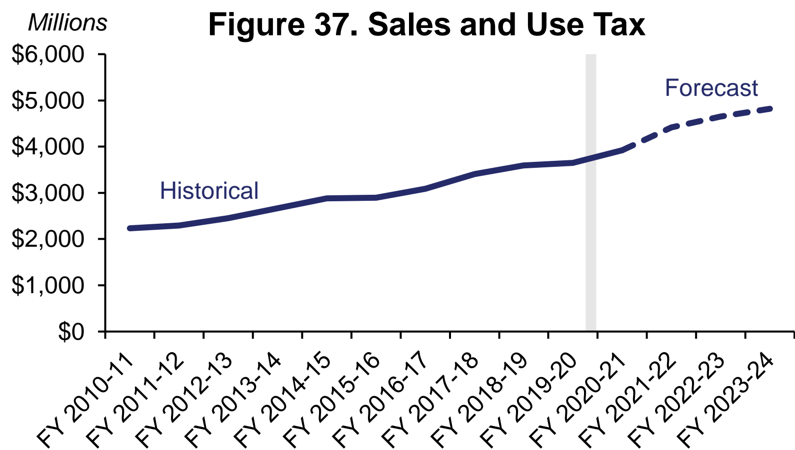
they may have to dip into a portion of these profits. OSPB assumes corporations will be able to sustain healthy profits as investors reward companies that have re-priced goods to account for higher wages and inputs. However, these business decisions impact the shape of the corporate revenue forecast, as increased compensation still lowers C-corp profits creating a small drag on revenue.

Since the December forecast, expectations for corporate revenue were revised up slightly in FY 2021-22, by $29.0 million, as profits have remained strong and collections to date have been in line with expectations. However, FY 2022-23 and FY 2023-24 projections were revised down by $25.9 million and $61.7 million, respectively, due to downward revisions in U.S. corporate profit expectations in the out years as a result of business decisions and inflationary and interest rate pressures limiting earnings potential.

Sales and Use Taxes

Sales Taxes

Sales tax revenue grew 6.9 percent in FY 2020-21 and is expected to grow by an additional 14.5 percent in FY 2021-22 before slowing to 5.5 percent growth in FY 2022-23. Relative to the December forecast, the projection for FY 2021-22 was revised upward by approximately $72.4 million to $3.913 billion. The projections for FY 2022-23 and FY 2023-24 were also revised upward by $130.2 million and $146.6 million to $4.127 billion and $4.279 billion, respectively. These growth rates and revisions are consistent with our expectations for the Colorado retail sales forecast in our economic forecast tables, wherein the projected nominal calendar year growth rates of 16.5 percent in 2021, 7.8 percent in 2022, 4.1



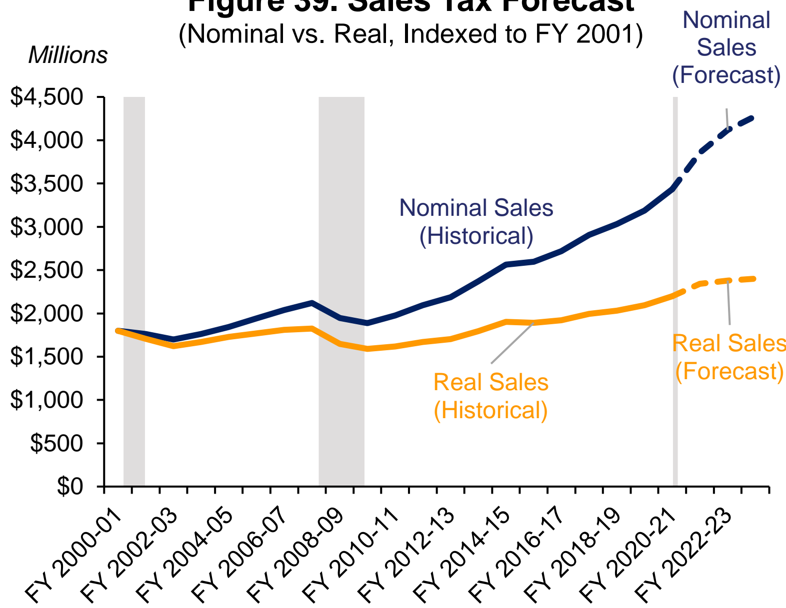
percent in 2023, and 3.5 percent in 2024.

These forecast projections include policy adjustments to reflect recent legislative action not yet incorporated into the broader sales tax trends, including: HB 21-1312, HB 21-1265, HB 21-1261, and SB 21-229. These adjustments amount to -$27.6 million in FY 21-22, +$22.6 million in FY 22-23, and +$30.8 million in FY 23-24.

Near term revisions are consistent with a continuation of elevated durable and nondurable goods consumption, prompting strong revenue collections over recent months. However, revisions to the latter half of 2022 and onward are largely due to increased inflation expectations, as the Denver-Aurora-Lakewood consumer price index is now expected to grow by 7.2 percent in 2022 and 3.0 percent in 2023. Figure 38 summarizes the forecast changes on both a nominal and real basis. While nominal revenue growth rates have been revised upward in each year as compared to the previous forecast, real growth has been revised downward in each year. These downward revisions to real growth in sales tax collections reflect the joint effects of lower accumulated savings and higher inflationary pressures on putting downward pressure on durable goods demand over the course of 2022 and early 2023. These expectations are consistent with downward revisions to the U.S. GDP forecast.

Figure 38. Sales Tax Revenue Growth

	Previous Forecast (December)		Current Forecast (March)		Change vs. Previous	
Growth Period	**Nominal**	**Real**	**Nominal**	**Real**	**Nominal**	**Real**
FY 2021-22	10.5%	6.9%	12.2%	6.5%	1.7%	-0.4%
FY 2022-23	5.0%	2.0%	6.8%	1.6%	1.8%	-0.4%
FY 2023-24	3.6%	1.0%	3.9%	0.9%	0.3%	-0.1%
Average	**6.4%**	**3.3%**	**7.7%**	**3.0%**	**1.3%**	**-0.3%**

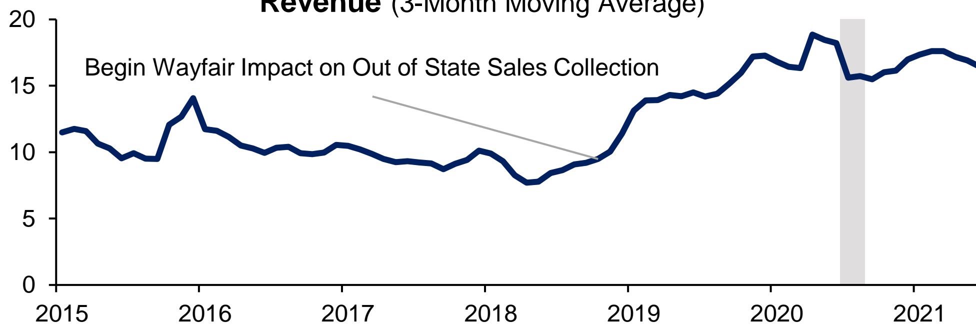


These same themes regarding growth in sales tax revenue are illustrated by Figure 39 showing nominal and real sales tax collections over time. In particular, even after record growth in FY 2021-22, sales tax revenue (the blue line) is expected to continue growth at or around historical trend levels going forward. Meanwhile, once adjusted for inflation (the yellow line), sales tax growth is considerably more flat, and actually below historical trend growth rates. The result is that the gap between observed retail sales tax revenue (nominal) and inflation-adjusted revenue is growing significantly over the forecast period.

Use Taxes

Use tax revenue increased 1.8 percent to $214.2 million in FY 2020-21 after a 39.1 percent decline in FY 2019-20, largely as a result of HB 19-1240 and the collection of sales tax from out-of-state sales vendors. It is expected that use taxes will continue to rebound to $239.1 million in FY 2021-22 and grow to $246.0 million in FY 2022-23. These projections are revised upward from the December forecast due to higher revenue in recent months and upwardly revised expectations resulting from continued elevated goods consumption and an expectation that there will be higher levels of capital investment in industries like construction and oil and gas. These projections continue to assume that the trade-off between sales and use tax revenue as a result of HB 19-1240 has largely leveled off as a more normal relationship between sales and use tax collections resumes. This tradeoff between sales and use tax revenue as a result of changes in destination sourcing is demonstrated by the sharp increase in the ratio of sales tax revenue to use tax revenue starting in July 2019, when the impacts came into effect.

Figure 40. Ratio of Sales Tax Revenue to Use Tax Revenue (3-Month Moving Average)



Source: Colorado Department of Revenue; OSPB

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. Revenue is expected to decline by 7.6 percent in FY 2021-22 and resume slower growth in FY 2022-23 and FY 2023-24. 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 and other excise taxes includes taxes on cigarettes, tobacco, nicotine, and liquor. Proposition EE, a ballot measure approved in November 2020, imposes additional taxes on cigarettes and tobacco products and creates a new tax on other nicotine products such as e-cigarettes. Proposition EE taxes went into effect in January 2021. Figure 41 below summarizes the new taxes levied on cigarettes and tobacco through FY 2023-24. Taxes on cigarettes and tobacco will increase marginally in FY 2024-25 and again in FY 2027-28. Additionally, Proposition EE creates a new tax on other nicotine products which were not taxed previously, beginning at 30 percent and increasing incrementally up to 62 percent by July 2027. Through FY 2022-23,

Figure 41. Proposition EE Tax Rates

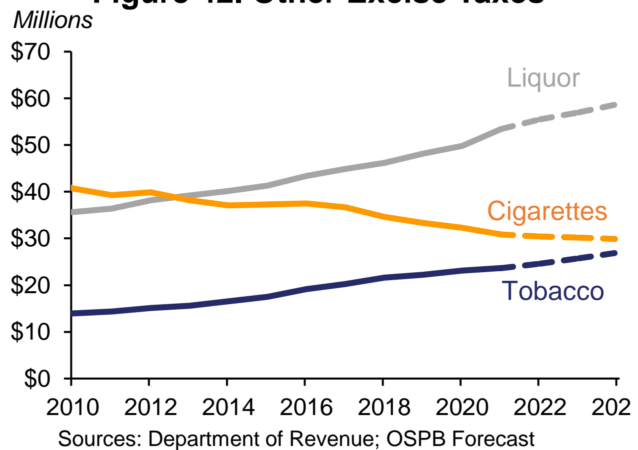
Cigarettes	FY 2020-21	FY 2021-22	FY 2022-23
General Fund	$0.20	$0.20	$0.20
Amendment 35	$0.64	$0.64	$0.64
Proposition EE	$1.10	$1.10	$1.10
Total Cigarette Taxes	**$1.94**	**$1.94**	**$1.94**
Tobacco	**FY 2020-21**	**FY 2021-22**	**FY 2022-23**
General Fund	20%	20%	20%
Amendment 35	20%	20%	20%
Proposition EE	10%	10%	10%
Total Tobacco Taxes	**50%**	**50%**	**50%**
Nicotine	**2021**	**2022**	**2024**
Proposition EE	30%	35%	50%
Total Nicotine Taxes	**30%**	**35%**	**50%**

revenue from the Proposition EE-imposed taxes is largely transferred to the State Education Fund, with smaller amounts going to the Rural Schools Cash Fund, the Housing Development Grant Fund, the Tobacco Tax Cash Fund, the Eviction Legal Defense Fund, and the Preschool Programs Cash Fund. Starting in FY 2023-24, these funds will be transferred almost entirely into the Preschool Programs Cash Fund aside from a small transfer to the Tobacco Education Programs Fund.

Proposition EE went into effect in January 2021, bringing in $49.0 million total for the second half of FY 2020-21. The majority of this revenue came from cigarettes at $37.7 million, with tobacco and nicotine making up the other $11.3 million. OSPB expects total Proposition EE revenue to increase to $214.1 million in FY 2021-22, as the taxes will be in effect for the full year and the nicotine tax rate increases. Nicotine revenue came in at $8.2 million in FY 2020-21 with one quarter of data, and quarterly revenue has continued to increase since early 2021; nicotine revenue is expected to reach $39.7 million for FY 2022. Tobacco has come in roughly as expected since the implementation. Proposition EE cigarette revenues have come in lower than expected given the revenue we've seen from the other two cigarette taxes. Given that the $1.10 Proposition EE cigarette tax is 5.5 times higher than the $0.20 excise tax, we would expect the total Proposition EE cigarette revenue to also be 5.5 times higher, but the ration between the taxes has been much lower. The Department of Revenue has recently identified an issue with cigarette revenue that resulted in overfunding in General Fund and Amendment 35 revenue and underfunding in Prop EE revenue. The March General Fund report will adjust for the identified error. As a result, OSPB has revised up the forecast for Proposition EE cigarette revenue to $158.9 million for FY 2021-22.

Other excise taxes include the initial taxes on cigarettes and tobacco excluding Proposition EE and Amendment 35 as well as revenue from liquor. These three revenue streams each have a fairly consistent pattern with liquor and tobacco trending upward and cigarettes trending down as smoking cigarettes becomes less popular over time. Liquor sales increased significantly at the beginning of the pandemic, and revenue has continued to increase at its pre-pandemic rate in recent months. With the significant increase in the cigarettes tax rate in January, cigarette sales spiked in December 2020 and fell sharply when the new tax was implemented. Additionally, as discussed in the section above, DOR has identified issues with reporting cigarette revenue over the past several months, so actual revenue to date for this fiscal year has likely been overstated and will be corrected next month. This led

Figure 42. Other Excise Taxes



Sources: Department of Revenue; OSPB Forecast

to a moderate downward revision of the cigarette revenue forecast to $30.4 million for FY 2021-22.

Other General Fund Revenue

Other General Fund revenue includes insurance premium tax revenue, interest/investment income, and court receipts. Other General Fund revenue is expected to remain flat at $441.0 million in FY 2021-22, as increases to insurance premium tax and interest income cancel out decreases to Other Income. Revenue is then expected to increase by 15.1 percent in FY 2022-23 and 5.9 percent in FY 2023-24. This estimate was revised down from the December forecast mainly due to low insurance premium tax receipts so far in FY 2021-22. 2020 legislation changing the amount of quarterly tax payments may be resulting in a shift of premium tax payments to later in the fiscal year. In addition, the outlook for the life, property and casualty, and several other insurance sectors remains strong, and 2021 legislation reducing the size of the annuities exemption and regional home office rate reduction should further buoy revenues in the out years. Our estimate for interest income has been revised upward in all three years due to higher-than-anticipated receipts and expectations of Federal Reserve interest rate hikes.

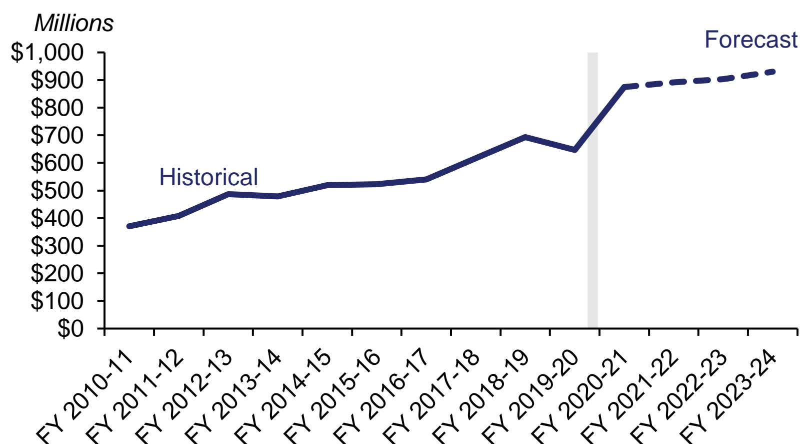
State Education Fund

Revenue to the State Education Fund from income taxes increased by 35.2 percent in FY 2020-21 and is expected to continue to grow by 2.0 percent in FY 2021-22. The large increase in FY 2020-21 is largely due to the impact of a delayed transfer from FY 2019-20 revenue collections, while an additional delayed transfer of $75.6 million into the SEF in FY 2021-22 buoys revenue above the prior fiscal year.

In FY 2022-23, there is a 1.2 percent increase to $903.2 million in FY 2022-23 and a 3.0 percent increase to $930.1 million in FY 2023-24.

Compared with the December forecast, FY 2021-22 revenue is $93.8 million, or 11.8 percent higher as a result of the new delayed transfer mentioned as well as upward revisions to income forecasts. Projections in FY 2022-23 and FY 2023-24 were $20.4

Figure 43. Revenues to the State Education Fund



Source: Colorado Department of Revenue; OSPB

million and $10.4 million higher than December's forecasts, respectively. This does not include transfers from other funds.

The Colorado Constitution requires that 1/3 of 1 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 discussion highlights those cash fund revenues that are subject to TABOR or have significant fiscal implications.

Total cash fund revenue subject to TABOR was $2.2 billion in FY 2020-21. In FY 2021-22, cash fund revenue is projected to increase by 12.0 percent followed by 1.8 percent growth in FY 2022-23 and 4.4 percent growth in FY 2023-24.

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 fuel taxes. 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 as new fees go into effect.

Figure 44. Transportation Revenue Forecast and Actuals

	Actual FY 20-21	Forecast FY 21-22	Forecast FY 22-23	Forecast FY 23-24
Highway Users Tax Fund (HUTF)				
Motor and Special Fuel Taxes	$593.6	$640.7	$648.8	$656.3
Percent Change	-4.9%	7.9%	1.3%	1.1%
Road Usage Fees	$0.0	$0.0	$59.7	$91.6
Percent Change	N/A	N/A	N/A	53.4%
Total Registrations	$400.2	$382.3	$360.2	$403.3
Percent Change	4.8%	-4.5%	-5.8%	12.0%
Registrations	$234.1	$244.3	$239.6	$246.5
Road Safety Surcharge	$137.8	$108.2	$93.8	$128.9
Late Registration Fees	$28.3	$29.7	$26.9	$28.0

Governor's Budget Request	$0.0	$0.0	-$46.8	-$19.8
Road Usage Fees	$0.0	$0.0	-$28.0	$0.0
Road Safety Surcharge	$0.0	$0.0	-$17.0	-$18.0
Other HUTF	$0.0	$0.0	-$1.8	-$1.8
Other HUTF	$48.1	$59.8	$74.6	$76.6
Percent Change	-23.5%	24.4%	24.7%	2.7%
Total HUTF	**$1,041.9**	**$1,082.8**	**$1,096.5**	**$1,208.0**
Percent Change	**-2.6%**	**3.9%**	**1.3%**	**10.2%**
Non-HUTF				
State Highway Fund	$18.4	$24.8	$25.4	$26.2
Percent Change	-38.6%	35.0%	2.4%	2.9%
Other Transportation Funds	$95.5	$118.3	$119.2	$124.2
Percent Change	-5.8%	23.9%	0.8%	4.1%
Total Transportation Revenue				
Total Transportation	**$1,155.8**	**$1,225.9**	**$1,241.2**	**$1,358.3**
Percent Change	**-3.5%**	**6.1%**	**1.2%**	**9.4%**

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 gas taxes declined sharply at the onset of the pandemic as commuter travel waned, but are expected to pick up in FY 2021-22 based on increased tourism into the state and a return to offices. Revenue from diesel taxes were relatively unaffected by the pandemic, and collections are very high to date in the current fiscal year as high demand for goods has resulted in a higher need for shipping. Revenue from Motor and Special Fuel tend not to be very affected by fuel prices as the tax itself is not price dependent, and demand for fuel tends not to be very sensitive to changes in price. However, it is possible that demand could slow if prices rise dramatically, so this is a downside risk to the forecast. Additionally, new Road Usage Fees charged on gas and diesel go into effect in FY 2022-23 and increase in later years, which will provide significant additional revenue for transportation. Vehicle purchases started to rebound through 2021, which helped bolster registration-related collections in FY 2021-22. However, the forecast was revised down slightly from December due to expectations that monetary policy tightening will reduce the number of cars sold. OSPB forecasts a decline in registration revenue in FY 2021-22 and FY 2022-23 due to changes in S.B. 21-260 that will temporarily reduce the Road Safety Surcharge beginning in January 2022, which is expected to reduce HUTF revenue by an estimated $32.8 million in FY 2021-22 and $49.5 million in FY 2022-23.

Transportation revenue is coming in strong in the current fiscal year, but the HUTF forecast for FY 2021-22 has been revised down since December due to two fee relief proposals added in the Governor’s January 3 budget submission. The first proposal would delay the implementation of the Road Usage Fee, a fee of $0.02 on every gallon of gas and diesel, by six months from July 1, 2022 to January 1, 2023. The second proposal would reduce the Road Safety Surcharge by an additional $5.55 per registration for 2023, resulting in $35 million less revenue split over FY 2022-23 and FY 2023-24. Figure 45 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 2021-22 appropriation and are assumed to be held flat in future years.

Figure 45. Highway Users Tax Fund Distribution Forecast and Actuals

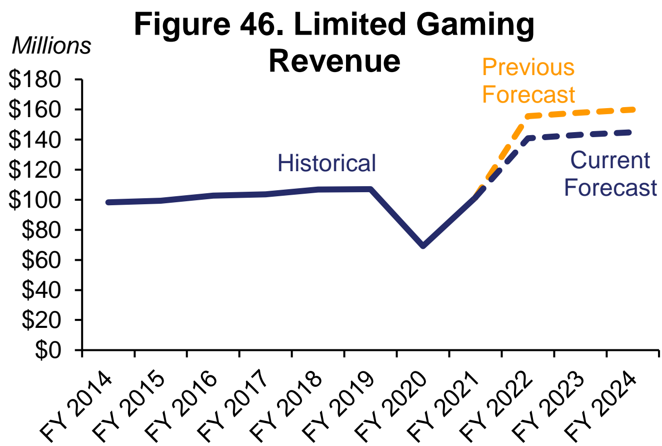
	Actual FY 20-21	Forecast FY 21-22	Forecast FY 22-23	Forecast FY 23-24
HUTF Distributions				
Off-the-Top Deductions	$134.8	$181.2	$181.2	$181.2
State Highway Fund (CDOT)	$560.1	$555.8	$563.8	$631.2
Counties	$212.2	$210.2	$213.0	$238.0
Cities	$134.8	$135.6	$138.5	$157.6
Total HUTF	**$1,041.9**	**$1,082.8**	**$1,096.5**	**$1,208.0**

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 pre-pandemic levels. Changes in the "Other Transportation Funds" category are often driven by fluctuations in aviation tax revenue, which has rebounded over low FY 2019-20 and FY 2020-21 levels, resulting in a revision upward since the December forecast.

Limited Gaming

After pandemic-induced reductions in FY 2019-20, total gaming revenue rebounded and grew by 48.2 percent to $121.7 million in FY 2020-21, nearly returning to its pre-pandemic level of $127.2M in 2018-19. This forecast assumes an increase in casino gaming FY 2021-22 consistent with the prior forecast due to the Amendment 77 impacts of higher bet limits and expanded game options on top of strong demand coming out of the pandemic. However, the forecast for revenue collections has been revised down slightly from December due to a slower expected pace of casinos moving through the tax bracket structure discussed later in this section. Similar

Figure 46. Limited Gaming Revenue



Source: Colorado Department of Revenue; OSPB

revisions to revenue also appear in the FY 22-23 and FY 23-24 forecasts as FY 2021-22 revenue will serve as the new base for gaming revenue in the post-Amendment 77 environment. Revisions to the forecast are shown in Figure 46 and the current forecast is shown in Figure 47 below.

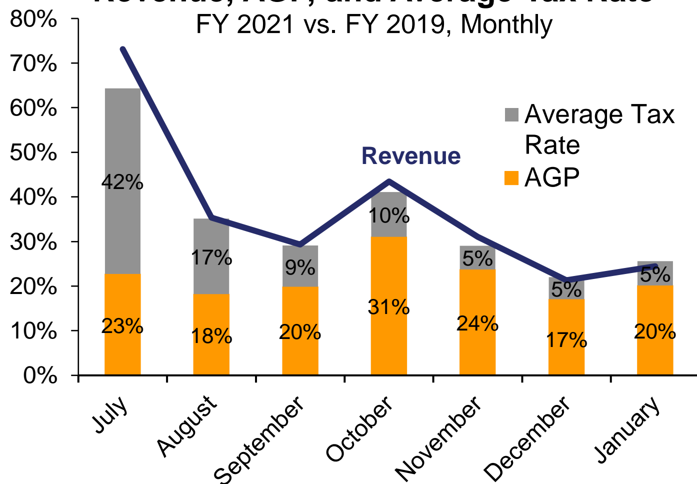
Figure 47. Distribution of Limited Gaming Revenues	Actual FY 20-21	Forecast FY 21-22	Forecast FY 22-23	Forecast FY 23-24
A. Total Limited Gaming Revenues (Includes Fees and Interest)	**$121.7**	**$162.9**	**$165.6**	**$167.5**
Annual Percent Change	48.1%	33.9%	1.6%	1.2%
B. Gaming Revenue Exempt from TABOR (Extended Limited)	**$19.8**	**$22.1**	**$22.4**	**$22.7**
Annual Percent Change	53.0%	11.3%	1.6%	1.2%
B. Base Limited Gaming Revenues	**$101.8**	**$140.8**	**$143.1**	**$144.8**
Annual Percent Change	47.2%	38.3%	1.6%	1.2%
C. Gaming Revenue Subject to TABOR (Limited)	**$101.8**	**$140.8**	**$143.1**	**$144.8**
Annual Percent Change	47.2%	38.3%	1.6%	1.2%
D. Total Amount to Base Revenue Recipients	**$87.6**	**$126.4**	**$129.0**	**$130.6**
Amount to State Historical Society (28%)	$24.5	$35.4	$36.1	$36.6
Amount to Counties (12%)	$10.5	$15.2	$15.5	$15.7
Amount to Cities (10%)	$8.8	$12.6	$12.9	$13.1
Amount to Distribute to Remaining Programs (State Share) (50%)	$43.8	$63.2	$64.5	$65.3
Amount to Local Government Impact Fund	$0.0	$5.4	$5.5	$5.6
Colorado Tourism Promotion Fund	$0.0	$15.0	$15.0	$15.0
Creative Industries Cash Fund	$0.0	$2.0	$2.0	$2.0
Film, Television, and Media Operational Account	$0.0	$0.5	$0.5	$0.5
Bioscience Discovery Evaluation Fund	N/A	N/A	N/A	N/A
Advanced Industries Acceleration Fund	$0.0	$5.5	$5.5	$5.5
Innovative Higher Education Research Fund	$0.0	$2.1	$2.1	$2.1
Transfer to the General Fund	$43.8	$32.7	$33.9	$34.6
E. Total Amount to Amendment 50 Revenue Recipients	**$17.4**	**$19.8**	**$19.9**	**$20.3**
Community Colleges, Mesa and Adams State (78%)	$13.6	$15.5	$15.5	$15.8
Counties (12%)	$2.1	$2.4	$2.4	$2.4
Cities (10%)	$1.7	$2.0	$2.0	$2.0

Gaming revenue collections in Colorado are a function of two variables: (1) adjusted gross proceeds (AGP) at each casino and (2) the tax rate applied to average gross proceeds. An increase in the amount spent on gambling will result in a relatively linear increase in AGP. Thus, the Amendment 77 driven expansion in gaming has directly caused higher AGP across the state. For instance, betting on baccarat alone (which was not allowed prior to Amendment 77) has resulted in on average $1.98 million in additional AGP each month. On the other hand, the relationship between increased gambling and the tax rate applied is more complicated because the tax rate is not the same for each additional dollar of AGP, nor does it increase at a linear rate. Rather, the tax rates are based on the schedule outlined in Figure 48. This relationship means that the average tax rate charged on AGP increases over the course of the year, as casinos move up in tax brackets.

Figure 48. Gaming Tax Rates

Casino Adjusted Gross Proceeds	Tax Rate
Up to $2,000,000	0.25%
$2,000,001 to $5,000,000	2.00%
$5,000,001 to $8,000,000	9.00%
$8,000,001 to $10,000,000	11.00%
$10,000,001 to $13,000,000	16.00%
$13,000,001 and Over	20.00%

Figure 49. Growth in Gaming Revenue, AGP, and Average Tax Rate
FY 2021 vs. FY 2019, Monthly



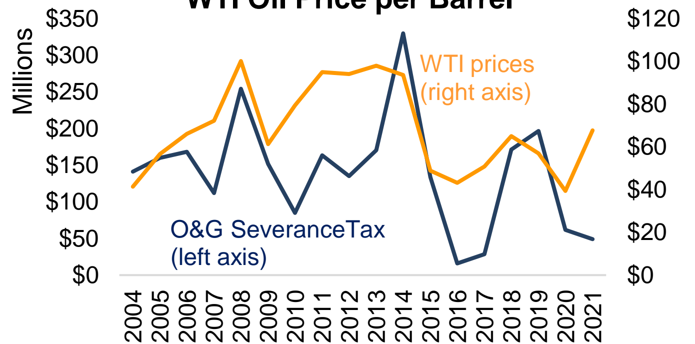
Source: Colorado Department of Revenue; Division of Gaming.

As a result, while the trend line for AGP growth relative to 2019 is quite linear and flat, the percent average tax rate growth exponentially decreased from July through November, stabilizing at around 5% (or the equivalent of an average tax rate 0.85 percentage points higher in 2021 than in 2019). This trend is shown in Figure 49.

Severance

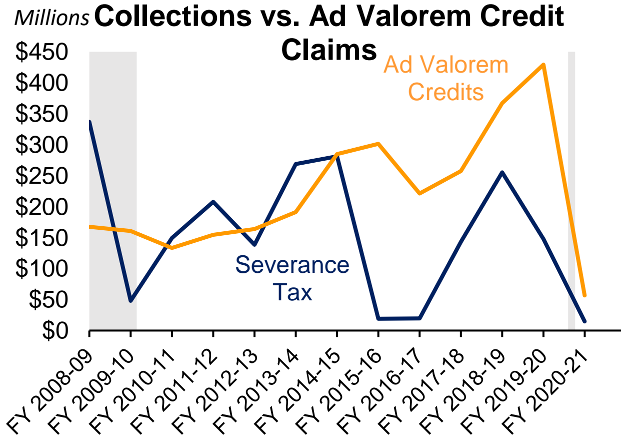
Severance tax revenue fell to $14.7M in FY 2020-21, the lowest annual value since 1990 and the fourth-lowest value since the tax was implemented in FY 1977-78. Just two years prior, revenue reached $255.2M, its third-highest value on record. This illustrates the significant volatility of this revenue source, some of which is due to the tax base itself. Oil and gas severance tax, which depending on the year accounts for 89-97 percent of overall collections, depends on production levels multiplied by price. While oil and gas production in Colorado has increased 19 of the last 21 years (12.2 percent average annual growth rate) and 17 of the last 21 years (3.9 percent average), respectively, prices have fluctuated far more. This price volatility also causes volatility in the ad valorem credit, which is based local property tax assessments on 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.

Figure 50. Oil and Gas Severance Tax Collections & WTI Oil Price per Barrel



Source: Colorado Department of Revenue (severance tax revenue); EIA (WTI prices).

Figure 51. Severance Tax Collections vs. Ad Valorem Credit Claims



Source: Colorado Department of Revenue; OSPB

Since the end of February, oil prices have spiked to levels not seen since 2014 due to the Russian invasion of Ukraine. This pushed U.S. benchmark oil prices to an average of $105 per barrel since February 24, where they are largely expected to remain for the rest of the year due to sanctions on Russian oil exports exacerbating the supply-demand mismatch that predates the conflict. In contrast, Henry Hub natural gas prices have remained relatively stable year-to-date, since U.S. production currently exceeds demand. Figure 50 shows the correlation between WTI oil price per barrel and severance tax collections, with tax collections lagging oil prices by about a year over the last few years.

As a result of the swift uptick in oil prices, the severance tax revenue forecast was revised up to $156.8 million in FY22 and $166.7 million in FY23, before dropping to $127.3 million in FY24, as shown in Figure 52. The upward revision is largely due to the price increase, since production is not expected to increase significantly over the course of 2022. The breakeven price to produce a

barrel of oil in the Federal Reserve Tenth District, which includes Colorado, was $57 per barrel during the third quarter of 2021, while the price to substantially increase production was $73 per barrel as of the fourth quarter. WTI prices were in the profitable range most of 2021 and production has just begun to tick up, indicating the industry is not inclined to make quick decisions about investing in production in response to prices.

Figure 52. Severance Tax Revenue

	Actual FY 2020-21	Forecast FY 2021-22	Forecast FY 2022-23	Forecast FY 2023-24
Oil & Gas	$0.6	$151.4	$161.5	$114.67
Coal	$1.9	$2.8	$2.3	$2.0
Molybdenum & Metals	$2.2	$2.0	$1.9	$1.8
Interest	$10.0	$9.0	$9.6	$9.6
Total	**$14.7**	**$165.2**	**$175.2**	**$128.0**
Change	*-88.8%*	*1024.1%*	*6.0%*	*-26.9%*

Marijuana

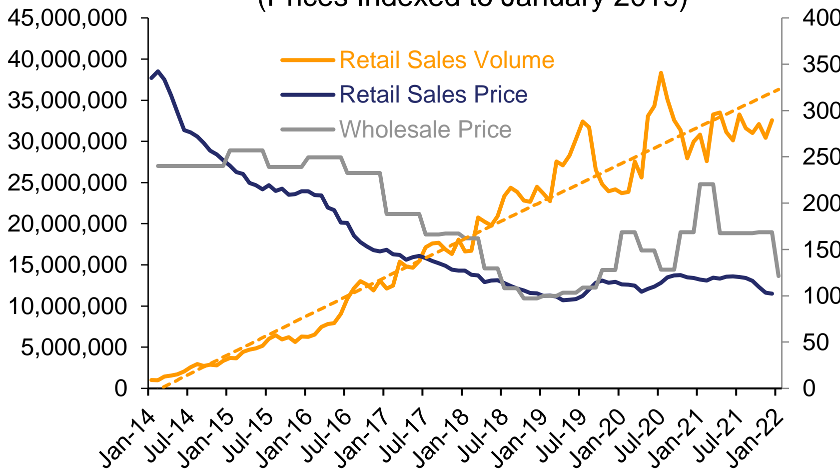
Total marijuana tax revenue grew 22.2 percent in FY 2020-21 as a result of a spike in sales during the height of the pandemic. While revenue has continued at historically high levels to date in FY 2021-22, it has fallen from the levels seen over the course of FY 2020-21. Large downward revisions were made in the September and December forecasts to account for the anticipated drop in revenue from the 15 percent special sales tax on retail marijuana, which is the primary contributor to the Marijuana Tax Cash Fund (MTCF).

The March forecast is generally in line with the December forecast, except for a downward revision to the 15 percent excise tax revenue as wholesale prices settle back to historic levels. The March forecast projects an 8.9 percent reduction in total marijuana revenue in FY 2021-22, down from the record levels seen in FY 2020-21, followed by slower growth of 2.3 percent and 2.7 percent in FY 2022-23 and FY 2023-24, respectively. Figures 53 and 54 summarize these projections.

Figure 53. Tax Revenue from the Marijuana Industry	Actual FY 20-21	Forecast FY 21-22	Forecast FY 22-23	Forecast FY 23-24
Proposition AA Taxes (Not Subject to TABOR)				
Retail Marijuana 15% Special Sales Tax	$288.2	$266.2	$278.2	$287.9
Retail Marijuana 15% Excise Tax	$120.8	$107.5	$104.7	$106.0
Total Proposition AA Taxes	**$409.0**	**$373.7**	**$382.9**	**$393.9**

2.9% Sales Tax & Interest (Subject to TABOR)				
Medical Marijuana 2.9% State Sales Tax	$13.8	$10.8	$10.6	$10.4
Retail Marijuana 2.9% State Sales Tax	$1.6	$2.1	$2.0	$2.0
Interest Earnings	$0.2	$0.4	$0.4	$0.4
Total 2.9% Sales Taxes & Interest	**$15.6**	**$13.3**	**$13.0**	**$12.8**
Total Marijuana Taxes	**$424.6**	**$387.0**	**$395.9**	**$406.7**

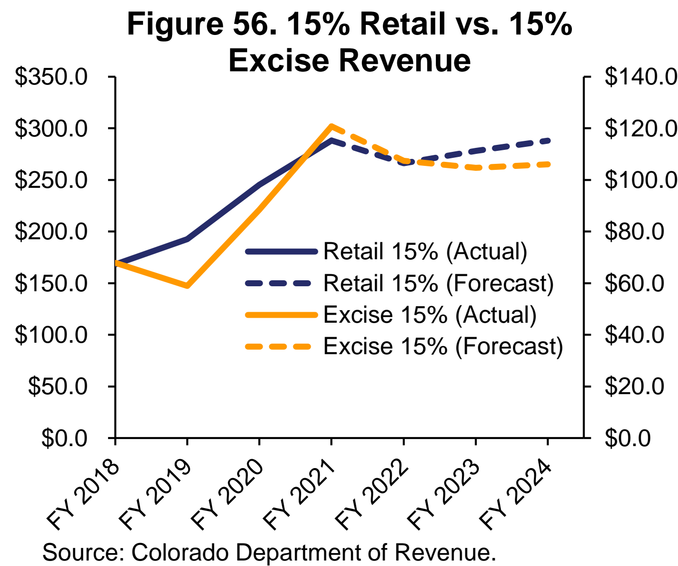
Figure 54. Tax Revenue from the Marijuana Industry	Total Marijuana Revenue	Local Share	General Fund	BEST School Capital Construction	Public School Permanent Fund	Public School Fund	Marijuana Tax Cash Fund
FY 2020-21 Actual	$424.6	$28.8	$40.4	$40.0	$0.0	$113.4	$201.9
FY 2021-22 Projected	$387.0	$26.6	$37.3	$107.5	$0.0	$30.2	$185.4
FY 2022-23 Projected	$395.9	$27.8	$39.0	$104.7	$0.0	$31.5	$192.9
FY 2023-24 Projected	$406.7	$28.8	$40.3	$106.0	$0.0	$32.6	$199.0



Source: Colorado Department of Revenue; University of Colorado at Boulder.

Figure 55 highlights a few critical characteristics of Colorado's marijuana market and the ways in which trends have shifted over the course of the pandemic. Growth in recreational retail sales volume, number of grams of marijuana sold, has shown a steep and relatively linear trajectory in Colorado since legalization in 2014, with an average yearly sales growth of approximately $56.3 million per year. Retail sales volume rose to record highs during the height of the pandemic, even compared to trend growth, but stabilized below trend growth over the latter half of 2021. This below trend growth in volume is expected to be a natural result of the maturation of the Colorado marijuana market, whereby slower growth will continue as current consumers grow their demand and experiment with new products, but fewer new consumers will drive new market demand. Revenue data from the first half of FY 2021-22 has indicated that these volume trends will continue at moderate, below trend growth rates for the forseeable future.

The retail price per gram of flower stabilized significantly at the beginning of 2019 and while the retail price experienced a slight pandemic-induced increase, it did not deviate from its apparent equilibrium price of $4-5 per gram. In contrast, wholesale prices are much more volatile and were more responsive to the pandemic-induced shocks, rising more than 100 percent from their January 2019 levels, from $781 per pound to $1,721 per pound. These elevated price levels also outlasted other pandemic-related impacts and only settled back down to more normal levels of $948 per pound in January.



The level of pandemic-induced growth is significantly higher for excise tax revenue because of these price and volume trends, as is demonstrated by the steeper slope of the orange line as compared to the blue line from FY 2019 to FY 2021. This is because of the direct role that wholesale prices play in excise tax collections. Similarly, the flatter (in fact, slightly negative) trajectory of excise tax revenue from FY 2022 to FY 2023 is due to the longer term nature of the price impacts on the first few months of revenue in FY 2022, with the return to normal prices not fully incorporated until FY 2023.

Federal Mineral Lease

Federal Mineral Lease (FML) revenue increased by 31 percent to $82.0 million in FY 2020-21, due to the Bureau of Land Management (BLM) approving several royalty rate reductions for coal mines in FY20 as well as increased gas and oil production (particularly on the Western Slope) in FY21. Revenue is expected to grow by almost 42 percent in FY22, reaching $116.4M. This is an upward revision from December to account for growth in oil and gas prices. Revenue derived from natural gas product production on federal leases accounts for roughly 50 percent of total revenues, so federal mineral lease revenue is not as susceptible to the fluctuation in oil prices as state severance taxes.

Expectations for revenue growth in FY23 and FY24 are more subdued. The number of oil and gas leases on federal land in Colorado has dropped significantly in recent years, from over 5,000 each year between federal fiscal years 2006 and 2012, to under 3,900 annually since federal fiscal year 2017. The amount of leased acreage has also markedly decreased, peaking at 5.2 million acres in federal fiscal year 2008 before gradually decreasing every year since then, reaching 2.4 million

acres in 2020. Further, approved BLM drilling permits in Colorado averaged 45 per month between October 2020 and March 2021 before plummeting to 2.5 per month in the ensuing six months, although some of this may be due to uncertainty around the Biden administration's proposal to curb new energy leases on federal lands, which a federal court struck down in June. As a result, we expect relatively flat year-on-year growth in FY23 at $103.9M and FY24 at $89.2M.

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

Figure 57. FML Forecast Distribution Table	Actual FY 2020-21	Forecast FY 2021-22	Forecast FY 2022-23	Forecast FY2023-24
Total FML Revenue	**$82.0**	**$116.4**	**$103.9**	**$89.2**
Change	*30.9%*	*41.9%*	*-10.7%*	*-14.1%*
Bonus Payments	**$1.6**	**$2.3**	**$2.1**	**$1.8**
Local Government Perm Fund	$0.8	$1.2	$1.0	$0.9
Higher Ed FML Revenues Fund	$0.8	$1.2	$1.0	$0.9
Non-bonus FML Revenue	**$80.4**	**$114.1**	**$101.8**	**$87.4**
State Public School Fund	$38.8	$55.1	$49.2	$42.2
Colorado Water Conservation Board	$8.0	$11.4	$10.2	$8.7
DOLA Grants	$16.1	$22.8	$20.4	$17.5
DOLA Direct Distribution	$16.1	$22.8	$20.4	$17.5
School Districts	$1.4	$1.9	$1.7	$1.5
Total Higher Ed Maintenance Reserve Fund	$0.8	$1.2	$1.0	$0.9

Other Cash Funds

The state receives revenue from a variety of other, smaller cash funds. 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 is forecasted to be $90.1 million in FY 2021-22. This estimate was revised upward from the December forecast because collections have come in higher than expected to date this fiscal year and public utilities revenue for the rest of the fiscal year is revised upward. OSPB expects a decline in revenue for FY 2022-23 as a result of DORA's inclusion in the Governor's proposed Fee Relief for Individuals and Businesses stimulus package. This package would waive renewal fees for nurses and mental health workers for two years, which would reduce revenue by $7.1 million in FY 2022-23 and $6.9 million in FY 2023-24.

The category of "Other Miscellaneous Cash Funds" includes revenue from over 300 cash fund programs that collect revenue from fines, fees, and interest earnings. This broad category is less sensitive to general economic conditions than revenue sources like income and severance taxes. This cash fund revenue is forecast to be $861.5 million in FY 2021-22, which is nearly unchanged from the revenue in FY 2020-21. Most miscellaneous cash funds are projected to increase from the prior fiscal year, and this roughly offsets a large, $43.0 million revenue reduction associated with the one-time Unclaimed Property Trust Fund transfer stemming from HB 20-1381 (Cash

Fund Transfers General Fund). Miscellaneous cash funds are forecasted to increase by 2.9 percent in FY 2022-23 and by 4.2 percent in FY 2023-24.

Figure 58. Other Cash Funds Forecasts and Actuals.

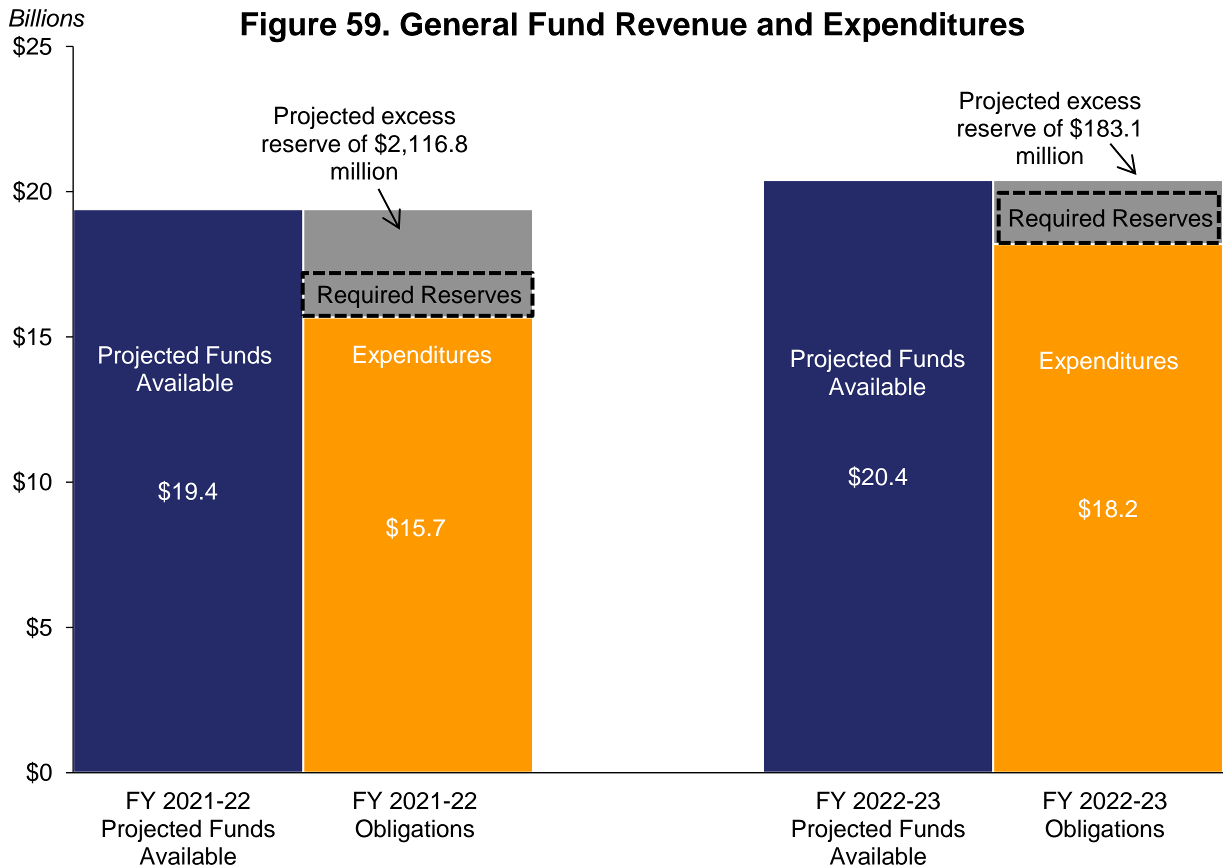
	Actual 2020-21	Forecast FY 2021-22	Forecast FY 2022-23	Forecast FY 2023-24
Forecast Without Governor's Budget				
DORA	$89.1	$90.1	$92.3	$95.4
Change	*9.9%*	*1.1%*	*2.4%*	*3.4%*
Miscellaneous Cash Funds	$857.5	$861.5	$907.3	$924.3
Change	*17.2%*	*0.5%*	*5.3%*	*1.9%*
Governor's Budget Request				
DORA	$0.0	$0.0	-$7.1	-$6.9
Miscellaneous Cash Funds	$0.0	$0.0	-$20.6	$0.0
Final Forecast				
DORA	$89.1	$90.1	$85.2	$88.5
Percent Change	*9.9%*	*1.1%*	*-5.4%*	*3.9%*
Miscellaneous Cash Funds	$857.5	$861.5	$886.7	$924.3
Percent Change	*17.2%*	*0.5%*	*2.9%*	*4.2%*

Budget Outlook

General Fund

General Fund revenue increased 11.2 percent in FY 2020-21 and is projected to increase 13.1 percent in FY 2021-22 before growing 2.8 percent in FY 2022-23 and 3.2 percent in FY 2023-24. General Fund revenue for FY 2021-22 is $205.9 million, or 1.3 percent higher, than was estimated in December, driven by increased expectations for income and sales tax revenue collections. The forecast for FY 2022-23 is $344.7 million, or 2.1 percent higher than estimated in December, as strong wage and inflation growth continues to put upward pressure on individual income and sales tax revenue collections.

Figure 59. General Fund Revenue and Expenditures



The General Fund reserve was above the required statutory reserve amount of 2.86 percent of appropriations in FY 2020-21. Under this forecast, the General Fund ending balance is projected to be $2,116.8 million above the statutory reserve level of 13.4 percent of appropriations in FY

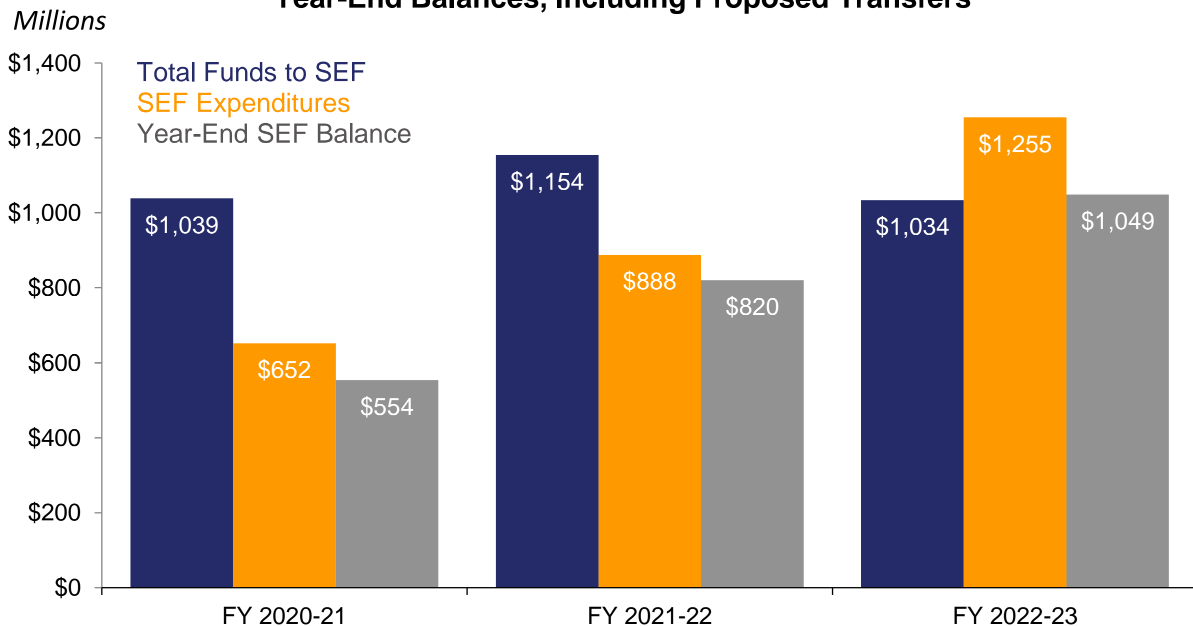
2021-22 and $183.1 million above the statutory reserve level of 15.0 percent of appropriations in FY 2022-23. Figure 59 summarizes total projected General Fund revenue available, total obligations, and reserve levels for FY 2021-22 and FY 2022-23 under current law.

State Education Fund

The State Education Fund's year-end balance was $553.7 million in FY 2020-21 and is projected to increase to $820.1 million in FY 2021-22, including transfers. This is a $93.8 million upward revision compared to the December 2021 forecast, due in part to revenue from expected increases in income taxes as well as 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, the year-end balance is projected to be $1,049.0 million, $207.4 million above the December forecast due largely to lower expected expenditures as a result of updated local share and pupil count assumptions, but also in response to total revenue being revised up with expected increases in individual income revenue. Note that these ending balances assume the $450 million transfer to the SEF in FY 2022-23, as proposed in the Governor's budget. Figure 60 summarizes total State Education Fund revenue, expenditures, and ending balances for FY 2020-21, FY 2021-22, and FY 2022-23.

Figure 60. State Education Fund Revenues, Expenditures and Year-End Balances, Including Proposed Transfers



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, wage growth continues to be strong, largely due to a tight labor market. Additionally, retail sales growth is expected to remain above historical averages, but a significant percent of the growth is due to inflation. Inflation risks are 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. Additionally, the current geopolitical conflict in the Ukraine is expected to drive up food and energy prices, with the potential for more adverse outcomes on the broader economy. Economic conditions currently underlying this forecast are slightly weighted towards downside risk.

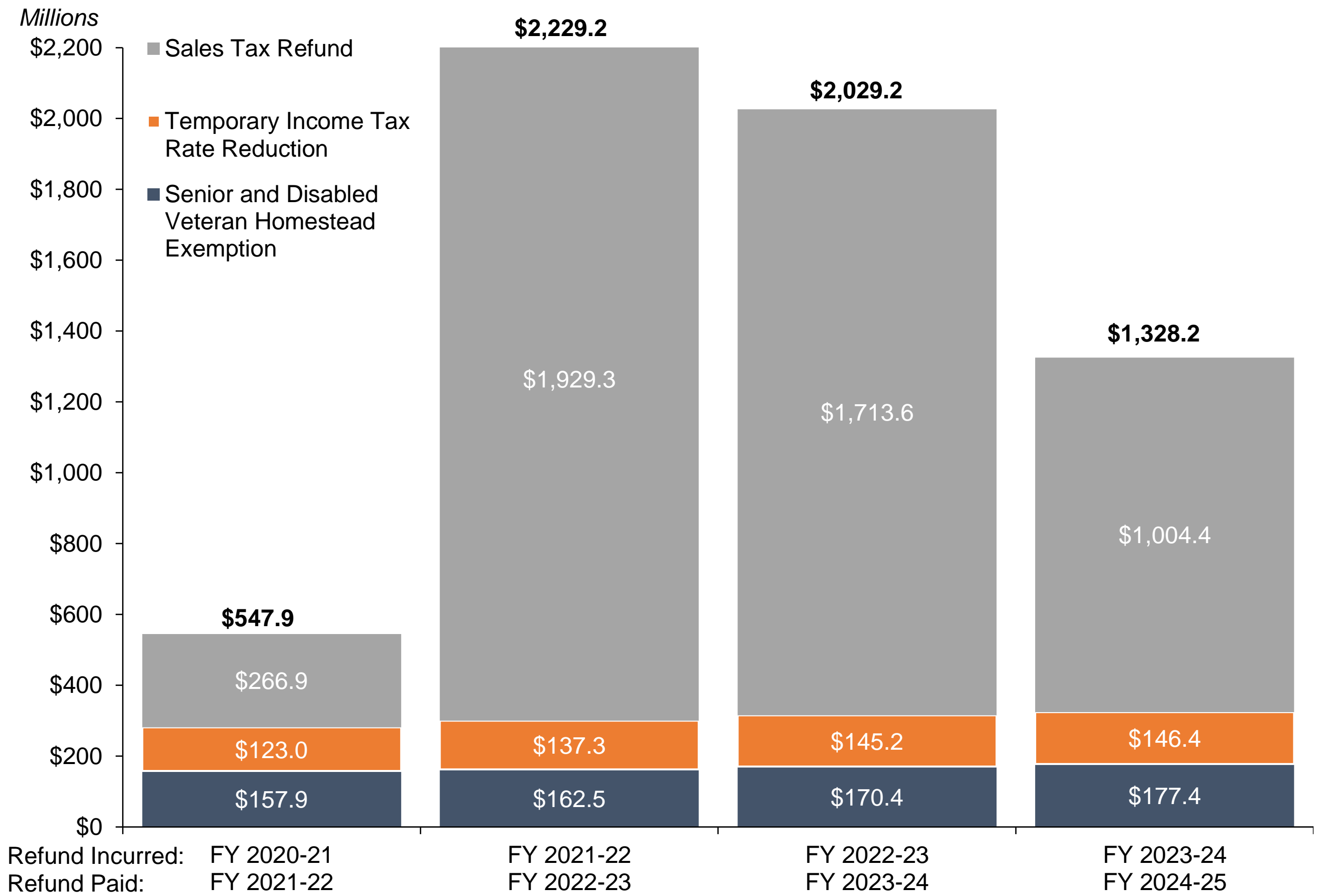
Supplemental Materials

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 did not exceed the revenue cap in FY 2019-20 but exceeds it in FY 2020-21 by $547.9 million. In each year of the projection period, TABOR revenue is expected to exceed the cap, with the highest refund occurring in the current fiscal year. In FY 2021-22, revenue will be $2,229.2 million due primarily to upward revisions in individual income tax revenue. In FY 2022-23, revenue is projected to be $2,029.2 million above the cap as income and sales tax revenue exceed previous expectations. In FY 2023-24, the review amount above the cap lowers to $1,328.2 million as current high inflation allows for further growth in the Referendum C limit.

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.



An estimated $123.0 million of the $547.9 million refund obligation will be paid out as an income tax rate reduction, while $157.9 million will be refunded via the senior homestead and disabled veterans property tax exemption expenditures and $266.9 million via a sales tax refund in FY 2021-22. Any difference between estimated refunds and actual refunds will be corrected in the next fiscal year in which a refund is owed, which is FY 2021-22 in this forecast.

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	$401.8	$415.9	$436.7	$454.9
2	Change	1.7%	6.9%	7.2%	5.6%	5.7%	8.5%	3.5%	5.0%	4.2%
3	Wage and Salary Income (Billions)	$151.2	$161.0	$170.9	$182.9	$187.1	$205.2	$222.3	$234.3	$244.0
4	Change	3.1%	6.5%	6.2%	7.0%	2.3%	9.7%	8.3%	5.4%	4.2%
5	Per-Capita Income ($/person) /A	$52,386.0	$55,300.0	$58,475.0	$61,098.0	$64,036.0	$69,103.0	$70,985.9	$73,798.3	$76,082.5
6	Change	0.2%	5.6%	5.7%	4.5%	4.8%	7.9%	2.7%	4.0%	3.1%
	Population & Employment									
7	Population (Thousands)	5,529.6	5,599.6	5,676.9	5,734.9	5,784.2	5,814.7	5,858.6	5,917.1	5,978.6
8	Change	1.5%	1.3%	1.4%	1.0%	0.9%	0.5%	0.8%	1.0%	1.0%
9	Net Migration (Thousands)	53.3	42.4	51.8	34.2	28.6	15.1	30.0	37.0	40.0
10	Unemployment Rate	3.1%	2.6%	3.0%	2.7%	6.9%	5.4%	3.7%	3.2%	3.0%
11	Total Nonagricultural Employment (Thousands)	2,601.7	2,660.3	2,727.3	2,790.1	2,644.6	2,740.1	2,833.2	2,894.6	2,943.8
12	Change	2.4%	2.3%	2.5%	2.3%	-5.2%	3.6%	3.4%	2.2%	1.7%
	Construction Variables									
13	Total Housing Permits Issued (Thousands)	39.0	40.7	42.6	38.6	40.5	60.1	65.5	69.7	72.4
14	Change	22.3%	4.4%	4.8%	-9.4%	4.8%	48.6%	9.0%	6.3%	4.0%
15	Nonresidential Construction Value (Millions) /B	$5,987.8	$6,151.9	$8,151.0	$5,167.0	$5,462.3	$5,602.9	$5,902.6	$6,097.4	$6,207.2
16	Change	20.0%	2.7%	32.5%	-36.6%	5.7%	2.6%	5.4%	3.3%	1.8%
	Price Variables									
17	Retail Trade (Billions) /C	$184.7	$194.6	$206.1	$224.6	$228.8	$266.6	$287.4	$299.1	$309.5
18	Change	1.0%	5.4%	5.9%	9.0%	1.9%	16.5%	7.8%	4.1%	3.5%
19	Denver-Aurora-Lakewood Consumer Price Index (1982-84=100)	246.6	255.0	262.0	267.0	272.2	281.8	302.1	311.1	319.4
20	Change	2.8%	3.4%	2.7%	1.9%	2.0%	3.5%	7.2%	3.0%	2.7%

/A 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.

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

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

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	$19,428.4	$20,132.6	$20,615.8	$21,048.8
2	Change	1.7%	2.3%	2.9%	2.3%	-3.4%	5.7%	3.0%	2.4%	2.1%
3	Personal Income (Billions) /B	$16,096.9	$16,850.2	$17,706.0	$18,424.4	$19,627.6	$21,076.8	$21,709.1	$22,686.0	$23,389.2
4	Change	2.6%	4.7%	5.1%	4.1%	6.5%	7.4%	3.0%	4.5%	3.1%
5	Per-Capita Income ($/person) /B	$49,880	$51,861	$54,129	$55,950	$59,208	$63,505	$65,097	$67,945	$69,786
6	Change	1.9%	4.0%	4.4%	3.4%	5.8%	7.3%	2.5%	4.4%	2.7%
7	Wage and Salary Income (Billions)	$8,091.2	$8,474.7	$8,900.5	$9,323.5	$9,444.1	$10,327.0	$11,204.6	$11,787.3	$12,247.0
8	Change	2.9%	4.7%	5.0%	4.8%	1.3%	9.3%	8.5%	5.2%	3.9%
	Population & Employment									
9	Population (Millions)	322.7	324.9	327.1	329.3	331.5	331.9	333.5	333.9	335.2
10	Change	0.7%	0.7%	0.7%	0.7%	0.7%	0.1%	0.6%	0.6%	0.5%
11	Unemployment Rate	4.9%	4.4%	3.9%	3.7%	8.1%	5.4%	3.7%	3.6%	3.6%
12	Total Nonagricultural Employment (Millions)	144.3	146.6	148.9	150.9	142.2	146.1	151.4	152.8	153.8
13	Change	1.8%	1.6%	1.6%	1.3%	-5.8%	2.8%	3.6%	1.0%	0.7%
	Other Key Indicators									
14	Consumer Price Index (1982-84=100)	240.0	245.1	251.1	255.7	258.8	271.0	289.9	298.0	305.1
15	Change	1.3%	2.1%	2.4%	1.8%	1.2%	4.7%	7.0%	2.8%	2.4%
16	Corporate Profits (Billions)	$2,037.7	$2,128.9	$2,305.0	$2,367.8	$2,243.8	$2,800.2	$2,912.2	$2,897.7	$2,944.0
17	Change	-1.1%	4.5%	8.3%	2.7%	-5.2%	24.8%	4.0%	-0.5%	1.6%
18	Housing Permits (Millions)	1.210	1.280	1.330	1.390	1.470	1.710	1.880	2.000	2.080
19	Change	2.0%	6.3%	3.6%	4.3%	6.1%	16.3%	9.6%	6.8%	4.0%
20	Retail Trade (Billions)	$5,506.1	$5,732.9	$5,985.1	$6,184.6	$6,215.1	$7,418.1	$7,922.5	$8,215.7	$8,470.4
21	Change	2.9%	4.1%	4.4%	3.3%	0.5%	19.4%	6.8%	3.7%	3.1%

/A U.S. Bureau of Economic Analysis, National Income and Product Accounts. Inflation-adjusted, in 2009 dollars.
/B Personal Income as reported by the U.S. Bureau of Economic Analysis includes: wage and salary disbursements, supplements to wages and salaries, proprietors' income with inventory and capital consumption adjustments, rental income of persons with capital consumption adjustments, personal dividend income, personal interest income, and personal current transfer receipts, less contributions from government social insurance.

Table 3: General Fund Revenue Estimates by Tax Category /A

	Category	Actual FY 2020-21	Percent Change	Estimate FY 2021-22	Percent Change	Estimate FY 2022-23	Percent Change	Estimate FY 2023-24	Percent Change
	Excise Taxes								
1	Sales	$3,418.1	6.9%	$3,912.5	14.5%	$4,126.7	5.5%	$4,278.7	3.7%
2	Use	$214.2	1.8%	$239.1	11.6%	$246.0	2.9%	$252.1	2.5%
3	Retail Marijuana Sales - Special Sales Tax	$288.2	17.4%	$266.2	-7.6%	$278.2	4.5%	$287.9	3.5%
4	Cigarette	$30.1	-7.3%	$30.4	0.9%	$30.2	-0.8%	$29.9	-1.1%
5	Tobacco Products	$29.0	19.1%	$25.4	-12.4%	$26.4	3.7%	$27.0	2.1%
6	Liquor	$53.4	6.6%	$56.1	5.1%	$57.2	2.0%	$58.8	2.7%
7	Proposition EE/Nicotine	$49.0	N/A	$214.1	336.8%	$228.2	6.6%	$235.6	3.2%
8	**Total Excise**	**$4,082.1**	**8.6%**	**$4,743.9**	**16.2%**	**$4,992.9**	**5.2%**	**$5,169.9**	**3.5%**
	Income Taxes								
9	Net Individual Income	$9,478.1	9.6%	$10,718.2	13.1%	$10,983.2	2.5%	$11,333.0	3.2%
10	Net Corporate Income	$1,183.7	62.5%	$1,176.1	-0.6%	$1,059.4	-9.9%	$1,068.9	0.9%
11	**Total Income**	**$10,661.8**	**13.7%**	**$11,894.3**	**11.6%**	**$12,042.6**	**1.2%**	**$12,401.9**	**3.0%**
12	*Less: State Education Fund Diversion*	*$874.6*	*35.2%*	*$892.1*	*2.0%*	*$903.2*	*1.2%*	*$930.1*	*3.0%*
13	**Total Income to General Fund**	**$9,787.2**	**12.2%**	**$11,002.2**	**12.4%**	**$11,139.4**	**1.2%**	**$11,471.8**	**3.0%**
	Other Revenue								
14	Insurance	$336.3	-0.3%	$354.6	5.4%	$437.0	23.2%	$458.8	5.0%
15	Interest Income	$50.0	60.9%	$53.9	7.7%	$36.8	-31.7%	$42.4	15.2%
16	Pari-Mutuel	$0.3	-21.2%	$0.3	13.8%	$0.3	-2.0%	$0.3	-2.0%
17	Court Receipts	$3.5	-9.8%	$3.5	1.2%	$3.7	4.5%	$3.7	0.0%
18	Other Income	$50.7	423.4%	$28.7	-43.5%	$29.7	3.6%	$32.1	8.1%
19	**Total Other**	**$440.9**	**15.3%**	**$441.0**	**0.0%**	**$507.6**	**15.1%**	**$537.3**	**5.9%**
20	**GROSS GENERAL FUND**	**$14,310.1**	**11.2%**	**$16,187.2**	**13.1%**	**$16,639.8**	**2.8%**	**$17,179.0**	**3.2%**

/A Dollars in millions.

Table 4: General Fund Overview /A

		Actual FY 2020-21	Estimate FY 2021-22	Estimate FY 2022-23	Estimate FY 2023-24
Revenue					
1	**Beginning Reserve**	**$1,825.7**	**$3,178.0**	**$3,725.2**	**$2,205.4**
2	**Gross General Fund Revenue**	**$14,310.1**	**$16,187.2**	**$16,639.8**	**$17,179.0**
3	*Transfers to the General Fund*	$336.818	$35.8	$34.7	$36.9
4	**TOTAL GENERAL FUND AVAILABLE**	**$16,472.6**	**$19,400.9**	**$20,399.6**	**$19,421.3**
Expenditures					
5	**Appropriation Subject to Limit**	**$10,979.1**	**$12,003.3**	**$13,482.4**	**$15,045.8**
6	*Dollar Change (from prior year)*	-$826.0	$1,024.2	$1,479.1	$1,563.4
7	*Percent Change (from prior year)*	-7.0%	9.3%	12.3%	11.6%
8	**Spending Outside Limit**	**$2,347.9**	**$3,672.4**	**$4,711.8**	**$2,118.6**
9	*TABOR Refund under Art. X, Section 20, (7) (d)*	$547.9	$2,229.2	$2,029.2	$1,328.2
10	*Homestead Exemption (Net of TABOR Refund)*	$157.9	$0.0	$0.0	$0.0
11	*Other Rebates and Expenditures*	$137.9	$141.6	$143.4	$144.7
12	*Transfers for Capital Construction*	$43.0	$354.0	$391.6	$50.0
13	*Transfers for Transportation*	$30.0	$294.0	$205.0	$0.0
14	*Transfers to State Education Fund*	$113.0	$123.0	$450.0	$0.0
15	*Transfers to Other Funds*	$1,318.3	$530.7	$1,492.6	$595.8
16	**TOTAL GENERAL FUND OBLIGATIONS**	**$13,327.1**	**$15,675.7**	**$18,194.2**	**$17,164.4**
17	*Percent Change (from prior year)*	4.8%	17.6%	16.1%	-5.7%
18	Reversions and Accounting Adjustments	-$32.4	$0.0	$0.0	$0.0
Reserves					
19	**Year-End General Fund Balance**	**$3,178.0**	**$3,725.2**	**$2,205.4**	**$2,256.9**
20	*Year-End General Fund as a % of Appropriations*	28.9%	31.0%	16.4%	15.0%
21	*General Fund Statutory Reserve*	$314.0	$1,608.4	$2,022.4	$2,256.9
22	*Statutory Reserve %*	2.86%	13.4%	15.0%	15.0%
23	*Above/Below Statutory Reserve*	$2,864.0	$2,116.8	$183.1	$0.0

/A. FY 2020-21 and FY 2021-22 expenditures reflect all legislation that has passed through both the Colorado House and Senate as of June 18, 2021. FY 2022-23 appropriations will be adopted in future budget legislation. Therefore, FY 2022-23 expenditures and fund balance projections shown are illustrative only. Dollars in millions.

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

		Actual FY 2020-21	Estimate FY 2021-22	Estimate FY 2022-23	Estimate FY 2023-24
	Revenue				
1	**Beginning Reserves**	**$1,992.4**	**$3,731.6**	**$4,545.3**	**$3,254.5**
2	*State Education Fund*	$166.7	$553.7	$820.1	$1,049.0
3	*General Fund*	$1,825.7	$3,178.0	$3,725.2	$2,205.4
4	**Gross State Education Fund Revenue**	**$1,038.9**	**$1,154.4**	**$1,034.1**	**$930.1**
5	Requested Transfer to State Education Fund	$0.0	$0.0	$450.0	$0.0
6	**Gross General Fund Revenue /B**	**$14,646.9**	**$16,223.0**	**$16,674.4**	**$17,215.9**
7	**TOTAL FUNDS AVAILABLE FOR EXPENDITURE**	**$17,678.2**	**$21,109.0**	**$22,253.7**	**$21,400.5**
	Expenditures				
8	General Fund Expenditures /C	$13,327.1	$15,675.7	$18,194.2	$17,164.4
9	State Education Fund Expenditures	$651.9	$888.0	$1,255.1	$1,661.5
10	**TOTAL OBLIGATIONS**	**$13,978.9**	**$16,563.7**	**$19,449.3**	**$18,825.9**
11	*Percent Change (from prior year)*	4.2%	18.5%	17.4%	-3.2%
12	*Reversions and Accounting Adjustments*	-$32.4	$0.0	$0.0	$0.0
	Reserves				
13	**Year-End Balance**	**$3,731.6**	**$4,545.3**	**$3,254.5**	**$2,574.6**
14	State Education Fund	$553.7	$820.1	$1,049.0	$317.7
15	General Fund	$3,178.0	$3,725.2	$2,205.4	$2,256.9
16	*General Fund Above/Below Statutory Reserve*	$2,864.0	$4,233.5	$366.1	$0.0

/A FY 2020-21 and FY 2021-22 expenditures reflect all legislation that has passed through both the Colorado House and Senate as of June 18, 2021. FY 2022-23 appropriations will be adopted in future budget legislation. Therefore, FY 2022-23 expenditures and fund balance projections shown are illustrative only. Dollars in millions.
/B These amounts include the following transfers: $115.8 million in FY 2020-21, $248.1 million in FY 2021-22, and $124.0 million in FY 2022-23.
/C This amount includes transfers to the General Fund.
/D General Fund expenditures include appropriations subject to the limit of 5.0 percent of Colorado personal income as well as all spending outside the limit.

Table 6: Cash Fund Revenue Subject to TABOR /A

	Category	Actual FY 2020-21	Estimate FY 2021-22	Estimate FY 2022-23	Estimate FY 2023-24
1	**Transportation-Related /A**	**$1,155.8**	**$1,225.9**	**$1,241.2**	**$1,358.3**
2	Change	-3.5%	6.1%	1.2%	9.4%
3	**Limited Gaming Fund /B**	**$101.8**	**$140.8**	**$143.1**	**$144.8**
4	Change	47.2%	38.3%	1.6%	1.2%
7	**Regulatory Agencies**	**$89.1**	**$90.1**	**$85.2**	**$88.5**
8	Change	9.9%	1.1%	-5.4%	3.9%
9	**Insurance-Related**	**$21.0**	**$24.3**	**$21.4**	**$21.5**
10	Change	-15.7%	15.5%	-11.9%	0.5%
11	**Severance Tax**	**$14.7**	**$165.2**	**$175.2**	**$128.0**
12	Change	-88.8%	1025.3%	6.0%	-26.9%
13	**Other Miscellaneous Cash Funds**	**$857.5**	**$861.5**	**$886.7**	**$924.3**
14	Change	17.2%	0.5%	2.9%	4.2%
15	**TOTAL CASH FUND REVENUE**	***$2,240.0***	***$2,507.9***	***$2,552.8***	***$2,665.5***
16	Change	0.1%	12.0%	1.8%	4.4%

/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

		Actual FY 2020-21	Estimate FY 2021-22	Estimate FY 2022-23	Estimate FY 2023-24
	TABOR Revenues				
1	General Fund /A	$13,929.8	$15,709.8	$16,136.4	$16,655.5
	Percent Change from Prior Year	10.3%	12.8%	2.7%	3.2%
2	Cash Funds /A	$2,240.0	$2,507.9	$2,552.8	$2,665.5
	Percent Change from Prior Year	-0.2%	12.0%	1.8%	4.4%
3	**Total TABOR Revenues**	**$16,169.8**	**$18,217.7**	**$18,689.2**	**$19,321.0**
	Percent Change from Prior Year	8.7%	12.7%	2.6%	3.4%
	Revenue Limit Calculation				
4	Previous calendar year population growth	1.2%	0.3%	0.7%	0.8%
5	Previous calendar year inflation	1.9%	2.0%	3.5%	7.2%
6	**Allowable TABOR Growth Rate**	**3.1%**	**2.2%**	**4.2%**	**8.0%**
7	TABOR Limit /B	$12,628.1	$12,905.9	$13,447.9	$14,523.8
8	General Fund Exempt Revenue Under Ref. C /C	$3,016.3	$3,082.6	$3,212.1	$3,469.0
9	**Revenue Cap Under Ref. C /B /D**	**$15,644.3**	**$15,988.5**	**$16,660.0**	**$17,992.8**
10	*Amount Above/Below Cap*	$525.5	$2,229.2	$2,029.2	$1,328.2
11	***Revenue to be Refunded including Adjustments from Prior Years /E***	**$547.9**	**$2,229.2**	**$2,029.2**	**$1,328.2**
12	TABOR State Emergency Reserve Requirement	$469.3	$479.7	$499.8	$539.8

/A Amounts differ from the revenue totals reported in Table 3, 6 due to accounting adjustments, and some General Fund revenue is exempt from TABOR. Dollars in millions.
/B The TABOR limit and Referendum C cap are adjusted to account for changes in the enterprise status of various state entities.
/C Under Referendum C, a "General Fund Exempt Account" is created in the General Fund. The account consists of money collected in excess of the TABOR limit in accordance with Referendum C.
/D The revenue limit is calculated by applying the "Allowable TABOR Growth Rate" to either "Total TABOR Revenue" or the "Revenue Cap under Ref. C," whichever is smaller. Beginning in FY 2010-11, the revenue limit is based on the highest revenue total from FY 2005-06 to 2009-10 plus the "Allowable TABOR Growth Rate." FY 2007-08 was the highest revenue year during the Referendum C timeout period. SB 17-267 reduced the Referendum C cap by $200 million in FY 2017-18. SB 21-260 raises the Referendum C cap back to its pre-SB 17-267 levels, adjusted for inflation and population growth since the passage of SB 17-267. The new cap, in line with the original Referendum C cap, then grows by inflation and population growth in subsequent years.
/E These adjustments are the result of: (a) changes that were made to State accounting records for years in which TABOR refunds occurred that resulted in changes in required refunds to taxpayers, and (b) the refund to taxpayers in previous years was different than the actual amount required. Such adjustments are held by the State until a future year in which a TABOR refund occurs when they adjust the total refund amount distributed to taxpayers.