Colorado Legislative Council Staff

March 2022 | Economic & Revenue Forecast

March 17, 2022

Contents

Contributors

Kate Watkins, Chief Economist
Marc Carey
Louis Pino
Greg Sobetski
Elizabeth Ramey
Jeff Stupak
David Hansen
Anna Gerstle
Christina Van Winkle
Debbie Grunlien

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

Legislative Council Staff • State Capitol Building • Denver, Colorado 80203
(303) 866-3521 • LCS.Economist@state.co.us • http://leg.colorado.gov/EconomicForecasts
Legislative Council Staff is the nonpartisan service agency of the Colorado General Assembly.

Executive Summary

This report presents the budget outlook based on current law and the March 2022 forecast for General Fund and cash fund revenue, as well as the TABOR outlook. This document also 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 2020-21

Based on the Annual Comprehensive Financial Report, the General Fund ended the year with a 29.0 percent reserve, $2.87 billion above the required 2.86 percent reserve. Revenue subject to TABOR exceeded the Referendum C cap by $525.5 million, requiring TABOR refunds in the current FY 2021-22.

FY 2021-22

The ongoing economic and jobs recovery from the 2020 recession will increase General Fund revenue collections by a projected 11.6 percent above year-ago levels. Based on the enacted supplemental package, the General Fund is projected to end the year with a 29.1 percent reserve, $1.91 billion above the required 13.4 percent reserve. Revenue subject to TABOR is expected to exceed the Referendum C cap by $2.0 billion.

FY 2022-23 Unbudgeted

The General Assembly is projected to have $3.2 billion, or 20.7 percent, more to spend or save in the General Fund than what is budgeted to be spent and saved in FY 2021-22. As a budget has not yet been adopted for FY 2022-23, this amount holds current appropriations for FY 2021-22 constant and assumes current law transfers, the projected TABOR refund obligation, and the 15.0 percent General Fund reserve requirement. The $3.2 billion amount does not incorporate other caseload growth, inflationary, or other budgetary pressures. Revenue subject to TABOR is expected to exceed the Referendum C cap by $1.56 billion.

Risks to the forecast. The war in Ukraine, the ongoing pandemic, mounting inflationary pressure, and evolving monetary policy all pose significant risks to the economic outlook, elevating the risk of recession during the forecast period. While projected TABOR refunds are large enough to absorb regular forecast error, a recession would likely reduce revenue below the Referendum C cap, resulting in less revenue available for spending or saving in the General Fund budget.

Cash Fund Revenue

Based on the Annual Comprehensive Financial Report, cash funds revenue subject to TABOR fell 0.2 percent in FY 2020-21 to $2.24 billion, following an 8.3 percent decline in FY 2019-20 on pandemic-related drags. Revenue is expected to grow in the current and future years, rebounding 10.6 percent in FY 2021-22 from pandemic-induced lows, before moderating to 6.1 percent and 4.6 percent growth in FY 2022-23 and FY 2023-24, respectively. Elevated crude oil and natural gas prices, increased travel activity, and stronger casino traffic will drive growth across severance tax, transportation-related revenue, and gaming revenue streams in the current fiscal year. Based on stronger oil price and inflation expectations, revenue expectations were increased $44.2 million in

FY 2021-22, $82.0 million in FY 2022-23, and $88.9 million in FY 2023-24 relative to the December forecast. For more information, see the cash funds section beginning on page 29.

Unemployment Insurance Trust Fund insolvency. The Unemployment Insurance (UI) Trust Fund ended FY 2020-21 with a deficit of $1.0 billion, due to an unprecedented increase in unemployment benefits paid during the COVID-19-related recession and continued elevated unemployment. Benefits paid reached $1.3 billion in FY 2019-20, an increase of 247.1 percent, and increased further in FY 2020-21, to $2.0 billion. Benefits paid are expected to decline in FY 2021-22, to $597.0 million. The fund became insolvent in August 2020, when benefits exceeded available funds. As of March 11, 2022, Colorado has $1.013 in federal loans outstanding. Fund insolvency triggered a move to the second highest rate schedule on January 1, 2022. This, along with an increase in the chargeable wage base enacted in Senate Bill 20-207, are expected to increase premium revenues to the fund in FY 2021-22, to $842.8. With declining benefits paid and increasing premium revenues, the fund is expected to return to solvency in FY 2023-24. For more information, see page 36.

Economic Outlook

Colorado and the nation's economic recovery from the 2020 recession continues, but emerging challenges cloud the outlook. While economic activity has reached and exceeded pre-pandemic levels, employment has yet to fully recover in several service industries hit hardest by the pandemic, and inflationary pressures continue to mount. The "Great Reconsideration" continues in labor markets, with elevated quits, retirements, and job switching. Workers are slowly increasing hours and taking on additional jobs, yet work is slow to normalize, and employers are struggling to find needed help. While the tight labor market is producing sizable wage gains, many households are increasingly drawing down savings, as inflationary pressures are outpacing wage hikes for most.

Pandemic-related challenges have been compounded by emerging risks, including accelerating inflation and the war in Ukraine. As inflationary pressures mount, the Federal Reserve hiked interest rates 25 basis points in March, and additional increases are expected throughout the year. While this forecast assumes a smooth transition toward tighter monetary policy, efforts to rein in inflation could come at the cost of economic growth and may be a source of volatility in financial markets. High inflation is expected to erode business profits and mute consumer activity in 2022, while higher interest rates will slow economic activity over the longer term.

Risks to the forecast are skewed to the downside, with an elevated risk of recession during the forecast period given geopolitical uncertainty and evolving monetary policy to address high inflation. Discussion of the economic outlook begins on page 39, and summaries of expectations for the U.S. and Colorado economies are presented, respectively, in Tables 15 and 16 on pages 62 and 63.

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 expectations relative to the December 2021 forecast (Table 2);
- statutory transfers to transportation and capital construction funds (Table 3);
- transfers to the State Education Fund (Figure 1);
- the disposition of fiscal policies dependent on revenue collections;
- General Fund rebates and expenditures (Table 4); and
- cash fund transfers to and from the General Fund (Table 5).

Legislative Assumptions

This forecast is based on current law, including changes enacted to date during the 2022 regular legislative session and federal legislation enacted to date. Legislation that has been adopted by both chambers and incorporated into this forecast includes:

- changes to General Fund appropriations under the supplemental package for FY 2021-22 (HB 22-1170 through HB 22-1195), as well as HB 22-1196 and HB 22-1197; and
- changes to transfers to and from the General Fund (see Tables 4 and 6).

FY 2020-21

Based on the Annual Comprehensive Financial Report released by the Office of the State Controller, the General Fund ended FY 2020-21 with a 29.0 percent reserve, $2.87 billion higher than the statutorily required 2.86 percent reserve (Table 1, line 19). General Fund revenue grew 11.2 percent in FY 2020-21 relative to year-ago levels, reflecting strong sales tax and income tax collections. Revenue subject to TABOR exceeded the Referendum C cap by $525.5 million. The TABOR surplus amount is set aside in the year in which it is collected and refunded in the following year. The FY 2020-21 TABOR surplus and $22.4 million in under-refunds from surpluses in prior years will be refunded to taxpayers in the current FY 2021-22 via the three TABOR refund mechanisms in current law. For more information, see the TABOR section of this forecast beginning on page 17.

FY 2021-22

The General Fund is expected to end FY 2021-22 with a 29.1 percent reserve, $1.91 billion higher than the statutorily required 13.4 percent reserve (Table 1, line 19). Strong wage and business income growth and robust goods consumption, as well as elevated inflationary pressures are projected to boost General Fund revenue collections by 11.6 percent above year-ago levels. Relative to the December forecast, revenue expectations were increased by $59.0 million on collections year-to-date and economic expectations for the remainder of the year. Revenue subject to TABOR is projected to exceed the Referendum C cap by $2.0 billion in FY 2021-22, resulting in a TABOR refund of an equal amount in FY 2022-23.

FY 2022-23 (Unbudgeted)

Scenario A: Holds appropriations constant in FY 2022-23. Because a budget has not yet been enacted for FY 2022-23, Table 1 (line 21) shows the amount of revenue available in FY 2022-23 relative to the amount budgeted to be spent or saved in FY 2021-22. Based on this forecast, the General Assembly will have $3.2 billion, or 20.7 percent, more to spend or save than in FY 2021-22. This amount assumes current law obligations for FY 2022-23, including transfers and rebates and expenditures (Table 1, lines 8 through 12), as well as a 15.0 percent reserve requirement under SB 21-226, and the projected TABOR refund obligation. The $3.2 billion amount is a cumulative amount based on prior year revenue expectations and the budget situation in FY 2021-22. Any changes in revenue expectations or changes made to the budget for FY 2021-22 will carry forward into FY 2022-23. The $3.2 billion amount holds FY 2021-22 appropriations constant and therefore does not reflect any caseload, inflationary, or other budgetary pressures.

Scenario B: Assumes JBC-approved actions to date. Scenario B, shown on lines 23 and 24 of Table 1, presents the amount of revenue in excess of the statutorily required 15 percent reserve, assuming enactment of actions approved by the Joint Budget Committee (JBC) to date and recommendations made by the Joint Technology Committee and Capital Development Committee. These actions are summarized in Table 2 of the JBC Staff document dated March 15, 2022.[1] They include:

- FY 2021-22 appropriations adjustments for the Department of Health Care Policy and Financing and Department of Higher Education;
- JBC action on FY 2022-23 requested Long Bill appropriations;
- For FY 2021-22 and future years, JBC bills approved for introduction and approved placeholders for HB 22-1278 and HB 22-1286; and
- General Fund transfer recommendations from the Capital Development Committee and Joint Technology Committee for capital projects.

On net, these actions would reduce FY 2021-22 General Fund appropriations under current law by $190.2 million, and increase appropriations in FY 2022-23 by $1.62 billion above FY 2021-22 levels, with an additional $351.2 million increase above FY 2022-23 levels in FY 2023-24. Additional net transfers from the General Fund would total $569.1 million in FY 2022-23 and $316.0 million in FY 2023-24.

Scenario C: Assumes JBC-approved actions to date and $1.22 billion in one-time spending. Scenario C, shown on lines 25 and 26 of Table 1, presents the amount of revenue in excess of the statutorily required 15 percent reserve, assuming Scenario B as well as additional one-time spending of $1.22 billion in FY 2022-23. The $1.22 billion amount is equal to the excess reserve in FY 2022-23 under Scenario B, thereby drawing down the excess reserve amount shown on line 25 to $0.[2] This scenario helps to contextualize how one-time spending will impact the FY 2023-24 budget situation. Based on this forecast and the assumptions under Scenario C, the General Fund would end FY 2023-24 with an excess reserve of $715.1 million.

The information included in Scenarios A, B, and C are provided for informational purposes and should not be considered a policy recommendation by Legislative Council Staff.

---

[1] Joint Budget Committee Staff Working Document dated March 15, 2022, titled: "Overview of Joint Budget Committee Actions to Date and Pending Items for FY 2021-22 and FY 2022-23." Available at: https://leg.colorado.gov/sites/default/files/gfo-03-15-22.pdf
[2] The $1.22 billion amount differs from the $1.44 billion amount included in the March 15, 2022 JBC Staff document due to changes in the forecast relative to forecast expectations in December 2021.

Table 1
General Fund Overview
Dollars in Millions

	Funds Available	FY 2020-21 Actual	FY 2021-22 Estimate	FY 2022-23 Estimate	FY 2023-24 Estimate
1	Beginning Reserve	$1,825.7	$3,181.5	$3,543.0	*
2	General Fund Revenue	$14,310.1	$15,965.3	$16,054.0	$16,356.0
3	Transfers from Other Funds *(Table 5)*	$336.8	$32.1	$30.5	$32.8
4	**Total Funds Available**	**$16,472.6**	**$19,178.9**	**$19,627.5**	*****
5	Percent Change	14.6%	16.4%	2.3%	*
	Expenditures	**Actual**	**Budgeted**	**Estimate**	**Estimate**
6	General Fund Appropriations Subject to Limit[1]	$10,979.1	$12,193.5	*	*
7	TABOR Refund Obligation Under Art. X, §20, (7)(d)	$547.9	$2,003.2	$1,563.7	$622.6
8	Rebates and Expenditures *(Table 4)*	$295.8	$143.3	$142.4	$142.0
9	Transfers to Other Funds *(Table 5)*	$1,318.3	$524.9	$521.5	$550.2
10	Transfers to the State Education Fund[2]	$113.0	$123.0	$0.0	$0.0
11	Transfers to Transportation Funds *(Table 3)*	$30.0	$294.0	$115.0	$0.0
12	Transfers to Capital Construction Funds *(Table 3)*	$43.0	$354.0	$20.0	$20.0
13	**Total Expenditures**	**$13,327.1**	**$15,635.9**	*	*
14	Percent Change	4.3%	17.3%	*	*
15	Accounting Adjustments[3]	$36.1	*	*	*
	Reserve	**Actual**	**Budgeted**	**Estimate**	**Estimate**
16	Year-End General Fund Reserve	$3,181.5	$3,543.0	*	*
17	Year-End Reserve as a Percent of Appropriations	29.0%	29.1%	*	*
18	Statutorily Required Reserve[4]	$314.0	$1,633.9	*	*
19	**Amount in Excess or (Deficit) of Statutory Reserve**	**$2,867.5**	**$1,909.1**	*	*
20	Excess Reserve as a Percent of Expenditures	21.5%	12.2%	*	*
	Perspectives on FY 2022-23 (Unbudgeted)			**Estimate**	**Estimate**
	Scenario A: Holds FY 2021-22 Appropriations Constant[5]				
21	Amount in Excess or (Deficit) of 15% Reserve Requirement			$3,242.4	*
22	As a Percent of Prior-Year Expenditures			20.7%	*
	Scenario B: Assumes JBC-Approved Actions to Date[6]				
23	Amount in Excess or (Deficit) of 15% Reserve Requirement			$1,224.3	$1,939.4
24	As a Percent of Prior-Year Expenditures			7.9%	11.7%
	Scenario C: Assumes JBC-Approved Actions to Date and $1.22 Billion in One-Time Spending in FY 2022-23[7]				
25	Amount in Excess or (Deficit) of 15% Reserve Requirement			$0.0	$715.1
26	As a Percent of Prior-Year Expenditures			0.0%	4.0%
	Addendum	**Actual**	**Estimate**	**Estimate**	**Estimate**
27	Percent Change in General Fund Appropriations	-7.5%	11.1%	*	*
28	5% of Colorado Personal Income Appropriations Limit	$16,597.8	$17,519.5	$18,519.6	$20,038.2
29	Transfers to State Education Fund per Amendment 23	$874.6	$896.1	$899.1	$905.0

*Totals may not sum due to rounding. * Not estimated.*
[1]Includes the supplemental bills (HB 22-1170 through HB 22-1195), as well as HB 22-1196 and HB 22-1197.
[2]Includes transfers pursuant to SB 19-246, HB 20-1420, and SB 21-208.
[3]Includes $22.4 million for under-refunds of TABOR surpluses from prior years.
[4]The required reserve is calculated as a percent of operating appropriations, and is required to equal 2.86 percent in FY 2020-21, 13.4 percent in FY 2021-22, and 15 percent each year thereafter.
[5]This scenario holds appropriations in FY 2022-23 equal to appropriations in FY 2021-22 (line 6) to determine the total amount of money available relative to FY 2021-22 expenditures, net of the obligations in lines 7 through 12.
[6]This scenario assumes JBC actions approved to date and capital project transfer recommendations made by the CDC and JTC, as detailed in the March 15, 2022 JBC Staff memorandum available at: https://leg.colorado.gov/sites/default/files/gfo-03-15-22.pdf
[7]This scenario assumes Scenario B, and $1.22 billion in one-time spending in FY 2022-23. The $1.22 billion amount is equal to the FY 2022-23 excess reserve amount under Scenario B.

Risks to the General Fund Budget Outlook

Inflation risk is unusually high. In recent months, inflationary pressures have gained significant momentum from wage gains, pandemic-induced supply chain disruptions, and geopolitical conflict. This forecast projects that the Denver-Aurora-Lakewood consumer price index will rise 7.0 percent in 2022 and 3.8 percent in 2023, before easing to 2.4 percent in 2024. The risk of escalating conflict in the war in Ukraine, potential for additional pandemic-induced supply chain disruptions, and the momentum of a wage-price spiral, each pose significant upside risks to the inflation forecast. These risks in turn create uncertainties for the state budget outlook and TABOR situation. Specifically, higher (or lower) than expected inflation would allow the state to retain more (or less) revenue under the Referendum C cap in FY 2023-24 and future years, and may also contribute to higher (or lower) near-term budgetary pressures for state programs.

General Fund forecast error threatens TABOR refunds, while recession risk threatens the budget outlook. Strong General Fund collections have boosted revenue well above the Referendum C cap, resulting in TABOR surpluses large enough to absorb regular forecast error in FY 2021-22 and FY 2022-23. In other words, higher (or lower) revenue would result in higher (or lower) TABOR refunds. However, given significant risks to the economic outlook, the risk of recession during the forecast period is elevated. A recession would likely reduce revenue below the Referendum C cap, thereby reducing the amount available for the General Fund budget.

Higher-than-expected cash funds revenue will increase General Fund budget pressures. In addition to most General Fund revenue, some cash funds—including severance tax revenue, which is the state's most volatile revenue stream—are subject to the TABOR limit. Because TABOR surpluses are refunded using General Fund money, higher than expected cash funds revenue would create additional budgetary pressures for the General Fund.

Changes Between the December 2021 and March 2022 Forecasts

Table 2 summarizes the changes to the General Fund budget outlook between the December 2021 and this March 2022 forecast. Changes for FY 2020-21 reflect updated information from the Annual Comprehensive Financial Report. Changes to transfers to and from the General Fund reflect updated expectations for transfers that are dependent on revenue streams and 2022 legislation passed to date. Revisions to General Fund revenue in FY 2020-21 and FY 2021-22 result in higher revenues and larger TABOR refund obligations for these fiscal years, while revisions to General Fund revenue in FY 2022-23 result in lower revenue and smaller TABOR refund obligations. While General Fund revenue revisions have no net impact on the budget, increased expectations for cash funds subject to TABOR results in additional budgetary pressures during the forecast period because TABOR refunds are paid for from the General Fund.

Table 2
Changes in the General Fund Budget Situation Relative to the December 2021 Forecast
Dollars in Millions, Positive Amounts Reflect an Increase Relative to December

	Components of Change	2020-21	2021-22	2022-23	Description of Changes
1	**Funds Available**	**$72.0**	**$71.8**	**-$296.3**	
2	Beginning Reserve	$0.0	$13.5	$49.0	Carries changes in the prior-year's reserve forward.
3	General Fund Revenue	$70.4	$59.0	-$344.5	Reflects changes to revenue expectations.
4	Transfers from Other Funds	$1.6	-$0.7	-$0.8	See Table 5. Changes are forecast-driven.
5	**Expenditures**	**$76.7**	**$22.8**	**-$298.9***	
6	Operating Appropriations	$0.2	-$102.9	-$102.9*	Reflects the 2022 supplemental package.
7	TABOR Refund Obligation	$76.5	$124.7	-$188.6	Reflects changes in General Fund and cash funds expectations.
8	Rebates and Expenditures	$0.0	-$3.6	-$2.5	See Table 4. Slight reductions based on year-to-date amounts.
9	SEF Transfers	$0.0	$0.0	$0.0	
10	Transportation Transfers	$0.0	$0.0	$0.0	
11	Capital Construction Transfers	$0.0	$5.1	$0.0	HB 22-1195. See Table 3.
12	Other Cash Fund Transfers	$0.0	-$0.5	$8.9	See Table 5. Some changes are forecast-driven.
13	Accounting Adjustment	$18.2			Reflects the final, audited year-end balance.
14	Required Reserve	$0.0	-$13.8	-$13.8*	Reflects lower appropriations under the supplemental package.
15	**Surplus Relative to Required Reserve**	**$13.5**	**$62.7**	**$4.2***	

**Because a budget for FY 2022-23 has not yet been adopted, amounts assume that FY 2021-22 appropriations are held constant in FY 2022-23.*

General Fund Transfers to Transportation and Capital Construction

Statutory transfers from the General Fund to transportation and capital construction funds are shown in Table 3. 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 5, and shown on lines 3 and 9 of Table 1.

Table 3
Infrastructure Transfers to and from the General Fund
Dollars in Millions

Transportation Funds	2020-21	2021-22	2022-23	2023-24
SB 21-110	$30.0			
SB 21-260		$170.0	$115.0	
SB 21-265		$124.0		
Total	**$30.0**	**$294.0**	**$115.0**	**$0.0**

Capital Construction Funds	2020-21	2021-22	2022-23	2023-24
HB 15-1344*	$20.0	$20.0	$20.0	$20.0
HB 20-1378	$3.0			
SB 21-064		$0.1		
SB 21-112	$20.0			
SB 21-224		$328.8		
HB 22-1195		$5.1		
Total	**$43.0**	**$354.0**	**$20.0**	**$20.0**

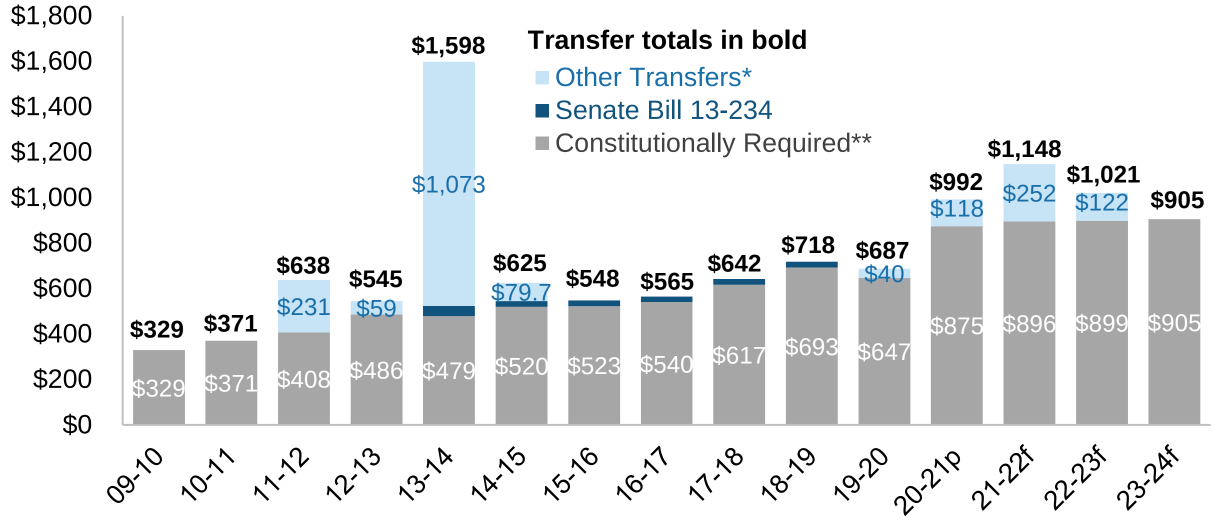
*Transfers are contingent upon requests made by the Capital Development Committee.

General Fund contributions to transportation. Following a one-time $30.0 million transfer from the General Fund to the State Highway Fund for FY 2020-21, legislation enacted in 2021 directs an additional $294.0 million in transfers to the State Highway Fund in FY 2021-22. For FY 2022-23 through FY 2025-26, Senate Bill 21-260 requires transfers from the General Fund to the State Highway Fund and the Multimodal Transportation and Mitigation Options Fund depending on the amount of revenue retained as a result of the TABOR limit adjustment in the bill. This forecast projects that the entire $115 million transfer will be made in FY 2022-23, with no additional transfer requirement thereafter. The bill also repealed an ongoing obligation for $50 million annual transfers from the General Fund to the State Highway Fund beginning in FY 2022-23. Finally, the bill creates new ongoing transfers that begin in FY 2024-25, beyond the current forecast period.

State Education Fund

Figure 1 shows revenue to the State Education Fund. The Colorado Constitution requires the State Education Fund to receive one-third of one percent of taxable income. In FY 2021-22, the State Education Fund is expected to receive $896.1 million as a result of this requirement, with slightly higher amounts in the following year resulting from growth in taxable income among Colorado taxpayers.

Figure 1
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, HB 20-1420 for FY 2020-21 and FY 2021-22, HB 20-1427 for FY 2020-21 through FY 2022-23, and SB 21-208 for FY 2021-22.*
***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.*

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. 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, and Senate Bill 21-208 includes a $100 million transfer in FY 2021-22.

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 $4.9 million in FY 2020-21, $129.1 million in FY 2021-22, and $121.9 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 5 under House Bill 20-1427.

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 expected to be available for tax years 2021 through 2024. 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. The state collected a TABOR surplus in FY 2020-21. This forecast expects a TABOR surplus in each of FY 2021-22, FY 2022-23, and FY 2023-24. Therefore, partial refundability of the credit is expected to be available for tax years 2021, 2022, 2023, and 2024.

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 forecast 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, no transfer is expected for FY 2022-23 or FY 2023-24, as revenue subject to TABOR is expected to come in well above the cutoff amount.

Table 4
General Fund Rebates and Expenditures
Dollars in Millions

Category	Actual FY 2020-21	Percent Change	Estimate FY 2021-22	Percent Change	Estimate FY 2022-23	Percent Change	Estimate FY 2023-24	Percent Change
Senior and Veterans Property Tax Exemptions	$157.9	4.4%	$162.8	3.1%	$163.6	0.5%	$169.3	3.5%
TABOR Refund Mechanism[1]	$0.0		-$162.8		-$163.6		-$169.3	
Cigarette Rebate	$9.3	4.2%	$8.2	-11.6%	$7.9	-3.6%	$7.7	-2.3%
Old Age Pension Fund	$78.9	-7.0%	$67.2	-14.8%	$63.8	-5.0%	$61.7	-3.3%
Aged Property Tax and Heating Credit	$6.4	8.8%	$6.1	-3.8%	$6.0	-2.8%	$5.9	-1.3%
Older Coloradans Fund	$8.0	-20.0%	$10.0	25.0%	$10.0	0.0%	$10.0	0.0%
Interest Payments for School Loans	$1.3	-80.6%	$1.0	-20.9%	$2.8	178.9%	$2.8	0.0%
Firefighter Pensions	$4.3	1.2%	$4.6	5.8%	$4.7	2.0%	$4.8	2.0%
Amendment 35 Distributions	$0.8	-1.0%	$0.8	-0.7%	$0.8	-1.6%	$0.8	-0.8%
Marijuana Sales Tax Transfer to Local Governments	$29.0	18.2%	$26.5	-8.6%	$27.6	3.9%	$29.0	5.4%
Business Personal Property Exemptions[2]	NA		$18.9		$19.0	0.5%	$19.4	2.0%
Total Rebates and Expenditures	**$295.8**	**103.0%**	**$143.3**	**-51.6%**	**$142.4**	**-0.6%**	**$142.0**	**-0.3%**

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.

[2]Pursuant to HB 21-1312, local government are reimbursed for expanded business personal property tax exemptions.

Table 5
Cash Fund Transfers
Dollars in Millions

Transfers to the General Fund		2020-21	2021-22	2022-23	2023-24
HB 05-1262	Amendment 35 Tobacco Tax	$0.8	$0.8	$0.8	$0.8
SB 13-133 & HB 20-1400	Limited Gaming Fund	$44.7	$24.9	$25.7	$26.4
HB 19-1327	Sports Betting Startup Cost Reimbursement	$1.6			
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	$88.5			
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	$7.9			
HB 20-1427	2020 Tax Holding Fund	$2.0	$4.1	$4.1	$4.1
SB 21-209	Repealed Cash Funds		$0.05		
SB 21-251	Loan Family Medical Leave Program				$1.53
Total Transfers to the General Fund		**$336.8**	**$32.1**	**$30.5**	**$32.8**

Transfers from the General Fund		2020-21	2021-22	2022-23	2023-24
SB 11-047	Bioscience Income Tax Transfer to OEDIT	$7.1	$7.9	$7.9	$8.1
SB 14-215	Marijuana Tax Cash Fund	$203.0	$171.4	$178.2	$187.8
SB 15-244 & SB 17-267	State Public School Fund	$32.9	$30.0	$31.2	$32.9
HB 18-1323	Pay For Success Contracts Pilot Program Funding	$0.5	$0.4		
HB 19-1168 & SB 20-215	Health Insurance Affordability Cash Fund	$5.2	$19.8	$48.5	$72.6
HB 19-1245	Housing Development Grant Fund	$15.0	$59.2	$62.3	$65.6
HB 20-1116	Procurement Technical Assistance Program Extension	$0.2	$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	$49.0	$185.8	$183.6	$182.7
HB 20-1427*	Preschool Programs Cash Fund	$0.2	$0.5	$0.1	$0.2
SB 20B-002	Housing & Direct COVID Emergency Assistance	$54.0			
SB 20B-003	Energy Utility Bill Payment Assistance	$5.0			
SB 20B-004	Transfers for COVID Emergency	$100.0			
EO D2020 230	Disaster Emergency Fund Transfer	$148.9			

**HB 20-1427 requires the transfer of 73% of additional sales tax revenue due to the imposition of the minimum cigarette price to the Programs Cash Fund on June 30th in 2021, 2022, and 2023.*

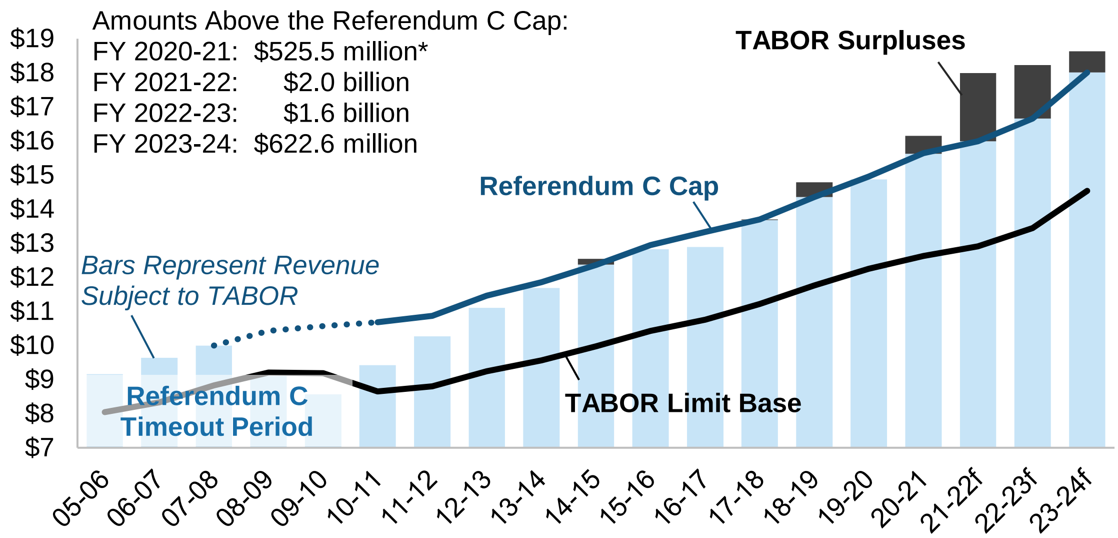
Table 5 (Cont.)
Cash Fund Transfers
Dollars in Millions

Transfers from the General Fund (Cont.)		2020-21	2021-22	2022-23	2023-24
HB 21-1149	Energy Sector Career Pathway in Higher Education		$5.0		
HB 21-1215	Expansion of Justice Crime Prevention Initiative	$3.5			
HB 21-1253	Renewable & Clean Energy Project Grants	$5.0			
HB 21-1260	Implement State Water Plan	$20.0			
HB 21-1262	Money Support Agricultural Events Organization	$5.0			
HB 21-1263	Meeting & Event Incentive Program	$10.0			
HB 21-1285	Funding to Support Creative Arts Industries		$5.0		
HB 21-1288	Colorado Startup Loan Program	$31.4			
HB 21-1290	Additional Funding For Just Transition	$15.0			
HB 21-1326	Support DNR Programs	$25.0			
SB 21-054	Wildfire Mitigation & Response	$13.0			
SB 21-113	Firefighting Aircraft Wildfire Mgmt & Response	$30.8			
SB 21-202	Public School Air Quality Improvement Grants	$10.0			
SB 21-211	Adult Dental Benefit	$1.1	$2.3		
SB 21-225	Repay Cash Funds For 2020 Transfers		$10.0		
SB 21-227	State Emergency Reserve	$101.0			
SB 21-230	CO Energy Office Energy Fund	$40.0			
SB 21-231	Energy Office Weatherization Assistance Grants	$3.0			
SB 21-234	Agriculture & Drought Resiliency	$3.0			
SB 21-235	Stimulus Funding Dept of Ag Efficiency Programs	$3.0			
SB 21-240	Watershed Restoration Grant Program Stimulus	$30.0			
SB 21-242	Housing Devt Grants Hotels Tenancy Support	$15.0			
SB 21-243	CDPHE Appropriation Public Health Infrastructure		$14.5		
SB 21-248	Loan Program for Colorado Agriculture	$30.0			
SB 21-251	Loan Family Medical Leave Program	$1.5			
SB 21-258	Wildfire Risk Mitigation	$25.0			
SB 21-281	Severance Tax Trust Fund Allocation	$9.5		$9.5	
SB 21-283	Cash Fund Solvency		$4.3		
SB 21-286	Home- & Community-based Services	$260.7			
HB 22-1194	Local Firefighter Safety Resources		$5.0		
HB 22-1197	Effective Date of Dept of Early Childhood		$3.5		
Total Transfers from the General Fund		**$1,318.3**	**$524.9**	**$521.5**	**$550.2**
Net General Fund Impact		**-$981.5**	**-$492.7**	**-$491.0**	**-$517.5**

TABOR Outlook

The state TABOR outlook is presented in Table 7 and illustrated in Figure 2, which also provides a history of the TABOR limit base and the Referendum C cap. In FY 2020-21, state revenue subject to TABOR exceeded the Referendum C cap, creating a state obligation for TABOR refunds to taxpayers in FY 2021-22. State revenue subject to TABOR is projected to exceed the Referendum C cap in each of FY 2021-22, FY 2022-23, and FY 2023-24, creating a state obligation for TABOR refunds to taxpayers in each of FY 2022-23, FY 2023-24, and FY 2024-25.

Figure 2
TABOR Revenue, TABOR Limit Base, and the Referendum C Cap
Dollars in Billions



Source: Office of the State Controller and Legislative Council Staff. f = Forecast.
**The refund amount for FY 2020-21 differs from surplus amount because it includes $22.4 million in under-refunds from prior TABOR surpluses.*

FY 2020-21. The audited Annual Comprehensive Financial Report reports that state revenue subject to TABOR exceeded the Referendum C cap by $525.5 million. After accounting for an outstanding refund obligation attributable to under-refunds of prior TABOR surpluses, the Controller reports that the state is obligated to refund $547.9 million in the current FY 2021-22. The FY 2020-21 surplus will be refunded to taxpayers via the three TABOR refund mechanisms under current law, which are explained in greater detail below. Pursuant to Senate Bill 21-260, the Referendum C cap was increased by $225.0 million in FY 2020-21, reversing a reduction made to the FY 2017-18 Referendum C cap in Senate Bill 17-267.

Forecasts for FY 2021-22 through FY 2023-24. State revenue subject to TABOR is projected to exceed the Referendum C cap throughout the forecast period. In the current FY 2021-22, revenue is expected to exceed the Referendum C cap by $2.0 billion, before exceeding the cap by $1.6 billion in FY 2022-23 and $622.6 million in FY 2023-24. Refunds of those amounts are expected to be returned to taxpayers in the year following each surplus. The actual refund obligation in any given year will incorporate any over- or under-refund of prior year surpluses. Relative to the December forecast, expectations for revenue subject to TABOR were increased in FY 2021-22, primarily on higher expectations for General Fund revenue, and reduced in FY 2022-23 and FY 2023-24 on lower General Fund expectations. The projected TABOR surplus in FY 2023-24 was also reduced on significantly higher inflation expectations for calendar year 2022, which impacts the FY 2023-24 Referendum C cap allowable growth.

Enterprise disqualification. When a TABOR enterprise is disqualified, its revenue becomes subject to TABOR and an upward adjustment equal to that revenue amount is also made to the Referendum C cap.[3] Similarly, downward adjustments are made to both revenue and the Referendum C cap when an enterprise requalifies. As a result, disqualification or requalification has no impact on the TABOR refund situation. However, if an enterprise remains disqualified over multiple years, year-over-year changes in that enterprise's revenue may increase or decrease the TABOR refund obligation. This forecast does not include adjustments for enterprise disqualification. However, disqualification may occur for one or more enterprises depending on policy decisions made during the 2022 legislative session.

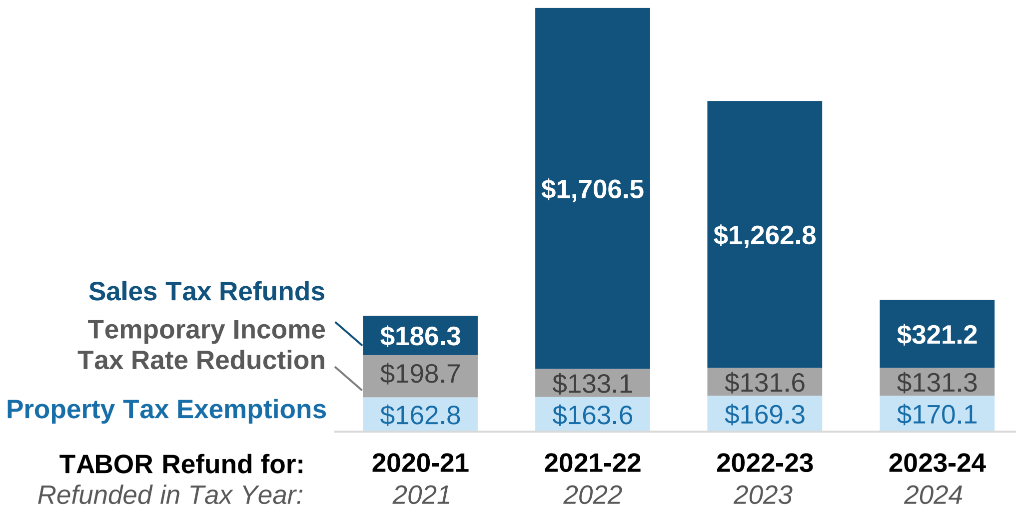
Risks to the forecast. Estimates of the TABOR surplus and TABOR refund obligation represent the amount by which state revenue subject to TABOR is expected to exceed the Referendum C cap. Therefore, any error in the General Fund or cash funds revenue forecasts will result in an error of an equal amount in the TABOR refund forecast. Any forecast error for inflation or population growth for calendar year 2022 will also impact the TABOR situation by resulting in higher or lower allowable growth in the Referendum C cap. Finally, disqualification of one or more enterprises over multiple years may result in a higher or lower TABOR refund obligation depending on growth in the enterprise(s) revenue.

TABOR refund mechanisms. Current state law includes three TABOR refund mechanisms: property tax exemptions for seniors and disabled veterans, a temporary reduction in the income tax rate from 4.55 percent to 4.50 percent, and the six-tier sales tax refund mechanism based on taxpayers' incomes. All three refund mechanisms will be used to refund the FY 2020-21 surplus in tax year 2021, and, based on this forecast, all three refund mechanisms are expected to be used for each of tax years 2022, 2023, and 2024, as shown in Figure 3. Table 6 provides estimates for the amounts to be refunded to taxpayers via the six-tier sales tax refund mechanism for tax year 2021, and estimated amounts for tax years 2022, 2023, and 2024.

Refunds made via property tax exemptions reduce an obligation that would otherwise be paid from General Fund revenue. Refunds made via the income tax rate reduction and sales tax refund are paid to taxpayers when they file their state income tax returns. These two mechanisms are accounted for as an offset against the amount of surplus revenue restricted to pay TABOR refunds, rather than as a revenue reduction. Therefore, the General Fund revenue forecast does not incorporate downward adjustments as a result of these refund mechanisms being activated.

[3] For more information on TABOR and TABOR enterprises, see the Legislative Council Staff memorandum titled: "The TABOR Revenue Limit", available at: https://leg.colorado.gov/sites/default/files/the_tabor_revenue_limit.pdf

Figure 3
Expected TABOR Refunds and Refund Mechanisms
Dollars in Millions



Source: Legislative Council Staff March 2022 forecast. Actual amount will differ and future refunds will be adjusted for over- or under-refunds in prior years.

Table 6
Projected TABOR Refunds via the Six-Tier Sales Tax Refund Mechanism

Tax Year 2021 Refunds from FY 2020-21 TABOR Refund Obligation

Taxpayer Distribution by AGI			Single Filers	Joint Filers
	up to	$44,000	$37	$74
$44,001	to	$88,000	$49	$98
$88,001	to	$139,000	$56	$112
$139,001	to	$193,000	$68	$136
$193,001	to	$246,000	$74	$148
$246,001	and up		$117	$234

Tax Year 2022 Refunds from FY 2021-22 TABOR Refund Obligation

Taxpayer Distribution by AGI			Single Filers	Joint Filers
	up to	$47,000	$333	$666
$47,001	to	$94,000	$445	$890
$94,001	to	$149,000	$512	$1,024
$149,001	to	$207,000	$608	$1,216
$207,001	to	$263,000	$654	$1,308
$263,001	and up		$1,053	$2,106

Tax Year 2023 Refunds from FY 2022-23 TABOR Refund Obligation

Taxpayer Distribution by AGI			Single Filers	Joint Filers
	up to	$49,000	$244	$488
$49,001	to	$98,000	$325	$650
$98,001	to	$154,000	$374	$748
$154,001	to	$214,000	$445	$890
$214,001	to	$273,000	$478	$956
$273,001	and up		$770	$1,540

Tax Year 2024 Refunds from FY 2023-24 TABOR Refund Obligation

Taxpayer Distribution by AGI			Single Filers	Joint Filers
	up to	$50,000	$61	$122
$50,001	to	$100,000	$82	$164
$100,001	to	$158,000	$94	$188
$158,001	to	$220,000	$112	$224
$220,001	to	$280,000	$120	$240
$280,001	and up		$193	$386

AGI = Adjusted gross income.
Note: Amounts do not include estimates for taxpayer refunds from the income tax rate reduction or local government property tax exemption mechanisms.

Table 7
TABOR Revenue Limit and Retained Revenue
Dollars in Millions

		Actual FY 2020-21	Estimate FY 2021-22	Estimate FY 2022-23	Estimate FY 2023-24
	TABOR Revenue				
1	General Fund[1]	$13,929.8	$15,514.4	$15,594.9	$15,882.9
2	Cash Funds	$2,240.0	$2,477.3	$2,628.8	$2,749.3
3	**Total TABOR Revenue**	**$16,169.8**	**$17,991.7**	**$18,223.7**	**$18,632.1**
	Revenue Limit				
4	Allowable TABOR Growth Rate	3.1%	2.2%	4.2%	8.1%
5	Inflation (*from Prior Calendar Year*)	1.9%	2.0%	3.5%	7.0%
6	Population Growth (*from Prior Calendar Year*)[2]	1.2%	0.3%	0.7%	1.1%
7	TABOR Limit Base	$12,628.1	$12,905.9	$13,447.9	$14,537.2
8	Voter Approved Revenue Change (Referendum C)	$3,016.3	$3,082.6	$3,212.1	$3,472.3
9	Total TABOR Limit / Referendum C Cap[3]	$15,644.3	$15,988.5	$16,660.0	$18,009.5
10	**TABOR Revenue Above** (Below) **Referendum C Cap**	**$525.5**	**$2,003.2**	**$1,563.7**	**$622.6**
	Retained/Refunded Revenue				
11	Revenue Retained under Referendum C[4]	$3,016.3	$3,082.6	$3,212.1	$3,472.3
12	Fiscal Year Spending (*revenue available to be spent or saved*)	$15,644.3	$15,988.5	$16,660.0	$18,009.5
13	Outstanding Under-refund Amount[5]	$22.4			
14	**Revenue Refunded to Taxpayers**	**$547.9**	**$2,003.2**	**$1,563.7**	**$622.6**
15	TABOR Reserve Requirement	$469.3	$479.7	$499.8	$540.3

Totals may not sum due to rounding.
[1]Revenue differs from the amount in the General Fund summaries because of accounting adjustments across TABOR boundaries.
[2]Following each decennial census, the April 1 census population counts are used instead of July 1 population estimates for purposes of calculating the growth factors for the TABOR limit. Population estimates are used in all other years for purposes of the growth calculation.
[3]This forecast assumes that all enterprises will maintain enterprise status. If an enterprise is disqualified, both revenue subject to TABOR and the Referendum C cap will have equal upward adjustments.
[4]Revenue retained under Referendum C is referred to as "General Fund Exempt" in the budget.
[5]This amount represents under-refunds from prior years.

General Fund Revenue

This section presents the Legislative Council Staff outlook for General Fund revenue, the state's main source of funding for discretionary operating appropriations. Table 8 on page 27 summarizes actual General Fund revenue collections for FY 2020-21 and projections for FY 2021-22 through FY 2023-24.

FY 2020-21. Final audited figures show that General Fund revenue increased 11.2 percent over year-ago levels to total $14.3 billion in FY 2020-21. Gains were broad-based across revenue streams, with robust income and sales tax collections driving growth.

Forecast for FY 2021-22 through FY 2023-24. General Fund revenue is expected to increase 11.6 percent to total nearly $16.0 billion in FY 2021-22. In FY 2022-23 and FY 2023-24, growth is expected to slow considerably in as inflationary pressures erode business profits, consumers rein in spending on goods, capital gains are muted by slower equity market growth, and higher interest rates slow economic activity. Gross General Fund revenue is expected to grow only 0.6 percent in FY 2022-23, and 1.9 percent in FY 2023-24.

Forecast revisions. The revenue outlook was increased by $59.0 million, or 0.4 percent, for the current FY 2021-22 based on strong year-to-date collections but reduced economic expectations for the remaining four months of the fiscal year. Revenue expectations were reduced by $344.5 million, or 2.1 percent, for FY 2022-23 with larger downward revisions in FY 2023-24. While the sales tax forecast was increased on higher inflation expectations, corporate and individual income tax revenue forecasts were downgraded on the expectation that higher inflation will erode business profits and labor shortages will constrain business growth.

Risks to the forecast. Risks to the General Fund revenue forecast remain elevated. On the upside, revenue collections have consistently outperformed forecast expectations since the beginning of the pandemic recession. Higher inflationary pressures and stronger-than-expected wage gains could boost sales tax and individual income tax collections above the amounts projected in this forecast. Downside risks include depressed capital gains on ongoing near-term equity market volatility, adverse business impacts from higher-than-expected inflation, or slower than expected economic activity in response to monetary policy tightening.

Limited information is available confirming the impact of recent income tax policy changes and the extent to which federal fiscal stimulus has supported state income taxes over the past two years. These policy impacts complicate the ability to assess the underlying health of the state tax base, which could be stronger or weaker than currently forecast.

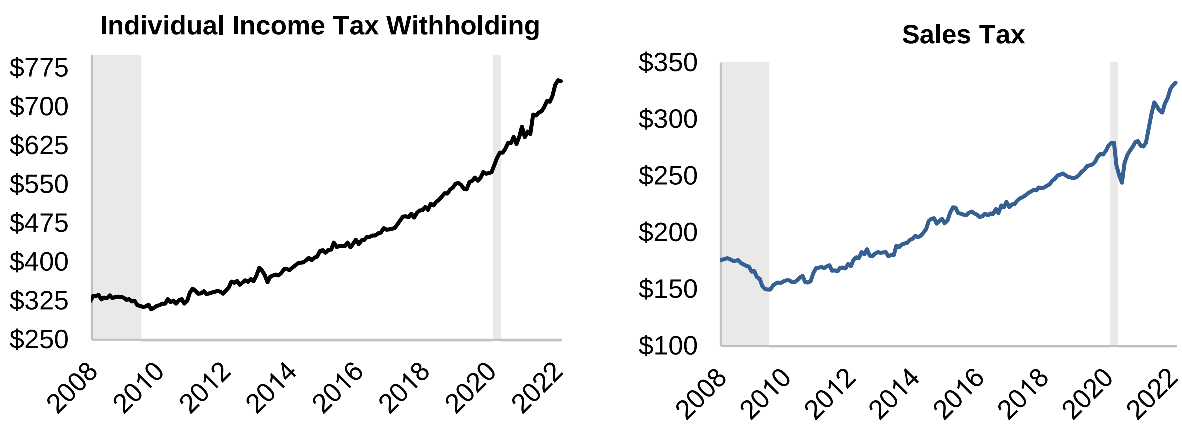
Individual Income Tax

Taxable income earned by individuals and non-corporate businesses is taxed at a flat rate of 4.55 percent. Revenue is credited to the General Fund and is subject to TABOR, except that an amount equal to one third of 1 percent of taxable income is transferred to the State Education Fund (SEF) and exempt from TABOR. Individual income tax revenue is the largest source of General Fund revenue, accounting for about 60 percent of revenue to the General Fund in FY 2020-21, net of the SEF transfer.

FY 2020-21. Individual income tax collections exceeded expectations throughout FY 2020-21 as growth in incomes continued unabated by the pandemic recession. In FY 2020-21, individual income tax revenue collections, before the application of the SEF transfer, increased by 9.6 percent over year ago levels to $9.5 billion. FY 2020-21 collections surprised on the upside throughout the fiscal year. Federal fiscal stimulus propped up employment through the federal paycheck protection program and boosted state taxable income via unemployment insurance benefits. Additionally, the pandemic recession had comparatively minor impacts on many high-income earners, who comprise a larger share of the income tax base.

Forecast for FY 2021-22 through FY 2023-24. In the current FY 2021-22, individual income tax collections are expected to reach $10.6 billion before application of the SEF transfer, an increase of 11.7 percent over year-ago levels, as withholding payments continue their strong growth (Figure 4, left). Individual income tax collections are expected to slow to only 0.2 percent growth in FY 2022-23. While wage growth is expected to remain strong, high inflationary pressures are expected to erode non-corporate business incomes and equity market volatility will weigh on capital gains. Individual income tax collections are forecast to increase 1.9 percent in FY 2023-24 on ongoing economic growth.

Figure 4
Selected General Fund Revenue Sources
Millions of Dollars in Monthly Collections



Source: Office of the State Controller with Legislative Council Staff seasonal adjustments. Data are shown as a three-month moving average on a cash basis. February 2022 collections are preliminary.

Income tax rate. This forecast expects the state TABOR refund obligation for each of FY 2020-21 through FY 2022-23 to be sufficient to trigger a temporary reduction in the income tax rate from 4.55 percent to 4.50 percent for each of tax years 2021 through 2024. The cost of the rate reduction is accounted as a debit against restricted prior year TABOR surpluses, rather than a reduction in current year revenue. Therefore, the forecast for all fiscal years reflects the application of a 4.55 percent tax rate for budget purposes.

Legislative adjustments. This forecast includes significant adjustments for the future impacts of recent legislation on individual income tax revenue. **House Bill 21-1311** expanded the state earned income tax credit and activated the state child tax credit, while also restricting the application of federal itemized deductions and qualified business income deductions for the purpose of determining

Colorado taxable income. **House Bill 21-1233** is expected to increase claims of the tax credit for conservation easement donations, thereby decreasing state revenue. On net, legislation enacted during 2021 is expected to reduce income tax revenue by between $25 million and $45 million annually, because large impacts of legislation in both directions are mostly expected to offset one another.

Corporate Income Tax

Corporate income tax revenue totaled a record amount of $1,183.7 million in FY 2020-21, a 62.5 percent increase from the prior fiscal year. Corporate profits reached their nadir in the second quarter of 2020. Despite the significant disruptions to the economy caused by the pandemic, profits have since grown at a rapid pace. Additionally, the pandemic caused a shift in consumer spending toward goods-producing businesses, which tend to account for a larger share of corporate income tax in Colorado, increasing corporate income tax revenue further.

Collections are expected to decline by 4.0 percent in FY 2021-22 to $1,137 million but will remain above pre-pandemic FY 2018-19 levels. Corporate profits are expected to fall from highs in 2021 in the current and next year as inflationary pressures erode profits and consumers shift from goods to services consumption. These trends are expected to result in a corporate income tax collection declines of 13.0 percent and 12.5 percent in FY 2022-23 and FY 2023-24, respectively.

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 increased 6.9 percent to total $3.4 billion during FY 2020-21, supported by robust consumer and business activity, large fiscal stimulus measures, and improving pandemic conditions.

Through the first eight months of the current fiscal year, sales tax revenue rose strongly as household balance sheets remained healthy and consumers returned to spending on food services and accommodations. Elevated household savings contributed to robust holiday sales activity as sales tax collections in January from December's sales were up 23.6 percent year-over-year. Despite the impact of the recession on employment and wages, government transfer payments boosted personal income to record levels. Personal savings rates also spiked, rising as high 34 percent nationally after initial stimulus payments in 2020 following the onset of the pandemic, and rising again to 26.6 percent during the spring of 2021. By January 2022, the personal savings rate dropped to 6.4 percent and gross private saving fell from a seasonally adjusted annual rate of $4.6 trillion in the first quarter of 2021 to $2.1 trillion in the fourth quarter. Additionally, the effects of the pandemic continue to linger and consumer spending remains elevated for many taxable goods. Another factor has been upward price pressures for key goods that comprise a significant share of sales tax revenue such as food and motor vehicles.

While personal income growth is expected to slow significantly in FY 2021-22 as government transfer payments recede, consumer spending and recent legislative adjustments will keep tax revenues elevated through the fiscal year. Sales tax revenue is expected to rise 13.6 percent in FY 2021-22 on strong goods consumption and elevated costs for many goods, including vehicles, due to supply chain constraints and inflationary pressures. Revenue growth is expected to slow to 4.2 percent in FY 2022-23 as consumers resume more spending on nontaxable service sector activities and shift away from some goods consumption. In FY 2023-24, sales tax revenue is expected to grow more in line with personal incomes and increase another 4.7 percent.

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 was up by 1.8 percent in FY 2020-21 following a 39.1 percent decline in FY 2019-20. During the forecast period, use tax is expected to grow by 11.9 percent in FY 2021-22, and then at a slower pace of 8.1 percent and 4.3 percent in FY 2022-23 and FY 2023-24, respectively. Over the forecast period, revenue growth will be supported by more investment in oil and gas activity, improved nonresidential construction and investment activity, and legislative changes enacted during the 2021 session.

Use tax revenue fell sharply in FY 2019-20 as rules promulgated by the Department of Revenue and legislative changes enacted in HB 19-1240 converted retail use tax collections to sales tax collections. The immediate, steep decline in retailers' use tax moderated and reversed in FY 2020-21. Use tax collections are now expected to grow over the long term as business activity increases.

Proposition EE Cigarette, Tobacco, and Nicotine Taxes

Table 8 includes a line for Proposition EE taxes, which are deposited 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, while equivalent transfers from the General Fund to the 2020 Tax Holding Fund are shown in Table 5 on page 14. Proposition EE taxes totaled $49.0 million in FY 2020-21. This forecast estimates that Proposition EE taxes will total $185.8 million in FY 2021-22 and $183.6 million in FY 2022-23.[4]

Proposition EE was referred to voters under House Bill 20-1427 and approved in November 2020. The measure increased cigarette and tobacco taxes and created a new tax on nicotine products. Beginning January 1, 2021, the cigarette tax increased from $0.84 to $1.94 per pack; the tax for tobacco products increased from 40 percent to 50 percent of manufacturer's list price (MLP); and the new tax for nicotine products, 30 percent of MLP, was instituted. 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.

[4] Revisions to Proposition EE collections data are expected in the April Department of Revenue General Fund Report due to inconsistencies in cigarette revenue collections in FY 2021-22 to date. Because of current data limitations, estimates for Proposition EE revenue, as well as Amendment 35 and statutory cigarette excise tax collections, are subject to change.

Table 8
General Fund Revenue Estimates
Dollars in Millions

	Category	Actual FY 2020-21	Percent Change	Estimate FY 2021-22	Percent Change	Estimate FY 2022-23	Percent Change	Estimate FY 2023-24	Percent Change
	Excise Taxes								
1	Sales	$3,418.1	6.9	$3,881.5	13.6	$4,046.3	4.2	$4,236.5	4.7
2	Use	$214.2	1.8	$239.6	11.9	$259.0	8.1	$270.1	4.3
3	Retail Marijuana Sales	$288.2	17.4	$265.1	-8.0	$275.5	3.9	$290.4	5.4
4	Cigarette	$30.1	-7.3	$29.1	-3.4	$28.1	-3.6	$27.4	-2.3
5	Tobacco Products	$29.0	19.1	$24.3	-16.3	$26.3	8.1	$27.2	3.6
6	Liquor	$53.4	6.6	$56.4	5.7	$58.2	3.2	$60.5	3.9
7	Proposition EE Tobacco Taxes	$49.0	NA	$185.8	279.0	$183.6	-1.2	$182.7	-0.5
8	Total Excise	$4,082.0	8.6	$4,681.8	14.7	$4,876.9	4.2	$5,094.8	4.5
	Income Taxes								
9	Net Individual Income	$9,478.1	9.6	$10,590.1	11.7	$10,606.3	0.2	$10,811.0	1.9
10	Net Corporate Income	$1,183.7	62.5	$1,136.5	-4.0	$988.3	-13.0	$865.1	-12.5
11	Total Income Taxes	$10,661.7	13.7	$11,726.6	10.0	$11,594.6	-1.1	$11,676.0	0.7
12	Less: Portion diverted to the SEF	-$874.6	35.2	-$896.1	2.5	-$899.1	0.3	-$905.0	0.7
13	Income Taxes to the General Fund	$9,787.1	12.2	$10,830.5	10.7	$10,695.5	-1.2	$10,771.0	0.7
	Other Sources								
14	Estate	$0.0	NA	$0.0	NA	$0.0	NA	$0.0	NA
15	Insurance	$336.3	-0.3	$362.5	7.8	$394.8	8.9	$411.4	4.2
16	Pari-Mutuel	$0.3	-21.2	$0.4	27.8	$0.5	20.0	$0.5	5.0
17	Investment Income	$50.0	60.9	$51.9	3.7	$49.0	-5.5	$41.7	-15.0
18	Court Receipts	$3.5	-9.8	$3.1	-11.9	$3.0	-3.4	$2.7	-8.4
19	Other Income	$50.7	423.4	$35.1	-30.8	$34.3	-2.3	$33.9	-1.1
20	Total Other	$440.9	15.3	$452.9	2.7	$481.6	6.3	$490.2	1.8
21	**Gross General Fund Revenue**	**$14,310.1**	**11.2**	**$15,965.3**	**11.6**	**$16,054.0**	**0.6**	**$16,356.0**	**1.9**

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

Cash Fund Revenue

Table 9 summarizes the forecast for cash fund revenue subject to TABOR. Typically, 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.

Table 9
Cash Fund Revenue Subject to TABOR
Dollars in Millions

	Actual FY 2020-21	Estimate FY 2021-22	Estimate FY 2022-23	Estimate FY 2023-24	CAAGR*
Transportation-Related	$1,155.8	$1,218.5	$1,344.5	$1,433.1	
Percent Change	-3.5%	5.4%	10.3%	6.6%	7.4%
Severance Tax	$14.7	$125.9	$128.5	$115.1	
Percent Change	-88.8%	757.3%	2.1%	-10.4%	98.7%
Gaming Revenue[1]	$101.8	$139.7	$141.5	$143.3	
Percent Change	47.2%	37.2%	1.3%	1.3%	12.1%
Insurance-Related	$21.0	$24.3	$21.4	$21.5	
Percent Change	-15.7%	15.5%	-11.9%	0.5%	0.7%
Regulatory Agencies	$89.1	$91.2	$92.1	$93.2	
Percent Change	9.9%	0.4%	0.8%	0.8%	1.5%
2.9% Sales Tax on Marijuana[2]	$15.5	$13.8	$13.4	$13.6	
Percent Change	16.2%	-11.1%	-2.8%	1.7%	-4.2%
Other Cash Funds[3]	$841.4	$862.8	$886.0	$927.3	
Percent Change	16.2%	2.5%	2.7%	4.7%	3.3%
Total Cash Fund Revenue	**$2,240.0**	**$2,477.3**	**$2,628.8**	**$2,749.3**	
Subject to the TABOR Limit[3]	-0.2%	10.6%	6.1%	4.6%	7.1%

Totals may not sum due to rounding.
** CAAGR: Compound average annual growth rate for FY 2020-21 to FY 2023-24.*
[1]Gaming revenue in this table does not include Amendment 50 revenue, because it is not subject to TABOR.
[2]Includes revenue from the 2.9 percent sales tax collected from the sale of medical and retail marijuana. This revenue is subject to TABOR.
[3]For FY 2019-20 through FY 2021-22, includes transfers from the Unclaimed Property Trust Fund to the General Fund per SB 19-261 and HB 20-1381. Revenue to this fund is TABOR exempt, but becomes subject to TABOR when transferred out of the fund.

FY 2020-21. Figures from the Office of the State Controller indicate cash fund revenue subject to TABOR totaled $2.24 billion in FY 2020-21, a decrease of 0.2 percent from the prior fiscal year. The most significant increase in percentage terms was in gaming revenue, which increased by 47.2 percent to $101.8 million. The largest increase in nominal terms was other cash funds, which increased by 16.2 percent to $841.4 million in part on transfers across TABOR boundaries from the Unclaimed Property Trust Fund. The largest decrease in both percentage and nominal terms was in severance tax collections, which shrank by $117.0 million to $14.7 million in FY 2020-21. The collapse of oil and gas prices in April 2020 and subsequent decline in production activity curtailed severance tax revenue significantly. Transportation-related revenue, the largest source of cash fund revenue subject to TABOR, also declined in FY 2020-21, contracting by $42.4 million to $1.16 billion, as demand for motor fuel and vehicle registrations fell significantly on pandemic-related disruptions and reduced travel activity.

Forecast for FY 2021-22 through FY 2023-24. Total cash fund revenue subject to TABOR in the current FY 2021-22 is expected to total $2.48 billion, a 10.6 percent increase from FY 2020-21. In subsequent years, growth is expected to moderate to 6.1 percent and 4.6 percent in FY 2022-23 and FY 2023-24, respectively. Relative to December, multiple cash fund forecasts were revised upwards, while others were revised downwards. Continued price pressures in energy markets placed upward pressure on severance tax collections. While higher gasoline prices have depressed demand for gasoline and lowered gas tax collections.

Transportation-related revenue subject to TABOR ended FY 2020-21 down 3.5 percent, falling for the second consecutive year as fuel tax revenues continued to decline from reduced commuter traffic and travel activity. The decline in fuel tax revenue was partially offset by increased vehicle registrations as motor vehicle offices reopened. Revenue is expected to increase by 5.4 percent in FY 2021-22 as travel activity resumes. However, the spike in energy prices is expected to dampen motor fuel consumption over the next year compared with expectations in the last forecast. Increased travel activity and new fee revenue will contribute to growth through the forecast period with revenue increasing 10.3 percent in FY 2022-23 and 6.6 percent in FY 2023-24. The forecast for transportation-related revenue is presented in Table 10.

Most fuel taxes and vehicle registration fees are credited to the **Highway Users Tax Fund** (HUTF) and disbursed to the Department of Transportation, the State Patrol, the Division of Motor Vehicles, and to county and municipal governments for transportation purposes. In FY 2020-21, HUTF revenue decreased for the second consecutive year, falling 2.6 percent on sagging fuel consumption. Fuel tax receipts are expected to rebound in FY 2021-22, but remain below pre-pandemic peak levels until FY 2022-23. While fuel consumption is expected to grow through the forecast period, improving vehicle fuel efficiency and permanent shifts to remote work for some will dampen expected growth over the long term. In FY 2020-21, falling fuel revenue was partially offset by vehicle registration fees. DMV office closures during the spring of 2020 shifted a portion of FY 2019-20 vehicle registrations into FY 2020-21 and elevated revenue growth. However, registrations are expected to slow to trend levels through the forecast period. From FY 2021-22 through the forecast period, registration fee revenue will be further impacted by legislative adjustments that temporarily reduce the road safety surcharge.

The outlook for transportation-related revenue will also be influenced by other legislation enacted during the 2021 session, particularly Senate Bill 21-260. The bill has impacts on state revenue subject to and exempt from TABOR. In addition to the previously mentioned changes to the road safety surcharge, Senate Bill 21-260 created a road usage fee on gasoline and diesel fuel beginning in FY 2022-23 along with retail delivery fees credited to the Highway Users Tax Fund and Multimodal Transportation and Mitigation Options Fund. The bill's other revenue impacts occur in state enterprises, which are exempt from TABOR and excluded from the amounts shown in Table 10.

Table 10
Transportation Revenue by Source
Dollars in Millions

	Actual FY 2020-21	Estimate FY 2021-22	Estimate FY 2022-23	Estimate FY 2023-24	CAAGR*
Highway Users Tax Fund					
Motor and Special Fuel Taxes	$593.6	$637.5	$659.4	$665.8	3.9%
Percent change	-4.9%	7.4%	3.4%	1.0%	
Road Usage Fees	$0.0	$0.0	$59.7	$90.5	
Percent change	NA	NA	NA	51.5%	
Total Registrations	$400.2	$377.1	$363.3	$405.1	0.4%
Percent change	4.8%	-5.8%	-3.7%	11.5%	
Registrations	234	*$239.4*	*$245.9*	*$252.0*	
Road Safety Surcharge	*$137.8*	*$106.0*	*$92.0*	*$128.2*	
Late Registration Fees	*$28.3*	*$31.7*	*$25.4*	*$24.8*	
Other HUTF Receipts[1]	$48.1	$60.6	$81.0	$86.3	21.6%
Percent change	-23.7%	26.0%	33.7%	6.6%	
Total HUTF	**$1,041.9**	**$1,075.2**	**$1,163.3**	**$1,247.7**	6.2%
Percent change	-2.6%	3.2%	8.2%	7.3%	
State Highway Fund (SHF)[2]	$18.4	$13.5	$23.2	$23.7	8.8%
Percent change	-33.2%	-26.5%	71.7%	2.0%	
Other Transportation Funds	$95.5	$129.9	$157.9	$161.7	19.2%
Percent change	-5.8%	36.0%	21.6%	2.4%	
Aviation Fund[3]	*$16.9*	*$39.8*	*$45.8*	*$39.0*	
Multimodal Transp. Options Fund[4]	*$0.0*	*$0.0*	*$6.8*	*$7.6*	
Law Enforcement-Related[5]	*$6.9*	*$5.9*	*$5.0*	*$5.0*	
Registration-Related[6]	*$71.6*	*$84.1*	*$100.4*	*$110.2*	
Total Transportation Funds	**$1,155.8**	**$1,218.5**	**$1,344.5**	**$1,433.1**	7.4%
Percent change	-3.5%	5.4%	10.3%	6.6%	

Totals may not sum due to rounding.

**CAAGR: Compound average annual growth rate for FY 2020-21 to FY 2023-24.*
[1]*Includes daily rental fee, oversized overweight vehicle surcharge, interest receipts, judicial receipts, drivers' license fees, and other miscellaneous receipts in the HUTF.*
[2]*Includes only SHF revenue subject to Article X, Section 20, of the Colorado Constitution (TABOR). Beginning in FY 2019-20, SHF revenue subject to TABOR no longer includes local government grants and contracts.*
[3]*Includes revenue from aviation fuel excise taxes and the 2.9 percent sales tax on the retail cost of jet fuel.*
[4]*Retail delivery fee revenue credited to the fund under SB 21-260.*
[5]*Includes revenue from driving under the influence (DUI) and driving while ability impaired (DWAI) fines.*
[6]*Includes revenue from Emergency Medical Services registration fees, emissions registration and inspection fees, motorcycle and motor vehicle license fees, and POST Board registration fees.*

Severance tax revenue, including interest earnings, totaled $14.7 million in FY 2020-21, a decline from $131.7 million in the prior year. After decreasing over the past two fiscal years, revenue is expected to increase to $125.9 million in FY 2021-22. Severance tax revenue is expected to increase modestly in FY 2022-23 as price pressures keep oil and gas prices elevated through 2022. Collections are expected to decline in FY 2023-24 as prices decline and ad valorem tax credit utilization increases. 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.

Table 11
Severance Tax Revenue Forecast by Source
Dollars in Millions

	Actual FY 2020-21	Estimate FY 2021-22	Estimate FY 2022-23	Estimate FY 2023-24	CAAGR*
Oil and Gas	$0.6	$112.4	$114.1	$100.4	461.7%
Percent Change	-99.5%	19740.2%	1.5%	-12.0%	
Coal	$1.9	$2.5	$2.8	$3.0	16.1%
Percent Change	-27.4%	29.4%	12.3%	7.6%	
Molybdenum and Metallics	$2.2	$2.0	$2.1	$2.1	-1.5%
Percent Change	-5.7%	-10.0%	5.0%	1.2%	
Total Severance Tax Revenue	**$4.7**	**$116.8**	**$118.9**	**$105.5**	182.0%
Percent Change	-96.0%	2385.0%	1.8%	-11.3%	
Interest Earnings	$10.0	$9.0	$9.6	$9.6	-1.2%
Percent Change	-32.8%	-9.3%	5.7%	0.7%	
Total Severance Tax Fund Revenue	**$14.7**	**$125.9**	**$128.5**	**$115.1**	98.7%
Percent Change	-88.8%	757.3%	2.1%	-10.4%	

**CAAGR: Compound average annual growth rate for FY 2020-21 to FY 2023-24.*

Severance tax collections from **oil and natural gas** totaled $0.6 million in FY 2020-21 and are forecast to increase in FY 2021-22 to $112.4 million as rising oil and gas prices increase the value of production in the state. In early FY 2020-21, low oil prices constrained the U.S. and Colorado oil and gas sectors and resulted in production cuts. The ad valorem tax credit also put downward pressure on collections as property taxes for 2019 were paid on near-historic-low production levels. Severance taxes fell to $0 for many oil wells in 2020 because on top of low prices and a slowdown in production activity, producers claimed the ad valorem credit, which allows oil and gas producers to deduct any property taxes paid from their severance tax liability.

After falling precipitously in early 2020, oil prices have risen to over $110 per barrel in March 2022. Similarly, natural gas prices have risen to over $4.50 per million BTU in March 2022, after they fell below $2 per million BTU for much of 2020. Despite the sharp rise in prices, production in Colorado remains subdued. Many wells are shut and only 12 rigs are active in the state, down from 26 during September 2019. Oil prices are forecast to average about $100 per barrel over 2022, and $85 per barrel over 2023. Natural gas prices are forecast to average $3.95 per million BTU over 2022, and $3.59 over 2023.

While production has not yet bounced back in Colorado, and is expected to remain below 2019 levels throughout the forecast period, higher prices will put upward pressure on severance tax collections as taxes are paid on the value of oil and gas produced. Additionally, **HB 21-1312** will increase oil and gas collections beginning in FY 2021-22, as it restricted the value of the netback deduction for producers.

After declining by 27.4 percent in FY 2020-21, **coal severance tax** revenue is expected to increase in FY 2021-22 by 29.4 percent to $2.5 million. **HB 21-1312** also phased out certain tax credits for coal production in the state, which will contribute to collections growth through FY 2023-24 when the credits are fully phased out. Based on current expectations, coal severance taxes are expected to increase further to $2.8 million in FY 2022-23 and $3.0 million in FY 2023-24. In years beyond the forecast period, collections are expected to resume their previous decline as electricity generation continues to transition away from coal to renewable sources and natural gas.

Metal and molybdenum mines are expected to pay $2.0 million in severance taxes on the value of minerals produced in FY 2021-22 and $2.1 million in FY 2022-23. In 2021, prices for molybdenum have increased nearly 100 percent, and are expected to remain elevated in the near future, increasing the value of production in the state.

Finally, **interest earnings** on severance tax revenue are expected to total $9.0 million in FY 2021-22 and $9.6 million in FY 2022-23.

Limited gaming revenue includes taxes, fees, and interest earnings collected in the Limited Gaming Fund and the State Historical Fund. 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. Casinos on tribal lands in southwestern Colorado are not subject to the state tax.

Most gaming revenue is subject to TABOR. Revenue attributable to gaming expansions enacted under Amendment 50 and Amendment 77 is TABOR-exempt. After the adoption of Amendment 77 at the November 2020 general election, voters in Black Hawk, Central City, and Cripple Creek subsequently passed ordinances that removed bet limits and allowed city councils to permit more games. Expanded gaming in each community began May 1, 2021.

Limited gaming revenue subject to TABOR declined by 35.4 percent to $69.1 million in FY 2019-20 before rebounding by 47.2 percent to $101.8 million in FY 2020-21. Boosted by expanded gaming activity from Amendment 77 and pent-up demand following the pandemic-induced downturn, revenue is expected to grow by 37.2 percent in FY 2021-22, slow to 1.3 percent growth in FY 2022-23 and FY 2023-24. In March 2020, Colorado casinos were closed by executive order and were allowed to reopen with limited capacity and limited game offerings in June. Most casinos remitted little tax revenue during the last quarter of FY 2019-20. Gaming revenue gradually improved over the latter half of calendar year 2020 and into 2021. As restrictions were removed, revenue surged over the spring months and continued to grow over the second and third quarters of 2021. Revenue for FY 2021-22 is expected to grow at a strong pace as the industry recovers from the health and economic crises, and the new bet limits and games take effect. Additionally, a large expansion of the Monarch Casino and Resort recently opened in anticipation of Amendment 77 that will further boost revenue.

House Bill 20-1400, passed by the legislature during the 2020 session, changed 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-pandemic levels. The forecast predicts that revenue will exceed FY 2018-19 levels in FY 2021-22.

Sports betting was legalized in the state after the passage of Proposition DD during the November 2019 election. Betting launched on May 1, 2020, growing rapidly through the latter half of 2020 and into 2021. 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, fee revenues are subject to TABOR. License fees, the sports betting operations fee, and other miscellaneous fees subject to TABOR collected during FY 2020-21 totaled $2.4 million, with sports betting operations fees comprising about 88 percent of this revenue. Sports betting revenue subject to TABOR was up 6.4 percent through the first seven months of FY 2021-22, reaching $2.2 million. Sports betting revenue subject to TABOR is included in the Other Cash Funds forecast.

In FY 2020-21, sports betting taxes exempt from TABOR totaled $8.1 million. Betting activity continues to grow and in FY 2021-22, revenue was up nearly double through January year-to-date. Through January, sports betting tax revenue totaled about $7.6 million.

Marijuana tax revenue totaled $424.5 million in FY 20202-21, a 22.2 percent increase from the prior fiscal year. Marijuana tax revenues will decline in FY 2021-22 by 8.0 percent to $390.6 million. Despite this decline, revenue in FY 2021-22 will remain about 12.5 percent higher than FY 2019-20 levels. Revenue is forecast to grow throughout the remainder of the forecast period, reaching $418.0 million in FY 2023-24. 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 subject to the state's revenue limit. Tax revenue from marijuana sales is shown in Table 12.

The special sales tax is the largest source of marijuana revenue and is imposed at a rate of 15 percent of the retail price of marijuana. The special sales tax generated $288.2 million in FY 2020-21. Revenue from the special sales tax is expected to decline to $265.1 million in FY 2021-22, an 8.0 percent decrease from the prior year. Expectations for FY 2021-22 were revised down slightly from the December forecast based on weaker than expected collection. Revenue is expected to grow through the rest of the forecast period, reaching $275.5 million in FY 2022-23 and $290.4 million by FY 2023-24. The state distributes 10 percent of the special sales tax to local governments and retains the rest in the Marijuana Tax Cash Fund, the General Fund, and the State Public School Fund.

Table 12
Tax Revenue from the Marijuana Industry
Dollars in Millions

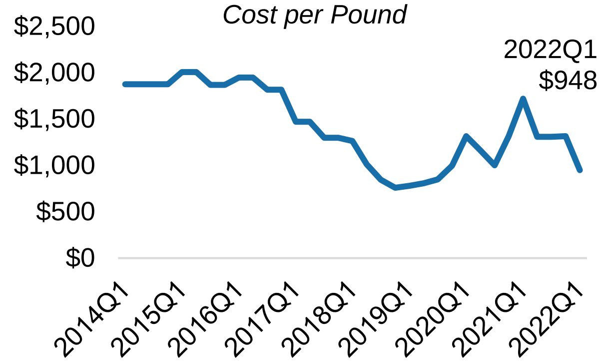
	Actual FY 2020-21	Estimate FY 2021-22	Estimate FY 2022-23	Estimate FY 2023-24	CAAGR*
Proposition AA Taxes					
Special Sales Tax	$288.2	$265.1	$275.5	$290.4	0.2%
State Share of Sales Tax	$259.4	$238.6	$247.9	$261.3	
Local Share of Sales Tax	$28.8	$26.5	$27.5	$29.0	
15% Excise Tax	$120.8	$111.7	$110.2	$114.0	-1.9%
Total Proposition AA Taxes	**$409.0**	**$376.9**	**$385.6**	**$404.4**	1.8%
Percent Change	22.5%	-7.9%	2.3%	4.9%	
2.9 Sales Tax (Subject to TABOR)					
2.9% Sales Tax on Medical Marijuana	$13.8	$12.2	$11.8	$11.9	-4.8%
2.9% Sales Tax on Retail Marijuana	$1.6	$1.4	$1.5	$1.6	0.2%
TABOR Interest	$0.1	$0.1	$0.1	$0.1	
Total 2.9% Sales Tax	**$15.5**	**$13.8**	**$13.4**	**$13.6**	-4.2%
Percent Change	16.2%	-11.1%	-2.8%	1.7%	
Total Marijuana Tax Revenue	**$424.5**	**$390.6**	**$399.0**	**$418.0**	**-0.5%**
Percent Change	22.2%	-8.0%	2.1%	4.8%	

**CAAGR: Compound average annual growth rate for FY 2020-21 to FY 2023-24.*

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 2020-21, the excise tax generated $120.8 million, a 36.5 percent increase from the prior year. After strong growth in FY 2020-21, marijuana excise tax revenue will decline in FY 2021-22 on slowing demand and declining wholesale prices. Revenue from marijuana excise taxes is expected to total $111.7 million in FY 2021-22, $110.2 million in FY 2022-23, and $114.0 million in FY 2023-24. 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 fell to $948 per pound in the first quarter of 2022 as shown in Figure 5. After facing upward pressure in 2020 due to increased demand and constrained supply, the wholesale price has largely been in decline in recent quarters. The wholesale price is a significant determinant of excise tax revenue, and remains both an upside and downside risk to the forecast.

Figure 5
Calculated Average Wholesale Rate
Cost per Pound



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. The medical marijuana sales tax generated $13.8 million in FY 2020-21, and is expected to generate slightly less, $12.2 million, in FY 2021-22. Retail marijuana dispensaries remitted the state sales tax on marijuana accessories totaling $1.6 million in FY 2020-21, and this amount is expected to decline in FY 2022-23 to $1.4 million before rising through the remainder of the forecast period. Revenue from the 2.9 percent sales tax is deposited in the Marijuana Tax Cash Fund and is subject to TABOR.

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 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.

As shown in Table 13, FML revenue totaled $82.7 million in FY 2020-21, a 31.8 percent increase from FY 2019-20. In FY 2021-22, FML revenue is forecast to increase 45% percent to $119.9 million. Producers are expected to increase production in the near future due to higher natural gas prices and increased expectations for demand. Natural gas prices fell in 2020 to below $2 per million BTU, but have increased to over $4.50 per million BTU in early-2022. Declining natural gas prices in 2023 are expected to result in declining FML revenues in FY 2022-23.

Table 13
Federal Mineral Lease Revenue Distribution
Dollars in Millions

	Actual FY 2020-21	Estimate FY 2021-22	Estimate FY 2022-23	Estimate FY 2023-24
Total FML Revenue	$82.7	$119.9	$112.6	$116.2
Bonus Payments (portion of total revenue)	**$2.5**	**$3.6**	**$3.4**	**$3.5**
Local Government Permanent Fund	$1.2	$1.8	$1.7	$1.7
Higher Education FML Revenue Fund	$1.2	$1.8	$1.7	$1.7
Other (non-bonus) **FML Revenue**	**$80.2**	**$116.3**	**$109.2**	**$112.7**
State Public School Fund	$38.8	$56.2	$52.8	$54.5
Colorado Water Conservation Board	$8.0	$11.6	$10.9	$11.3
DOLA Grants	$16.0	$23.3	$21.8	$22.5
DOLA Direct Distribution	$16.0	$23.3	$21.8	$22.5
School Districts	$1.4	$2.0	$1.9	$1.9
Higher Education FML Revenue Fund	$1.2	$1.8	$1.7	$1.7

DOLA = Department of Local Affairs.

Note: The table shows the actual and projected revenue distributions to the various FML recipients. It does not reflect transfers of FML revenue from the recipients and funds to other funds, such as the General Fund, that have occurred.

The **Unemployment Insurance (UI) Trust Fund** ended FY 2020-21 with a deficit of $1.0 billion, as the high levels of benefits paid during the pandemic drained the fund without sufficient revenue to offset losses. The fund is expected to return to solvency in FY 2023-24. Forecasts for UI revenue, benefit payments, and year-end balances are shown in Table 14. 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 remain elevated after seeing 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. Benefits paid increased further in FY 2020-21, to $2.0 billion. As a consequence, the fund was nearly depleted on June 30, 2020, triggering a move to the second highest premium rate schedule beginning January 1, 2021, and became insolvent on August 18, 2020.

Table 14
Unemployment Insurance Trust Fund
Revenues, Benefits Paid, and Fund Balance
Dollars in Millions

	Actual FY 2020-21	Estimate FY 2021-22	Estimate FY 2022-23	Estimate FY 2023-24	CAAGR*
Beginning Balance	$412.2	($1,014.2)	($767.4)	($114.2)	
Plus Income Received					
UI Premium	$600.2	$842.8	$1,023.0	$1,222.1	26.7%
Solvency Surcharge	$0.0	$0.0	$123.1	$260.4	
Interest	$0.7	$0.0	$0.0	$0.0	
Other**		$1.1			
Total Revenues	**$600.9**	**$843.8**	**$1,146.1**	**$1,482.6**	**35.1%**
Percent Change	7.6%	40.4%	35.8%	29.4%	
Less Benefits Paid	($2,027.3)	($597.0)	($492.9)	($482.2)	-38.0%
Percent Change	59.8%	-70.6%	-17.4%	-2.2%	
Accounting Adjustment	$0.0	$0.0	$0.0	$0.0	
Ending Balance	**($1,014.2)**	**($767.4)**	**($114.2)**	**$886.2**	
Solvency Ratio					
Fund Balance as a Percent of Total Annual Private Wages	-0.72%	-0.51%	-0.07%	0.53%	

Totals may not sum due to rounding.
**CAAGR: Compound average annual growth rate for FY 202-21 to FY 2023-24.*
***Other income includes Coronavirus Relief Funds applied to federal loans outstanding.*

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. Colorado began borrowing from the Federal Unemployment Account (FUA) to fund benefit payments in August 2020. As of March 11, 2022, Colorado has $1.013 in federal loans outstanding. Colorado is one of nine states with outstanding FUA loans, which range from Connecticut's $454.5 million to California's $19.6 billion. FUA loans were extended interest-free until September 6, 2021, at 2.28 percent during the remainder of 2021, and a rate of 1.59 percent in 2022. Colorado made an interest payment of $1.5 million in September 2021 from Coronavirus Relief Funds. The state will be required to make the next interest payment on outstanding loans by September 30, 2022. By law, employer contributions to the Unemployment Compensation Fund cannot be used for these payments.

The amount of UI benefits paid is expected to decline in FY 2021-22, to $597.0 million, and to fall further in FY 2022-23 and FY 2023-24, to $492.9 million and $482.2 million, respectively. The negative fund balances beginning in FY 2020-21 resulted 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 is suspended for 2021 and 2022, and the chargeable wage base is held constant at $13,600 for 2021. Beginning in 2022, the chargeable wage base will increase incrementally, to $17,000 in 2022, to $20,400 in 2023, and to $23,800 in 2024. The solvency surcharge will be turned on beginning January 1, 2023 and is expected to remain in place as long as the forecast fund balance remains below the 0.7 percent of annual private wages required to turn the solvency surcharge off. Fund revenues are expected to increase through the forecast period, surpassing benefits paid starting in FY 2021-22 and allowing repayment of federal loans outstanding and an improvement in the UITF balance.

Economic Outlook

The U.S. and Colorado economies continue to show growth across most sectors as the pandemic approaches an endemic phase. Yet, new and elevated risks to the economic recovery have emerged with the war in Ukraine, which has shocked global commodity markets and poses a new source of global economic uncertainty. Inflation has increasingly come into view as a major concern for businesses and consumers. In addition to wage pressures from the tight labor market, and elevated goods prices due to pandemic-induced supply-chain disruptions and strong global demand, the war in Ukraine has caused inflationary pressures to spike further by impacting crude oil, agricultural, and metals markets. The economic impacts of the geopolitical conflict will depend on the duration and escalation of conflict, which poses significant downside risks to global economic and financial markets.

As inflationary pressures mount, the Federal Reserve increased their benchmark interest rate, the federal funds rate, by 25 basis points in March, and additional increases are expected throughout the year. While this forecast assumes a smooth transition toward tighter monetary policy, efforts to rein in inflation could come at the cost of economic growth and may be a source of volatility in financial markets. The risk of recession during the forecast period is elevated as geopolitical conflict, inflation, and monetary policy tightening challenge economic growth.

The "Great Reconsideration" continues in labor markets, with elevated quits, retirements, and job switching. Workers are slowly increasing hours and taking on additional jobs, yet work is slow to normalize to pre-pandemic levels of activity for the hardest-hit industries, and employers are struggling to find needed help. While the tight labor market is producing sizable wage gains, many households are increasingly drawing down savings, as inflationary pressures are outpacing wage growth for most.

Pandemic assumptions. The pandemic is expected to ease further in 2022 as populations across the country and globe edge toward herd immunity and higher levels of vaccination. The pandemic is expected to have more geographically and industry-isolated impacts, instead of broad-based impacts and to ease throughout the forecast period. That said, the risk of a more virulent variant than Omicron remain.

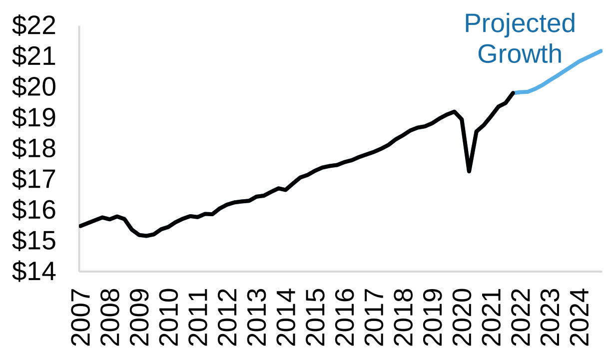
Tables 15 and 16 on pages 62 and 63 present histories and expectations for key indicators for the U.S. and Colorado economies, respectively.

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 all final goods and services produced in the U.S. Real GDP declined by an average of 3.4 percent in 2020, as the severe contraction during the first half of the year pulled annual levels of economic activity well below those experienced in 2019 (Figure 6). In 2021, real GDP grew by over 6 percent in the first half of the year, but slowed to 2.3 percent in the third quarter before growing by 7.0 percent in the fourth quarter, closing the year with an average growth of 5.7 percent growth, the largest gain since 1984. Fourth-quarter growth reflected a broad-based recovery, with increases not only in consumer spending, which has largely fueled the recovery, but also in inventory investment and exports, offset by declines in government spending and increased imports. The war in Ukraine is expected to weigh heavily on U.S. economic activity in the first and second quarter of 2022, as elevated crude oil prices spike inflationary pressures and dampen business investment and consumer spending. The tight labor market, ongoing supply chain disruptions, and monetary policy tightening are also expected to slow growth in 2022 and beyond.

- Real U.S. GDP is expected to slow in 2022, growing 2.5 percent over year ago levels as inflation erodes growth potential. The economy is projected to expand further in 2023 and 2024 at 2.6 percent and 2.4 percent, respectively, rates slightly below trend growth.

Figure 6
U.S. Real Gross Domestic Product
Trillions of Dollars



Source: U.S. Bureau of Economic Analysis and Legislative Council Staff March 2022 forecast. Data reflect seasonally adjusted annual rates.

Consumption spending slows. Consumer spending, as measured by personal consumption expenditures, accounts for more than two-thirds of total economic activity; it accounted for a majority of the decline in GDP in the second quarter of 2020, and has largely fueled the recovery so far. After growing by 11.4 percent and 12.0 percent in the first and second quarters of 2021, consumer spending slowed toward pre-pandemic levels of growth in the latter half of the year, growing by 2.0 percent and 3.1 percent in the third and fourth quarters, respectively, with fourth-quarter growth primarily reflecting increases in spending on services including health care, financial services and insurance, and transportation. Consumer spending on goods and services has shown divergent patterns during the pandemic, with spending on goods exceeding pre-pandemic levels by the third quarter of 2020, and spending on services only nearly recovering to pre-pandemic levels in the fourth quarter of 2021.

Business inventories recover in the fourth quarter. Business investment, as measured by gross private domestic investment, rebounded sharply in the second half of 2020, after declining for the three previous quarters. Business investment grew by 82.1 percent and 24.7 percent in the third and fourth quarters of 2020, respectively, before lagging again in the first half of 2021 with 2.3 percent and 3.9 percent declines in the first and second quarters, respectively. Business investment picked up in the latter half of 2021, growing by 12.4 percent in the third quarter before surging by 33.5 percent in the fourth quarter, primarily driven by an increase in private inventories as businesses restocked empty shelves in retail, led by motor vehicle and parts dealers, and wholesale, led by durable goods. The increase in business investment also reflected an increase in intellectual property products that was partly offset by a decrease in commercial and health care structures.

Exports of goods and services rebound. After declining by 5.3 percent in the third quarter, exports grew by 23.6 percent in the fourth quarter, reflecting increases in both goods, led by consumer goods, and services, led by travel. Net exports continued to be a slight drag on economic activity, as imports also increased. Ongoing impacts of the COVID-19 pandemic on economies across the globe continue to mute export activity, particularly for services, which remain below pre-pandemic levels by 18 percent, likely reflecting dampened international tourist activity. Fourth-quarter goods exports recovered to pre-pandemic levels for the first time.

Waning federal stimulus drags on growth. Government spending rose precipitously in the first quarter of 2021 with the March passage of the American Rescue Plan Act of 2021. This act included direct payments to households, extended unemployment benefits, individual tax relief and financial assistance, business assistance, public health spending, and aid to state and local governments amounting to approximately $1.9 trillion. The impact of federal stimulus has continued to wane since the second quarter of 2021. After increasing by 11.3 percent in the first quarter, federal government spending declined by 5.3 percent, 5.1 percent, and 4.5 percent in the second, third, and fourth quarters, respectively. After increasing for the previous two quarters, state and local government spending also declined in the fourth quarter.

The passage of the federal Infrastructure Investment and Jobs Act in late 2021 will increase government spending over normal levels by $550 billion over the next five years. The bill is expected to increase economic activity, with additional investments in various infrastructure projects, including roads, bridges, transit and rail, and broadband.

Colorado's economic growth in perspective. Prior to the pandemic-induced recession, Colorado had enjoyed more than a decade of strong economic growth, outpacing most other states in the nation across economic indicators, including employment, personal income, and GDP growth. Coming off of these strong levels of growth, in the near-term the state is likely to slip from the list of the top five to ten states by most major indicators toward a nationwide average. Slower growth is expected because the state is growing from a higher relative base of economic activity. Additionally, after a decade of double-digit growth in home prices and strong growth in rent prices, high housing costs across many regions of the state will pose headwinds to jobs growth in many of the less affordable regions of the state.

Labor Markets

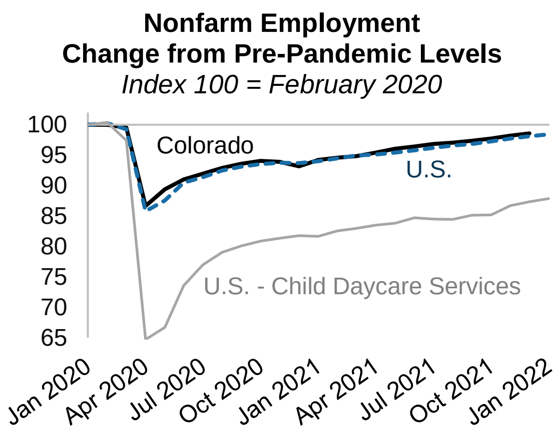
The labor market continues to recover, growing ever closer to pre-pandemic levels of employment. Indicators suggest waning supply and demand mismatches, with businesses in some sectors still reporting difficulty finding workers. Retirements and resignations have contributed to continued labor shortages in some sectors as workers have left the labor force or reduced hours or the number of jobs worked for myriad reasons, including health concerns, job dissatisfaction, and child or other dependent care. The most recent revised data suggests that at the current rate, employment levels are expected to reach pre-pandemic levels in early 2022, and will reach pre-COVID trend levels with growth in late 2022.

- U.S. nonfarm employment is expected to increase by 3.4 percent in 2022 and 2.4 percent in 2023. The U.S. unemployment rate is expected to decline from 5.4 percent in 2021 to 3.7 percent in 2022 and to fall below pre-pandemic rates, averaging 3.4 percent in 2023.

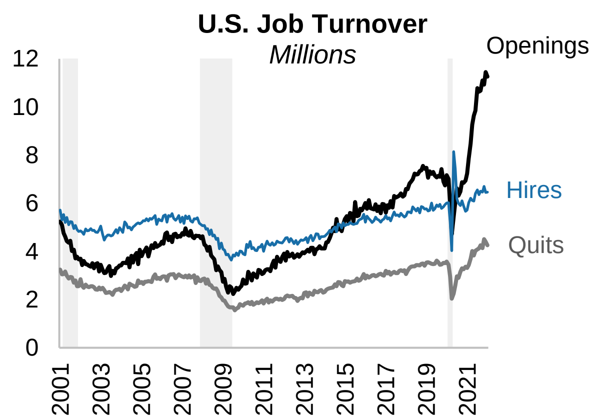
- In Colorado, nonfarm employment is expected to slightly outpace national trends in 2022 by growing 3.5 percent before slowing to 2.2 percent growth in 2023 as the labor market tightens further. The Colorado unemployment rate is expected to decline from 5.4 percent in 2021 to 3.9 percent in 2022 before falling further to 3.1 percent in 2023.

Labor supply issues abate, but employment gaps remain. The "Great Reconsideration" continues in labor markets, with elevated quits, retirements, and job switching. Workers are slowly increasing hours and taking on additional jobs (Figure 7, bottom left), yet work is slow to normalize to pre-pandemic levels of activity, and gaps remain. Based on the most recent data, U.S. and Colorado nonfarm employment were 1.4 percent (2.1 million jobs) and 0.2 percent (6,100 jobs), respectively, below February 2020 levels (Figure 7, top left). Workers continue to rethink their work-life balance, and churn in labor markets remains high, with elevated quits, hires and job openings (Figure 7, top right). In the current recovery, health concerns and elevated asset prices are factors in workers retiring at a faster pace, and staying retired, keeping the labor force participation rate of 55 and over workers well below pre-pandemic levels (Figure 7, bottom right). Labor force participation rates increased overall in February, but ticked down slightly for women, as caregiving responsibilities continue to weigh on labor force participation for those who care for dependents. Health concerns for young children who are ineligible for vaccines are compounded by a lack of childcare, where employment remains down by almost 12 percent compared to its February 2020 level (Figure 7, top left).

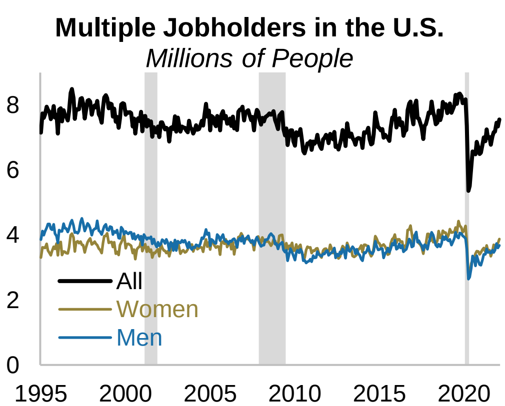
Figure 7
Selected U.S. and Colorado Labor Market Indicators



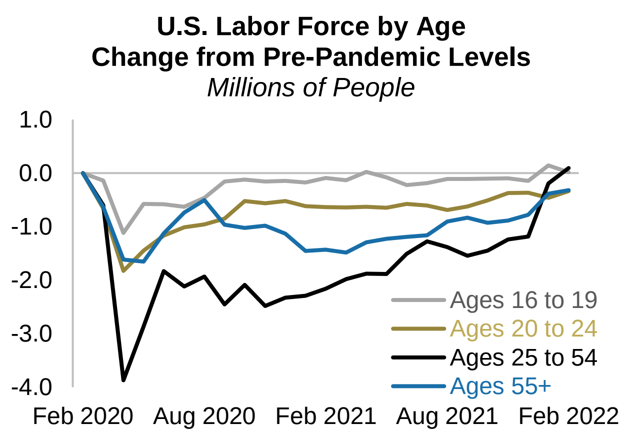
Source: Bureau of Labor Statistics. Data are seasonally adjusted and through January 2022 for Colorado, February 2022 for the U.S.



Source: U.S. Bureau of Labor Statistics, Job Openings and Labor Turnover Survey (JOLTS). Data are seasonally adjusted and through January 2022.



Source: Bureau of Labor Statistics, Current Population Survey. Data are not seasonally adjusted and are through February 2022.

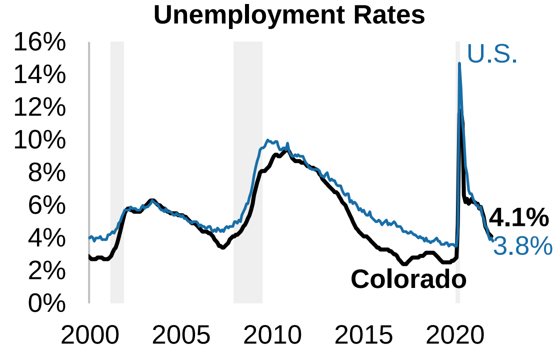


Source: U.S. Bureau of Labor Statistics with Legislative Council Staff calculations. Data are seasonally adjusted and through February 2022.

Nominal wage growth varies by industry and wage level. According to the most recent data from the Atlanta Federal Reserve Wage Tracker, which tracks changes in 12-month moving averages of nominal wages (not adjusted for inflation) based on the U.S. Current Population Survey, nominal wage growth picked up overall in 2021, from 3.4 percent in June, down from a pre-pandemic average of 3.6 percent, to 4.3 percent in February 2022, but varies across industries, ranging from highs of 4.8 percent and 4.7 percent in leisure and hospitality, and finance and business services, respectively, to lows of 3.4 percent and 3.9 percent in public administration, and education and health, respectively. Wages for earners in the lowest wage quartile are up by 5.9 percent in February 2022, with those in the highest wage quartile up by 3.2 percent.

The nation has recovered 90.4 percent of the jobs lost during the pandemic. Nationwide job gains were strong in February as the Omicron wave began to wane, with employers adding 678,000 jobs and bringing 2022 average monthly job gains to 579,500 (Figure 7, top left). Over the past 22 months, the U.S. has gained 19.9 million, or 90.4 percent, of the 22.0 million jobs lost between February and April 2020. February job gains were broad-based, with no major industry losing jobs. Leaders in job gains included leisure and hospitality (+179,000), professional and business services (+95,000), health care (+64,000), and construction (+60,000). Employment in the hard-hit leisure and hospitality sector is still down by 1.5 million, or 9.0 percent, since February 2020. The labor force participation rate edged up in February, to 62.3 percent, still 1.1 percent below its pre-pandemic level. Employment rose faster, pushing the unemployment rate down to 3.8 percent, still just above February 2020's rate of 3.5 percent (Figure 8).

Figure 8
Unemployment Rates



Source: U.S. Bureau of Labor Statistics. Data are seasonally adjusted. U.S. data are through February 2022. Colorado data are through January 2022.

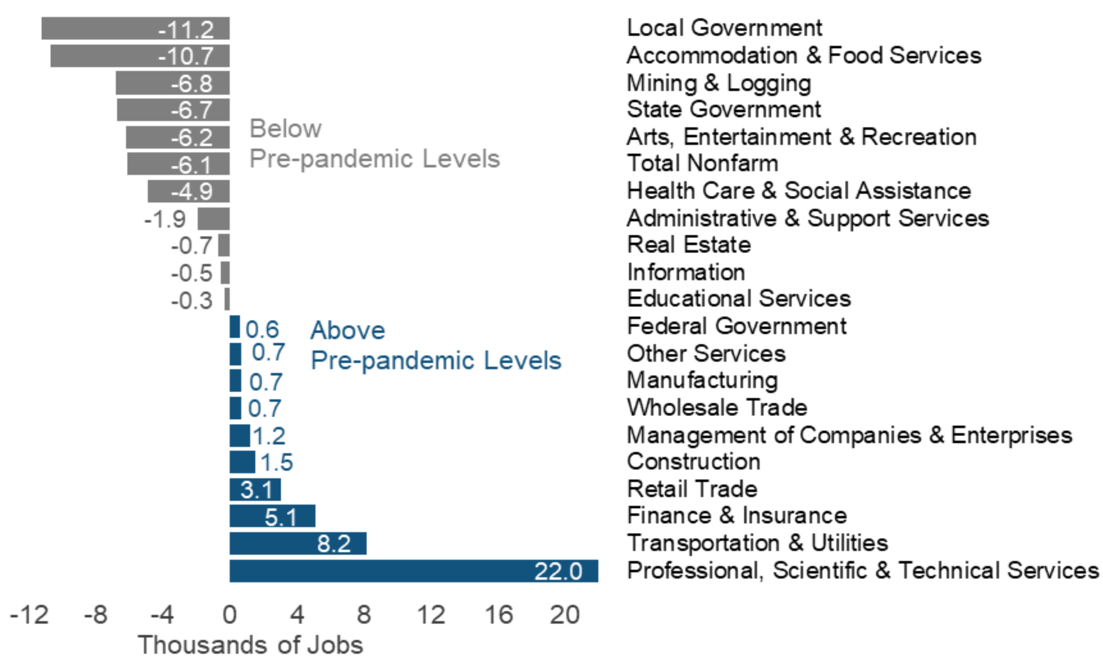
Supplemental data from questions added to the Bureau of Labor Statistics' household survey beginning in May 2020 provide further information about lingering impacts of the pandemic on U.S. workers. In February 2022, 13.0 percent of the employed population teleworked because of the pandemic, down from 15.4 percent the prior month, and from 35.4 percent in May 2020. In February 2022, 4.2 million people reported that they were unable to work because their employer closed or lost business due to the pandemic, and 1.2 million were prevented from looking for work due to the pandemic.

Colorado employment recovery exceeds national rate. Colorado's unemployment rate ticked down to 4.1 percent from December's revised rate of 4.2 percent, the lowest rate since February 2020, reflecting increases in the labor force (+ 16,700) as well as job gains (+6,700). The unemployment rate has fallen from the peak rate of almost 12 percent in May 2020 to its current low of 4.1 percent in 20 months, compared to the 51 months required to fall from the peak unemployment rate (9.4 percent) during the Great Recession to the same level of 4.1 percent. The labor force participation rate continues to improve, reaching 68.5 percent in January, the third highest among the 50 states, which helps relieve labor supply constraints. Among the 50 states ranked by lowest to highest unemployment rates, Colorado ranks 26th, equal to Maine and West Virginia. The lowest rate belongs to Nebraska and Utah (2.2 percent), while the highest rate belongs to New Mexico (5.9 percent).

With January's gain of 6,700 jobs, Colorado has regained 98.4 percent, or 368,400, of the 374,500 jobs lost between February and April 2020. Employment is down 6,100 jobs from its February 2020 level, but is down 118,800 jobs compared to the level of employment that would have been expected with the pre-COVID trend of 4,900 jobs added per month on average. January job gains were led by construction, up by 2,000 jobs, professional and business services, up by 1,900 jobs, trade, transportation, and utilities, up by 1,100 jobs, and manufacturing, up by 1,000 jobs. Over the year, the largest private sector job gains were in leisure and hospitality, which added 64,800 jobs. The sector is still 4.9 percent (16,900 jobs) below February 2020 levels. Other sectors with notable gains over the year include professional and business services (+30,800 jobs) and trade, transportation, and utilities (+11,000 jobs).

The jobs recovery varies across the state and across industries. Counties in the Pueblo and southern mountain region are still experiencing relatively high rates of unemployment. In January 2022, the state's highest unemployment rates were in Huerfano (7.2 percent), Pueblo (6.3 percent), Rio Grande (5.7 percent), Fremont (5.6 percent) and Las Animas (5.6 percent). The state's lowest unemployment rates are in the eastern plains counties of Cheyenne (1.6 percent) and Baca (1.6 percent). The Boulder and Greeley areas continue to lag in the employment recovery, with employment still below pre-pandemic levels, while Grand Junction and Colorado Springs regions areas have exceeded February 2020 employment levels.

Figure 9
Change from Pre-pandemic Levels in Colorado Employment by Industry
Change from February 2020 to January 2022



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

As shown in Figure 9, the accommodation and food services industry remains the biggest private sector loser in number of jobs, down 10,700 jobs since February 2020, but with a 92.3 percent recovery rate. Private industry sectors with significant jobs added since the beginning of the pandemic include professional, scientific, and technical services (up 22,000 jobs), transportation, warehousing, and utilities (up 8,200 jobs), finance and insurance (up 5,100 jobs), and retail trade (up 3,100 jobs). The mining and logging sector has continued to shed jobs since the pandemic began, and is down an additional 4,400 jobs since April 2020, for a total of 6,800 jobs lost since February 2020.

Employment data revisions. Nonfarm employment estimates are subject to change with monthly revisions and annual rebenchmark estimates released in March 2022. Total nonfarm employment was revised upward for all months in 2021, for an average monthly increase of 13,700, up from 12,700. The unemployment rate was revised downward, from an annual average of 5.9 percent to 5.4 percent in 2021.

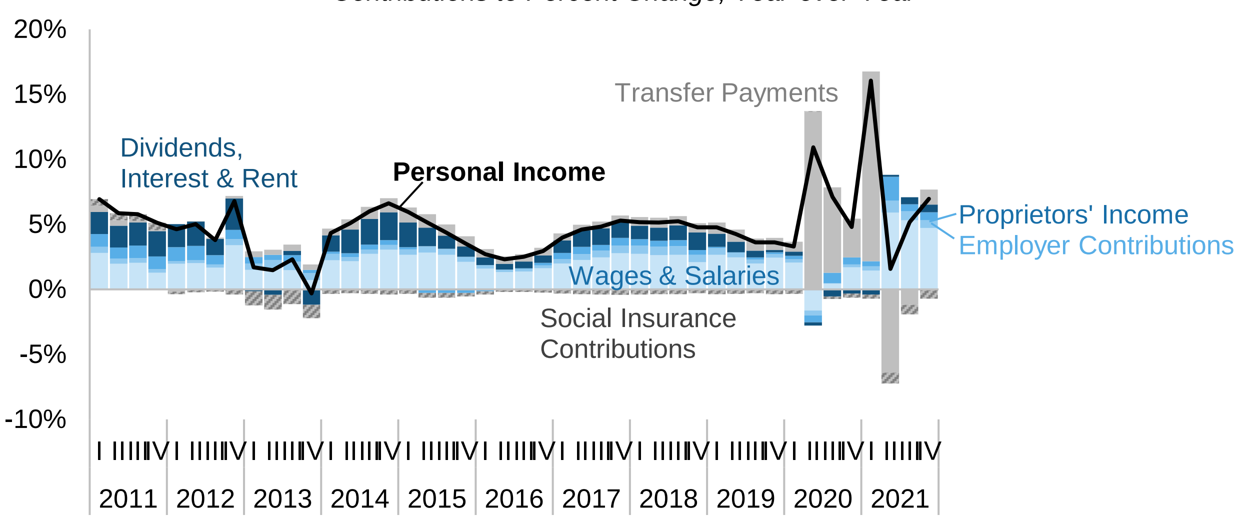
Personal Income

Personal income serves as an aggregate measure of most sources of household and some business income. The federal policy response to the pandemic resulted in a record-breaking boost to personal income in 2020 and at the start of 2021, as government transfer payments from unemployment insurance, direct payments to households, and other income support more than offset pandemic declines in wages and salaries. Robust growth in wages and salaries in 2021 more than offset the expiration of federal fiscal stimulus (Figure 10). The tight labor market is expected to sustain ongoing wage and salary growth in the year ahead, although inflationary pressures will erode real gains, and some households, particularly those with lower incomes, are finding it increasingly difficult to make ends meet.

- The drop-off in federal support will slow personal income growth considerably in 2022, when total personal income will increase 1.5 percent nationally and 1.8 percent in Colorado over year-ago levels. Personal income will reaccelerate in 2023, growing 4.5 percent and 4.8 percent nationally and in Colorado, respectively.

- Robust wage and salary growth is expected to continue in 2022, adding 8.5 percent in 2022 and 6.7 percent in 2023 for the U.S., and 8.6 percent in 2022 and 6.5 percent in 2023 in Colorado.

Figure 10
U.S. Personal Income and Its Contributions
Contributions to Percent Change, Year-over-Year



Source: U.S. Bureau of Economic Analysis. Data shown at seasonally adjusted annualized rates.

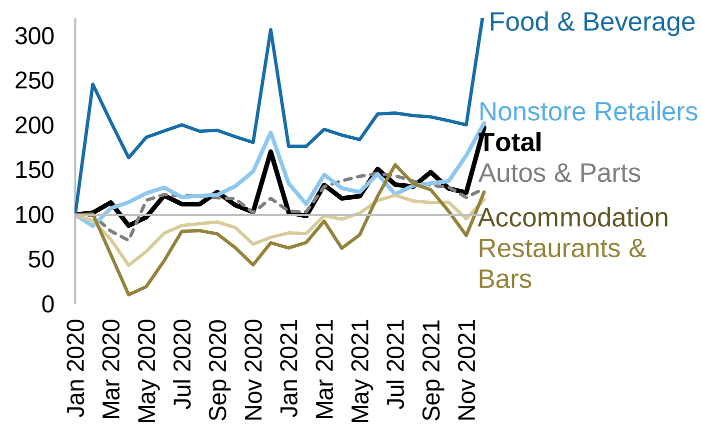
Inflation will outpace wage growth for many. While wage growth continues to pick up steam in an increasingly tight labor market, inflation is expected to outpace wage gains for many, if not most, households in 2022. The Census Bureau's Pulse data suggests that many households, especially lower-income households, are finding it increasingly difficult to make ends meet as inflationary pressures mount and with the expiration of federal fiscal stimulus, including the expanded child tax credit.

Consumer Activity

The main driver of the U.S. economy, consumer spending, continued to recover from pandemic-related disruptions through the end of 2021, although the war in Ukraine has emerged as a new risk. Inflation-adjusted service sector spending continued to lag pre-recession peaks through the fourth quarter of 2021, but ended the year only slightly below pre-pandemic levels as the health care and food services and accommodations sectors continued to improve. While the impact on spending from supply shortages and delayed production eased somewhat toward the end of the year, the war in Ukraine has injected new uncertainty into global energy and commodity markets. The resulting supply-chain disruptions and inflationary pressures could now persist throughout 2022, threatening to disrupt consumer spending, particularly as consumer sentiment remains persistently low.

Colorado retail sales robust in 2021, leisure and hospitality continues to strengthen. Colorado retail sales ended 2021 up 17.3 percent from the prior year, and were up 15.8 percent year-over-year in December (Figure 11). The holiday season pushed retail sales in December up to nearly double pre-pandemic levels recorded in January 2020. While the surge of COVID cases, supply-chain disruptions, struggling consumer confidence, and waning stimulus impacted retail sales activity through the fall, holiday spending for many consumers surged and sent retail sales to their highest level recorded.

Figure
Colorado Retail Sales
Index January 2020 = 100



Source: Colorado Department of Revenue. Data are not seasonally adjusted or adjusted for inflation and are through December 2021.

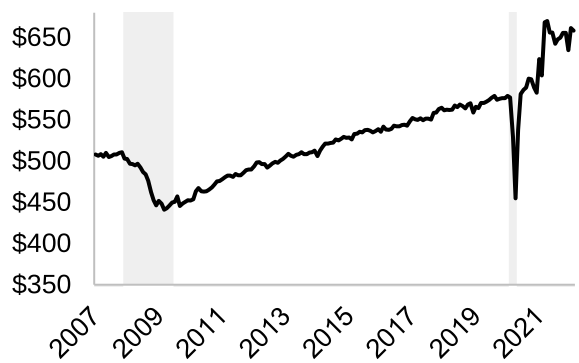
Retail trade encompasses industries that primarily sell retail goods as a service. Typically, retail trade comprises about half of the state's retail sales activity. In 2021, growth in the state's retail trade industries was led by sales of motor vehicles and parts. Nationally, production delays and supply shortages continue to dampen new vehicle inventories and sales volumes (Figure 12).

Despite the downward pressure on volume that has likely occurred at the state level as well, price pressures have pushed the dollar value of sales up. In 2021, Colorado sales for motor vehicle and parts dealers were up nearly $4.6 billion and comprised more than one-fifth of retail trade growth. Other strong contributors to growth in 2021 were general merchandise stores, building materials and nursery stores, and clothing stores. The fastest growing sectors in 2021 included clothing stores, gas stations, and sporting goods and hobby stores that were among the most adversely impacted during the recession. For the year, sales for each retail trade industry recorded double-digit growth, except for sales at food and beverage stores, which increased just 6.3 percent.

Sales continued to improve for restaurants and hotels, and retail sales for both industries are consistently above pre-pandemic levels. While sales for restaurants and hotels dipped in November as COVID cases surged and consumer confidence dipped, sales jumped again in December. Restaurants and bars ended the year about 17.4 percent above pre-pandemic levels, and hotels were about 25.5 percent higher.

Inflation, pandemic, and supply disruptions challenge real U.S. retail sales. Advance estimates indicate that inflation-adjusted (real) U.S. retail trade and food service sales peaked in April 2021 before falling by 2.1 percent in May (Figure 12). Since April 2021, monthly gains have been mixed, with incremental growth in some months offset by contractions in others. In January 2022, real retail sales remained about 2.2 percent below the April peak, but were up 5.1 percent year-over-year.

Figure 12
Real U.S. Retail and Food Service Sales
Billions of 2022 Dollars



Source: U.S. Census Bureau. Adjusted for inflation using the CPI-U index for all U.S. urban areas. Seasonally adjusted data through February 2022.

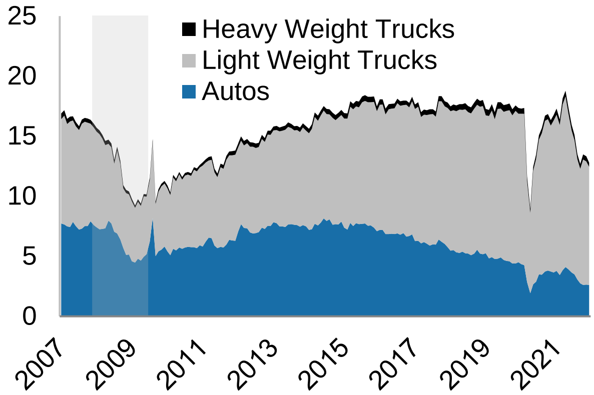
Surging inflation, COVID case counts, and supply chain disruptions dampened sales over the latter half of 2021. Indeed, from the third quarter of 2021 to the fourth quarter, nominal sales contracted for electronics and appliance stores, health and personal care stores, and department stores. Several industries failed to post sales growth that exceeded overall quarterly inflation, including motor vehicles and parts, furniture, sporting goods and hobbies, and food services. While demand for vehicles is up, sales are down considerably as supply chain disruptions starve the market of new vehicles (Figure 13).

Inflationary concerns and supply-chain disruptions have been exacerbated by the war in Ukraine. Many commodities are traded in world markets and the conflict threatens to disrupt agricultural, energy, and other markets. Energy market disruptions in particular broadly impact prices as the cost of shipping and manufacturing goods rises. Persistently high inflation could erode real sales growth and impact overall consumer purchases. Global logistics remain tenuous as disruptions in one part of the supply chain can have ramifications for other sectors.

Despite challenges over the latter half of 2021, real retail sales were up 14.1 percent for the year. Nominally, sales in 2021 were boosted by motor vehicles and parts, comprising more than 24 percent of increased sales activity, along with restaurants and bars, gasoline stations, non-store retailers, and clothing stores. Combined, these industries made up more than 72 percent of growth for the year. Not coincidentally, restaurants and bars, gasoline stations, and clothing stores were among the most impacted during the recession, and rebounding activity significantly contributed to overall sales growth.

Real U.S. consumer spending on services just shy of pre-pandemic levels in the fourth quarter. Recent estimates of economic activity in the fourth quarter of 2021 indicate that real consumer spending on services rose to 99.5 percent of spending compared to the fourth quarter of 2019. Services increased more slowly than expected in the fourth quarter, and were likely impacted by the Omicron wave and waning stimulus in the latter half of the year. Overall, real spending on services was up by 5.8 percent in 2021, led by gains in leisure and hospitality and health care. Leisure and hospitality spending reached its pre-pandemic peak for the first time in the fourth quarter.

Figure 13
U.S. New Vehicle Sales
Thousands of Units



Source: U.S. Bureau of Economic Analysis, Supplemental Estimates. Seasonally-adjusted annual rates through December 2021.

The recovery of services has significantly lagged spending on goods, and growth in services was once again outpaced by goods over the last year as pandemic impacts lingered. Specifically, the health care and leisure and hospitality sectors both employ significant portions of the nation's workers, account for a large share of business income, and contribute significant amounts to state and local tax revenues. Each sector continues to struggle with labor shortages and a lagging recovery. Once spending strengthens for these sectors, they are expected to broadly boost economic activity through the forecast period.

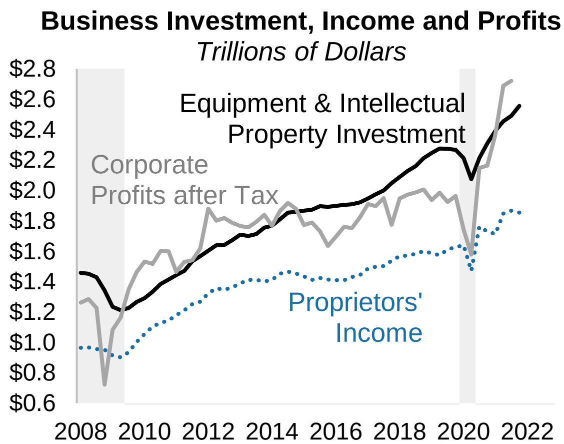
Household spending expectations strong, but overall outlook is mixed. According to the New York Federal Reserve's Survey of Consumer Expectations, year-ahead household spending expectations remained strong in January, despite a slight dip from November 2021. Spending expectations have rebounded significantly from pandemic lows and have risen well above pre-pandemic levels. Concurrently, households' perceptions of their current financial situations were mixed, with a slight decline in those expecting to be worse off coinciding with a decline in those expecting to be better off. Overall, more households expected their financial situations in the year ahead to remain about the same. While down slightly over the past couple months, consumers' inflation expectations remain elevated. It should be noted that the survey was conducted prior to the war in Ukraine. Overall, household spending activity should remain strong over 2022, but inflation, income growth, and financial stability pose downside risks over the forecast period.

Consumer activity expected to improve through the forecast period. Consumer activity in Colorado is expected to improve over the forecast period despite current headwinds that could impact near-term spending. Following strong holiday sales, a return to services will boost spending in 2022. However, nominal sales growth could mask inflationary pressures that erode gains in real spending activity. Over the year ahead, consumers will need to adjust to waning federal stimulus, higher interest rates, inflation, and continued supply chain disruptions. While risks related to the pandemic are fading, the war in Ukraine, energy market volatility, and inflation pose downside risks to the forecast. Additionally, persistently low consumer sentiment is also a downside risk that could begin to dampen household expectations and spending behavior in the year ahead.

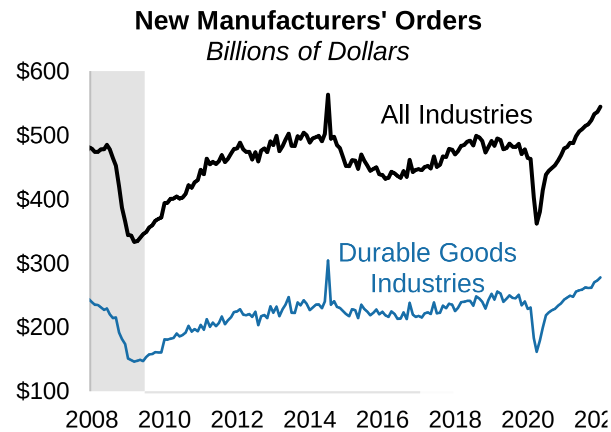
Business Activity

While business activity has surged above pre-pandemic levels across most indicators, supply chain disruptions, labor shortages, geopolitical instability, and historically high input prices threaten business activity in 2022. Rising wages and prices will erode business profits in the year ahead, while supply chains will stall production activity. Business incomes, including corporate profits and nonfarm proprietors' incomes, climbed to record highs throughout 2021 (Figure 14, top left). Business investment in equipment and software also climbed in 2021, signaling ongoing business growth and development through the end of the calendar year. The recovery in business activity from the pandemic-induced recession has been uneven across industries. Goods-based industries, including domestic manufacturing, have accelerated rapidly on strong demand, while many service industries—namely, tourism, travel, and in-person leisure and hospitality industries—continue to ebb and flow with COVID-19 case counts.

Figure 14
Selected U.S. Indicators of Business Activity



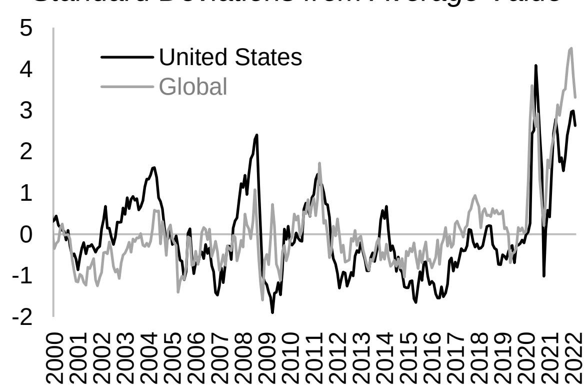
Source: U.S. Bureau of Economic Analysis. Data through the fourth quarter of 2021.



Source: U.S. Census Bureau. Data through January 2022.

Supply chain distributions and labor shortages will slow business growth in 2022. Supply-chain disruptions will continue to threaten growth for many industries in 2022 as pandemic-related shutdowns in prior months stall deliveries and slow manufacturing activity across the globe. While pandemic-related distortions are easing as COVID cases fall across the globe, the war in Ukraine poses new challenges and uncertainties. In recent months, the Federal Reserve Bank of New York published an index of U.S. and global supply chain pressures (Figure 15). Both U.S. and global indices remained elevated in February, prior to the Russian invasion of Ukraine.

Figure 15
Global Supply Chain Pressure Index
Standard Deviations from Average Value

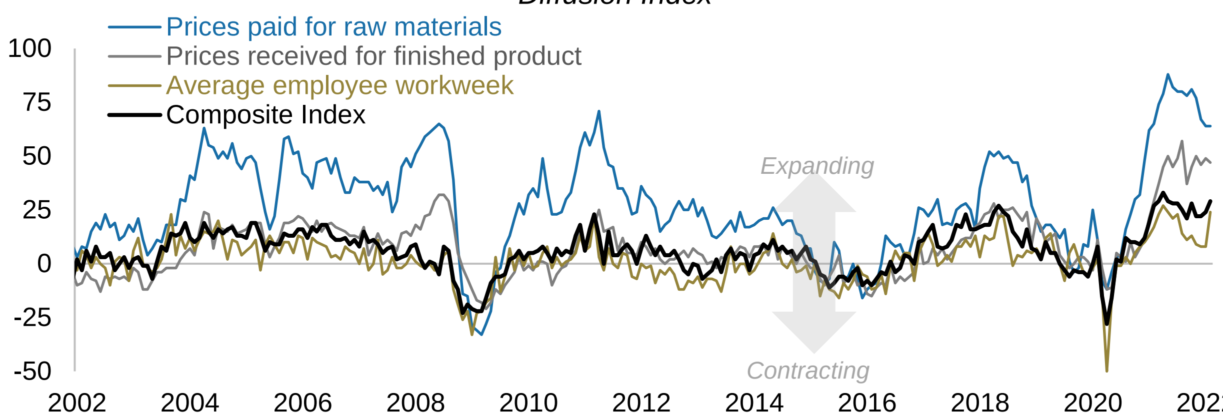


Source: Federal Reserve Bank of New York. Data are through February 2022.

Domestic manufacturing activity remains strong on elevated demand for goods. Spurred by pandemic-related shifts toward goods consumption, manufacturing activity remains strong nationally and in the Colorado region. Yet, supply chain disruptions and labor shortages are constraining production activity for many goods and threaten industry profits and growth. The Federal Reserve Bank of Kansas City produces a monthly manufacturing index for the Tenth District region, which includes Colorado and several surrounding states. The index is based on surveys of manufacturers and is a diffusion index, representing the share of respondents reporting increases or reductions in various indicators of manufacturing activity. The composite index combines indicators to provide an overall picture of manufacturing activity. The February 2022 release suggests an ongoing expansion at index highs (Figure 16).

All subcomponents of the index suggest an expansion in activity as well as mounting price pressures, including an ongoing expansion in the average hourly workweek. The vast majority of survey respondents indicated price pressures for raw inputs, and many manufacturers report increasing prices on final goods.

Figure 16
Tenth District Manufacturing Index
Diffusion Index



Source: Federal Reserve Bank of Kansas City. Data are seasonally adjusted. A value above zero indicates expansion; below zero indicates contraction in activity.

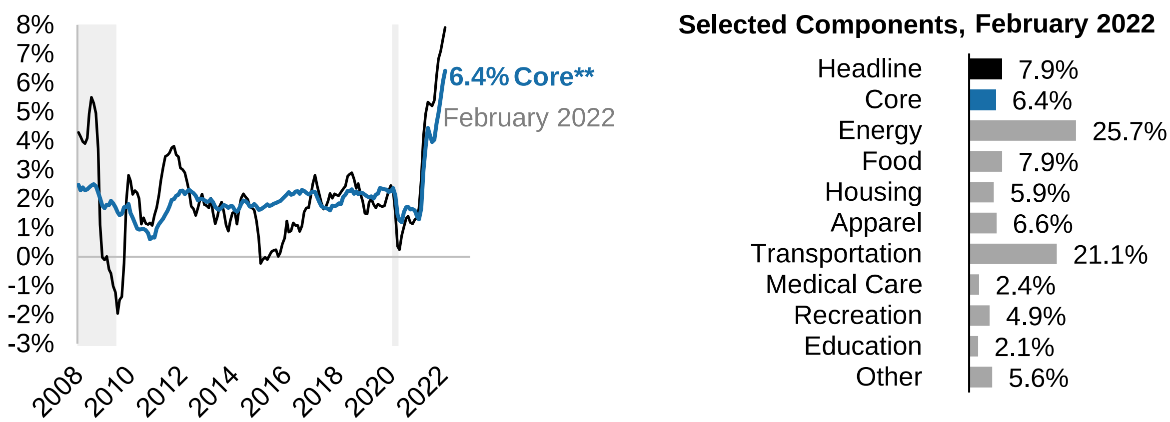
Service sectors expected to see gains as the pandemic eases, though challenges remain. As pandemic-related restrictions ease further in the months ahead, and on low COVID-19 case counts, the service sector is expected to see additional gains for industries most impacted by the pandemic, including restaurants and bars, hotels, travel, and arts and recreation industries. Yet, challenges remain for these industries, including labor shortages, the risk of future surges in COVID-19 cases, and high fuel prices, which are expected to dampen consumer spending and travel activity.

Business dissolutions and new business filings in Colorado. The pandemic has taken a toll on many businesses in the state, with data from the Secretary of State's Office indicating that business dissolutions accelerated in the fourth quarter of 2021. Dissolutions totaled 40,413 in 2021, up 7.7 percent above year-ago levels. The rise in dissolutions is not necessarily a leading indicator of what is to come, but instead a reflection of the recent recession and ongoing pandemic; a spike in dissolutions lagged the end of the Great Recession by over a year. Other indicators show strength in the business recovery. New business filings increased through the end of 2021 relative to year-ago levels, as did business renewals.

Monetary Policy and Inflation

Inflationary pressures continue to mount. Prices continue to rise across the United States and the rest of the world. As measured by the U.S. city average consumer price index (CPI-U), the average change in the price of goods and services faced by consumers has reached levels not seen since the early 1980s. Gasoline, shelter, and food prices drove the majority of price increases for the nation in February 2022, the most recent data available. As shown in Figure 17, following the COVID-19 induced recession, inflationary pressures fell dramatically with nationwide headline inflation falling to about 0.25 percent in May 2020. However, beginning in early 2021 prices have risen steadily. In February 2022, headline inflation rose to 7.9 percent, meaning that on average consumer prices in January 2022 were 7.9 percent higher than they were in January 2021. While core inflation, which excludes energy and food prices, rose to 6.4 percent.

Figure 17
U.S. City Average Consumer Price Index (CPI-U) Inflation
Percent Change in Prices, Year-over-Year



*Source: U.S. Bureau of Labor Statistics. *Headline inflation includes all products and services. **Core inflation excludes food and energy prices.*

What's driving inflationary pressures? In recent months, inflationary pressures have been driven by four main factors:

- **Higher global demand for goods.** As the economy has recovered from pandemic lows, consumer activity has rebounded—particularly driven by spending on goods as spending on many services remains depressed on health concerns. Unprecedented federal fiscal stimulus and low interest rates have supported consumer activity and borrowing.

- **Supply chain disruptions.** Global supply chains have been challenged by the pandemic-related shutdowns and slowdowns at manufacturing plants and with port closures across the globe. To date, the largest inflationary impacts have been concentrated in the transportation component on vehicle production disruptions and semiconductor chip shortages.

- **Higher energy prices.** Energy prices are the most volatile inflationary component. In 2021, gasoline and other fuel prices rose from historical lows in 2020, driven by growing global demand for crude oil with supply unable to keep pace. Unusual weather patterns have also spiked natural gas prices (for more information, see the energy section on page 55).

- **Geopolitical tensions.** Most recently, the invasion of Ukraine has spurred additional inflationary pressures. The conflict has further disrupted supply chains, and international sanctions placed on Russia have further constrained the supply of certain goods. Most notably, the prices of oil, gas, and cereal commodities, such as wheat, spiked in the wake of the invasion.

How long will inflationary pressures last? Some price pressures are still expected to be temporary, although more persistent than previously forecast. Supply chain disruptions are expected to persist well into 2022, maintaining elevated price pressures in the transportation component due to high gasoline and vehicle prices in particular. These pressures are expected to eventually give way, as supply chains diversify, production and manufacturing activity increases to meet demand, and increased vaccinations soften the impact of the pandemic or other disruptions over the longer term. Additionally, demand pressure may abate as many consumers are expected to delay or shift their consumption activity in response to high prices for fuel and goods, such as vehicles and trucks, and as services activities continue to normalize. The war in Ukraine raises risks to the inflation outlook, with damage to infrastructure in the area and the impact of sanctions on the global economy likely to outlast on the ground conflict.

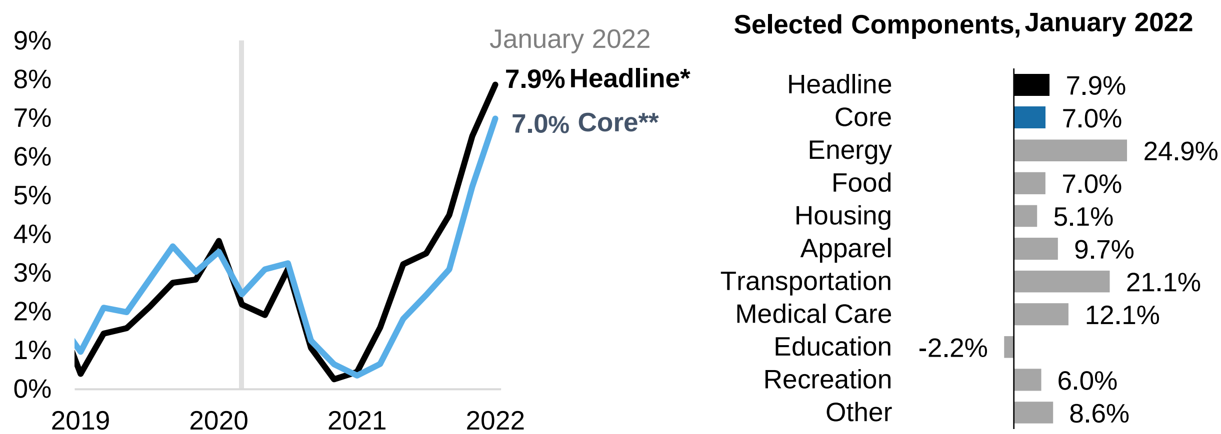
- Headline inflation for U.S. urban consumers is expected to rise by 7.1 percent in 2022 and 3.9 percent in 2023. Similarly, headline inflation in the Denver-Aurora-Lakewood combined statistical area is forecast at 7.0 percent in 2022 and 3.8 percent in 2023.

Monetary policy tightening expected in 2022. In response to accelerating inflation and its unexpected persistence, members of the Federal Open Market Committee of the Federal Reserve System have begun tightening monetary policy. The Federal Reserve increased their benchmark interest rate, the federal funds rate, in March 2022 and are expected to increase this rate several more times throughout 2022. Additionally, the Federal Reserve has begun tapering their asset purchases. By flexing these monetary policy tools, short- and longer-term interest rates are expected to rise in 2022, thereby raising the cost of borrowing, and tempering demand which, in turn, will help ease inflationary pressures. There is significant uncertainty regarding when these changes will begin to ease price pressures, and whether the Federal Reserve can engineer a soft landing amidst supply chain disruptions and shifting geopolitical tensions. Inflation is expected to remain well above the Federal Reserve's target of 2 percent throughout 2022.

Risks to the inflation forecast remain to the upside. Importantly, risks to the inflation forecast are skewed to the upside, as uncertain geopolitical tensions amidst the ongoing pandemic and the potential emergence of new variants risk additional disruptions to production, manufacturing, and shipping industries. Additional federal fiscal stimulus from infrastructure spending could prop up demand further, pushing construction costs higher than expected. Finally, businesses may raise prices more than expected for goods and services as a result of wage pressures from labor shortages in many industries.

Colorado inflationary pressures exceed the national average in early 2022. After remaining below the national average for all of 2021, Colorado's inflation rate exceeded the national rate in January 2022. Figure 18 shows the recent path of inflation as measured by the Denver-Aurora-Lakewood CPI-U index and inflation among select components. In January 2022, headline inflation reached 7.9 percent, while core inflation reached 7.0 percent. Similar to the national trend, the largest price increases occurred within energy and transportation, increasing 25 percent and 21 percent, respectively. For much of 2021, inflationary pressures were most concentrated in these two areas resulting largely from supply chain disruptions and energy prices, as discussed above. However, price pressures at the end of 2021 and start of 2022 suggest broad-based momentum. In particular, the housing component of the Denver-Aurora-Lakewood series began to accelerate in late 2021 after remaining well below its historical average for much of 2020 and 2021. Housing represents the largest component of the "basket of goods and services" used to calculate the consumer price index, representing 44.4 percent of all components for Colorado (42.4 percent for the U.S. city average index). The methodology for the CPI results in a six-month lag between actual rent increases and when data reflect those increases. The housing component is expected to see strong price pressures in 2022 and into 2023 as strong demand for housing continues.

Figure 18
Denver-Aurora-Lakewood Consumer Price Index (CPI-U) Inflation
Percent Change in Prices, Year-over-Year



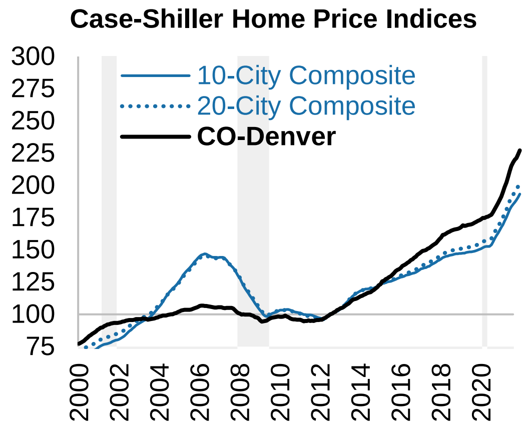
*Source: U.S. Bureau of Labor Statistics. A bi-monthly series of Denver-Aurora-Lakewood CPI data became available starting in 2018. *Headline inflation includes all products and services. **Core inflation excludes food and energy prices.*

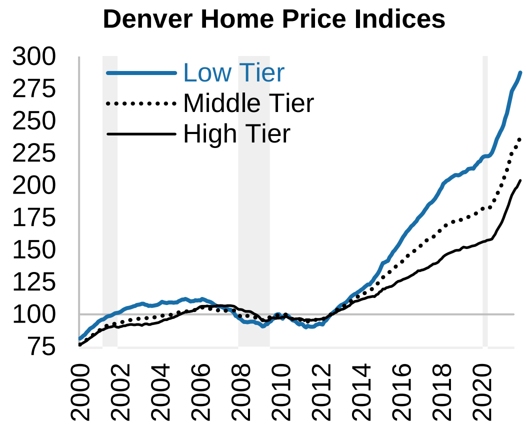
Real Estate and Construction Activity

Home prices surged in 2021, increasing affordability issues. Housing prices around the country skyrocketed in 2021, a product of high household savings, low interest rates, demographic contributors, pandemic distortions, and demand that has substantially outstripped supply. Many homebuyers accumulated considerable savings during 2020, when opportunities for discretionary spending were choked by public health restrictions. This, along with pandemic-inspired relocations, have increased competition for national housing stock limited by rising construction costs and supply chain disruptions, exacerbating several years of home starts lagging household growth. The impacts of those supply and demand mismatches on the housing market have been severe. The Case-Shiller 20-city composite home price index increased by 18.5 percent over the 12 months ending in December 2021, considerably outpacing even the fastest periods of home price appreciation during the 2000s (Figure 19, left).

Colorado's home prices are likewise soaring, by an average of 20.3 percent in 2021, slightly outpacing national rates of appreciation. In Denver, increases have been fairly consistent across homes priced at different levels (Figure 19, right). While real estate values have surged statewide, the Federal Housing Finance Agency reports the fastest rates of appreciation in Pueblo (+23.8 percent), Colorado Springs (+22.3 percent), and Grand Junction (+22.1 percent), compared with slower rates of growth in Boulder (+16.7 percent), Fort Collins (+17.9 percent) and Greeley (+18.7 percent) over the year ending in the fourth quarter of 2021.

Figure 19
Selected Home Price Indicators
Index 100 = July 2012





Source: S&P Dow Jones Indices LLC. Data are seasonally adjusted.

Home price appreciation is expected to slow during the forecast period, as supply chain issues are resolved, homebuilding increases, the savings glut is spent down, and interest rates rise. After reaching a record low of 2.7 percent in December 2020, rates for a 30-year fixed mortgage have seen a precipitous rise since December 2021, reaching 3.76 percent in March 2022. High home prices coupled with rising borrowing costs are expected to squeeze many would-be home buyers, especially first-time buyers, out of a wide array of markets across the United States. In Colorado, housing affordability is eroding even in previously affordable communities, and is expected to shape net migration in the state.

In Colorado, single-family homebuilding slowed after booming in 2020. After increasing by nearly 20 percent in 2020, builders pulled permits to construct 34,300 single-family homes in 2021, an increase of 3.5 percent compared with 2020. Multifamily homebuilding continued its ascent, with builders pulling permits to construct nearly 25,100 multifamily units in 2021, an increase of 84 percent from 2020.

Builders face multiple headwinds in responding to strong price growth and low inventory from severe pandemic-related construction supply chain disruptions, a shortage of skilled labor, and increasing costs for lumber and other materials. Lumber prices are nearly three times pre-pandemic levels in March 2022, pushed up on increased demand as people working from home seek to remodel. Home losses from the Marshall Fire in late December, as well as losses from natural disasters in other states are expected to compound these pressures on home construction costs and exacerbate the existing backlog of pandemic-related delays in homebuilding.

- Builders have responded to strong price growth and low inventory. The number of residential permits ended 2021 with a 48.6 percent increase over the prior year level. Residential construction activity is expected to remain at elevated levels, contracting slightly (3.7 percent) in 2022, and growing 1.8 percent and 3.4 percent in 2023 and 2024, respectively.

Nonresidential construction activity faces an uphill climb. Nonresidential construction activity peaked at the start of the pandemic and quickly receded, contracting by 7.0 percent between February 2020 and December 2021, but ended the year up by 3.9 percent year-over-year. Declines in activity were broad-based, with education, office, lodging, and recreational projects all sustaining large hits that have not yet reversed. Both public and private investors have pulled back, though public investment appears poised to accelerate following adoption of the federal Infrastructure Investment and Jobs Act (IIJA). On the private side, commercial construction has been a relative bright spot, up 16.8 percent in 2021, after bottoming out in December 2020.

Investors in nonresidential real estate anticipate a bumpy road ahead. Demand for hotels and other lodging is not expected to return to 2019 levels until beyond the current forecast period. Likewise, the shift toward remote work has dampened the outlook for office space. Low demand is expected to suppress construction activity in these areas, suppressing headline figures despite growth opportunities in other areas, including warehouses and industrial space. However, the passage of the IIJA has improved the public sector investment outlook.

- The value of nonresidential construction starts in Colorado is expected to remain flat, growing 2.1 percent in 2022, 4.2 percent in 2023, and 3.5 percent in 2024. While the cost of construction materials is expected to rise, a slowdown in activity is expected to partially offset rising prices.

Energy Markets

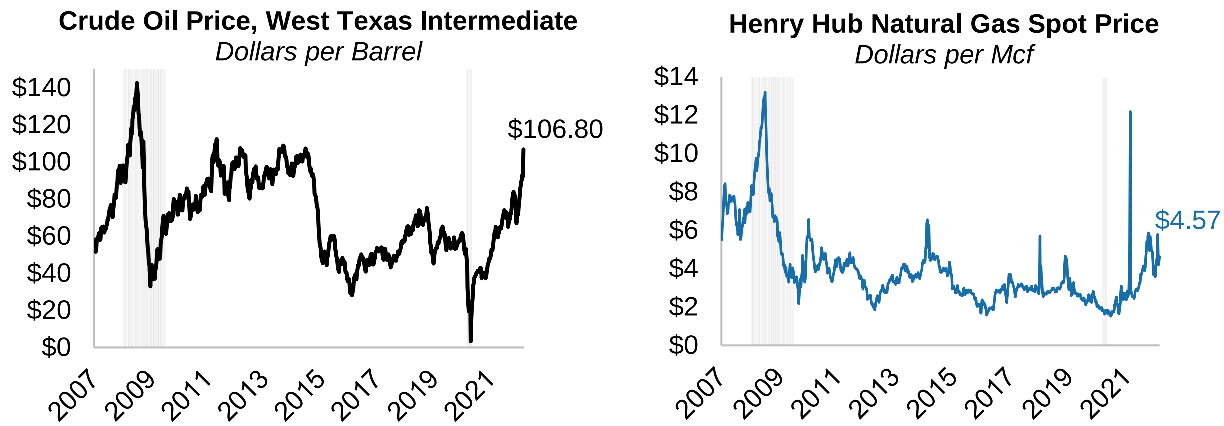
Inadequate supply and geopolitical tensions spur energy price increases. The COVID-19 pandemic, and now the war in Ukraine, have sent shockwaves through energy markets, resulting in intense price and production volatility. With initial lockdowns, the onset of the COVID-19 pandemic dramatically reduced demand for oil and gas, pushing fuel prices down significantly, with producers subsequently cutting production in response. As the economy began to normalize, demand for oil and gas rebounded faster than supply, causing consistent upward price pressure for most of 2021. The U.S. Energy Information Administration had forecast that global liquid fuel production would finally meet and then exceed consumption in early 2022, providing some much needed price relief. However, with the outbreak of war in Ukraine, and the accompanying international economic sanctions placed on Russia, prices for both oil and gas surged in February and March of 2022.

As of March 8, 2022, the U.S. Energy Information Administration forecast the price of oil to remain above $110 per barrel through June of this year and to remain above $90 for the rest of 2022. However, other forecasters are predicting the price of a barrel of oil will average $135 in 2022 and $115 in 2023. The uptick in price is likely to spur additional global production, but as seen earlier in the pandemic, additional production can be slow to come online.

Prior to the pandemic, the weekly average price of a barrel of West Texas Intermediate crude oil was around $55 (Figure 20, left). The drop in demand pushed prices to a low of $3.32 for the week of April 24, 2020. Following this trough, oil prices were generally on the rise, reaching about $90 per barrel in mid-February 2022. With the onset of war in Ukraine, the price of a barrel of oil surged above $120 in early March.

Natural gas prices have similarly experienced volatility in the wake of the COVID-19 recession and war in Ukraine. Prior to the pandemic, natural gas prices hovered around $2.51 per million BTU. By June 2020, prices had fallen to $1.63 per million BTU. Following this decline, prices have generally been on the rise, reaching $4.57 per million BTU as of the week of March 4, 2022 (Figure 20, right). Similar to oil prices, the price for natural gas spiked with the war in Ukraine, reaching over $5 per million BTU in early March.

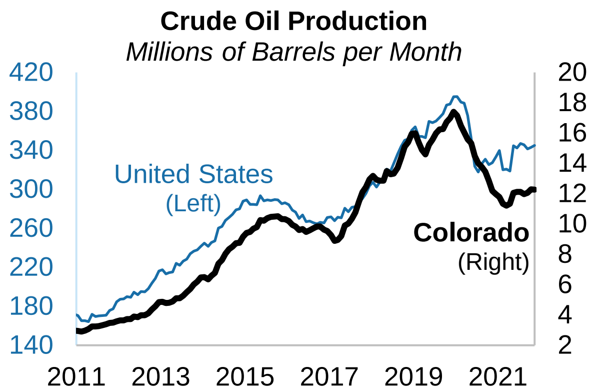
Figure 20
U.S. Energy Prices



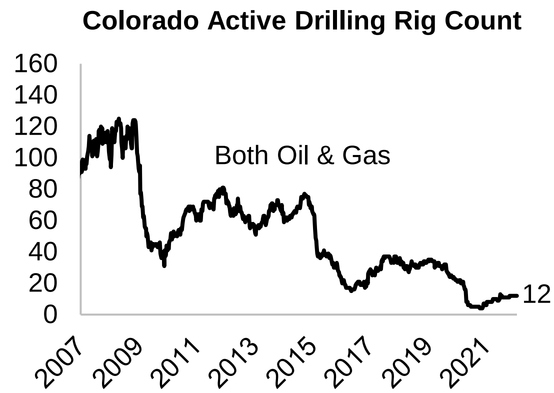
Source: U.S. Energy Information Administration. Weekly average prices. Data are not seasonally adjusted. Oil price data are through the week of March 11, 2022; natural gas price data are through the week of March 4, 2022.

Oil and gas production remains below pre-pandemic levels. Oil and gas production in both the U.S. and Colorado began to decline at the onset of the COVID-19-related recession in early 2020 (Figure 21, left). Nationally, oil and gas production leveled off in mid-2020, while production in Colorado continued to decline through early 2021. After initially rebounding, both U.S. and Colorado oil production have leveled off in recent months and remain well below pre-recession levels. According to the Energy Information Administration, natural gas production just reached pre-recession levels in late 2021, while oil production is not expected to recover until early 2023. The number of active oil and gas drilling rigs in Colorado also fell from over 20 before the recession to a low of 4 in November 2020 (Figure 21, right). The number of active rigs rebounded shortly after this trough, but has remained around 12 since July 2021.

Figure 21
Select Energy Market Indicators



Source: U.S. Energy Information Administration. Data are shown as a three-month moving average and are not seasonally adjusted. Data are through November 2021.



Source: Baker Hughes. Data are not seasonally adjusted. Data are through October 2021.

Global Economy and International Trade

Inflationary concerns, ongoing supply chain disruptions, and the war in Ukraine have begun to weigh on the global economic outlook, in addition to ongoing concerns about the lingering effects of the pandemic on economic disparities, poverty, and economic development. The global economy is expected to continue to grow, but at a slower pace through the forecast period.

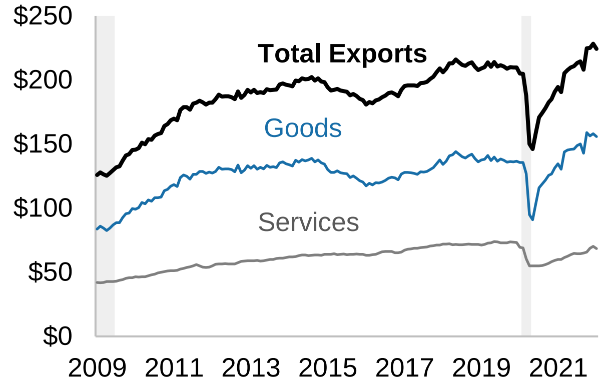
The International Monetary Fund forecasts slower global growth than initially anticipated. In January, even before the war in Ukraine, a weaker global economic position caused the International Monetary Fund (IMF) to downgrade its outlook for 2022. The IMF reduced the outlook by 0.5 percentage points to 4.4 percent based largely on worse expectations for the U.S. and China. A major assumption that had boosted the outlook last fall was optimism over the U.S.'s Build Back Better plan, however, the IMF no longer expects it to become law. Additionally, the IMF notes the U.S. will be impacted by earlier-than-expected monetary tightening in the face of rapid inflation. For China, the pandemic continues to cause disruptions related to its strict COVID policies, and the economy faces ongoing financial pressures from its struggling real estate markets.

The IMF continues to view risks to the forecast as weighted to the downside. Downside risks include prolonged pandemic conditions, energy price volatility, supply-chain disruptions, and inflationary uncertainty. Inflationary uncertainty in particular could pose a number of problems for the global economy. For instance, persistently high inflation could alter the spending and borrowing behavior of consumers and businesses. Additionally, high inflation could result in overly aggressive monetary policies that will threaten to derail nascent economic recoveries. Although the organization did not anticipate the war in Ukraine, it should be noted the conflict exacerbates each downside risk cited above.

Slower economic growth expected to weigh on trade. In January, the IMF reduced its 2022 outlook for global trade, revising growth down 0.7 percentage points to 6.0 percent. Global output and trade typically move hand-in-hand, with slower output translating to fewer imports and exports of goods and services. Over the forecast period, the agency expects that the demand for goods will moderate from recent spikes caused by the pandemic. Another factor that will weigh on trade in the year ahead is the war in Ukraine. According to a brief published by the IMF, the sanctions imposed on Russia will have significant impacts on the global economy. The organization specifically notes that sanctions on the country's banking system have disrupted its ability to exchange money for exports and imports.

U.S. trade volumes jump in 2021. U.S. trade volumes improved over the latter half of 2021 and ended the year up 22 percent according to data from WiserTrade. Over the year, trade with each of the nation's largest partners posted double-digit growth, including Canada (24.5 percent), China (21.1 percent), Mexico (19.1 percent), Japan (17.3 percent), and Germany (21.1 percent). Notably, trade volumes for several partner countries surged after tepid growth in the first quarter. The nation's North American partners accounted for about 64 percent of improved U.S. trade for the year, while China accounted for about 17 percent, and the European Union for about 15.6 percent. The nation's imports and exports were also boosted by rebounding shipments of computer and electronic products, transportation equipment, chemical products, and oil and gas. Despite Russia's small share of the nation's imports and exports, the war in Ukraine will impact global markets for agricultural products, oil and gas, fertilizers, and other goods that will indirectly affect prices and overall economic activity. While goods exports are above pre-pandemic levels, exports of services continue to lag (Figure 22).

Figure 22
U.S. Monthly Exports
Billions of Dollars



Source: U.S. Bureau of Economic Analysis (balance of payments basis). Data are through September 2021 and are seasonally adjusted but not adjusted for inflation.

Colorado trade volumes improve with growth among the state's largest trade partners and commodities. After contracting 4.8 percent in 2020, Colorado trade volumes rebounded in 2021, growing 25.8 percent amid strong growth with the state's largest trading partners and commodity groups. Together, the state's North American trade partners comprised more than 52 percent of increased trade volume over the past year, followed by China (14.8 percent), Taiwan (7.9 percent), and Malaysia (7.8 percent). In January, the IMF downgraded its expectations for Canada and Mexico, revising down its 2022 GDP growth forecast for Canada by 0.8 percentage points to 4.1 percent, and by 1.2 percentage points for Mexico to 2.8 percent. Worse-than-expected growth in Canada and Mexico may dampen Colorado's exports for the year, while higher prices for oil and gas and other major import commodities may reduce some import volumes.

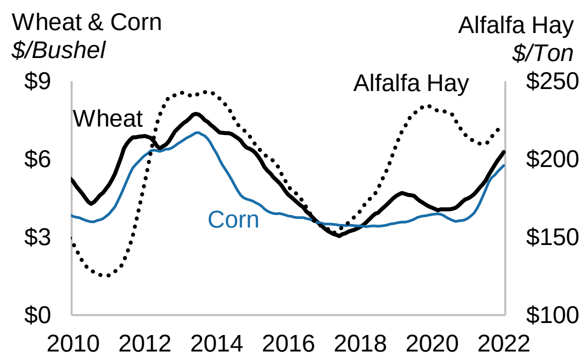
Colorado's strengthening recovery boosted the state's imports in 2021. For the year, imports were up more than 35 percent, led by Canadian imports that were up by nearly 67 percent. Oil and gas imports from Canada, up more than 83 percent in 2021, are one of Colorado's largest import commodities. Imports of building materials and transportation equipment also comprise a large portion of the state's Canadian imports.

Agriculture

Conditions in Colorado's agricultural economy continue to improve for many producers, although rising input costs weigh on profits, and drought continues to plague farmers and ranchers throughout the state. Farm income and agricultural credit conditions have strengthened over the past year in the Federal Reserve's Tenth District, which includes Colorado[5], bolstered by continued strength in agriculture commodity markets, record-low farm loan interest rates, and support from government programs. A strong farm economy supported farm real estate values, which continued to increase at a rapid pace through 2021, up 24 percent over 2020 in the mountain states.

Grain prices reach multi-year highs. The continued economic recovery, supply-chain disruptions, rising costs for farmers, increased demand for renewable fuels, and adverse weather sent grain prices skyrocketing in 2021. Colorado corn and wheat prices reached multi-year highs in 2021, with corn as high as $6.66 per bushel in August, an eight-year high, and wheat reaching $7.13 per bushel in November, a seven-year high. Corn and wheat finished the year up 37.7 percent and 53.8 percent on average, respectively from 2020. (Figure 23). Dairy prices showed strong growth in the fourth quarter of 2021 as well.

Figure 23
Prices Received for Colorado Crops

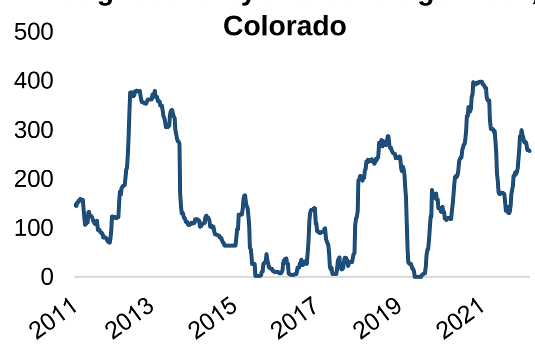


Source: U.S. Department of Agriculture, National Agriculture Statistics Service. Data shown as a 12-month moving average through January 2022. .

The war in Ukraine has multiplied risk in agricultural markets and is expected to drive further grain price increases, as the region accounts for a significant share of global wheat, corn, and fertilizer exports. While higher grain prices will drive higher profits for some crop farmers, livestock farmers will face higher feed prices, and crop farmers will face higher energy and fertilizer costs going into spring planting.

Drought conditions continue throughout the state. Drought conditions continue to plague the state, with 92 percent of the state in moderate to extreme drought in early March 2022, according to the U.S. drought monitor. Extreme drought has receded from the Denver metro and surrounding areas to the north and east, leaving severe drought throughout much of the eastern plains, while conditions on the Western Slope continue to improve. The Drought Severity and Coverage Index (DSCI) is one measure of drought levels in Colorado, with values ranging from 0 to 500, and with higher numbers indicating worse drought conditions. As shown in Figure 24, Colorado's

Figure 24
Drought Severity and Coverage Index, Colorado



Source: U.S. Drought Monitor. Data through March 7, 2022.

[5] The Tenth District includes western Missouri, Nebraska, Kansas, Oklahoma, Wyoming, Colorado and northern New Mexico. Data for Colorado are generally combined along with that of Wyoming and northern New Mexico into the category "mountain states" due to limited survey responses.

drought conditions are substantially improved from early 2021, which was a period of severe drought conditions compared to historical standards, but remain worse than in most years since 2013.

Supply chain disruptions impact agriculture. Pandemic-related supply chain disruptions have impacted the prices for farm inputs, including fertilizers and pesticides, as well as tractor parts, semiconductors used for precision farming technologies, and other supplies. Shortages of workers in transportation and warehousing have increased wait times to receive supplies and access export markets for some producers.

Net farm incomes expected to decline as government support wanes. Record levels of government payments to farmers through the Coronavirus Food Assistance Program (CFAP) brought U.S. farm income to a multi-year high in 2020. Net farm income is expected to increase by 25.1 percent in 2021 compared to 2020 and is forecast to decrease by 4.5 percent in 2022 as direct government payments and higher production expenses erode farm profits. Farm production expenses are forecast to increase by 5.1 percent, with large increases in feed and fertilizer expenditures.

Summary

Colorado and the nation's economic recovery from the 2020 recession continues, but emerging challenges cloud the outlook. While economic activity has reached and exceeded pre-pandemic levels, employment has yet to fully recover in several in-person industries, and labor shortages along with supply chain disruptions continue to plague the recovery. While the pandemic is expected to continue to shape economic activity, these challenges have been compounded by emerging risks, including accelerating inflation and the war in Ukraine, which will add to pandemic-related constraints on job growth and economic activity. Risks to the forecast have increased since December 2021, on pandemic-related uncertainty compounded by geopolitical tensions, inflation, and the evolving monetary policy landscape.

Risks to the Forecast

Several factors could result in either stronger or weaker economic activity than forecast. Risks to the forecast remain elevated and skewed to the downside with the war in Ukraine, ongoing pandemic-related uncertainty, and evolving monetary policy clouding the outlook.

Downside risks. The war in Ukraine poses a sizable risk to inflation and economic activity. Further escalation in geopolitical conflict could result in a contraction in economic activity globally and in the U.S. Tight labor markets and high commodity prices may provide the kindling for a wage-price spiral that could result in even stronger inflation than forecast. In this instance, more rate monetary policy tightening is likely, which could weaken economic growth. The pandemic's trajectory remains a risk to economic activity. Additional business closures could exacerbate supply chain disruptions, and elevated health concerns could dampen in-person service industry activity further. Finally, unusual weather patterns, and related natural disasters such as wildfires, have become more frequent and pose geographically specific threats to impacted areas. They also pose potential systemic threats to real estate, insurance, and finance industries depending on their severity.

Upside risks. A faster-than-expected resolution to the war in Ukraine and an accompanying drop in commodity prices pose an upside risk to the forecast. Additionally, a near-term post-pandemic boom in spending on services could promote business expansion and boost economic growth more than expected. Similarly, sooner-than-expected easing in supply chain disruptions or faster-than-expected jobs growth could enable a stronger economic recovery than expected. Over the longer-term, pandemic-related shifts toward remote work, technological change, and simpler, more localized supply chains could result in stronger productivity gains and economic growth.

Table 15
National Economic Indicators

						Legislative Council Staff Forecast		
Calendar Years	**2017**	**2018**	**2019**	**2020**	**2021**	**2022**	**2023**	**2024**
Real GDP (*Billions*) [1]	$18,079.1	$18,606.8	$19,032.7	$18,384.7	$19,427.2	$19,912.9	$20,430.6	$20,921.0
Percent Change	2.3%	2.9%	2.3%	-3.4%	5.7%	2.5%	2.6%	2.4%
Nonfarm Employment (*Millions*) [2]	146.6	148.9	150.9	142.1	146.1	151.1	154.7	157.6
Percent Change	1.6%	1.6%	1.3%	-5.8%	2.8%	3.4%	2.4%	1.9%
Unemployment Rate [2]	4.4%	3.9%	3.7%	8.1%	5.4%	3.7%	3.4%	3.3%
Personal Income (*Billions*) [1]	$16,850.2	$17,706.0	$18,424.4	$19,627.6	$21,059.8	$21,375.7	$22,337.6	$23,298.1
Percent Change	4.7%	5.1%	4.1%	6.5%	7.3%	1.5%	4.5%	4.3%
Wage and Salary Income (*Billions*) [1]	$8,474.7	$8,900.5	$9,323.5	$9,444.1	$10,306.5	$11,182.6	$11,931.8	$12,600.0
Percent Change	4.7%	5.0%	4.8%	1.3%	9.1%	8.5%	6.7%	5.6%
Inflation [2]	2.1%	2.4%	1.8%	1.2%	4.7%	7.1%	3.9%	2.4%

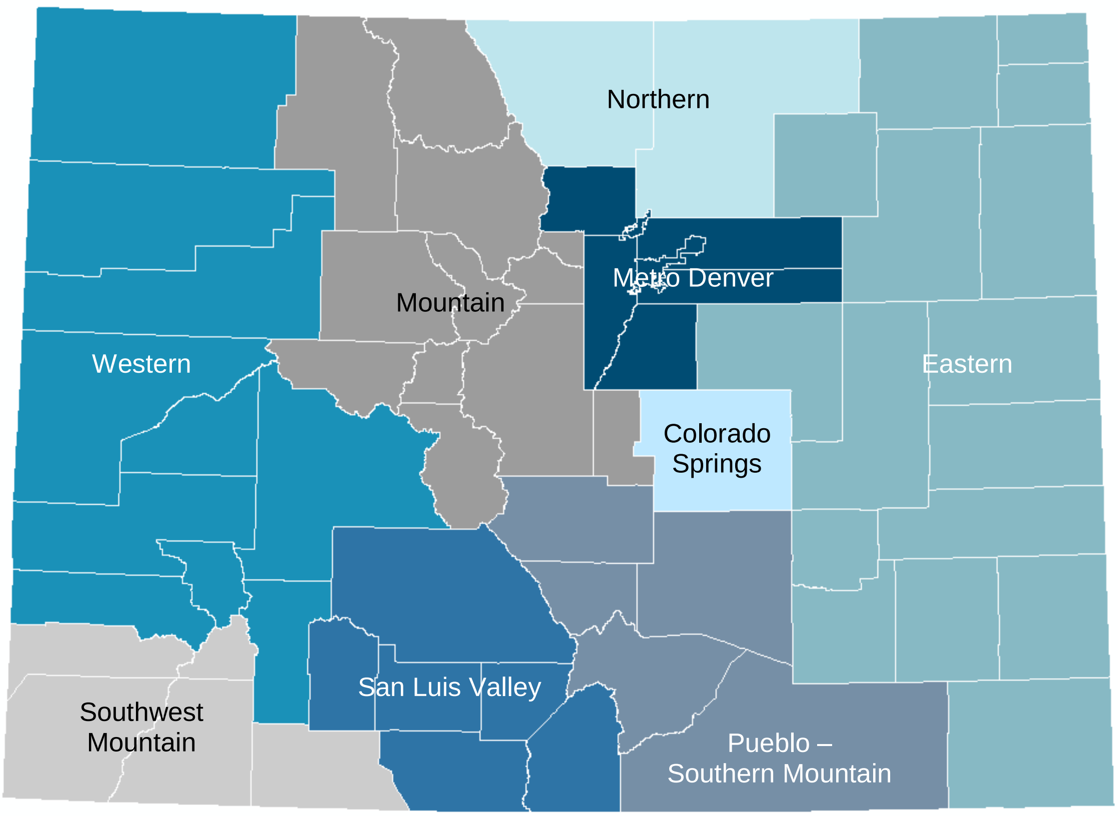
Sources
[1]U.S. Bureau of Economic Analysis. Real gross domestic product (GDP) is adjusted for inflation. Personal income and wages and salaries not adjusted for inflation.
[2]U.S. Bureau of Labor Statistics. Inflation shown as the year-over-year change in the consumer price index for all urban areas (CPI-U).

Table 16
Colorado Economic Indicators

Calendar Years	2017	2018	2019	2020	2021	Legislative Council Staff Forecast 2022	2023	2024
Population (*Thousands, as of July 1*) [1]	5,617.4	5,697.2	5,758.5	5,773.7	5,812.1	5,876.0	5,946.5	6,017.9
Percent Change	1.3%	1.4%	1.1%	0.3%	0.7%	1.1%	1.2%	1.2%
Nonfarm Employment (*Thousands*) [2]	2,660.0	2,726.9	2,790.0	2,651.3	2,745.3	2,841.4	2,903.9	2,962.0
Percent Change	2.2%	2.5%	2.3%	-5.0%	3.5%	3.5%	2.2%	2.0%
Unemployment Rate [2]	2.6%	3.0%	2.6%	6.9%	5.4%	3.9%	3.1%	2.9%
Personal Income (*Millions*) [3]	$309,658	$331,955	$350,390	$370,392	$400,764	$407,978	$427,561	$446,374
Percent Change	6.9%	7.2%	5.6%	5.7%	8.2%	1.8%	4.8%	4.4%
Wage and Salary Income (*Millions*) [3]	$160,963	$170,904	$182,944	$187,128	$204,905	$222,527	$236,992	$250,737
Percent Change	6.5%	6.2%	7.0%	2.3%	9.5%	8.6%	6.5%	5.8%
Housing Permits (*Thousands*) [1]	40.7	42.6	38.6	40.5	60.1	57.9	58.9	60.9
Percent Change	4.4%	4.8%	-9.4%	4.8%	48.6%	-3.7%	1.8%	3.4%
Nonresidential Construction (*Millions*) [4]	$6,154.9	$8,146.4	$5,166.7	$5,462.3	$5,602.9	$5,720.5	$5,960.8	$6,169.4
Percent Change	2.8%	32.4%	-36.6%	5.7%	2.6%	2.1%	4.2%	3.5%
Denver-Aurora-Lakewood Inflation [5]	3.4%	2.7%	1.9%	2.0%	3.5%	7.0%	3.8%	2.4%

Sources
[1]U.S. Census Bureau. 2020 population numbers reflect the 2020 Census, while other numbers reflect July 1 estimates. Residential housing permits are the number of new single- and multifamily housing units permitted for building.
[2]U.S. Bureau of Labor Statistics.
[3]U.S. Bureau of Economic Analysis. Personal income and wages and salaries not adjusted for inflation.
[4]F.W. Dodge.
[5]U.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.

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 are revised 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.

Metro Denver Region

Of the nine economic regions identified in this forecast, Colorado's diverse seven-county metro Denver region holds the largest share of the state's population, representing more than 60 percent of the state's workers. The impacts of the pandemic and related recession continue to influence the region's labor market. Leisure and hospitality industries remain impacted most, weighing on the rebound to pre-pandemic jobs levels. Reflecting ongoing elevated demand, low inventories, and low interest rates, area home prices continue to soar alongside residential construction activity. Nonresidential construction activity ticked up in the second half of 2021, but remains relatively subdued. Economic indicators for the region are summarized in Table 17.

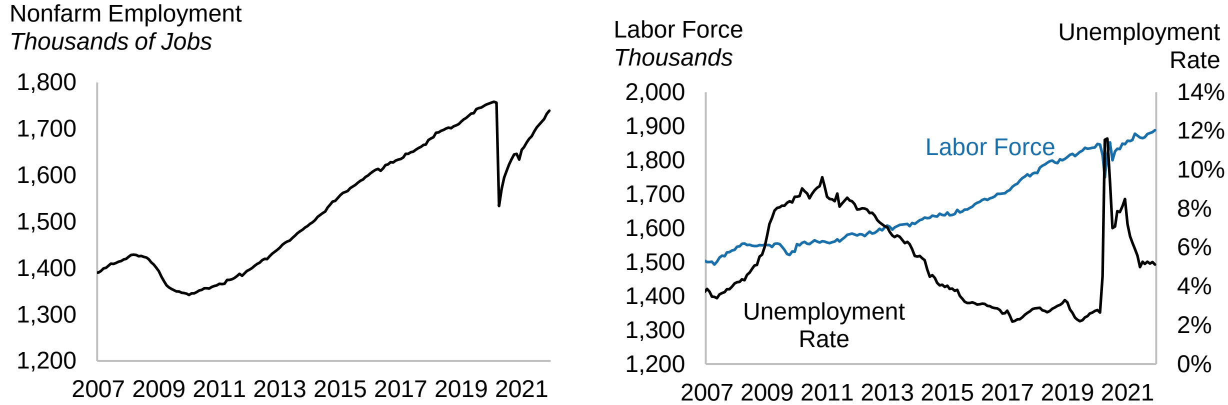
Table 17
Metro Denver Region Economic Indicators
Adams, Arapahoe, Broomfield, Boulder, Denver, Douglas, and Jefferson Counties

	2017	2018	2019	2020	2021
Employment Growth[1]	2.1%	2.6%	2.3%	-5.1%	3.2%
Unemployment Rate[2]	2.5%	2.9%	2.5%	7.4%	5.6%
Housing Permit Growth[3]					
Denver-Aurora MSA Single-family	3.8%	7.9%	-6.1%	1.5%	16.3%
Boulder MSA Single-family	-4.3%	15.7%	-9.5%	-6.2%	-34.4%
Nonresidential Construction Growth[4]					
Value of Projects	-10.9%	46.7%	-37.1%	-11.0%	4.1%
Square Footage of Projects	-14.8%	-10.7%	-8.0%	-7.2%	31.4%
Level (*Millions*)	19,259	17,193	15,809	14,664	19,270
Number of Projects	-23.9%	-18.4%	-11.5%	-0.7%	14.0%
Level	945	771	682	677	772

MSA = Metropolitan statistical area.
[1]U.S. Bureau of Labor Statistics, CES (establishment survey). Seasonally adjusted. Data through December 2021.
[2]U.S. Bureau of Labor Statistics, LAUS (household survey). Seasonally adjusted. Data through December 2021.
[3]U.S. Census. Growth in the number of residential building permits. Data through December 2021.
[4]F.W. Dodge. Data through December 2021.

Labor market. After declining 5.1 percent in 2020, nonfarm employment in the metro Denver region continued to recover in 2021, ending the year up 3.2 percent from the prior year. Though the number of jobs remains below pre-pandemic levels (Figure 25, left), the region is expected to make a full recovery in 2022. Growth is expected across most major industries except leisure and hospitality, which will remain below pre-pandemic levels through 2022, consistent with statewide and national trends. After spiking to 7.4 percent in 2020, the region's average unemployment rate dropped to 5.6 percent in 2021, though still significantly higher than the pre-pandemic low of 2.3 percent (Figure 25, right). The number of workers in the labor force (those employed and those seeking employment) exceeded pre-pandemic levels in 2021 and continues to rise, a healthy sign of area labor market improvements. The metro Denver region's diverse economy supports multiple industries, supporting a faster recovery than most other regions in the state and nationally.

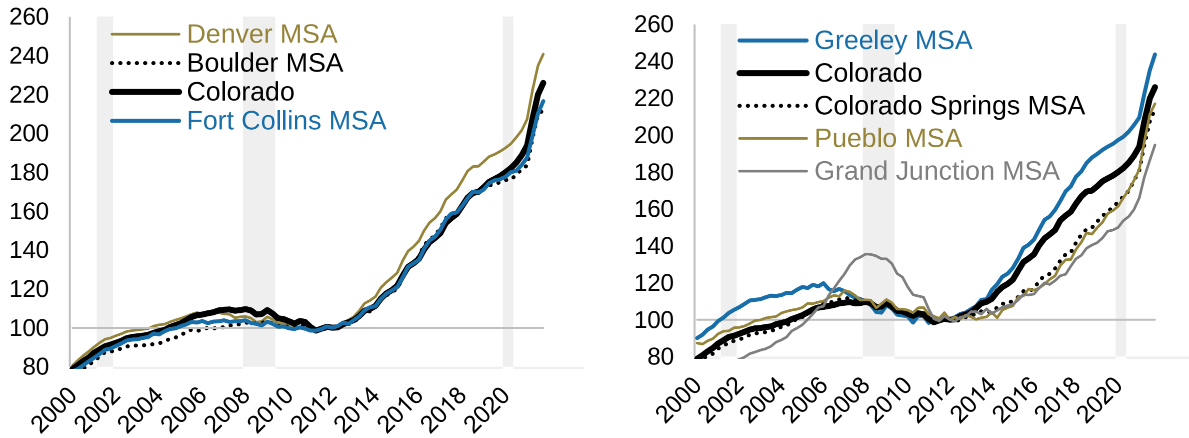
Figure 25
Metro Denver Region Labor Market Activity



Source: U.S. Bureau of Labor Statistics. Data are seasonally adjusted and shown through December 2021.

Home prices. Along with other regions of the state, home price appreciation in the metro Denver region accelerated through 2021 (Figure 26). Historically low interest rates have propped up demand, while pandemic-related uncertainty has kept homeowners from putting their homes on the market. While inventories have improved in recent months, home prices are expected to remain elevated as demand for housing continues to outstrip limited supply. According to data from the Federal Housing Finance Agency, in the fourth quarter of the year, home prices were up 18.6 percent over year-ago levels in the Denver-Aurora-Lakewood metropolitan statistical area, and up 17.4 percent in Boulder.

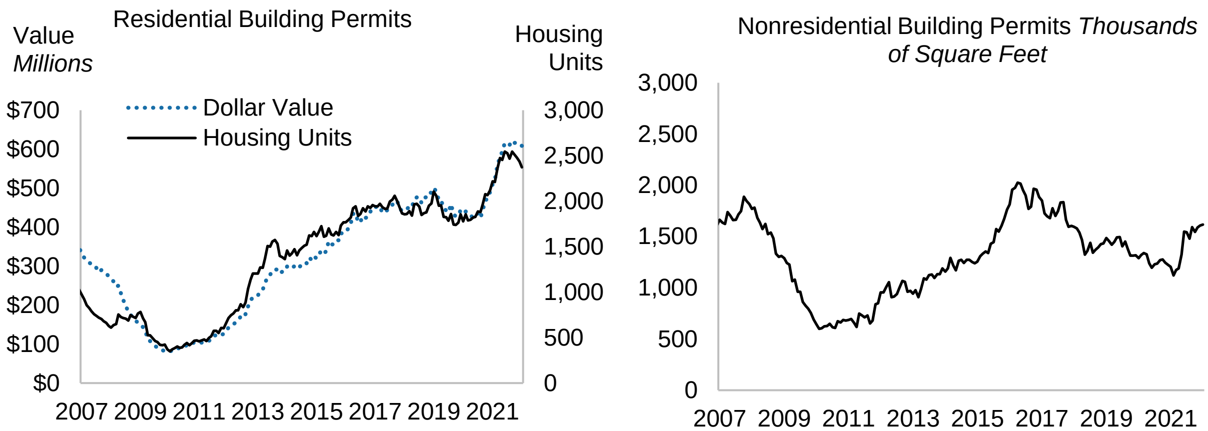
Figure 26
FHFA All-Transaction Home Price Indices
Index 100 = 2012Q1 (Recessionary Trough in Grey Bars)



Source: Federal Housing Finance Agency (FHFA). Data are seasonally adjusted and through 2021Q4.

Residential construction. To meet bourgeoning demand, metro Denver residential construction activity continued to accelerate throughout 2021, with permits for single-family homes increasing by 16.3 percent over year-ago levels (Figure 27, left). However, single-family permits in the Boulder MSA continued to decline in 2021, falling 34.4 percent compared to 2020. Population growth in the region is expected to slow relative to historical rates, due in part to housing affordability that prices many families out of the region. Population growth is expected to be concentrated in the suburban and exurban areas of the region that offer relatively more affordable options and are seeing the highest levels of construction activity.

Figure 27
Metro Denver Region Construction Activity



Source: F.W. Dodge. Data shown as twelve-month moving averages. Data are not seasonally adjusted and are through December 2021.

Nonresidential construction. The metro Denver nonresidential building activity continued to improve in 2021 but remained subdued relative to 2016 highs (Figure 27, right). Nonresidential construction activity slowed in Denver and Boulder counties, dragging down region-wide activity in the first half of the year over year-ago levels. The shift toward remote work and the continued business impacts of the pandemic are expected to put downward pressure on demand for commercial real estate in the region, slowing nonresidential construction activity in the years ahead. Future nonresidential building is expected to shift from office space and brick-and-mortar retail establishments to favor nonresidential development that supports e-commerce, such as warehousing space. The impacts of the federal infrastructure bill are expected to contribute to nonresidential construction activity beginning in 2023.

Northern Region

Larimer and Weld counties comprise the diverse economies of the northern region. Larimer County outperformed much of the state throughout the economic recovery period, thought the leisure and hospitality industry has waned with the winter increase in COVID-19 cases. Both Larimer and Weld counties experienced strong residential construction activity and home price appreciation, while nonresidential construction has lagged. Weld County's economic activity, largely driven by the oil and gas and agricultural industry, has faced headwinds as oil and gas production have yet to bounce back after the recession and the region continues to face severe drought conditions. The persistent oil and gas slump puts pressure on both the private sector, through lower industry income, and the public sector, through reduced property, severance, and sales taxes. Economic indicators for the region are summarized in Table 18.

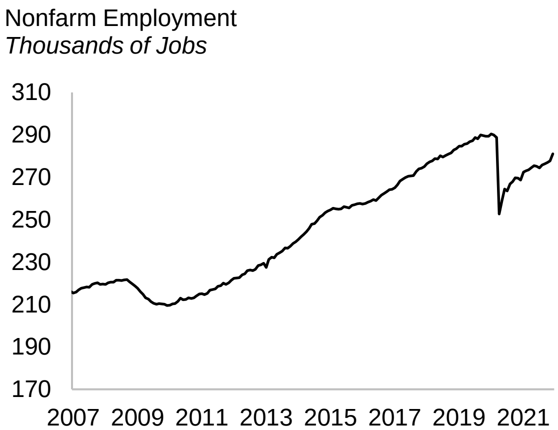
Table 18
Northern Region Economic Indicators
Weld and Larimer Counties

	2017	2018	2019	2020	2021
Employment Growth[1]					
Fort Collins-Loveland MSA	3.1%	2.6%	2.2%	-5.0%	2.1%
Greeley MSA	5.0%	4.8%	3.6%	-6.9%	1.0%
Unemployment Rate[2]					
Fort Collins-Loveland MSA	2.3%	2.6%	2.3%	6.3%	4.9%
Greeley MSA	2.5%	2.8%	2.5%	7.0%	5.8%
State Cattle and Calf Inventory Growth[3]	6.7%	2.6%	8.0%	1.9%	4.0%
Natural Gas Production Growth[4]	5.5%	17.1%	22.0%	8.3%	-3.6%
Oil Production Growth[4]	13.9%	29.5%	10.7%	-11.9%	-12.8%
Housing Permit Growth[5]					
Fort Collins-Loveland MSA Total	-18.2%	8.4%	-18.2%	-0.3%	13.3%
Fort Collins-Loveland MSA Single Family	21.0%	-14.1%	-4.9%	34.7%	-0.1%
Greeley MSA Total	23.1%	24.6%	-2.2%	9.1%	15.5%
Greeley MSA Single Family	16.4%	32.1%	-8.4%	28.1%	3.8%
Nonresidential Construction Growth[6]					
Value of Projects	32.2%	64.9%	-71.6%	74.3%	-30.9%
Square Footage of Projects	17.8%	-27.6%	-16.2%	5.2%	-1.2%
Level (*Thousands*)	3,996	2,892	2,424	2,549	2,520
Number of Projects	2.9%	13.4%	-17.1%	-12.0%	-11.5%
Level	284	322	267	235	208

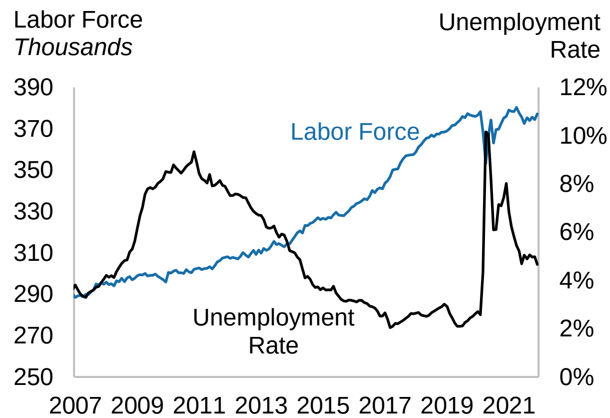
MSA = Metropolitan statistical area.
[1]U.S. Bureau of Labor Statistics, CES (establishment survey). Seasonally adjusted. Data through December 2021.
[2]U.S. Bureau of Labor Statistics, LAUS (household survey). Seasonally adjusted. Data through December 2021.
[3]National Agricultural Statistics Service. Cattle and calves on feed through December 2021.
[4]Colorado Oil and Gas Conservation Commission. Data through November 2021.
[5]U.S. Census Bureau. Growth in the number of residential building permits. Data through December 2021.
[6]F.W. Dodge. Data through December 2021.

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 28). Even accounting for significant layoffs in March 2020, the unemployment rate averaged 6.3 percent in 2020 in the Fort Collins-Loveland area and 7.0 percent in Greeley. In the Fort Collins-Loveland area, the average unemployment rate for 2021 registered 4.9 percent, well below the state average of 5.4 percent, while unemployment in the Greeley area remained above the state average at 5.8 percent. Employment growth in both areas during 2021, 2.1 percent in the Fort Collins-Loveland area and 1.0 percent in the Greeley area, has been slower than the state average of 2.8 percent. Additionally, the region has regained a smaller share of jobs lost during the recession than the state as a whole. Employment growth in the Fort Collins-Loveland area likely slowed due to labor shortages. Alternatively, Greeley's employment growth is likely facing headwinds as the oil and gas industry has yet to bounce back after the recession. Employment is not expected to fully recover until pandemic conditions improve and energy markets return to pre-crisis levels.

Figure 28
Northern Region Labor Market Activity



Source: U.S. Bureau of Labor Statistics; CES. Data are seasonally adjusted and are through December 2021.



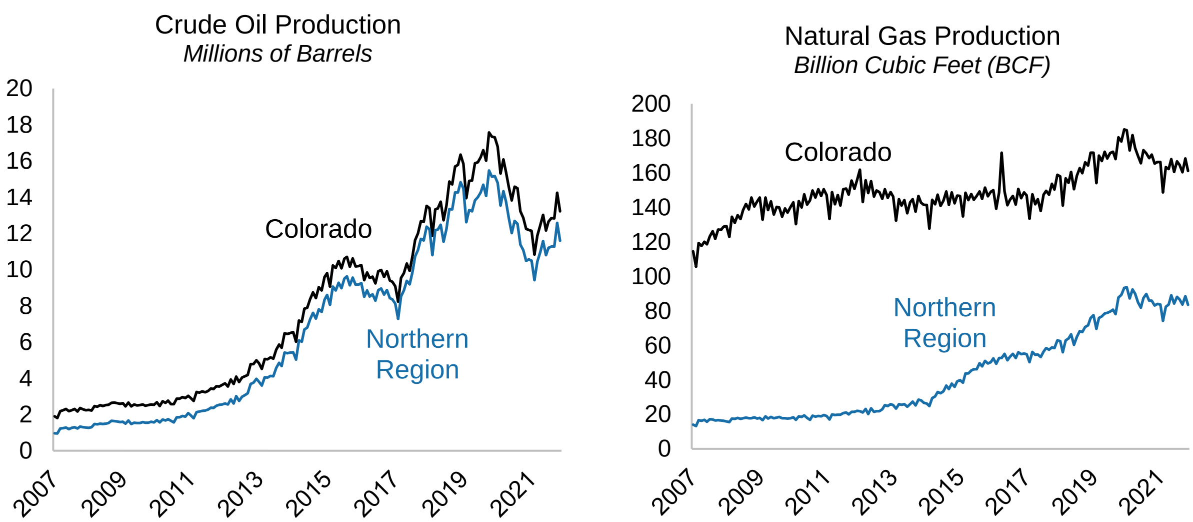
Source: U.S. Bureau of Labor Statistics; LAUS. Data are seasonally adjusted and are through December 2021.

Agriculture. The northern region produces about a quarter of Colorado's agricultural value due to the heavy concentration of the livestock industry in Weld County. The region's agricultural sector faced significant headwinds in 2020, with supply chain disruptions, COVID-19 outbreaks in meat processing facilities, wildfires, and severe drought. The cattle and calf inventory grew only 1.9 percent through 2020, a slowdown from 8.0 percent growth in 2019. As the negative effects of COVID-19 have begun to abate and pasture conditions in the northeastern part of the state have marginally improved, cattle and calf inventories have rebounded, growing 4.0 percent in 2021. Increased commercial demand, resulting from restaurant openings and the return to in-person learning at area universities, is expected to spur additional growth throughout 2022.

Energy sector. Oil production in the northern region, particularly in Weld County, has dominated statewide production for over a decade. However, oil production throughout the state declined in 2020 and early 2021 as a result of the collapse in demand and significant declines in prices (Figure 29). Oil production in the region fell by 11.9 percent in 2020 and another 12.8 percent in 2021. The latter half of 2021 saw oil production begin to rebound, but remain well below pre-recession levels. Natural gas production, particularly in the northern region, did not suffer as poorly as oil production.

Year-to-date through November, production in the Northern region only declined 3.6 percent in 2021, compared to a 14.5 percent decline across the state. After collapsing in 2020, oil prices have been on the rise for most of 2021 and early 2022, reaching over $90 per barrel in February 2022. After falling to around $1.63 per million BTU in 2020, natural gas prices have also generally been on the rise in 2021 and early 2022, reaching $4.38 in January 2022. Oil prices are expected to average about $79 per barrel and natural gas prices will average $3.92 in 2022, based on estimates from the U.S. Energy Information Administration. Higher than average prices throughout 2022 and increased demand for oil and gas in the near- and midterm is expected to spur additional production.

Figure 29
Colorado Energy Production

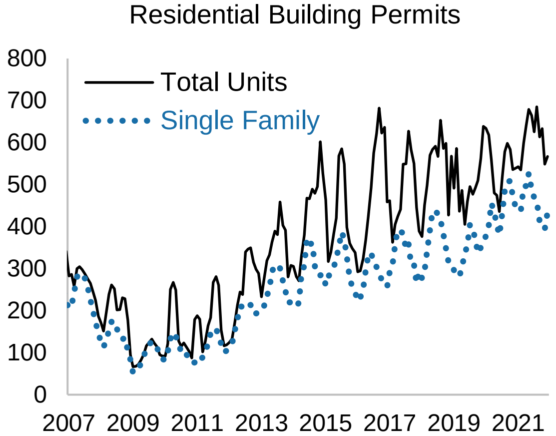


Source: Colorado Oil and Gas Conservation Commission. Monthly data through November 2021.

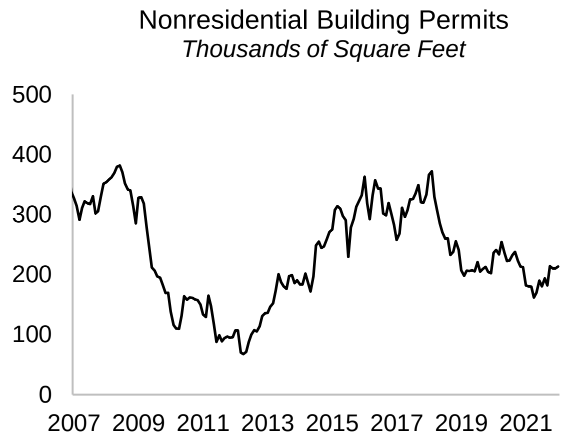
Housing. Housing construction activity in the northern region in 2021 has increased significantly over 2020 levels. In a shift from year-ago trends, the majority of residential permit growth is from multifamily units, rather than single-family homes. Total housing permits in the Fort Collins-Loveland area increased by 13.3 percent in 2021 over year-ago levels, while single-family permits decreased 0.1 percent over the same period. Total housing permits in the Greeley area increased by 15.5 percent in 2021 over 2020, while single-family permits only increased by 3.8 percent over the same period (Figure 30, left). Average prices for single-family units in Larimer County increased by 11.1 percent between January 2021 and January 2022, while prices increased by 15.6 percent in Weld County, according to the Colorado Association of Realtors. Additionally, the time that listings spend on the market has declined significantly, falling by 7.8 percent in January 2022 compared to January 2021, and 26.4 percent in Weld County.

Nonresidential construction. After sustaining moderate nonresidential construction activity in 2020, delayed impacts of the recession slowed activity in 2021. The value of new projects declined by 30.9 percent, the number of projects declined by 11.5 percent, and total square footage declined by 1.2 percent from year-ago-levels (Figure 30, right). Future commercial construction activity will depend in part on the recovery in energy prices and production, which may translate into more commercial projects in 2022.

Figure 30
Northern Region Construction Activity



Source: U.S. Census Bureau. Data shown as three-month moving averages. Data are not seasonally adjusted and are through December 2021.



Source: F.W. Dodge. Data shown as twelve-month moving averages. Data are not seasonally adjusted and are through January 2022.

Pueblo – Southern Mountains Region

The Pueblo – Southern Mountains region encompasses five counties along the eastern slope of the Sangre de Cristo Mountains, and includes the City of Pueblo. The region was hit hard by the pandemic-induced recession. Data tell a complicated and sometimes contradictory story of the economic recovery, where population growth is slow and employment has recovered in fits and starts, but workforce participation is increasing, real estate values are surging, and construction activity has increased even from elevated pre-pandemic levels. Indicators for the regional economy are presented in Table 19 and discussed below.

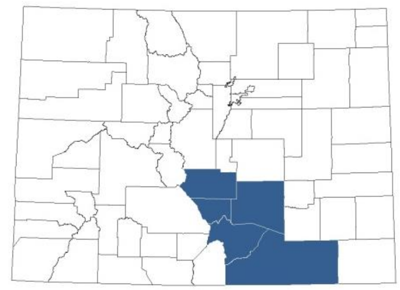


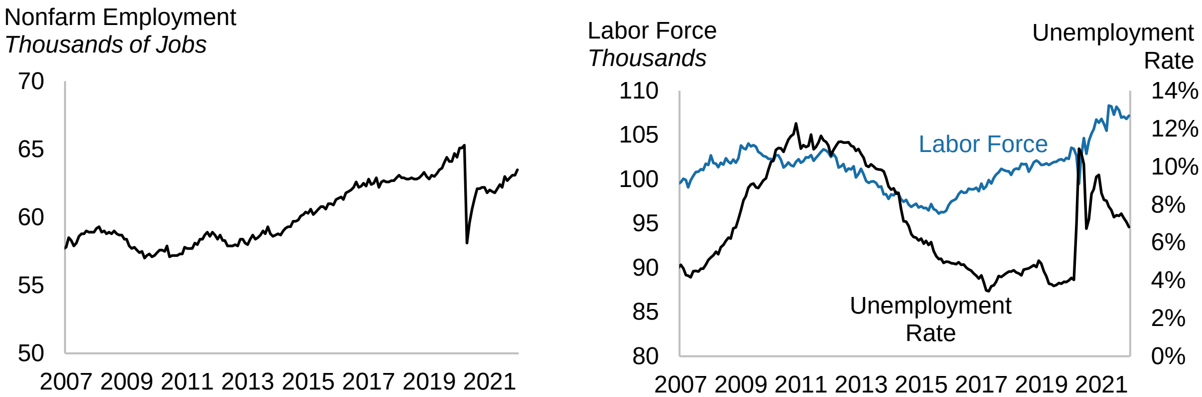
Table 19
Pueblo Region Economic Indicators
Custer, Fremont, Huerfano, Las Animas, and Pueblo Counties

	2017	2018	2019	2020	2021
Employment Growth					
Pueblo Region[1]	2.5%	0.6%	1.1%	-2.4%	3.7%
Pueblo MSA[2]	1.0%	0.5%	1.3%	-2.5%	0.7%
Unemployment Rate[1]	4.0%	4.6%	4.0%	8.1%	7.6%
Housing Permit Growth[3]					
Pueblo MSA Total	14.9%	45.1%	3.8%	18.4%	24.0%
Pueblo MSA Single Family	16.2%	52.6%	-6.2%	31.1%	24.0%
Nonresidential Construction Growth[4]					
Value of Projects	-64.5%	222.9%	45.2%	26.2%	178.2%
Square Footage of Projects	-52.6%	145.1%	-19.7%	37.7%	288.4%
Level (*Thousands*)	162	397	318	438	1,702
Number of Projects	-72.2%	50.0%	23.3%	86.5%	4.3%
Level	20	30	37	69	72

MSA = Metropolitan statistical area.
[1]U.S. Bureau of Labor Statistics, CES (establishment survey). Seasonally adjusted. Data through December 2021.
[2]U.S. Bureau of Labor Statistics, LAUS (household survey). Seasonally adjusted. Data through December 2021.
[3]U.S. Census Bureau. Growth in the number of residential building permits. Data through December 2021.
[4]F.W. Dodge. Data through December 2021.

Labor market. The Pueblo region's labor market recovery has been slower than most other parts of the state, but has gained momentum in the second half of 2021. Although unemployment remains above pre-pandemic levels, Pueblo County businesses reported employing 63,500 workers in December 2021, up 3.7 percent from year ago levels, but lower than the 65,300 workers in March 2020 (Figure 31, left). The region's labor force population averaged about 108,000 in 2021, representing a 3.9 percent increase from 2020 and well outpacing the state's 2.5 percent labor force growth rate over the same period (Figure 31, right). Slow employment growth alongside a growing labor force is elevating the regional unemployment rate, which, at 7.6 percent, was the highest in the state in 2021.

Figure 31
Pueblo Region Labor Market Trends

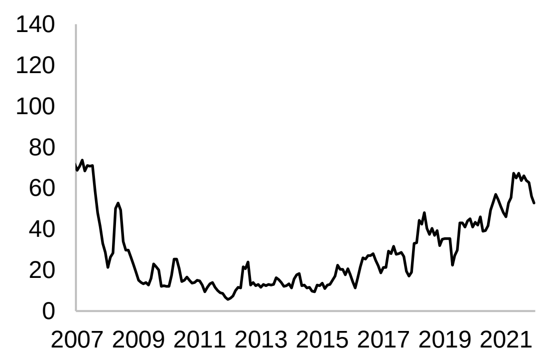


Source: U.S. Bureau of Labor Statistics; CES (left) and LAUS (right). Data are seasonally adjusted and are through December 2021.

Population. The 2020 Census showed that population in the region grew by 10,820, or 4.7 percent, between 2010 and 2020, well below the statewide rate of 14.8 percent. Moderate growth in the region's northern counties, Custer, Fremont, and Pueblo, was offset by flat or declining populations in the southern counties of Huerfano and Las Animas. The State Demography Office estimates that Las Animas County's population has fallen annually since 2003, and that populations in Custer, Fremont, and Huerfano counties will begin to decrease in 2022. The region has a higher share of elderly Coloradans, a lower share of children and young adults, and little in-migration, relative to the state as a whole.

Housing market. Home values in the region's largest communities are increasing rapidly, straining budgets for would-be homebuyers. The Federal Housing Finance Agency's home price indices show that prices in the Pueblo Metropolitan Statistical Area, which includes Pueblo County, have increased faster than any metropolitan area in the state every year since 2017. Prices in Pueblo have increased by 67 percent over the last five years, versus 61 percent for Colorado Springs and 48 percent for the Denver metro area. Homes in Pueblo remain less expensive than those further north, but the rapid appreciation has limited affordable options for Pueblo residents looking to purchase a home.

Figure 32
Single-family Residential Permits
Number of Housing Units



Source: U.S. Census Bureau. Data shown as three-month moving averages. Data are not seasonally adjusted and are through December 2021.

Preliminary 2021 property tax data from the region's assessors indicate that home price appreciation is occurring throughout the region as well. Residential property values in the region increased 21.6 percent between 2020 and 2021. The most significant increases were in the City of Pueblo (up 25.5 percent), the remainder of Pueblo County (up 20.5 percent), the Cañon City area (up 25.3 percent), and Florence (up 22.7 percent). The pace of increase was much slower in the

Walsenburg area (up 10.9 percent), Trinidad (up 7.4 percent), and rural eastern Las Animas County (up 6.3 percent).

Given the region's slow population growth, home price increases likely reflect other demand-side factors, including improved household incomes for wealthier residents, persistently low interest rates, and faster appreciation among less expensive properties. Home prices are expected to moderate during the forecast period as interest rates rise.

Bolstered by buyer demand, homebuilding in Pueblo County remains at its highest level since the Great Recession. Builders pulled permits for over 700 housing units in 2021 exceeding last year's full-year total (Figure 32).

Nonresidential construction. Nonresidential construction activity in the region also continues to increase, again surpassing its highest level since the Great Recession. In 2021, the region's builders exceeded their construction output for 2020, adding $420.1 million in new structures adding more than 1.3 million square feet to their nonresidential inventory. The majority of this activity is from the $500 million EVRAZ North America long rail mill that broke ground in Pueblo in July. The half-mile long rail building will employ about 800 construction workers and produce 7,000 tons of steel, 52,000 yards of concrete and 5 million pounds of rebar once complete. In addition, the Pueblo School District 60 broke ground in April 2021 on the new Pueblo East and Centennial high schools, part of a $218 million bond program approved by voters in 2019.

Nonresidential construction will be supported by several new projects over the next year. In addition to the two new high schools, School District 60 also announced a new K-8 school slated to begin construction in 2022. The announced Turkey Creek Solar Farm, a 200-megawatt project, is expected to further boost construction activity when it breaks ground in 2022.

Colorado Springs Region

The Colorado Springs region encompasses El Paso County, and is home to the state's second-largest city. The regional economy has recovered impressively from the pandemic-induced recession. Nonfarm employment levels surpassed pre-pandemic highs in December 2021, reflecting the strongest economic recovery across the regions of the state. Construction activity has remained strong throughout the pandemic to date, with 2021 signaling another banner year for both residential and nonresidential builders. Indicators for the Colorado Springs regional economy are presented in Table 20.

Table 20
Colorado Springs Region Economic Indicators
El Paso County

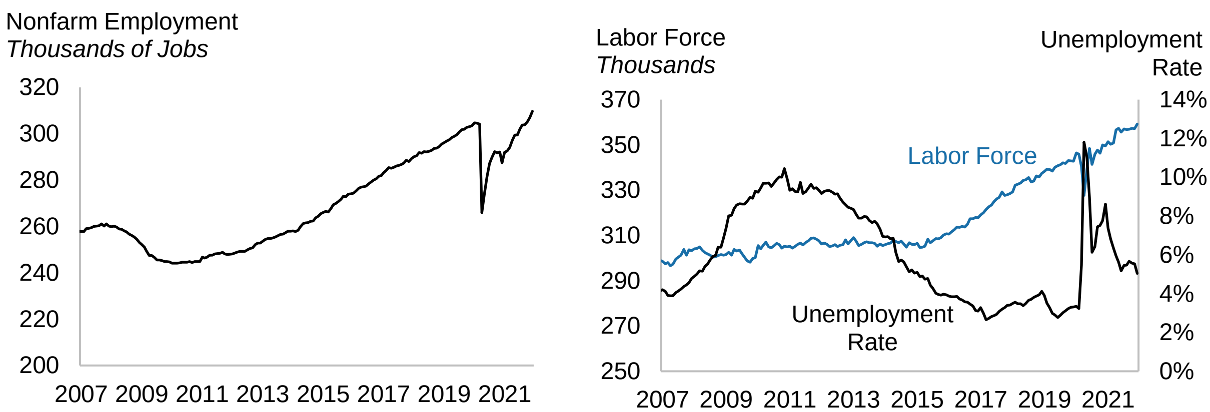
	2017	2018	2019	2020	2021
Employment Growth[1]					
Colorado Springs MSA	2.9%	2.2%	2.6%	-3.5%	3.8%
Unemployment Rate[2]	3.1%	3.7%	3.2%	7.3%	5.8%
Housing Permit Growth[3]					
Total	-3.9%	15.4%	-3.8%	25.7%	34.7%
Single Family	6.7%	9.6%	-4.1%	24.4%	0.7%
Nonresidential Construction Growth[4]					
Value of Projects	-22.6%	20.9%	0.5%	44.2%	4.1%
Square Footage of Projects	10.5%	9.3%	5.3%	115.3%	-42.8%
Level (*Thousands*)	2,599	2,841	2,992	6,441	3,684
Number of Projects	30.0%	-1.3%	-31.1%	16.0%	-27.9%
Level	550	543	374	434	313

MSA = Metropolitan statistical area.
[1]U.S. Bureau of Labor Statistics, CES (establishment survey). Seasonally adjusted. Data through December 2021.
[2]U.S. Bureau of Labor Statistics, LAUS (household survey). Seasonally adjusted. Data through December 2021.
[3]U.S. Census Bureau. Growth in the number of residential building permits. Data through December 2021.
[4]F.W. Dodge. Data through December 2021.

Labor market. El Paso County's population is growing rapidly, overtaking Denver as the state's most populous county according to the 2020 Census. Projections from the State Demography Office indicate that its population growth will outpace Denver's and the state over the next five years. Since the start of the pandemic-induced recession, Colorado Springs employers have added jobs at a faster rate than those in other parts of the state (Figure 33, left). The region's 3.8 percent job growth in 2021 comfortably exceeded the state's other metropolitan areas, and is the only metro area to surpass pre-pandemic jobs levels to date. While pandemic job losses were severe in all parts of the state, Colorado Springs was relatively well-equipped to weather the storm, as the region's economy relies less on the sectors that have been most severely affected – like oil and gas, leisure and hospitality, and tourism – than other parts of the state. Key employers like those working in national defense experienced fewer pandemic disruptions to business, while the addition of an Amazon fulfillment center in the summer of 2021 brought more jobs to the region.

The growth in population is contributing to a growing labor force population, causing the unemployment rate to remain elevated above pre-pandemic levels, averaging 5.8 percent in 2021, the second-highest among regions after only the Pueblo region (Figure 33, right). As such, elevated unemployment rates mask an economy in which employers are adding jobs and workers are joining or returning to the workforce at impressive rates.

Figure 33
Colorado Springs Labor Market Activity



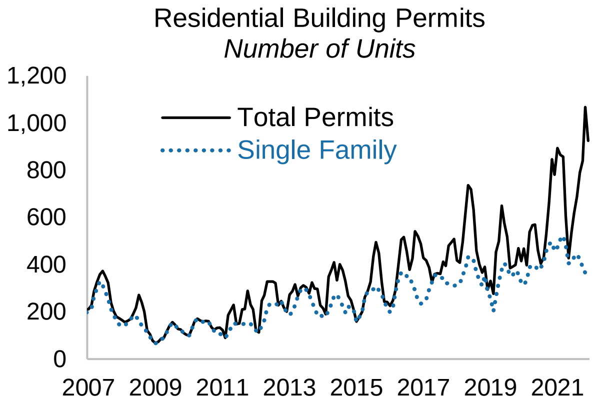
Source: U.S. Bureau of Labor Statistics; CES data (left) and LAUS data (right). Data are seasonally adjusted through December 2021.

Housing. Homebuilding in El Paso County remains robust. Builders pulled more than 9,100 housing construction permits in 2021, an increase of 34.7 percent from already high 2020 levels (Figure 34, left). Multifamily construction has comprised a growing share of activity, representing 43.1 percent of total permits in 2021 compared to 26.4 percent in 2020.

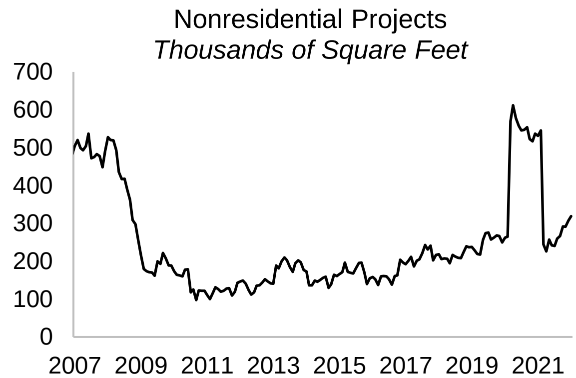
The Federal Housing Finance Agency's home price index shows that home prices in the Colorado Springs metropolitan statistical area, which includes El Paso and Teller counties, increased 18.0 percent in 2021 above year-ago levels. For the third straight year, Colorado Springs prices appear to be increasing more quickly than those in Denver, Fort Collins, Greeley, Boulder, and Grand Junction, and slower only than those in Pueblo. Rapid price growth, robust demand, and bolstered transportation infrastructure are expected to sustain homebuilding through the forecast period.

Nonresidential construction. Colorado Springs continues to experience a nonresidential construction boom as well, with construction activity at levels not experienced since before the Great Recession. Builders added 3.7 million square feet of nonresidential space in 2021 (Figure 34, right). In 2020, total square footage was higher, owing to the inclusion of the 3.7 million square foot Amazon fulfillment center that opened during the summer of 2021. In September, Amazon announced plans to add an additional 2,200 employees in the Colorado Springs area between the main fulfillment center and three smaller operations.

Figure 34
Colorado Springs Construction Activity

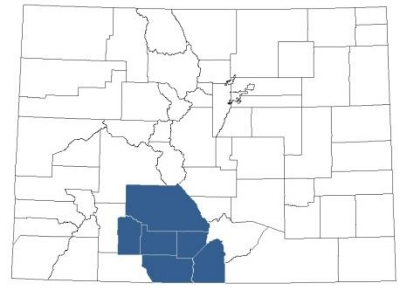


Source: U.S. Census Bureau. Data are shown as three-month moving averages. Data are not seasonally adjusted and are through December 2021.



Source: F.W. Dodge. Data shown as twelve-month moving averages. Data are not seasonally adjusted and are through January 2022.

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 health and government services, including Adams State University, as well as a small but resilient tourism sector. The region's labor market continues to recover, while supply chain disruptions, worsening drought conditions and continued water shortages cloud the outlook for agricultural producers. Economic indicators for the region are summarized in Table 21.

Table 21
San Luis Valley Region Economic Indicators
Alamosa, Conejos, Costilla, Mineral, Rio Grande, and Saguache Counties

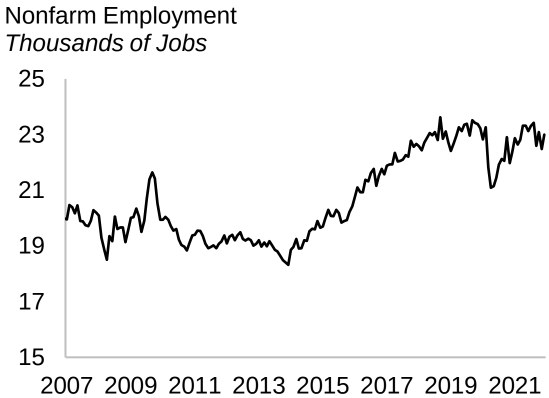
	2017	2018	2019	2020	2021
Employment Growth[1]	4.3%	3.0%	1.0%	-4.6%	4.2%
Unemployment Rate[1]	3.6%	4.1%	3.6%	6.6%	5.7%
Barley[2]					
Acres Harvested	68,000	53,000	52,000	45,000	NA
Crop Value ($/Acre)	$607	$660	$672	$703	NA
Potatoes[2]					
Acres Harvested	55,600	55,000	51,000	53,800	52,700
Crop Value ($/Acre)	$3,572	$3,942	$4,709	$4,816	NA
Housing Permit Growth[3]	16.8%	16.3%	-11.1%	13.9%	28.6%
National Park Recreation Visits[4]	25.4%	-9.0%	19.1%	-12.5%	30.6%

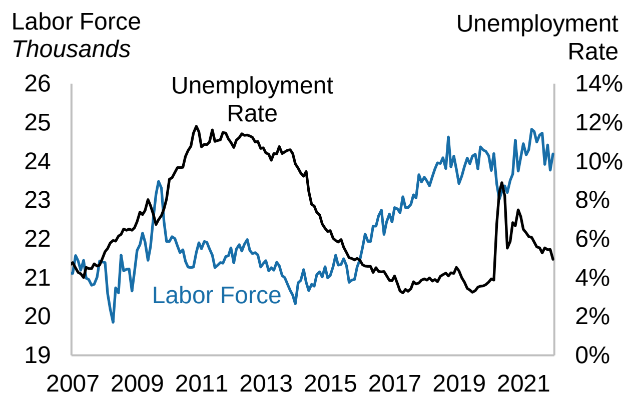
NA = Not available.
[1]U.S. Bureau of Labor Statistics, LAUS (household survey). Seasonally adjusted. Data through December 2021.
[2]National Agricultural Statistics Service, statewide data. Area harvested 2021 is for the marketing year ending in June 2021.
[3]F.W. Dodge. Data through December 2021.
[4]National Park Service. Data through December 2021. 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 lettuce, wheat, and barley, with hemp and quinoa acreages on the rise. Grazing and alfalfa hay are important in areas lacking sufficient access to water rights. Through February, the 2021-22 marketing year potato shipments are on par with the same period last year. Ongoing disruptions from weather and supply chain issues cloud the outlook for the region's agricultural producers. Although drought had almost completely receded from the region over the summer of 2021, conditions have since deteriorated. According to the U.S. Drought Monitor, most of the region has returned to severe or extreme drought as of February 15, 2022. Longer-term changes in precipitation have reduced snowpack to below-average spring levels in nine of the past eleven years, according to the USDA's Natural Resources Conservation Service. Weather and access to water remain significant concerns for San Luis Valley agriculture producers, with depleted runoff into streams, reservoirs, and irrigation canals.

Labor market. Labor market conditions have improved, albeit inconsistently, since declining sharply with statewide shutdowns in early 2020. Overall, employment in the region was up 4.2 percent in 2021 compared to 2020 (Figure 35, left). After meeting or exceeding pre-pandemic levels of employment through the summer, sluggish employment growth in the fall left regional employment at 99 percent of pre-pandemic levels in December 2021. The number of unemployed individuals declined through the fall of 2021, and the unemployment rate fell to 4.9 percent in December 2021, bringing the 2021 average to 5.7 percent (Figure 35, right).

Figure 35
San Luis Valley Labor Market Activity



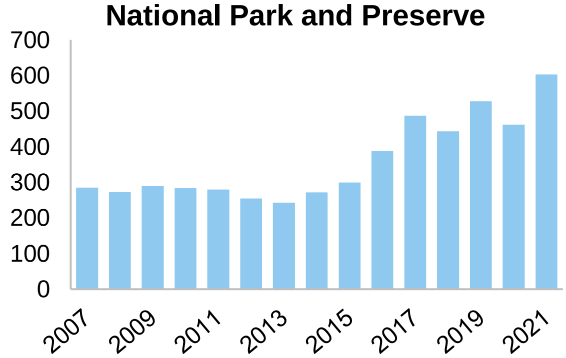


Source: U.S. Bureau of Labor Statistics; LAUS. Data prior to 2010 adjusted by Legislative Council Staff. Data are seasonally adjusted and are through December 2021.

Housing and population growth. At 0.2 percent population growth, or a net gain of 81 people between 2010 and 2020, the San Luis Valley is among the slowest growing of the state's nine regions, just ahead of the eastern region, which gained a net 68 people over the decade. Significant population gains in Alamosa County were offset by declines in Conejos and Rio Grande counties, according to 2020 Census data. Housing permits issued in the San Luis Valley were up by 28.6 percent in 2021, after increasing by 13.9 percent in 2020. Median single-family home prices in Alamosa and Saguache counties finished the year up 6.4 percent and 20.4 percent, respectively, over 2020. At under $300,000, however, median home prices remain well below the statewide median of $512,000.

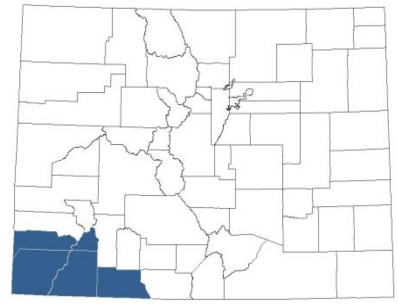
Tourism. Visits to the Great Sand Dunes National Park and Preserve recovered rapidly during the summer months of 2020 following spring park closures, although remained down by 12.5 percent compared to 2019 total visitation. At over 600,000, park visits in 2021 exceeded pre-pandemic levels and finished the year up 30.6 percent (Figure 36).

Figure 36
Visits to Great Sand Dunes National Park and Preserve



Source: National Park Service. Data through December 2022.

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 social assistance. Like many regions of the state with a heavy reliance on tourism, the COVID-19 pandemic significantly impacted economic activity in the southwest mountains. However, the region continues to recover, with recent data pointing to a strengthening labor market, robust home building activity, and a return to travel and tourism to the area. Economic indicators for the region are summarized in Table 22.

Table 22
Southwest Mountain Region Economic Indicators
Archuleta, Dolores, La Plata, Montezuma, and San Juan Counties

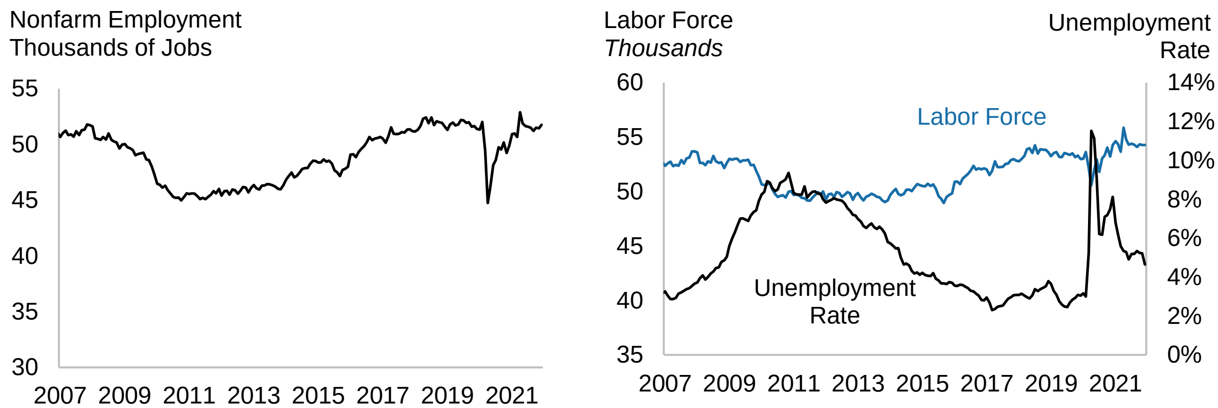
	2017	2018	2019	2020	2021
Employment Growth[1]	2.2%	1.8%	-0.2%	-5.2%	4.9%
Unemployment Rate[1]	2.7%	3.3%	2.9%	7.1%	5.4%
Housing Permit Growth[2]	29.8%	24.1%	-33.9%	12.4%	18.4%
National Park Recreation Visits[3]	4.4%	-7.6%	-2.1%	-48.1%	87.2%

NA = Not available.
[1]U.S. Bureau of Labor Statistics, LAUS (household survey). Seasonally adjusted. Data through December 2021.
[2]F.W. Dodge. Data through December 2021.
[3]National Park Service. Data through December 2021 Recreation visits for Mesa Verde National Park and Hovenweep National Monument.

Labor market. The labor market improved in the region throughout 2021, despite an uptick in the unemployment rate through the third and fourth quarters. Travel and tourism based sectors of the economy were likely impacted by the Delta and Omicron waves of the pandemic during the summer and fall months. However, the unemployment rate ended the year at 4.6 percent, down from 8.1 percent in December 2020 and among the lowest posted in the state. Further, employment was up 4.9 percent in 2021, one of the fastest rates posted among the regions and above statewide growth (Figure 37, left). Encouragingly, individuals returned quickly to the labor force, rising above pre-pandemic peaks as early as October 2020 and growing by 3.1 percent in 2021, also exceeding statewide growth. Heading into 2022, steady employment growth and falling unemployment are expected to push the unemployment rate lower as business and labor market conditions continue to improve.

While the pandemic trajectory remains a risk to the region's economy, many are also concerned about labor shortages and housing. Many businesses have reported challenges finding employees, resulting in understaffing and overtime work for existing staff as they struggle to keep up with increased demand. Additionally, the area has had unseasonably warm weather and lower-than-average snowpack, causing concern for the agricultural industry in the area over ongoing drought conditions.

Figure 37
Southwest Mountain Region Labor Market Activity

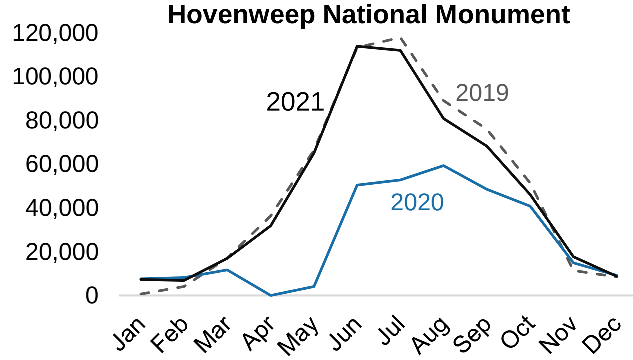


Source: U.S. Bureau of Labor Statistics; LAUS. Data are seasonally adjusted and are through December 2021.

Housing. Like national and statewide trends, the housing market in the southwest mountain region recorded robust growth emerging from the recession, and further accelerated through the first half of 2021. Permit activity slowed through the latter half of the year, but remained up 18.4 percent overall. In 2021, the Colorado Association of Realtors reported strong sales activity and price appreciation throughout the region. Median sales prices for single-family homes were up by double digits in all five of the region's counties. Median single-family home price growth over 2021 ranged from 18.1 percent in Montezuma County to 53 percent in Dolores County. For the region's largest housing markets, the median single-family home price was up 32.2 percent in Archuleta County and 21.7 percent in La Plata County. However, rapid price appreciation and low inventory levels likely dampened sales activity throughout the year. Sales were down by 2.9 percent in Archuleta County and 6.2 percent in La Plata County. Sales also fell in San Juan County, but were up in Dolores and Montezuma counties where prices are much lower.

Tourism. Figure 38 compares monthly visits to Mesa Verde National Park and nearby Hovenweep National Monument parks from 2019 to 2021. Through the pandemic, visits were down significantly, but began to track more closely with pre-pandemic levels by the fourth quarter of 2020. In 2021, visitor levels tracked closely with 2019 levels, with a small dropoff in activity from July to October. For the year, visits in 2021 were down just 2.8 percent from 2019 levels.

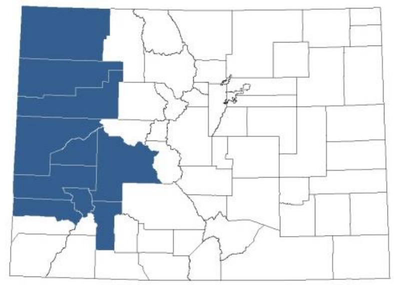
Figure 38
Visits to Mesa Verde National Park and Hovenweep National Monument



Source: National Park Service. *Data through December 2021.

In 2020, passenger traffic was down more than 50 percent at the Durango-La Plata County airport, consistent with the broad reach of the pandemic on travel nationwide. However, passenger traffic ended 2021 up 1.7 percent over 2019 levels, exceeding 2019 levels of traffic each month since June. The recovery marks a return to travel and tourist activity.

Western Region



The ten-county western region has a diverse economy. Key industries in the more northern counties of Mesa, Garfield, Moffat, and Rio Blanco 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 pandemic in the spring of 2020, summer wildfires engulfed large swathes of the region, shutting down popular tourist destinations altogether. While unemployment remains elevated in the region, the housing and construction industries have shown significant growth in 2021 over recessionary 2020 levels, and outdoor recreation has also seen a boost compared to 2020 activity. Economic indicators for the region are summarized in Table 23.

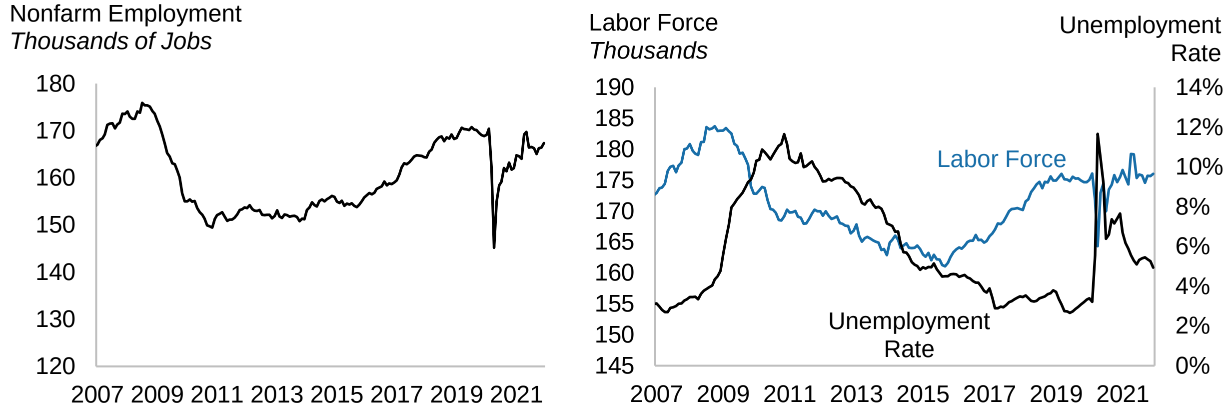
Table 23
Western Region Economic Indicators
Delta, Garfield, Gunnison, Hinsdale, Mesa, Moffat, Montrose, Ouray, Rio Blanco, and San Miguel Counties

	2017	2018	2019	2020	2021
Employment Growth					
Western Region[1]	3.3%	2.6%	1.2%	-4.8%	3.5%
Grand Junction MSA[2]	2.2%	2.5%	1.4%	-5.4%	1.7%
Unemployment Rate[1]	3.0%	3.2%	2.8%	6.6%	5.5%
Natural Gas Production Growth[3]	-6.3%	5.2%	-0.9%	-7.8%	-8.7%
Housing Permit Growth[4]	42.8%	15.5%	-11.7%	30.3%	21.9%
Nonresidential Construction Growth[4]					
Value of Projects	-33.1%	2.8%	64.7%	-66.9%	220.7%
Square Footage of Projects	-17.6%	27.4%	7.0%	-26.4%	50.7%
Level (*Thousands*)	477	608	651	479	722
Number of Projects	-36.7%	18.0%	20.3%	22.5%	32.2%
Level	50	59	71	87	115
National Park Recreation Visits[5]	6.5%	-5.8%	2.3%	-0.1%	12.7%

MSA = Metropolitan statistical area.
[1]U.S. Bureau of Labor Statistics, LAUS (household survey). Seasonally adjusted. Data through December 2021.
[2]U.S. Bureau of Labor Statistics, CES (establishment survey). Seasonally adjusted. Data through December 2021.
[3]Colorado Oil and Gas Conservation Commission. Data through November 2021.
[4]F.W. Dodge. Data through December 2021.
[5]National Park Service. Data through December 2021. Recreation visits for Dinosaur National Monument, Colorado National Monument, Black Canyon of the Gunnison, and Curecanti National Recreation Area.

Labor market. Employment in the region, similar to the rest of the state, suffered a 4.8 percent decline in 2020 with the onset of the COVID-19 pandemic. Employment has since rebounded, however, regaining all but 3,085 of the jobs lost during the pandemic-related recession (Figure 39, left). The region's 5.5 percent unemployment rate for 2021 is just above the state average of 5.4 percent (Figure 39, right). Employment growth in the Grand Junction area has fared worse than the region as a whole, with employment levels shrinking by 5.4 percent in 2020 and only growing 1.7 percent in 2021, contributing to an unemployment rate of 6.1 percent over 2021.

Figure 39
Western Region Labor Market Activity

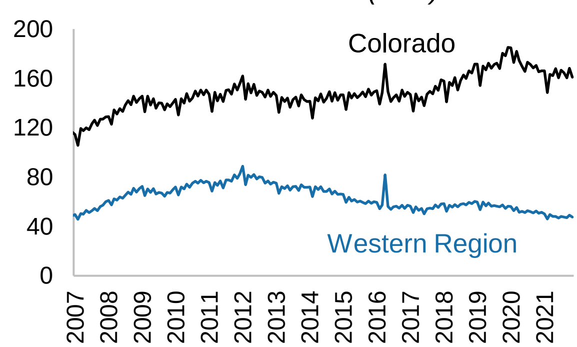


Source: U.S. Bureau of Labor Statistics; LAUS. Data prior to 2010 adjusted by Legislative Council Staff. Data are seasonally adjusted and are through December 2021.

Construction. Following a rebound in activity in 2020, the residential construction industry kept a similar pace in 2021, with a 21.9 percent increase in housing permits over 2020, spurred by a shift in demand toward more rural areas and larger houses as a result of the pandemic. Nonresidential construction suffered a slowdown in 2020, but has since bounced back, with the value of projects more than doubling in 2021. This growth is largely driven by significant investments in the Riverfront at Dos Rios development in Grand Junction, the new library building in Gunnison County, the expansion of the Gunnison-Crested Butte Airport, and an 80-megawatt solar project in the Delta-Montrose area. A portion of this sizable growth is due to the significant drop seen in 2020; however, indicators suggest the nonresidential construction sector is strong in the region.

Energy sector. The region is home to the Piceance Basin, a sizable natural gas resource in the state. Natural gas production in the region has largely been in decline since 2012. After declining by 7.8 percent in 2020, natural gas production shrank by an additional 8.7 percent in 2021 year-to-date through November (Figure 40). The cold snap in early 2021 pushed natural gas prices up from \$2.71 in January to \$12.18 per million Btu in the third week of February, as measured by the Henry Hub Natural Gas Spot Price, as demand spiked and supply was constrained by extreme weather. Natural gas prices have since moderated but are expected to remain well above 2020 prices through 2023.

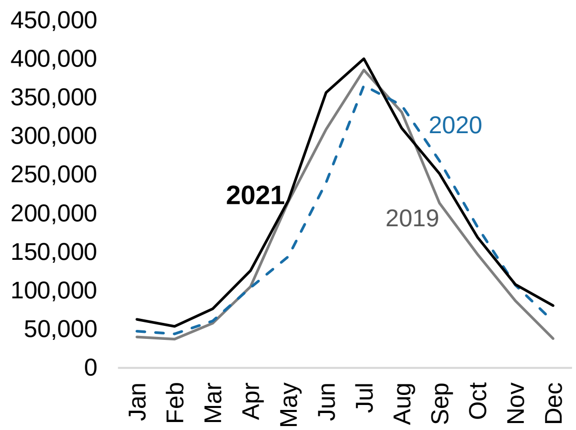
Figure 40
Natural Gas Production
Billion Cubic Feet (BCF)



Source: Colorado Oil and Gas Conservation Commission. Monthly data through November 2021.

National park visitors. Subdued tourism resulting from the COVID-19 pandemic combined with summer wildfires in 2020 led to reduced outdoor recreation and national park visitation in the region in 2020 (Figure 41). In 2021, national park visits in this region are up by 12.7 percent compared to 2020. The Dinosaur National Monument, the Colorado National Monument, and the Curecanti National Recreation Area all saw increases over 2021 visits, rising by 36.1 percent, 14.7 percent, and 13.3 percent over 2020, respectively. Visits to Black Canyon of the Gunnison, however, decreased by 9.6 percent over 2020.

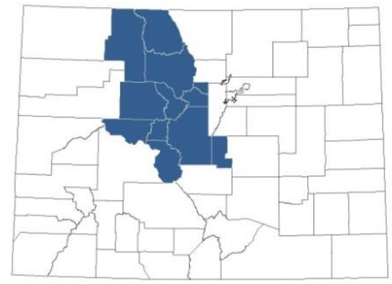
Figure 41
Regional National Park Visits



Source: National Park Service. Data are through December 2021 and include Dinosaur and Colorado National Monuments, Curecanti National Recreation Area, and Black Canyon of the Gunnison National Park.

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 activity, with a large share of workers employed in leisure and hospitality industries. The ongoing pandemic has had varying impacts on the region, boosting some sectors and dampening others. While the region has benefited from improved confidence and travel activity during the recovery, it has been challenged by slow employment growth and a declining labor force.



Nonresidential construction activity fell in 2021, a trend that is expected to continue into 2022. For residential real estate, rapid price growth and low inventory contributed to slower sales in 2021, but residential construction activity remains strong. Economic indicators for the mountain region are presented in Table 24.

Table 24
Mountain Region Economic Indicators
Chaffee, Clear Creek, Eagle, Gilpin, Grand, Jackson, Lake, Park, Pitkin, Routt, Summit, and Teller Counties

	2017	2018	2019	2020	2021
Employment Growth[1]	4.0%	3.0%	1.9%	-7.2%	1.9%
Unemployment Rate[1]	2.2%	2.6%	2.3%	8.3%	5.1%
Housing Permit Growth[2]	-10.7%	68.0%	12.0%	-34.0%	29.8%
Nonresidential Construction Growth[2]					
Value of Projects	298.4%	-78.0%	40.6%	84.5%	-56.0%
Square Footage of Projects	221.0%	-65.1%	29.2%	20.9%	-21.2%
Level (Thousands)	2,028	708	915	1,106	871
Number of Projects	-1.6%	17.7%	-37.0%	69.6%	7.7%
Level	62	73	46	78	84

NA = Not available.
[1]U.S. Bureau of Labor Statistics, LAUS (household survey). Seasonally adjusted. Data through December 2021.
[2]F.W. Dodge. Data through December 2021.

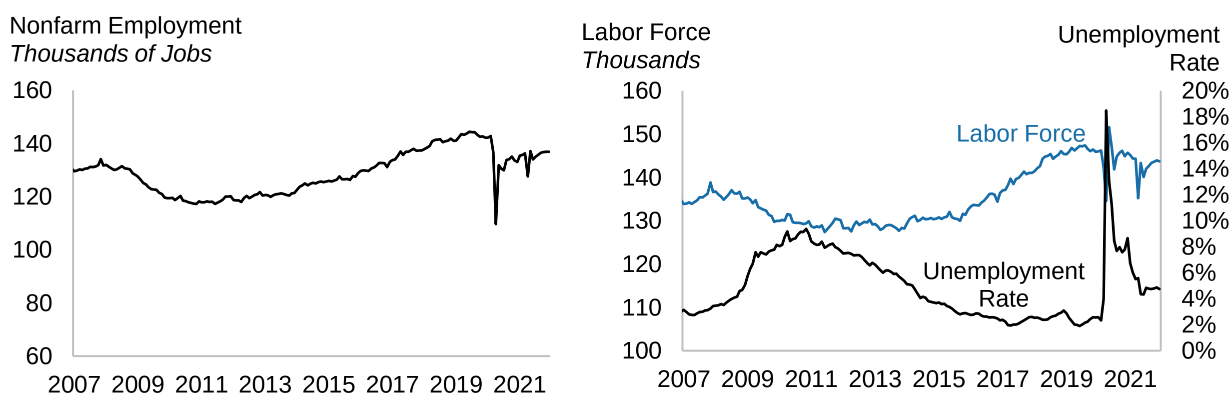
Labor market. Labor market indicators for the mountain region showed little improvement over the latter half of 2021. One of the hardest hit regions early in the pandemic, lingering effects of the crisis continue to affect employment trends during the recovery. Improvements in the region's unemployment rate have stalled, and the region's labor force recovery remains challenged (Figure 42). While the region remains sensitive to fluctuating economic and pandemic conditions, labor supply issues are among the top local concerns.

By year end 2021, the mountain region's unemployment rate rose to 4.8 percent, in line with the average over the last six months of the year and higher than the 4.3 percent rate posted in June. Over the latter half of the year, the region's unemployment rate remained elevated as tepid employment growth combined with a stagnant labor force. For the year, employment in the mountain region was up 1.9 percent, but remains well below peak levels. By December, the region had recovered about 81.9 percent of jobs lost during the recession compared with 95.8 percent statewide, reflecting the slowest employment growth in the state.

This slow employment growth in the region is likely caused by a number of factors. For instance, the region's labor force contracted in 2021, falling 1.5 percent for the year and marking the only region to post a decline. The smaller labor force indicates a smaller pool of active job seekers and has likely contributed to labor shortages. Despite slight growth in the labor force heading into the ski season, it remains well below peak levels posted in 2019. Another factor contributing to slow employment growth is the region's heavy reliance on outside workers. Traditionally, the region attracts significant percentages of workers from adjacent communities, particularly along the Front Range. Attractive employment opportunities closer to home, lingering effects of the pandemic, and a shift away from leisure and hospitality work have made it harder to find workers. On the positive side, travel restrictions have eased and visa issuances are recovering, factors that may bring more international workers to the region.

The trajectory of the pandemic remains a risk factor to the regional economy. News reports suggested the surge of the Omicron variant impacted bookings for lodging in resort communities during January. However, pandemic setbacks appear increasingly short-lived and are likely shifting the timing of planned vacations rather than causing permanent cancellations. As more sectors recover, overall bookings for the year were bolstered by a return of events such as weddings and corporate meetings. Another factor impacting the mountain region economy each year is snowfall, which varies across the region. While areas in Pitkin County are at or above average snowpack, snowpack has been weaker along the I-70 corridor and north central Colorado. Large resorts have increasingly relied on season passes and pre-season sales to mitigate revenue risks, but ancillary businesses and support services could be impacted if weather reduces skier traffic.

Figure 42
Mountain Region Labor Market Activity



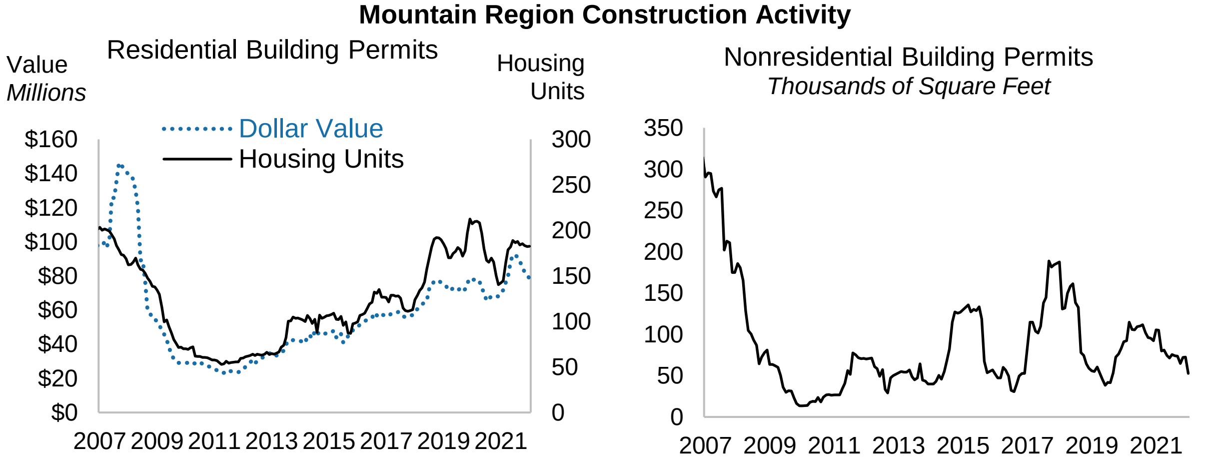
Source: U.S. Bureau of Labor Statistics; LAUS. Data are seasonally adjusted and are through December 2021. Includes Legislative Council Staff adjustments prior to 2010.

Construction. In contrast to other regions in the state, residential construction activity in the mountain region fell in 2020 despite strong sales activity and price growth. Activity rebounded in 2021 as permitted units rose about 30 percent. Indicators remain favorable for the mountain region with strong price growth, strong demand, and the push for affordable housing in mountain resort communities. One challenge facing the industry is ongoing labor shortages. Data indicate that although regional construction industry employment has improved significantly since the recession, employment remained down about 1.0 percent in the third quarter of 2021 from peak levels recorded two years earlier. Despite the risks of rising material costs and labor challenges in the industry, momentum in residential construction activity is expected to persist into 2022, but at a slower rate.

Residential sales activity slowed for several areas of the mountain region in 2021. By year end, sales of single-family homes were down in Chaffee (-1.6 percent), Eagle (-15.7 percent), Grand (-2.8 percent), Jackson (-17.9 percent), Pitkin (-1.8 percent), and Routt (-5.3 percent) counties compared with the prior year. Sales for townhomes and condos in the mountain region were also down in 2021. Rapid price appreciation and low inventory may be dampening opportunities for buyers and contributing to slower sales. In 2021, median single-family price growth in the region exceeded statewide growth (17.7 percent) in eight of 12 counties, with prices rising as high as 34.6 percent in Eagle County. Four counties posted slower price growth than the state, including Clear Creek, Gilpin, Jackson, and Pitkin counties.

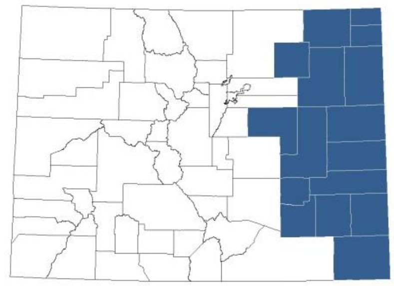
Data indicate that nonresidential construction activity increased in 2020, with gains in both value and square footage (Figure 43, right). However, the gain is attributable to strength in the first half of the year offsetting slowing activity in the latter half. In 2021, the value of nonresidential construction and square footage of projects ended the year down 56 percent and 21 percent, respectively. While nonresidential construction is highly variable and can be influenced by a few large projects, the region is expected to see slower nonresidential construction activity into 2022 as investors and businesses wait for more certainty.

Figure 43
Mountain Region Construction Activity



Source: F.W. Dodge. Data shown as twelve-month moving averages. Data are not seasonally adjusted and are through January 2022.

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 local farming and ranching communities. Out-migration and an aging population continue to put pressure on the region's labor force, which is the most sparsely populated in the state. Supply chain disruptions and deteriorating drought conditions cloud the outlook for the region's agricultural industry. Consistent with historical trends, labor markets continue to outperform those in other regions of the state. Economic indicators for the region are presented in Table 25.

Table 25
Eastern Region Economic Indicators
Baca, Bent, Logan, Cheyenne, Crowley, Elbert, Kiowa, Kit Carson, Lincoln, Morgan, Otero, Phillips, Prowers, Sedgwick, Washington, and Yuma Counties

	2017	2018	2019	2020	2021
Employment Growth[1]	3.1%	2.1%	1.0%	-4.5%	4.9%
Unemployment Rate[1]	2.3%	2.7%	2.4%	4.5%	4.3%
Crop Price Changes[2]					
Wheat ($/Bushel)	-2.9%	34.6%	-7.0%	6.3%	37.7%
Corn ($/Bushel)	-3.4%	2.8%	9.3%	-4.6%	53.8%
Alfalfa Hay (Baled, $/Ton)	4.8%	23.8%	14.9%	-7.8%	1.7%
Livestock[3]					
State Cattle and Calf Inventory Growth	6.7%	2.6%	8.0%	1.9%	4.0%
Milk Production	6.7%	8.8%	5.5%	7.1%	2.4%
Housing Permit Growth[4]	22.2%	43.4%	0.2%	22.3%	21.7%

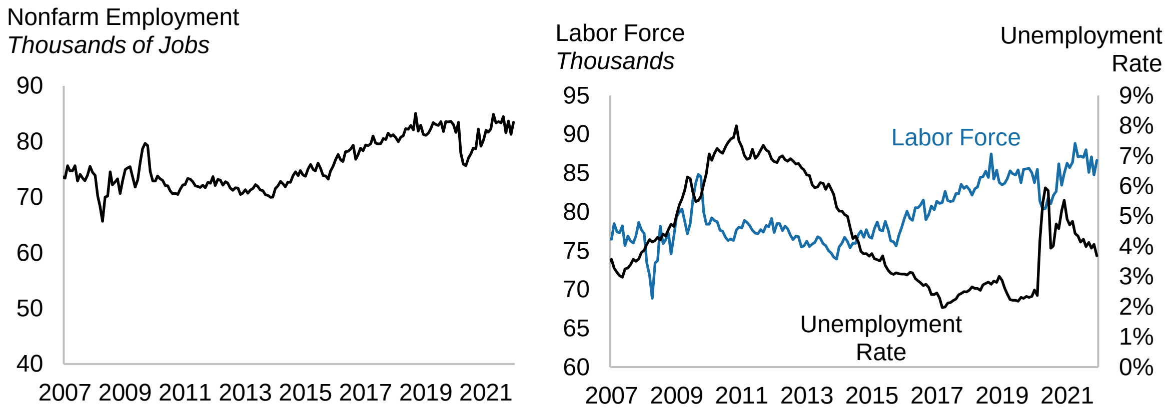
[1]U.S. Bureau of Labor Statistics, LAUS (household survey). Data through December 2021.
[2]National Agricultural Statistics Service. Data through December 2021.
[3]National Agricultural Statistics Service. Data through December 2021.
[4]F.W. Dodge. Data through December 2021.

Agriculture and livestock. The eastern plains is the largest agricultural region in the state and agriculture drives much of the region's economy. The continued economic recovery, supply-chain disruptions, rising costs for farmers, and adverse weather sent grain prices skyrocketing in 2021. Colorado corn and wheat prices reached multi-year highs in 2021, up 53.8 percent and 37.7 percent, respectively from 2020.

Despite higher crop prices, the region's agricultural producers face increasing headwinds. Ongoing recovery-related supply chain disruptions have resulted in shortages and higher prices for key agricultural inputs including fertilizers, pesticides, fuel, machinery, and trucking. Further, drought conditions in the region have deteriorated considerably since the summer of 2021, with most of the region in severe drought as of February 15, 2022, reversing the improvements seen in early 2021. In addition, recent turmoil in Russian and Ukraine threaten global grain supplies further, roiling global grain markets further in early 2022.

Labor market. As in other areas of the state and nation, labor market conditions in the eastern plains indicated a choppy recovery in 2021. Employment finished the year up by 4.9 percent, nearly reaching pre-pandemic levels in December (Figure 44, left). The region's unemployment rate ticked down by 0.4 percent in December 2021, bringing the 2021 average to 4.3 percent, the lowest among the state's nine regions (Figure 44, right).

Figure 44
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 December 2021.

Housing and population growth. The eastern plains was the slowest-growing region in the state between 2010 and 2020, gaining a net of only 68 people. Significant population gains in Elbert and Morgan counties were offset by losses in Kit Carson, Logan, Bent, Baca, and Prowers counties. Counties experiencing population growth border the northern region and the Denver and Colorado Springs metropolitan areas, as former residents of these larger, more expensive areas search for more affordable housing. As a result, housing markets in these counties are seeing substantial home price appreciation. The median sales price for a single-family home in Elbert County, for example, which borders both metro Denver and Colorado Springs, rose 17.9 percent in 2021, to $645,000, with sellers receiving over 100 percent of the list price, according to the Colorado Association of Realtors. Median home prices in Morgan County, bordering the northern and metro Denver regions, grew 11.8 percent to $307,500 in 2021, but remain well below the statewide median of $512,000.

Wind farms. The eastern plains region has seen substantial investment in wind energy in recent years, expanding property tax revenues for local communities and providing a stable revenue source for landowners who agree to house wind turbines. With over 500 turbines, Xcel Energy's Cheyenne Ridge and Rush Creek wind farms span Cheyenne, Elbert, Kit Carson, and Lincoln counties. Xcel Energy recently announced the construction of a high-voltage transmission line to bring electricity from the region to the Front Range. As the state continues to address renewable energy goals, the abundance of wind resources in the region is expected to attract more investment in wind farms.

Appendix: Historical Data

National Economic Indicators

Calendar Years	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021
GDP ($ *Billions*)[1]	$14,769.9	$14,478.1	$15,049.0	$15,599.7	$16,254.0	$16,843.2	$17,550.7	$18,206.0	$18,695.1	$19,479.6	$20,527.2	$21,372.6	$20,893.7	$22,993.5
Percent Change	2.0%	-2.0%	3.9%	3.7%	4.2%	3.6%	4.2%	3.7%	2.7%	4.2%	5.4%	4.1%	-2.2%	10.0%
Real GDP ($ *Billions*)[1]	$15,643.0	$15,236.3	$15,649.0	$15,891.5	$16,254.0	$16,553.3	$16,932.1	$17,390.3	$17,680.3	$18,079.1	$18,606.8	$19,032.7	$18,384.7	$19,427.2
Percent Change	0.1%	-2.6%	2.7%	1.5%	2.3%	1.8%	2.3%	2.7%	1.7%	2.3%	2.9%	2.3%	-3.4%	5.7%
Unemployment Rate[2]	5.8%	9.3%	9.6%	8.9%	8.1%	7.4%	6.2%	5.3%	4.9%	4.4%	3.9%	3.7%	8.1%	5.4%
Inflation[2]	3.8%	-0.3%	1.6%	3.1%	2.1%	1.5%	1.6%	0.1%	1.3%	2.1%	2.4%	1.8%	1.2%	4.7%
10-Year Treasury Note[3]	3.7%	3.3%	3.2%	2.8%	1.8%	2.4%	2.5%	2.1%	1.8%	2.3%	2.9%	2.1%	0.9%	1.5%
Personal Income ($ *Billions*)[1]	$12,477.6	$12,080.4	$12,594.5	$13,339.3	$14,014.3	$14,193.7	$14,976.6	$15,685.2	$16,096.9	$16,850.2	$17,706.0	$18,424.4	$19,627.6	$21,059.8
Percent Change	3.8%	-3.2%	4.3%	5.9%	5.1%	1.3%	5.5%	4.7%	2.6%	4.7%	5.1%	4.1%	6.5%	7.3%
Wage & Salaries ($ *Billions*)[1]	$6,534.1	$6,249.1	$6,372.5	$6,626.2	$6,928.1	$7,114.0	$7,476.3	$7,859.5	$8,091.3	$8,474.7	$8,900.5	$9,323.5	$9,444.1	$10,306.5
Percent Change	2.2%	-4.4%	2.0%	4.0%	4.6%	2.7%	5.1%	5.1%	2.9%	4.7%	5.0%	4.8%	1.3%	9.1%
Nonfarm Employment (*Millions*)[2]	137.2	131.3	130.3	131.9	134.2	136.4	138.9	141.8	144.3	146.6	148.9	150.9	142.1	146.1
Percent Change	-0.5%	-4.3%	-0.7%	1.2%	1.7%	1.6%	1.9%	2.1%	1.8%	1.6%	1.6%	1.3%	-5.8%	2.8%

Sources
[1]U.S. Bureau of Economic Analysis. Real gross domestic product (GDP) is adjusted for inflation. Personal income and wages and salaries not adjusted for inflation.
[2]U.S. Bureau of Labor Statistics. Inflation shown as the year-over-year change in the consumer price index for all urban areas (CPI-U).
[3]Federal Reserve Board of Governors.

Colorado Economic Indicators

Calendar Years	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021
Nonfarm Employment (*Thousands*) [1]	2,349.6	2,244.3	2,221.0	2,257.4	2,311.7	2,380.5	2,463.5	2,541.2	2,601.5	2,660.0	2,726.9	2,790.0	2,651.3	2,745.3
Percent Change	0.8%	-4.5%	-1.0%	1.6%	2.4%	3.0%	3.5%	3.2%	2.4%	2.2%	2.5%	2.3%	-5.0%	3.5%
Unemployment Rate [1]	4.9%	7.9%	9.2%	8.7%	8.0%	6.7%	5.0%	3.7%	3.1%	2.6%	3.0%	2.6%	6.9%	5.4%
Personal Income ($ *Millions*) [2]	$210,029	$199,352	$205,866	$223,493	$236,759	$249,513	$271,410	$284,837	$289,673	$309,658	$331,955	$350,390	$370,392	NA
Percent Change	3.9%	-5.1%	3.3%	8.6%	5.9%	5.4%	8.8%	4.9%	1.7%	6.9%	7.2%	5.6%	5.7%	
Per Capita Income ($) [2]	$42,953	$40,093	$40,785	$43,635	$45,586	$47,339	$50,706	$52,222	$52,251	$55,125	$58,267	$60,848	$63,776	NA
Percent Change	2.1%	-6.7%	1.7%	7.0%	4.5%	3.8%	7.1%	3.0%	0.1%	5.5%	5.7%	4.4%	4.8%	
Wage & Salary Income ($ *Millions*) [2]	$116,710	$112,228	$113,670	$118,414	$124,947	$129,521	$138,626	$146,578	$151,165	$160,963	$170,904	$182,944	$187,128	NA
Percent Change	3.7%	-3.8%	1.3%	4.2%	5.5%	3.7%	7.0%	5.7%	3.1%	6.5%	6.2%	7.0%	2.3%	
Housing Permits [3]	18,998	9,355	11,591	13,502	23,301	27,517	28,698	31,871	38,974	40,673	42,627	38,633	40,469	60,123
Percent Change	-35.5%	-50.8%	23.9%	16.5%	72.6%	18.1%	4.3%	11.1%	22.3%	4.4%	4.8%	-9.4%	4.8%	48.6%
Nonresidential Construction ($ *Millions*) [4]	$4,114	$3,354	$3,147	$3,923	$3,695	$3,624	$4,351	$4,991	$5,988	$6,155	$8,146	$5,167	$5,462	$5,603
Percent Change	-21.8%	-18.5%	-6.2%	24.7%	-5.8%	-1.9%	20.1%	14.7%	20.0%	2.8%	32.4%	-36.6%	5.7%	2.6%
Denver-Aurora-Lakewood Inflation [1]	3.9%	-0.6%	1.9%	3.7%	1.9%	2.8%	2.8%	1.2%	2.8%	3.4%	2.7%	1.9%	2.0%	3.5%
Population (*Thousands, July 1*) [3]	4,889.7	4,972.2	5,029.2	5,121.9	5,193.7	5,270.8	5,352.6	5,454.3	5,543.8	5,617.4	5,697.2	5,758.5	5,773.7	5,812.1
Percent Change	1.8%	1.7%	1.1%	1.8%	1.4%	1.5%	1.6%	1.9%	1.6%	1.3%	1.4%	1.1%	0.3%	0.7%

NA = Not available.
[1]U.S. Bureau of Labor Statistics. Inflation shown as the year-over-year change in the consumer price index for Denver-Aurora-Lakewood metro area.
[2]U.S. Bureau of Economic Analysis. Personal income and wages and salaries not adjusted for inflation.
[3]U.S. Census Bureau. Residential housing permits are the number of new single and multi-family housing units permitted for building. 2010 and 2020 population numbers reflect the decennial Census, while other numbers reflect July 1 estimates.
[4]F.W. Dodge.