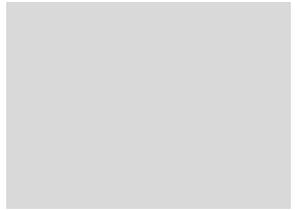
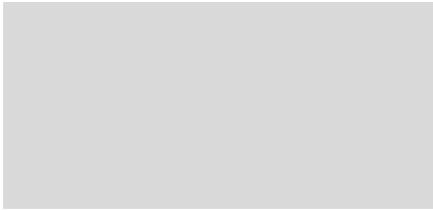




Colorado Legislative Council Staff
December 2020 | Economic & Revenue Forecast



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Special thanks to Cathy Eslinger, Suzanne Keim, Dan Phillips, Jerry Schierkolk, and David Williams.
Cover photos of the Colorado State Capitol, courtesy of Suzanne Keim.

Executive Summary

This report presents the budget outlook based on current law and the December 2020 forecast for General Fund and cash fund revenue, as well as the TABOR outlook. This December forecast also includes annual forecasts for kindergarten through twelfth grade (K-12) enrollment and assessed valuation, which inform an updated school finance outlook. Additionally, this forecast includes projections for the adult and juvenile corrections populations. Consistent with other quarterly forecasts, this document includes summaries of expectations for the U.S. and Colorado economies and an overview of current economic conditions in nine regions of the state.

General Fund Budget Outlook

FY 2019-20	Preliminary unaudited revenue figures suggest that the General Fund ended the year with a 15.4 percent reserve, \$1.46 billion above the 3.07 percent required reserve. The \$197 million increase in the year-end balance relative to the September estimate incorporates new information from the state's Basic Financial Statements, which will be finalized once the Comprehensive Annual Financial Report is released. Revenue subject to TABOR fell just short (\$82.5 million) of the Referendum C cap.
FY 2020-21	The impacts of the COVID-19 pandemic will weigh on FY 2020-21 General Fund revenue collections, which are projected to decline 5.6 percent from year-ago levels. Significant budget balancing actions made during the 2020 legislative session more than offset projected revenue declines. While collections to date continue to exceed expectations, the revenue outlook remains uncertain on elevated COVID-19 cases, tax policy changes, and still unknown taxpayer behavior during the regular 2020 income tax filing season. The General Fund is projected to end the year with a 23.7 percent reserve, \$2.25 billion above the required 2.86 percent reserve. Revenue subject to TABOR is expected to fall below the Referendum C cap by \$1.52 billion.
FY 2021-22 Unbudgeted	As revenue rebounds from recessionary levels, the General Assembly is projected to have \$3.75 billion, or 31.9 percent, more to spend or save in the General Fund than what is budgeted to be spent and saved in FY 2020-21. Any changes to revenue or expenditures in FY 2020-21 will change this amount. This amount holds current appropriations for FY 2020-21 constant and assumes current law transfers, and a 2.86 percent General Fund reserve requirement. This amount does not incorporate caseload growth, inflationary, or other budgetary pressures. Revenue subject to TABOR is expected to fall below the Referendum C cap by \$1.01 billion.

Risks to the forecast. The economic and health policy landscape continues to evolve, posing both upside and downside risks to the General Fund budget that are high by any historical standard. The economy is still to be tested as it is weaned off of the extraordinary federal government stimulus that buoyed activity earlier in the year. On risks to the upside, as this forecast goes to print, additional federal fiscal stimulus remains under consideration. Should additional stimulus be enacted, economic activity may be stronger than expected in 2021. While General Fund revenue collections to date have been stronger than expected, this forecast has limited real data on which to base assumptions for how the COVID-19 recession and significant tax policy changes will influence taxpayer refunds and decisions when they file returns for 2020 and beyond.

Cash Fund Revenue

Preliminary, unaudited figures from the Office of the State Controller indicate that cash fund revenue subject to TABOR totaled \$2.24 billion in FY 2019-20, a decrease of \$201.3 million, or 8.3 percent, from the prior fiscal year. Revenue in the current FY 2020-21 is expected to decline an additional 4.4 percent before rebounding to grow by 5.3 percent in FY 2021-22. The crude oil market rout, drop in travel activity due to COVID-19-related disruptions, and reduced casino capacity will continue to weigh on collections from severance tax, transportation-related revenue, and gaming revenue in the current fiscal year. As the economy improves and COVID-19-related restrictions ease with the distribution of vaccines, collections are expected to recover, though they will remain below FY 2018-19 levels through at least FY 2022-23.

Unemployment Insurance Trust Fund insolvency. Unemployment insurance benefits paid have seen an unprecedented increase during the COVID-19-related economic contraction. Benefits paid rose from \$365.5 million in FY 2018-19 prior to the pandemic to \$1.27 billion in FY 2019-20 and are expected to peak at \$2.09 billion in the current FY 2020-21. The state's Unemployment Insurance Trust Fund balance on June 30, 2020, remained positive but dipped below 0.4 percent, triggering a move to the second highest premium rate schedule beginning January 1, 2021. The fund became insolvent in August 2020, when benefits exceeded available funds. The fund is not expected to return to solvency within the forecast period, necessitating ongoing borrowing to fund benefits.

Economic Outlook

The development and distribution of effective COVID-19 vaccines brightened the outlook for the U.S. and Colorado economies, particularly for late 2021 and 2022. The economic recovery remains incomplete and uneven as health concerns and social distancing restrictions continue to weigh heavily on tourism, travel, oil and gas, and leisure and hospitality industries. While business and consumer resilience have produced stronger than expected economic activity to date, the industries impacted most by the pandemic will face difficult winter months ahead based on the resurgence in COVID-19 cases. Risks to the forecast remain elevated, with the resurgence in the virus weighing on the near-term outlook, and additional federal stimulus posing the greatest upside risk. Discussion of the economic outlook begins on page 81, and summaries of expectations for the U.S. and Colorado economies are presented, respectively, in Tables 20 and 21 on pages 98 and 99.

School Finance Outlook

An update to the school finance outlook begins on page 19.

FY 2020-21. Lower than expected enrollment and at risk populations have reduced the overall total program cost by \$121 million. In addition, declines in property tax and specific ownership tax collections have reduced the local share by just over \$38 million. The net result is a reduction of \$83 million in state aid obligations from what was expected during the 2020 legislative session.

FY 2021-22. Based on revised inflation expectations and the 2020 kindergarten through twelfth grade (K-12) enrollment forecast, total program requirements are expected to increase by \$138 million on a year-over-year basis between the current year and FY 2021-22. The 2020 assessed valuation forecast implies a \$31 million increase in the local share in FY 2021-22, resulting in a \$107 million increase in required state aid.

K-12 Enrollment

A forecast for K-12 enrollment begins on page 41. The enrollment count for the current (2020-21) school year totaled 845,916 student FTE across Colorado's public schools, down 22,280 student FTE, or 2.6 percent, from the previous school year. The majority of the unprecedented decline is due to impacts from the COVID-19 pandemic and is not expected to persist.

A 3.8 percent drop in brick-and-mortar enrollment drove the overall decline in enrollment this school year, as pandemic-related health concerns spurred a shift to online learning and other alternative education models. Statewide K-12 enrollment is projected to bounce back in the 2021-22 school year, increasing by 19,944 student FTE, as most students return to in-person classrooms. Enrollment is forecast to decline by 1,867 student FTE in the 2022-23 school year, coming off a large increase the year prior and continuing the slowing enrollment trends of the past several years. As the impacts of COVID-19 wear off, downward pressure on Colorado's public school enrollment will be felt from smaller age cohorts and lower birth rates. Housing cost issues will continue to push students out of the metro Denver area and into exurban areas, as well as the northern and Colorado Springs regions, where strong job growth and new and relatively affordable housing options will continue to attract young families.

Assessed Valuation

A forecast for assessed values – the amount of property values that are subject to taxation at local mill levies – begins on page 49. Assessed values increased 0.5 percent statewide between 2019 and 2020, mainly on contributions from residential construction. This forecast expects assessed values to grow 0.5 percent further in 2021, a reassessment year. Residential values will increase significantly due to home price appreciation between January 2019 and June 2020. Meanwhile, nonresidential values will drop substantially on commercial and industrial property depreciation at the height of the pandemic, alongside reduced production values for oil, gas, and other natural resources. Statewide assessed values are expected to tick up by 2.0 percent in 2022, reflecting new construction and renewed growth in oil and gas production, and to rebound further in 2023, growing 8.9 percent.

With the passage of Amendment B, the Colorado Constitution no longer requires the General Assembly to adjust the residential assessment rate (RAR) to maintain a constitutional target percentage. This forecast assumes that throughout the forecast period, assessment rates will remain at their present levels: 29 percent for most nonresidential property and 7.15 percent for residential property.

Corrections Populations

A forecast for the state's adult prison population and parole caseload begins on page 59. A forecast for juvenile correctional populations, including commitment, parole, and detention populations, begins on page 75.

The state's **adult prison population** fell to 17,441 offenders on June 30, 2020, a decrease of 2,510 over FY 2019-20. The decline reflects executive orders that aimed to reduce community spread of COVID-19 within correctional facilities, primarily via expedited releases, as well as fewer admissions from courts. The population has fallen further since June, and is expected to continue to decline to

reach 15,767 offenders on June 30, 2021. This forecast expects that the population will begin to increase in mid-2021, reaching 16,646 offenders in June 2022.

The in-state **adult parole population** reached an all-time high of 10,315 on June 30, 2020, as a result of expedited releases. The parole population will fall from present levels as releases slow and parolees are discharged, reaching 9,812 in June 2021 and 8,581 in June 2022.

All three estimated **juvenile corrections populations** are expected to continue to decline. With authority granted by executive order in response to the pandemic, the Division of Youth Services expedited releases from its population of committed youth. The commitment population fell to an average of 453 in FY 2019-20 and is expected to fall further to average 351 youths during FY 2020-21. The parole population experienced a one-time increase as a result of new releases, but is expected to fall during the current year and beyond as commitments slow. The detention population fell precipitously on fewer arrests during the pandemic, and will average just 159 youths during FY 2020-21. It is expected to rebound to 217 youths in FY 2021-22, before returning to its long-term trend of continued decline.

General Fund Budget Overview

This section presents the General Fund overview based on current law. A summary of the General Fund overview is shown in Table 1. This section also presents expectations for the following:

- a summary of changes in the forecast since May (Table 2);
- the TABOR outlook (Table 3 and Figure 1);
- statutory transfers to transportation and capital construction funds (Table 4);
- the disposition of fiscal policies dependent on revenue collections;
- General Fund rebates and expenditures (Table 5); and
- cash fund transfers to and from the General Fund (Table 6).

This forecast is based on current law, including changes resulting from the 2020 regular legislative session, the 2020 special session, and the outcome of the November 2020 election.

FY 2019-20

Preliminary, unaudited collections figures from the Office of the State Controller suggest that the General Fund ended FY 2019-20 with a 15.4 percent reserve, \$1.46 billion higher than the statutorily required 3.07 percent reserve (Table 1, line 19). The \$197 million increase in the year-end balance relative to the September estimate incorporates new information from the state's Basic Financial Statements, which will be finalized once the Comprehensive Annual Financial Report is released.

FY 2020-21

The General Fund is expected to end the current fiscal year with a 23.7 percent reserve, \$2.25 billion higher than the statutorily required 2.86 percent reserve (Table 1, line 19). The projected year-end reserve is \$577.9 million higher than expected in September, reflecting a higher beginning balance carried over from FY 2019-20 and higher revenue expectations on stronger collections year-to-date that more than offset revenue and expenditure impacts from November election outcomes and legislation enacted during the 2020 special session.

Despite improved expectations relative to September, General Fund revenue is still projected to contract 5.6 percent in FY 2020-21 relative to year-ago levels. Budget balancing actions made during the 2020 legislative session that reduced General Fund expenditures relative to FY 2019-20 levels more than offset the projected decline in revenue. While the budget outlook has improved, risks to the revenue forecast remain high by any historical standard.

FY 2021-22 (Unbudgeted)

Because a budget has not yet been enacted for FY 2021-22, Table 1 (line 21) shows the amount of revenue available in FY 2021-22 relative to the amount budgeted to be spent or saved in FY 2020-21. Based on this forecast, the General Assembly will have \$3.75 billion, or 31.9 percent, more to spend or save than in the current FY 2020-21. This amount assumes current law obligations for FY 2021-22, including transfers and rebates and expenditures (Table 1, lines 8 through 12), as well as a 2.68 percent reserve requirement. The \$3.75 billion amount is a cumulative amount based on revenue expectations and the budget situation in both FY 2019-20 and FY 2020-21. Any changes in revenue expectations or

changes made to the budget for FY 2020-21 will carry forward into FY 2021-22. The \$3.75 billion amount holds FY 2020-21 appropriations constant and therefore does not reflect any caseload, inflationary, or other budgetary pressures.

Table 1
General Fund Overview
Dollars in Millions

Funds Available	FY 2019-20 Preliminary	FY 2020-21 Estimate	FY 2021-22 Estimate	FY 2022-23 Estimate
1 Beginning Reserve	\$1,262.6	\$1,826.9	\$2,559.3	*
2 General Fund Revenue	\$12,868.5	\$12,150.6	\$13,139.2	\$13,744.0
3 Transfers from Other Funds (Table 6)	\$248.0	\$324.6	\$9.4	\$8.4
4 Total Funds Available	\$14,379.1	\$14,302.1	\$15,707.9	*
5 Percent Change	2.9%	-0.5%	9.8%	*
Expenditures	Preliminary	Budgeted	Estimate	Estimate
6 General Fund Appropriations Subject to Limit	\$11,840.3	\$10,785.7	*	*
7 TABOR Refund Obligation Under Art. X, §20, (7)(d)	\$0.0	\$0.0	\$0.0	\$0.0
8 Rebates and Expenditures (Table 5)	\$145.7	\$298.5	\$306.8	\$314.6
9 Transfers to Other Funds (Table 6)	\$210.9	\$522.7	\$516.4	\$534.2
10 Transfers to the State Education Fund ¹	\$40.3	\$113.0	\$23.0	\$0.0
11 Transfers to Transportation Funds (Table 4)	\$300.0	\$0.0	\$0.0	\$50.0
12 Transfers to Capital Construction Funds (Table 4)	\$213.6	\$23.0	\$20.0	\$20.0
13 Total Expenditures	\$12,750.7	\$11,742.8	*	*
14 Percent Change	-0.8%	-7.9%	*	*
15 Accounting Adjustments ²	\$198.5	*	*	*
Reserve	Preliminary	Budgeted	Estimate	Estimate
16 Year-End General Fund Reserve	\$1,826.9	\$2,558.4	*	*
17 Year-End Reserve as a Percent of Appropriations	15.4%	23.7%	*	*
18 Statutorily Required Reserve ³	\$363.5	\$308.5	*	*
19 Amount in Excess or (Deficit) of Statutory Reserve	\$1,463.4	\$2,250.8	*	*
20 Excess Reserve as a Percent of Expenditures	11.5%	19.2%	*	*
Perspective on FY 2020-21 (Unbudgeted)			Estimate	Estimate
Scenario: Hold FY 2020-21 Appropriations Constant⁴				
21 Amount in Excess or (Deficit) of 2.86% Statutory Reserve			\$3,747.5	*
22 As a Percent of Prior-Year Expenditures			31.9%	*
Addendum	Preliminary	Estimate	Estimate	Estimate
27 Percent Change in General Fund Appropriations	5.2%	-8.9%	*	*
28 5% of Colorado Personal Income Appropriations Limit	\$15,602.3	\$16,759.8	\$17,609.2	\$18,542.5
29 Transfers to State Education Fund Per Amendment 23	\$646.7	\$706.6	\$698.7	\$736.0

Totals may not sum due to rounding. * Not estimated.

¹Includes transfers pursuant to SB 19-246 and HB 20-1420.

²Estimated adjustment based on the Office of the State Controller's Basic Financial Statements for FY 2019-20.

³The required reserve is calculated as a percent of operating appropriations, and is required to equal 3.07 percent in FY 2019-20, 2.86 percent in FY 2020-21 and FY 2021-22, and 7.25 percent each year thereafter.

⁴This scenario holds appropriations in FY 2021-22 equal to appropriations in FY 2020-21 (line 6) to determine the total amount of money available relative to FY 2020-21 expenditures, net of the obligations in lines 7 through 12.

Risks to the Forecast Remain Unusually High

The economic and health policy landscape continues to evolve, and as a result, the General Fund budget faces an uncertain outlook with both upside and downside risks to the forecast. The distribution of COVID-19 vaccines holds promise for the economic outlook and the possibility of additional federal fiscal stimulus poses an upside near-term risk to economic activity. The pace of the economic recovery in Colorado and nationally will heavily influence revenue streams, including income and sales tax revenue. These two sources of revenue have historically accounted for about 95 percent of General Fund revenue.

While General Fund revenue collections to date have been stronger than expected, this forecast has limited real data on which to base assumptions for how the COVID-19 recession and significant tax policy changes will influence taxpayer refunds and decisions when they file returns for 2020 and beyond. This forecast is based on actual General Fund collections data for the first five months of the fiscal year (July through November). On average, collections for these five months have historically accounted for about 38 percent of total General Fund collections in a fiscal year. The largest share of revenue is collected during the regular income tax filing season, which runs from January through April. With significant risks to the forecast and a large portion of collections still to come, revenue estimates in this forecast are subject to larger revisions in subsequent forecasts than during prior years.

Changes Between the May Forecast Update and December Forecast

The budget situation has changed considerably since the May 2020 forecast update. Specifically, changes in the economic outlook and major policy changes that have impacted both revenue and spending. Table 2 summarizes the changes across the forecasts between the May forecast update and this December forecast for both FY 2019-20 and the current FY 2020-21.

Changes to revenue expectations. Boosting revenue in FY 2019-20, economic activity and income tax collections for the 2019 tax year far exceeded May and June forecasts. These forecasts were prepared with limited data due to delayed income tax payment deadlines and COVID-19 related distortions to other revenue streams. On higher FY 2019-20 collections, income tax forecasts were improved to reflect growth from higher levels in September. For this December forecast, the development and distribution of an effective COVID-19 vaccine is expected to result in stronger economic activity throughout the forecast period, resulting in an additional upward adjustment.

Changes in General Fund obligations. In addition to updated economic expectations, law changes altered the General Fund budget situation. These changes include legislation enacted during the 2020 regular session to balance the budget relative to the May forecast update and legislation enacted during the 2020 special session, which increased appropriations and transfers from the General Fund. In addition to legislation signed into law, ballot measures approved by voters during the November election also impacted the budget situation. In particular, Proposition 116 reduced the income tax rate from 4.63 percent to 4.55 percent, resulting in a downward adjustment to revenue. In addition, Proposition EE increased cigarette, tobacco, and nicotine taxes, resulting in higher General Fund revenue and transfers.

Table 2
Changes Across 2020 Legislative Council Revenue Forecasts
Dollars in Millions

FY 2019-20

Components of Change	May Estimate	Changes Between Forecasts				December Estimate	Description of Changes
		June	Sept	Dec	Cumulative		
Funds Available	\$12,970.2	\$464.4	\$964.9	-\$20.4	\$1,409.0	\$14,379.1	Strong 2019 income tax collections.
Beginning Reserve	\$1,262.6	\$0.0	\$0.0	\$0.0	\$0.0	\$1,262.6	
General Fund Revenue	\$11,653.8	\$320.9	\$893.8	\$0.0	\$1,214.7	\$12,868.5	Higher than expected 2019 income tax collections. Delayed July filings accrued back into FY 2019-20.
Transfers from Other Funds	\$53.8	\$143.5	\$71.1	-\$20.4	\$194.2	\$248.0	Budget balancing transfers (see Table 6).
Expenditures & Transfers	\$12,989.7	-\$282.2	\$62.9	-\$19.7	-\$239.0	\$12,750.7	Reduced appropriations with budget balancing actions.
Operating Appropriations	\$12,086.2	-\$281.3	\$35.3	\$0.0	-\$246.0	\$11,840.3	Reflects budget balancing.
Rebates and Expenditures	\$141.4	\$0.8	\$3.5	\$0.0	\$4.3	\$145.7	Truing up to actual amounts.
State Education Fund Transfers	\$40.3	\$0.0	\$0.0	\$0.0	\$0.0	\$40.3	
Transportation Transfers	\$300.0	\$0.0	\$0.0	\$0.0	\$0.0	\$300.0	
Capital Construction Transfers	\$225.8	\$7.5	\$0.0	-\$19.7	-\$12.3	\$213.6	Truing up actual transfers.
Other Cash Fund Transfers	\$195.9	-\$9.1	\$24.0	\$0.0	\$14.9	\$210.9	Legislative actions (Table 6).
Required Reserve	\$876.3	-\$513.8	\$1.1	\$0.0	-\$512.8	\$363.5	Reduced from 7.25% to 3.07%.
Accounting Adjustment				\$198.5	\$198.5	\$198.5	Updated with Basic Financial Statements.
Surplus (Shortfall)	-\$895.8	\$1,260.4	\$900.9	\$197.9	\$2,359.2	\$1,463.4	Shortfall is more than offset by higher than expected revenue, and budget balancing actions including appropriations reductions and the reduced reserve requirement.

Source: Legislative Council Staff 2020 forecasts.

Table 2 (Cont.)
Changes Across 2020 Legislative Council Revenue Forecasts
Dollars in Millions

FY 2020-21

Components of Change	May Estimate	Changes Between Forecasts				December Estimate	Description of Changes
		June	Sept	Dec	Cumulative		
Funds Available	\$10,287.8	\$1,592.0	\$1,444.0	\$978.3	\$4,014.3	\$14,302.1	Higher revenue and beginning balance.
Beginning Reserve	-\$19.5	\$746.6	\$902.0	\$197.9	\$1,846.5	\$1,826.9	Higher FY 2019-20 year-end balance carries into FY 2020-21.
General Fund Revenue	\$10,306.6	\$526.1	\$542.1	\$775.7	\$1,843.9	\$12,150.6	Stronger than expected revenue to date, stronger economic expectations on the COVID vaccine.
Transfers from Other Funds	\$0.7	\$319.2	\$0.0	\$4.7	\$323.9	\$324.6	See Table 6. Budget balancing legislation, truing up actuals.
Expenditures & Transfers	\$12,696.9	-\$1,394.4	\$43.5	\$396.8	-\$954.1	\$11,742.9	Reduced appropriations with budget balancing, increased transfers during special session.
Operating Appropriations	\$12,086.2	-\$1,437.0	\$9.2	\$127.2	-\$1,300.6	\$10,785.7	Budget balancing legislation (June); Special session legislation and election outcomes (December).
Rebates and Expenditures	\$317.9	-\$2.8	-\$10.7	-\$5.9	-\$19.4	\$298.5	Slight changes based on year-to-date expenditures.
State Education Fund Transfers	\$0.0	\$113.0	\$0.0	\$0.0	\$113.0	\$113.0	HB 20-1420.
Transportation Transfers	\$50.0	-\$50.0	\$0.0	\$0.0	-\$50.0	\$0.0	HB 20-1376.
Capital Construction Transfers	\$20.0	\$3.0	\$0.0	\$0.0	\$3.0	\$23.0	See Table 4.
Other Cash Fund Transfers	\$222.8	-\$20.6	\$45.0	\$275.4	\$299.9	\$522.7	Budget balancing, special session bills, November election outcomes (see Table 6).
Required Reserve*	\$876.3	-\$571.7	\$0.3	\$3.6	-\$567.8	\$308.5	Reduced from 7.25% to 2.86%; changes consistent with appropriations.
Surplus (Shortfall)	-\$3,285.4	\$3,558.1	\$1,400.2	\$577.9	\$5,536.2	\$2,250.8	Shortfall is more than offset by increased beginning balance and revenue expectations, reduced appropriations.

Source: Legislative Council Staff 2020 forecasts.

*Surplus (shortfall) is shown relative to the required reserve. Since a budget had not yet been set, May FY 2020-21 appropriations and reserve requirement estimates hold prior year appropriations constant.

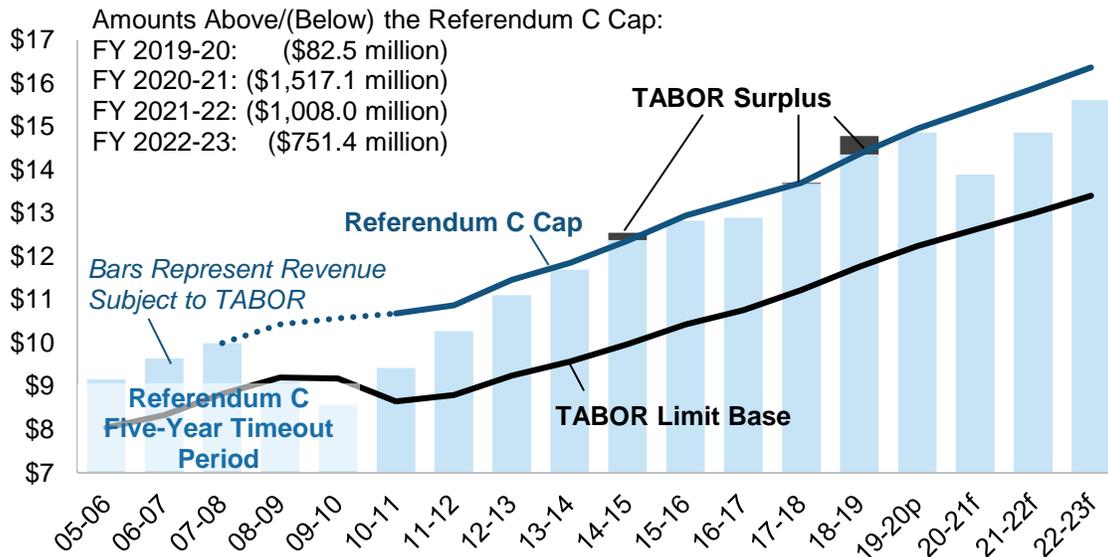
TABOR Outlook

The state TABOR outlook is presented in Table 3 and illustrated in Figure 1, which also provides a history of the TABOR limit base and the Referendum C cap.

FY 2018-19 refund. State revenue subject to TABOR exceeded the Referendum C cap by \$428.3 million in FY 2018-19, obligating the state to issue TABOR refunds during FY 2019-20. TABOR refunds were made to taxpayers first via **property tax exemptions** administered at the county level. The remaining refund obligation triggered a **temporary income tax rate reduction**, to 4.50 percent, for 2019 income taxes on returns filed in 2020. The rate reduction refunds FY 2018-19 revenue that was restricted in the General Fund to pay TABOR refunds, and does not reduce the amount of income tax revenue credited to the General Fund.

FY 2019-20. On September 1, 2020, the State Controller certified that FY 2019-20 state revenue subject to TABOR fell short of the Referendum C cap by \$82.5 million. Because state revenue did not exceed the Referendum C cap, there is no obligation to issue TABOR refunds during the current FY 2020-21. The state income tax rate is 4.55 percent for tax year 2020 and future years under Proposition 116.

Figure 1
TABOR Revenue, TABOR Limit Base, and the Referendum C Cap
Dollars in Billions



Source: Office of the State Controller and Legislative Council Staff. p = Preliminary. f = Forecast.

Forecast for FY 2020-21 through FY 2022-23. State revenue subject to TABOR is expected to fall short of the Referendum C cap in all three years of the current forecast period, and the state will not incur an obligation for TABOR refunds. As a result, no refunds to taxpayers are expected to be made via property tax exemptions or refunds using the income tax form through tax year 2023. The state obligation to reimburse counties for homestead exemptions for FY 2020-21 through FY 2023-24 will be paid from General Fund revenue in those years, rather than restricted prior year TABOR surpluses.

Table 3
TABOR Limit and Retained Revenue
Dollars in Millions

	Preliminary FY 2019-20	Estimate FY 2020-21	Estimate FY 2021-22	Estimate FY 2022-23	
TABOR Revenue					
1	General Fund ¹	\$12,629.5	\$11,757.6	\$12,616.4	\$13,200.3
2	Cash Funds ¹	\$2,236.8	\$2,137.5	\$2,250.2	\$2,415.0
3	Total TABOR Revenue	\$14,866.3	\$13,895.1	\$14,866.6	\$15,615.3
Revenue Limit					
4	Allowable TABOR Growth Rate	4.1%	3.1%	3.0%	3.1%
5	Inflation (<i>from Prior Calendar Year</i>)	2.7%	1.9%	2.0%	2.2%
6	Population Growth (<i>from Prior Calendar Year</i>)	1.4%	1.2%	1.0%	0.9%
7	TABOR Limit Base	\$12,241.5	\$12,621.0	\$12,999.6	\$13,402.6
8	Voter Approved Revenue Change (Referendum C)	\$2,624.8	\$1,274.2	\$1,867.0	\$2,212.7
9	Total TABOR Limit / Referendum C Cap	\$14,948.8	\$15,412.3	\$15,874.6	\$16,366.7
10	TABOR Revenue Above (Below) Referendum C Cap	(\$82.5)	(\$1,517.1)	(\$1,008.0)	(\$751.4)
Retained/Refunded Revenue					
11	Revenue Retained under Referendum C ²	\$2,624.8	\$1,274.2	\$1,867.0	\$2,212.7
12	Fiscal Year Spending (<i>revenue available to be spent or saved</i>)	\$14,866.3	\$13,895.1	\$14,866.6	\$15,615.3
13	Revenue Refunded to Taxpayers	\$0.0	\$0.0	\$0.0	\$0.0
14	TABOR Reserve Requirement	\$446.0	\$416.9	\$446.0	\$468.5

Totals may not sum due to rounding.

¹Revenue differs from the amount in the General Fund and cash fund revenue summaries because of accounting adjustments across TABOR boundaries, including a \$30 million transfer from the Unclaimed Property Trust Fund to the Housing Development Grant Fund anticipated for FY 2022-23.

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

General Fund Transfers to Transportation and Capital Construction

Statutory transfers from the General Fund to transportation and capital construction funds are shown in Table 4. In the General Fund overview shown in Table 1, these transfers are reflected on lines 11 and 12. Other non-infrastructure-related transfers to and from the General Fund are summarized in Table 6, and shown on lines 3 and 9 of Table 1.

General Fund contributions to transportation. Senate Bill 17-267, which authorized \$1.88 billion in certificates of participation (COPs) for transportation projects, requires General Fund appropriations for COP-related lease payments beginning in FY 2018-19. Under current law, these General Fund appropriations are expected to total \$100 million annually by FY 2021-22. These appropriations are included in line 6 of Table 1, and not included in Table 4.

Senate Bill 18-001 created one-time General Fund transfers for transportation of \$495 million in FY 2018-19 and \$150 million in FY 2019-20. These amounts are apportioned to the State Highway Fund, the Multimodal Transportation Options Fund, and county and municipal governments. Senate Bill 18-001 authorizes 20 years of additional transfers to the State Highway Fund set at \$50 million per year beginning in FY 2019-20. House Bill 20-1376 repealed the \$50 million transfers in each of FY 2019-20 and FY 2020-21 as a part of the budget-balancing package. Senate Bill 19-262 authorized a \$100 million transfer to the Highway Users Tax Fund in FY 2019-20 only.

Table 4
Infrastructure Transfers to and from the General Fund
Dollars in Millions

Transportation Funds	2019-20	2020-21	2021-22	2022-23
SB 18-001 & HB 20-1376	\$200.0			\$50.0
SB 19-262	\$100.0			
Total	\$300.0	\$0.0	\$0.0	\$50.0
Capital Construction Funds				
	2019-20	2020-21	2021-22	2022-23
HB 15-1344*	\$20.0	\$20.0	\$20.0	\$20.0
SB 17-262	\$60.0			
HB 19-1250	\$0.2			
SB 19-172	\$0.1			
SB 19-214	\$145.5			
HB 20-1378	-\$19.7	\$3.0		
HB 20-1261	\$7.5			
Total	\$213.6	\$23.0	\$20.0	\$20.0

*Transfers are contingent upon requests made by the Capital Development Committee.

Fiscal Policies Dependent on Revenue Conditions

Certain fiscal policies are dependent upon forecast revenue conditions. These policies are summarized below.

Partial refundability of the conservation easement tax credit is available for tax year 2019, but is not expected to be available for tax years 2020 through 2023. The conservation easement income tax credit is available as a nonrefundable credit in most years. In tax years when the state refunds a TABOR surplus, taxpayers may claim an amount up to \$50,000, less their income tax liability, as a refundable credit. Because a TABOR surplus was collected in FY 2018-19, the credit was partially refundable for tax year 2019. The state did not collect a TABOR surplus in FY 2019-20, and this forecast update does not expect a TABOR surplus in any of FY 2020-21, FY 2021-22, or FY 2022-23. Therefore, partial refundability of the credit is not expected to be available for tax years 2020, 2021, 2022, or 2023.

Contingent transfers for affordable housing. House Bill 19-1322 created conditional transfers from the Unclaimed Property Trust Fund (UPTF) to the Housing Development Grant Fund for affordable housing projects for three fiscal years. House Bill 20-1370 delayed the start of these contingent transfers until FY 2022-23. The transfers are contingent based on the balance in the UPTF as of June 1 and the Legislative Council Staff June 2023 and subsequent June forecasts. For the fiscal year in which a relevant forecast is published, if revenue subject to TABOR is projected to fall below a “cutoff” amount equal to the projected Referendum C cap minus \$30 million dollars, a transfer will be made. The transfer is equal to the greater of \$30 million, or the UPTF fund balance. Based on this forecast, a transfer is expected in FY 2022-23. Because the June 1, 2023, UPTF fund balance is unknown, this forecast assumes a \$30 million transfer in FY 2022-23.

Table 5
General Fund Rebates and Expenditures
Dollars in Millions

Category	Preliminary FY 2019-20	Percent Change	Estimate FY 2020-21	Percent Change	Estimate FY 2021-22	Percent Change	Estimate FY 2022-23	Percent Change
Senior and Veterans Property Tax Exemptions	\$151.2	3.6%	\$155.0	2.6%	\$160.8	3.7%	\$168.6	4.9%
TABOR Refund Mechanism ¹	-\$151.2		\$0.0		\$0.0		\$0.0	
Cigarette Rebate	\$8.9	-5.0%	\$9.1	1.9%	\$8.3	-8.6%	\$8.0	-3.1%
Old-Age Pension Fund	\$84.8	-2.3%	\$79.2	-6.7%	\$76.3	-3.6%	\$74.3	-2.6%
Aged Property Tax and Heating Credit	\$5.8	5.3%	\$6.2	6.5%	\$6.3	1.9%	\$6.1	-3.9%
Older Coloradans Fund	\$10.0	0.0%	\$8.0	-20.0%	\$10.0	25.0%	\$10.0	0.0%
Interest Payments for School Loans	\$6.5	-11.9%	\$5.7	-12.6%	\$6.1	7.0%	\$6.4	4.9%
Firefighter Pensions	\$4.3	1.5%	\$4.4	2.6%	\$4.5	2.6%	\$4.6	2.6%
Amendment 35 Distributions	\$0.8	-1.7%	\$0.8	0.3%	\$0.7	-5.9%	\$0.7	-1.3%
Marijuana Sales Tax Transfer to Local Governments	\$24.5	27.4%	\$30.1	22.7%	\$33.7	12.0%	\$35.9	6.3%
Total Rebates and Expenditures	\$145.7	-41.7%	\$298.5	104.9%	\$306.8	2.8%	\$314.6	2.6%

Totals may not sum due to rounding.

¹*Pursuant to SB 17-267, local government reimbursements for these property tax exemptions are the first TABOR refund mechanism used to meet the prior year's refund obligation.*

Table 6
Cash Fund Transfers
Dollars in Millions

Transfers to the General Fund		2019-20	2020-21	2021-22	2022-23
HB 05-1262	Amendment 35 Tobacco Tax	\$0.8	\$0.8	\$0.7	\$0.7
SB 13-133 & HB 20-1400	Limited Gaming Fund	\$25.5	\$30.1	\$2.3	\$3.6
SB 19-208	State Employee Reserve Fund	\$23.0			
SB 19-261	Unclaimed Property Trust Fund	\$30.0			
HB 20-1361	Reduce The Adult Dental Benefit		\$1.1	\$2.3	
HB 20-1380	Move Tobacco Litigation Settlement Moneys		\$40.0		
HB 20-1381	Cash Fund Transfers	\$55.0	\$88.5		
HB 20-1382	Repeal Cash Funds with General Fund Reversions	\$12.9			
HB 20-1387	Transfers From Unexpended County Reimbursements		\$13.0		
HB 20-1395	End WORK Act Grants Transfer Money To General Fund		\$0.2		
HB 20-1401	Marijuana Tax Cash Fund Spending & Transfer		\$137.0		
HB 20-1406	Cash Fund Transfers To The General Fund	\$30.9	\$11.9		
HB 20-1427	2020 Tax Holding Fund		\$2.0	\$4.1	\$4.1
D 2020 070	Federal Coronavirus Relief Fund	\$70.0			
Total Transfers to the General Fund		\$248.0	\$324.6	\$9.4	\$8.4
Transfers from the General Fund		2019-20	2020-21	2021-22	2022-23
SB 11-047	Bioscience Income Tax Transfer to OEDIT	\$20.6	\$19.0	\$20.3	\$21.3
SB 14-215	Marijuana Tax Cash Fund	\$161.4	\$194.7	\$218.1	\$231.9
HB 14-1016 ¹	Procurement Technical Assistance Cash Fund	\$0.2			
SB 15-244 & SB 17-267	State Public School Fund	\$28.1	\$34.1	\$38.2	\$40.6
HB 16-1161 ²	Older Coloradans Fund & Veterans Grant Program Fund (<i>conditional</i>)	\$0.0			
HB 18-1323	Pay For Success Contracts Pilot Program Funding	\$0.5	\$0.5	\$0.4	
HB 19-1168 & SB 20-215	Health Insurance Affordability Cash Fund	\$0.0	\$0.0	\$0.0	\$0.0
HB 19-1245	Housing Development Grant Fund	\$0.0	\$10.9	\$52.6	\$54.2
HB 20-1116	Procurement Technical Assistance Program Extension		\$0.2	\$0.2	\$0.2
HB 20-1412	COVID-19 Utility Bill Payment-related Assistance		\$4.8		
SB 20-003	State Parks Improvement Appropriation		\$1.0		
HB 20-1427	2020 Tax Holding Fund		\$91.8	\$185.6	\$185.2
HB 20-1427	Preschool Programs Cash Fund		\$0.6	\$1.0	\$0.7
SB 20B-002	Housing & Direct COVID Emergency Assistance		\$60.0		
SB 20B-003	Energy Utility Bill Payment Assistance		\$5.0		
SB 20B-004	Transfers for COVID Emergency		\$100.0		
Total Transfers from the General Fund		\$210.9	\$522.7	\$516.4	\$534.2
Net General Fund Impact		\$37.2	(\$198.1)	(\$507.1)	(\$525.7)

¹If unexpended money appropriated for certain programs is available, additional transfers may be made under HB20-1100, HB20-1388, and HB20-1389.

¹The transfer is contingent upon the receipt of at least \$200,000 in gifts, grants, and donations by the relevant contractor.

²HB 16-1161 requires transfers to the Older Coloradans Fund (95%) and the Veterans Assistance Grant Program Cash Fund (5%) of any excess General Fund moneys set aside for reimbursements to local governments for the Senior Homestead and Disabled Veteran property tax exemptions. These transfers are repealed under HB20-1387.

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School Finance Outlook

This section presents information on the outlook for school finance from a state budgetary perspective, both in the current (FY 2020-21) and subsequent (FY 2021-22) fiscal years. This outlook incorporates information from the K-12 enrollment and assessed value projections, located on page 41 and page 49, respectively, of the forecast document. Enrollment changes are a major determinant of overall required formula funding (total program), since funding is allocated on a per pupil basis. Similarly, assessed values on real property determine a school district's property tax base, which, along with a school district's total program mill levy, determine a school district's available property tax revenue. This revenue, supplemented by specific ownership tax revenue from vehicle registrations, constitutes the local share of school district funding. Subject to available budgetary resources, the difference between total program funding requirements and the local share is the amount the state must cover through state equalization payments, or state aid.

Relative to last year's appropriation, the **FY 2020-21** requirement for state aid has decreased by about \$83 million. This is because:

- total program requirements have decreased by \$121 million; and
- revenue available for the local share decreased by \$38 million.

For **FY 2021-22**, the state aid requirement is expected to increase by \$107 million on a year-over-year basis because:

- total program requirements will increase by \$138 million; and
- revenue available for the local share will increase by \$31 million.

State funding for total program will depend on budget decisions made by the General Assembly, including the amount of the budget stabilization factor, and the funding allocation between the General Fund and State Education Fund. For example, the available contribution for school finance from the State Education Fund for FY 2021-22 will need to increase by \$522 million and the General Fund requirement will increase by \$139 million on a year-over-year basis under the following scenario:

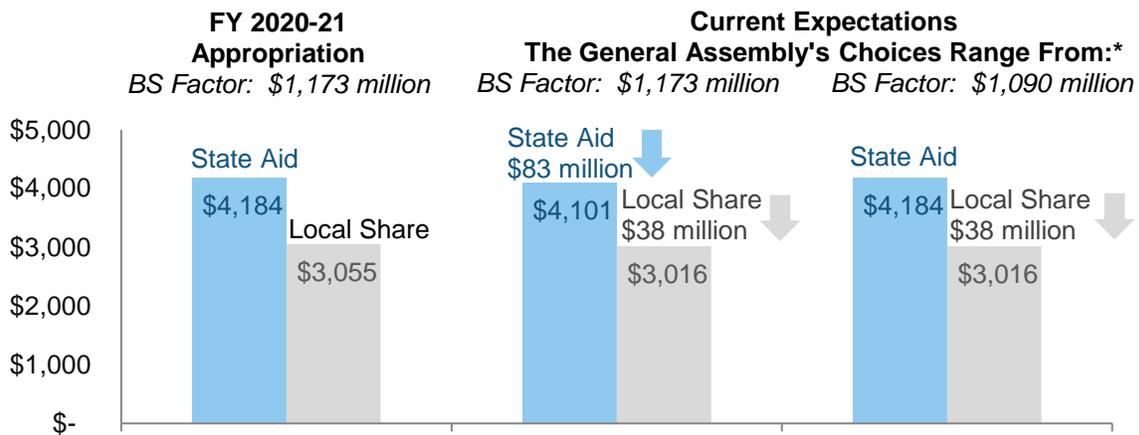
- a \$140 million ending balance for the State Education Fund in FY 2021-22; and
- the budget stabilization factor is returned to the FY 2019-20 level of \$572.4 million as per the Governor's budget request.

Funding Status for the Current Fiscal Year (FY 2020-21)

Lower than expected enrollment and decreased expectations for property tax revenue collections are expected to increase budgetary flexibility by \$83 million in the current fiscal year relative to the initial appropriation enacted in 2020. Preliminary funded pupil counts and funded at-risk pupil counts are lower than estimates last year. Specifically, the funded pupil count decreased by just over 5,000 students, while funded at-risk totals decreased by 53,000 students. This decreases the overall total program cost by about \$121 million relative to the initial appropriation. At the same time, the preliminary estimate for the local share is \$38 million, or 1.3 percent, lower than expected during the

2020 legislative session. This includes a decrease of \$35 million in property taxes and a decrease of just over \$3 million in specific ownership taxes. As shown in Figure 2 below, the combination of these changes means that the state’s obligation for school finance is nearly \$83 million lower than the appropriation for state aid made in the 2020 legislative session. The General Assembly could choose to decrease either the General Fund or the State Education Fund appropriation by \$83 million, decrease the budget stabilization factor by \$83 million, or anything in between, to address this additional obligation.

Figure 2
Change in Expectations for School Finance Funding, FY 2020-21
Dollars in Millions



At-Risk Population during the COVID-19 Pandemic

The 2020 legislative appropriation for school finance was made in the early months of the COVID-19 pandemic, under conditions of heightened uncertainty and limited data availability. In House Bill 20-1418, the estimated funded pupil count and local share were based on the December 2019 enrollment and assessed values forecast, which occurred before the onset of the pandemic. In addition, during the 2020 legislative session, the estimate for at risk pupils was increased by about 51,000 pupils in an attempt to account for the economic hardship caused by the pandemic.

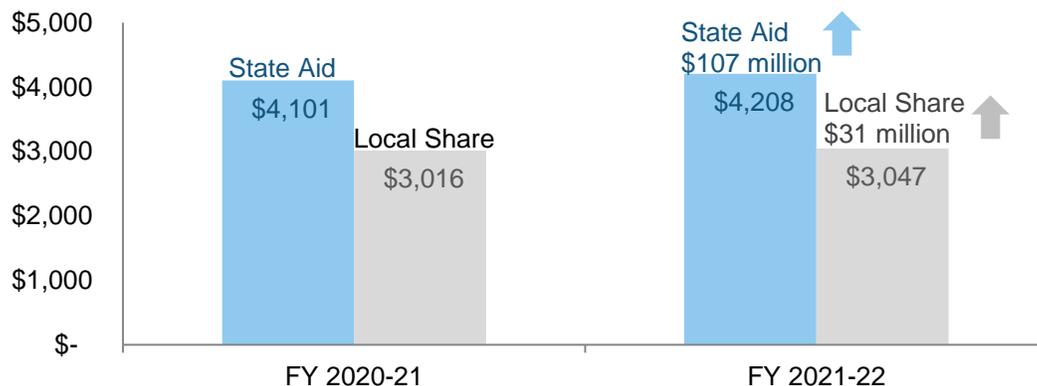
During the 2020-21 academic year, most Colorado school districts have experienced enrollment declines, especially among pupils in kindergarten and the early grades of elementary school. Declines reported by some Front Range districts have been as high as 6 percent. Additionally, these declines have also impacted the number of families that have submitted the required paperwork to be eligible for the federal free lunch program, totaling just over 300,000. Because qualification for free lunch is the primary determinant of at risk funding, the reported number of at risk students may not accurately reflect the true number of eligible students.

Funding Outlook for Next Fiscal Year (FY 2021-22)

Total program funding requirements are expected to increase by \$138 million between FY 2020-21 and FY 2021-22. The estimated funded pupil count is expected to decrease by about 4,100 pupils on a year-over-year basis. Inflation expectations for 2020 have increased modestly since the September forecast from 1.7 percent to 2.0 percent. As shown in Figure 3, the combination of these two factors increases the overall required cost of total program by about \$138 million on a year-over-year basis.

This total includes an increase of \$107 million in required state aid, as assessed values are projected to grow by 0.5 percent in FY 2021-22 on a year-over-year basis, leading to an increase of \$31 million in the local share.

Figure 3
Change in Expectations for School Finance Funding, FY 2020-21 to FY 2021-22
Dollars in Millions



Assuming an ending balance of \$140 million in FY 2021-22 and a \$100 million ending balance thereafter in the State Education Fund and the budget stabilization factor is returned to its level from FY 2019-20 as the Governor has requested, the available contribution from that fund for FY 2021-22 is projected to increase by \$522 million on a year-over-year basis. This implies that the corresponding General Fund requirement for school finance will increase by \$139 million relative to FY 2020-21. It should be noted, however, this type of expenditure from the State Education Fund is not sustainable. Under this scenario, the required contribution from the General Fund in FY 2022-23 would need to increase by \$512 million, or 13.3 percent, in order to hold the budget stabilization factor at this new, lower level.

Summary of Updated Information Incorporated into the School Finance Model

Each fall, school districts collect enrollment information from all 178 school districts and the Charter School Institute (CSI). Districts report preliminary totals to the Colorado Department of Education (CDE), which in turn provides this information to Legislative Council Staff to assist in the development of its K-12 enrollment projections. Preliminary pupil counts are also incorporated into the Legislative Council Staff school finance model. All district-level pupil counts are provided on a full-time equivalent (FTE) basis. Enrollment components include the overall pupil count for grades 1-12 as well as total kindergarten, online, ASCENT, and CSI students. This information is used to determine a school district’s funded pupil count. CDE also provides information on the number of funded at-risk students and the K-12 membership, which is used to determine a school district’s funding for at-risk pupils, which for many districts can be a significant component of district total program. When preliminary counts are finalized in January, the school finance model will be updated accordingly.

In addition, CDE also obtains district-level information on assessed values and specific ownership tax revenue. This information is combined with certified mill levies for each district, to obtain estimates for the amount of funding school districts will receive from local revenue sources. Updated enrollment and local share estimates thus combine to provide the best estimate for the state’s

obligation for state equalization payments for both the current and subsequent fiscal years. Final true-up for the FY 2020-21 appropriation for state aid will occur through passage of a mid-year supplemental bill for CDE. The appropriation for state aid in FY 2021-22 will be made through passage of the 2021 Long Bill and the 2021 School Finance Act.

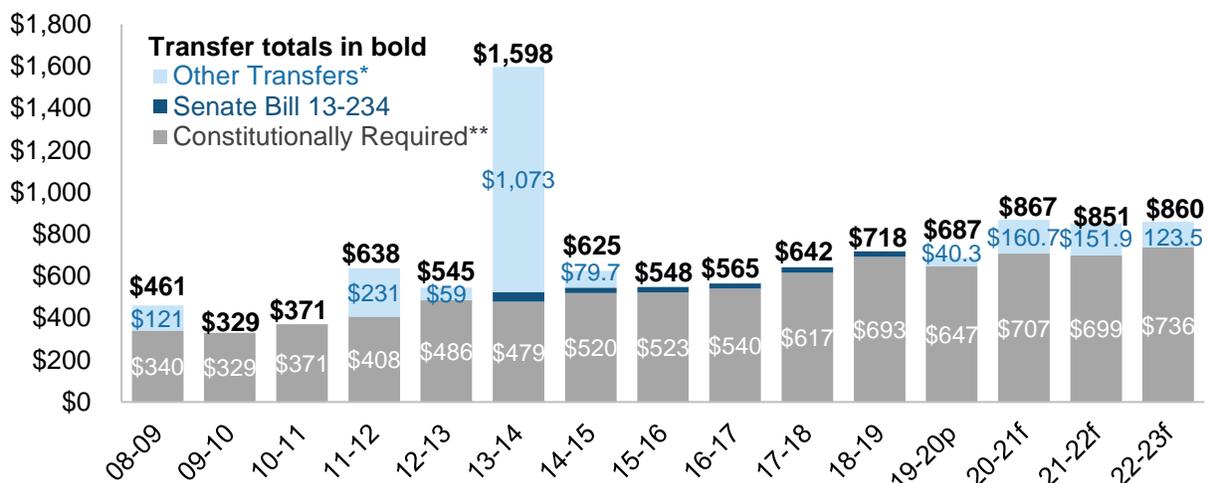
State Education Fund Transfers

The Colorado Constitution requires the State Education Fund to receive one-third of 1 percent of taxable income. In FY 2020-21, the State Education Fund is expected to receive \$706.6 million as a result of this requirement, with higher amounts in the following year resulting from growth in taxable income among Colorado taxpayers. Figure 4 shows revenue to the State Education Fund.

In addition, the General Assembly has at different times authorized the transfer of additional moneys from the General Fund to the State Education Fund (see Table 1, line 10). Money in the State Education Fund is required to be used to fund kindergarten through twelfth grade public education. The 2020 school finance act, House Bill 20-1418, includes a one-time \$6.4 million transfer to the State Education Fund from multiple cash funds in FY 2020-21, after which only constitutionally required transfers are scheduled under current law. In addition, House Bill 20-1420 includes a transfer of \$113 million in FY 2020-21 and \$23 million in FY 2021-22 to the State Education Fund.

Finally, Proposition EE, which was approved by voters in the November 2020 election, also transfers new revenue from increased cigarette, tobacco and nicotine taxes to the State Education Fund for three fiscal years. These amounts are currently estimated at \$47.7 million in FY 2020-21, \$128.9 million in FY 2021-22, and \$123.5 million in FY 2022-23. These amounts represent a portion of the transfers from the General Fund to the 2020 Tax Holding Fund shown in Table 6 under House Bill 20-1427.

Figure 4
Revenue to the State Education Fund
Dollars in Millions



Source: Colorado State Controller's Office and Legislative Council Staff forecast. p = Preliminary. f = forecast.

*Includes transfers under SB 09-260 for FY 2008-09, SB 11-183 and SB 11-156 for FY 2011-12, HB 12-1338 for FY 2012-13 and FY 2013-14, HB 14-1342 for FY 2014-15, SB 19-246 for FY 2019-20, and HB 20-1420 for FY 2020-21 and FY 2021-22, and HB 20-1427 for FY 2020-21 through FY 2022-23.

**One-third of 1 percent of federal taxable income is required to be dedicated to the State Education Fund under Article IX, Section 17 of the Colorado Constitution.

General Fund Revenue

This section presents the Legislative Council Staff outlook for General Fund revenue, the state's main source of funding for operating appropriations. Table 8 on page 29 summarizes preliminary, unaudited General Fund revenue collections for FY 2019-20 and projections for FY 2020-21 through FY 2022-23.

FY 2019-20. General Fund revenue collections increased 2.4 percent and totaled \$12.9 billion. Strong individual income tax revenue collections for the 2019 tax year, coupled with persistent growth in sales tax revenue, were more than enough to offset significant weakening in corporate income tax payments and use tax receipts.

Revenue for FY 2019-20 includes accrual adjustments made at the end of the fiscal year. Accrual adjustments are made every year so that tax revenue is accounted in the year when the underlying economic activity being taxed actually occurred. For FY 2019-20, accrual adjustments were especially significant because final income tax payment deadlines for the 2019 tax year and some estimated payment due dates for the 2020 tax year were delayed until July 2020, and therefore collected in FY 2020-21. Thus, revenue collections for FY 2019-20 were boosted by more than usual due to the annual accrual adjustment that pulled these collections back into FY 2019-20.

FY 2020-21. Revenue is expected to fall 5.6 percent and total \$12.2 billion in FY 2020-21. The decrease reflects the impacts of the recession on individual and corporate income tax revenue, which are each expected to decrease, and sales tax revenue, which is expected to grow only slightly.

While this forecast still expects a year-over-year revenue decrease of over \$700 million, revenue expectations have been revised upward substantially – by nearly \$800 million – from expectations published in September. Revisions to the forecast reflect continued strength in collections to date and more optimism for an economic recovery in earnest following distribution of an effective COVID-19 vaccine. However, expectations for FY 2020-21 continue to incorporate more uncertainty than usual, as a potential double-dip recession or faster-than-expected recovery pose a wide range of possible revenue outcomes.

Revisions to the FY 2020-21 forecast now also incorporate ballot measures that were approved at the November 2020 General Election.

FY 2021-22. Revenue is expected to rebound, increasing 8.1 percent to total \$13.1 billion. The forecast anticipates growth from low levels as business and consumer activity both recover after the recession. Revenue collections for FY 2021-22 are now expected to modestly exceed nominal pre-pandemic levels, though revenue will continue to fall short of pre-pandemic collections on a per-capita, inflation-adjusted basis.

FY 2022-23. Revenue growth is expected to moderate considerably, particularly for sales taxes. The General Fund will add 4.6 percent and total \$13.7 billion. Revenue will remain below pre-pandemic levels on a per capita, inflation-adjusted basis.

Risks to the forecast. The revenue outlook has firmed relative to forecasts published earlier this year. In particular, approval and initial distribution of COVID-19 vaccines has begun to illuminate the timeline for potential normalization. Economic expectations have been revised upward accordingly, and some downside risk has dissipated.

Nevertheless, risks to the forecast remain high by any historical standard. The economy is still to be tested as it is weaned off of the extraordinary government intervention that buoyed activity earlier in the year. Many relatively high-income households have been insulated from the brunt of the pandemic, as white collar professions have transitioned to work from home rather than furloughs and closures. However, the impacts of more “normal” recessions on employment and wages historically have taken a year or two to manifest. Any forthcoming job losses could spark a double-dip recession, posing downside risk to the largest General Fund revenue streams.

Additionally, this forecast has limited real data on which to base assumptions for how significant changes to the federal tax code will influence taxpayer decisions when they file returns for 2020 and beyond. For example, under changes to federal law and state administrative rule, taxpayers who carry back certain business loss deductions on their federal returns may not claim those deductions on their state returns, which could result in a faster revenue recovery than observed following prior recessions. Some of these filing decisions will be apparent by the time of the March 2021 forecast, but most will not be visible until the June 2021 forecast. Similarly, any future shifts in the deadlines for filing 2020 taxes could cloud the revenue outlook significantly.

Legislation. This forecast includes adjustments for 2020 legislation from the regular and special session, as shown in Table 7.

Table 7
2020 Legislative Adjustments to the General Fund Revenue Forecast
Dollars in Millions

Bill Number and Short Title	2020-21	2021-22
HB 20-1001 Nicotine Product Regulation	\$0.1	\$0.1
HB 20-1003 Rural Jump-Start Zone Act Modifications	-\$0.2	-\$0.8
HB 20-1020 Long-Term Lodging Sales Tax Exemption	\$3.7	\$7.4
HB 20-1024 Net Operating Loss Deduction Modifications ¹		
HB 20-1048 Race Trait Hairstyle Anti-Discrimination Protections ²		
HB 20-1109 Tax Credit Employer Contributions to Employee 529s		-\$0.04
HB 20-1143 Environmental Justice and Projects ²		
HB 20-1385 Use of Increased Medicaid Match	\$1.3	
HB 20-1420 Adjust Tax Expenditures for State Education Fund ³	\$94.1	\$32.0
SB 20-200 Implementation of Colorado Secure Savings Plan ⁴		
HB 20B-1004 Retain Sales Tax for COVID-19-Related Assistance	-\$39.3 to -\$52.8	
HB 20B-1006 Insurance Premium Tax Payments & Credits ⁵		
Net General Fund Revenue Impact	\$46.2 to \$59.7	\$38.7

¹Increases state revenue beginning in FY 2035-36.

²Assessed as a minimal revenue increase.

³This bill increases revenue in part by reversing revenue decreases anticipated to result from income tax deductions in the federal CARES Act. The amounts presented here include the reversal of these decreases, which eliminated the negative adjustments to revenue that had been included in the May 2020 forecast update.

⁴Assessed as an indeterminate revenue decrease.

⁵May impact the timing but not the amount of collections across fiscal years.

Ballot measures. Based on the outcome of the November 2020 election, this forecast includes adjustments for two ballot measures:

- Proposition 116, which reduced the state income tax rate from 4.63 percent to 4.55 percent for 2020 and all future tax years. Proposition 116 reduced projections for individual and corporate income tax revenue by 1.73 percent, but its impacts were more than offset by improved expectations for the economy.
- Proposition EE, which will increase cigarette and tobacco taxes and create a nicotine products tax effective January 1, 2021. Proposition EE tobacco tax revenue is credited to the General Fund and transferred in whole to a cash fund. The measure's impacts are described further on page 27.

Expiring tax expenditures. This forecast estimates state revenue under current state and federal law. Under current state law, certain tax expenditures that were available in 2019 expire within the forecast period. Where applicable, the forecast includes upward adjustments to revenue projections to account for the expiration of these tax expenditures.

Individual income tax. Individual income tax revenue is the largest source of General Fund revenue; it accounted for just over 62 percent of FY 2019-20 receipts, net of the SEF diversion. Individual income tax revenue is expected to decrease sharply, falling 7.6 percent in FY 2020-21, before rebounding to grow 6.4 percent in FY 2021-22. Revenue is expected to remain below the FY 2019-20 peak level through FY 2021-22. Revenue is now expected to exceed the FY 2019-20 peak level in FY 2022-23, but will remain below the pre-pandemic peak on a per capita, inflation-adjusted basis. Expectations published here incorporate an adjustment for the passage of Proposition 116, which reduced the state income tax rate from 4.63 percent to 4.55 percent and is expected to decrease income tax revenue by roughly 1.73 percent for all future years.

FY 2019-20. Individual income tax revenue grew 4.8 percent to total \$8.6 billion, its highest level ever. Taxes collected on income earned during 2019 more than offset declines in estimated tax payments for the first two quarters of 2020, when many of the state's industries endured a sudden stop in activity.

FY 2020-21. Individual income tax revenue is expected to fall 7.6 percent to total \$8.0 billion, consistent with expectations for declining wage, business, and investment income during the fiscal year. This amount is net of the accrual adjustments discussed above.

This forecast makes a significant upward adjustment of about \$650 million for the current fiscal year. Revenue outpaced expectations over the three months that have elapsed since publication of the September forecast. Notably, income tax withheld from wages and other payments, the largest component of individual income tax revenue, increased 12.2 percent between July and November 2020 compared with the same period in 2019. This forecast assumes that roughly half of the increase is attributable to over-withholding of income tax payments, which is expected to be offset by increased income tax refunds in the spring. However, the remainder of the increase is thought to represent real economic activity and a boost from unemployment insurance benefits.

It is counterintuitive that tax withheld from wage income would increase significantly during and following a deep economic recession marked by swelling unemployment and falling wage income. However, some compelling explanations exist. The pandemic recession disproportionately affected lower-income employees in service sectors, for whom taxable income is a smaller percentage of wages. Some of these workers became unemployed and received taxable unemployment benefits, which offset lost withholding from their paychecks. Meanwhile, workers in many high-earning professions have been relatively unaffected to this point.

Beyond withholding, other components of individual income tax revenue have exhibited more strength than expected. Net final payments by extension filers for the 2019 tax year arrived in October 2020 and roughly doubled net final payments by extension filers for the 2018 tax year in October 2019. Estimated tax payments, mostly made by wealthy taxpayers who earn significant non-wage income, fell by 10.8 percent, or roughly \$175 million, through November compared with the first 11 months of tax year 2019. While the decline represents a significant loss, it is less than had been expected in earlier forecasts.

While this forecast includes five months of actual data for FY 2020-21, it still contains significant uncertainty for the current fiscal year. All risks to the economic outlook are also risks to the income tax forecast, as income tax collections are highly pro-cyclical and tend to fluctuate in the same direction as, but more widely than, economic output. Income tax refunds are expected to be sizable given the 2020 income tax rate reduction under Proposition 116, changes to the 2020 state withholding tables that have resulted in over-withholding for many taxpayers, and the historical trends of elevated refunds following economic downturns. That said, refunds could exceed current expectations, posing a downside risk to the forecast. More information on these factors will become available once final 2020 income tax returns, which include tax refund claims, are processed between January and April 2021.

FY 2021-22. Individual income tax revenue is projected to rebound from recessionary lows, rising 6.4 percent to total \$8.5 billion. Pandemic constraints on economic activity are expected to be lifted during mid-2021, though lasting economic damage in service sectors is expected to keep tax collections below pre-recession levels. The forecast for FY 2021-22 revenue contains the same risks as the FY 2020-21 projection, as a surprise in current fiscal year collections would inform expectations for next year's revenue outlook. Revenue expectations were increased by just over \$400 million relative to the September 2020 forecast.

FY 2022-23. Revenue is expected to grow 5.2 percent to reach \$8.9 billion. While nominal revenue is forecast to surpass its prerecession high mark, revenue is expected to remain lower than its previous peak on a per capita, inflation-adjusted basis. Revenue expectations were increased by just over \$350 million relative to the September 2020 forecast.

Federal and state policies impacting the individual income tax forecast. The CARES Act includes several provisions expected to reduce taxable income, of which the largest are:

- allowing the deduction of "excess" losses by non-corporate businesses that would otherwise exceed a threshold established in the Tax Cuts and Jobs Act of 2017;

- allowing net operating losses for individuals, estates, and trusts to be carried back for up to five years, and delimiting the amount by which these losses may be used to reduce taxable income;
- increasing the percentage of business interest income that is tax deductible; and
- suspending required minimum distributions from retirement funds, allowing some retirees to let their fund balances recover before making distributions and incurring tax liability.

The CARES Act is expected to reduce federal taxable income for tax years 2015 through 2020.

On June 2, 2020, the Department of Revenue (DOR) adopted two emergency rules that affect the state's administration of the deductions in the CARES Act. Specifically, the emergency rules together define "internal revenue code" for the purpose of determining federal taxable income, which in turn is used to determine Colorado taxable income. Under the rules, "internal revenue code" is defined to exclude federal statutory changes enacted after the end of a tax year. DOR is expected to disallow amended returns filed for tax year 2019 and earlier years that show reduced federal taxable income as a result of the deductions in the CARES Act.

The rules effectively eliminate the revenue impact of most CARES provisions for 2019 and earlier years. However, taxpayers who carry losses back to earlier years on their federal returns, as permitted in CARES, may lose access to those deductions entirely for state tax purposes. The interaction of federal law and state rule is expected to increase state revenue in the years following the recession, though the magnitude of the impact will depend on taxpayer decision making.

House Bill 20-1420 created state income tax additions that reverse the revenue decreases attributable to the three most significant provisions in the CARES Act: those related to excess business losses, net operating losses, and business interest income. In combination with the emergency rules, HB 20-1420 effectively reverses the full revenue decrease that these sections would otherwise have effected on Colorado state income tax collections.

Corporate income tax. After reaching record levels in FY 2018-19, corporate income tax revenue totaled \$728.3 million in FY 2019-20, a 20.8 percent drop from the prior fiscal year. The steep decline resulted from the pandemic and related restrictions, which either closed or significantly slowed activity for many businesses. In addition, steep declines in oil prices have rippled through the economy, causing decreases in tax payments. Corporate tax revenues are expected to fall by an additional 25.7 percent in FY 2020-21 as the economic effects of the COVID-19 pandemic continue to hamper business activity. This forecast also incorporates a reduction in corporate income taxes resulting from the passage of Proposition 116.

Revenue is expected to begin recovering in FY 2021-22 but to remain below pre-COVID levels during the forecast period. For FY 2020-21, corporate income tax revenue expectations were revised upward by \$69.1 million on higher economic expectations relative to September. Corporate income tax revenue is volatile, and to the extent that economic performance falls short of or exceeds expectations, corporate income tax revenue will likewise be lower or higher than forecast.

Sales tax. The 2.9 percent state sales tax is assessed on the purchase of goods, except those specifically exempted, and a relatively small collection of services. Sales tax receipts are expected to increase 1.4 percent to total \$3.2 billion during FY 2020-21, after growing by 4.7 percent during FY 2019-20.

Sales tax revenue is expected to pick up in FY 2021-22 and FY 2022-23, growing by 6.1 percent and 2.9 percent, respectively.

Revenue was flat for sales made in June and July, as many households lost disposable income when extended unemployment payments under the CARES Act wound down. Collections were up on a year-over-year basis for sales that occurred in September and October, and are expected to increase year-over-year in the final months of the year as the pandemic-related shift toward in-home consumption boosts retail sales. Sales tax collections are expected to normalize beginning in FY 2021-22 with more widespread distribution of COVID-19 vaccines and easing of social distancing requirements.

Out-of-state sales. Sales tax collections came in stronger than expected during FY 2019-20, with revenue bolstered by additional out-of-state sales tax collections resulting from legislative and rule changes made during 2019. The Department of Revenue reports that a total of \$79.3 million was collected in new sales tax revenue as a result of those changes during FY 2019-20. Out-of-state collection growth has moderated in recent months, growing by about half a million dollars per month.

Use tax. The 2.9 percent state use tax is due when sales tax is owed, but is not collected at the point of sale. Use tax revenue is largely driven by capital investment among manufacturing, energy, and mining firms. Revenue is expected to decrease by 1.9 percent in FY 2020-21, before growing at a modest 1.6 percent in FY 2021-22 and falling by 0.8 percent in FY 2022-23.

Use tax revenue fell by 39.1 percent in FY 2019-20 as rules promulgated by the Department of Revenue and legislative changes from HB 19-1240 converted retail use tax collections to sales tax collections. The steep decline in retailers' use tax appears to have moderated over the last several months, while consumers' use tax remains stable. This is expected to keep use tax collections lower than their historical trend. Additionally, capital investments declined in the oil and gas sector, as the ability to finance investment dried up and demand for oil weakened this spring.

Proposition EE tobacco taxes. Beginning with this forecast, Table 8 now includes a line for Proposition EE tobacco taxes, which are collected in the General Fund, transferred to the 2020 Tax Holding Fund, and distributed to fund affordable housing, eviction legal defense, rural schools, tobacco education programs and, in the future, preschool programs.. Table 8 shows expected revenue collections and equivalent transfers from the General Fund to the 2020 Tax Holding Fund are shown in Table 8 on page 29. This forecast estimates that Proposition EE tobacco taxes will total \$98.1 million in FY 2020-21 and increase to \$185.6 million in FY 2021-22.

Proposition EE was referred to voters under House Bill 20-1427 and approved in November 2020. The measure increases cigarette and tobacco taxes and creates a new tax on nicotine products. Beginning January 1, 2021, the cigarette tax will increase from \$0.84 to \$1.94 per pack; the tax for tobacco products will increase from 40 percent to 50 percent of manufacturer's list price (MLP); and the new tax for nicotine products will be 30 percent of MLP. These tax rates will continue to increase incrementally until FY 2027-28, when they reach \$2.64 per pack for cigarettes and 62 percent of MLP for tobacco and nicotine products. Revenue from the new taxes is exempt from TABOR as a voter-approved revenue change.

Table 8
General Fund Revenue Estimates
Dollars in Millions

Category	Preliminary FY 2019-20	Percent Change	Estimate FY 2020-21	Percent Change	Estimate FY 2021-22	Percent Change	Estimate FY 2022-23	Percent Change
Excise Taxes								
1 Sales	\$3,196.0	4.7	\$3,241.1	1.4	\$3,439.7	6.1	\$3,540.7	2.9
2 Use	\$210.5	-39.1	\$206.5	-1.9	\$209.8	1.6	\$208.1	-0.8
3 Retail Marijuana Sales	\$245.5	27.0	\$301.1	22.7	\$337.3	12.0	\$358.5	6.3
4 Cigarette	\$32.5	-0.1	\$32.2	-0.9	\$29.5	-8.6	\$28.6	-3.1
5 Tobacco Products	\$24.4	9.5	\$29.5	21.1	\$25.8	-12.6	\$27.1	5.1
6 Liquor	\$50.1	3.7	\$54.4	8.6	\$54.9	1.0	\$57.2	4.1
7 Proposition EE Tobacco Taxes	\$0.0	NA	\$91.8	NA	\$185.6	102.1	\$185.2	-0.2
8 Total Excise	\$3,759.0	1.7	\$3,956.7	5.3	\$4,282.6	8.2	\$4,405.4	2.9
Income Taxes								
9 Net Individual Income	\$8,645.5	4.8	\$7,990.2	-7.6	\$8,501.8	6.4	\$8,945.1	5.2
10 Net Corporate Income	\$728.3	-20.8	\$541.1	-25.7	\$667.0	23.3	\$733.3	9.9
11 Total Income Taxes	\$9,373.8	2.3	\$8,531.3	-9.0	\$9,168.8	7.5	\$9,678.4	5.6
12 Less: Portion diverted to the SEF	-\$646.7	-6.7	-\$706.6	9.3	-\$698.7	-1.1	-\$736.0	5.3
13 Income Taxes to the General Fund	\$8,727.1	3.0	\$7,824.6	-10.3	\$8,470.1	8.2	\$8,942.4	5.6
Other Sources								
14 Estate	\$0.0	NA	\$0.0	NA	\$0.0	NA	\$0.0	NA
15 Insurance	\$337.4	7.2	\$304.0	-9.9	\$319.0	4.9	\$326.0	2.2
16 Pari-Mutuel	\$0.4	-23.7	\$0.4	-4.4	\$0.4	6.8	\$0.4	4.3
17 Investment Income	\$31.1	17.2	\$26.9	-13.4	\$28.3	5.2	\$29.4	3.8
18 Court Receipts	\$3.9	-6.7	\$4.1	5.5	\$3.8	-7.4	\$3.8	1.4
19 Other Income	\$9.7	-80.2	\$33.8	249.0	\$35.0	3.5	\$36.6	4.6
20 Total Other	\$382.5	-3.1	\$369.2	-3.5	\$386.5	4.7	\$396.3	2.5
21 Gross General Fund Revenue	\$12,868.5	2.4	\$12,150.6	-5.6	\$13,139.2	8.1	\$13,744.0	4.6

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

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Cash Fund Revenue

Table 9 summarizes the forecast for cash fund revenue subject to TABOR. The largest cash fund revenue sources subject to TABOR are motor fuel taxes and other transportation-related revenue, gaming taxes, and severance taxes. The end of this section also presents the forecasts for marijuana tax revenue, Federal Mineral Lease payments, and the outlook for the Unemployment Insurance Trust Fund. These forecasts are presented separately because they are not subject to TABOR limitations.

FY 2019-20. Preliminary, unaudited figures from the Office of the State Controller indicate cash fund revenue subject to TABOR totaled \$2.24 billion in FY 2019-20, a decrease of \$201.3 million or 8.3 percent from the prior fiscal year. The most significant decrease in both dollar and percentage terms was in severance tax collections, which shrank by \$123.5 million, or 48.4 percent. Monthly average oil and gas production and prices tracked below FY 2018-19 levels during the first nine months of the fiscal year before COVID-related shutdowns caused both prices and production to fall precipitously. Transportation-related revenue, the largest source of cash fund revenue subject to TABOR, also declined, contracting by \$77.7 million, as demand for motor fuel and vehicle registrations fell between April and June this year.

Forecast for FY 2020-21 through FY 2022-23. Total cash fund revenue subject to TABOR in the current FY 2020-21 is expected to total \$2.14 billion, a decline of 4.4 percent from the prior year. Total cash fund revenue is forecast to increase by 5.3 percent and 6.0 percent in FY 2021-22 and FY 2022-23, respectively, but is forecast to remain below pre-pandemic levels throughout the forecast period. Expectations relative to the September forecast were largely unchanged. The crude oil market rout and drop in travel activity are expected to impact several cash fund sources in the current and following fiscal year. Specifically, revenue to transportation-related and severance cash funds is expected to decline in FY 2020-21 before picking up in FY 2021-22. Other cash fund revenue sources, including gaming and marijuana revenues, are expected to increase in each of FY 2020-21 and FY 2021-22 over year-ago levels.

Transportation-related revenue subject to TABOR fell 6.1 percent over year-ago levels to total \$1,198.2 million in FY 2019-20, with most of the decline attributable to falling motor fuel consumption and vehicle registration payments between April and June 2020. Transportation-related revenue is expected to increase 0.5 percent in FY 2020-21 before growing by 3.3 percent in FY 2021-22 and 2.6 percent in FY 2022-23. The forecast for TABOR revenue to transportation-related cash funds is shown in Table 10. Expectations for revenue were revised only modestly relative to those published in the September forecast, with increased registration fee expectations mostly offsetting reduced expectations for motor fuel tax revenue.

The largest source of transportation-related revenue is the motor fuel excise tax credited to the Highway Users Tax Fund (HUTF). Consistent with pandemic business closures, fuel tax revenues fell 22 percent between May and July 2020 compared with the same months in 2019. Fuel taxes have recovered somewhat since, with revenues between August and October 2020 declining by 7 percent from the same months last year. Reduced vehicle traffic attributable to business and office closures is expected to persist through 2020. Fuel consumption is expected to rebound in 2021 and 2022, but to remain below FY 2018-19 levels due to both cyclical and structural factors.

Table 9
Cash Fund Revenue Subject to TABOR
Dollars in Millions

	Preliminary FY 2019-20	Estimate FY 2020-21	Estimate FY 2021-22	Estimate FY 2022-23	CAAGR*
Transportation-Related	\$1,198.2	\$1,204.3	\$1,243.5	\$1,276.1	
Percent Change	-6.1%	0.5%	3.3%	2.6%	2.1%
Severance Tax	\$131.7	\$18.3	\$51.5	\$115.5	
Percent Change	-48.4%	-86.1%	182.1%	124.2%	-4.3%
Gaming Revenue ¹	\$69.1	\$72.3	\$80.0	\$90.3	
Percent Change	-35.4%	4.5%	10.6%	12.9%	9.3%
Insurance-Related	\$24.9	\$22.9	\$21.1	\$22.0	
Percent Change	10.5%	-8.2%	-7.9%	4.3%	-4.1%
Regulatory Agencies	\$81.1	\$82.6	\$85.3	\$87.6	
Percent Change	2.9%	1.9%	3.3%	2.7%	2.6%
Capital Construction Related - Interest ²	\$6.3	\$3.9	\$3.3	\$2.7	
Percent Change	33.6%	-39.0%	-15.9%	-16.0%	-24.5%
2.9% Sales Tax on Marijuana ³	\$12.4	\$14.5	\$15.5	\$16.2	
Percent Change	15.0%	16.9%	7.4%	4.3%	9.4%
Other Cash Funds	\$713.0	\$718.9	\$750.0	\$774.6	
Percent Change	4.4%	0.8%	4.3%	3.3%	2.8%
Total Cash Fund Revenue Subject to the TABOR Limit	\$2,236.8	\$2,137.5	\$2,250.2	\$2,385.0	2.2%

Totals may not sum due to rounding.

*CAAGR: Compound average annual growth rate for FY 2019-20 to FY 2022-23.

¹Gaming revenue in this table does not include Amendment 50 revenue or sports betting revenue because it is not subject to TABOR.

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

³Includes revenue from the 2.9 percent sales tax collected from the sale of medical and retail marijuana. This revenue is subject to TABOR.

Closures of local DMV offices delayed collection of some vehicle registration fees from FY 2019-20 into FY 2020-21. Revenue from registrations is expected to grow 4.7 percent in the current FY 2020-21 as a result of these distortions, and to return to trend levels for FY 2021-22 and FY 2022-23.

As expected, COVID-related travel slowdowns reduced daily vehicle rental fee revenue by more than half between May and October 2020 relative to the same months in 2019. The decrease in rental fees drove an 11.5 percent decrease in other HUTF revenue during FY 2019-20. This revenue is expected to remain low through FY 2020-21 before rebounding in FY 2021-22.

The State Highway Fund (SHF) receives money primarily from HUTF allocations, interest earnings, and local government matching grants. HUTF revenue is subject to TABOR when initially collected but not double-counted for TABOR purposes when distributed to the SHF, and thus is omitted from SHF revenue in Table 10. Following a March 2020 Attorney General opinion, local government matching grants are no longer accounted as subject to TABOR, reducing SHF revenue shown in Table 10 for FY 2019-20 and subsequent years. Fewer HUTF allocations and local government funds are expected to limit the SHF balance, reducing interest earnings in the fund through the forecast period.

Table 10
Transportation Revenue by Source
Dollars in Millions

	Preliminary FY 2019-20	Estimate FY 2020-21	Estimate FY 2021-22	Estimate FY 2022-23	CAAGR*
Highway Users Tax Fund (HUTF)					
Motor and Special Fuel Taxes	\$624.5	\$611.1	\$639.2	\$651.6	1.4%
Percent Change	-4.6%	-2.1%	4.6%	1.9%	
Total Registrations	\$381.8	\$399.6	\$396.9	\$403.3	1.8%
Percent Change	-0.2%	4.7%	-0.7%	1.6%	
<i>Registrations</i>	\$227.0	\$236.8	\$234.9	\$238.6	
<i>Road Safety Surcharge</i>	\$134.0	\$140.7	\$139.9	\$142.2	
<i>Late Registration Fees</i>	\$20.9	\$22.2	\$22.0	\$22.5	
Other HUTF Receipts ¹	\$63.0	\$61.9	\$67.7	\$69.4	3.3%
Percent Change	-11.5%	-1.7%	9.4%	2.6%	
Total HUTF	\$1,069.3	\$1,072.6	\$1,103.7	\$1,124.2	1.7%
Percent Change	-3.6%	0.3%	2.9%	1.9%	
State Highway Fund (SHF) ²	\$27.5	\$19.8	\$21.1	\$23.0	-5.9%
Percent Change	-30.9%	-28.0%	6.6%	8.6%	
Other Transportation Funds	\$101.4	\$111.8	\$118.6	\$128.9	8.3%
Percent Change	-20.4%	10.3%	6.1%	8.7%	
<i>Aviation Fund</i> ³	\$26.2	\$15.0	\$28.9	\$33.9	
<i>Law Enforcement-Related</i> ⁴	\$7.7	\$9.3	\$8.4	\$8.4	
<i>Registration-Related</i> ⁵	\$67.5	\$87.5	\$81.3	\$86.5	
Total Transportation Funds	\$1,198.2	\$1,204.3	\$1,243.5	\$1,276.1	2.1%
Percent Change	-6.1%	0.5%	3.3%	2.6%	

Totals may not sum due to rounding.

*CAAGR: Compound average annual growth rate for FY 2019-20 to FY 2022-23.

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

²Includes only SHF revenue subject to Article X, Section 20, of the Colorado Constitution (TABOR). Beginning in FY 2019-20, SHF r subject to TABOR no longer includes local government grants and contracts.

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

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

⁵Includes revenue from Emergency Medical Services registration fees, emissions registration and inspection fees, motorcycle and motor vehicle license fees, and POST Board registration fees.

Addendum: TABOR-Exempt FASTER Revenue

	Preliminary FY 2019-20	Estimate FY 2020-21	Estimate FY 2021-22	Estimate FY 2022-23	CAAGR*
Bridge Safety Surcharge	\$112.2	\$117.4	\$116.6	\$119.0	1.4%
Percent Change	-2.1%	4.7%	-0.7%	2.0%	

Note: Revenue to the Statewide Bridge Enterprise from the bridge safety surcharge is TABOR-exempt and therefore not included in the table above. It is included as an addendum for informational purposes.

Aviation fuel excise tax revenue is expected to remain subdued through FY 2020-21 before rebounding in FY 2021-22 and FY 2022-23. Revenue to the **Statewide Bridge Enterprise** is not subject to TABOR and is therefore omitted from the "Total Transportation Funds" line in Table 9; however, a forecast for this revenue is shown as an addendum to Table 10 for informational purposes.

Severance tax revenue, including interest earnings, totaled \$131.7 million in FY 2019-20, a decline of 48.4 percent over the previous year. Revenue is expected fall further during FY 2020-21 to a total of \$18.3 million before increasing to \$51.5 million in FY 2021-22 and \$115.5 million in FY 2022-23. Severance tax revenue is more volatile than other revenue sources due to the boom-bust nature of the oil and gas sector and Colorado's tax structure. The forecast for the major components of severance tax revenue is shown in Table 11.

Severance tax collections from **oil and natural gas** totaled \$111.9 million in FY 2019-20 and are forecast to decline 95.8 percent in FY 2020-21 to \$4.7 million based on year-to-date collections that reflect activity in 2020. Low oil prices will significantly constrain the U.S. oil and gas sector and result in production cuts. Additionally, the ad valorem tax credit is also expected to put downward pressure on collections.

Demand for crude oil tanked as countries across the globe restricted both domestic and foreign travel this spring. Travel by car picked up this summer but declined again this fall. Transportation consumption accounts for about 70 percent of oil demand in the U.S., so demand for oil is expected to remain low until travel and commuting activity resume to approach their pre-shutdown levels.

Oil prices remain low as producers are extracting more oil than is currently consumed, resulting in higher domestic oil stocks. Production in Colorado remains subdued, with wells shut, capital expenditures cut significantly, and only 7 rigs active in the state, down from 26 during September 2019. Regulatory changes for oil and gas drilling is likely to cause a slower bounce back from these low levels. This forecast is consistent with average Colorado oil prices of around \$39 per barrel in 2020 and \$48 per barrel in 2021, both of which have been revised up modestly from the September forecast. Natural gas prices are forecast at \$2.12 per thousand cubic feet in 2020 and \$3.12 per thousand cubic feet in 2021. Property taxes for 2019 have already been paid on near historic production levels, which will reduce severance taxes to \$0 for many oil wells in 2020 through the ad valorem credit, which allows oil and gas producers to deduct any property taxes paid from their severance tax liability.

Coal severance tax revenue declined 26.1 percent in FY 2019-20 and will decline modestly throughout the remainder of the forecast period as electrical utilities continue to transition away from coal to renewable sources and natural gas. Based on current expectations, coal severance taxes are expected to decline 21.8 percent in FY 2020-21 to \$2.1 million and decline by an additional 8.8 percent to \$1.9 million in FY 2021-22.

Metal and molybdenum mines are expected to pay \$2.0 million in severance taxes on the value of minerals produced in FY 2020-21 and \$2.3 million in FY 2021-22. Mining activity at the two molybdenum mines in Colorado, the Climax Mine outside Leadville and the Henderson Mine outside Empire, is expected to be significantly reduced based on lower demand for steel and other products that use molybdenum.

Table 11
Severance Tax Revenue Forecast by Source
Dollars in Millions

	Preliminary FY 2019-20	Estimate FY 2020-21	Estimate FY 2021-22	Estimate FY 2022-23	CAAGR*
Oil and Gas	\$111.9	\$4.7	\$37.4	\$101.0	-3.4%
Percent Change	-52.5%	-95.8%	693.9%	169.9%	
Coal	\$2.6	\$2.1	\$1.9	\$1.7	-13.5%
Percent Change	-26.1%	-21.8%	-8.8%	-9.3%	
Molybdenum and Metallics	\$2.4	\$2.0	\$2.3	\$2.3	-0.2%
Percent Change	-3.2%	-14.1%	13.4%	1.9%	
Total Severance Tax Revenue	\$116.8	\$8.8	\$41.6	\$105.0	-3.5%
Percent Change	-51.7%	-92.5%	372.6%	152.5%	
Interest Earnings	\$14.8	\$9.5	\$9.9	\$10.5	-11.0%
Percent Change	10.1%	-36.3%	4.9%	5.5%	
Total Severance Tax Fund Revenue	\$131.7	\$18.3	\$51.5	\$115.5	-4.3%
Percent Change	-48.4%	-86.1%	182.1%	124.2%	

*CAAGR: Compound average annual growth rate for FY 2019-20 to FY 2022-23.

Finally, interest earnings on severance tax revenue are expected to total \$9.5 million in FY 2020-21 and \$9.9 million in FY 2021-22. Interest earnings in FY 2019-20 were based on a higher average balance in severance tax accounts following the passage of Senate Bill 19-016. SB 19-016 distributes severance tax revenue in the year following when the revenue is collected; therefore, the principal builds through the fiscal year, generating interest revenue.

Limited gaming revenue includes taxes, fees, and interest earnings collected in the Limited Gaming Fund and the State Historical Fund. Most of this revenue is subject to TABOR. Revenue attributable to Amendment 50, which expanded gaming beginning in FY 2009-10, is TABOR-exempt. The state limited gaming tax is a graduated tax assessed on casino adjusted gross proceeds, the amount of wagers collected less the amount paid to players in winnings, in the three state-sanctioned gaming municipalities: Black Hawk, Central City, and Cripple Creek. Casinos on tribal lands in southwestern Colorado are not subject to the state tax.

Limited gaming revenue subject to TABOR declined by 35.4 percent to \$69.1 million in FY 2019-20, and is expected to grow by 4.5 percent in FY 2020-21 before growing by 10.6 percent and 12.9 percent in FY 2021-22 and FY 2022-23, respectively. Colorado casinos were closed by executive order on March 17, and were allowed to reopen with limited capacity and limited game offerings on June 15. This left casinos with no revenue for most of the last quarter of the fiscal year. Loosening of restrictions combined with the passage of Amendment 77 will help to increase casino revenue in FY 2020-21. Amendment 77, which is expected to be implemented by May 1, 2021, allows casino bets of any amount and gave the three gaming cities permission to add new casino games in their cities. Revenue for FY 2021-22 and FY 2022-23 is expected to grow at a faster pace as the industry recovers from the health and economic crises, and the new bet limits and games take effect.

House Bill 20-1400, passed by the legislature during the 2020 session, changes the formula used to calculate revenue subject to TABOR. The new formula was created to keep distributions to limited and extended revenue beneficiaries similar to the breakdowns between the two prior to the significant dip in tax revenue. These formulas supersede current statutory distribution formulas until the fiscal year after gaming tax revenues return to pre-downturn levels.

Sports betting was legalized in the state after the passage of Proposition DD during the November 2019 election. It launched on May 1, 2020, and got off to a rocky start with all professional sports suspended in the U.S. until late July. A forecast of sports betting revenue will be available in future forecasts, once tax collections data for several months become available.

Revenue collected from sports betting activity includes licensing fees, set at between \$1,200 and \$2,000 per operator, and a master license charged biannually, an operations fee, and tax revenue, which is set at 10 percent of casinos' net sports betting proceeds. As voter approved revenue, sports betting tax revenue is not subject to the TABOR limit; however, the fee revenue will be subject to TABOR. A Sports Betting Operations Fee was created under the rules adopted by the Limited Gaming Commission to cover a portion of administrative costs. The intent of the fee is to cover the remaining costs after license fees are paid, and was set for FY 2019-20 at \$54,000 for internet sports betting operators and master licensees and at \$12,500 for retail sports betting operators and master licensees. License fees, the sports betting operations fee, and other miscellaneous fees collected during FY 2019-20 totaled \$0.6 million and sports betting taxes collected totaled \$0.3 million. In FY 2020-21, sports betting tax collections through October totaled \$1.3 million, with half of the revenue coming in during October alone, while license, operations, and other fees totaled \$1.7 million during the same period, driven by operations fees at \$1.6 million.

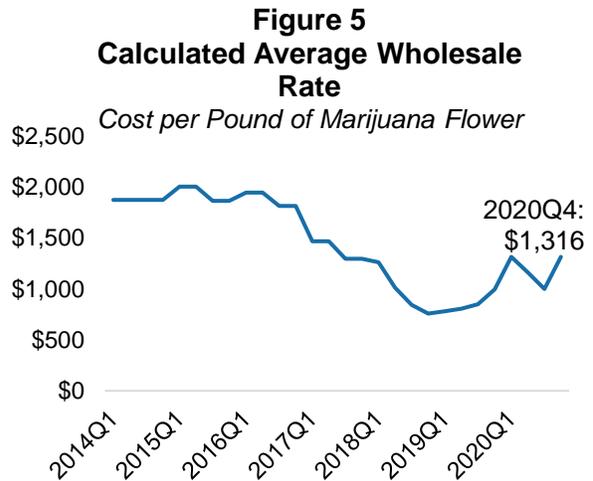
Preliminary, unaudited figures from the Office of the State Controller indicate that **marijuana tax revenue** totaled \$338.9 million in FY 2019-20, a 28.9 percent increase from the prior fiscal year. Marijuana tax revenues will continue to grow through the forecast period reaching \$433.4 million in FY 2020-21 and \$488.8 million in FY 2021-22. The majority of the revenue from the marijuana industry is voter-approved revenue exempt from TABOR; however, the 2.9 percent state sales tax is included in the state's revenue limit. Tax revenue from marijuana sales is shown in Table 12.

The special sales tax is the largest marijuana revenue source and is assessed at a rate of 15 percent of the retail price of marijuana. Special sales tax revenue generated \$245.5 million in FY 2019-20. Revenue from the special sales tax has been strong since the beginning of calendar year 2020 and is expected to reach \$301.1 million in FY 2020-21, a 22.7 percent increase from the prior year. Revenue is expected to grow through the forecast period, reaching \$337.3 million in FY 2021-22 and \$358.5 million by FY 2022-23.

The state distributes 10 percent of the special sales tax to local governments and retains the rest to be used in the Marijuana Tax Cash Fund, the General Fund, and the State Public School Fund.

The excise tax is the second largest source of marijuana revenue and is dedicated to the BEST Fund for school construction. However, for FY 2020-21 only, HB 20-1418 requires the first \$40 million in excise tax revenue go to the BEST Fund with the remainder going to the State Public School Fund. In FY 2019-20, the excise tax generated \$81.1 million, a 37.5 percent increase from the prior year. Robust demand for marijuana products will continue to bolster the excise tax through the forecast period as revenue from marijuana excise taxes is expected to total \$117.8 million in FY 2020-21 and \$136.0 million by FY 2021-22.

The excise tax is based on the calculated or actual wholesale price of marijuana when it is transferred from the cultivator to the retailer. There is considerable uncertainty about the calculated price due to a lack of available information. The wholesale price bottomed out at \$759 per pound of marijuana flower in the fourth quarter of 2018 but has risen to \$1,316 per pound in the fourth quarter of 2020 as shown in Figure 5. The wholesale price is a significant determinant of the excise tax revenue and it is not clear if the price will continue to increase or fall, consistent with downward trends from 2016 to 2019. The wholesale price remains as both an upside and downside risk to the forecast.



Source: Colorado Department of Revenue.

The 2.9 percent state sales tax rate applies to medical marijuana and marijuana accessories purchased at a retail marijuana store. Medical marijuana sales tax revenue generated \$10.7 million in FY 2019-20 and is expected to grow through the forecast period, generating \$12.4 million in FY 2020-21 and \$13.6 million in FY 2021-22. Retail marijuana dispensaries remitted the state sales tax on marijuana accessories totaling \$1.3 million in FY 2019-20, and this amount is expected to increase moderately through the forecast period. Revenue from the 2.9 percent sales tax is deposited in the Marijuana Tax Cash Fund and is subject to TABOR.

Table 12
Tax Revenue from the Marijuana Industry
Dollars in Millions

	Preliminary FY 2019-20	Estimate FY 2020-21	Estimate FY 2021-22	Estimate FY 2022-23	CAAGR*
Proposition AA Taxes					
Special Sales Tax	\$245.5	\$301.1	\$337.3	\$358.5	13.5%
State Share of Sales Tax	\$220.9	\$271.0	\$303.5	\$322.7	
Local Share of Sales Tax	\$24.5	\$30.1	\$33.7	\$35.9	
15% Excise Tax	\$81.1	\$117.8	\$136.0	\$146.1	21.7%
Total Proposition AA Taxes	\$326.5	\$418.9	\$473.3	\$504.7	15.6%
2.9 Sales Tax (Subject to TABOR)					
2.9% Sales Tax on Medical Marijuana	\$10.7	\$12.4	\$13.6	\$14.1	9.6%
2.9% Sales Tax on Retail Marijuana	\$1.3	\$1.6	\$1.6	\$1.7	
TABOR Interest	\$0.3	\$0.4	\$0.4	\$0.4	
Total 2.9% Sales Tax	\$12.4	\$14.5	\$15.5	\$16.2	9.4%
Total Taxes on Marijuana	\$338.9	\$433.4	\$488.8	\$520.9	15.4%

*CAAGR: Compound average annual growth rate for FY 2019-20 to FY 2022-23.

Federal Mineral Lease (FML) revenue is the state's portion of the money the federal government collects from mineral production on federal lands. Collections are mostly determined by the value of mineral production on federal land and royalty rates negotiated between the federal government and mining companies. Since FML revenue is not deposited into the General Fund and is exempt from TABOR, the forecast is presented separately from other sources of state revenue.

FML revenue totaled \$61.9 million in FY 2019-20, a 45.4 percent decrease from FY 2018-19. This decrease is attributable to a royalty rate reduction granted by the Bureau of Land Management to the Colowyo coal mine in Routt County, as well as lower oil and natural gas prices and production. This rate reduction was approved for several prior years, causing the Department of Interior to refund revenue from prior years, and will reduce distributions to Colorado. In FY 2020-21, FML revenue is forecast to decrease 11.9 percent to \$55.3 million. Due to the crash in oil prices and subsequent production cuts, oil prices are expected to remain around \$39 per barrel during 2020 and about \$48 per barrel during 2021, resulting in a decrease in royalties collected. Producers are cutting oil and natural gas production due to lower prices broadly. Natural gas prices remain low due to an oversupply, but are expected to increase next year to around \$3.12 per thousand cubic feet, up from about \$2.12 in 2020, as both associated and non-associated production remains below pre-pandemic levels while demand has not declined as steadily. FML revenue will rebound gradually in the last two years of the forecast to \$61.3 million in FY 2021-22 and \$66.1 million in FY 2022-23.

The **Unemployment Insurance (UI) Trust Fund** is expected to end FY 2020-21 with a deficit of \$1.1 billion, as the high levels of benefits being paid drain the fund without sufficient revenue increases to offset the losses. The fund is not expected to return to solvency within the forecast period. Forecasts for UI revenue, benefit payments, and year-end balances are shown in Table 13. Revenue to the UI Trust Fund is not subject to TABOR and is therefore excluded from Table 9. Revenue to the Employment Support Fund, which receives a portion of the UI premium surcharge, is subject to TABOR and is included in the revenue estimates for other cash funds in Table 9.

UI benefits paid have seen an unprecedented increase during the COVID-19-related rapid economic contraction. Benefits paid reached \$1.3 billion in FY 2019-20, an increase of 247.1 percent, with nearly \$1 billion in the last quarter alone. As a consequence, the fund balance as of June 30, 2020, was almost depleted, triggering a move to the second highest premium rate schedule beginning January 1, 2021. The fund became insolvent in August 2020. When the balance of the UI Trust Fund falls below zero, the federal government requires that another revenue source be found to continue funding the UI program. On August 18, 2020, Colorado began borrowing from the Federal Unemployment Account to fund benefit payments. Loans are currently extended interest free through the end of 2020. As of December 10, 2020, the state had \$638.2 million in federal loans outstanding.

The amount of UI benefits paid is expected to grow further in FY 2020-21 to \$2.1 billion, as unemployment remains elevated with the effects of COVID-19 continuing to reverberate and swaths of businesses shuttered or operating at reduced levels into 2021. Benefits paid are expected to fall back to \$893.6 million in FY 2021-22 and to \$877.7 million in FY 2022-23. The forecast benefit amounts include only regular unemployment insurance benefits, as these are the only benefits currently being funded by the state UI Trust Fund under current law. Should state extended benefits be triggered on during the forecast period, expected benefits paid could increase. The anticipated negative fund balances beginning in FY 2020-21 are expected to result in a shift to the highest rate schedule beginning January 1, 2022. This forecast incorporates the adjustments to fund revenues enacted with Senate Bill 20-207. Namely, the solvency surcharge will be suspended for 2021 and 2022, and the chargeable wage base will be held constant at \$13,600 for 2021. Beginning in 2022, the chargeable wage base will increase incrementally, to \$17,000 in 2022 and to \$20,400 in 2023. The solvency surcharge will be turned on beginning January 1, 2023. The forecast fund balances do not account for the required federal borrowing to maintain the fund balance at \$0 or above.

Assuming no extension of the interest-free period, Colorado will begin accruing interest on loans in January 2021. Under federal law, employer contributions to state trust funds may not be used to make interest payments; under state statute, a separate assessment is required to pay interest on federal loans used to fund the UI program. During the summer of 2021, businesses will be charged a special interest assessment to pay for the interest payment expected to be due in 2021. The amount individual businesses are charged is determined by a formula based on the amount owed to the federal government and each business's total wages as a percent of total wages statewide. Businesses with the most favorable layoff history are exempt from the assessment.

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

	Estimate FY 2019-20	Estimate FY 2020-21	Estimate FY 2021-22	Estimate FY 2022-23	CAAGR*
Beginning Balance	\$1,104.1	\$412.2	(\$1,081.3)	(\$1,210.3)	
Plus Income Received	\$532.8	\$592.6	\$764.5	\$974.4	22.3%
UI Premium	\$0.0	\$0.0	\$0.0	\$124.4	
Interest	\$25.9	\$4.8	\$0.0	\$0.0	
Total Revenues	\$558.7	\$597.4	\$764.5	\$1,098.8	25.3%
Percent Change	2.3%	6.9%	28.0%	43.7%	
Less Benefits Paid	\$1,268.5	\$2,090.9	\$893.6	\$877.7	-11.6%
Percent Change	247.1%	64.8%	-57.3%	-1.8%	
Accounting Adjustment	\$18.0	\$0.0	\$0.0	\$0.0	
Ending Balance	\$412.2	(\$1,081.3)	(\$1,210.3)	(\$989.1)	
Solvency Ratio					
Fund Balance as a Percent of Total Annual Private Wages	0.30%	-0.75%	-0.80%	-0.62%	

Totals may not sum due to rounding.

**CAAGR: Compound average annual growth rate for FY 2019-20 to FY 2022-23.*

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K-12 Enrollment Forecast

This section of the forecast presents projections for kindergarten through twelfth grade (K-12) enrollment in Colorado’s public schools. Projections are presented in full-time equivalent (FTE) terms, and are an important factor in determining funding levels for Colorado’s 178 school districts. Table 14 summarizes current and projected enrollment for the 2020-21 through 2022-23 school years by forecast region. Figures 8 and 9 on pages 47 and 48 show enrollment growth projections by forecast region and school district, respectively, for the 2021-22 school year.

- **FY 2020-21.** The enrollment count for the current school year totaled 845,916 student FTE across Colorado’s public schools, down 22,280 FTE, or 2.6 percent, from the previous school year. The decline is largely attributable to the impacts of the COVID-19 pandemic, which caused many parents to seek alternatives to public education. While Colorado’s public school enrollment has been steadily slowing since FY 2014-15, the drop off in enrollment this year is unprecedented and not expected to continue.
- **FY 2021-22.** Statewide K-12 enrollment is projected to rebound next school year, increasing by 19,944 student FTE. This forecast assumes that in-person class offerings will resume, though a fraction of the students who pursued alternatives to public education during the FY 2020-21 school year are expected remain in online classes, private school, or homeschool.
- **FY 2022-23.** Historical enrollment trends are expected to return in the out year of the forecast, when enrollment declines by 1,867 FTE. Slower birth rates and shifts in employment will continue to constrain growth. Growth will be strongest in the northern and western regions, while all other regions are expected to decline.

Table 14
K-12 Public School Enrollment
Full-Time Equivalent (FTE) Students

Region	Actual 2020-21	Percent Change	Estimated 2021-22	Percent Change	Estimated 2022-23	Percent Change	Average Growth*
Metro Denver	479,633	-2.9%	489,740	2.1%	489,485	-0.1%	1.0%
Northern	89,704	-2.2%	92,639	3.3%	93,322	0.7%	2.0%
Colorado Springs	122,299	-1.3%	124,660	1.9%	123,643	-0.8%	0.5%
Pueblo	32,172	-3.5%	33,299	3.5%	32,863	-1.3%	1.1%
Eastern Plains	26,430	-1.7%	26,946	2.0%	26,698	-0.9%	0.5%
San Luis Valley	7,121	-4.0%	7,371	3.5%	7,271	-1.4%	1.0%
Mountain	24,305	-4.6%	25,124	3.4%	24,886	-0.9%	1.2%
Southwest Mountain	14,583	7.6%	14,750	1.2%	14,435	-2.1%	-0.5%
Western	49,671	-4.3%	51,332	3.3%	51,391	0.1%	1.7%
Statewide Total	845,916	-2.6%	865,860	2.4%	863,994	-0.2%	1.1%

Source: Colorado Department of Education and Legislative Council Staff.

**Compound average annual growth rate between 2020-21 and 2022-23.*

Forecast Comparison

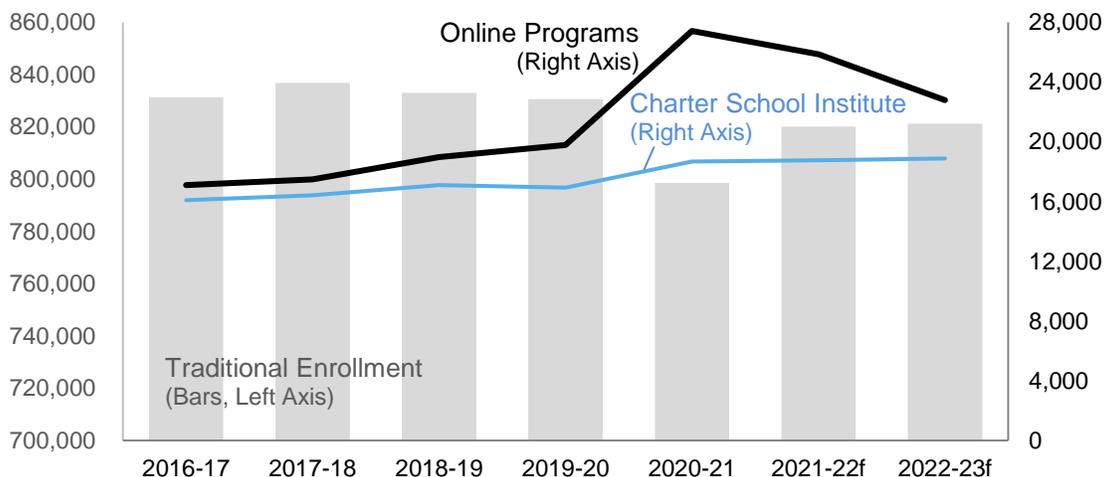
Relative to the Legislative Council Staff forecast published last December, actual enrollment in the 2020-21 school year was 22,991 FTE, or 2.6 percent, lower than expected. The difference resulted from the COVID-19 health-related concerns that caused many schools to switch back-and-forth between remote and in-person classes during the 2019-20 and 2020-21 school years. Health concerns and in-person instruction uncertainty caused some families to seek alternatives to public education. While total brick-and-mortar enrollment declined by 31,973 FTE in FY 2020-21 compared to FY 2019-20, online enrollment grew by 7,895 FTE and Charter School Institute (CSI) enrollment grew by 1,806 FTE. The largest change in enrollment occurred amongst kindergarteners enrolled in brick-and-mortar schools. Brick-and-mortar kindergarten enrollment fell by 9.9 percent this year, while total kindergarten enrollment, including online enrollment, fell by slightly less at 8.5 percent.

COVID-19 Impacts and Assumptions

In the 2020-21 school year, actual enrollment decreased by 2.6 percent overall. In particular, enrollment in brick-and-mortar schools decreased 3.8 percent, largely due to the COVID-19 pandemic causing school districts to switch to remote learning, a hybrid of remote and in-person learning, or a modified in-person experience. Many districts have moved between these models throughout the first semester of the school year. The decrease in brick-and-mortar enrollment was somewhat offset by an increase in online enrollment.

Assumptions. This forecast assumes that if students are not enrolled in their typical school district, parents found alternative forms of education, which may include online schools, home schooling, creation of “pods” with other families, private school, or were held back for the year. The forecast expects in-person learning to resume in the 2021-22 school year; however, vaccine distribution and ongoing health concerns pose ongoing uncertainty on the timing of resumed enrollment in public school. Most students are expected to return to their school district next year; however, some parents may keep their child in an alternative education model in order to provide continuity or due to continued COVID-19 concerns, as shown in Figure 6 below.

Figure 6
Online, CSI, and Traditional Enrollment
*Full-Time Equivalent (FTE) Students**



Source: Colorado Department of Education and Legislative Council Staff. f = Forecast.
 *FY 2016-17 through FY 2018-19 kindergarten students are counted as 0.58 FTE.

Statewide Enrollment Trends

Colorado's public school enrollment has been steadily slowing in recent years as smaller age cohorts enter the public school system. The decrease in enrollment in the 2020-21 school year due to the COVID-19 pandemic is expected to be an outlier, with enrollment bouncing back in 2021-22 and returning to long-term, primarily demographic-driven enrollment trends in the 2022-23 school year.

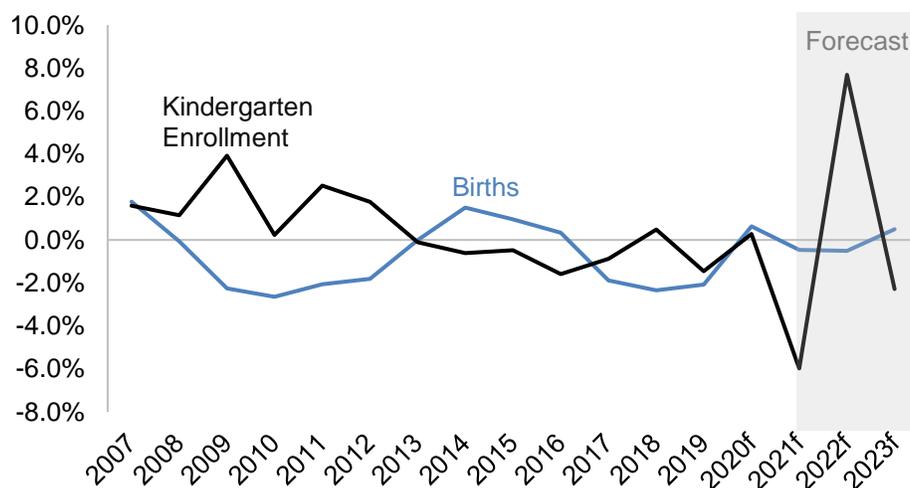
Current trends in enrollment. The impacts of the COVID-19 pandemic on enrollment this school year are highly unusual and expected to pose a short-term distortion for enrollment in the current school year before enrollment normalizes next year.

- **Kindergarten.** Total kindergarten enrollment decreased by 8.5 percent in the 2020-21 school year, as many parents may have chosen not to enroll their children in kindergarten due to health concerns and uncertainty regarding in-person versus remote learning. Some of these students are expected to instead enroll in kindergarten in the 2021-22 school year, while others may enroll in first grade depending on the alternative education received in the current year. Longer-term trends will return in FY 2022-23, as statewide birth rates continue to decline, putting downward pressure on enrollment.
- **1st through 12th grades.** Total enrollment fell by 2.1 percent this year (about 17,000 FTE); however, online and CSI enrollment grew by about 8,900 FTE. First grade enrollment next year will be impacted by lower kindergarten enrollment in the current year, although some kindergarteners held back during the current year may enroll in first grade, while upper classes with larger student populations are graduating, leaving smaller classes as the birth rate has continued to decline. Some students are expected to remain in online programs or the non-public school option adopted this year. Housing affordability will continue to drive students from more costly districts to more affordable parts of the state. Additionally, enrollment will grow with new housing developments, such as those in the northern and Colorado Springs regions.
- **Online.** Enrollment in online programs grew by 39.5 percent in the 2020-21 school year due to the COVID-19 pandemic, adding approximately 7,900 students. As discussed above, much of the growth is attributable to parents seeking alternatives to traditional education during the pandemic. Online enrollment does not include students doing remote learning through their traditional public schools. Online enrollment growth is primarily in the southwest mountain region (Durango School District authorizes the Colorado Connections Academy Durango), as well as in the metro Denver and Colorado Springs regions. Online enrollment is expected to remain higher than historical levels throughout the forecast period.
- **CSI enrollment.** Enrollment in CSI schools continued to grow in the 2020-21 school year, adding almost 1,800 student FTE. CSI now makes up 2.3 percent of total statewide enrollment. Much of this growth occurred in the metro Denver, northern, and western regions. In 2021-22, enrollment is expected to remain relatively flat overall, with a school closing in Colorado Springs and new schools proposed in Steamboat Springs and Montezuma-Cortez.

Longer-term trends in enrollment. Trends impacting K-12 enrollment in the state over the last few years are expected to continue to influence enrollment throughout the forecast period. Some of these trends include:

- **Lower birthrates are muting enrollment growth.** A decline in the number of births during the Great Recession continues to constrain enrollment growth in Colorado. As shown in Figure 7, birth rates in Colorado fell each year between 2008 and 2012 following healthy gains over most of the ten prior years. As a result, smaller student cohorts began entering into the K-12 school system in the 2014-15 school year.
- **Slower net in-migration.** Both domestic and foreign in-migration has slowed over the last few years. People moving into Colorado from other states have skewed younger and childless, while the slowdown in foreign migrants with higher fertility rates result in fewer children in the state. The pandemic is expected to exacerbate this decline, with projections for the age five student cohort lower than in last year’s demographic forecast. In-migration is expected to pick up again in 2023, albeit at a more moderate pace than the recent peak in 2015.
- **Housing affordability continues to impact enrollment across regions in the state.** Rising housing costs are influencing the distribution of enrollment across the state. The pandemic has in part contributed to stronger appreciation in housing prices around many regions in the state, worsening affordability in a time of higher unemployment. In particular, high housing costs in the metro Denver area are causing families with school age children to relocate to the exurbs or more affordable metro areas and in some cases to leave the state altogether. In the City and County of Denver, more families are expected to move out than to move into the area. Conversely, relatively more affordable regions of the state, such as the Colorado Springs, Pueblo, and northern regions, will experience stronger enrollment growth comparatively.

Figure 7
Colorado Kindergarten Enrollment and Resident Births
Percent Change, Year-over-Year



Source: Colorado Department of Local Affairs, State Demography Office, Colorado Department of Education and Legislative Council Staff. f = Forecast.

Regional Enrollment Trends

The following briefly summarizes enrollment trends for school districts in the nine forecast regions of the state. Regional enrollment figures can be found in Table 14 on page 41.

- **Metro Denver region.** Total enrollment declined by 2.9 percent this year with larger declines in suburban districts than in Denver School District while some exurban districts' enrollment grew. Most of the students are expected to return to public schools next year, and the rest will remain in online, private, or pod-learning arrangements. The area is projected to return to longer-term trends thereafter, with smaller age cohorts gradually replacing larger ones and housing constraints continuing to put downward pressure on enrollment.
- **Northern region.** Total enrollment dropped by 2.2 percent this year, one of the lower declines in the state. Most districts expect that students who were pulled out of public school this year to return next year. That will be compounded by growth in housing developments and relatively more affordable housing costs when compared to the Denver Metro area, continuing recent trends that boost enrollment. Some districts in Weld County may face some decline in enrollment if the oil and gas industry does not bounce back by the summer.
- **Colorado Springs region.** Enrollment in 2020-21 declined by 1.3 percent, as increased online enrollment partially offset a 4.1 percent decrease in brick-and-mortar enrollment. The regional economy has experienced strong job growth and offered relatively affordable housing in recent years, attracting families to the area. Total enrollment growth in the region is expected to increase next year, as many students return to brick-and-mortar schools, although some students will remain in alternative education options. Growth is expected to flatten in the out year, as enrollment stabilizes.
- **Pueblo region.** Total enrollment fell by 3.5 percent this year as pressures from COVID-19 caused students to enroll in online and private schools, or be homeschooled. The region faces various downward pressures moving forward, including employment opportunities, school choice enrollment shifts including online options, and declining birth rates. Enrollment will bounce back next year as some students return to brick-and-mortar schools, but will continue its recent declines in the out year.
- **Eastern plains region.** Enrollment was not as impacted by the pandemic as other regions, falling by 1.7 percent this year, as small class sizes both kept and attracted some students. Longer-term expectations are driven by trends of declining rural populations, with concerns for lack of jobs and housing, with the exception of exurban counties experiencing new residential construction. School districts closer to the metro Denver and northern regions, such as Morgan and Elbert counties, are seeing the largest enrollment growth rates, buoyed by new residential construction. Enrollment is projected to return to pre-pandemic levels next year before continuing its downward trend in the out year.
- **San Luis Valley region.** A 4.0 percent decline in enrollment this year is due largely to COVID-19, but also limited employment opportunities and housing, and a demographic decline in the region. Part of the decline this year was offset by gains in some districts, as families who lost jobs moved back home from other regions. The decline in brick-and-mortar enrollment was not offset by online enrollment, as was common in other regions of the state. Those students are expected to return to school next year, while housing, employment, and demographic pressures will influence enrollment in the out year.

- **Mountain region.** Total enrollment fell by 4.6 percent this year, led by a decline in brick-and-mortar enrollment. The pandemic exacerbated housing issues, with some wealthy families moving into resort areas, while families employed in the hospitality sector faced employment loss. The return to public schools the next two years is expected to be moderated by some of these families leaving the region to seek employment and affordable housing elsewhere.
- **Western region.** Enrollment in one of the most varied regions declined by 4.3 percent this year due to COVID-19, a decline in tourism, and a faltering oil and gas sector. High housing costs in some districts cause families to leave the area, while in other districts lower costs attracted students. Enrollment will near pre-pandemic levels next year and is expected to flatten in the out year, as families leave the area and age cohort sizes decline.
- **Southwest mountain region.** Bucking other regional trends, overall enrollment grew by 7.6 percent this year due solely to a sizable increase in online enrollment. The 175.8 percent increase in online enrollment is attributable to Durango’s multidistrict online school, which increased by 1,500 students. During next school year, online enrollment is expected to decline while brick-and-mortar enrollment bounces back. Overall, enrollment will grow modestly in the 2021-22 school year and decline by the fastest pace in the state, as the region has seen declining enrollment in recent years due to employment pressures and high cost of living attracting families with fewer kids.

Risks to the Forecast

Significant uncertainty due to COVID-19 and vaccine timelines cloud this forecast, posing both upside and downside risks to enrollment. As parents sought alternatives to a brick-and-mortar education this year, it is uncertain whether students will remain homeschooled or enrolled in online, CSI, or private school next year and beyond. Kindergarten enrollment faces upside risks if kindergarteners held out of school this year will start next year as “redshirt” kindergarteners, and downside risk if parents choose to keep kindergarteners out of school, homeschooled, in private school, or enroll them in first grade. Additionally, people who moved this year due to COVID-related concerns or changes in employment may have kept their children in remote learning in the district they left. This may result in larger than expected shifts across school districts in future years.

Birth rates in the state continue to decline and net in-migration is expected to moderate further, with high housing costs putting pressure on family formation and younger in-migrants. The pandemic-induced recession exacerbated this trend, as many Coloradoans lost their jobs this year, particularly in the service and energy sectors. Full-scale vaccination schedules will impact the economic recovery but significant uncertainty remains. Housing costs rose this year as a result of the pandemic pushing people to search for additional space and potentially accelerating the move to exurban areas.

Figure 8
Forecast Percent Change in Enrollment by School District

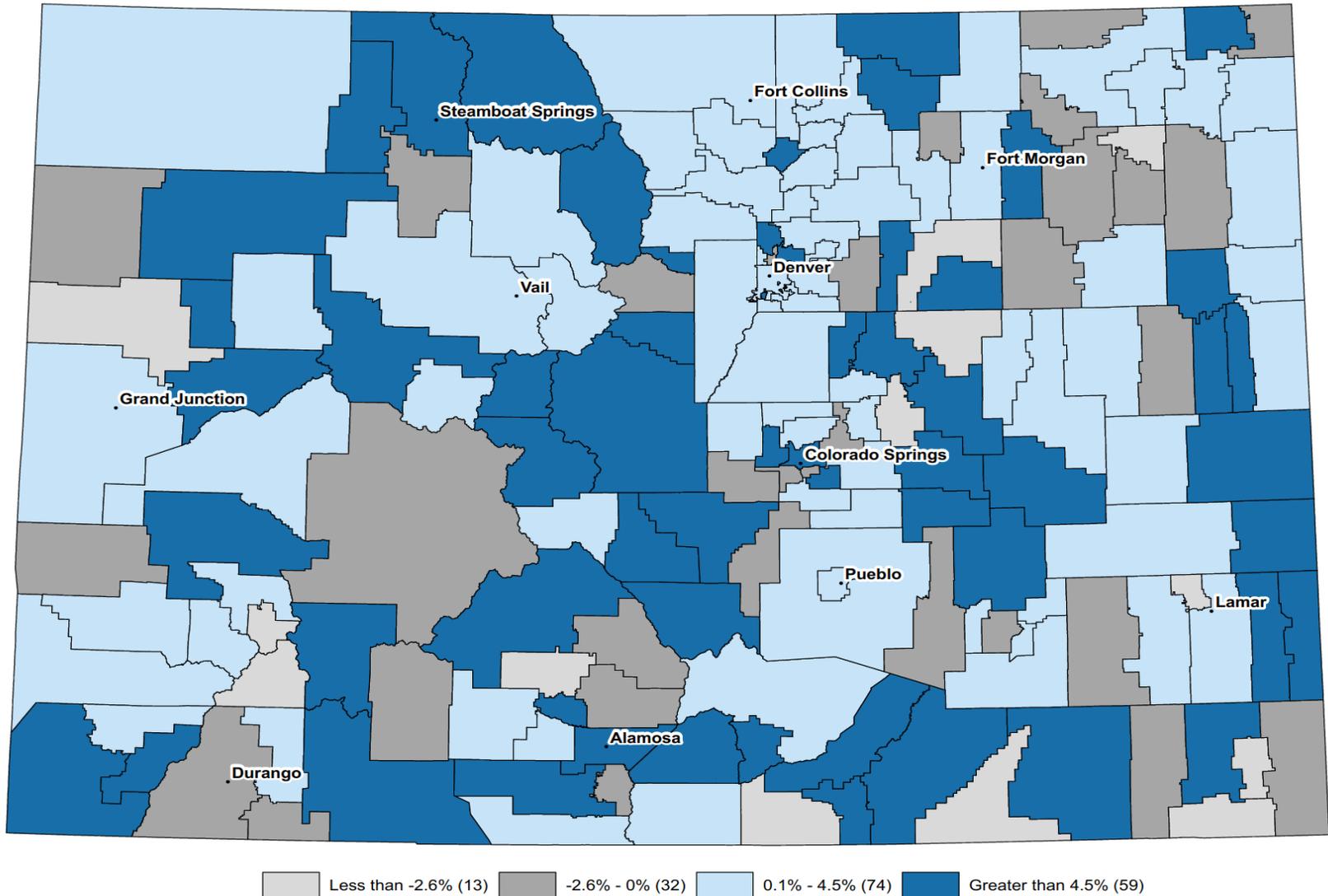
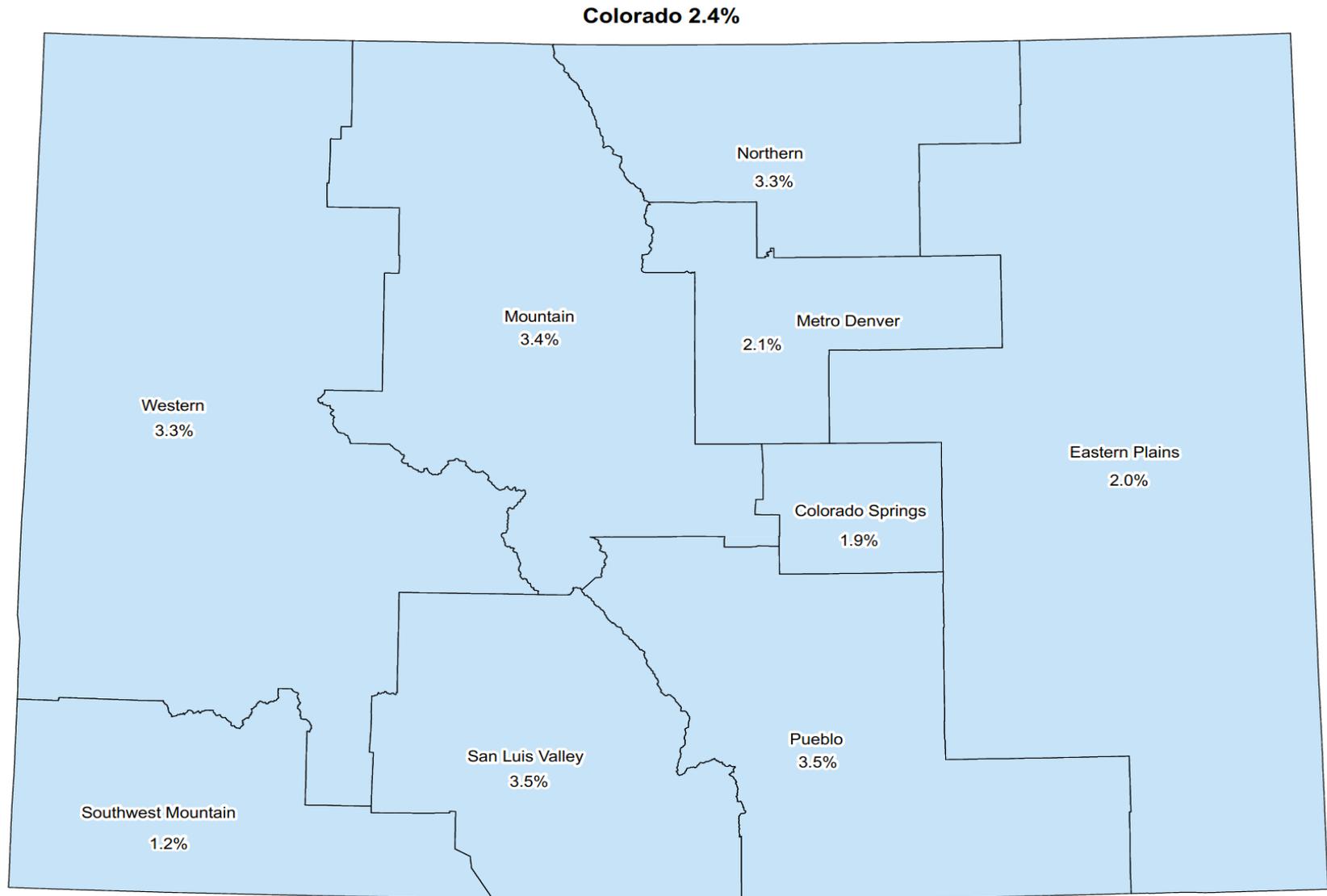


Figure 9
Forecast Percent Change in Enrollment by Economic Region



Assessed Value Projections

This section provides projections of assessed values for residential and nonresidential property in Colorado through 2023. Property values and the assessment rate determine assessed values, which are an important determinant of property taxes. Property taxes are the largest source of local government tax revenue in Colorado and are collected by counties, cities, and special districts.

Local property tax revenue is also the first source of funding for local public school districts. Assessed property values within a school district are thus an important determinant of the amount of state aid provided to each school district. Districts then receive state equalization payments in an amount equal to the difference between formula funding and their local share. More information on school finance can be found starting on page 19.

Summary

Statewide assessed taxable values increased 0.5 percent statewide between 2019 and 2020. This change reflects new residential and nonresidential construction and new assessments for natural resources, personal property, and state assessed utilities. Every two years, county assessors determine new values for residential, commercial, industrial, and vacant properties, based on the previous 18 months of sales as part of the reassessment process.

Statewide assessed values are expected to increase 0.5 percent in 2021, a reassessment year. Continued growth in residential values will be offset by declining commercial values and a marked drop in oil and gas values as a result of the pandemic. Assessed values in each region of the state will reflect the unique mix of properties and economic forces specific to that region. In 2022, an intervening year between reassessments, assessed values will increase 2.0 percent, primarily reflecting the value of new construction.

Impact of the COVID-19 Pandemic

The COVID-19 pandemic has significantly reduced commercial property values, as many small businesses were forced to close and office vacancy rates skyrocketed. For commercial property, the impact of the pandemic is reflected in 2021 values, as the 2021 reassessment is based on valuations as of June 30, 2020. Pandemic effects on property values occurring after June 30, 2020, will have no impact on assessed values for the 2021-2022 reassessment cycle.

The value of oil and gas property declined markedly, as both demand for and production of oil collapsed with reduced travel during the pandemic. Oil and gas values for 2021 are based on 2020 production, and values for 2022 are based on 2021 production.

The pandemic likely contributed to home-price appreciation through the second quarter of 2020, as it induced some demand for additional space, single-family homes, and homes outside of the urban cores of metro areas across the state. However, because home prices have been rising steadily in the state over the last several years, it is difficult to separate the pandemic's impact on residential property values statewide from other contributing factors.

Residential Assessment Rate

In the November 2020 election, voters approved Amendment B, which repealed the Gallagher Amendment from the state constitution. As a result, the General Assembly is no longer required to set the residential assessment rate (RAR) to maintain the ratio between residential and nonresidential assessed values, and the residential assessment rate is maintained at its current 7.15 percent. If the Gallagher Amendment were still in place, this forecast estimates that the RAR would decrease **from 7.15 percent to 5.62 percent** for 2021 and 2022 to maintain the required ratios following the 2021 reassessment. If the RAR were reduced as estimated, residential assessed values would have declined by a projected \$15.2 billion, or 21.4 percent, relative to this forecast's expectation for 2021.

Assessed Values

Total statewide assessed values reached \$136.2 billion in 2020, and are expected to increase 0.5 percent to \$136.9 billion in 2021. In 2022, assessed values are expected to increase by 2.0 percent due to new construction and increased oil and gas production. Residential and nonresidential assessed values are shown in Table 15 and Figure 10 on page 51. Maps displaying assessed values by region and school districts are shown in Figures 11 and 12 on pages 54 and 55.

Table 15
Residential and Nonresidential Assessed Values
Millions of Dollars

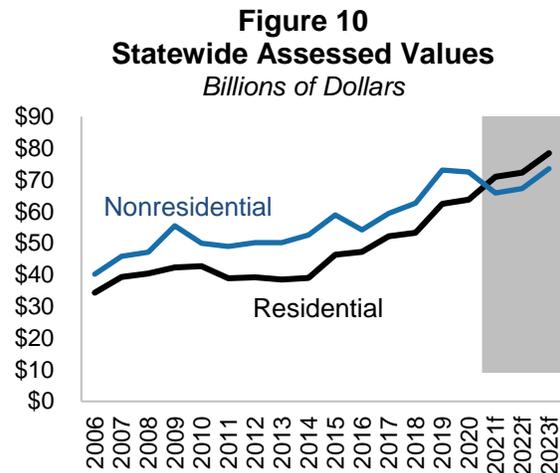
Year	Residential		Nonresidential		Total	
	Assessed Value	Percent Change	Assessed Value	Percent Change	Assessed Value	Percent Change
2007	\$39,331	14.5%	\$45,816	14.0%	\$85,147	14.2%
2008	\$40,410	2.7%	\$47,140	2.9%	\$87,550	2.8%
2009	\$42,298	4.7%	\$55,487	17.7%	\$97,785	11.7%
2010	\$42,727	1.0%	\$49,917	-10.0%	\$92,644	-5.3%
2011	\$38,874	-9.0%	\$48,962	-1.9%	\$87,835	-5.2%
2012	\$39,198	0.8%	\$50,211	2.6%	\$89,409	1.8%
2013	\$38,456	-1.9%	\$50,153	-0.1%	\$88,609	-0.9%
2014	\$38,997	1.4%	\$52,578	4.8%	\$91,575	3.3%
2015	\$46,378	18.9%	\$58,899	12.0%	\$105,277	15.0%
2016	\$47,261	1.9%	\$54,157	-8.1%	\$101,419	-3.7%
2017	\$52,162	10.4%	\$59,468	9.8%	\$111,630	10.1%
2018	\$53,279	2.1%	\$62,636	5.3%	\$115,915	3.8%
2019	\$62,486	17.3%	\$73,086	16.7%	\$135,572	17.0%
2020	\$63,751	2.0%	\$72,480	-0.8%	\$136,231	0.5%
2021f	\$70,988	11.4%	\$65,903	-9.1%	\$136,890	0.5%
2022f	\$72,311	1.9%	\$67,275	2.1%	\$139,586	2.0%
2023f	\$78,458	8.5%	\$73,543	9.3%	\$152,001	8.9%

Source: Colorado Department of Local Affairs, Division of Property Taxation. f = Legislative Council Staff forecast.

Residential assessed values forecast. In 2021, statewide residential market values are expected to increase 11.4 percent as county assessors revalue property for the reassessment year. Home sales that occurred in 2019 and the first half of 2020 will determine the 2021 market values. While decelerating slightly, the housing market is expected to remain strong along the northern Front Range, with significant price increases forecast in the Denver metro area, northern Colorado, and Colorado Springs. The Western Slope and other rural parts of the state are expected to see slower, but still significant, home price appreciation. With the RAR held constant at 7.15 percent, residential assessed values will proportionately reflect the growth of residential market values.

In 2022, residential assessed values will increase 1.9 percent due to new construction across the state. County assessors will value 2022 new construction at 2020 market values and apply a 7.15 percent RAR to determine the assessed value for new construction in that year.

Nonresidential assessed values forecast. Because the assessment rate for nonresidential property is fixed at 29 percent, changes in market value are proportionally reflected in the assessed value. Statewide assessed nonresidential property values are expected to decrease 9.1 percent in 2021. This decrease is attributable to the reassessment of commercial, industrial, and vacant property that occurred in the midst of the pandemic, as these values reflect reassessments as of June 30, 2020, as well as the collapse in demand for oil in 2020 due to the pandemic.



Source: Colorado Department of Local Affairs, Division of Property Taxation. f = Legislative Council Staff forecast.

Beginning in 2022, nonresidential assessed values are expected to increase moderately through the forecast period as the commercial sector recovers following the pandemic and demand for oil and natural gas rebounds. Figure 10 depicts residential and nonresidential assessed values from 2006 through the end of the forecast period ending in 2023.

Regional Impacts and Variations

Assessed values in each region of the state are determined by the unique mix of properties and economic forces specific to that region. Table 16 shows the 2020 assessed value by region and the expected change throughout the forecast period.

Table 16
2020 Assessed Value and Forecast Changes
Billions of Dollars

Region	Assessed Value	Forecast Changes Year-Over-Year			3-Year Annual Average
	2020p	2021	2022	2023	
Colorado Springs	\$8,694	5.6%	2.1%	9.0%	5.4%
Eastern Plains	\$3,343	1.0%	2.8%	3.4%	2.4%
Metro Denver	\$75,140	1.8%	1.9%	11.1%	4.7%
Mountain	\$13,655	6.7%	0.6%	3.9%	3.6%
Northern	\$19,734	-9.9%	3.8%	9.2%	0.7%
Pueblo	\$3,045	1.2%	1.4%	5.4%	2.6%
San Luis Valley	\$716	1.0%	1.1%	2.8%	1.6%
Southwest Mountain	\$2,995	-0.8%	1.6%	2.0%	0.9%
Western	\$8,908	-2.4%	0.8%	3.6%	0.6%
Statewide Total	\$136,231	0.5%	2.0%	8.9%	3.7%

p = Preliminary data from the Colorado Department of Local Affairs, Division of Property Taxation.

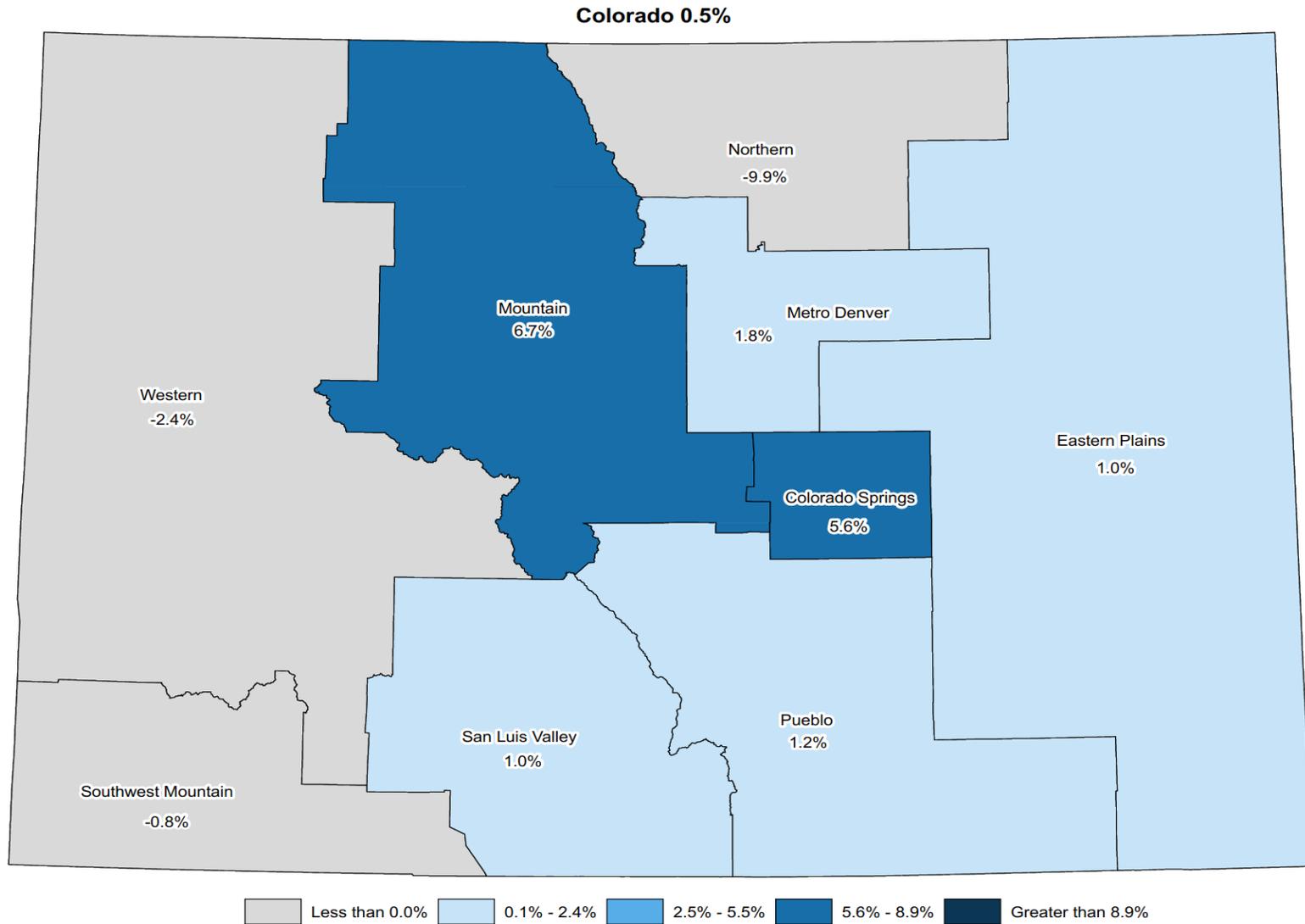
The unique mix of properties in each region will determine the change in value between 2020 and 2021, after the 2021 reassessment. Commercial and industrial values have been significantly impacted by the pandemic, while the value of state assessed utilities is expected to remain flat and agricultural land values are expected to be relatively stable. Trends for each region are summarized in Table 17 and shown in Figure 13.

All regions of the state are expected to increase in total assessed value between 2021 and 2022. The northern region and the Eastern Plains will have the fastest growth due to the recovery of the oil and gas industry. The other seven regions of the state will grow based on new construction and increases in the value of state assessed properties.

Table 17
Summary of Projected Changes in Values by Region between 2020 and 2021

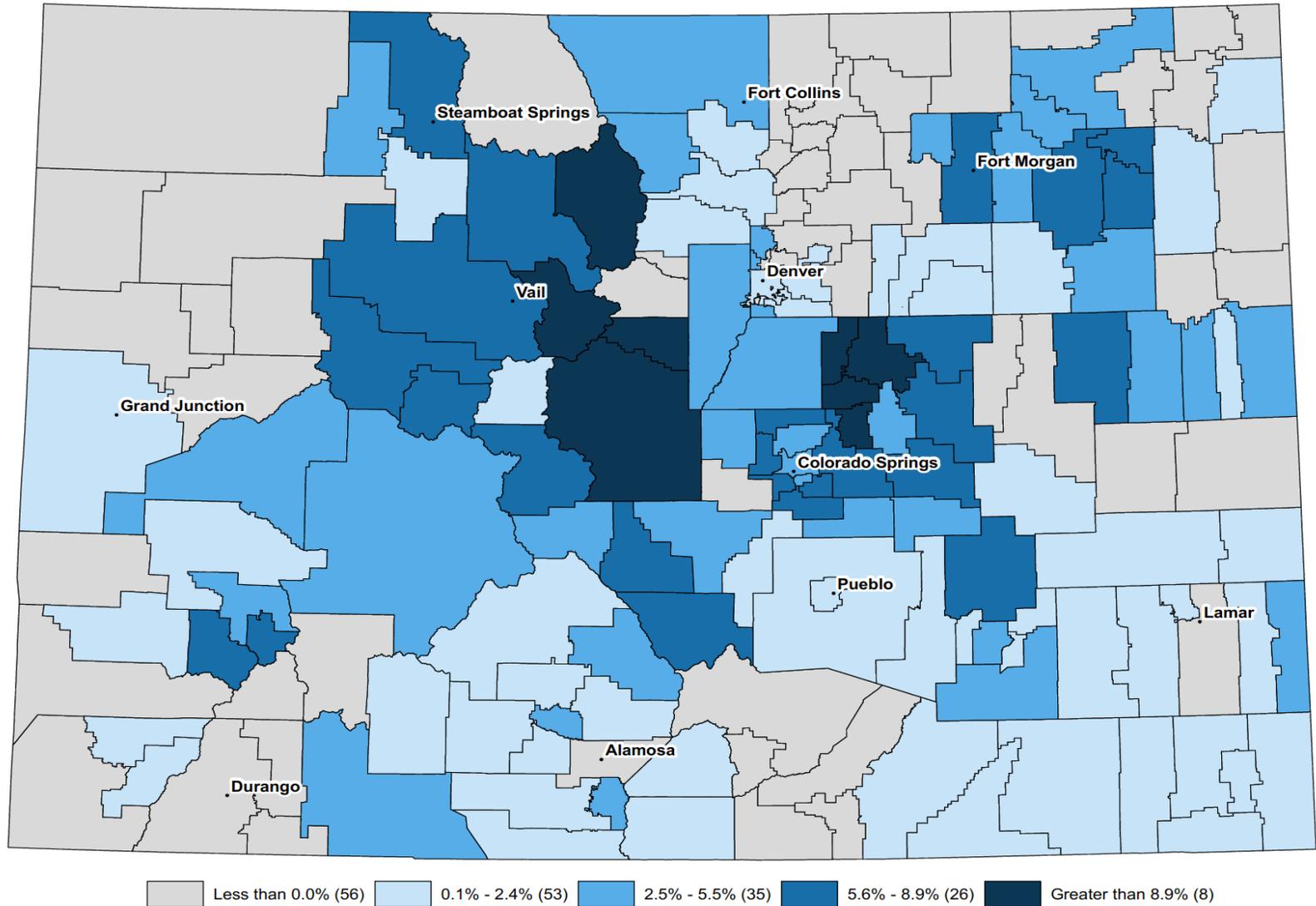
Region	Total Assessed Value Growth	Residential Trends	Nonresidential Trends
Metro Denver	1.8%	<ul style="list-style-type: none"> • Slower appreciation in Denver and Boulder. • More growth in lower cost suburbs. 	<ul style="list-style-type: none"> • Reassessment of commercial, industrial, and retail buildings with business closures and higher vacancy rates due to the pandemic. • Reduced flights into DIA from pandemic will dampen growth in state assessed value.
Colorado Springs	5.6%	<ul style="list-style-type: none"> • Continued home price appreciation as homebuyers seek more affordable areas. • Slower growth than in previous reassessment years. 	<ul style="list-style-type: none"> • Reassessment of commercial, industrial, and retail buildings with business closures and higher vacancy rates due to the pandemic. • Stable values for state assessed, vacant, and agricultural property, primarily in eastern part of region.
Northern	-9.9%	<ul style="list-style-type: none"> • Slower appreciation in both Larimer and Weld Counties. 	<ul style="list-style-type: none"> • Reassessment of commercial, industrial, and retail buildings with business closures and higher vacancy rates due to the pandemic. • Reduced oil and gas development in 2020.
Western	-2.4%	<ul style="list-style-type: none"> • Rapid home price appreciation in Grand Junction as homebuyers seek more affordable areas. • Some counties have less growth as local economies shift away from natural resources. 	<ul style="list-style-type: none"> • Reassessment of commercial, industrial, and retail buildings with business closures and higher vacancy rates due to the pandemic. • Less natural gas production activity in some counties.
Pueblo	1.2%	<ul style="list-style-type: none"> • Home price appreciation in Pueblo as demand shifts south from Colorado Springs region. • Slower growth than in previous reassessment years 	<ul style="list-style-type: none"> • Reassessment of commercial, industrial, and retail buildings with business closures and higher vacancy rates due to the pandemic. • Appreciation in state assessed, agricultural, and vacant land values will moderate commercial and industrial declines.
Eastern Plains	1.0%	<ul style="list-style-type: none"> • Rapid home price appreciation in counties on the eastern fringe of the metro area. • Slow growth in other parts of the region. 	<ul style="list-style-type: none"> • Stable value for state-assessed and agricultural property. • Reduced oil and gas development in isolated producing counties.
Mountain	6.7%	<ul style="list-style-type: none"> • Slowing, but still significant appreciation in resort areas and neighboring counties. 	<ul style="list-style-type: none"> • Slowing valuations for commercial property region-wide, and decreased mine values in Clear Creek, Lake, and Teller counties. • Continued appreciation of vacant land.
Southwest Mountains	-0.8%	<ul style="list-style-type: none"> • Region-wide slowing in home price growth, with Pagosa Springs continuing to outpace Durango and Cortez. 	<ul style="list-style-type: none"> • Reassessment of commercial, industrial, and retail buildings with business closures and higher vacancy rates due to the pandemic. • Less natural gas production activity in western part of the region.
San Luis Valley	1.0%	<ul style="list-style-type: none"> • Continued slow growth in home prices. 	<ul style="list-style-type: none"> • Stable value for agricultural property and vacant land. • Reassessment of commercial, industrial, and retail buildings with business closures and higher vacancy rates due to the pandemic.

Figure 11
Forecast Percent Change in Total Assessed Valuation by Economic Region
 2021 Assessment Year (Budget Year 2020-21)



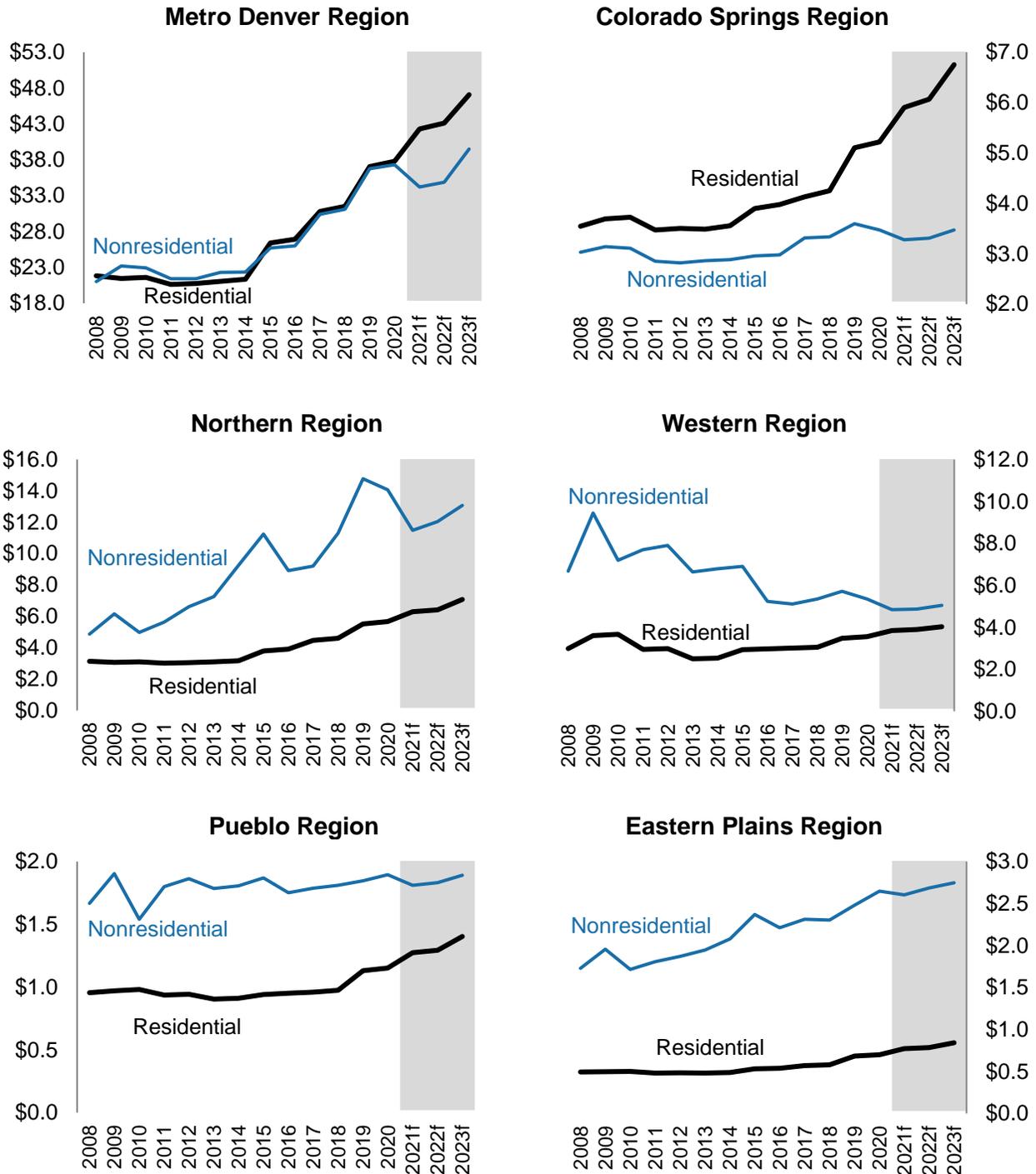
Source: Legislative Council Staff December 2020 forecast.

Figure 12
Forecast Percent Change in Total Assessed Valuation by School District
 2021 Assessment Year (Budget Year 2020-21)



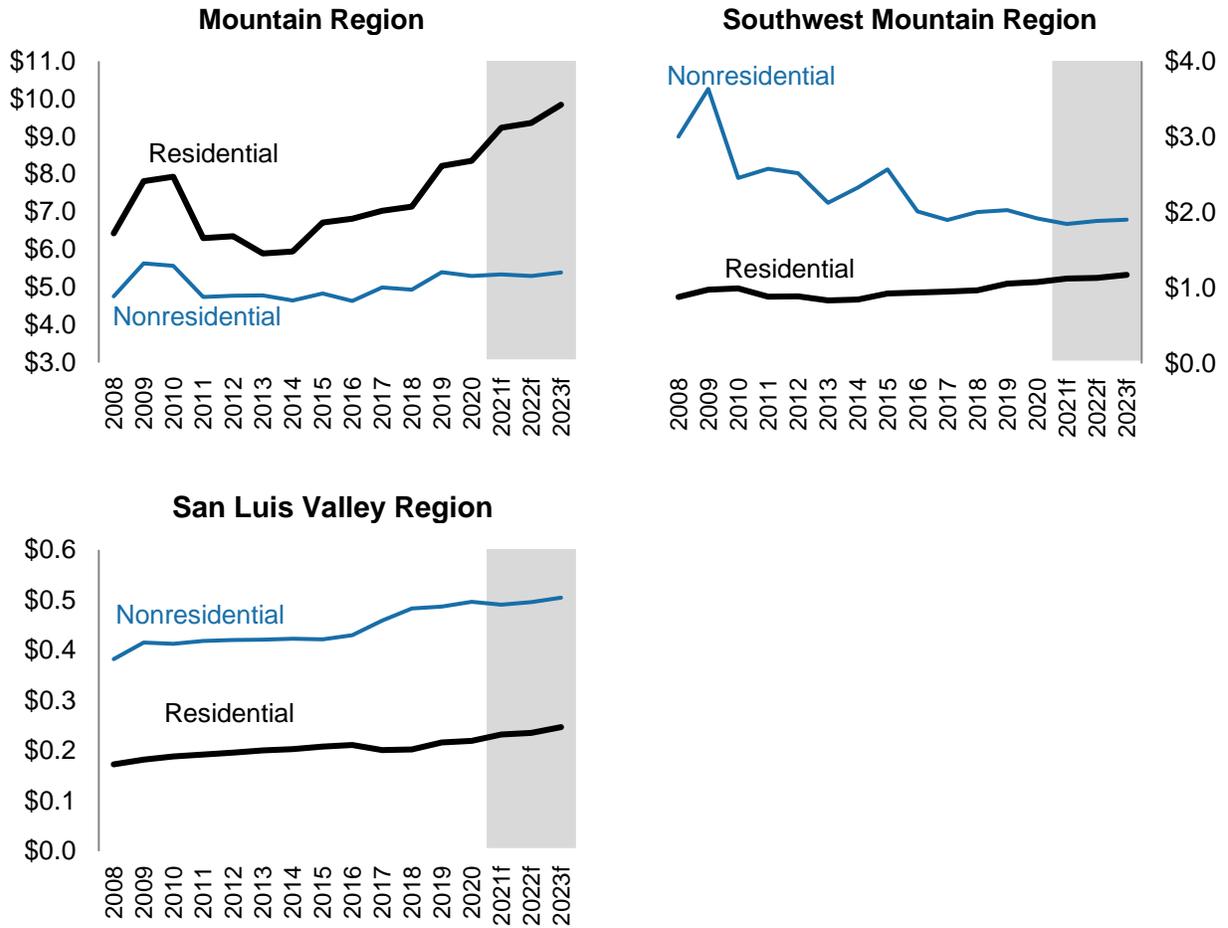
Source: Legislative Council Staff December 2020 forecast.

Figure 13
Assessed Values by Region
Billions of Dollars



Source: Department of Local Affairs, Division of Property Taxation.
 Legislative Council Staff forecast in 2021 through 2023.

Figure 13 (Cont.)
Assessed Values by Region
Billions of Dollars



Source: Department of Local Affairs, Division of Property Taxation.
 Legislative Council Staff forecast in 2021 through 2023.

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Adult Prison Population and Parole Caseload Projections

This section presents projections of the state’s adult prison population and parole caseload for FY 2020-21 through FY 2022-23. It includes a discussion of the historical and current trends affecting these populations, the adjustments made since the December 2019 forecast, and relevant recent legislation. It concludes with an analysis of risks to the forecast.

Key Findings

Significant population decrease. The Department of Corrections (DOC) jurisdictional population (“prison population”) was 17,441 on June 30, 2020, a decline of 2,510 offenders, or 12.6 percent, from the prior year. The trajectory of the prison population deviated substantially from the December 2019 forecast, which projected a much smaller decrease of 1.7 percent over the fiscal year, for a June 30, 2020 population of 19,614.

The prison population has continued to decline over the first five months of FY 2020-21. Between June 30 and November 30, the prison population fell by an additional 1,076 offenders, or 6.2 percent.

Parole increase. The June 30, 2020 in-state parole population was 10,315, an increase of 963 offenders, or 10.3 percent, over the previous year. In comparison, the December 2019 anticipated 9,757 offenders, or an increase of 4.3 percent.

In addition to legislative changes affecting sentencing and parole, the key driver of the substantial prison and parole population changes was the COVID-19 pandemic, which drove changes throughout the criminal justice system, including in policing behavior, court activity, DOC admissions, releases to parole, parole supervision, and parole and probation revocations. These impacts are discussed in detail below.

Forecast summary. As shown in Table 18 on page 65 (prison population) and Table 19 on page 68 (parole caseload), the following outcomes are anticipated over the forecast period:

- **Overall population.** The prison population is expected to decline to 15,767 inmates as of June 30, 2021, a decrease of 9.6 percent over FY 2020-21 or a decrease of 3.7 percent relative to the most recent population count on November 30. The forecast assumes that the effects of the COVID-19 pandemic and mitigation efforts will continue to suppress admissions in the short to medium term, while legislative changes will have a longer-term impact. Additional uncertainty remains as yet-unknown structural changes in policing or prison and parole administration may persist in the aftermath of the pandemic. The forecast assumes that admissions will remain subdued as reduced court activity continues to reverberate. Additionally, releases to parole will

Prison population:

The number of offenders committed to the custody of the Department of Corrections (DOC), including those in state prisons, private prisons, community corrections facilities, county jails, and other locations.

Parole caseload:

Offenders who have been released from prison but remain under DOC supervision. Depending on the context, this term may refer only to parolees located in Colorado.

New court commitment:

Admission to DOC custody of an offender who has been convicted of a felony and sentenced to a period of incarceration.

Release:

Departure of an offender from prison to parole or via discharge from DOC supervision.

Revocation:

Return to DOC custody of an offender who has violated his or her terms of parole.

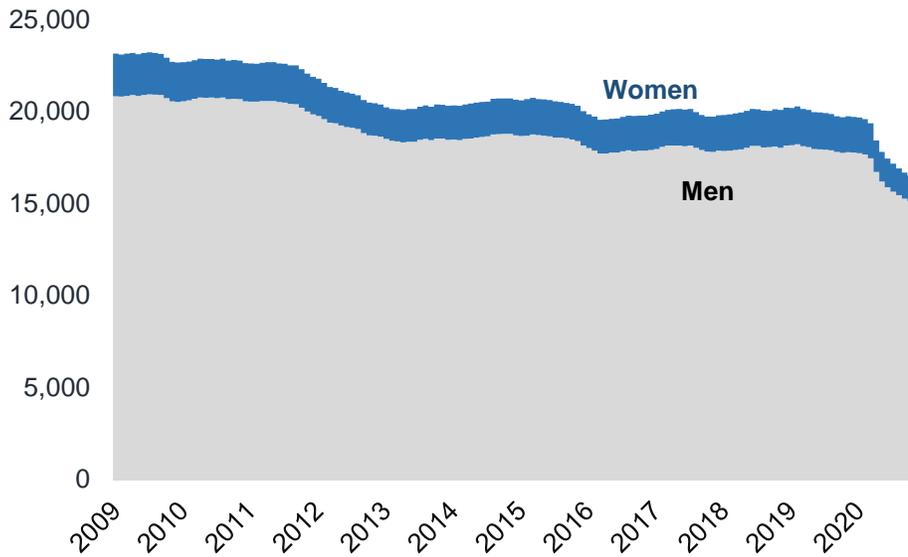
continue to decline into late 2021 due to suppressed admissions. By June 30, 2022, the prison population is expected to increase by 5.6 percent to reach 16,646 inmates. The prison population forecast has been revised downward significantly relative to the December 2019 forecast, primarily as a result of substantial disruptions to the criminal justice system due to the COVID-19 pandemic.

- **Male population.** After declining by 11.4 percent in FY 2020-21, the male prison population is expected to fall another 8.8 percent between June 2020 and June 2021, decreasing from 15,886 inmates to 14,494 inmates, before increasing 5.2 percent to 15,251 inmates in June 2022. Trends driving changes in the male population are similar to those for the overall state inmate population.
- **Female population.** After declining by 22.9 percent in FY 2020-21, the female population is expected to decrease by 18.1 percent, from 1,555 inmates in June 2020 to 1,273 inmates in June 2021, before increasing by 9.6 percent to 1,395 inmates in June 2022. After reaching 10.1 percent in June 2019, the share of women in the state's prison population declined to 8.9 percent in June 2020, and is expected to average 8.3 percent over the forecast period.
- **Parole caseload.** After increasing 10.3 percent to 10,315 in June 2020, in-state parole caseload is expected to decline to 9,812 parolees in June 2021 and 8,581 parolees in June 2022. The parole population will continue to fall as the number of releases remains subdued.

Prison Population Forecast

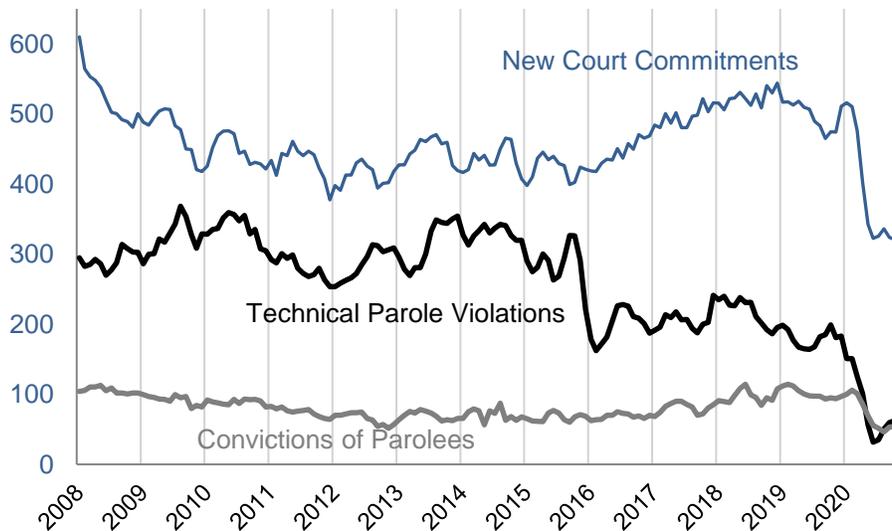
Recent trends. Between February 2019 and February 2020, just before the first cases of COVID-19 were identified in Colorado, the prison population declined by 665 inmates, or 3.3 percent. With the implementation of social distancing and safety measures to prevent mass COVID-19 outbreaks inside DOC facilities, the prison population was reduced sharply. By April 30, 2020, after two months that roughly corresponded with the period of statewide shutdowns, the prison population had declined by an additional 1,167 inmates, or 6.0 percent. As of the most recent count in November, the population totaled 16,365 inmates, a further decline of 2,054 inmates, or 11.2 percent, since April. The decline reduced the population across both state-operated and private facilities, with the DOC using the south campus of the Centennial Correctional Facility for quarantine purposes. As a result, the vacancy rate for state-operated prisons has increased, from 1.1 percent in February 2020 to 25.0 percent in November 2020.

Figure 14
Prison Population by Sex
June 2009 to November 2020



Source: Colorado Department of Corrections.

Figure 15
State Prison Admissions by Source*
Three-Month Moving Average



Source: Colorado Department of Corrections.

*Omits admissions for returns from prior releases to probation, court order discharge or appeal bond, interstate compact, and youthful offender system terminations. The omitted categories produced a combined average of eight admissions per month over the sample period.

Admissions. An offender who is admitted to a DOC facility is generally recorded as having been admitted for one of three reasons. Most admissions are attributable to *new court commitments*, i.e., felony criminal cases in which a defendant is convicted and sentenced to a period of incarceration. The two other principal types of admissions are for readmissions of parolees, either because the parolee *committed a new crime* while on parole or because the parolee incurred a *technical parole violation* – a violation of his or her conditions of parole that was not prosecuted as a new crime.

Trends in prison admissions are presented in Figure 15. Admissions increased 10.5 percent in 2017 and 5.2 percent in 2018, before falling by 7.2 percent in 2019. Through November of 2020, admissions are down by 36.2 percent compared to the same period in 2019. Monthly average admissions fell from 781 in 2019 to 496 in 2020. The decrease in new court commitments accounts for about half of the decline in admissions, while decreased readmissions for technical violations accounts for 37.7 percent of the decline. New court commitments represent the majority of all prison admissions, and inmates admitted by new court commitments will remain in prison for a longer duration than those revoked from parole.

The decline in court commitments reflects reduced court capacity, jury trial moratoria, and other changes in court operations due to the COVID-19 pandemic and related public health measures. On March 16, 2020, Chief Justice Coats ordered the suspension of jury trials throughout the state and limited courts to emergency operations. While the prohibition on non-emergency operations was lifted in early May with the end of the statewide stay-at-home order, proceedings were shifted online and otherwise curtailed due to safety protocols. The statewide moratorium on jury trials continued through early August. With the winter surge in COVID-19 cases in the state, several judicial districts have re-suspended jury trials through early 2021.

These changes have slowed the pace of court proceedings and reduced felony case filings in state district courts, which are down 21.1 percent year-to-date compared with 2019 filings, compared with average annual increases of 9.4 percent between 2015 and 2018 and a decline of 2.1 percent in 2019. The percentage of cases open for over one year has increased to 12.5 percent in the fourth quarter of 2020, compared with 10.2 percent in the same period last year. New court commitments to DOC averaged almost 500 per month in 2019, and fell to a low of 286 in May 2020 before beginning to bounce back, only to dip again in November, to 233.

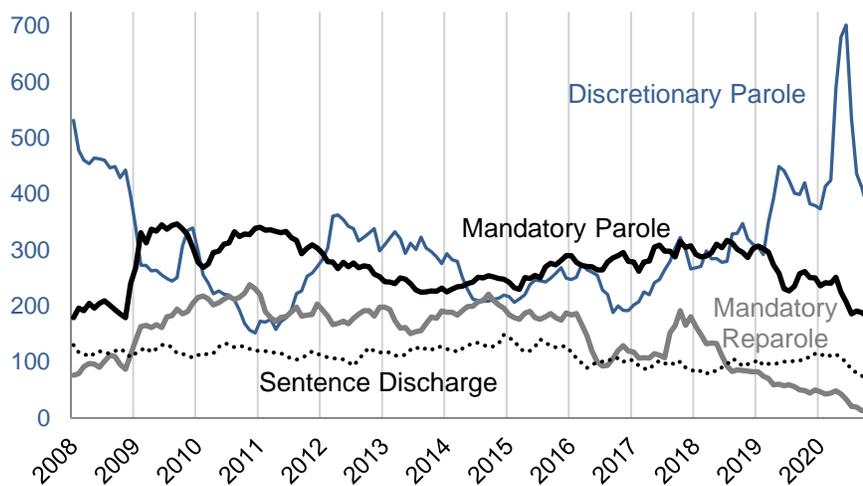
Legislative changes have also placed downward pressure on admissions. In addition to Senate Bill 19-143, which tightened criteria for revocation to prison for a technical parole violation, House Bill 20-1019 reclassified some types of absences or attempted absences from non-prison supervision (e.g., supervised parole or a direct sentence to community corrections) from a felony to a misdemeanor, depending on the prior conviction. In addition, House Bill 19-1263 reclassified several existing drug felonies as drug misdemeanors for offenses committed on or after March 1, 2020. Felony case filings for escape and drug offenses in state district courts are down 37.4 percent and 59.4 percent, respectively, compared with the same period in 2019, after increasing at an average annual rate of 8.0 percent and 15.6 percent between 2015 and 2018. Details of legislative changes are discussed further below.

Releases. There are four primary ways in which inmates may be released from DOC: discretionary parole, mandatory parole, mandatory reparole, and sentence discharge. The two largest categories, discretionary parole and mandatory parole, represent the conditions under which an inmate may first be released onto parole. *Discretionary* parole releases indicate that the State Board of Parole chose to release an offender early, on or after his or her parole eligibility date but before his or her mandatory release date. *Mandatory* parole releases indicate that the offender was not granted early parole and instead was allowed to leave a DOC facility only after having reached his or her mandatory release date.

The two other major release categories pertain to offenders who have previously been released on parole and who were subsequently revoked to a DOC facility. One of these categories, *mandatory reparole*, is expected to fall to zero over the current forecast period due to the implementation of Senate Bill 19-143, which limited the circumstances under which the Parole Board may revoke an offender and removed the option of mandatory reparole for these offenders. Instead, revoked offenders are required to serve out the duration of their sentence in a DOC facility before receiving a *sentence discharge*.

Figure 16 presents state prison releases in each of the four most significant categories. Total releases from prison have been trending upward in recent years, rising from a monthly average of 804 in 2017 to 820 in 2019. As shown in Figure 16, discretionary releases spiked during the spring of 2019 and remained elevated throughout the year, reflecting an acceleration of releases of parole-eligible offenders in advance of those offenders’ mandatory release dates. Although discretionary releases were already elevated, the implementation of Senate Bill 19-143 in mid-2019 has also contributed to accelerating releases of low- and medium-risk parole-eligible inmates to parole. The increase in discretionary parole releases was accompanied by an attendant drop-off in mandatory releases during the immediate succeeding months.

Figure 16
State Prison Releases by Source*
Three-Month Moving Average



Source: Colorado Department of Corrections.

*Omits releases to probation, court-ordered discharges, releases on appeal bonds and inmate deaths. The omitted categories produced a combined average of 19 releases per month over the sample period.

The COVID-19 pandemic accelerated these trends as the DOC sought to manage the prison population to allow for social distancing as recommended by the Centers for Disease Control (CDC) guidelines to mitigate the spread of COVID-19 in DOC facilities. Working and living in close quarters makes inmates and staff particularly susceptible to an outbreak inside the facility, which could contribute to community spread outside the facility through contact with staff or released offenders. A series of executive orders issued by Governor Polis since the pandemic began resulted in a surge of discretionary releases, particularly in the months of April and May. Releases in the month of April 2020 totaled 1,369, of which 937 were discretionary. In May, total releases were 975, with 678 discretionary releases. June releases returned to average levels, and have declined since then, reflecting fast-tracked releases in the previous two months.

Executive Order D 2020-016 outlines ways in which to reduce and manage the inmate population during the pandemic, including those in community corrections facilities, intensive supervision and the county jail backlog. Specifically, the order, issued on March 25, 2020, allowed DOC to:

- limit the number of prisoners it accepts, based on certain criteria, and instead keep offenders in pre-transfer facilities, usually jails;
- award earned time credits to inmates to speed their release to parole;
- move inmates to intensive supervision programs outside of prison;
- expand the state's preexisting special needs parole program to expedite parole hearings for COVID-19-related considerations; and
- utilize the 650 additional beds available at the recently-opened south campus of the Centennial Correctional Facility to house inmates, regardless of classification, for needs related to the COVID-19 outbreak.

Executive Order D 2020-043, issued on April 23, 2020, extended the provisions of D-2020-016 for an additional 30 days, and amended them to further facilitate the reduction in the incarcerated population. Specifically, the order allowed DOC to develop criteria for the transfer of inmates to intensive supervision programs and allowed the administrators of community corrections programs discretion to award earned time credits to offenders in order to speed their release.

Most of the provisions of these executive orders were allowed to expire on May 22, 2020, with the exception of the provisions related to inmate intake processes. These provisions have been extended by orders D 2020-078, D 2020-112, D 2020-140, D 2020-166, D 2020-192, D 2020-221, D 2020-248, and D 2020-278, and are set to expire on January 10, 2021, unless extended.

Prison population forecast. New court commitments are expected to remain subdued as long as COVID-19-related public health restrictions remain in place, and to begin to recover as courts are able to resume a pre-COVID pace of activity. Given the significant reduction in current felony filings, as well as the lag between filing, sentencing, and commitment to DOC, we expect admissions to remain subdued through late 2021. While admissions will increase from pandemic lows, they will not return to pre-COVID levels during the forecast period due to legislative changes. We expect releases to

parole, which are already substantially down from pre-COVID levels, to continue to decline, reflecting lower admissions. Releases will remain significantly below their pre-COVID levels through the forecast period, climbing slowly to approach admissions in 2023. We expect the decline in the inmate population to begin to slow in early 2021. The population will begin to increase first as opportunities to release lower risk offenders to parole dissipate further, and later as courts begin to return to a normal pace of in-person operations. Table 18 shows historical and projected prison populations by sex from FY 2009-10 through FY 2022-23.

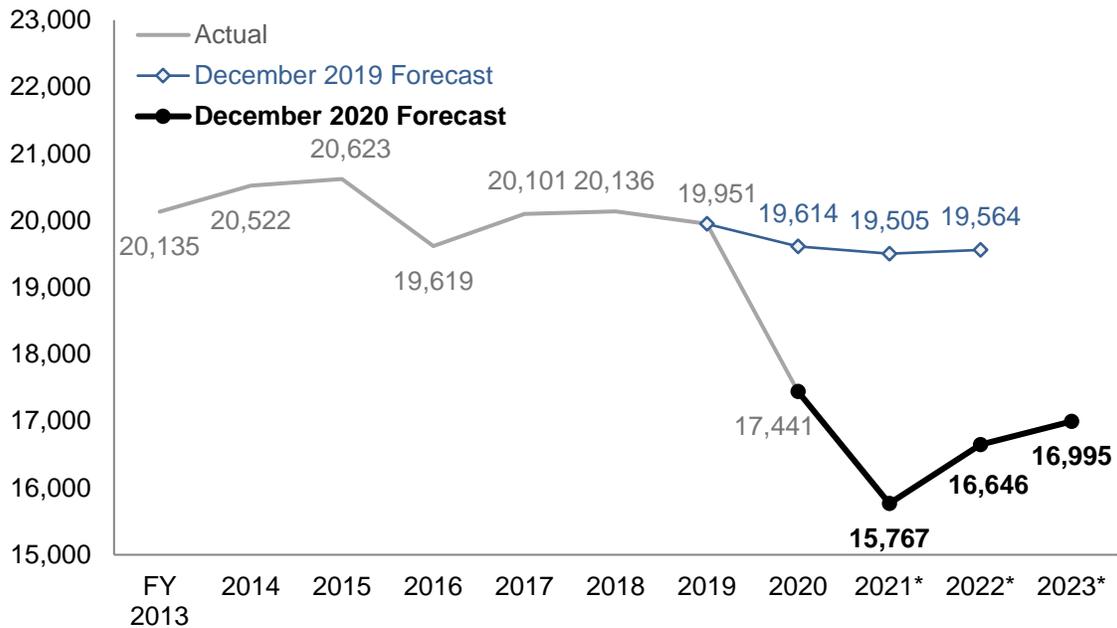
Table 18
Adult Prison Population by Sex
As of June 30 each Fiscal Year

Fiscal Year	Males	Percent Change	Females	Percent Change	Total	Percent Change
FY 2009-10	20,766	-0.6%	2,094	-8.6%	22,860	-1.4%
FY 2010-11	20,512	-1.2%	2,098	0.2%	22,610	-1.1%
FY 2011-12	19,152	-6.6%	1,885	-10.2%	21,037	-7.0%
FY 2012-13	18,355	-4.2%	1,780	-5.6%	20,135	-4.3%
FY 2013-14	18,619	1.4%	1,903	6.9%	20,522	1.9%
FY 2014-15	18,655	0.2%	1,968	3.4%	20,623	0.5%
FY 2015-16	17,768	-4.8%	1,851	-5.9%	19,619	-4.9%
FY 2016-17	18,108	1.9%	1,993	7.7%	20,101	2.5%
FY 2017-18	18,125	0.1%	2,011	0.9%	20,136	0.2%
FY 2018-19	17,935	-1.0%	2,016	0.2%	19,951	-0.9%
FY 2019-20	15,886	-11.4%	1,555	-22.9%	17,441	-12.6%
FY 2020-21*	14,494	-8.8%	1,273	-18.1%	15,767	-9.6%
FY 2021-22*	15,251	5.2%	1,395	9.6%	16,646	5.6%
FY 2022-23*	15,556	2.0%	1,439	3.2%	16,995	2.1%

*Source: Colorado Department of Corrections. *Legislative Council Staff projections.*

Adjustments to the forecast for total population. Figure 17 illustrates the inmate population forecasts published in December 2019 and December 2020. This forecast makes significant downward revisions to population expectations for both June 2021 and June 2022. It assumes that the impacts of COVID-19 will continue to reverberate throughout the forecast period, first in the continuing decline of the prison population through mid-2021, and then in its slow upward trend as capacity constraints moderate the pace at which COVID-19-related backlogs and delays can be addressed. Given the rapid and substantial decline in the prison population already in 2020, the forecast does not anticipate a return to pre-COVID-19 population levels within the forecast period.

Figure 17
Adult Inmate Population, Forecast-to-Forecast Comparison



Source: Colorado Department of Corrections and Legislative Council Staff. Actual values shown for FY 2012-13 through FY 2019-20. *Current forecast period.

Parole Forecast

Colorado’s parole population encompasses offenders who have been released from prison but have not yet been discharged from DOC supervision. These offenders may live with family or friends in the community, be housed in community corrections facilities, or be detained in county jails for violating parole terms. Offenders who reside in Colorado are generally supervised by DOC’s Division of Adult Parole. With authorization, offenders may be supervised by parole officers in another state, and some offenders from other states are supervised in Colorado. Offenders who stop reporting to their parole officers, or who illegally leave the state without authorization, are counted as absconders.

Offenders may be released to parole on or after their parole eligibility date at the discretion of the Parole Board (discretionary parole). Offenders who are not granted discretionary parole are released at their mandatory release date (mandatory parole). An offender’s parole period is dictated by statute according to his or her initial sentence. Offenders who violate parole terms may be revoked to DOC following a Parole Board revocation hearing, though the circumstances under which revocations are allowed have been narrowed following the enactment of Senate Bill 19-143. Parolees who are convicted for new crimes may again be sentenced to DOC custody and returned to prison to begin a new sentence.

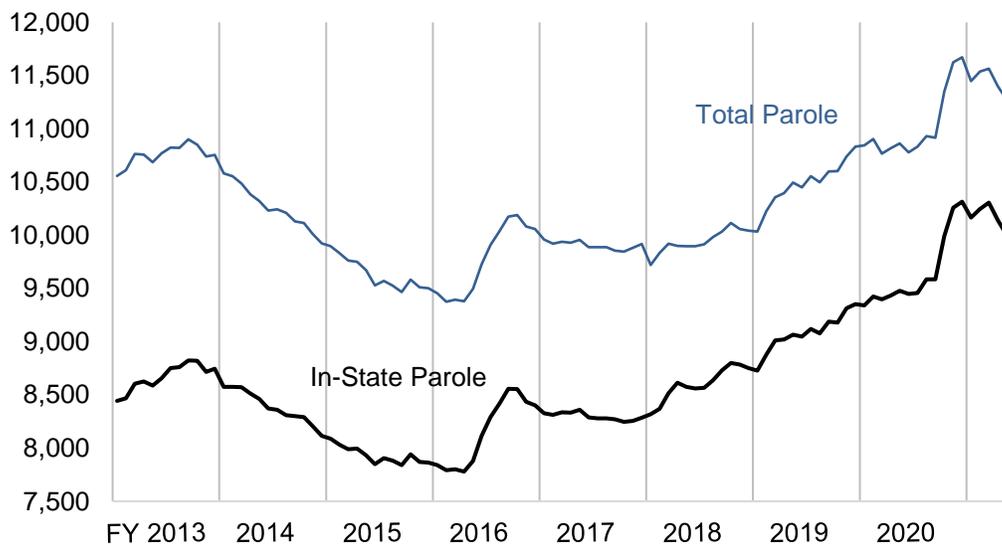
For these reasons, the prison and parole populations are intertwined. This forecast uses the assumptions already identified for the prison population as determinants of parole caseload. For example, an inmate who is granted parole is assumed to add to the parole population, and a parolee who is revoked to DOC is assumed to subtract from the parole population.

Recent trends. Over 2018 and 2019, the parole population steadily increased due to policy changes that accelerated releases to parole and limited the circumstances under which a parolee can be returned to prison. These included:

- House Bill 17-1326, which created a file review system to replace parole application hearings for certain inmates;
- House Bill 18-1251, which required that parole application hearings be conducted immediately following a jurisdictional inmate’s completion of a residential transitions placement;
- House Bill 18-1410, which allowed the DOC to request that the Parole Board conduct certain application hearings if the prison vacancy rate fell below 2 percent for a sustained period; and
- Senate Bill 19-143, which constrained revocations and broadened the circumstances under which DOC could request that certain application hearings be conducted.

Excluding absconders, the total parole population increased 5.4 percent in FY 2018-19 and 4.3 percent in FY 2019-20 through March 2020. A history of in-state and total parole caseload is presented in Figure 18.

**Figure 18
Colorado Parole Caseload**



Source: Colorado Department of Corrections. Omits absconders.

COVID-19 impacts. As discussed above, Governor Polis issued Executive Orders D 2020-016 and D 2020-043 to mitigate public health risks in prison facilities by expediting releases of inmates. Pursuant to the executive orders as well as its preexisting authority, the Parole Board increased the volume of releases to parole. Releases surged from an average of 817 offenders per month between July 2019 and March 2020 to 1,369 offenders in April and 975 offenders in May. Across the two months:

- 285 offenders were released through an expedited parole process for low-risk offenders within 180 days of their parole eligibility date;
- 163 offenders were released on special needs parole, a preexisting but sparsely-used program to release offenders deemed incapacitated or incompetent and therefore unlikely to pose a risk to public safety, which was temporarily broadened in Executive Order D 2020-016; and
- additional releases were granted under the Parole Board’s normal discretionary authority to release offenders who have passed their parole eligibility date.

These releases brought the parole population to an all-time high of 10,315 in-state parolees and 11,672 total parolees, excluding absconders, in June 2020. Since June, the parole population has fallen as discharges from parole have outpaced new releases. With fewer parole-eligible offenders deemed sufficiently low risk for release, monthly releases fell to an average of 666 between June and November 2020, reaching an 18-year low of 504 releases in November.

Parole caseload forecast. This forecast anticipates a steep decline in parole caseload from its current elevated level. Table 19 presents the parole population forecast, which is discussed below.

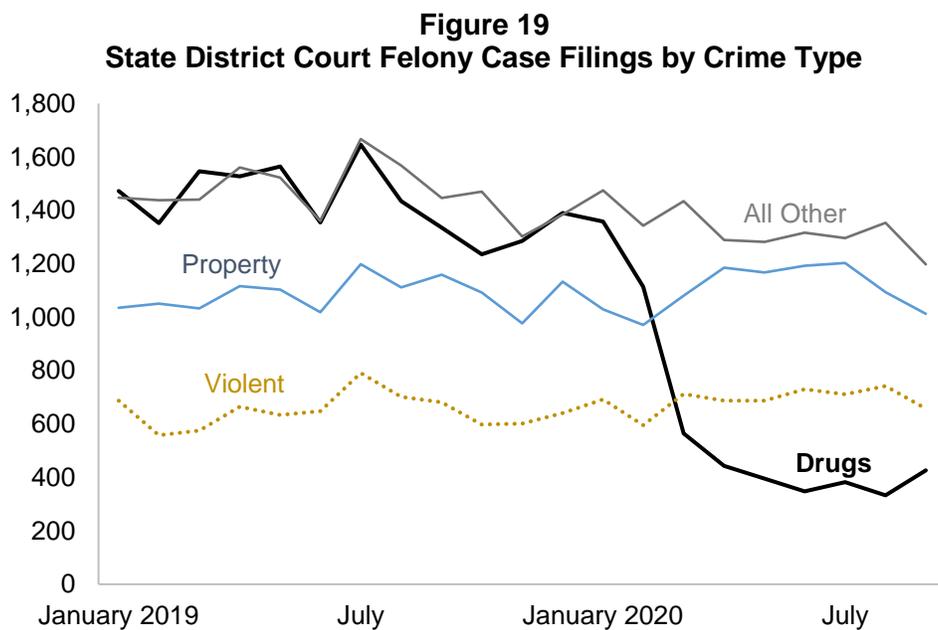
Table 19
Parole Population
As of June 30 each Fiscal Year

Fiscal Year	In-State Parole	Percent Change	Out-of-State Parole	Percent Change	Total	Percent Change
FY 2009-10	8,535	-5.3%	2,100	3.5%	10,635	-3.7%
FY 2010-11	8,181	-4.1%	1,922	-8.5%	10,103	-5.0%
FY 2011-12	8,445	3.2%	2,066	7.5%	10,511	4.0%
FY 2012-13	8,746	3.6%	2,008	-2.8%	10,754	2.3%
FY 2013-14	8,116	-7.2%	1,808	-10.0%	9,924	-7.7%
FY 2014-15	7,865	-3.1%	1,636	-9.5%	9,501	-4.3%
FY 2015-16	8,402	6.8%	1,656	1.2%	10,058	5.9%
FY 2016-17	8,286	-1.4%	1,633	-1.4%	9,919	-1.4%
FY 2017-18	8,752	5.6%	1,290	-21.0%	10,042	1.2%
FY 2018-19	9,352	6.9%	1,480	14.7%	10,832	7.9%
FY 2019-20	10,315	10.3%	1,357	-8.3%	11,672	7.8%
FY 2020-21*	9,812	-4.9%	1,229	-9.4%	11,041	-5.4%
FY 2021-22*	8,581	-12.5%	1,046	-14.9%	9,627	-12.8%
FY 2022-23*	7,933	-7.6%	941	-10.0%	8,874	-7.8%

*Source: Colorado Department of Corrections. *Legislative Council Staff projections.*

This forecast expects the parole population to decline in the near term. Releases from prison are expected to remain low, as the population of parole-eligible offenders has declined by about a quarter in the wake of the pandemic. Between June and November, the parole population fell 3.4 percent to 11,275, representing most of the total decrease expected to occur during the current FY 2020-21. This forecast expects that the parole population will decrease through 2021 and into late 2022, and increase thereafter.

Over the forecast period, the parole population is expected to decrease as a result of **House Bill 19-1263**. For offenses committed on and after March 1, 2020, the bill reclassified most felony drug possession charges as misdemeanors, which do not carry the possibility of a prison sentence. The bill's effective date made its effects difficult to distinguish from the consequences of the pandemic. However, as shown in Figure 19, felony case filings for drug charges fell by 72 percent between March and September compared with the same period in 2019, a decrease that was not shared by other case filings.



Source: Judicial Branch, State Court Administrator's Office.
Aggregation by Legislative Council Staff. Monthly data through September 2020.

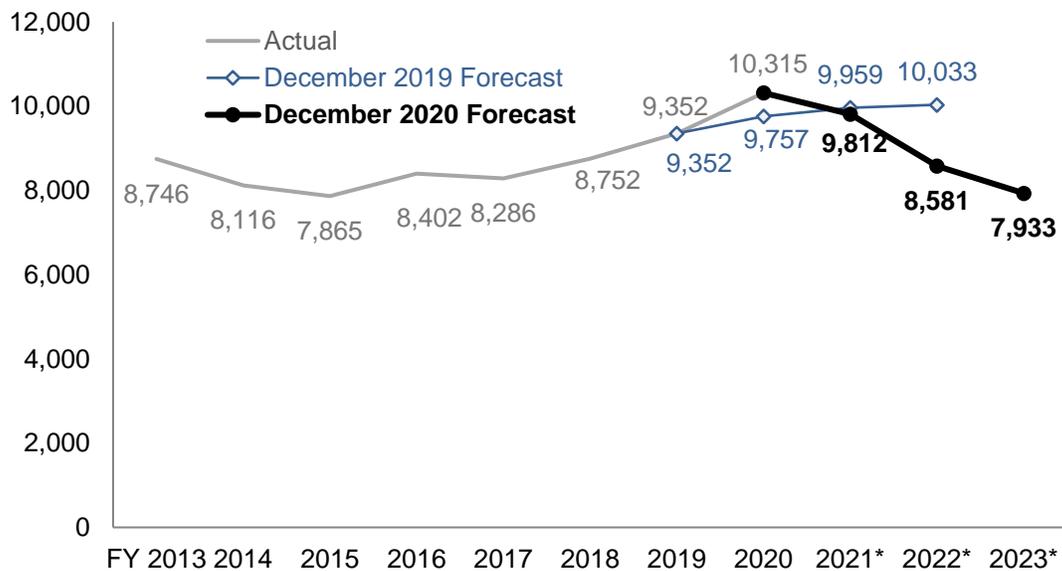
Even before HB 19-1263, defendants convicted of level 4 drug felonies for drug possession were often not sentenced to incarceration. For those that were, length of stay in DOC averaged between four and five months. However, these defendants spent about 10 months, on average, on parole. Therefore, the impact of reduced commitments for drug offenses under HB 19-1263 is expected to impact the parole population by more than twice as much as the prison population, since offenders who are not incarcerated as a result of the bill would have spent more than twice as long on parole as in prison.

House Bill 20-1019 is expected to place upward pressure on the parole population because parolees who leave or fail to return to their home or facility location when on intensive supervision or in a community corrections facility can no longer be charged with felony escape and returned to prison on a new felony conviction. The forecast assumes that there will be fewer readmissions of parolees for new crimes annually as a result of this provision.

Finally, the population of **absconders**, who are omitted from parole caseload for the purposes of this forecast, increased significantly during the spring. DOC counted an average of 1,277 absconders between July and September 2020, about 75 percent more than the average for the same period of 2019. This forecast assumes that the increase in absconders is attributable to the pandemic, which has limited opportunities for parole officers to contact and supervise parolees, and that the population of absconders will normalize in late 2021, putting some upward pressure on parole caseload.

Adjustments to the parole caseload forecast. Figure 20 illustrates the in-state parole caseload forecasts published in December 2019 and December 2020. The June 2020 parole population exceeded last year’s expectations by 558 parolees, or 5.7 percent. Expectations for the parole population have been revised downward modestly for June 2021, and revised downward significantly for June 2022.

Figure 20
Adult In-State Parole Population as of June 30, Forecast-to-Forecast Comparison



Source: Colorado Department of Corrections and Legislative Council Staff.
 Actual values shown for FY 2012-13 through FY 2019-20. *Current forecast period.

Factors Affecting the Adult Prison Population and Parole Caseload

It can be difficult to isolate the factors that directly impact the adult prison population and parole caseload. The following paragraphs describe how external factors, including demographic and economic trends, changes within the criminal justice system, new legislation, and internal factors including departmental and Parole Board administration, can influence the growth or decline of the inmate population and parole caseload volume.

Population. All other things being equal, a larger population may result in a greater number of criminal offenses, arrests, criminal felony filings, and prison commitments. Colorado’s population is projected to grow about 2.9 percent through the forecast period, which may put mild upward pressure on the inmate population.

Economic factors. Prison admissions exhibited essentially no correlation with economic conditions during the Great Recession and the subsequent recovery. Accordingly, this forecast assumes no correlation between economic conditions and the prison population.

Criminal justice system. The actions of the state courts affect inmate population growth. In particular, commitment of offenders to prison is the most significant determinant of the inmate population. The mix of crimes sentenced also affects the prison population because more serious crimes entail longer durations of stay in correctional facilities.

Parole policy and Parole Board administration. Statute defers the authority to grant discretionary inmate releases to the appointed members of the State Board of Parole. Subject to statutory requirements, the Board is autonomous, and any change in its pattern of releases would have a significant effect on the state prison population and parole caseload.

Departmental administration. The DOC's Division of Prisons oversees the state's prisons and, within constraints imposed by an offender's sex and custody level, has discretion to place inmates in appropriate facilities. Because the Parole Board has appeared more willing to grant parole to inmates who have completed certain treatment and reentry programs, navigation of inmates to the facilities in which those programs are offered may have an effect on the rate at which inmates are granted parole when there is not an ongoing public health crisis.

The DOC's Division of Adult Parole oversees the state's parole officers. Division leaders must decide in which cases to pursue revocation when an offender violates the conditions of his or her parole. Under Senate Bill 19-143, the division is able to pursue revocation only in specifically identified circumstances.

Community Corrections. In addition to housing convicted offenders who are serving diversionary sentences in lieu of being sentenced to DOC, community corrections facilities are used to house DOC jurisdictional inmates in residential transitions programs. Admission of an offender to a community corrections facility occurs at the discretion of the local board that oversees that facility. These boards' willingness or unwillingness to accept offenders from DOC may be a determinant of an offender's possibility of release to parole.

Legislation. Legislation enacted by the General Assembly may influence the state prison population and parole caseload. During the 2019 and 2020 legislative sessions, the General Assembly enacted bills that may impact the state prison population and/or parole caseload in the future. These are described below.

- **House Bill 19-1263** reclassifies several existing drug felonies as drug misdemeanors, reduces the fine penalties and jail terms for drug misdemeanors, and makes several other changes to sentencing for drug offenses. The bill is expected to substantially reduce felony filings for drug offenses, and to reduce the prison and parole population. Impacts on the prison population will be less significant than the impact on felony filings, because offenders previously convicted for low-level drug felonies often did not receive prison sentences, and because those who were sentenced to DOC remained incarcerated for an average of four to five months.

- **House Bill 20-1019** contains several provisions with potential impact on the prison population. Specifically, the bill:
 - reopened the south campus of the Centennial Correctional Facility and allows the DOC to use up to 650 beds to house inmates. This provision is not expected to impact the prison population. The use of the new state-operated facility could increase the share of jurisdictional inmates located at state-operated prisons and decrease the share located at private prisons, county jails, or other locations.
 - allowed for a wider range of circumstances for which an inmate may be awarded earned time, removed the requirement that earned time be awarded in accordance with statutory categories and allowed the application of performance standards established by the DOC. The current maximum of 10 days per month is unchanged. To the extent that this provision allows more inmates to collect earned time more quickly, the number of releases to parole will increase and the prison population will decrease.
 - created a new crime of an unauthorized absence for an inmate on an intensive supervision program, in a community corrections program, or participating in a work release program. These categories of offenders are removed from the offenses of escape and attempted escape, which carry a charge of a class 2 or 3 felony for escape or a class 4 or 6 felony for attempted escape. Unauthorized absence carries a reduced charge in most cases, to a class 3 misdemeanor, which does not require prison time, or in some cases a class 3 or 6 felony. This provision of the bill is expected to reduce the prison population and increase the parole population.
- **Senate Bill 20-100** repealed the death penalty in the state of Colorado. Because of the small number of death row inmates in Colorado (3 at the time the bill was signed into law) and death penalty cases tried each year (0 to 3), this bill is expected to have minimal impact on the prison population.

Risks to the Forecast

The most significant risk to the forecast is the continuation or abandonment of ongoing interventions in the criminal justice system in response to the COVID-19 pandemic. In combination, restrictions on court operations and expedited releases aimed to mitigate coronavirus spread within facilities have distorted every driver of the prison population: admissions, releases, readmissions, discharges, and judicial, administrative, and Parole Board behavior. This forecast assumes a return to systemic normalcy in mid-to-late 2021. Earlier or later normalization could cause significant deviations from the expectations published here. Further, structural changes that emerge in the wake of the pandemic could cause significant long-term changes that this forecast does not anticipate.

It is difficult to differentiate between the lasting effects of permanent policy changes and the temporary effects of the pandemic on the trajectory of the prison population. For example, key provisions of both HB 19-1263, concerning drug offenses, and HB 20-1019, concerning prison population management, first applied in March 2020, when the state locked down and Governor Polis issued his primary executive order related to the management of the correctional system during the disaster emergency. This forecast attempts to separate temporary and permanent effects, but the possibility of conflating pandemic effects with policy effects raises the possibility of forecast error.

Finally, among all projections published in this document, the correctional population forecasts are unique in that the values they estimate do not move reliably in response to economic or demographic conditions. Instead, these forecasts are based on expectations for behavior by would-be offenders, prosecutors, juries and judges, inmates, parole board members, and DOC administrators. The forecast does not anticipate changes in current patterns of behavior beyond those that can be extrapolated from currently available data. The possibility of consequential behavioral change in the management of a rapidly evolving policy area compounds forecast risks.

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Youth Corrections Population Projections

This section presents the forecast for the population of juvenile offenders administered by the Division of Youth Services (DYS) in the Department of Human Services (CDHS). The three major populations administered by the DHS are juveniles committed to custody, previously committed juveniles serving a period of parole, and juveniles in DHS detention.

Summary

Through FY 2022-23, all three DHS-administered populations are expected to continue to decline, and expectations for the commitment and detention populations have been revised downward to reflect more significant declines than those anticipated previously, while the parole population expectations have been revised upward. The following outcomes are anticipated over the forecast period:

- The DHS **commitment population** will decrease over the forecast period from an average daily population of 453 youths in FY 2019-20 to 283 youths in FY 2022-23.
- The average daily **parole population** will correspondingly fall from 205 youths in FY 2019-20 to 141 youths in FY 2022-23.
- The DHS **detention population** will decrease from an average daily population of 225 youths in FY 2019-20 to 205 youths in FY 2022-23.

Juvenile Offender Sentencing Options

Juvenile offenders not prosecuted as adults are managed through the juvenile courts. If a court determines that a juvenile committed a crime, he or she is adjudicated as a delinquent. Upon being adjudicated, the court may sentence a juvenile to any one or a combination of the following:

Commitment. Depending on age and offense history, a juvenile may be committed to the custody of the DHS for a determinate period of between one and seven years for committing an offense that would be a felony or misdemeanor if committed by an adult. The commitment population is housed at long-term commitment facilities.

Detention. The court may sentence a juvenile to a detention facility if he or she is found guilty of an offense that would constitute a class 3, 4, 5, or 6 felony or a misdemeanor if committed by an adult. Detention sentences may not exceed 45 days and are managed by the DHS. The detention population is housed at short-term detention facilities, and most youths remain in detention for less than a month.

County jail or community corrections. Individuals between 18 and 21 who are adjudicated as delinquent prior to turning 18 may be sentenced to county jail for up to six months or to a community correctional facility or program for up to one year.

Probation or alternative legal custody. The court may order that a juvenile be placed under judicial district supervision and report to a probation officer. Conditions of probation may include participation in public service, behavior programs, restorative justice, or restitution. The court may also place the juvenile in the custody of a county department of social services, a foster care home, a hospital, or a child care center.

Influences on the Juvenile Offender Population

Court sentencing practices. Total juvenile delinquency filings increased consistently during the 1990s, peaking in 1998. Since then, filings have fallen, but had stabilized since FY 2016-17, prior to the COVID-19 pandemic. The decrease in case filings correlated with the rising availability of pretrial diversion programs, which kept some cases from being heard in the juvenile courts. In addition to changes in the number of cases adjudicated, changes to statute and sentencing practice have led to the rise of alternative sentencing options, which have correspondingly reduced the population of detained and committed youths.

Legislative action. Policies affecting sentencing alternatives for juveniles affect the size of the detention and commitment populations. These include the creation of diversionary programs as alternatives to incarceration, mandated caps on sentence placements, and changes to parole terms. During the 2020 legislative session, two bills passed that may affect the juvenile detention, commitment, and parole populations through the current forecast period; these are described below.

- **House Bill 20-1019** creates the new crime of unauthorized absence, usually a misdemeanor, to replace certain instances of felony escape. The bill is discussed in detail in the adult prison population forecast section of this document. The same provision applies to youth offenders as to the adult population. It is expected to have a minimal impact on the youth corrections population.
- **House Bill 20-1390** discontinues two therapeutic and rehabilitative culture pilot programs within the DYS. These programs previously provided therapeutic care in a home-like environment for up to 35 youth committed to DYS at two locations. It is not expected to affect the number of youths in the DYS commitment population.

COVID-19 pandemic and executive orders. The COVID-19 pandemic and efforts to contain it have impacted the size of the detention, commitment, and parole populations of juvenile offenders. On April 11, 2020, Governor Polis issued Executive Order D 2020-034, which:

- suspended seclusion policies at juvenile facilities to allow for compliance with CDC guidelines for isolation and quarantine to contain COVID-19 infections;
- suspended the juvenile parole board's authority to grant, deny, or defer parole for any juvenile committed to CDHS, except for aggravated or violent juvenile offenders, and directed CDHS to assess each offender for risk to public safety and to release to parole those deemed fit; and
- suspended CDHS's obligation to provide detention or to accept committed juveniles into custody, in order to comply with CDC guidelines and to prevent introducing new juveniles who may have COVID-19 into the detained and committed populations.

The executive order was extended by subsequent executive orders, and its provisions remain in effect.

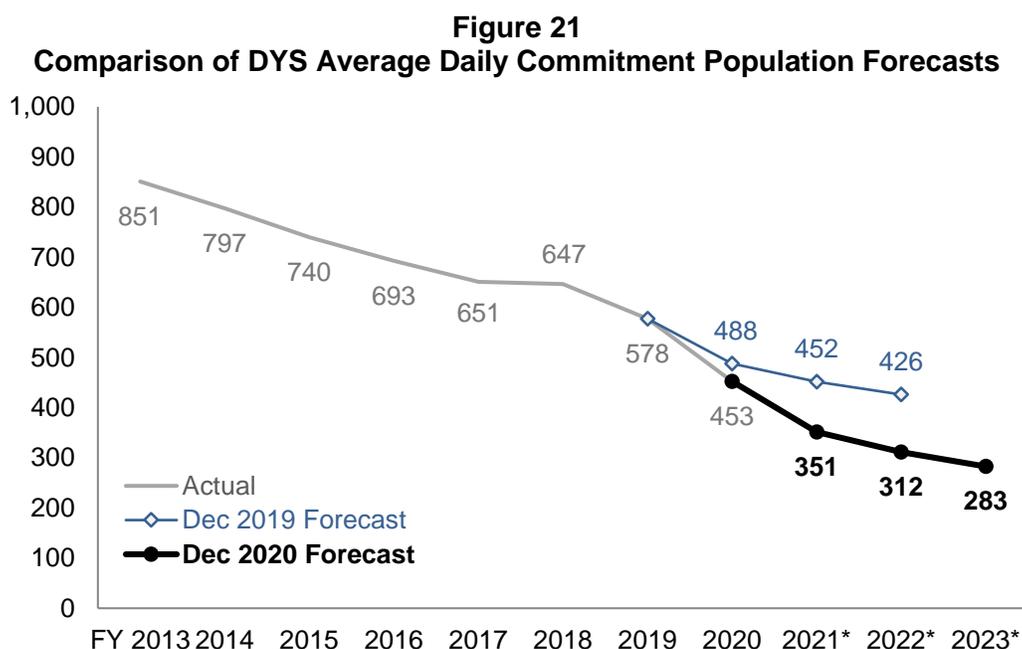
In accordance with executive order, DYS has reduced the number of detained and committed youth in order to comply with social distancing requirements. In addition, policing behavior has shifted toward fewer arrests of juvenile offenders, while court operations and commitments have slowed.

Division of Youth Services Sentencing Placements and Population Forecast

Commitment. The commitment population consists of juveniles adjudicated for a crime and committed to DYS custody. In FY 2019-20, the average daily commitment population was 453 youths, representing a 21.6 percent decrease from the prior year. Between FY 2020-21 and FY 2022-23, the commitment population is expected to drop from 351 to 283 youths, a significant decrease that reflects the short- to medium-term impacts of the pandemic and efforts to contain it, as well as the long-term rise of diversion programs and alternative sentencing and decreases in commitments to the DYS.

The FY 2019-20 average daily commitment population fell short of the December 2019 forecast by 35 youths. The most important determinant of the population decrease was a reduction in the number of youths newly committed to the DYS along with a spike in releases to parole in April through September 2020, both resulting from the pandemic.

Expectations for the commitment population have been revised downward. The forecasts for FY 2020-21 and FY 2022-23 have been reduced as shown in Figure 21.



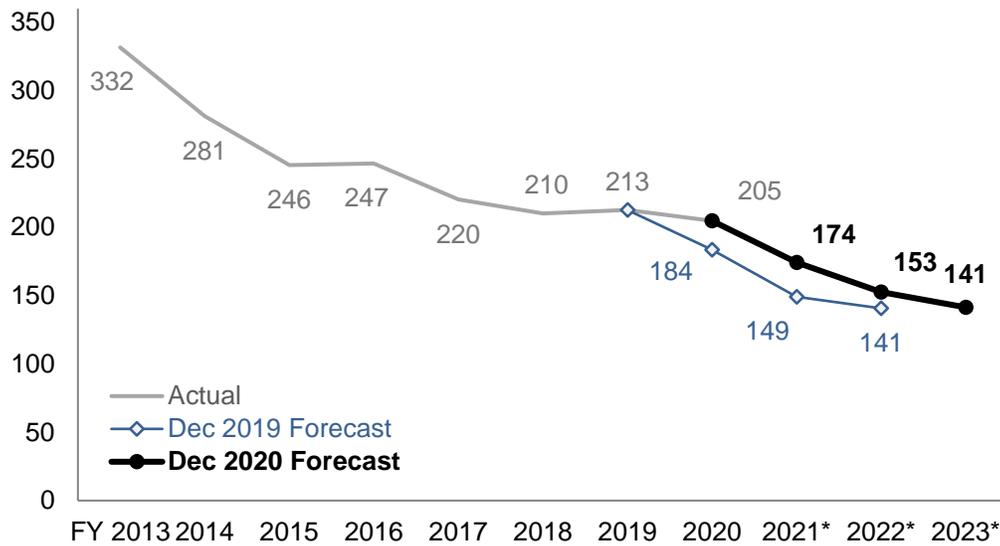
Source: Colorado Department of Human Services Division of Youth Services and Legislative Council Staff.
*Current forecast period.

Parole. Juveniles who have served their commitment sentence are usually granted release to community parole if approved by the Juvenile Parole Board, although the board’s authority has been temporarily suspended by executive order for most youths. All youths serve a parole period of at least six months, though the board may extend the parole period up to 21 months for certain offenders.

The juvenile parole population averaged 205 youths in FY 2019-20. The average parole population was 21 youths greater than anticipated in last year’s forecast, as shown in Figure 22. The parole population was elevated from April through September for a monthly average of 221 youths as DYS implemented Governor Polis’s executive order. The parole population is expected to average 174 parolees over the entirety of FY 2020-21, and to fall further to average 153 parolees during

FY 2021-22 and 141 parolees during FY 2022-23 as the number of releases from commitment facilities slows. Expectations for the FY 2020-21 and FY 2021-22 parole population have been increased for both FY 2020-21 and FY 2021-22 relative to last year's forecast.

Figure 22
Comparison of DYS Average Daily Parole Population Forecasts

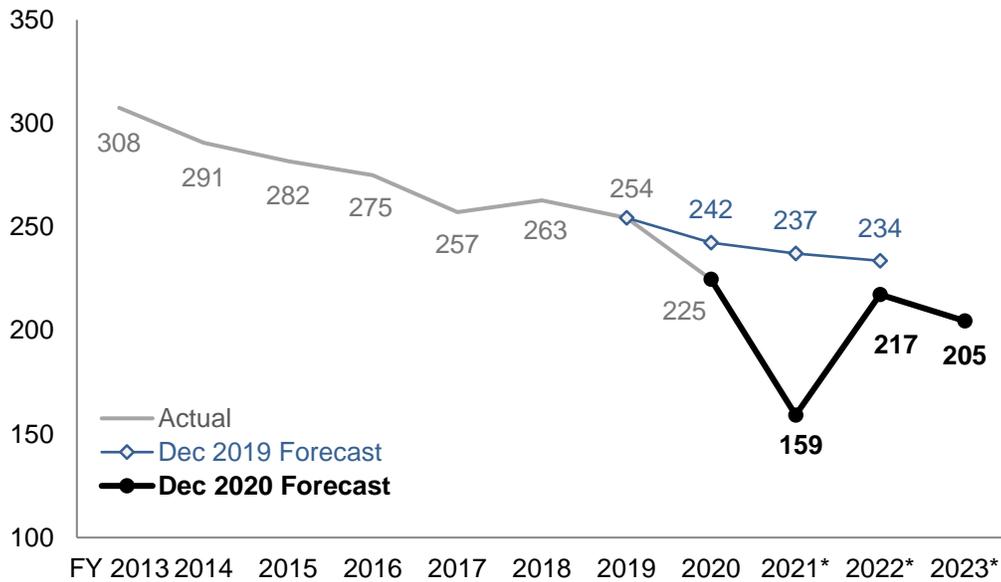


Source: Colorado Department of Human Services Division of Youth Services and Legislative Council Staff.
 *Current forecast period.

Detention. The DYS manages eight secure facilities housing detained youth. Under Senate Bill 19-210, the detention population cap is 327 youths, though the detention population remains well below the statutory cap in accordance with executive order and social distancing requirements. Relative to the commitment and parole populations, the detention population is more volatile because of the short sentences served by detained youth.

Figure 23 presents expectations for the youth detention population. The detention population averaged 225 youths in FY 2019-20 and fell short of the December 2019 forecast by 17 youths. The population is expected to continue to decline rapidly, to 159 youth in FY 2020-21, as COVID-19 restrictions remain in place for much of the year, before rebounding to 217 youth in 2021-22 and continuing to decline moderately to 205 youth in FY 2022-23. Expectations for the detention population have been revised downward from those published last year.

Figure 23
Comparison of DYS Average Daily Detention Population Forecasts



Source: Colorado Department of Human Services Division of Youth Services and Legislative Council Staff.
 *Current forecast period.

Risks to the Forecast

The most significant risk to the forecast is how DYS and the juvenile courts will continue their management of the youth offender population during the pandemic, and whether and when the juvenile justice system will return to pre-COVID normalcy in 2021. This forecast does not anticipate a backlog of juveniles who will be committed to DYS when the juvenile courts return to their normal dockets. However, if more youths are admitted than expected, the commitment and parole populations will be higher than forecast.

Law enforcement and the courts may possibly change their approach to commitment or detention of juveniles as a result of their observations of how youths perform under alternative sentencing or supervision as a result of the pandemic. This forecast assumes that the commitment and detention populations will each return to their long-run downward trends once pandemic-related distortions subside. Attitudinal changes that may increase or decrease the future numbers of youths placed in DYS custody are not accounted for here.

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Economic Outlook

While growth in the U.S. and Colorado economies has slowed in recent months with the resurgence of COVID-19 cases, both economies enter 2021 with elevated optimism as multiple COVID-19 vaccines enter mass production and distribution. The resiliency of business and consumer activity continues to surprise on the upside and support an ongoing recovery from April lows at a faster-than-expected pace. The injection of unprecedented monetary and fiscal stimulus beginning in April calmed markets and buoyed economic activity throughout 2020.

The economic recovery remains incomplete and uneven as health concerns and social distancing restrictions continue to weigh heavily on tourism, travel, and leisure and hospitality industries and employment. Unlike other economic recoveries of the past, the rising tide cannot lift all boats during a pandemic. The “K-shape” that characterizes the current recovery, where many industries have bounced back to pre-pandemic levels and others remain left behind, will continue into 2021 until one or more COVID-19 vaccines are widely distributed across the U.S. population.

Relative to the September forecast, economic expectations were revised upward across most major indicators on stronger than expected economic activity to date and the production and ongoing distribution of multiple effective COVID-19 vaccines. The lasting impacts of the pandemic recession remain unknown and pose ongoing downside risks to longer-term economic activity. As the steadying effects of monetary and fiscal stimulus dissipate, the extent of long-term scarring from the pandemic will become known in 2021 and 2022. Tables 20 and 21 on pages 98 and 99 present histories and expectations for key indicators for the U.S. and Colorado economies, respectively.

As this forecast goes to print, additional federal fiscal stimulus remains under consideration. Should additional stimulus be enacted, economic activity may be stronger than expected in 2021. This forecast assumes that ongoing but easing social distancing restrictions will be necessary until mid-2021 as vaccines are manufactured and distributed across the U.S. and the globe.

Gross Domestic Product

The most commonly cited indicator of total economic activity in the U.S. is real gross domestic product (GDP), an estimate of the inflation-adjusted value of final goods and services. Data from the U.S. Bureau of Economic Analysis suggest that economic activity rebounded sharply in the third quarter of the year, growing 33.1 percent on a seasonally adjusted annual rate over the second quarter (Figure 24). This marked an unprecedented rate of growth following an unprecedented 31.4 percent decline in the second quarter of the year.

- Real U.S. GDP is expected to decline 3.4 percent in 2020 as the severe contraction during the first half of the year pulls annual levels of economic activity below those experienced in 2019. Economic activity is expected to expand 4.6 percent in 2021, nearing pre-COVID-19 levels, and rise an additional 3.1 percent in 2022 while approaching trend levels of economic activity.

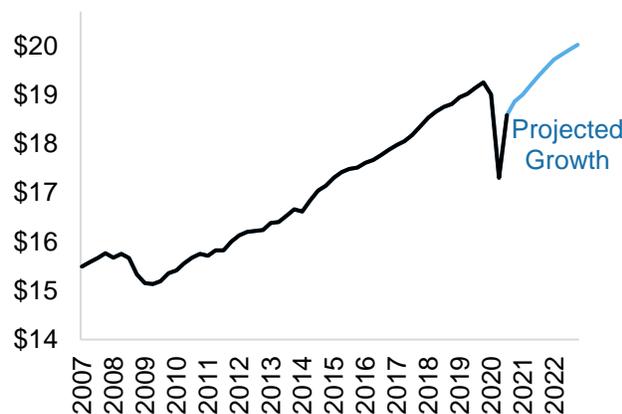
Changes in the forecast and the shape of recovery. Since the May 2020 forecast update, projections of economic activity have improved with each subsequent forecast, reflecting stronger than expected activity year-to-date, stronger-than-expected boosts from unprecedented federal and monetary stimulus, and for this December forecast, the near-term distribution of multiple effective vaccines. For

comparison, the May forecast update expected a starker 5.6 percent decline in real GDP relative to the 3.4 percent projection assumed here. Yet, real GDP, like many other prominent indicators, masks the “K-shaped” recovery across industries. In this recovery, many businesses and households are thriving while others continue to experience severe impacts from the pandemic and attendant social distancing restrictions.

Consumption of services remains subdued.

Consumer spending, as measured by personal consumption expenditures and accounting for more than two-thirds of total economic output, accounted for a majority of the decline in GDP in the second quarter. While consumption of goods thrived in the third quarter of the year, consumption of in-person services remains well below pre-pandemic levels. Consumption of services is expected to remain subdued until the U.S. experiences widespread distribution of one or more COVID-19 vaccines and social distancing restrictions are fully relaxed. Until that time, consumption of goods is expected to remain elevated as consumers opt for self-services at home.

Figure 24
U.S. Real Gross Domestic Product
Seasonally Adjusted Annual Rates



Source: U.S. Bureau of Economic Analysis and Legislative Council Staff December forecast.

The business investment outlook remains uneven. Overall, business investment, as measured by gross private domestic investment, rebounded sharply in the third quarter of the year. This follows three consecutive quarters of decline. Investment in nonresidential structures continued to deteriorate in the third quarter, while all other major underlying components—including nonresidential equipment, intellectual property, and residential investment, rose. The change in inventories represented the strongest boost to business investment, as supply chain disruptions abated and demand for manufactured goods rebounded from April lows.

Export activity remains weak. Net exports were a drag on growth in the third quarter of the year. Exports of U.S. goods to foreign consumers increased, but remain well below pre-pandemic levels. Imports of foreign goods rose sharply, more than offsetting export growth, as supply chain disruptions eased. Ongoing impacts of the COVID-19 pandemic on economies across the globe are expected to mute demand for U.S. goods well into 2021.

Further federal stimulus in question. Government spending rose precipitously in the second quarter with the largest injection of federal stimulus, projected at about \$2 trillion between 2020 and 2025, in U.S. history. The federal Families First Coronavirus Response Act and Coronavirus Aid, Relief, and Economic Security Act (CARES) included direct payments to households, and expanded and extended unemployment insurance benefits, business assistance, health and education spending, and tax cuts to households and businesses. The rippling effects of the stimulus continue to stave off a sharper decline in GDP.

As this forecast goes to print, Congress is considering additional federal stimulus policy options. The Paycheck Protection Program (PPP) and additional federal unemployment insurance benefits expired at the start of August, and extended federal unemployment insurance benefits are set to expire at the end of 2020. This forecast assumes that as the stimulus expires, the recovery will lose momentum but will continue to expand from April lows. Additional stimulus poses an upside risk to the forecast. As a risk to the downside, the expiration of stimulus could give way to lower levels of consumer and business activity than assumed in this forecast.

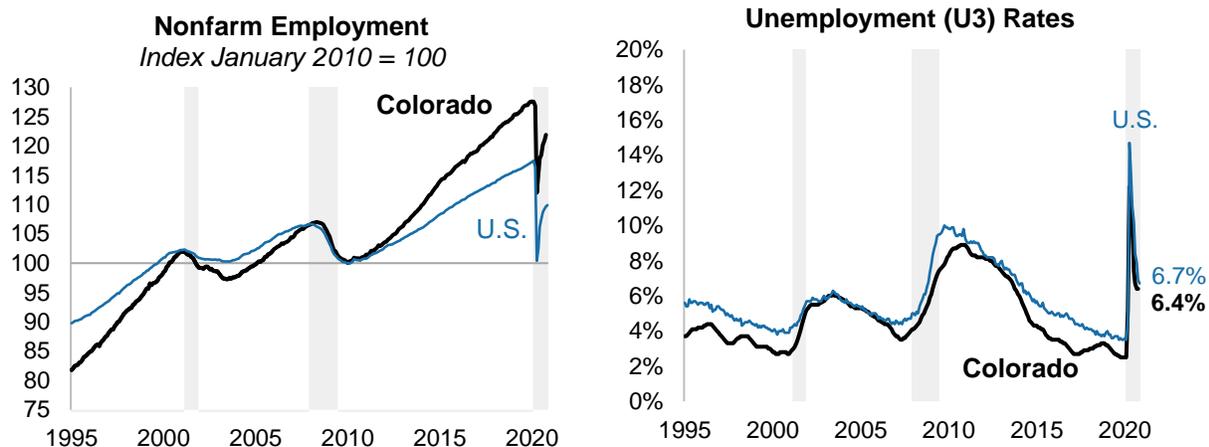
Labor Markets

Labor market indicators continue to improve for both the U.S. and Colorado, but the pace of the jobs recovery has moderated in recent months, with pre-COVID-19 employment levels remaining out of reach. Leisure and hospitality industries comprise the largest share of ongoing labor market weakness. Labor markets are expected to remain subdued through 2021, with nonfarm employment reaching pre-COVID-19 levels, not accounting for population growth, and the unemployment rate falling below 5 percent sometime in 2022.

- U.S. nonfarm employment is expected to decrease at a pace of 5.7 percent in 2020 before rebounding 2.2 percent in 2021. After reaching a historic low of 3.7 percent in 2019, the U.S. unemployment rate is expected to rise to 8.1 percent in 2020, and to remain elevated at 6.4 percent in 2021.
- In Colorado, nonfarm employment is expected to decline by 4.1 percent in 2020 before rebounding 3.1 percent in 2021. The Colorado unemployment rate is expected to increase sharply from 2.8 percent in 2019 to 6.9 percent in 2020, before falling to 5.9 percent in 2021.

Employment gains stall with winter virus resurgence. The resurgence of COVID-19 across the U.S. and the subsequent reversal of reopening measures in several states, as well as the colder temperatures hampering outdoor activities and lack of additional federal stimulus, have contributed to a slowdown in economic recovery in the fourth quarter. The U.S. gained 245,000 jobs in November, down from 638,000 in October, and the unemployment rate edged down from 6.9 percent to 6.7 percent during the same period (Figure 25). Colorado continued to outperform the U.S. as a whole, but also showed signs of a stalling recovery. With 21,100 jobs gained in October, compared to 63,400 the month before, the unemployment rate in Colorado remained unchanged at 6.4 percent during the same period, the 20th highest among the 50 states. Private sector gains of 22,000 in October were offset by a loss of 900 government jobs, the majority of which are attributable to the end of the 2020 Census count.

Figure 25
Selected U.S. and Colorado Labor Market Indicators



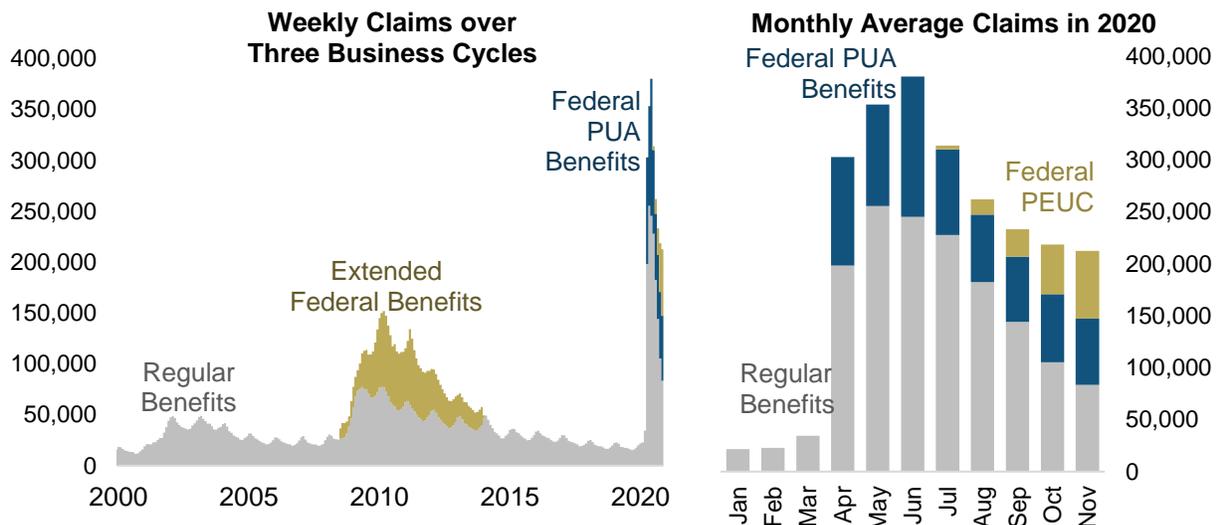
Source: U.S. Bureau of Labor Statistics. Data are seasonally adjusted. Colorado data are through October 2020. U.S. data are through November 2020.

New unemployment insurance claims rising. Following new restrictions on restaurants and other businesses amidst a surge in COVID-19 infections in the state, initial claims for regular state unemployment benefits have also surged, with hotels and restaurants the top industries with new claims. After peaking at a weekly average of 64,000 in April, initial unemployment claims in Colorado had been falling, to a monthly average low of 5,212 in September. At 12,251 in November, the weekly average initial claims were more than double their September low. Likewise, initial claims for Pandemic Unemployment Assistance (PUA), for self-employed and other workers not usually covered by unemployment insurance, were significantly up from their weekly average low of 2,020 in September to 7,090 in November.

Continued claims for regular state benefits continue to decline, to a weekly average of 65,201 claims in November, down from a weekly average peak of 255,643 in May. However, claims for Pandemic Emergency Unemployment Compensation (PEUC), which provides up to 13 additional weeks of unemployment benefits once the initial 13 weeks of regular state benefits are exhausted, continue to rise, up from a weekly average of 47,879 in October to 65,201 in November. Figure 26 shows continued claims for Colorado, including the additional federal benefits offered during the Great Recession and current pandemic.

In November, 131,053 people in Colorado were receiving PUA or PEUC benefits, while an additional 17,324 were receiving state extended benefits (SEB), which offers an additional 13 weeks of coverage once regular state benefits and PEUC benefits expire. SEB ended on November 28, after the state's insured unemployment rate fell below 5 percent on November 7, while the additional federal benefits are set to expire at the end of December. Through Senate Bill 20B-002, the state legislature sought to reinstate SEB by adopting an alternate measure of unemployment as a benefit trigger, but as of this writing, the state awaits federal guidance as to whether those benefits can be reinstated immediately or whether the usual 13-week waiting period will still apply before Colorado can rejoin the program.

Figure 26
Colorado Continued Claims for Unemployment Insurance

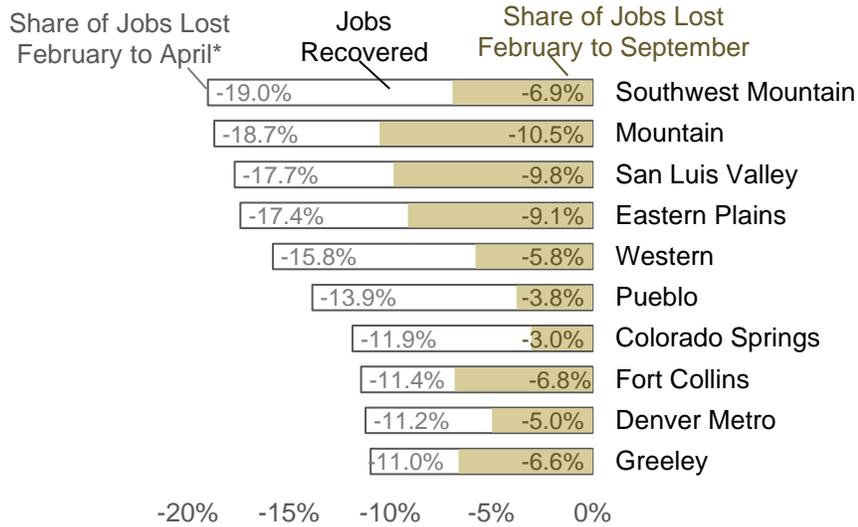


Source: Colorado Department of Labor and Employment. Data through the week of November 28, 2020 for federal PUA benefits and federal extended benefits; data through November 21, 2020 for regular benefits.

Demographic and geographic variations in employment and unemployment. Unemployment rates vary across demographic groups, with higher rates in the U.S. in November for men (6.7 percent) than for women (6.1 percent), reversing the relationship observed earlier in the pandemic. There are also higher rates for workers who are Black (10.8 percent), Hispanic (8.8 percent), and Asian (7.6 percent) than for those identified as White (6.0 percent). In Colorado, unemployment rates in October were highest in San Miguel (8.0 percent), Huerfano (7.9 percent), Summit (7.9 percent), Pueblo (7.8 percent), and Pitkin (7.6 percent) counties. Figure 27 (below) shows regional variations in jobs lost and regained since February 2020, with less than 50 percent of jobs lost having been regained through September in several regions including the eastern, mountain, and San Luis Valley regions, and the Fort Collins metropolitan area. For more information on regional trends see pages 101 through 125 of this forecast document. Employment rates for high-wage workers in Colorado were down by 0.2 percent through October 15, compared to January 2020, up from a trough of 12 percent in early April. For middle- and low-wage workers, employment was down 5.8 percent and 17.6 percent, respectively, up from troughs of 34.7 percent and 21.4 percent, according to data from Opportunity Insights Economic Tracker.

Jobs are coming back, but more slowly than they were lost. The U.S. lost 22 million jobs between February and April, and regained 12.3 million, or 55.6 percent through November. Employment was 6.5 percent below its February level. From April through October, Colorado gained 217,000, or 63.4 percent of the 243,300 jobs lost since the pandemic began (Figure 28). Employment in Colorado is 4.5 percent below its February level.

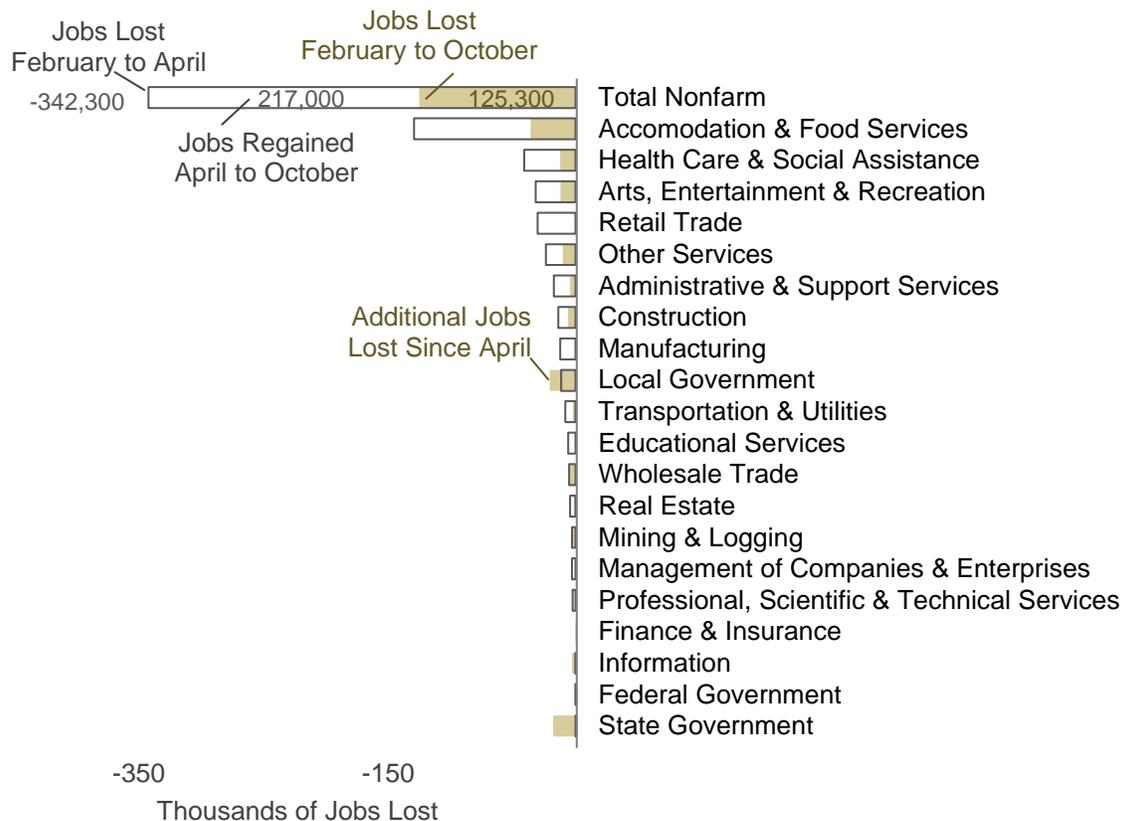
Figure 27
2020 Colorado Job Losses by Region



Source: BLS and Legislative Council Staff Calculations
 *For Eastern Plains and San Luis Valley, jobs lost through May.

Hardest-hit sectors continue to bounce back, offset by state and local government losses. Some of the hardest-hit sectors continued to bounce back through October, with accommodation and food services; health care and social assistance; arts, entertainment and recreation; retail trade; and other services regaining 72.2 percent, 70.3 percent, 62.6 percent, 100.7 percent, and 56.8 percent of jobs lost since the pandemic began. Additional losses since April in state and local government have offset private-sector gains. Figure 28 shows year-over-year changes in Colorado jobs by sector through October.

Figure 28
Colorado Job Losses in 2020



Source: U.S. Bureau of Labor Statistics with Legislative Council Staff calculations. Data are seasonally adjusted.

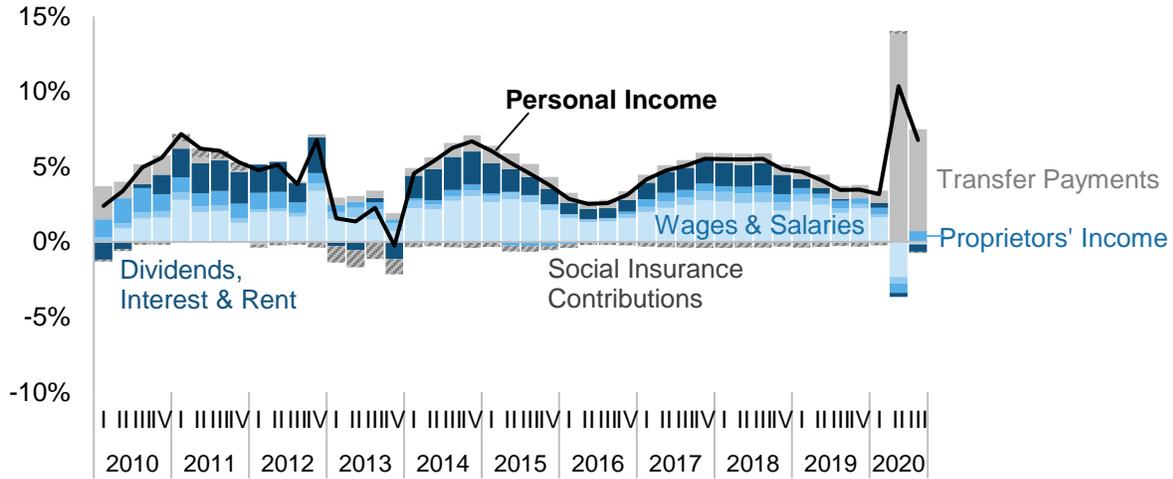
Personal Income

Personal income, an aggregate measure of most sources of household and non-corporate business income, experienced a paradoxical rise in 2020. Extraordinary government intervention in the form of unemployment benefits and direct payments to households more than offset declines in other sources of income, including wages. The boost to incomes could not elicit similar growth in aggregate economic activity as business and supply chain distributions from public health orders and health concerns ground consumer and business activity to a halt in the second quarter of the year. The boost from transfer payments has, however, stemmed more dramatic declines and has helped foster a stronger recovery in the second half of the year.

- Government transfer payments are expected to nurture growth in personal income during 2020, when U.S. and Colorado personal incomes are expected to increase 6.2 percent and 5.3 percent, respectively. As transfer payments dissipate, personal income is expected to decline modestly in the U.S. and continue to rise modestly in Colorado in 2021.

Government support outweighed hits to wage, business, and investment income. Earnings associated with productive economic activity – wages, business profits, and investments – have sagged, consistent with a deep recession. Incomes from all of these sources declined during the second quarter of 2020, and only business proprietor’s income posted an increase in the third quarter (Figure 29).

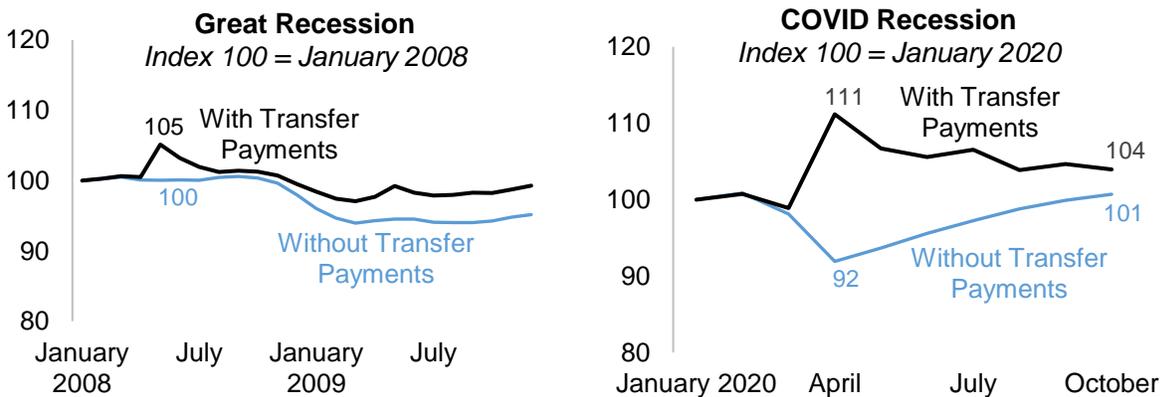
Figure 29
U.S. Personal Income and Its Contributions
Contributions to Percent Change, Year-over-Year



Source: U.S. Bureau of Economic Analysis.

Transfer payments have filled the void, and then some. Government support via expanded unemployment insurance programs, economic impact payments, and paycheck protection program grants offered a vast injection of liquidity, turning what would otherwise have been an historic collapse in incomes into two record-setting quarters for income *gains*. Figure 30 tracks actual personal income relative to what would have occurred absent the contribution from transfer payments. As shown in the right panel of Figure 30, transfer payment contributions swung personal incomes from an eight-point loss in April to an eleven-point gain. For comparison, the left panel of Figure 30 shows an analogous analysis for the Great Recession, when government support added five points to household incomes at its peak.

Figure 30
Personal Income, With and Without Transfer Payments, During Recessions



Source: U.S. Bureau of Economic Analysis.

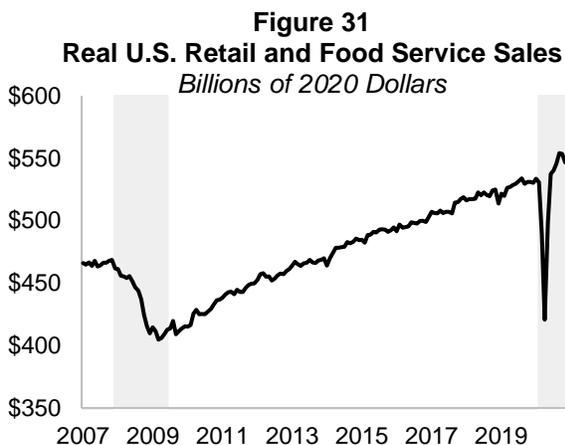
Personal income growth will moderate considerably without additional stimulus. The outlook for personal income is dependent on the presence and scope of additional fiscal stimulus. In the absence of additional stimulus, personal income gains are likely to diminish in 2021, as anticipated increases

in wages and salaries, investment income, and proprietors' income will be offset by declines in transfer payments. Consistent with prior business cycles, wages and salaries will take longer to recover than other components of personal income, as a loose labor market will diminish competition for workers and attendant wage pressure. A loss of momentum for households could cause more severe impacts elsewhere in the economy, where incomes have been sufficient until now to sustain household savings and consumption of goods. Because this forecast presents economic expectations consistent with current federal and state law, the expectations below assume no additional stimulus beyond that already authorized.

Consumer Activity

Consumer spending will moderate this holiday season and during the first quarter of 2021. The recent rise in COVID-19 cases resulted in increasing unemployment claims and a slowdown in job growth, which are expected to put downward pressure on spending in the near term. Once a vaccine is widely available, pent up demand will boost spending across the sectors currently restricted by the pandemic—namely, travel and bar and restaurant spending, and spending where health-related concerns have subdued in-person services.

Growth in spending on services continues to lag behind spending on durable and nondurable goods. Across the U.S., according to data from the Bureau of Economic Analysis, through the third quarter this year, spending on services declined 5.6 percent over the same period last year, while spending on goods rose 2.2 percent. As consumers turn to in-person alternatives, goods purchases continued to accelerate through October before weakening in November in conjunction with rising COVID-19 cases (Figure 31). Spending on computers, home appliances, recreational vehicles, and home fitness equipment have thrived in recent months, in addition to food for at home consumption.



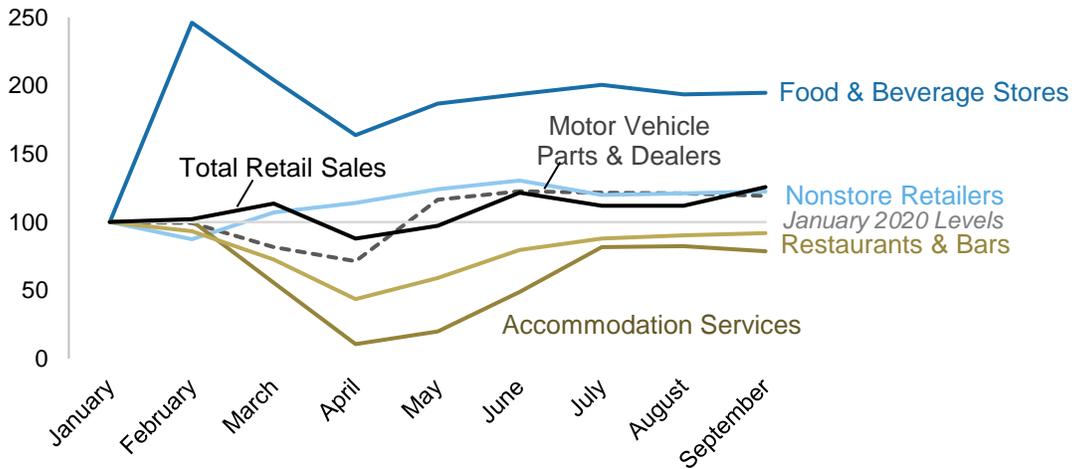
Source: U.S. Census Bureau advanced retail sales report, adjusted by inflation using the consumer price index for all urban areas. Data through November 2020.

The shift in spending patterns this year includes a faster transition to e-commerce sales. Nationally, total e-commerce sales increased 37.1 percent in the third quarter over the same period last year, and nonstore retail sales were up 27.6 percent. In Colorado, nonstore retail sales are up 118.4 percent during the same period according to data from the Colorado Department of Revenue. Although in-store sales should recover after the pandemic, e-commerce sales are expected to remain elevated, marking a permanent shift away from brick-and-mortar to online shopping or a hybrid model.

Warm weather helped boost retail sales through the fall. The Colorado Department of Revenue monthly retail trade reports indicate that Colorado retail trade picked up steam in June and maintained at higher levels through the fall as COVID-19 related restrictions eased and consumers traded services for goods. Spending at food and beverage stores remains almost double what it was pre-pandemic, while money spent at restaurants, bars, and hotels recovered to about 80 percent of

January levels (Figure 32). The fall and winter portend lower spending on services in the state, as COVID-related restrictions closed restaurants and bars to most in-house service in November.

Figure 32
2020 Colorado Retail Sales
Index January 2020 = 100



Source: Colorado Department of Revenue.

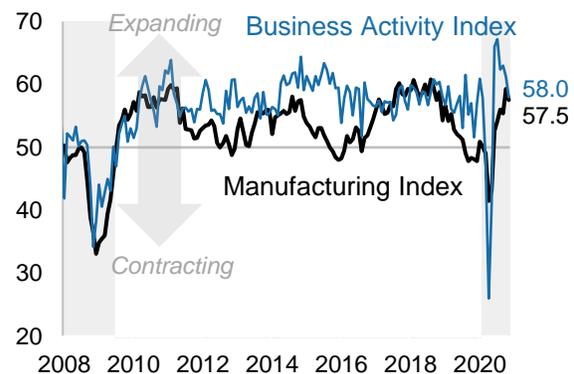
Business Activity

Business industry activity suggest an ongoing recovery across most sectors, though many businesses continue to trim employment, and business output remains below pre-pandemic levels. Emergency federal government loans and stimulus efforts have supported business activity since April. However, these programs have or are set to expire at the end of the year. In spite of stimulus, many businesses continue to feel the weight of social distancing restrictions, and a rising number of those most impacted have closed their doors or significantly reduced operations. The resurgence of COVID-19 cases in Colorado and across the nation are expected to subdue business activity at the end of 2020 and start of 2021 until warmer weather and the distribution of one or more vaccines allow for the relaxation of social distancing restrictions, improved demand, and reopening of new or shuttered businesses.

Manufacturing activity has rebounded and business activity continues to improve.

The Institute for Supply Management (ISM) produces a monthly index of manufacturing and non-manufacturing business activity based on a survey of firms, where values above 50 represent expansion. The November 2020 manufacturing index remained elevated and in expansionary territory at 57.5 in November (Figure 33). While non-manufacturing business activity continues to grow following its sharp decline early in 2020, its growth has also slowed in recent months. The

Figure 33
ISM Manufacturing and Business Indices
Diffusion Index



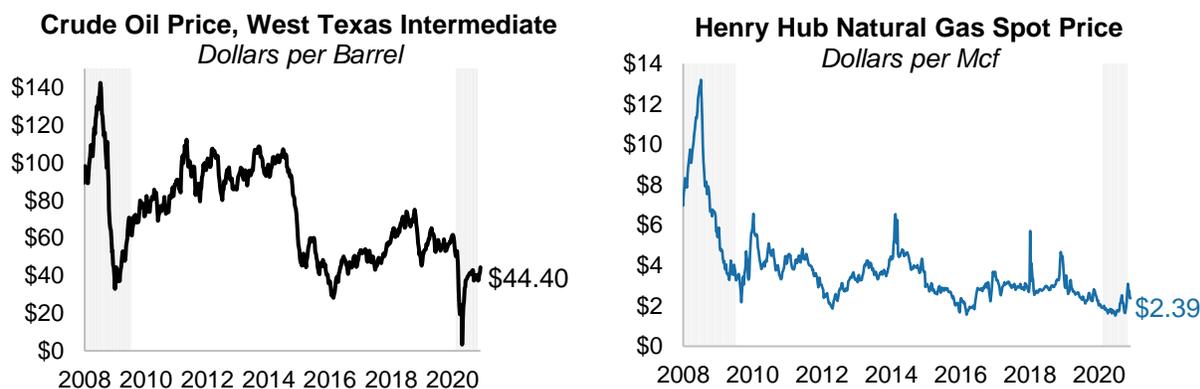
Source: Institute for Supply Management (ISM).

non-manufacturing business activity reached 58.0 in November 2020, signaling ongoing expansion, but at a slower pace (Figure 33). Additionally, employment in the non-manufacturing sector remains about 7 percent below pre-pandemic levels. The deceleration reflects the change in consumer demand largely due to the COVID-19 pandemic social distancing restrictions.

Energy Markets

News of a successful vaccine bolstered energy prices. Optimism abounded for an uptick in oil demand early next year on the news of multiple effective COVID-19 vaccines. West Texas Intermediate crude prices rose to almost \$45 per barrel and have hovered around the mid-\$40s for the last couple weeks (Figure 34, left). Crude oil stocks have been dropping steadily since mid-June when demand for gasoline picked up for summer road trips, helping to boost prices. Natural gas prices ebb and flow with the weather in colder months, this year being no exception. Henry Hub natural gas prices shot up in October on the expectation of a cold winter, and then moderated in November when warmer temperatures decreased the need to heat homes. About half of all homes in the U.S. are heated by natural gas. Prices are expected to rise later this winter and average over \$3 per million cubic feet in 2021 as demand picks up and production remains subdued.

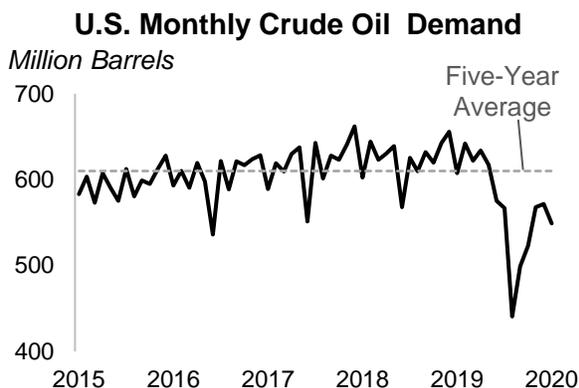
Figure 34
U.S. Energy Prices



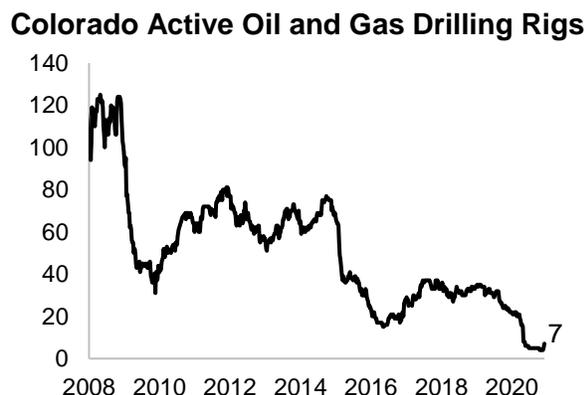
Source: U.S. Energy Information Administration. Weekly average prices. Data are not seasonally adjusted. Data are through the week of November 27, 2020.

Already low oil and gas production may decline further before rebounding. Oil production in both the U.S. and Colorado are far from recovering to pre-pandemic levels, as low demand for gasoline and jet fuel caused prices to sit below profitable levels for producers. Demand for oil products rebounded over the summer, but fell slightly in September, as summer road trips came to an end (Figure 35, left). Producers in plays closer to major refining centers, such as in the Permian Basin, were better positioned to resume production, as overall costs are lower than in plays further away, such as the Denver Julesberg Basin. The oil and gas drilling rig count in Colorado remains one-third of the count in January this year, although two rigs have recently come online (Figure 35, right). Additional pressure came from regulatory uncertainty this year, as the Colorado Oil and Gas Conservation Commission set rules to implement Senate Bill 19-181. With fewer rigs drilling new wells this year, production falls off more quickly, since the longer a well is in service, the more precipitous the drop in extraction levels. Oil production is expected to continue at subdued levels through mid-2021 before picking back up on stronger demand and prices, while associated natural gas production will rise along with oil production.

Figure 35
Select Energy Market Indicators



Source: U.S. Energy Information Administration. Data through September 2020.



Source: Baker Hughes. Data are not seasonally adjusted. Data are through the week of December 4, 2020.

Real Estate and Construction Activity

The residential real estate market in both the U.S and Colorado remains a bright spot during the COVID 19 pandemic despite ongoing weakness in the nonresidential construction market.

Tight inventories and historically low mortgage rates continue to drive the U.S. and Colorado housing markets. In March, the Federal Reserve cut the federal funds rate to near zero in order to support the economy. Since then, mortgage rates have steadily declined and have been hovering below 3 percent since August, boosting demand for both refinancing and home purchases. In November, the average 30-year fixed mortgage rate was 2.77 percent, 25 percent lower from the same month one year prior. In addition, a shift to working at home has many buyers looking for bigger homes, often in suburban areas as commuting time has become less of a factor. High lumber prices and low inventories may constrain growth, but low mortgage rates and strong demand will support the U.S. and Colorado housing market in spite of economic uncertainty.

- Colorado residential construction permits are expected to grow 8.8 percent in 2020, led by growth in single family construction activity. In 2021, the number of new housing permits is expected to decrease a modest 0.6 percent but remain at elevated levels on low inventories, low mortgage rates, and ongoing demand for housing in Colorado.

Nonresidential construction activity has slowed. Private sector concerns about the COVID-19 pandemic, tighter state and local budgets, lack of additional federal stimulus, and economic uncertainty have slowed activity in the U.S and Colorado nonresidential construction markets. Nonresidential construction was exempt from city and state stay-at-home orders, and work continued on current projects. However, the persistent uncertainty created by the COVID-19 pandemic has affected nonresidential investment, specifically for retail and office development, as companies demand less space, and many companies are taking a wait-and-see attitude.

Public outlays have been the main driver for U.S. nonresidential construction activity over the past several years. In October, spending on public nonresidential construction was up 3.2 percent from the same month one year ago, while private spending was down 8.2 percent over the year. Investment in public projects is expected to slow as the COVID-19 crisis has strained state and local government budgets. In addition, many public projects that were scheduled to start in the summer were pulled forward into the spring as there was less traffic on the roads to hinder construction.

Colorado nonresidential activity has also slowed. Similar to the nation, nonresidential construction activity in Colorado has slowed since the beginning of the year. Through October, the total value of nonresidential construction starts in Colorado was down 4.9 percent from the same period last year despite strong demand for new warehouse projects. In March, Amazon broke ground on its \$369 million fulfillment center near the Colorado Springs airport, boosting nonresidential investment for the state, but total activity has slowed since then.

- The value of nonresidential construction starts in Colorado is expected to drop in 2020 and 2021, declining by 5.3 percent and 2.9 percent, respectively, as many industries hold off on new construction projects in an uncertain economic climate.

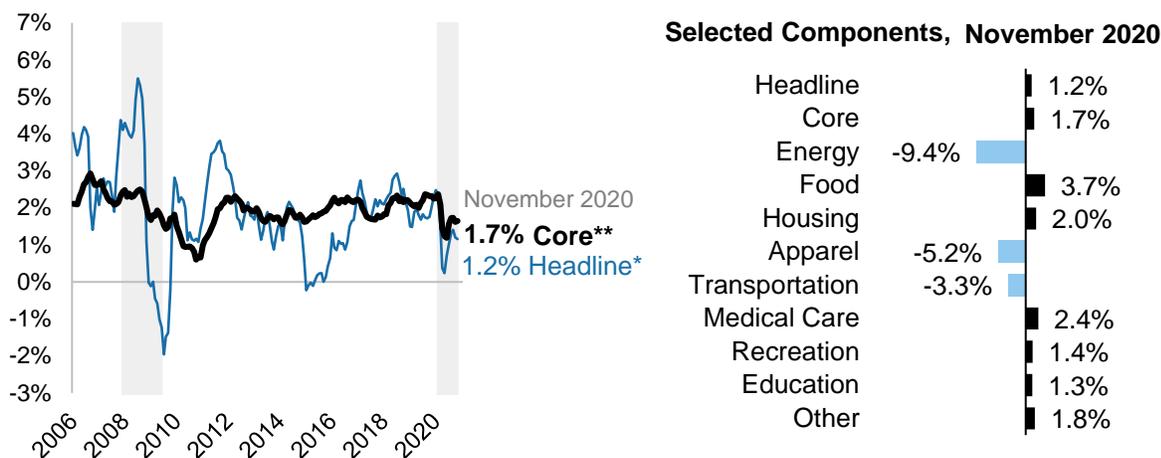
Monetary Policy and Inflation

Broad use of monetary policy has buoyed the struggling economy. Beginning in early March 2020, the Federal Reserve (the Fed) made a number of monetary policy changes in response to the economic damage caused by the COVID-19 pandemic. The Fed began by cutting the federal funds rate to zero, implementing a new \$700 billion round of large scale asset purchases (also known as quantitative easing), expanding or establishing a number of emergency lending facilities, and easing a number of banking regulations, all in an effort to create additional liquidity and boost economic activity. The Fed has signaled, and this forecast expects, that interest rates will remain at the zero lower bound through the current forecast period.

Beginning in late March 2020, the CARES Act made additional funding available to the Fed for further monetary policy support, including the creation of the Paycheck Protection Program Liquidity Facility, the Main Street Business Lending Program, and the Municipal Liquidity Facility. These programs were largely designed to purchase debt from businesses and local governments to support additional spending in the economy. A number of these programs established under the CARES Act are set to expire December 31, 2020, under current law.

Inflation remains well below Federal Reserve target of 2.0 percent. At the national level, inflation has tapered off since the beginning of the current recession. As shown in Figure 36, inflation fell from a high of 2.5 percent in January 2020 to 1.2 percent in October 2020, reflecting the broad downturn in demand within the economy and low energy prices. Similarly, core inflation, which excludes volatile food and energy components, slowed as a result of the recession, falling from about 2.3 percent in January 2020 to 1.6 percent in October 2020.

Figure 36
U.S. Consumer Price Index (CPI) Inflation
Percent Change in Prices, Year-over-Year



Source: U.S. Bureau of Labor Statistics. Inflation is calculated as the growth in urban area prices in a given period relative to the same period in the prior year.

*Headline inflation includes all products and services. **Core inflation excludes food and energy prices.

Prices in the Denver-Aurora-Lakewood combined statistical area have comfortably outpaced national inflation. The cost of housing, in particular, has increased more quickly than at the national level, as demand remains high and supply remains comparatively constrained.

- Headline inflation for U.S. urban consumers is expected to raise prices by 1.2 percent in 2020 and 2.1 percent in 2021. Headline inflation in the Denver-Aurora-Lakewood combined statistical area is forecast at 2.0 percent in 2020 and 2.2 percent in 2021.

Shift to average inflation targeting will likely result in more dovish monetary policy in the near future. In August, the Fed announced that it would adopt a new policy framework to guide future interest rate decisions: average inflation targeting. Rather than maintaining a strict inflation target of 2.0 percent, the Fed will target an average inflation rate of 2.0 percent over a period of years, allowing for periods of below target inflation to be offset by periods of above target inflation. This new framework will likely result in the Fed maintaining lower interest rates for longer during the next expansion. Complementarily, the Fed announced that it will be more responsive to periods where employment falls below its estimate of full employment, compared to periods where employment is in excess. Taken together, these decisions suggest that the Fed will place greater emphasis on fulfilling the full employment portion of its dual mandate, and less emphasis on the stable prices portion of the mandate.

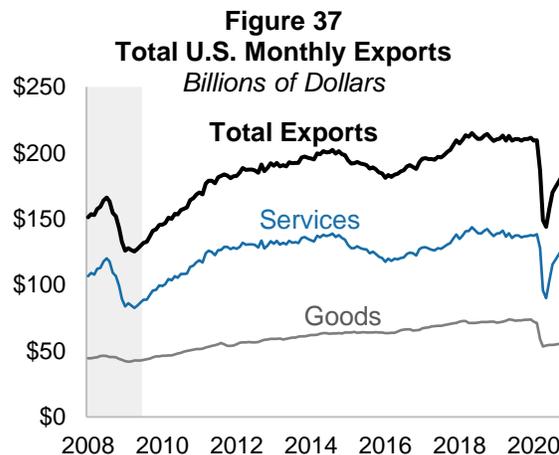
Global Economy and International Trade

A second-wave of COVID-19 spread across advanced economies this fall, putting the global economic recovery on hold. The global outlook improved, however, on news of an efficacious vaccine on the horizon, although the rapid distribution of the vaccine and the economic recovery will vary widely across countries. The International Monetary Fund (IMF) revised its October World Economic Outlook global growth projections up from its September projections for 2020 to a 4.4 percent contraction and down for 2021 to 5.2 percent growth.

COVID-19 continues to steer the global economy. The outlook for advanced economies improved over the IMF’s June forecast, as pent up demand manifested during the third quarter of the year. Advanced economies are projected to contract by 5.8 percent during 2020, a marked improvement from a projected 8.0 percent contraction in June. Economies in Europe weighed on growth this year, with contractions in Italy and Spain expected to reach double digits, and France and the United Kingdom not far behind. In 2021, advanced economies are expected to rebound 3.9 percent. China is the only major emerging economy expected to buck similar trends. As the country experienced both the outbreak and recovery before other nations, its economy is set to expand by 1.9 percent in 2020 and see a strong rebound to 8.2 percent growth in 2021.

Over the next two years, Mexico and Canada, Colorado’s largest trading partners, are expected to fare worse and slightly better, respectively, than the U.S. Mexico may be poised to enter a more protracted downturn, with the IMF projecting a 9.0 percent contraction in 2020 and a more modest recovery of 3.5 percent growth next year. A significant share of Mexico’s economy depends on imports from the U.S. As a result, Mexico’s recovery is in part linked to that of the U.S. Canada’s economy is projected to contract by 7.1 percent this year before growing by 5.2 percent next year. Canada is plagued by a second wave of COVID-19, resulting in the government implementing the largest economic relief package since World War II.

Trade activity faces an uneven recovery. Ongoing economic woes portend lower global trade volumes through at least 2021. U.S. exports to foreign partners fell dramatically in May 2020, led by the decline in services on travel restrictions and lower global demand (Figure 37). According to data published by WiserTrade, U.S. exports are down 14.5 percent year-to-date through October over year-ago levels. Leading the decline, U.S. oil exports fell by more than 22 percent during the same period on lower global demand and increased supply of crude and refined oil. Exports of cars, electrical and industrial machinery, and aerospace crafts and parts also contributed to the double-digit decline. On the upside, agricultural product exports increased over year-ago levels, with partial recovery from the impacts of higher tariffs over the last 18 months. U.S. imports fell by 8.9 percent during the same period, with similar patterns emerging in exports. The import of pharmaceutical and chemical products increased, resulting from higher demand for drugs to combat the pandemic.



Source: U.S. Bureau of Economic Analysis (balance of payments basis). Data are through September 2020 and are seasonally adjusted but not adjusted for inflation.

According to data from WiserTrade, Colorado, which is less dependent on exports than the country as a whole, saw a small uptick, 1.3 percent, in exports year-to-date through October over the same period last year; however, this is largely due to anomalous exports of spacecraft totaling \$500 million to French Guiana, the United Arab Emirates, and New Zealand. Meat exports, typically one of Colorado’s largest categories of exports, are up 6.7 percent in the first ten months of the year, also buoying the state’s trade volume. Imports to the state are down over 10 percent, with a 33 percent

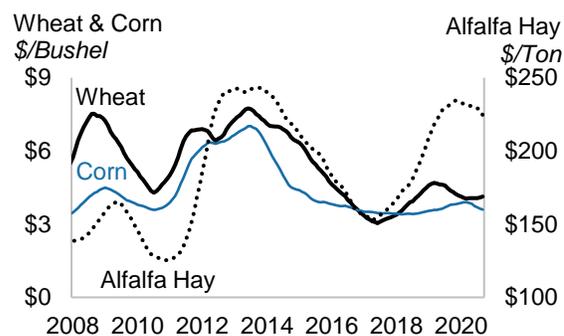
drop in fuel imports driving the decline. Trade is expected to remain subdued through 2020 and into 2021, while countries' infection rates ebb and flow with their economies in tow.

Agriculture

Colorado agricultural producers, already in the midst of a prolonged economic downturn, were beset by multiple challenges in 2020, including significant market disruptions caused by the global pandemic, severe weather conditions, and natural disasters. After declining at the fastest pace since 2016, the pace of deterioration in farm income slowed in the third quarter, and credit conditions eased in the Federal Reserve's Tenth District, which includes Colorado. While additional government support and increasing commodity prices created more favorable conditions for farm finances at the end of 2020, the outlook for 2021 remains precarious and highly dependent on the trajectory of the pandemic, improvement in weather conditions, commodity prices, and ongoing support from government programs.

Agricultural markets stabilize. While pandemic-related disruptions roiled agricultural markets earlier this year, the prices of most agricultural commodities began to recover in the summer months, and received some late-season support due to an improved outlook for agricultural exports. Grain prices have been trending upward since August, partially reversing a sharp decline during the early months of the pandemic. Despite these gains, average wheat and corn prices through September are still down 1.3 percent and 8.6 percent, respectively, compared to the same period last year (Figure 38).

Figure 38
Prices Received for Colorado Crops



Source: U.S. Department of Agriculture, National Agriculture Statistics Service. Data shown as a 12-month moving average through September 2020.

Devastating drought and wildfires add to pandemic woes. Compared to farmers elsewhere in the region, Colorado's producers may see fewer benefits from higher commodity prices as drought and wildfires hamper production. By December, 100 percent of the state had entered drought conditions, with 75 percent of the state experiencing extreme or exceptional drought, the most severe drought rankings, according to the U.S. drought monitor. This compares to 37 percent of the state suffering extreme or exceptional drought three months ago. As of September 2020, 60 counties were designated drought disaster areas by the U.S. Department of Agriculture. With these conditions comes the threat of large agricultural and recreational economic losses, as well as lasting damage from depleted soil health, increased pest infestations, rangeland deterioration, declining groundwater and reservoirs, and large wildfires. At least three major wildfires continued to burn in Colorado in early December, including two of the largest on record in the state, the Cameron Peak and East Troublesome fires, although both were 100 percent contained. The third largest wildfire in Colorado history, the Pine Gulch fire north of Grand Junction, also burned vast tracts this year, destroying grazing land and fencing infrastructure.

Farmers receive government support. Government aid programs have provided relief to producers, significantly boosting farm incomes and supporting credit conditions. According to the USDA December forecast, U.S. farm income for 2020 is forecast up 43.1 percent to nearly \$120 billion, the

second highest of all time. While cash receipts from crop and livestock sales are down \$3 billion, government support increased by \$46.5 billion, to account for nearly 39 percent of farm income, mostly due to supplemental and ad hoc assistance due to COVID-19 and natural disasters. The Coronavirus Food Assistance Program (CFAP) provided \$16 billion in direct financial assistance to agricultural producers who faced market disruptions and losses due to COVID-19. In September, the USDA announced an additional \$14 billion to be provided through CFAP 2. As of November 29, Colorado producers had received \$339.6 million, or 1.6 percent of the \$21.6 billion distributed through these programs. Top supported commodities in Colorado included cattle, corn, milk, and wheat.

Summary

The development and distribution of multiple effective COVID-19 vaccines brightened the outlook for the U.S. and Colorado economies, particularly for late 2021 and 2022. The economic recovery remains incomplete and uneven as health concerns and social distancing restrictions continue to weigh heavily on the tourism, travel, and leisure and hospitality industries. While business and consumer resilience have produced stronger than expected economic activity to date, the industries impacted most by the pandemic will face difficult winter months ahead on the resurgence in COVID-19 cases. Risks to the forecast remain elevated, with a resurgence in the virus weighing on the near-term outlook, and additional federal stimulus posing the greatest upside risk.

Risks to the Forecast

Several factors could result in either stronger or weaker economic activity than forecast.

Downside. The most sizeable downside risk to the economic outlook is a resurgence of COVID-19, necessitating a resumption of widespread business closures and stay-at-home orders. Additionally, as the effects of federal fiscal stimulus wear off, households and businesses may tighten consumption and investment more than expected. Other downside risks include stronger-than-expected headwinds from fiscal struggles among state and local governments, elevated levels of corporate debt, gaps in workforce skills and training, and income inequalities that may constrain labor market growth and consumer activity.

Upside. Additional federal stimulus could further soften the impact of the recession on households, businesses, and state and local governments, stabilizing and boosting job growth and incomes. Additionally, the challenges of the COVID-19 pandemic have expedited shifts toward remote work, leveraging technology, and in many realms, simpler, more localized supply chains. These shifts in consumer demands and business operations could produce stronger-than-expected growth over the forecast period.

Table 20
National Economic Indicators

Calendar Years	2015	2016	2017	2018	2019	Legislative Council Staff Forecast		
						2020	2021	2022
Real GDP (<i>Billions</i>) ¹	\$17,432.2	\$17,730.5	\$18,144.1	\$18,687.8	\$19,091.7	\$18,442.5	\$19,290.9	\$19,888.9
Percent Change	3.1%	1.7%	2.3%	3.0%	2.2%	-3.4%	4.6%	3.1%
Nonfarm Employment (<i>Millions</i>) ²	141.8	144.3	146.6	148.9	150.9	142.3	145.5	149.7
Percent Change	2.1%	1.8%	1.6%	1.6%	1.4%	-5.7%	2.2%	2.9%
Unemployment Rate ²	5.3%	4.9%	4.3%	3.9%	3.7%	8.1%	6.4%	5.5%
Personal Income (<i>Billions</i>) ¹	\$15,724.2	\$16,160.7	\$16,948.6	\$17,851.8	\$18,551.5	\$19,701.7	\$19,583.5	\$20,366.8
Percent Change	4.9%	2.8%	4.9%	5.3%	3.9%	6.2%	-0.6%	4.0%
Wage and Salary Income (<i>Billions</i>) ¹	\$7,859.5	\$8,089.1	\$8,471.5	\$8,894.2	\$9,309.3	\$9,346.5	\$9,683.0	\$10,225.3
Percent Change	5.1%	2.9%	4.7%	5.0%	4.7%	0.4%	3.6%	5.6%
Inflation ²	0.1%	1.3%	2.1%	2.4%	1.8%	1.2%	2.1%	2.2%

Sources

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

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

Table 21
Colorado Economic Indicators

Calendar Years	2015	2016	2017	2018	2019	Legislative Council Staff Forecast		
						2020	2021	2022
Population (<i>Thousands, as of July 1</i>) ¹	5,450.6	5,539.2	5,611.9	5,691.3	5,758.7	5,816.3	5,868.7	5,927.4
Percent Change	1.9%	1.6%	1.3%	1.4%	1.2%	1.0%	0.9%	1.0%
Nonfarm Employment (<i>Thousands</i>) ²	2,541.2	2,601.2	2,660.2	2,727.5	2,785.8	2,671.6	2,754.4	2,842.5
Percent Change	3.2%	2.4%	2.3%	2.5%	2.1%	-4.1%	3.1%	3.2%
Unemployment Rate ²	3.9%	3.3%	2.8%	3.2%	2.8%	6.9%	5.9%	4.6%
Personal Income (<i>Millions</i>) ³	\$284,820	\$290,670	\$312,046	\$335,196	\$352,185	\$370,851	\$386,797	\$402,656
Percent Change	5.0%	2.1%	7.4%	7.4%	5.1%	5.3%	4.3%	4.1%
Wage and Salary Income (<i>Millions</i>) ³	\$146,578	\$151,086	\$160,848	\$170,323	\$182,087	\$185,364	\$198,340	\$211,232
Percent Change	5.7%	3.1%	6.5%	5.9%	6.9%	1.8%	7.0%	6.5%
Housing Permits (<i>Thousands</i>) ¹	31.9	39.0	40.7	42.6	38.6	42.0	41.8	42.1
Percent Change	11.1%	22.3%	4.4%	4.8%	-9.4%	8.8%	-0.6%	0.7%
Nonresidential Building (<i>Millions</i>) ⁴	\$4,990.8	\$5,989.0	\$6,159.6	\$8,140.3	\$5,063.6	\$4,795.2	\$4,656.1	\$4,753.9
Percent Change	14.7%	20.0%	2.8%	32.2%	-37.8%	-5.3%	-2.9%	2.1%
Denver-Aurora-Lakewood Inflation ⁵	1.2%	2.8%	3.4%	2.7%	1.9%	2.0%	2.2%	2.3%

Sources

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

²U.S. Bureau of Labor Statistics.

³U.S. Bureau of Economic Analysis. Personal income and wages and salaries not adjusted for inflation. Forecast shown for 2019.

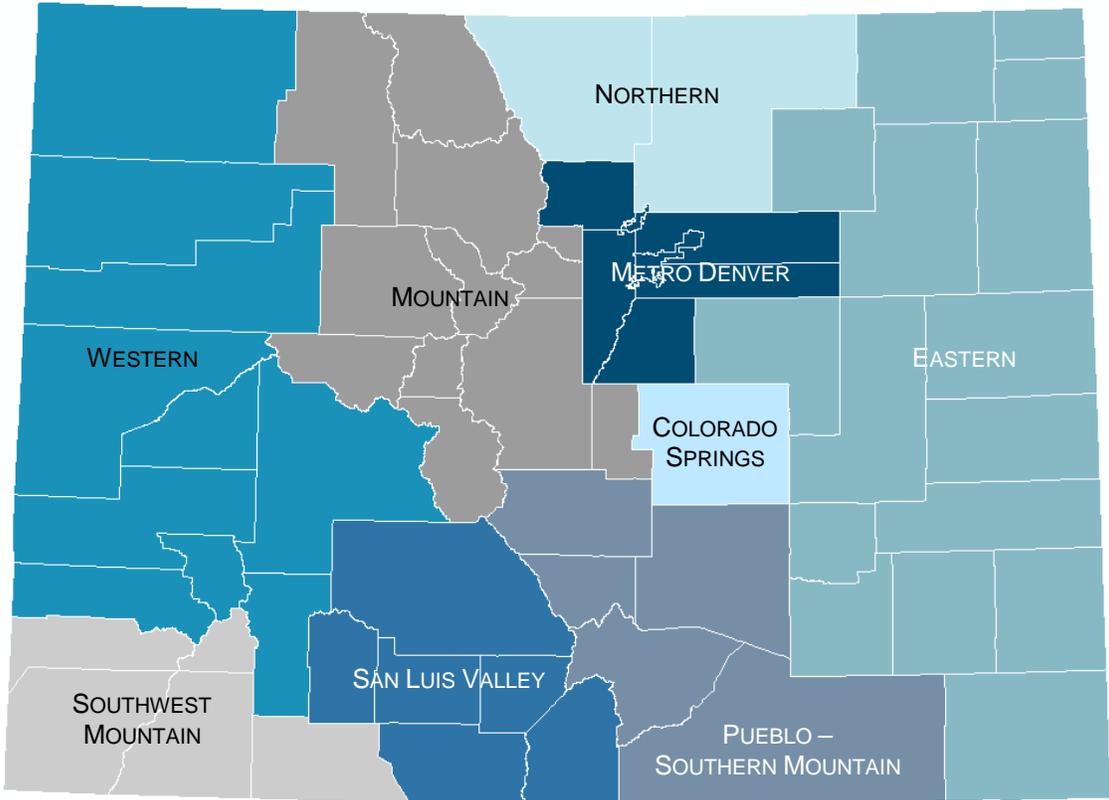
⁴F.W. Dodge.

⁵U.S. Bureau of Labor Statistics. Inflation shown as the year-over-year change in the consumer price index.

Note: Legislative Council Staff has discontinued the Colorado retail trade forecast due to data limitations.

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Colorado Economic Regions



A Note on Data Revisions

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

Like the employment data, residential housing permits and agriculture data are also based on surveys. These data are revised periodically. Nonresidential construction data in the current year reflects reported construction activity. These data are revised the following year to reflect actual construction activity. Retail trade sales data are no longer reported due to data limitations.

Metro Denver Region

Colorado's diverse seven-county metro Denver region holds the largest share of the state's population and workforce of the nine economic regions identified in this forecast. The impacts of the COVID-19 pandemic and related recession have taken a toll on the region's labor market, with only a fraction of the jobs lost in March and April regained in subsequent months. In response to the downturn in tourism and business travel and shifts in consumer activity, many businesses have reduced their workforce or shuttered their doors. Reflecting ongoing elevated demand and low interest rates, the residential real estate market remains hot in the metro Denver area, defying typical cooling trends in the winter months. Nonresidential construction activity, however, continues to cool from 2016 highs. Economic indicators for the region are summarized in Table 22.



Table 22
Metro Denver Region Economic Indicators
 Adams, Arapahoe, Broomfield, Boulder, Denver, Douglas, and Jefferson Counties

	2016	2017	2018	2019	YTD 2020
Employment Growth ¹	2.6%	1.9%	2.5%	2.2%	-3.6%
Unemployment Rate ²	3.0%	2.7%	3.0%	2.6%	7.0%
Housing Permit Growth ³					
Denver-Aurora MSA Single Family	12.2%	3.8%	7.9%	-6.1%	-4.8%
Boulder MSA Single Family	10.2%	-4.3%	15.7%	-9.5%	-13.5%
Nonresidential Construction Growth ⁴					
Value of Projects	27.9%	-10.8%	46.2%	-38.6%	-20.8%
Square Footage of Projects	6.9%	-14.2%	-11.6%	-8.4%	-10.1%
Level (<i>Millions</i>)	22,624	19,406	17,149	15,714	11,772
Number of Projects	9.9%	-23.8%	-18.5%	-12.3%	-4.8%
Level	1,242	946	771	676	521

MSA = Metropolitan statistical area.

¹U.S. Bureau of Labor Statistics, CES (establishment survey). Seasonally adjusted. Data through September 2020.

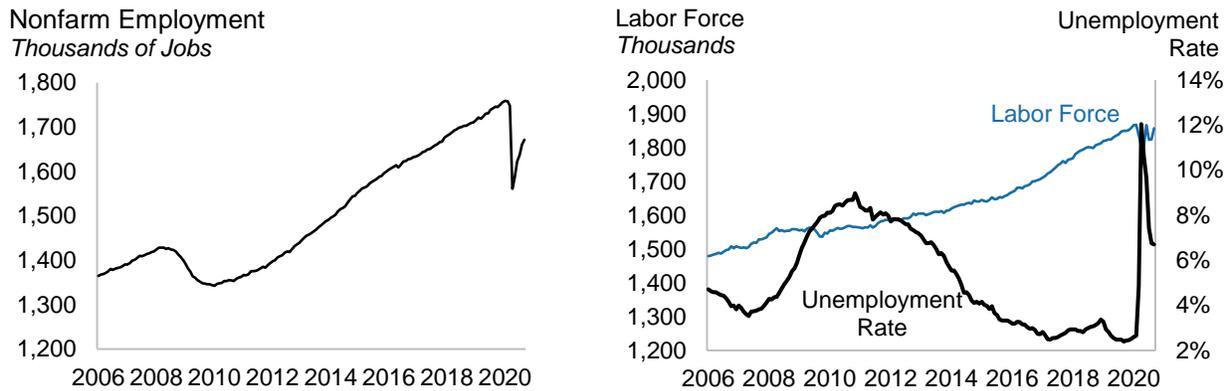
²U.S. Bureau of Labor Statistics, LAUS (household survey). Seasonally adjusted. Data through September 2020.

³U.S. Census. Growth in the number of residential building permits. Data through September 2020.

⁴F.W. Dodge. Data through October 2020.

Labor market. Data published by the U.S. Bureau of Labor Statistics for the metro Denver region suggest a 3.6 percent decline in the number of jobs year-to-date through September relative to the same period last year. Between January and April, the region lost 197,800 jobs (more than one in every ten jobs), 55.7 percent of which were recovered between May and September (Figure 39, left). The metro Denver region is home to a wide range of tourism-related and business travel activities, with Denver International Airport (DIA) serving as the main air transit hub in and out of Colorado. While conditions have improved since the lows of April, reduced air travel and ongoing social distancing continue to hit employment hard for leisure and hospitality industries. Passenger traffic through DIA has recovered since air travel nearly halted in April, but remains at one-half year-ago levels. The Denver metro area is home to a concentration of oil and gas firms, many of which have reduced the size of their workforce or filed for bankruptcy amid low energy prices. The area unemployment rate rose from 2.6 percent in February to a high of 12.0 percent in April before ticking down to 6.7 percent in September (Figure 39, right).

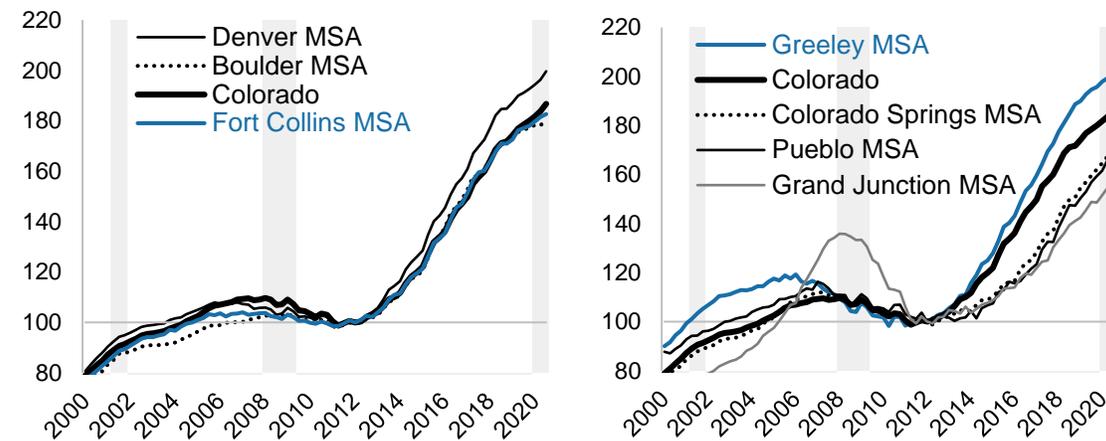
Figure 39
Metro Denver Region Labor Market Activity



Source: U.S. Bureau of Labor Statistics. CES (left) data are through September 2020. LAUS (right) data are through September 2020. Data are seasonally adjusted. Data prior to 2010 adjusted by Legislative Council Staff.

Home prices. Home-price appreciation continued to moderate through the third quarter in the metro Denver region along with other regions of the state following several years of double-digit gains (Figure 40). The Denver area housing market, however, has been impacted by the COVID-19 pandemic. COVID-19-related restrictions and uncertainty limited the number of homes put on the market in recent months. Home prices are expected to remain elevated as demand for housing in the metro Denver area continues to outstrip limited supply. According to data from the Denver Metro Association of Realtors, the average price for a single-family home reached a record \$625,100 in October, an 18 percent gain over year-ago prices. Multi-family homes sold for a record \$393,700, up nearly 8 percent from year-ago prices.

Figure 40
FHFA All-Transaction Home Price Indices
Index 100 = 2012Q1 (Recessionary Trough in Grey Bars)

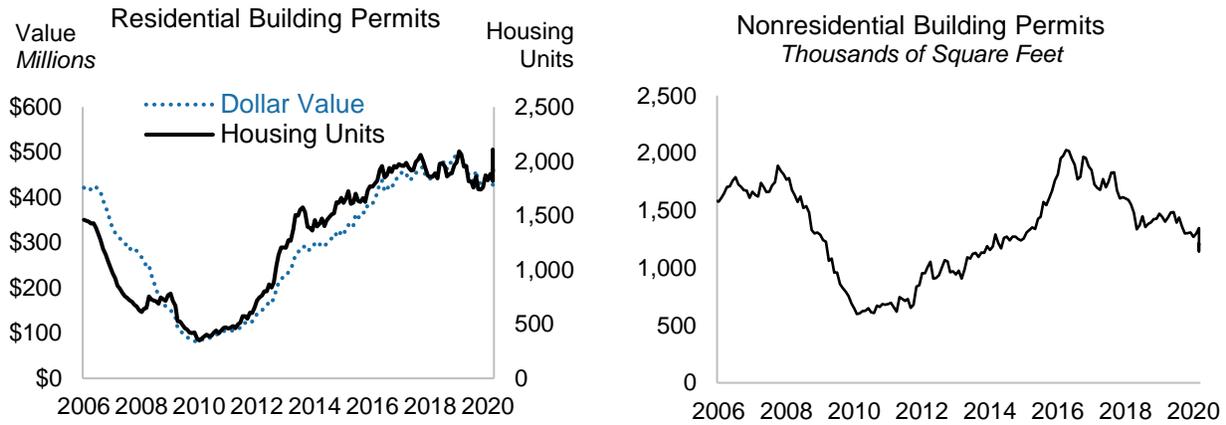


Source: Federal Housing Finance Agency (FHFA).

Residential construction. Metro Denver residential construction activity eased in the first half of the year before ticking up through October (Figure 41, left). The region is coming off a multi-year residential construction boom, with the high cost of housing dampening interest among many would-be buyers, and construction labor and land shortages constraining the pace of new building. Permits for new single-family residential construction activity in the Denver-Aurora metropolitan

statistical area (MSA) fell 4.8 percent year-to-date through September relative to the same period last year, although total permits, including multi-family residential construction, grew by 0.2 percent year-to-date. Construction activity in the Boulder MSA contracted 13.5 percent over the same period, continuing the slowdown in activity from 2019.

Figure 41
Metro Denver Region Construction Activity



Source: F.W. Dodge. Data shown as twelve-month moving averages. Data are not seasonally adjusted and are through October 2020.

Nonresidential construction. Metro Denver nonresidential building activity continues to moderate. In the first ten months of the year, the value (Figure 41, right), square footage, and number of projects continued to decline from 2016 highs. The shift toward remote work and business impacts of the COVID-19 crisis are expected to put downward pressure on demand for commercial real estate in the region and to slow nonresidential construction activity in the years ahead. While many major projects in the region remain in the pipeline, demand is expected to continue to slow. Future nonresidential building is expected to shift from office space and new commercial storefronts or brick-and-mortar retail establishments to favor nonresidential development that supports e-commerce, such as warehousing space.

Northern Region

Larimer and Weld counties comprise the diverse economies of the northern region. Larimer County's economy continues to expand with population growth drawn to the Fort Collins area, while Weld County's economic activity is driven largely by the oil and gas and agricultural industries. Colorado's energy industry is at significant risk from low oil prices and reduced global demand for oil and gas, which threatens both the private sector through industry income and the public sector through property and sales taxes. The region's labor market has historically been one of the tightest in the state, but may face stronger headwinds than other regions due to the composition of its economy. Construction industry activity showed strong growth at the beginning of the year, with strong residential construction activity offsetting subdued nonresidential construction. Table 23 shows economic indicators for the northern region.



Table 23
Northern Region Economic Indicators
Weld and Larimer Counties

	2016	2017	2018	2019	YTD 2020
Employment Growth ¹					
Fort Collins-Loveland MSA	3.8%	3.7%	2.7%	2.5%	-3.6%
Greeley MSA	-0.3%	-0.4%	2.4%	1.3%	-2.7%
Unemployment Rate ²					
Fort Collins-Loveland MSA	2.8%	2.4%	2.7%	2.3%	6.0%
Greeley MSA	3.4%	2.7%	2.9%	2.5%	6.4%
State Cattle and Calf Inventory Growth ³	1.0%	6.7%	2.6%	8.0%	1.5%
Natural Gas Production Growth ⁴	14.6%	5.6%	18.9%	19.2%	15.0%
Oil Production Growth ⁴	-7.3%	13.5%	36.0%	4.9%	-1.8%
Housing Permit Growth ⁵					
Fort Collins-Loveland MSA Total	47.9%	-18.2%	8.4%	-18.2%	2.8%
Fort Collins-Loveland MSA Single Family	-2.9%	21.0%	-14.1%	-4.9%	42.6%
Greeley MSA Total	-7.8%	23.1%	24.6%	-2.2%	24.3%
Greeley MSA Single Family	-9.9%	16.4%	32.1%	-8.4%	27.6%
Nonresidential Construction Growth ⁶					
Value of Projects	-0.5%	32.2%	64.5%	-71.5%	33.0%
Square Footage of Projects	-14.8%	17.8%	-29.0%	-14.4%	-4.9%
Level (<i>Thousands</i>)	3,393	3,996	2,838	2,428	2,003
Number of Projects	11.3%	2.9%	13.0%	-16.8%	-8.6%
Level	276	284	321	267	192

MSA = Metropolitan statistical area.

¹U.S. Bureau of Labor Statistics, CES (establishment survey). Seasonally adjusted. Data through September 2020.

²U.S. Bureau of Labor Statistics, LAUS (household survey). Seasonally adjusted. Data through September 2020.

³National Agricultural Statistics Service. Cattle and calves on feed through October 2020.

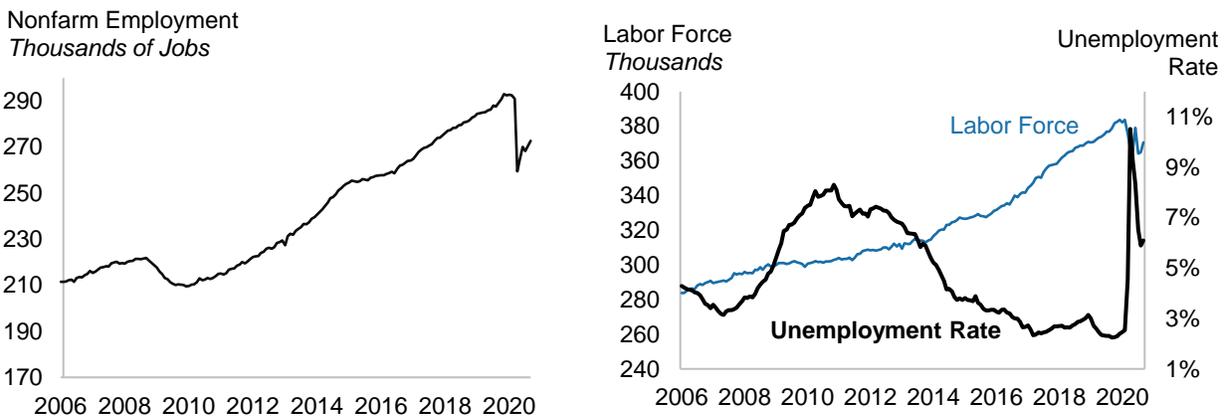
⁴Colorado Oil and Gas Conservation Commission. Data through July 2020.

⁵U.S. Census Bureau. Growth in the number of residential building permits. Data through September 2020.

⁶F.W. Dodge. Data through October 2020.

Labor market. The region’s labor market saw some of the fastest job growth and lowest unemployment rates in the state leading up to 2020 (Figure 42). Even accounting for significant layoffs in March, unemployment rates sat at 6.0 percent in Fort Collins-Loveland and 6.4 percent in Greeley year-to-date through September 2020, and remain close to the lowest unemployment rates in the state. Employment in the Fort Collins area has recovered more quickly than in Greeley, as the latter continues to feel the impact of the sluggish energy market recovery. Oil production remains stagnant, delaying the gain in employment levels in Weld County that will resume with the industry’s recovery. Employment, still down around 20,000 jobs in the region, is not expected to fully recover until well after a vaccine is available and energy markets return to pre-crisis levels.

Figure 42
Northern Region Labor Market Activity

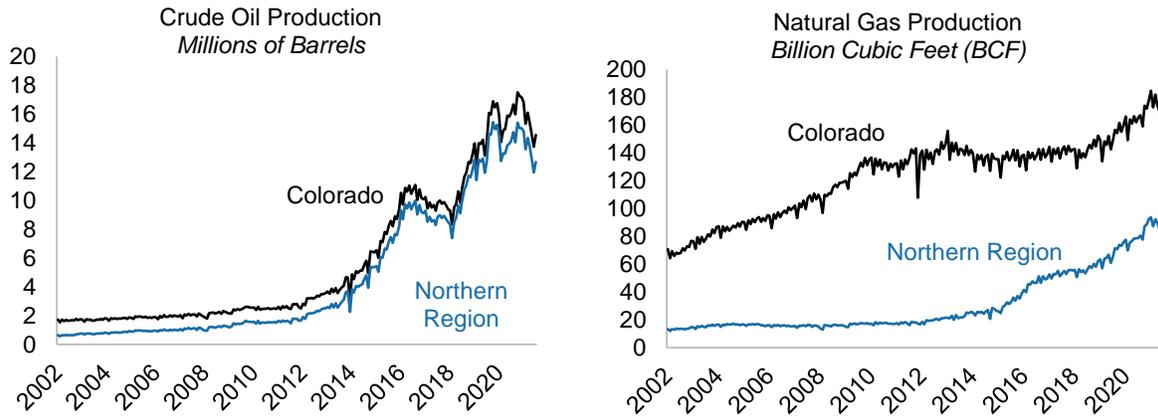


Source: U.S. Bureau of Labor Statistics; CES (left) and LAUS (right). Data are seasonally adjusted and are through September 2020.

Agriculture. The northern region produces about a quarter of the value of Colorado’s agricultural products due to the heavy concentration of the livestock industry in Weld County. Colorado’s agricultural sector faced significant headwinds this year, with supply chain disruptions, COVID-19 outbreaks in meat processing facilities, wildfires, and severe drought. The region’s cattle and calf inventory grew only 1.5 percent through October over the same period last year, a slowdown from 8.0 percent growth during 2019. Slower growth is the result of poor or very poor pasture and range conditions and low commercial demand. With more restaurants closing and schools continuing or converting to remote learning, demand will likely remain subdued through the winter.

Energy sector. Oil production in the northern region, particularly in Weld County, has dominated statewide production for over a decade (Figure 43, left). Oil and gas production climbed through April, increasing 5.0 percent and 21.1 percent, respectively, over year-ago levels. However, the significant fall in oil prices this spring combined with the drop in demand due to COVID-19-related shut downs led to reductions in oil and gas production as well as capital expenditures, as evidenced by the drop in Colorado rig counts through the summer. Oil prices have remained around \$40 per barrel over the last few months, which is an unprofitable price for many producers in the Denver-Julesburg Basin. Some companies have filed for bankruptcy to restructure debt loads, and thousands of workers have been laid off, particularly those directly involved in production. With oil storage in the U.S. still at higher-than-normal levels as demand remains subdued, prices are expected to remain depressed through 2020 and well into 2021.

Figure 43
Colorado Energy Production

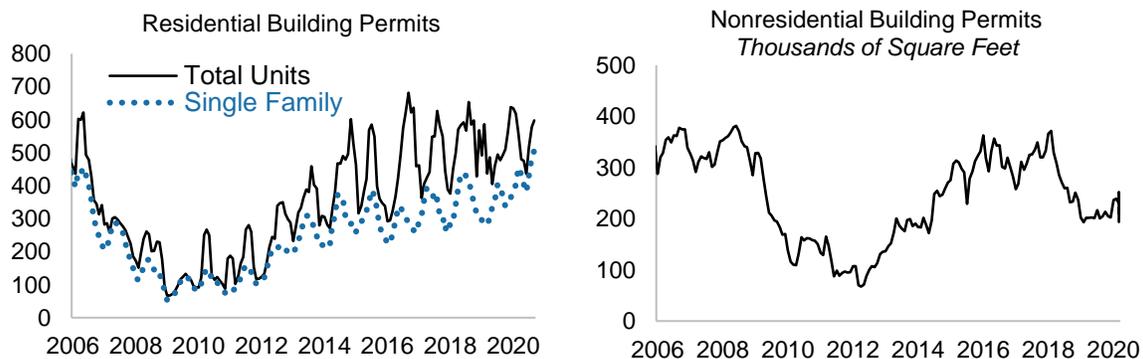


Source: Colorado Oil and Gas Conservation Commission. Monthly data through July 2020.

Housing. Following softer demand in 2019, growth in single-family housing permits in the region accelerated through September this year (Figure 44, left). Sustained demand combined with reduced mortgage rates have pushed single-family housing permits up 42.6 percent in the Fort Collins-Loveland area and 27.6 percent in Greeley year-to-date through September over the same period last year. Sales of single-family homes in Larimer County have outpaced those in Weld County through October, according to the Colorado Association of Realtors, at an 11.3 percent and 5.7 percent increase, respectively. Strong demand has pushed the median sales price of single-family homes up 4.7 percent in Larimer County and 7.0 percent in Weld County through October. Total housing permit growth through September has been more moderate in the region, particularly in the Fort Collins area, as the pandemic has put downward pressure on demand for multifamily housing units.

Nonresidential construction. Nonresidential construction activity in the region started the year strong, but has moderated in recent months and is expected to stay relatively flat through the rest of 2020. Year-to-date through October, activity is up 33.0 percent (Figure 44, right). Activity will likely remain subdued in 2021 as the oil and gas sector slowly recovers and large capital projects are put on hold resulting from lower tax revenue and an uncertain economic environment.

Figure 44
Northern Region Construction Activity



Source: U.S. Census Bureau. Data shown as three-month moving averages. Data are not seasonally adjusted and are through September 2020.

Source: F.W. Dodge. Data shown as twelve-month moving averages. Data are not seasonally adjusted and are through October 2020.

Pueblo – Southern Mountains Region

The Pueblo – Southern Mountains region includes five southern Front Range counties surrounding the City of Pueblo. The region suffered substantial job losses due to COVID-19-related closures; however, recent data suggests that the area’s labor market has begun to heal, pushing down the unemployment rate from historical highs. Though the nonresidential construction market is expected to slow as some projects are delayed or canceled, recent successes in attracting new, high tech industries to the region combined with a relatively affordable housing market have helped support economic growth. Indicators for the regional economy are presented in Table 24.



Table 24
Pueblo Region Economic Indicators
Custer, Fremont, Huerfano, Las Animas, and Pueblo Counties

	2016	2017	2018	2019	YTD 2020
Employment Growth					
Pueblo Region ¹	2.8%	2.7%	0.8%	1.6%	-5.2%
Pueblo MSA ²	1.8%	1.1%	0.1%	1.0%	-3.2%
Unemployment Rate ¹	4.9%	4.3%	4.8%	4.2%	7.7%
Housing Permit Growth ³					
Pueblo MSA Total	6.0%	14.9%	45.1%	3.8%	20.2%
Pueblo MSA Single Family	29.9%	16.2%	52.6%	-6.2%	36.5%
Nonresidential Construction Growth ⁴					
Value of Projects	-22.6%	-64.5%	222.9%	45.2%	-25.5%
Square Footage of Projects	-3.8%	-52.6%	145.1%	-19.7%	20.4%
Level (<i>Thousands</i>)	341	162	397	318	365
Number of Projects	50.0%	-72.2%	50.0%	23.3%	103.4%
Level	72	20	30	37	59

MSA = Metropolitan statistical area.

¹U.S. Bureau of Labor Statistics, CES (establishment survey). Seasonally adjusted. Data through September 2020.

²U.S. Bureau of Labor Statistics, LAUS (household survey). Seasonally adjusted. Data through September 2020.

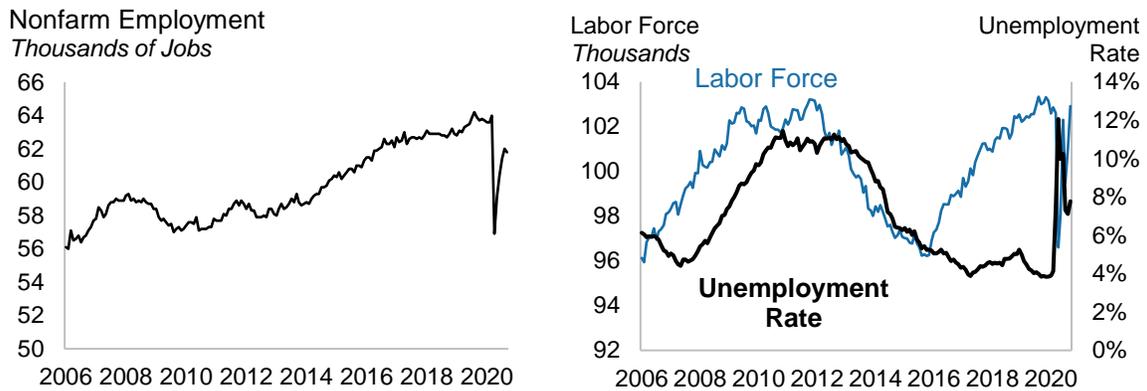
³U.S. Census. Growth in the number of residential building permits. Data through September 2020.

⁴F.W. Dodge. Data through October 2020.

Labor market. The five-county Pueblo region and metropolitan statistical area of Pueblo County continue to recover after substantial job losses early in the year; however, the total number of employees in these areas remains below levels from the same period last year. In April 2020, the first full month of the pandemic shutdown, the region lost just over 10,000 jobs from the month prior, with Pueblo County accounting for nearly three-quarters of job losses (Figure 45, left). Job loss occurred across all major industry sectors with the transportation, retail, financial, and leisure and hospitality sectors most heavily impacted by the COVID-19 crisis. Since then, businesses in the region have slowly added employees each month, but at a slower pace than in the same period last year. Year-to-date through September, employment growth in the Pueblo metropolitan statistical area was down 3.2 percent from the same period last year, while employment for the entire region was down 5.2 percent.

Unemployment insurance initial claims in the Pueblo region spiked in April because of COVID-19-related closures, pushing the region’s unemployment rate up to 12.1 percent and surpassing rates during the Great Recession. The unemployment rate has steadily declined each month since then, but remains at historical highs. As of September, the region’s unemployment rate ticked down to 7.8 percent and has averaged 7.7 percent year-to-date through September (Figure 45, right). The region’s unemployment rate is expected to remain elevated but gradually decline through the rest of year.

Figure 45
Pueblo Region Labor Market Trends

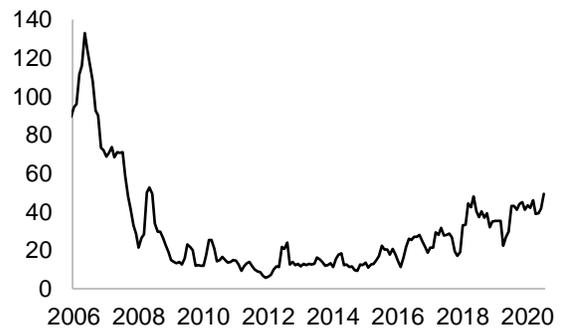


Source: U.S. Bureau of Labor Statistics; LAUS. Data prior to 2010 adjusted by Legislative Council Staff. Data are seasonally adjusted and are through September 2020.

Housing. Despite COVID-19-related headwinds, residential real estate market indicators in the region continued to improve in 2020. Through July, Pueblo County issued 434 total residential building permits, a 20.2 percent increase from the same period last year (Figure 46).

An affordable housing market compared with the northern and Metro Denver regions has helped soften the COVID-19-related economic impacts in the Pueblo region housing market. The median sales price for a single-family home in Pueblo County was \$252,000 in October 2020, compared to \$520,000 in the Metro Denver region, according to data from the Colorado Association of Realtors. Many realtors in the region reported minimal impacts from the change in buyer-seller protocol (e.g., virtual tours) which were in effect through early May. The low inventory of homes for sale in Pueblo County is also buoying the residential real estate market. In October, the county reported 325 single-family homes for sale, down almost 6.2 percent from the same month last year, while the number of townhouse/condos was down 133.3 percent.

Figure 46
Single-Family Residential Permits



Source: U.S. Census Bureau. Data shown as three-month moving averages. Data are not seasonally adjusted and are through September 2020.

Nonresidential construction. Early market indicators show that the region’s nonresidential market was continuing to gain momentum through the first two months of the year, but the impacts from COVID-19 are expected to slow the start of new projects in the region. The value of nonresidential projects fell by 25.5 percent year-to-date through October over the same period last year, but the number and size of new nonresidential projects is up from the same period last year. Amusement and public improvement-related projects have provided most of the lift for the region. The City of Pueblo has recently opened a convention center expansion along the Historic Arkansas Riverwalk. Through this project, the city is adding a large exhibit hall and Professional Bull Riders Sports Performance Center to the Pueblo Convention Center, a three-story parking garage across the street from the convention center, and a Gateway Plaza outdoor space. The total cost for the improvements is projected to top \$30 million. The bulk of the project will be paid for by state sales taxes under the state Regional Tourism Act program, in addition to state and federal grants. In addition, EVRAZ Rocky Mountain Steel in Pueblo reached a long-term contract with Xcel Energy to develop a 240-megawatt solar array at the steel mill site.

Colorado Springs Region

The Colorado Springs economy has rebounded strongly following the distress imposed by COVID-19. While the labor market suffered significantly in early 2020, robust employment growth in recent months has pushed the unemployment rate more than six percentage points below its peak in April. While the region's leisure and hospitality industries continue to feel the effects of pandemic-related closures and dampened activity, low real estate prices relative to the northern Front Range continue to attract young professionals into the area and support the economic recovery. Home sales and prices have increased year-to-date through September despite the challenges social distancing placed on the industry. Finally, both residential and nonresidential construction activity remains healthy in the region despite the effects of COVID-19. Indicators for the regional economy are presented in Table 25.



Table 25
Colorado Springs Region Economic Indicators
El Paso County

	2016	2017	2018	2019	YTD 2020
Employment Growth¹					
Colorado Springs MSA	2.9%	1.8%	2.2%	2.2%	-2.5%
Unemployment Rate²	3.7%	3.2%	3.8%	3.3%	7.0%
Housing Permit Growth³					
Total	41.3%	-3.9%	15.4%	-3.8%	7.5%
Single Family	19.7%	6.7%	9.6%	-4.1%	19.1%
Nonresidential Construction Growth⁴					
Value of Projects	48.9%	-22.6%	20.8%	0.5%	34.1%
Square Footage of Projects	26.1%	10.5%	9.2%	5.1%	117.9%
Level (<i>Thousands</i>)	2,353	2,599	2,838	2,984	5,947
Number of Projects	11.6%	30.0%	-1.5%	-31.0%	15.6%
Level	423	550	542	374	378

MSA = Metropolitan statistical area.

¹U.S. Bureau of Labor Statistics, CES (establishment survey). Seasonally adjusted. Data through September 2020.

²U.S. Bureau of Labor Statistics, LAUS (household survey). Seasonally adjusted. Data through September 2020.

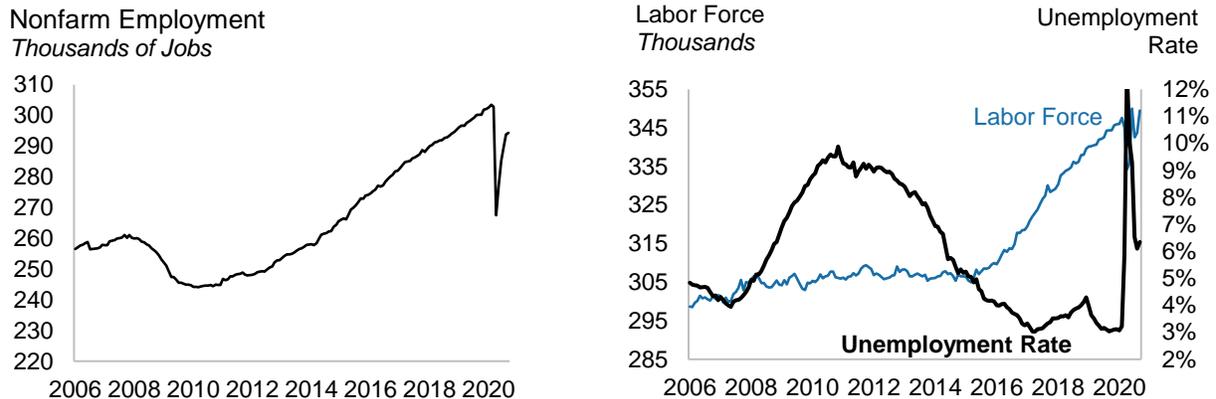
³U.S. Census. Growth in the number of residential building permits. Data through September 2020.

⁴F.W. Dodge. Data through October 2020.

Labor market. The Colorado Springs labor market started 2020 strong, adding nearly 1,400 new jobs in January and February over December 2019 levels before the COVID-19 outbreak began weighing heavily on the region's economy (Figure 47, left). In April, the Colorado Springs metropolitan statistical area lost a staggering 35,300 jobs from the prior month, a 12 percent decline. The region has since seen strong job growth, surpassing the statewide recovery. Across Colorado, average year-to-date employment through September is down 4.2 percent compared with the same period in 2019, while the Colorado Springs region is only down 2.5 percent over the same period.

The region's unemployment rate spiked to 12.7 percent in April after hovering near 3.0 percent over the past year (Figure 47, right). The rate steadily dropped through August, but increased slightly in September to 6.3 percent. Year-to-date through September, the region's unemployment rate averaged 7.0 percent, up from the 3.3 percent average rate one year prior. This forecast expects the region's unemployment rate to fall through the remainder of the year.

Figure 47
Colorado Springs Labor Market Activity



Source: U.S. Bureau of Labor Statistics; CES data (left) and LAUS data (right). Data are seasonally adjusted through September 2020.

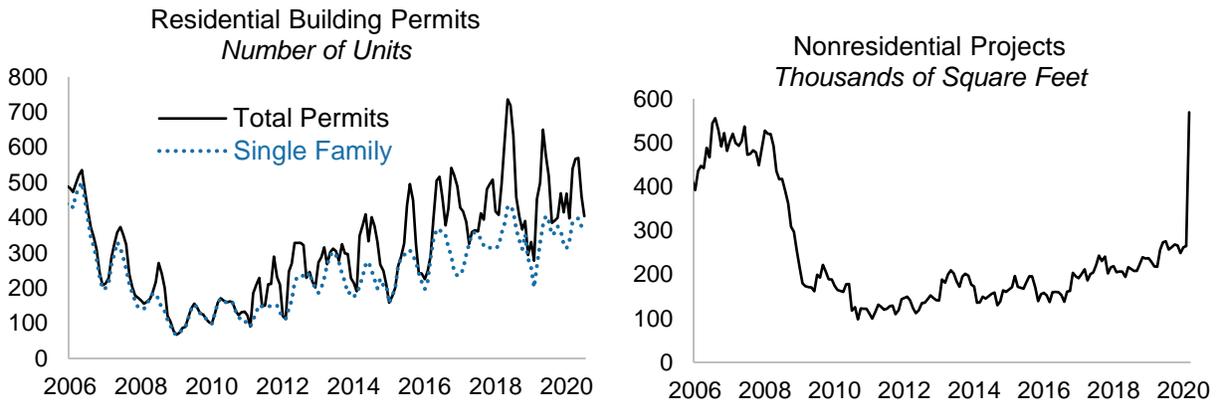
Tax collections. Similar to other areas in the state, the City of Colorado Springs saw a decline in tax collections due to COVID-19-related closures. According to reports released by the City of Colorado Springs, year-to-date revenue collected from the city’s general sales and use tax between January and October is down 2.5 percent from year-ago levels. Tax collections have fallen for many of the city’s retail industries, including significant declines for the hotel/motel, commercial machinery, and clothing store industries. However, collections from the medical marijuana and building materials industries are up significantly over the last year.

Housing. The Colorado Springs residential real estate market continues to perform well despite the headwinds from the COVID-19 pandemic. Year-to-date through September, total new residential permit issuances were up 7.5 percent compared with the same period last year (Figure 48, left). In September 2020, the median sales price for a single-family home in the region was \$385,000, up 18.5 percent from the previous year, according to the Colorado Association of Realtors. The average number of days on the market declined to 19 days in September, down from 25 days in the same month one year ago.

The region’s healthy economy and several years of robust home price gains have pushed the cost of living higher, and affordable housing is becoming a concern. Strong demand has pushed down the months’ supply of inventory in the region to 0.7 months as of September 2020, and the number of homes for sale declined by 55 percent. While still more affordable than real estate in the Denver metro region, Colorado Springs home prices continue to rise at solid rates as demand continues to outstrip supply.

Nonresidential construction. Investment in nonresidential projects in the region picked up pace in 2019 and this forecast expects this momentum to carry through 2020 (Figure 48, right). In March, Amazon broke ground on their \$369 million fulfillment center near the Colorado Springs airport. The fulfillment center is expected to open in mid-2021 and bring over 1,000 jobs to the region. In July, the new Olympic Museum opened in downtown Colorado Springs. Other major projects announced in the region include the Weidner Field at Switchbacks Stadium, Robson Arena at Colorado College, and several new hotels in the downtown area of Colorado Springs.

Figure 48
Colorado Springs Construction Activity



Source: U.S. Census Bureau. Data are shown as three-month moving averages. Data are not seasonally adjusted and are through September 2020.

Source: F.W. Dodge. Data shown as twelve-month moving averages. Data are not seasonally adjusted and are through October 2020.

San Luis Valley Region

Among the nine economic regions of the state identified in this forecast, the San Luis Valley has the state's smallest and oldest population with the lowest household incomes. The economy of the region's six counties is largely agricultural. Nonfarm employers include commercial, health, and government services, as well as a small but resilient tourism sector. The COVID-19 crisis, which continues to depress labor markets, has been compounded by drought conditions threatening the region's agricultural production. Economic indicators for the region are summarized in Table 26.



Table 26
San Luis Valley Region Economic Indicators
 Alamosa, Conejos, Costilla, Mineral, Rio Grande, and Saguache Counties

	2016	2017	2018	2019	YTD 2020
Employment Growth ¹	6.1%	4.5%	3.2%	2.4%	-8.8%
Unemployment Rate ¹	4.5%	3.9%	4.2%	3.8%	6.6%
Barley ²					
Acres Harvested	75,000	68,000	53,000	52,000	NA
Crop Value (\$/Acre)	\$685	\$607	\$660	\$672	NA
Potatoes ³					
Acres Harvested	51,500	51,500	51,600	48,400	NA
Crop Value (\$/Acre)	\$3,696	\$3,506	\$3,892	\$4,636	NA
Housing Permit Growth ⁴	-1.1%	16.8%	16.3%	-11.1%	8.9%
National Park Recreation Visits ⁵	29.6%	25.4%	-9.0%	19.1%	-15.6%

NA = Not available.

¹U.S. Bureau of Labor Statistics, LAUS (household survey). Seasonally adjusted. Data through September 2020.

²National Agricultural Statistics Service. Statewide. Data through 2019.

³National Agricultural Statistics Service. San Luis Valley Region. Data through 2019.

⁴F.W. Dodge. Data through October 2020.

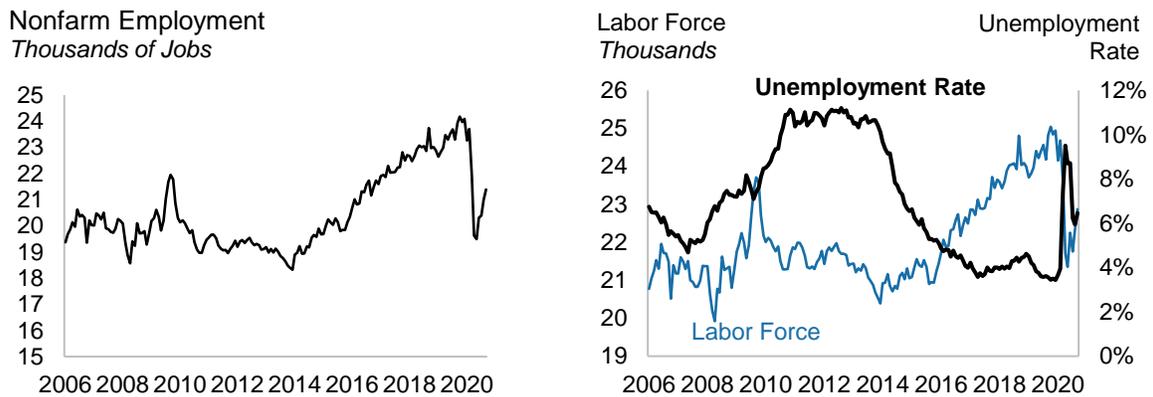
⁵National Park Service. Data through October 2020. Recreation visits for Great Sand Dunes National Park and Preserve.

Agricultural industry. With over 70 varieties grown in the region, potatoes are a key San Luis Valley crop. Other principal crops include head lettuce, wheat, and barley, with hemp and quinoa acreages on the upswing. Grazing and alfalfa hay are important in areas lacking sufficient access to water rights. Agricultural markets have stabilized since the pandemic-induced disruptions earlier in the year, although weather and potential additional COVID-19-related disruptions remain significant concerns. After plummeting during statewide shutdowns, year-to-date potato shipments rebounded to 11 percent above 2019 levels by mid-November. Since September, drought conditions have moderated in some areas of the Rio Grande Basin, which spans the San Luis Valley, while in others conditions have deteriorated into extreme and exceptional drought, according to the U.S. Drought Monitor. Unusually warm and dry conditions will continue to threaten crop irrigation and pasture forage in the region throughout at least the winter season.

Labor market. In addition to the agricultural industry, tourism, a regional medical center, a large retirement community, and government services, including Adams State University, support the San Luis Valley economy. The arts community has a growing regional economic presence, as well.

Labor market conditions have improved, albeit somewhat inconsistently, since declining sharply with statewide shutdowns. Employment is down 8.8 percent year-to-date through September compared with the same period last year (Figure 49, left). Consistent with historical experience, the region’s recovery lags that of the state as a whole. By September, the San Luis Valley had regained 45.1 percent of jobs lost since the pandemic began, compared with a statewide recovery rate of 56.7 percent. Participation in the labor force is recovering, at times more quickly than employment in the region, causing fluctuations in the unemployment rate. At 6.6 percent in September, it remains well above pre-pandemic levels (Figure 49, right).

Figure 49
San Luis Valley Labor Market Activity

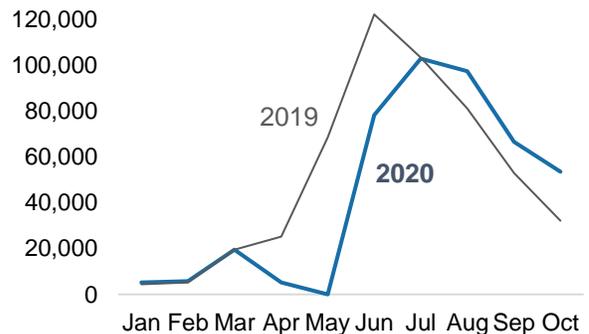


Source: U.S. Bureau of Labor Statistics; LAUS. Data prior to 2010 adjusted by Legislative Council Staff. Data are seasonally adjusted and are through September 2020.

Housing and population growth. After two consecutive years of strong growth, housing permits issued in the San Luis Valley region declined by 11.1 percent in 2019, but are up 8.9 percent through September 2020 compared with the same period last year. The region’s population is expected to grow over the next ten years, albeit more slowly than the state as a whole. After declining by 3.1 percent through April 2020, single-family home prices in Alamosa County are up 3.2 percent through September compared with the same period last year. At \$216,000, median home prices remain at about half of the statewide average of \$430,000, according to the Colorado Association of Realtors, making this region an attractive destination for retirees.

Tourism. Visits to the Great Sand Dunes National Park and Preserve recovered rapidly during the summer months to surpass year-ago monthly levels, although with park closures, year-to-date visits are down 15.6 percent through October. The park closed in April due to the pandemic, and remained closed until early June when a phased reopening began. After dropping to zero in May, park visits quickly recovered and in October were 66 percent above year-ago levels. (Figure 50).

Figure 50
Visits to Great Sand Dunes National Park and Preserve



Source: National Park Service.
*Data through October 2020.

Southwest Mountain Region

The southwest mountain region comprises five counties in the southwest corner of the state. The area’s diverse economy receives significant contributions from agriculture, tourism, and natural gas extraction, as well as typical regional services like health care and education. Tourism impacts and business closures associated with the COVID-19 pandemic have raised significant obstacles for the region’s economy, particularly the tourism sector, and are expected to continue to dampen area economic activity into 2021. Regional observers note that the hit to businesses and local governments over the summer months was less severe than initially anticipated, although employment growth remains the lowest in the state compared to year-ago levels. Economic indicators for the region are summarized in Table 27.



Table 27
Southwest Mountain Region Economic Indicators
 Archuleta, Dolores, La Plata, Montezuma, and San Juan Counties

	2016	2017	2018	2019	YTD 2020
Employment Growth ¹	3.8%	2.3%	2.0%	0.8%	-9.5%
Unemployment Rate ¹	3.5%	2.9%	3.4%	3.0%	7.1%
Housing Permit Growth ²	-4.6%	29.8%	24.1%	-33.9%	11.7%
National Park Recreation Visits ³	7.5%	4.4%	-7.6%	-2.1%	-53.4%

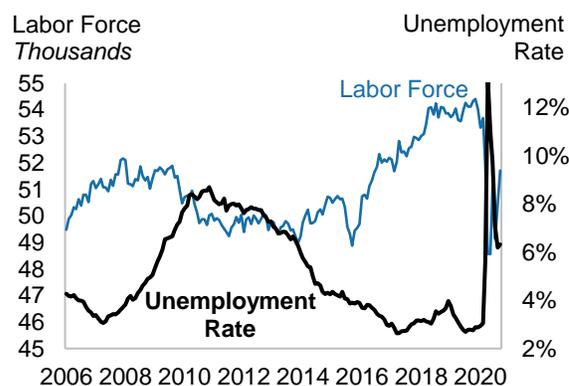
¹U.S. Bureau of Labor Statistics, LAUS (household survey). Seasonally adjusted. Data through September 2020.

²F.W. Dodge. Data through October 2020.

³National Park Service. Data through October 2020. Recreation visits for Mesa Verde National Park and Hovenweep National Monument.

Labor market. Consistent with other regions of the state, employment contracted heavily during the spring and summer on COVID-19-related business closures and stay-at-home orders. The regional unemployment rate peaked at 13.2 percent in April (Figure 51), the highest rate posted in any Colorado region since 1990 with the exception of the mountain region, which peaked at 19.3 percent the same month. The unemployment rate has since fallen to 6.3 percent as of September, but the region’s 3,300 unemployed workers remains double the average unemployed workers in 2019. Indicators for the regional labor market are presented in Figure 51. As shown, the unemployment rate spiked during the spring in spite of a drop-off in labor force participation, and fell heading into the summer despite reentries to the labor force population.

Figure 51
Southwest Mountain Region Labor Market

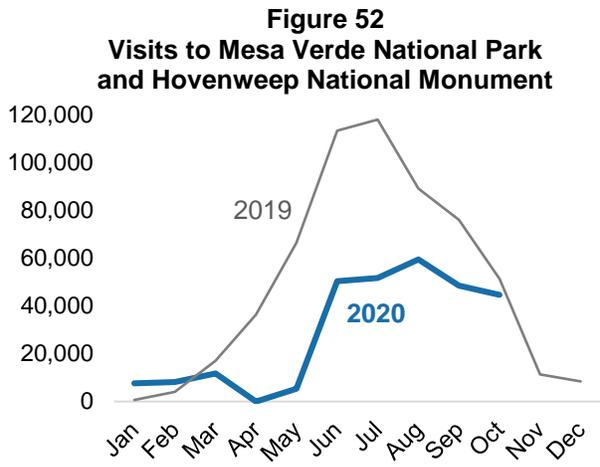


Source: U.S. Bureau of Labor Statistics; LAUS. Data prior to 2010 adjusted by Legislative Council Staff. Data are seasonally adjusted and are through September 2020.

Housing. After significant additions to the regional housing supply in 2017 and 2018, homebuilding slowed last year and remains below peak levels. The City of Durango announced in August that median single-family home prices have risen to \$517,000, up from \$485,500 two years ago, with median townhouse and condominium prices rising to \$340,000. Demand for housing in La Plata County remains high, but supply has dwindled in the face of the pandemic. The city is taking steps to promote new affordable and market-rate housing construction in order to boost supply and ameliorate the still-hot housing market.

Tourism. The region boasts tourist opportunities for year-round outdoor recreation, historical cultural sites, and in-town destinations. After a 2018 summer season marked by severe forest fires, regional tourism remained subdued in 2019. In 2020, tourism faced new challenges when visitors canceled or scaled back travel plans in response to the COVID-19 crisis.

The impacts of the COVID-19 crisis on regional tourism have been mixed. Travel cancellations have diminished visitations in some areas. For instance, closures of archaeological sites and hiking trails in response to both the COVID-19 pandemic and extreme fire danger resulted in visitations falling over 50 percent year-to-date compared to 2019 at Mesa Verde National Park and nearby Hovenweep National Monument (Figure 52). October visitation figures, however, reflect a return to year-ago levels, signaling a rebound in tourism activity. Potential cancellations of ski trips to Durango and Silverton could portend a poor winter travel season. On the other hand, some travelers report substituting road trips for canceled air travel, and summer sales tax receipts in the region’s communities fell less from 2019 levels than initially expected.



Source: National Park Service. *Data through October 2020.

Western Region

The ten-county western region has a diverse economy. Key industries in the more northern counties of Mesa, Garfield, Moffat, Rio Blanco, and Routt include energy and agriculture, while the counties of Delta, Gunnison, Hinsdale, Montrose, Ouray, and San Miguel are more reliant on tourism, mining, and retiree-related spending. Compounding the negative impacts of the COVID-19 crisis in the spring of 2020, summer wildfires engulfed large swathes of the region, shutting down popular tourist destinations altogether. Economic indicators for the region are summarized in Table 28.



Table 28
Western Region Economic Indicators

Delta, Garfield, Gunnison, Hinsdale, Mesa, Moffat, Montrose, Ouray, Rio Blanco, and San Miguel Counties

	2016	2017	2018	2019	YTD 2020
Employment Growth					
Western Region ¹	2.1%	3.6%	2.9%	2.1%	-6.4%
Grand Junction MSA ²	-0.3%	-0.4%	2.4%	1.3%	-2.7%
Unemployment Rate ¹	4.5%	3.4%	3.6%	3.1%	7.1%
Natural Gas Production Growth ³	-6.7%	-2.1%	1.3%	2.2%	1.9%
Housing Permit Growth ⁴	6.7%	42.8%	15.5%	-15.0%	20.0%
Nonresidential Construction Growth ⁴					
Value of Projects	16.4%	-33.1%	4.5%	54.5%	-75.4%
Square Footage of Projects	-3.9%	-17.6%	30.4%	-0.6%	-25.3%
Level (<i>Thousands</i>)	579	477	622	618	406
Number of Projects	41.1%	-36.7%	20.0%	16.7%	21.1%
Level	79	50	60	70	69
National Park Recreation Visits ⁵	-5.8%	6.5%	-5.8%	2.3%	6.3%

MSA = Metropolitan statistical area.

¹U.S. Bureau of Labor Statistics, LAUS (household survey). Seasonally adjusted. Data through September 2020.

²U.S. Bureau of Labor Statistics, CES (establishment survey). Seasonally adjusted. Data through September 2020.

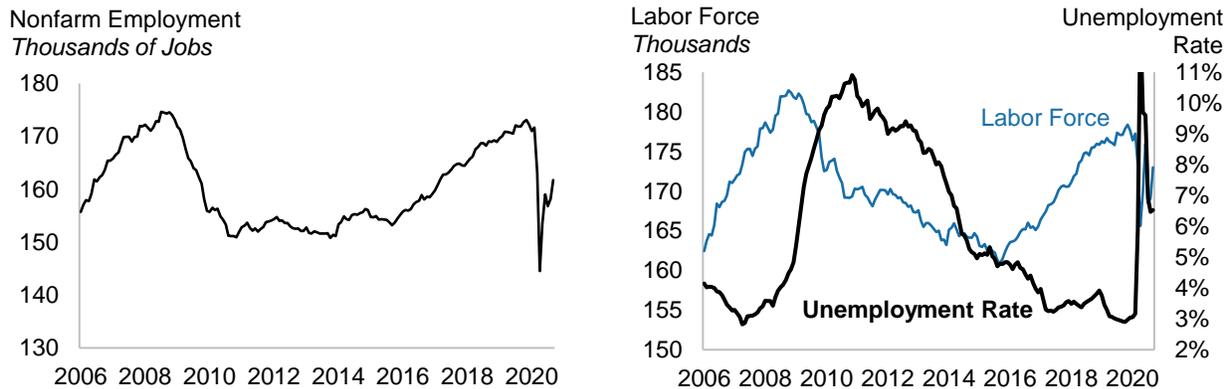
³Colorado Oil and Gas Conservation Commission. Data through July 2020.

⁴F.W. Dodge. Data through October 2020.

⁵National Park Service. Data through September 2020. Recreation visits for Dinosaur National Monument, Colorado National Monument, Black Canyon of the Gunnison, and Curecanti National Recreation Area.

Labor market. A steep decline in employment in March and April resulted in 6.4 percent fewer jobs from January through September over the same period last year (Figure 53, left). The tourism and energy sectors were hit hardest by the COVID-19-induced economic downturn. The Grand Junction area has fared better than other areas within the region, declining by 2.7 percent during the same period, due to its more diverse employment options. Only around half of the jobs that were lost were recovered through September, keeping the unemployment rate high at 7.1 percent year-to-date through September. The regional labor force shrunk as people stopped searching for jobs during the crisis, pushing the unemployment rate lower than it would otherwise be (Figure 53, right).

Figure 53
Western Region Labor Market Activity

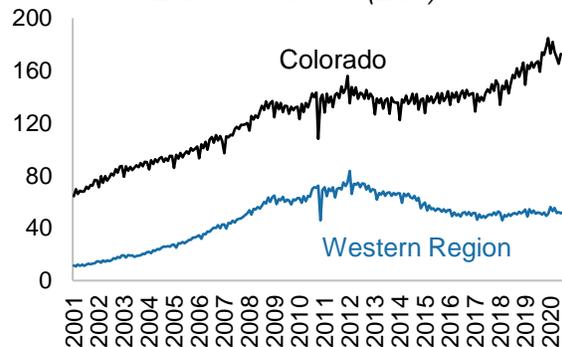


Source: U.S. Bureau of Labor Statistics; Data are seasonally adjusted and are through September 2020.

Construction. Residential construction activity, as measured by housing permits, declined 15.0 percent in 2019 over previous year levels, despite rising demand for housing in the region. In 2020, permit activity rebounded year-to-date through October, growing by 20.0 percent over year-ago levels. This about-face in the housing sector coincided a shift in housing demand toward more rural areas and to houses with more space. Nonresidential construction activity, however, has weakened. After two large projects drove up the value of nonresidential construction during 2019, the first ten months of 2020 experienced a 75.4 percent decrease in the value of projects. Nonresidential construction activity is expected to remain at lower levels through 2020, as professional workers continue to work from home and businesses refrain from significant investments due to high levels of ongoing uncertainty.

Energy sector. The Piceance Basin is located in the western region of Colorado and is the second largest potentially-developable natural gas resource in the country. Natural gas production in the region increased 1.9 percent through July 2020 over year-ago levels on strong production during the first quarter of the year (Figure 54). With lower associated gas production (from crude oil hydraulic fracturing extraction) resulting from subdued shale oil drilling, non-associated natural gas production has roughly maintained last year’s levels in the region. This decrease in overall production levels will help to bolster natural gas prices this winter, projected to peak around \$3.40 in January. These higher prices may curb demand for natural gas in 2021 if production remains slow next year.

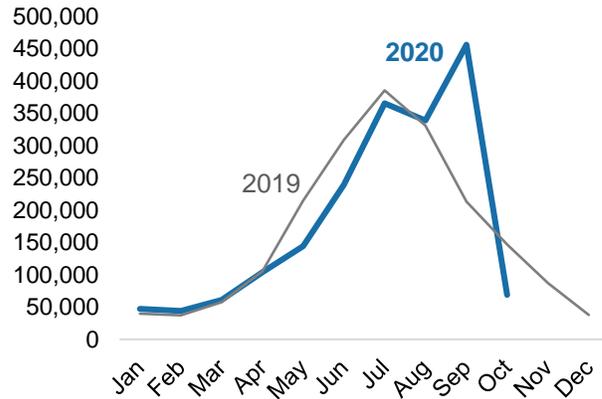
Figure 54
Natural Gas Production
Billion Cubic Feet (BCF)



Source: Colorado Oil and Gas Conservation Commission. Monthly data through July 2020.

National park visitors. Summer wildfires in the region hampered outdoor recreation, along with the ongoing impacts of COVID-19 and subdued tourism. After a strong start to the year, the number of visitors to the Black Canyon of the Gunnison National Park was down 30.2 percent during the first nine months of 2020 compared with the same period last year, while the nearby Curecanti National Recreation Area experienced a 37.7 percent increase during the same period. Figure 55 shows National Park visitations to the region for 2019 and 2020. Both parks were closed due to social-distancing measures and the temporary limitation of tourists to Gunnison County enacted as a result of the COVID-19 crisis. The parks started to partially reopen on May 15, before wildfires ravaged thousands of acres in Mesa and Garfield Counties, further halting visitations this season. Visitations to the Colorado National Monument near Grand Junction also decreased 13.2 percent through September this year compared with the first nine months of 2019. Tourist revenue to the region is expected to remain depressed through 2020 and likely into 2021.

Figure 55
Regional National Park Visits*



Source: National Park Service.

*Data are through October 2020 and include Dinosaur and Colorado National Monuments, Curecanti National Recreation Area, and Black Canyon of the Gunnison.

Mountain Region

The mountain region comprises twelve counties stretching from Poncha Pass north to the Wyoming border. The region is the state's most dependent on tourism, and to this point has been the most acutely affected by COVID-19 travel restrictions and the ongoing recession. Economic indicators for the mountain region are presented in Table 29.



Table 29
Mountain Region Economic Indicators
 Chaffee, Clear Creek, Eagle, Gilpin, Grand, Jackson, Lake, Park, Pitkin, Routt, Summit, and Teller Counties

	2016	2017	2018	2019	YTD 2020
Employment Growth ¹	3.4%	4.2%	3.2%	2.7%	-7.0%
Unemployment Rate ¹	2.8%	2.4%	2.7%	2.3%	8.4%
Housing Permit Growth ²	29.0%	-10.7%	73.9%	4.8%	-21.6%
Nonresidential Construction Growth ²					
Value of Projects	-28.9%	298.4%	-78.1%	41.6%	62.9%
Square Footage of Projects	23.0%	221.0%	-65.1%	29.2%	16.3%
Level (<i>Thousands</i>)	632	2,028	708	915	920
Number of Projects	57.5%	-1.6%	17.7%	-35.6%	51.3%
Level	63	62	73	47	59

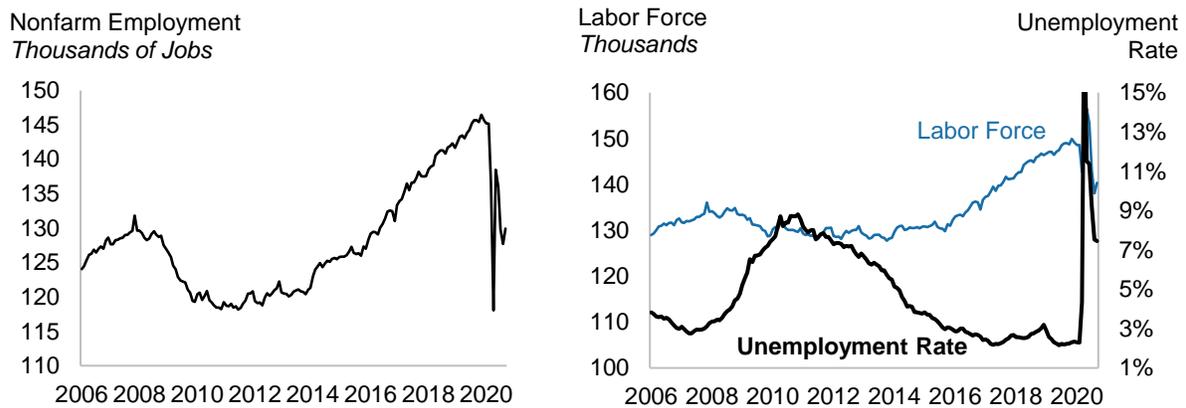
¹U.S. Bureau of Labor Statistics. LAUS (household) survey. Seasonally adjusted. Data through September 2020.

²F.W. Dodge. Data through October 2020.

The mountain region economy is especially procyclical, in that it performs better than other areas during expansions and suffers more than others during recessions. In normal economic circumstances, the mountain economy performs best when households have enough disposable income to travel on vacation to the region. The COVID-19 crisis is uniquely detrimental for the mountain economy because it has severely restricted tourist visitations, while also sparking a recession that will limit travel budgets over the next few years.

Labor market. Following significant disruptions caused by the COVID-19 pandemic in the spring of 2020, the labor market has rebounded but remains weak and suffers from additional capacity restrictions imposed in the region ahead of the 2020 winter tourism season. In April, the region suffered the worst unemployment spike in Colorado with 28 thousand jobs lost, pushing the unemployment rate above 19 percent. As of September, the unemployment rate for the region has fallen to 8.4 percent, and nearly 12 thousand jobs have been regained. Figure 56 illustrates the extent of the labor market effects measured in April and their partial reversal over the months since.

Figure 56
Mountain Region Labor Market Activity



Source: U.S. Bureau of Labor Statistics; LAUS. Data prior to 2010 adjusted by Legislative Council Staff. Data are seasonally adjusted and are through September 2020.

Following the 2008 recession, the mountain region unemployment rate increased more significantly than all other regions except for the western region, and remained elevated relative to other regions for about three and a half years. The region’s labor market trajectory following the 2020 recession will depend on the severity and duration of economic damage incurred to date and the ongoing dampening effects of the pandemic.

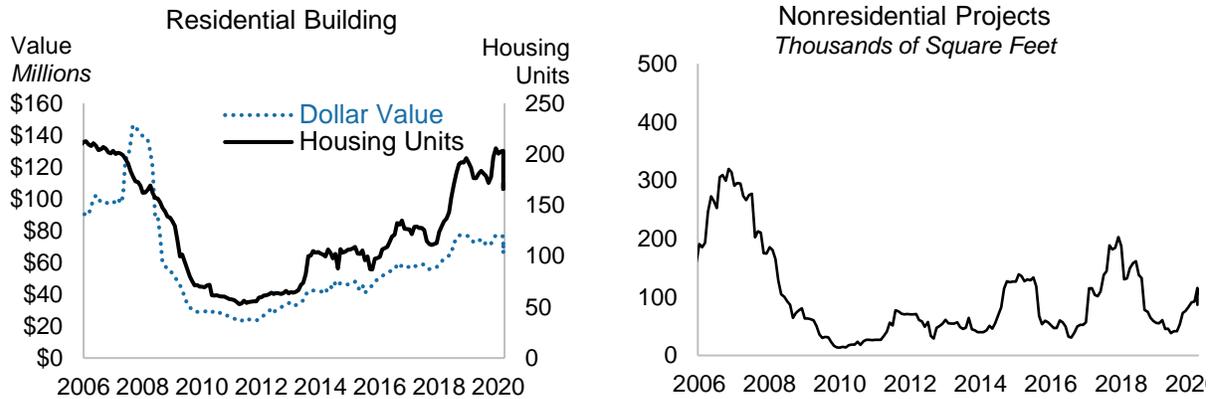
Tourism. Reduced recreational travel in 2020 and 2021 will pose significant economic challenges for the tourism-dependent areas that comprise most of this region. As the impacts of the recession inflict ongoing damage to household budgets, consumers who need to tighten their spending will cut travel budgets, posing a major drag on the outlook for the mountain region. Some mountain region tourist outfits were also threatened with wildfire-related summer road closures during 2020, including the unusual August closure of Independence Pass between Lake and Pitkin counties and the August closure of Trail Ridge Road in Larimer and Grand counties to most traffic.

The implications of COVID-19 for tourism during the coming winter are becoming clearer. Ahead of this season, Summit County, which contains four major ski resorts, imposed additional capacity restrictions for businesses in the area, including ski resorts. Additionally, the majority of counties in the mountain region are categorized as high or severe risk according to the Colorado Department of Public Health’s COVID-19 framework, imposing capacity restrictions and other public health orders on many businesses and places of gathering.

Reduced airline service may further dampen tourism in the region. Delta Airlines announced in August that it will not service ski season flights to Aspen this year, citing “the COVID-19 pandemic, travel restrictions and customer demand” in a statement. Previously, in May, the U.S. Department of Transportation announced that Delta was exempted from its prior requirement to serve Aspen, and that American Airlines was exempted from its prior requirement to serve Aspen, Eagle, and Montrose.

Construction. The regional construction indicators shown in Table 29 represent permitted activity through October on which construction remains underway. Year-to-date through October, residential construction has slowed but remains at elevated levels, while nonresidential construction activity has shown sizable growth relative to very low year-ago levels (Figure 57). The region may see less construction activity in the near future if demand for vacation properties and business activity remain subdued in the area.

Figure 57
Mountain Region Construction Activity



Source: F.W. Dodge. Data shown as twelve-month moving averages. Data are not seasonally adjusted and are through October 2020.

Eastern Region

The eastern region includes 16 rural counties on Colorado’s eastern plains. Agriculture is the primary industry in the region, with local businesses and government operations supporting the region’s farming and ranching communities. Out-migration and an aging population continue to put pressure on the labor force in the region, which is the most sparsely populated in the state. Ongoing drought conditions will weigh on the region’s outlook into 2021, compounding the COVID-19-related disruptions in labor markets and agricultural prices. Economic indicators for the region are presented in Table 30.

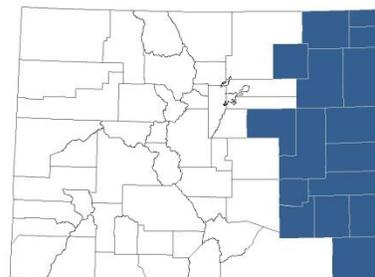


Table 30
Eastern Region Economic Indicators
 Baca, Bent, Logan, Cheyenne, Crowley, Elbert, Kiowa, Kit Carson, Lincoln, Morgan, Otero, Phillips, Prowers, Sedgwick, Washington, and Yuma Counties

	2016	2017	2018	2019	YTD 2020
Employment Growth ¹	4.0%	3.3%	2.3%	1.7%	-9.2%
Unemployment Rate ¹	3.0%	2.4%	2.8%	2.4%	4.4%
Crop Price Changes ²					
Wheat (\$/Bushel)	-27.9%	-2.9%	34.6%	-7.0%	-1.3%
Corn (\$/Bushel)	-7.7%	-3.4%	2.8%	9.3%	-8.6%
Alfalfa Hay (Baled, \$/Ton)	-15.5%	4.8%	23.8%	14.9%	-5.5%
Livestock ³					
State Cattle and Calf Inventory Growth	1.0%	6.7%	2.6%	8.0%	1.5%
Milk Production	5.2%	6.7%	8.8%	5.5%	7.2%

¹U.S. Bureau of Labor Statistics, LAUS (household survey). Data through September 2020.

²National Agricultural Statistics Service. Data through September 2020.

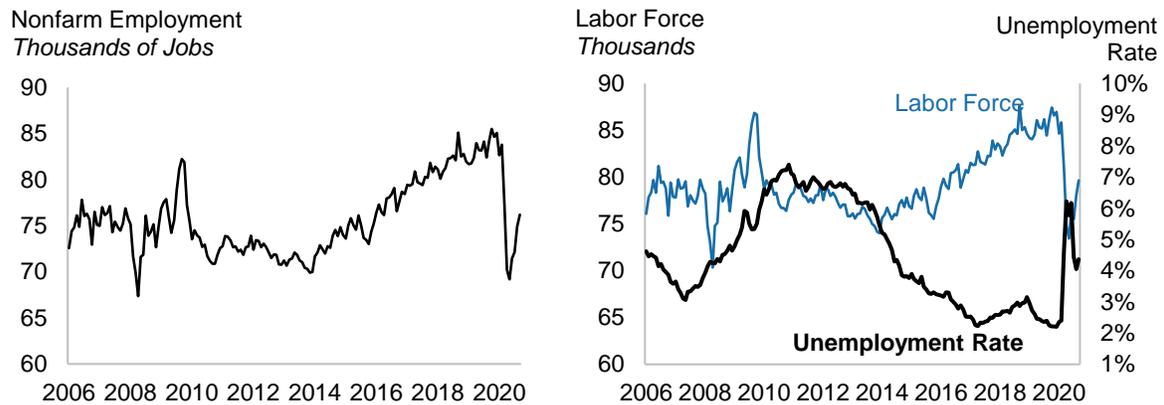
³National Agricultural Statistics Service. Cattle and calf inventory through October 2020; milk production through September 2020.

Agriculture and livestock. The eastern plains is the largest agricultural region in the state, and the sector drives much of the region’s economy. While pandemic-related disruptions roiled agricultural markets earlier this year, rising farm commodity prices have helped stabilize economic conditions in the third quarter. Grain prices have been trending upward since August, partially reversing a sharp decline during the early months of the pandemic. Despite these gains, average wheat and corn prices through September are still down 1.3 percent and 8.6 percent, respectively, compared to the same period last year.

Unlike farmers in other areas of the U.S., eastern plains producers are plagued by severe weather conditions, hampering recovery of the region’s farm economy. According to the U.S. Drought Monitor, conditions across the region continued to deteriorate in the third quarter, with all counties now wholly or partly in extreme drought. Parts of Kiowa County are in exceptional drought conditions. The winter wheat harvest was one of the smallest in the last decade. In contrast to U.S. corn production, which is forecast to grow 7 percent from 2019, Colorado production is anticipated to be down 11 percent year-over-year. The U.S. Drought Monitor forecasts continued drought through at least the winter season. Continued deterioration of forage and water conditions may force many ranchers across the region to reduce cattle herd size.

Labor market. As in other areas of the state and nation, labor market conditions in the eastern plains have begun recovering since the pandemic-related shutdowns, albeit more slowly than their precipitous decline. The unemployment rate in September was 4.4 percent, still well above pre-pandemic levels, but the lowest among the nine state regions, consistent with historical experience. (Figure 58, right). Employment is down 9.2 percent year-to-date compared with the same period last year (Figure 58, left). By September, the eastern plains had regained 47.6 percent of jobs lost since the pandemic began, compared with a statewide recovery rate of 56.7 percent.

Figure 58
Eastern Region Labor Market Activity



Source: U.S. Bureau of Labor Statistics; LAUS. Data prior to 2010 adjusted by Legislative Council Staff. Data are seasonally adjusted and are through September 2020.

Housing. Despite the contraction of many rural populations, counties bordering the northern region and the Front Range are growing, as former residents of larger, more expensive metropolitan areas search for more affordable housing. The median sales price for a single-family home in Elbert County, for example, which borders the metro Denver region, has risen from about \$330,000 in 2014 to over \$530,000 in 2020, according to the Colorado Association of Realtors. After declining during the early months of the pandemic, home prices in the county are up 4.8 percent through September 2020 compared to the same period last year. Median home prices in Morgan County are up 5.9 percent through September 2020 compared with the same period in 2019. Single-family home prices in Morgan County began climbing around mid-2017, rising from about \$145,000 in 2014 to \$270,000 in 2020, well above the median price of \$152,000 in neighboring Washington County, but well below the statewide median of \$430,000.

Renewable energy. Renewable energy projects, including solar and wind, have expanded rapidly in the eastern plains in recent years, bringing jobs and bolstering incomes and local tax revenues. In 2018, the region accounted for 100 percent of wind energy and 55 percent of Colorado’s solar capacity, comprising 95 percent of the state’s renewable energy capacity overall. By 2024, the region’s renewable energy capacity is expected to expand by more than 22 percent, according to a recent report by The Western Way.

Appendix: Historical Data

National Economic Indicators

Calendar Years	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019
GDP (\$ <i>Billions</i>) ¹	\$13,036.6	\$13,814.6	\$14,451.9	\$14,712.8	\$14,448.9	\$14,992.1	\$15,542.6	\$16,197.0	\$16,784.9	\$17,527.3	\$18,238.3	\$18,745.1	\$19,543.0	\$20,611.9	\$21,433.2
Percent Change	6.7%	6.0%	4.6%	1.8%	-1.8%	3.8%	3.7%	4.2%	3.6%	4.4%	4.1%	2.8%	4.3%	5.5%	4.0%
Real GDP (\$ <i>Billions</i>) ¹	\$14,912.5	\$15,338.3	\$15,626.0	\$15,604.7	\$15,208.8	\$15,598.8	\$15,840.7	\$16,197.0	\$16,495.4	\$16,912.0	\$17,432.2	\$17,730.5	\$18,144.1	\$18,687.8	\$19,091.7
Percent Change	3.5%	2.9%	1.9%	-0.1%	-2.5%	2.6%	1.6%	2.2%	1.8%	2.5%	3.1%	1.7%	2.3%	3.0%	2.2%
Unemployment Rate ²	5.1%	4.6%	4.6%	5.8%	9.3%	9.6%	8.9%	8.1%	7.4%	6.2%	5.3%	4.9%	4.3%	3.9%	3.7%
Inflation ²	3.4%	3.2%	2.9%	3.8%	-0.3%	1.6%	3.1%	2.1%	1.5%	1.6%	0.1%	1.3%	2.1%	2.4%	1.8%
10-Year Treasury Note ³	4.3%	4.8%	4.6%	3.7%	3.3%	3.2%	2.8%	1.8%	2.4%	2.5%	2.1%	1.8%	2.3%	2.9%	2.1%
Personal Income (\$ <i>Billions</i>) ¹	\$10,598.2	\$11,381.7	\$12,007.8	\$12,442.2	\$12,059.1	\$12,551.6	\$13,326.8	\$14,010.1	\$14,181.1	\$14,991.7	\$15,724.2	\$16,160.7	\$16,948.6	\$17,851.8	\$18,551.5
Percent Change	5.6%	7.4%	5.5%	3.6%	-3.1%	4.1%	6.2%	5.1%	1.2%	5.7%	4.9%	2.8%	4.9%	5.3%	3.9%
Wage & Salaries (\$ <i>Billions</i>) ¹	\$5,691.9	\$6,057.0	\$6,396.8	\$6,534.3	\$6,248.6	\$6,372.1	\$6,625.9	\$6,927.5	\$7,113.2	\$7,475.2	\$7,859.5	\$8,089.1	\$8,471.5	\$8,894.2	\$9,309.3
Percent Change	5.0%	6.4%	5.6%	2.1%	-4.4%	2.0%	4.0%	4.6%	2.7%	5.1%	5.1%	2.9%	4.7%	5.0%	4.7%
Nonfarm Employment (<i>Millions</i>) ²	134.0	136.5	138.0	137.2	131.3	130.3	131.9	134.2	136.4	138.9	141.8	144.3	146.6	148.9	150.9
Percent Change	1.7%	1.8%	1.1%	-0.6%	-4.3%	-0.7%	1.2%	1.7%	1.6%	1.9%	2.1%	1.8%	1.6%	1.6%	1.4%

Sources

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

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

³Federal Reserve Board of Governors.

Colorado Economic Indicators

Calendar Years	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019
Nonfarm Employment (<i>Thousands</i>) ¹	2,225.1	2,278.7	2,330.3	2,349.6	2,244.2	2,220.9	2,257.7	2,311.8	2,380.3	2,463.5	2,541.2	2,601.2	2,660.2	2,727.5	2,785.8
Percent Change	2.1%	2.4%	2.3%	0.8%	-4.5%	-1.0%	1.7%	2.4%	3.0%	3.5%	3.2%	2.4%	2.3%	2.5%	2.1%
Unemployment Rate ¹	5.0%	4.3%	3.7%	4.9%	7.3%	8.7%	8.4%	7.9%	6.9%	5.0%	3.9%	3.3%	2.8%	3.2%	2.8%
Personal Income (<i>\$ Millions</i>) ²	\$175,273	\$189,476	\$201,876	\$208,738	\$198,800	\$205,372	\$223,153	\$237,142	\$249,282	\$271,308	\$284,820	\$290,670	\$312,046	\$335,196	\$352,185
Percent Change	6.8%	8.1%	6.5%	3.4%	-4.8%	3.3%	8.7%	6.3%	5.1%	8.8%	5.0%	2.1%	7.4%	7.4%	5.1%
Per Capita Personal Income (<i>\$</i>) ²	\$37,841	\$40,140	\$42,024	\$42,689	\$39,982	\$40,689	\$43,575	\$45,669	\$47,311	\$50,711	\$52,254	\$52,475	\$55,604	\$58,896	\$61,157
Percent Change	5.5%	6.1%	4.7%	1.6%	-6.3%	1.8%	7.1%	4.8%	3.6%	7.2%	3.0%	0.4%	6.0%	5.9%	3.8%
Wage & Salary Income (<i>\$ Millions</i>) ²	\$98,774	\$105,649	\$112,526	\$116,710	\$112,228	\$113,670	\$118,414	\$124,947	\$129,521	\$138,626	\$146,578	\$151,086	\$160,848	\$170,323	\$182,087
Percent Change	5.6%	7.0%	6.5%	3.7%	-3.8%	1.3%	4.2%	5.5%	3.7%	7.0%	5.7%	3.1%	6.5%	5.9%	6.9%
Retail Trade Sales (<i>\$ Millions</i>) ³	\$65,492	\$70,437	\$75,329	\$74,760	\$66,345	\$70,738	\$75,548	\$80,073	\$83,569	\$90,653	\$94,920	NA	NA	NA	NA
Percent Change	5.1%	7.5%	6.9%	-0.8%	-11.3%	6.6%	6.8%	6.0%	4.4%	8.5%	4.7%				
Housing Permits ⁴	45,891	38,343	29,454	18,998	9,355	11,591	13,502	23,301	27,517	28,698	31,871	38,974	40,673	42,627	38,633
Percent Change	-1.3%	-16.4%	-23.2%	-35.5%	-50.8%	23.9%	16.5%	72.6%	18.1%	4.3%	11.1%	22.3%	4.4%	4.8%	-9.4%
Nonresidential Construction (<i>Millions</i>) ⁵	\$4,275	\$4,641	\$5,259	\$4,114	\$3,354	\$3,147	\$3,923	\$3,695	\$3,624	\$4,351	\$4,991	\$5,989	\$6,160	\$8,140	\$5,064
Percent Change	31.7%	8.6%	13.3%	-21.8%	-18.5%	-6.2%	24.7%	-5.8%	-1.9%	20.1%	14.7%	20.0%	2.8%	32.2%	-37.8%
Denver-Aurora-Lakewood Inflation ¹	2.1%	3.6%	2.2%	3.9%	-0.6%	1.9%	3.7%	1.9%	2.8%	2.8%	1.2%	2.8%	3.4%	2.7%	1.9%
Population (<i>Thousands, July 1</i>) ⁴	4,631.9	4,720.4	4,803.9	4,889.7	4,972.2	5,047.3	5,121.1	5,192.6	5,269.0	5,350.1	5,450.6	5,539.2	5,611.9	5,691.3	5,758.7
Percent Change	1.2%	1.9%	1.8%	1.8%	1.7%	1.5%	1.5%	1.4%	1.5%	1.5%	1.9%	1.6%	1.3%	1.4%	1.2%

NA = Not available.

¹U.S. Bureau of Labor Statistics. Inflation shown as the year-over-year change in the consumer price index for Denver-Aurora-Lakewood metro area.

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

³Colorado Department of Revenue. Data are not available after 2015.

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

⁵F.W. Dodge.