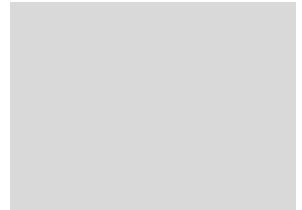
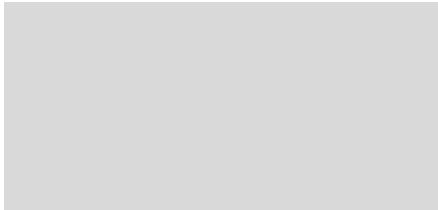




Colorado Legislative Council Staff
September 2022 | Economic & Revenue Forecast



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Executive Summary

This report presents the budget outlook based on current law and the September 2022 forecast for General Fund and cash fund revenue, as well as the TABOR and school finance outlooks. 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 2021-22	Preliminary figures indicate that the General Fund ended FY 2021-22 with a reserve of \$3.14 billion or 26.1 percent of appropriations, exceeding the statutorily required 13.4 percent reserve by \$1.53 billion. Revenue collections grew by 23.7 percent from the FY 2020-21 level, with individual income tax, corporate income tax, and sales tax collections all increasing at historic rates. State revenue exceeded the Referendum C cap by \$3.73 billion, triggering a General Fund obligation to pay TABOR refunds during FY 2022-23.
FY 2022-23	General Fund revenue collections are expected to modestly surpass FY 2021-22 revenue but fail to keep pace with inflation. The General Fund is expected to end FY 2022-23 with a 13.2 percent reserve, \$250.6 million below the statutorily required 15.0 percent reserve. Relative to the March forecast used to balance the FY 2022-23 budget, this forecast increases expectations for cash fund revenue subject to TABOR by a cumulative \$338.2 million in FY 2021-22 and FY 2022-23 combined, resulting in a year-end reserve projected to fall below the statutory reserve requirement.
FY 2023-24 Unbudgeted	General Fund revenue is expected to narrowly exceed FY 2022-23 collections as economic growth continues to slow; however, the FY 2023-24 Referendum C cap will incorporate inflation for calendar year 2022, which this forecast projects at 8.2 percent. The General Assembly is projected to have \$1.08 billion, or 5.6 percent, more available to spend or save relative to what is budgeted to be spent or saved in FY 2022-23 after the application of current law transfers and the 15.0 percent statutory reserve requirement. This amount does not incorporate caseload growth, inflationary, or other budgetary pressures. The General Fund Budget Overview section also presents the budget outlook under an alternative scenario that projects additional FY 2023-24 obligations based on current law and the updated outlook for school finance.
FY 2024-25 Unbudgeted	This forecast includes the first published projections for FY 2024-25. General Fund revenue is expected to grow at a modest rate of 3.9 percent and total \$18.75 billion, with state revenue subject to TABOR exceeding the Referendum C cap by \$1.90 billion.

Risks to the forecast. The aggressive monetary policy response to inflation and a faltering global economy 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 to be spent or saved in the General Fund budget.

Cash Fund Revenue

Cash fund revenue subject to TABOR totaled \$2.69 billion in FY 2021-22, an increase of 20.0 percent from prior year levels, according to preliminary data. Nearly 70 percent of this increase is attributable to rising severance tax collections, which surged alongside rising oil and natural gas prices in 2022. Cash fund revenue subject to TABOR is expected to continue rising through the forecast period, albeit at a slower pace, reaching \$2.77 billion in FY 2022-23, \$2.87 billion in FY 2023-24, and \$2.93 billion in FY 2024-25. Strong growth in transportation related-revenue is expected to offset declines in severance tax revenue and various other cash fund revenue streams throughout the forecast period. The forecast for cash fund revenue is presented beginning on page 35, and summarized in Table 13 on page 35.

Unemployment Insurance Trust Fund insolvency. After closing FY 2020-21 with a deficit of \$1.0 billion, the balance of the Unemployment Insurance Trust Fund improved in FY 2021-22 as benefits paid declined from pandemic highs. The fund became insolvent in August 2020, when benefits exceeded available funds, and Colorado began borrowing from the federal government to fund benefit payments. A move to the highest rate schedule to begin 2022, along with an increase in the chargeable wage base, has improved the fund's position, which was further bolstered by the injection of \$600 million in federal American Rescue Plan Act funds. Increasing fund revenues are expected to allow repayment of outstanding federal loans by 2023, and the fund balance is expected to steadily improve, exceeding pre-pandemic levels by the end of the forecast period.

Economic Outlook

The Colorado and national economies continue to expand, with positive consumer spending and a robust labor market indicating continued growth. Jobs are abundant, and ample household savings have helped to shrink the gap between rising incomes and even more quickly rising prices. But inflation has taken its toll. Rapid price hikes from energy and housing to food and vehicles have eroded real gains in earnings and income, household financial cushions, consumer spending, business activity, and trade. Imposing and persistent inflationary pressures have prompted the Federal Reserve to raise interest rates and reduce asset purchases, measures that have increased borrowing costs and have further influenced access to credit, asset prices, business activity, and construction. Indeed, the risk of a near-term recession has escalated considerably. The coming months will illuminate the inflation response to monetary policy treatment, as well as any persistent impacts for households and businesses. This forecast anticipates continued, yet slowing, expansion, but the path forward has narrowed. With a worsening economic outlook around the world, the possibility of a national downturn looms.

Discussion of the economic outlook begins on page 45, and summaries of expectations for the U.S. and Colorado economies are presented, respectively, in Tables 19 and 20 on pages 70 and 71.

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:

- projected changes in FY 2023-24 General Fund budget obligations under current law (Table 2);
- a summary of changes in expectations relative to the June 2022 forecast (Table 3);
- statutory transfers to transportation and capital construction funds (Table 4);
- the disposition of fiscal policies dependent on revenue conditions;
- General Fund rebates and expenditures (Table 5); and
- cash fund transfers to and from the General Fund (Table 6).

Legislative Assumptions

This forecast is based on current law, including the FY 2022-23 budget package and other changes to appropriations, revenue, and transfers enacted during the 2022 regular legislative session. Appropriations amounts are based on the FY 2022-23 appropriations report.

FY 2021-22

Preliminary data indicate that the General Fund ended FY 2021-22 with a reserve of \$3.14 billion or 26.1 percent of appropriations, exceeding the statutorily required 13.4 percent reserve by \$1.53 billion (Table 1, lines 16 through 19). Relative to the statutory reserve requirement, the surplus was \$62.8 million lower than expected in the June forecast, primarily due to corrections in the timing of transfers from the General Fund that had been projected, incorrectly, to occur in FY 2022-23.

Revenue collections grew by 23.7 percent from the FY 2020-21 level, the fastest growth rate since at least 1975, with individual income tax, corporate income tax, and sales tax collections all increasing at historic rates. General Fund revenue exceeded the June forecast by \$265.7 million, or 1.5 percent. The State Controller's September 1 certification reports that state revenue exceeded the Referendum C cap by \$3.73 billion, triggering a General Fund obligation to pay TABOR refunds to taxpayers during FY 2022-23.

FY 2022-23

The General Fund is expected to end FY 2022-23 with a 13.2 percent reserve, \$250.6 million below the statutorily required 15.0 percent reserve (Table 1, line 19). This amount incorporates FY 2022-23 appropriations after enactment of the budget package and other legislation, as well as corrections to transfers to and from the General Fund enacted in legislation passed near the end of the 2022 legislative session.

General Fund revenue collections are expected to modestly surpass FY 2021-22 revenue but fail to keep pace with inflation, as the economy faces significant headwinds in the face of the contractionary course of monetary policy being implemented to combat the rise in prices. Moderate growth in sales taxes and modest growth in individual income taxes are projected to offset expected declines in corporate income tax collections. State revenue subject to TABOR is expected to exceed the Referendum C cap by \$3.63 billion.

Relative to the March forecast used to balance the FY 2022-23 budget during the 2022 legislative session, this forecast includes increased expectations for cash fund revenue subject to TABOR by a cumulative \$338.2 million in FY 2021-22 and FY 2022-23 combined, mostly on upgraded expectations for severance tax collections. This revenue increases the General Fund obligation for TABOR refunds, resulting in a year-end reserve projected to fall below the statutory reserve requirement to which the budget was balanced.

FY 2023-24 (Unbudgeted)

General Fund revenue is expected to narrowly exceed FY 2022-23 collections as economic growth continues to slow. Meanwhile, the annual adjustment to the Referendum C cap for FY 2023-24 will incorporate inflation in Denver-Aurora-Lakewood consumer prices for calendar year 2022, which this forecast projects at 8.2 percent. As a result, state revenue subject to TABOR is expected to exceed the Referendum C cap by \$2.28 billion. This forecast presents two scenarios for the General Fund budget outlook for FY 2023-24.

Scenario A: Holds appropriations constant in FY 2023-24. Because a budget has not yet been enacted for FY 2023-24, Table 1 (line 21) shows the amount of revenue available in FY 2023-24 relative to the amount budgeted to be spent or saved in FY 2022-23. Based on this forecast, the General Assembly will have \$1.08 billion, or 5.6 percent, more available to spend or save than in FY 2022-23. This amount assumes current law obligations for FY 2023-24, including transfers, rebates, and expenditures (Table 1, lines 8 through 12), as well as a 15.0 percent reserve requirement and the projected TABOR refund obligation. The \$1.08 billion amount is a cumulative amount based on prior year revenue expectations and the budget situation in FY 2022-23. Any changes in revenue expectations or changes made to the budget for FY 2022-23 will carry forward into FY 2023-24. This amount holds FY 2022-23 appropriations constant and therefore does not reflect any caseload, inflationary, or other budget pressures.

Scenario B: Projected obligations based on current law. Scenario B, shown on line 23 of Table 1, presents the amount of revenue in excess of the statutorily required 15 percent reserve after the application of a set of assumptions for growth in appropriations and transfers consistent with the General Assembly's budget actions for FY 2022-23. Table 2 itemizes these assumptions, which include:

- anticipated changes in budget requests funded through the Long Bill, including primarily Medicaid and K-12 education; for K-12 education, this includes updated expectations for the FY 2023-24 state aid requirement based on this forecast (Table 2, line 2);
- increases in employee compensation and community provider rates consistent with the increases approved for FY 2022-23 (Table 2, lines 3 and 4);
- increases in the statutory reserve requirement that follow from the assumed changes in appropriations (Table 2, line 11);
- FY 2023-24 costs for capital construction and IT capital projects funded for FY 2022-23 (Table 2, lines 6 and 7); and
- a placeholder amount for capital transfers for controlled maintenance, consistent with the State Architect's recommendation for annual controlled maintenance expenditures (Table 2, line 8).

In total, the assumptions in Scenario B include \$998.2 million in General Fund obligations for appropriations, transfers, and the statutory reserve in excess of the current law appropriations and

transfers incorporated in Scenario A (Table 2, line 12). Under this scenario, the General Assembly will have an additional \$85.1 million, or 0.4 percent, more available to spend or save after the assumed increases (Table 2, line 13).

Table 1
General Fund Overview
Dollars in Millions

Funds Available	FY 2021-22 Preliminary	FY 2022-23 Estimate	FY 2023-24 Estimate	FY 2024-25 Estimate
1 Beginning Reserve	\$3,181.5	\$3,144.6	\$1,800.5	*
2 General Fund Revenue	\$17,697.9	\$17,948.3	\$18,056.5	\$18,251.3
3 Transfers from Other Funds (Table 6)	\$59.5	\$25.1	\$27.3	\$26.2
4 Total Funds Available	\$20,939.0	\$21,118.0	\$19,884.3	*
5 Percent Change	27.1%	0.9%	-5.8%	*
Expenditures	Preliminary	Budgeted	Estimate	Estimate
6 General Fund Appropriations	\$12,031.2	\$13,673.9	*	*
7 TABOR Refund Obligation Under Art. X, §20, (7)(d)	\$3,868.4	\$3,628.6	\$2,282.7	\$1,897.4
8 Rebates and Expenditures (Table 5)	\$149.6	\$145.3	\$144.6	\$143.8
9 Transfers to Other Funds (Table 6)	\$917.1	\$1,009.4	\$628.5	\$696.8
10 Transfers to the State Education Fund ¹	\$123.0	\$290.0	\$0.0	\$0.0
11 Transfers to Transportation Funds (Table 4)	\$484.9	\$88.0	\$0.0	\$100.0
12 Transfers to Capital Construction Funds (Table 4)	\$354.0	\$482.2	\$20.0	\$20.0
13 Total Expenditures	\$17,928.1	\$19,317.5	*	*
14 Percent Change	34.5%	7.7%	*	*
15 Accounting Adjustments ²	\$133.8	*	*	*
Reserve	Preliminary	Estimate	Estimate	Estimate
16 Year-End General Fund Reserve	\$3,144.6	\$1,800.5	*	*
17 Year-End Reserve as a Percent of Appropriations	26.1%	13.2%	*	*
18 Statutorily Required Reserve ³	\$1,612.2	\$2,051.1	*	*
19 Amount in Excess or (Deficit) of Statutory Reserve	\$1,532.4	(\$250.6)	*	*
20 Excess Reserve as a Percent of Expenditures	8.5%	-1.3%	*	*
Perspectives on FY 2023-24 (Unbudgeted)			Estimate	Estimate
Scenario A: Holds FY 2022-23 Appropriations Constant⁴				
21 Amount in Excess or (Deficit) of 15% Reserve Requirement			\$1,083.3	*
22 As a Percent of Prior-Year Expenditures			5.6%	*
Scenario B: Projected Obligations Based on Current Law⁵				
23 Amount in Excess or (Deficit) of 15% Reserve Requirement			\$85.1	*
24 As a Percent of Prior-Year Expenditures			0.4%	*
Addendum	Preliminary	Estimate	Estimate	Estimate
25 Percent Change in General Fund Appropriations	9.6%	13.7%	*	*
26 5% of Colorado Personal Income Appropriations Limit	\$17,519.5	\$18,519.6	\$20,111.5	\$21,318.2
27 Transfers to State Education Fund per Amendment 23	\$993.5	\$1,044.6	\$1,010.8	\$1,044.7

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

¹Includes transfers pursuant to HB 20-1420; SB 21-208; and HB 22-1390, net of amendments in SB 22-202.

²Includes \$133.8 million for under-refunds of TABOR surpluses from prior years.

³The required reserve is calculated as a percent of operating appropriations: 13.4 percent in FY 2021-22, and 15 percent each year thereafter.

⁴This scenario holds appropriations in FY 2023-24 equal to appropriations in FY 2022-23 (line 6) to determine the total amount of money available relative to FY 2022-23 expenditures, net of the obligations in lines 7 through 12.

⁵This scenario includes budget requests approved to date (primarily K-12 and Medicaid); estimated changes in employee compensation and community provider rates; capital construction and IT capital projects approved to date; and State Architect recommendations for controlled maintenance.

Table 2
Projected Changes in FY 2023-24 General Fund Budget Obligations Under Current Law
Dollars in Millions

		FY 2023-24
1	Excess Reserve Under Scenario A	\$1,083.3
	Change in Appropriations¹	
2	Change in Budget Requests Funded through Long Bill (primarily Medicaid and K-12 Education) ²	\$380.4
3	Change in Employee Compensation at 3.0% Increase	\$98.3
4	Change in Community Provider Rates at 2.0% Increase	\$59.8
5	Total Change in Appropriations	\$538.4
	Change in Capital Transfers¹	
6	FY 2023-24 Costs for FY 2022-23 Approved Capital Construction	\$194.0
7	FY 2023-24 Costs for FY 2022-23 Approved IT Capital	\$44.2
8	State Architect Recommendation for Controlled Maintenance ³	\$140.9
9	Total Change in Capital Transfers	\$379.0
10	Change in Expenditures (Line 5 plus Line 9)	\$888.7
11	Change in Required Reserve (15% of Line 5)	\$80.8
12	Total Change in General Fund Obligations	\$998.2
13	Excess Reserve Under Scenario B (Line 1 minus Line 12)	\$85.1

¹Source: Joint Budget Committee Staff based on FY 2022-23 budget actions and School Finance Outlook section of this September forecast.

²Includes an increase of \$238.0 million for the Department of Health Care Policy and Financing, an increase of \$196.3 million for the Department of Education, a decrease of \$63.3 million for the Governor's Office of Information Technology, and a net increase of \$9.4 million across various other departments.

³1.0 percent of current replacement value of state facilities. Omits \$1.9 million included on Line 6.

FY 2024-25 (Unbudgeted)

This September forecast includes the first projections for FY 2024-25. General Fund revenue is expected to grow at a modest rate of 3.9 percent and total \$18.75 billion, with state revenue subject to TABOR exceeding the Referendum C cap by \$1.90 billion. Because a budget has not been enacted for FY 2023-24, many of the most important budgetary inputs for FY 2024-25 cannot be projected yet. However, expectations for current law rebates, expenditures and transfers to and from the General Fund are presented in Table 1.

Risks to the General Fund Budget Outlook

Consumer price inflation has begun to moderate, but costs for governments may continue to rise. Energy prices have cooled since the beginning of the summer, leading consumer price indices for the national economy and Denver-Aurora-Lakewood area to show less inflation since June. Still, prices for many services continue to increase as labor and capital costs rise. Costs borne by state agencies will likely rise faster in the near future than in the recent past, driving increases for many General Fund budget items. High inflation in calendar year 2022, now forecast at 8.2 percent, will contribute to a large adjustment to the Referendum C cap, allowing the state to retain more of the revenue it collects; however, that jump will occur in FY 2023-24, while costs are rising now.

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 2022-23. In other words, higher (or lower) revenue would result in higher (or lower) TABOR refunds, but would not affect the General Fund budget. However, given significant risks to the economic outlook, the risk of recession during the forecast period is high. A recession would likely reduce revenue below the Referendum C cap, thereby reducing the amount available for the General Fund budget in FY 2023-24 and beyond.

Higher-than-expected cash funds revenue will increase General Fund budget pressures. 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 June and September Forecasts

FY 2021-22. As shown in Table 3, preliminary data indicate that the year-end General Fund balance fell short of June forecast expectations by \$62.8 million. This amount is the net impact of:

- General Fund revenue \$265.7 million in excess of the June forecast (Table 1, line 2);
- a \$305.2 million increase in the TABOR refund obligation (Table 1, line 7); this amount includes \$133.8 million in under-refunds of prior TABOR surpluses, which were offset by an equivalent accounting adjustment (Table 1, line 15), as the under-refunded amount remains restricted in the General Fund from prior year surpluses;
- a \$149.2 million increase in net transfers from the General Fund (Table 1, lines 3, 9, 10, 11, and 12), mostly attributable to corrections in timing of transfers across fiscal years; and
- a \$7.9 million increase in rebates and expenditures (Table 1, line 8), mostly for the Old Age Pension program.

FY 2022-23. Expectations for the year-end excess reserve were revised downward by \$60.0 million relative to the June forecast, mostly reflecting a \$604.0 million increase in the expected TABOR refund obligation, more than offsetting a \$521.2 million increase in expected General Fund revenue. While error in the General Fund revenue forecast has 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 from the General Fund. Many of the other changes in the forecast offset one another, including corrections for the timing or placement of transfers within Table 1.

FY 2023-24. Expectations for the amount of General Fund revenue available to spend or save were reduced by \$100.7 million under Scenario A, relative to the June forecast, mostly on the combined effects of a lower beginning balance and increased expectations for cash fund revenue subject to TABOR. Under Scenario B, expectations were reduced by \$133.8 million after incorporation of an increased state aid requirement for school finance, as discussed in the School Finance Outlook section of this forecast document.

Table 3
Changes in the General Fund Budget Situation Relative to the June 2022 Forecast
Dollars in Millions, Positive Amounts Reflect an Increase Relative to June

Components of Change	FY 2021-22	FY 2022-23	FY 2023-24	Description of Changes
Funds Available	\$296.7	\$424.7	\$594.5	
Beginning Reserve	\$0.0	-\$62.8	-\$59.7	Carries the lower FY 2021-22 end balance into FY 2022-23.
General Fund Revenue	\$265.7	\$521.2	\$655.2	See Table 12. Reflects upgrades to income and sales tax forecasts.
Transfers from Other Funds	\$31.0	-\$33.6	-\$1.0	See Table 6. Corrects the timing of a transfer in HB 22-1350.
Expenditures	\$493.2	\$484.7	\$692.8	
Operating Appropriations	\$0.0	\$2.0		Corrects minor omissions in the June forecast.
TABOR Refund Obligation	\$305.2	\$604.0	\$709.8	See Table 8. Reflects upgrades to revenue forecasts.
Rebates and Expenditures	\$7.9	\$5.0	\$3.8	See Table 5. Increases Old Age Pension disbursements.
SEF Transfers	\$0.0	-\$200.0	\$0.0	Moves a transfer to the "Other CF Transfers" line below.
Transportation Transfers	\$112.5	-\$112.5	\$0.0	See Table 4. Corrects the timing of a transfer in SB 21-260.
Capital Construction Transfers	\$0.0	\$0.0	\$0.0	See Table 4.
Other Cash Fund Transfers	\$67.7	\$185.9	-\$20.7	See Table 6. Corrects for omission of a transfer in SB 21-252.
Required Reserve	\$0.0	\$0.3		Corrects minor omissions in the June forecast.
Accounting Adjustment	\$133.8			Reflects underrefunds of prior TABOR surplus amounts.
Surplus Relative to Required Reserve	-\$62.8	-\$60.0		Nets the above changes.
Amount Available – Scenario A			-\$100.7	Nets the above changes.
Amount Available – Scenario B			-\$133.8	Increases school finance state aid based on this forecast.

General Fund Transfers for Transportation and Capital Construction

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

Table 4
Infrastructure Transfers from the General Fund
Dollars in Millions

Transportation Funds	2021-22	2022-23	2023-24	2024-25
SB 21-260	\$282.5	\$2.5		\$100.0
SB 21-265	\$124.0			
HB 22-1351		\$78.5		
HB 22-1411	\$36.5			
SB 22-176	\$1.9	\$7.0		
SB 22-180	\$40.0			
Total	\$484.9	\$88.0	\$0.0	\$100.0
Capital Construction Funds	2021-22	2022-23	2023-24	2024-25
HB 15-1344*	\$20.0	\$20.0	\$20.0	\$20.0
SB 21-064	\$0.1			
SB 21-224	\$328.8			
HB 22-1195	\$5.1			
HB 22-1340		\$462.2		
Total	\$354.0	\$482.2	\$20.0	\$20.0

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

General Fund contributions to transportation. General Fund transfers to transportation-related cash funds totaled \$484.9 million. Relative to the June forecast, the transfer amount shown in Table 4 reflects \$112.5 million of a \$115.0 million transfer directed by **Senate Bill 21-260** occurring at the end of FY 2021-22, rather than the beginning of FY 2022-23. That bill also creates new transfers of \$100 million annually that begin in FY 2024-25, as shown in Table 4.

Legislation enacted in 2022 directs \$78.4 million to transportation-related cash funds in FY 2021-22, and \$85.5 million to transportation-related cash funds in FY 2022-23. In FY 2021-22, transfers enacted in 2022 direct:

- \$40.0 million to the State Highway Fund (SB 22-180);
- \$36.5 million to the Highway Users Tax Fund (HB 22-1411); and
- \$1.9 million to the Southwest Chief Rail Line Economic Development, Rural Tourism, and Infrastructure Repair and Maintenance Fund (SB 22-176).

In FY 2022-23, transfers enacted in 2022 direct:

- \$31.4 million to the Highway Users Tax Fund (HB 22-1351);
- \$0.5 million to the Unused State-Owned Real Property Fund (SB 22-176); and
- \$53.6 million to the State Highway Fund (\$47.1 million from HB 22-1351; \$6.5 million from SB 22-176).

General Fund transfers for capital projects. Legislation enacted in 2022 directs \$5.1 million in FY 2021-22 and \$462.2 million in FY 2022-23 for capital construction and IT capital projects.

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 2022 through 2025. 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 2021-22, and this forecast expects a TABOR surplus in each of FY 2022-23, FY 2023-24, and FY 2024-25. Therefore, partial refundability of the credit is expected to be available for tax years 2022, 2023, 2024, and 2025.

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 through FY 2024-25, as revenue subject to TABOR is expected to come in well above the cutoff amount.

Table 5
General Fund Rebates and Expenditures
Dollars in Millions

Category	Preliminary FY 2021-22	Percent Change	Estimate FY 2022-23	Percent Change	Estimate FY 2023-24	Percent Change	Estimate FY 2024-25	Percent Change
Senior and Veterans Property Tax Exemptions	\$162.1	2.7%	\$161.3	-0.5%	\$160.7	-0.4%	\$168.2	4.7%
TABOR Refund Mechanism ¹	-\$162.1		-\$161.3		-\$160.7		-\$168.2	
Property Tax Assessed Value Reductions	\$0.0		\$0.0		\$225.0		\$0.0	
TABOR Refund Mechanism ²	\$0.0		\$0.0		-\$225.0		\$0.0	
Cigarette Rebate	\$8.2	-11.2%	\$7.2	-12.1%	\$7.0	-2.9%	\$6.8	-3.0%
Old Age Pension Fund	\$76.9	-2.5%	\$70.0	-9.0%	\$66.7	-4.6%	\$64.7	-3.0%
Aged Property Tax and Heating Credit	\$5.9	-8.0%	\$7.2	23.7%	\$7.1	-1.3%	\$6.9	-2.8%
Older Coloradans Fund	\$10.0	25.0%	\$10.0	0.0%	\$10.0	0.0%	\$10.0	0.0%
Interest Payments for School Loans	\$1.0	-20.9%	\$5.6	454.7%	\$5.6	0.0%	\$5.6	0.0%
Firefighter Pensions	\$4.5	4.4%	\$4.7	3.3%	\$4.8	2.0%	\$4.8	0.0%
Amendment 35 Distributions	\$0.7	-6.9%	\$0.7	-1.0%	\$0.7	-0.2%	\$0.7	-0.9%
Marijuana Sales Tax Transfer to Local Governments	\$25.6	-11.7%	\$22.6	-11.6%	\$23.8	5.2%	\$24.7	3.9%
Business Personal Property Exemptions ³	\$16.7		\$17.3	3.5%	\$18.9	9.1%	\$19.6	3.5%
Total Rebates and Expenditures	\$149.6	-49.4%	\$145.3	-2.8%	\$144.6	-0.5%	\$143.8	-0.6%

Totals may not sum due to rounding. NA = Not applicable.

¹Pursuant 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.

²Pursuant to SB 22-238, local government reimbursements for these property tax reductions are the third TABOR refund mechanism used to meet the refund obligation incurred in FY 2022-23 only.

³Pursuant to HB 21-1312, local governments are reimbursed for expanded business personal property tax exemptions.

Table 6
Cash Fund Transfers
Dollars in Millions

Transfers to the General Fund		2021-22	2022-23	2023-24	2024-25
HB 05-1262	Amendment 35 Tobacco Tax	\$0.7	\$0.7	\$0.7	\$0.7
HB 08-1216	Consumer Outreach and Education Program	\$0.02	\$0.0	\$0.0	\$0.0
SB 13-133, HB 20-1400, & SB 22-216	Limited Gaming Fund	\$14.0	\$20.4	\$21.0	\$21.4
SB 17-261	Repeal of 2013 Flood Recovery Account	\$8.3			
HB 20-1427	2020 Tax Holding Fund	\$4.1	\$4.1	\$4.1	\$4.1
SB 21-209	Repealed Cash Funds	\$0.1			
SB 21-251	Loan Family Medical Leave Program			\$1.5	
HB 22-1350	Workers, Employers, and Workforce Centers Cash Fund	\$32.4			
Total Transfers to the General Fund		\$59.5	\$25.1	\$27.3	\$26.2
Transfers from the General Fund		2021-22	2022-23	2023-24	2024-25
SB 11-047	Bioscience Income Tax Transfer to OEDIT	\$14.6	\$15.0	\$14.8	\$15.3
SB 14-215	Marijuana Tax Cash Fund	\$165.7	\$146.4	\$154.0	\$160.0
SB 15-244 & SB 17-267	State Public School Fund	\$29.0	\$25.7	\$27.0	\$28.0
HB 18-1323	Pay For Success Contracts Pilot Program Funding	\$0.4			
HB 19-1168 & SB 20-215	Health Insurance Affordability Cash Fund	\$12.6	\$13.6	\$14.2	\$14.5
HB 19-1245	Housing Development Grant Fund	\$66.1	\$72.0	\$76.8	\$80.3
HB 20-1116	Procurement Technical Assistance Program Extension	\$0.2	\$0.2	\$0.2	\$0.2
HB 20-1427	2020 Tax Holding Fund	\$208.0	\$209.2	\$204.6	\$255.0
HB 20-1427*	Preschool Programs Cash Fund	\$0.4	\$0.0		
HB 21-1149	Energy Sector Career Pathway in Higher Education	\$5.0			
HB 21-1285	Funding to Support Creative Arts Industries	\$18.0			
SB 21-225	Repay Cash Funds For 2020 Transfers	\$10.0			
SB 21-252	Community Revitalization Grant Program	\$65.0			
SB 21-281	Severance Tax Trust Fund Allocation		\$9.5		
SB 21-283	Cash Fund Solvency	\$4.3			
HB 22-1001	Reduce Fees For Business Filings		\$8.4		
HB 22-1004	Driver License Fee Reduction		\$3.9		
HB 22-1011	Wildfire Mitigation Incentives for Local Governments		\$10.0		
HB 22-1012	Wildfire Mitigation and Recovery		\$7.2		
HB 22-1115	Prescription Drug Monitoring Program		\$2.0		

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

Table 6 (Cont.)
Cash Fund Transfers
Dollars in Millions

Transfers from the General Fund (Cont.)		2021-22	2022-23	2023-24	2024-25
HB 22-1132	Regulation and Services for Wildfire Mitigation		\$0.1		
HB 22-1151	Turf Replacement Program		\$2.0		
HB 22-1194	Local Firefighter Safety Resources	\$5.0			
HB 22-1197	Effective Date of Dep't of Early Childhood	\$3.5			
HB 22-1295 ¹	Preschool Programs Cash Fund			\$136.8	\$143.3
HB 22-1298	Fee Relief for Nurses, Nurse Aides, and Technicians		\$11.7		
HB 22-1299	Fee Relief for Mental Health Professionals		\$3.7		
HB 22-1362	Building Greenhouse Gas Emissions	\$25.0			
HB 22-1381	CO Energy Office Geothermal Grant Program		\$12.0		
HB 22-1382	Support Dark Sky Designation and Promotion		\$0.04		
HB 22-1394	Fund Just Transition Community & Worker Supports		\$15.0		
HB 22-1408	Modify Incentives for Film Production		\$2.0		
HB 22-1411	Money from Coronavirus State Fiscal Recovery Fund	\$28.0			
SB 22-036	State Payment Old Hire Death and Disability Benefits		\$6.7		
SB 22-130	Authority For Public-Private Partnerships		\$15.0		
SB 22-134	State Fair Master Plan Funding	\$4.0			
SB 22-151	Safe Crossings for Colorado Wildlife and Motorists		\$5.0		
SB 22-163	Establish State Procurement Equity Program		\$2.0		
SB 22-168	Backcountry Search and Rescue	\$1.0			
SB 22-180	Programs to Reduce Ozone Through Transit	\$28.0			
SB 22-183	Crime Victims Services	\$6.0	\$1.0		
SB 22-191 ²	Procurement of Information Technology Resources				
SB 22-193	Air Quality Improvement Investments	\$102.0	\$1.5		
SB 22-195	Conservation District Grant Fund		\$0.1	\$0.1	\$0.1
SB 22-202	State Match for Mill Levy Override Revenue		\$10.0		
SB 22-206	Disaster Preparedness and Recovery Resources	\$35.0			
SB 22-214	General Fund Transfer to PERA Payment Cash Fund		\$198.5		
SB 22-215	Infrastructure Investment and Jobs Act Cash Fund	\$80.3			
SB 22-238	State Public School Fund		\$200.0		
Total Transfers from the General Fund		\$917.1	\$1,009.4	\$628.5	\$696.8
Net General Fund Impact		-\$857.5	-\$984.3	-\$601.3	-\$670.6

¹The transfer required in HB 22-1295 may be made from the General Fund or the State Education Fund.

²Beginning in FY 2023-24, SB 22-191 directs transfers of unspent prior year General Fund appropriations for IT procurement. Any transfer amount for FY 2023-24 is included in the FY 2022-23 General Fund appropriation amount and not included here.

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School Finance Outlook

This section presents information on the outlook for school finance from a state budgetary perspective for the coming budget year (FY 2023-24) and incorporates new information from the September 2022 forecast for income tax diversions to the State Education Fund, federal mineral lease payments, marijuana tax revenue, Proposition EE tax revenue, and changes in inflation expectations. No new information is available for FY 2022-23 school finance funding, which was initially determined through passage of the 2022 Long Bill and the 2022 School Finance Act. Figure 1 illustrates budgeted and expected state aid and local shares for school funding for FY 2022-23 and FY 2023-24.

For FY 2023-24, the **state aid requirement** is expected to increase by at least \$197 million on a year-over-year basis due to the factors described below.

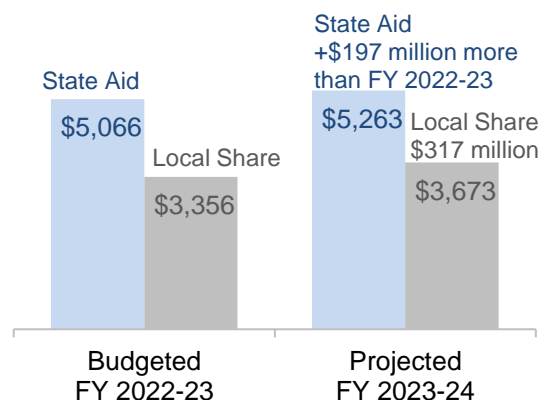
- **Total program requirements** will increase by \$514 million. Although the estimated funded pupil count is expected to decrease by about 20,511 pupils on a year-over-year basis, inflation expectations for 2022 have increased since the March forecast from 7.0 percent to 8.2 percent.
- On a year-over-year basis, revenue available for the **local share** will increase by up to \$317 million. This assumes that assessed values increase by \$12.5 billion relative to FY 2022-23, while specific ownership tax collections increase by 3 percent. It should be noted that this assessed values forecast was from the December 2021 forecast, prior to the inflationary jump that occurred last spring. The temporary assessment rate reductions for certain property types under Senate Bill 22-238 result in a smaller increase in the local share than would have otherwise occurred.

How is state aid determined?

Subject to available budgetary resources, the difference between total program funding requirements and the local share is the amount the state must cover through state equalization payments, or state aid.

Enrollment is a major determinant of required formula funding (total program), since funding is allocated on a per pupil basis. Similarly, assessed values on real property determine a school district's property tax base, which, along with a school district's total program mill levy, is the major determinant of the local share of school district funding. This school finance funding update assumes FY 2023-24 enrollment estimates based on the December 2021 Legislative Council Staff forecast for K-12 enrollment, combined with the removal of preschoolers from enrollment totals per the provisions of House Bill 22-1295. These estimates will be updated in December 2022.

Figure 1
Expectations for School Finance Funding
Dollars in Millions



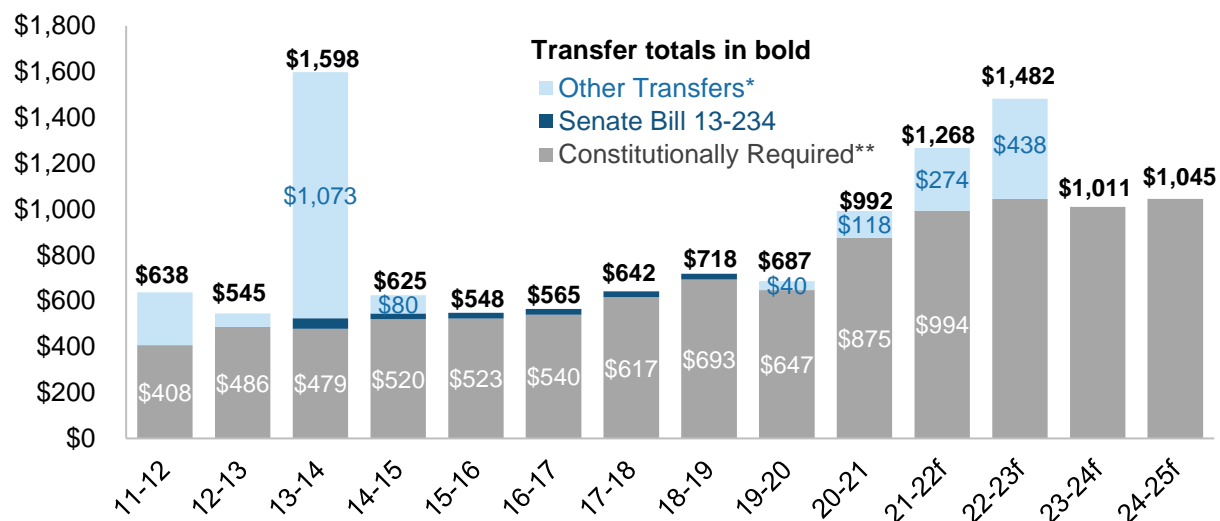
This forecast assumes assessed value estimates from the December 2021 Legislative Council Staff forecast, adjusted downwards per the provisions of SB 22-238, totaling \$152 billion. In addition, specific ownership tax receipts are assumed to increase by 3 percent from the level appropriated for

FY 2022-23. Given the enactment of SB 22-238, which temporarily reduces the assessment rate on certain types of properties in tax years 2023 and 2024, assessed values are expected to be lower and the December 2021 forecast may overestimate the actual totals as a result. The fiscal note for SB 22-238 estimates that the local share will be reduced by \$183.2 million in FY 2023-24 as a result of the assessment rate reductions under the bill. Similar to K-12 enrollment, assumptions for assessed values and the impact of the rate reduction will be updated with more complete information in December 2022. This forecast also incorporates increased mill levies for some school districts according to the correction schedule required by House Bill 21-1164.

State Education Fund. For FY 2023-24, the available contribution for school finance from the State Education Fund is expected to increase by \$197 million relative to FY 2022-23 levels. Expenditures from the State Public School Fund will decrease by \$7 million, while the General Fund requirement will increase by \$6 million on a year-over-year basis. These estimates assume a \$1 billion ending balance for the State Education Fund in FY 2023-24, and the budget stabilization factor is maintained at its current level.

The Colorado Constitution requires the State Education Fund to receive one-third of 1 percent of taxable income. In FY 2022-23, the State Education Fund is expected to receive \$1,044.6 million as a result of this requirement, with similar amounts in the following years of the forecast period. Figure 2 shows a history and forecast for revenue sources to the State Education Fund through the end of the forecast period.

Figure 2
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 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; SB 21-208 for FY 2021-22; and HB 22-1390 for FY 2022-23.

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

In addition to the income tax transfer, the General Assembly has at different times authorized the transfer of additional moneys from the General Fund to the State Education Fund. Most recently:

- House Bill 20-1420 included transfers of \$113 million in FY 2020-21 and \$23 million in FY 2021-22;
- Senate Bill 21-208 included a \$100 million transfer in FY 2021-22;
- House Bill 22-1390 included a \$290 million transfer in FY 2022-23, net of an amendment to the transfer amount enacted in Senate Bill 22-202; and
- Senate Bill 22-238 included a \$200 million transfer to the State Public School Fund in FY 2022-23; this amount is omitted from Figure 2 and listed instead in Table 6 because the money is not deposited in the State Education Fund.

Finally, Proposition EE, which was approved by voters in the November 2020 election, also transfers new revenue from increased cigarette, tobacco and nicotine taxes to the State Education Fund for three fiscal years. The remaining transfer amounts are currently estimated at \$151.3 million in FY 2021-22 and \$147.4 million in FY 2022-23. Beginning in FY 2023-24, this revenue will be redirected to the Preschool Programs Cash Fund instead.

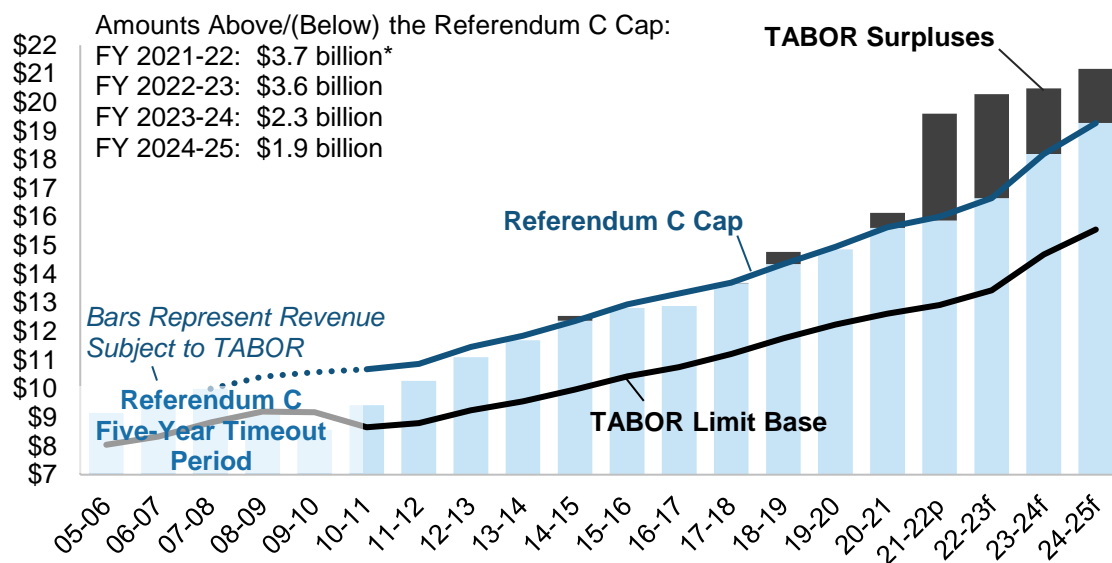
Appropriations are subject to change. The final appropriation for state aid in FY 2022-23 will be made through passage of the mid-year supplemental bill for the Colorado Department of Education. The initial appropriation for state aid in FY 2023-24 will be made through passage of the 2023 Long Bill and the 2023 School Finance Act.

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TABOR Outlook

The state TABOR outlook is presented in Table 8 and illustrated in Figure 3, which also provides a history of the TABOR limit base and the Referendum C cap. In FY 2021-22, state revenue subject to TABOR exceeded the Referendum C cap, creating a state obligation for TABOR refunds to taxpayers in FY 2022-23. State revenue subject to TABOR is projected to exceed the Referendum C cap in each of FY 2022-23, FY 2023-24, and FY 2024-25, creating a state obligation for TABOR refunds to taxpayers in each of, FY 2023-24, FY 2024-25, and FY 2025-26.

Figure 3
TABOR Revenue, TABOR Limit Base, and the Referendum C Cap
Dollars in Billions



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

*The refund amount for FY 2021-22 differs from surplus amount because it includes \$133.8 million in under-refunds from prior TABOR surpluses.

FY 2021-22. On September 1, 2022, the State Controller certified that state revenue subject to TABOR exceeded the Referendum C cap by \$3.73 billion in FY 2021-22. 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 \$3.87 billion in the current FY 2022-23. The FY 2021-22 surplus is being refunded to taxpayers via the TABOR refund mechanisms under current law, which are explained in greater detail below.

Forecasts for FY 2022-23 through FY 2024-25. State revenue subject to TABOR is projected to exceed the Referendum C cap throughout the forecast period. Revenue is expected to exceed the cap by \$3.63 billion in the current FY 2022-23, and by \$2.28 billion in FY 2023-24 and \$1.90 billion in FY 2024-25. Refunds of those amounts are expected to be returned to taxpayers in the fiscal 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 June forecast, expectations for revenue subject to TABOR were increased through the forecast period, due to higher expectations for General Fund and cash fund revenue subject to TABOR. These higher revenue expectations offset the impact of

higher inflation expectations for calendar year 2022, which increased expectations for the FY 2023-24 Referendum C cap.

Enterprise disqualification and requalification. When a state program no longer satisfies the requirements to qualify as a TABOR enterprise, it is “disqualified.” The program’s revenue becomes subject to TABOR and an upward adjustment equal to that revenue amount is also made to the Referendum C cap.¹ Similarly, downward adjustments are made to both revenue and the Referendum C cap when an enterprise requalifies. This forecast includes enterprise adjustments for the Auraria Higher Education Center, which was disqualified in FY 2020-21 and requalified in FY 2021-22, and for Adams State University, which was disqualified in FY 2021-22 and is assumed to requalify in FY 2022-23. Single-year enterprise adjustments have no net impact on the amount to be refunded to taxpayers. However, if an enterprise remains disqualified for multiple years, growth in that enterprise’s revenue between those years may increase (or decrease) the TABOR refund obligation if its revenue grows faster (or slower) than allowable growth.

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 will also impact the TABOR situation by resulting in higher or lower allowable growth in the Referendum C cap.

In an environment where large TABOR refunds are expected, TABOR insulates the General Fund budget from the impacts of error in the General Fund revenue forecast. Greater than expected General Fund revenue will result in a larger General Fund obligation for TABOR refunds, with no net impact on the amount available for the General Fund budget. Lower than expected General Fund revenue will result in a smaller obligation for TABOR refunds, and will impact the budget only if the error is great enough to erase the entire projected TABOR surplus.

By contrast, error in the forecast for cash fund revenue subject to TABOR poses a risk to the outlook for the General Fund budget. Greater than expected revenue from cash fund sources would increase the General Fund obligation for TABOR refunds, thereby reducing the amount available for the budget.

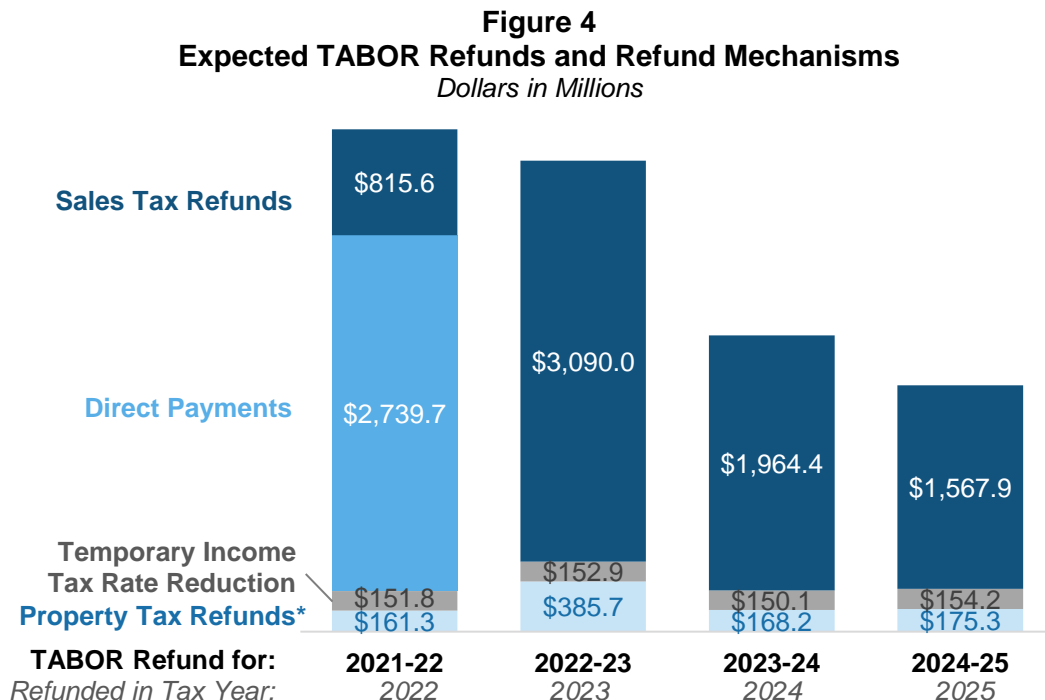
TABOR refund mechanisms. TABOR refund mechanisms and expected refund amounts are shown in Figure 4. Current state law includes three ongoing and two temporary TABOR refund mechanisms.

The three ongoing refund mechanisms include the property tax exemptions for seniors and veterans with a disability, the 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. Based on this forecast, all three ongoing refund mechanisms are expected to be used for tax years 2022, 2023, 2024, and 2025. Table 7 on page 25 presents estimated six-tier sales tax refund amounts for each year of the forecast period.

¹ For more information on TABOR and TABOR enterprises, see the Legislative Council Staff memoranda titled: “The TABOR Revenue Limit”, available at: https://leg.colorado.gov/sites/default/files/the_tabor_revenue_limit.pdf, and “State Government Enterprises”, available at: https://leg.colorado.gov/sites/default/files/r21-99_state_government_enterprises_0.pdf.

Senate Bill 22-233 establishes an additional refund mechanism to refund a portion of the FY 2021-22 surplus for tax year 2022 through direct payments to taxpayers, after funding the property tax exemptions and the temporary income tax rate reduction and before funding the six-tier sales tax refund mechanism. Direct payments in 2022 are \$750 for single-filing taxpayers and \$1,500 for households filing jointly. Table 7 provides estimates for the amounts being 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.

Senate Bill 22-238 establishes an additional refund mechanism to refund a portion of the FY 2022-23 surplus for tax year 2023 through reductions in the assessed valuations of residential and nonresidential property, which determine property taxes. A portion of local governments' foregone property tax revenue as a result of the bill is reimbursed by the state government, and reimbursements up to \$240 million are accounted as a TABOR refund mechanism under the bill. This mechanism is estimated to refund \$225 million in property tax year 2023. Figure 4 includes this mechanism with the "Property Tax Refunds" label.



Source: Legislative Council Staff September 2022 forecast.

* Includes \$225 million to be refunded from the FY 2022-23 TABOR surplus under Senate Bill 22-238.

Refunds made via property tax reductions reduce obligations 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. Direct payments are required to be sent to most taxpayers by October 2022. These three 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.

Proposition EE TABOR refund requirement. Revenue from the increased taxes on cigarettes, tobacco products, and nicotine products in Proposition EE totaled \$208.5 million in FY 2021-22, exceeding the estimate of FY 2021-22 tax revenue published in the 2020 Blue Book by \$22.0 million. TABOR requires that this amount be refunded to taxpayers in the current FY 2022-23; however, state law currently does not include a mechanism to issue this refund. The refund amounts in this section do not include this obligation because it is unknown at this time how this refund will be paid. These amounts will be updated in the future if the refund is paid from the General Fund, or uses any of the mechanisms in place to issue refunds of TABOR surplus amounts. For more information on this requirement, see the General Fund Revenue section of this forecast document.

Table 7
Projected TABOR Refunds via the Six-Tier Sales Tax Refund Mechanism

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

Taxpayer Distribution by AGI			Single Filers	Joint Filers
	up to	\$48,000	\$160	\$320
\$48,001	to	\$95,000	\$214	\$428
\$95,001	to	\$150,000	\$246	\$492
\$150,001	to	\$209,000	\$293	\$586
\$209,001	to	\$266,000	\$315	\$630
\$266,001	and up		\$506	\$1,012

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

Taxpayer Distribution by AGI			Single Filers	Joint Filers
	up to	\$50,000	\$600	\$1,200
\$50,001	to	\$100,000	\$801	\$1,602
\$100,001	to	\$157,000	\$921	\$1,842
\$157,001	to	\$219,000	\$1,095	\$2,190
\$219,001	to	\$279,000	\$1,178	\$2,356
\$279,001	and up		\$1,896	\$3,792

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

Taxpayer Distribution by AGI			Single Filers	Joint Filers
	up to	\$51,000	\$377	\$754
\$51,001	to	\$102,000	\$503	\$1,006
\$102,001	to	\$161,000	\$579	\$1,158
\$161,001	to	\$224,000	\$688	\$1,376
\$224,001	to	\$285,000	\$740	\$1,480
\$285,001	and up		\$1,191	\$2,382

Tax Year 2025 Refunds from FY 2024-25 TABOR Refund Obligation

Taxpayer Distribution by AGI			Single Filers	Joint Filers
	up to	\$52,000	\$297	\$594
\$52,001	to	\$104,000	\$397	\$794
\$104,001	to	\$165,000	\$457	\$914
\$165,001	to	\$229,000	\$543	\$1,086
\$229,001	to	\$292,000	\$584	\$1,168
\$292,001	and up		\$939	\$1,878

AGI = Adjusted gross income.

Note: Amounts do not include estimates for taxpayer refunds via the 2022 direct payments under Senate Bill 22-233, via the temporary income tax rate reduction, or via reimbursements to local government for property tax exemptions.

Table 8
TABOR Revenue Limit and Retained Revenue
Dollars in Millions

	Preliminary FY 2021-22	Estimate FY 2022-23	Estimate FY 2023-24	Estimate FY 2024-25
TABOR Revenue				
1 General Fund ¹	\$2,671.6	\$2,772.8	\$2,874.9	\$2,926.2
2 Cash Funds ¹	\$19,747.0	\$20,285.5	\$20,488.6	\$21,177.5
3 Total TABOR Revenue	\$17,075.4	\$17,512.7	\$17,613.7	\$18,251.3
Revenue Limit				
4 Allowable TABOR Growth Rate	2.2%	4.2%	9.3%	5.9%
5 Inflation (<i>from Prior Calendar Year</i>)	2.0%	3.5%	8.2%	4.7%
6 Population Growth (<i>from Prior Calendar Year</i>) ²	0.3%	0.7%	1.1%	1.2%
7 TABOR Limit Base ³	\$12,929.8	\$13,444.7	\$14,695.1	\$15,562.1
8 Voter Approved Revenue Change (Referendum C)	\$3,082.6	\$3,212.1	\$3,510.8	\$3,717.9
9 Total TABOR Limit / Referendum C Cap ³	\$16,012.4	\$16,656.8	\$18,205.9	\$19,280.0
10 TABOR Revenue Above (Below) Referendum C Cap	\$3,734.6	\$3,628.6	\$2,282.7	\$1,897.4
Retained/Refunded Revenue				
11 Revenue Retained under Referendum C ⁴	\$3,082.6	\$3,212.1	\$3,510.8	\$3,717.9
12 Fiscal Year Spending (<i>revenue available to be spent or saved</i>)	\$16,012.4	\$16,656.8	\$18,205.9	\$19,280.0
13 Outstanding Under-refund Amount ⁵	\$133.8			
14 Revenue Refunded to Taxpayers	\$3,868.4	\$3,628.6	\$2,282.7	\$1,897.4
15 TABOR Reserve Requirement	\$480.4	\$499.7	\$546.2	\$578.4

Totals may not sum due to rounding.

¹Revenue differs from the amount in the General Fund Revenue section because of accounting adjustments across TABOR boundaries. For FY 2021-22, data reported here differ from data reported in the Cash Fund Revenue section because they come from different preliminary sources; this discrepancy is expected to be reconciled upon publication of the Annual Comprehensive Financial Report for FY 2021-22.

²Following 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.

³These amounts incorporate enterprise adjustments for Auraria Higher Education Center and Adams State University. Additional changes to enterprise status will affect these amounts.

⁴Revenue retained under Referendum C is referred to as "General Fund Exempt" in the budget.

⁵This amount represents underrefunds from prior years.

General Fund Revenue

This section presents the outlook for General Fund revenue, the state's main source of funding for discretionary operating appropriations. Table 12 on page 33 summarizes preliminary General Fund revenue collections for FY 2021-22 and projections for FY 2022-23 through FY 2024-25.

FY 2021-22. Preliminary figures indicate suggest that General Fund revenue increased 23.7 percent over FY 2020-21 levels to total \$17.7 billion in FY 2021-22. The extraordinary revenue increase is broad-based, reflecting much higher than expected individual and corporate income tax payments, alongside impressive increases in sales and use taxes and the first full year of tobacco tax collections under Proposition EE. Collections came in \$265.7 million, or 1.5 percent, higher than June forecast expectations.

Forecast for FY 2022-23 through FY 2024-25. General Fund revenue is expected to continue to increase throughout the forecast period at a reduced rate as inflationary pressures and higher interest rates slow economic activity. General Fund revenue is expected to total \$17.9 billion in the current FY 2022-23, a 1.4 percent increase from the prior fiscal year. In FY 2023-24, General Fund revenue is expected to increase by another 0.6 percent, totaling \$18.1 billion. Revenue is expected to be nearly \$18.8 billion by FY 2024-25.

Forecast revisions. Relative to the June forest, the revenue outlook for the current FY 2022-23 was increased by \$521.2 million, or 3.0 percent, with almost all of the revision attributable to individual income tax and sales tax expectations. Revenue expectations were revised upward by \$655.2 million for FY 2023-24.

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 to confirm 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 strength of the state tax base, which could be stronger or weaker than currently forecast.

Legislative adjustments. This forecast incorporates the estimated fiscal impacts of legislation enacted by the General Assembly during the 2022 legislative session. Legislative impacts on the General Fund revenue outlook are presented in Table 9.

Table 9
General Fund Revenue Impacts of 2022 Legislation
Dollars in Millions

	FY 2021-22	FY 2022-23	FY 2023-24
HB 22-1005 Healthcare Preceptors Tax Credit		(\$0.15)	(\$0.30)
HB 22-1007 Assistance Landowner Wildfire Mitigation		(\$0.15)	(\$0.30)
HB 22-1010 Early Childhood Educator Income Tax Credit	(\$6.20)	(\$12.90)	(\$13.70)
HB 22-1025 Repeal of Infrequently Used Tax Expenditures		\$0.20	\$0.40
HB 22-1026 Alternative Transportation Options Tax Credit		(\$11.00)	(\$23.50)
HB 22-1051 Modify Affordable Housing Tax Credit			
HB 22-1055 Sales Tax Exemption Essential Hygiene Products		(\$5.20)	(\$11.00)
HB 22-1083 Colorado Homeless Contribution Income Tax Credit		(\$2.60)	(\$6.10)
HB 22-1149 Advanced Industry Investment Tax Credit		(\$1.10)	(\$2.90)
HB 22-1205 Senior Housing Income Tax Credit	(\$50.00)	(\$50.00)	
HB 22-1310 529 Account Administrative Expenses		(\$0.09)	(\$0.18)
HB 22-1320 ABLE Savings Accounts		(\$0.23)	(\$0.49)
HB 22-1392 Contaminated Land Income Tax & Property Tax Credit	(\$1.00)	(\$3.50)	(\$5.00)
HB 22-1406 Qualified Retailer Retain Sales Tax		(\$39.30)	
HB 22-1418 Extension of Certain Unused Tax Credits			(\$5.00)
SB 22-006 Sales Tax Assistance for Small Business		(\$2.50)	(\$2.80)
SB 22-051 Policies to Reduce Emissions from the Built Environment		(\$2.10)	(\$4.30)
Total	(\$57.20)	(\$130.62)	(\$75.17)

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 one 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 61 percent of revenue to the General Fund in FY 2021-22, net of the SEF transfer.

FY 2021-22. In FY 2021-22, preliminary individual income tax collections reached \$11.7 billion before the SEF transfer, an increase of 23.6 percent over year-ago levels, as tax receipts continued to exceed expectations. Table 10 presents net tax receipts for tax years 2020 and 2021, including forecast expectations for the remaining final payments for tax year 2021. As shown in Table 10, an increase in refunds was offset by significant increases in withholding, estimated payments, and final cash payments. The rapid increase in wage withholding is consistent with rapid wage and salary growth, estimated at 10.2 percent in 2021, compared with 2.3 percent in 2020 (Figure 5 on page 30, left). Estimated payments and cash with returns were up substantially over year-ago levels in August, suggesting that taxpayers may have underestimated 2021 tax liability due to pandemic-related distortions, bolstering 2021 cash payments as well as 2022 estimated payments. Investors may be pulling forward capital gains, as well, in anticipation of inflation, interest rate hikes, and financial market volatility impacting financial asset values.

Table 10
Individual Income Tax Receipts by Source, Tax Years 2020 and 2021¹
Dollars in Millions

	Tax Year 2020 Actual	Tax Year 2021 Estimated	Percent Change
Withholding	\$7,526	\$8,510	13.1%
Estimated Payments	\$1,569	\$1,965	25.3%
Cash With Returns ²	\$1,398	\$2,250	60.9%
Refunds ²	(\$1,457)	(\$1,795)	23.2%
Total	\$9,036	\$10,930	21.0%

Source: Office of the State Controller; Department of Revenue; and June 2022 Legislative Council Staff forecast.

¹*For illustrative purposes, withholding and estimated payments for a tax year show receipts between February of that year and January of the following year. Cash with returns and refunds for a tax year show transactions between January and December of the following year. Tax received during these time periods may be for the current or any prior tax year, but are assumed to be representative of the tax years indicated.*

²*Cash with returns and refunds for tax year 2020 include preliminary data for August 2022 and forecasted transactions for September through December 2022. TABOR refund amounts that reduced final payments are added to cash with returns.*

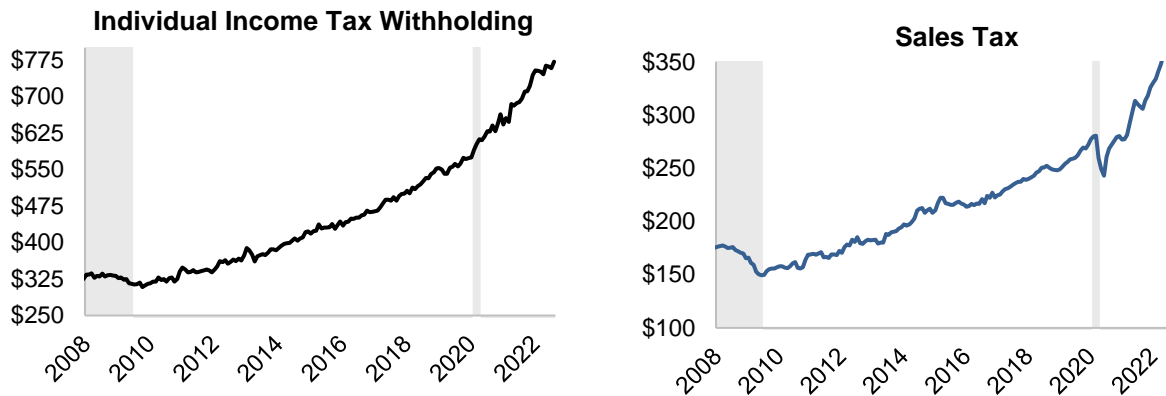
Preliminary income tax revenue for FY 2021-22 is greater than estimated tax year 2021 payments because it includes accruals of anticipated tax revenue for tax year 2022.

Forecast for FY 2022-23. Growth in individual income tax collections is expected to slow in FY 2022-23, when revenue will increase by 2.6 percent to \$12.0 billion. Expectations for the year have been upgraded by about \$407 million relative to the June forecast on the strength of preliminary collections for tax year 2021 as well as year-to-date payments for tax year 2022. Wages and salaries are expected to continue to grow at elevated rates in 2022, by 11.3 percent, bolstering withholding and reducing some credits, deductions, and exemptions, before returning to pre-pandemic growth rates for the remainder of the forecast period. The boom in estimated payments is expected to wind down, as inflation, tightening monetary policy, and slowing economic growth weigh on financial asset returns as well as cash with returns while boosting refunds.

Forecast for FY 2023-24 through FY 2024-25. Individual income tax collections are expected to decline by 1.6 percent in FY 2023-24, to \$11.8 billion. This September forecast includes the first estimate of individual income tax revenue for FY 2024-25, when growth in revenue is expected to resume. Collections for FY 2024-25 are expected to reach \$12.2 billion for a 3.4 percent increase.

Income tax rate. This forecast expects the state TABOR refund obligation for each of FY 2021-22 through FY 2024-25 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 2022 through 2025. 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 income tax forecast for all fiscal years reflects the application of a 4.55 percent tax rate for budget purposes.

Figure 5
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. August 2022 collections are preliminary.

Legislative adjustments. This forecast includes significant adjustments for the future impacts of recent legislation on individual income tax revenue. For tax year 2022, **House Bill 22-1205** creates a refundable, means-tested income tax credit for senior Coloradans who do not claim a homestead property tax exemption. **House Bill 22-1010** creates a refundable income tax credit for early childhood educators for tax years 2022 through 2025. Twelve bills enacted during the 2022 legislative session establish or extend income tax credits or deductions, many temporarily, and are expected to reduce income tax revenue by between \$55 million and \$140 million annually during the forecast period.

Corporate Income Tax

Corporate income taxes have historically been a volatile revenue source because they are highly susceptible to changes in the broader economy and the business cycle. After growing at a rapid pace in the prior fiscal year, corporate income tax revenue grew at a robust rate of 32.5 percent in FY 2021-22, totaling \$1.57 billion, a record high for Colorado corporate income tax revenue. High inflation and strong corporate profits are contributing to the strong growth. In addition, unprecedented amounts of federal aid to individuals and businesses in the form of stimulus checks, supplemental unemployment benefits, expanded child tax credits, and forgivable business loans, plus a shift to spending on goods, continue to support corporate profits.

Corporate income tax revenue is expected to fall by 19.3 percent and 3.5 percent in FY 2022-23 and FY 2023-24, respectively, as subsidies from federal aid wane, inflationary pressures erode profits, and consumers shift from goods to services consumption. Total corporate income taxes are expected to slightly pick up again in FY 2024-25.

Legislative adjustments. This forecast includes adjustments for the impacts of recent legislation on corporate income tax revenue. For tax years 2023 and 2024, **House Bill 22-1026** replaces a tax deduction with a tax credit for employers offering subsidized public transportation and ridesharing benefits to their employees.

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. Growing throughout the pandemic, sales tax receipts have been supported by robust consumer and business activity, large fiscal stimulus measures, excess household savings, and a return by consumers to businesses selling taxable services. Exceeding inflation at four-decade highs, sales tax revenues were up 19.6 percent in FY 2021-22.

Although price pressures have eroded real wage gains and many households have spent down excess savings, sales tax receipts continue to post strong growth, and have started the fiscal year up 14.6 percent year-to-date through August. Household financial situations remain strong despite the recent rise in debt, and employment continues to grow. However, inflationary pressures are expected to ease over the fiscal year and spending on big-ticket durable goods is expected to slow with rising interest rates and a return to spending on services. Along with slowing personal income growth, sales tax receipts are expected to increase by a slower 6.0 percent pace in FY 2022-23. Growth will also be impacted by legislation, including new exemptions and temporary business tax relief. Despite slower personal income and price growth through the forecast period, sales tax receipts are expected to grow a little faster in FY 2023-24, increasing by 6.5 percent. In FY 2024-25, sales tax receipts are expected to grow in line with personal income and increase by 4.1 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. During the forecast period, use tax is expected to grow by 8.9 percent in FY 2022-23, and then at a slower pace of 5.0 percent and 3.8 percent in FY 2023-24 and FY 2024-25, respectively. In the near term, revenue growth will be supported by oil and gas activity and nonresidential construction and investment activity. However, rising interest rates will weigh on investment during the forecast period as firms continue to manage rising costs and a tight labor market.

Proposition EE Cigarette, Tobacco, and Nicotine Taxes

Table 11 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, starting in FY 2023-24, preschool programs. Table 12 shows expected revenue collections, while equivalent transfers from the General Fund to the 2020 Tax Holding Fund are shown in Table 6 on page 14. Proposition EE taxes totaled \$208.0 million in FY 2021-22, the first full fiscal year for which they were in place.

Proposition EE was referred to voters under House Bill 20-1427 and approved in November 2020. The measure increased cigarette and tobacco taxes, created a new tax on nicotine products, and created a minimum price for cigarette sales. Revenue from the new taxes is exempt from the state TABOR limit as a voter-approved revenue change. 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. The measure stated that the tax rates should continue to increase incrementally until FY 2027-28, reaching \$2.64 per pack for cigarettes and 62 percent of MLP for tobacco and nicotine products.

The 2020 Blue Book estimated that total Proposition EE revenue would bring in \$186.5 million in FY 2020-21. Because actual revenue exceeded the Blue Book estimate, TABOR requires the General Assembly to either refer a ballot measure to retain the excess revenue, or refund the excess revenue to taxpayers and reduce the tax rates in proportion to the excess. Because the Blue Book estimate was 10.3 percent lower than actual revenue, this forecast makes the assumption that each of the tax rates will be reduced by 10.3 percent beginning in April 2023. The assumed reduced tax rates are shown in Table 11. This assumption reduces Proposition EE revenue by \$6.8 million in FY 2022-23 and by \$24.8 million in FY 2023-24 relative to if the tax rates were unchanged.

Table 11
Assumed Proposition EE Tax Rates

	April 2023 - June 2024	July 2024 - June 2026	July 2026 Onward
Cigarettes			
Original Prop EE Tax Rate	\$1.10	\$1.40	\$1.80
Reduced Tax Rate	\$0.99	\$1.26	\$1.61
Tobacco			
Original Prop EE Tax Rate	10%	16%	22%
Reduced Tax Rate	9%	14%	20%
Nicotine			
Original Prop EE Tax Rate	50%	56%	62%
Reduced Tax Rate	45%	50%	56%

Table 12
General Fund Revenue Estimates
Dollars in Millions

Category		Preliminary FY 2021-22	Percent Change	Estimate FY 2022-23	Percent Change	Estimate FY 2023-24	Percent Change	Estimate FY 2024-25	Percent Change
Excise Taxes									
1	Sales	\$4,089.0	19.6	\$4,335.1	6.0	\$4,615.9	6.5	\$4,805.5	4.1
2	Use	\$232.6	8.6	\$253.3	8.9	\$265.9	5.0	\$276.0	3.8
3	Retail Marijuana Sales	\$258.7	-10.2	\$226.4	-12.5	\$238.2	5.2	\$247.5	3.9
4	Cigarette	\$26.0	-13.8	\$25.7	-1.1	\$25.0	-2.9	\$24.2	-3.0
5	Tobacco Products	\$26.6	-8.3	\$26.0	-2.3	\$27.9	7.4	\$29.3	5.0
6	Liquor	\$56.3	5.6	\$57.9	2.7	\$60.0	3.7	\$62.4	4.1
7	Proposition EE Tobacco Taxes	\$208.0	324.3	\$209.2	0.6	\$204.6	-2.2	\$255.0	24.6
8	Total Excise	\$4,897.2	20.0	\$5,133.6	4.8	\$5,437.4	5.9	\$5,699.9	4.8
Income Taxes									
9	Net Individual Income	\$11,717.8	23.6	\$12,027.4	2.6	\$11,828.9	-1.6	\$12,234.8	3.4
10	Net Corporate Income	\$1,568.6	32.5	\$1,265.6	-19.3	\$1,220.8	-3.5	\$1,276.9	4.6
11	Total Income Taxes	\$13,286.4	24.6	\$13,293.0	0.0	\$13,049.8	-1.8	\$13,511.6	3.5
12	Less: Portion diverted to the SEF	-\$993.5	13.6	-\$1,044.6	5.1	-\$1,010.8	-3.2	-\$1,044.7	3.3
13	Income Taxes to the General Fund	\$12,292.9	25.6	\$12,248.4	-0.4	\$12,038.9	-1.7	\$12,467.0	3.6
Other Sources									
14	Estate	\$0.0	NA	\$0.0	NA	\$0.0	NA	\$0.0	NA
15	Insurance	\$390.2	16.0	\$428.6	9.9	\$439.7	2.6	\$451.7	2.7
16	Pari-Mutuel	\$0.4	34.8	\$0.4	8.3	\$0.5	5.3	\$0.5	8.2
17	Investment Income	\$69.2	38.3	\$89.6	29.4	\$92.7	3.5	\$87.6	-5.5
18	Court Receipts	\$2.4	-31.4	\$2.4	1.0	\$2.4	0.3	\$2.3	-4.6
19	Other Income	\$45.6	-10.1	\$45.3	-0.8	\$44.8	-0.9	\$44.7	-0.3
20	Total Other	\$507.8	15.2	\$566.3	11.5	\$580.2	2.4	\$586.9	1.2
21	Gross General Fund Revenue	\$17,697.9	23.7	\$17,948.3	1.4	\$18,056.5	0.6	\$18,753.8	3.9

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

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Cash Fund Revenue

Table 13 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 13
Cash Fund Revenue Subject to TABOR
Dollars in Millions

	Preliminary FY 2021-22¹	Estimate FY 2022-23	Estimate FY 2023-24	Estimate FY 2024-25	CAAGR*
Transportation-Related	\$1,229.4	\$1,265.7	\$1,388.5	\$1,474.4	
Percent Change	6.4%	3.0%	9.7%	6.2%	6.2%
Severance Tax	\$325.0	\$337.9	\$260.3	\$190.8	
Percent Change	2113.0%	4.0%	-22.9%	-26.7%	-16.3%
Gaming Revenue ²	\$115.4	\$119.0	\$122.3	\$124.1	
Percent Change	13.3%	3.1%	2.8%	1.5%	2.5%
Insurance-Related	\$24.3	\$22.5	\$21.5	\$21.9	
Percent Change	15.4%	-7.3%	-4.4%	1.9%	-3.4%
Regulatory Agencies	\$92.3	\$80.0	\$85.0	\$86.4	
Percent Change	3.6%	-13.3%	6.3%	1.6%	-2.2%
2.9% Sales Tax on Marijuana ³	\$11.8	\$9.4	\$9.9	\$10.3	
Percent Change	-23.9%	-19.9%	5.1%	4.0%	-4.3%
Other Cash Funds ³	\$889.2	\$938.2	\$987.4	\$1,018.3	
Percent Change	5.7%	5.5%	5.2%	3.1%	4.6%
Total Cash Fund Revenue Subject to the TABOR Limit	\$2,687.3	\$2,772.8	\$2,874.9	\$2,926.2	2.9%

Totals may not sum due to rounding.

** CAAGR: Compound average annual growth rate for FY 2021-22 to FY 2024-25.*

¹For FY 2021-22, data reported here differ from data reported in the TABOR Outlook section because they come from different preliminary sources; this discrepancy is expected to be reconciled upon publication of the Annual Comprehensive Financial Report for FY 2021-22.

²Gaming revenue in this table does not include extended gaming revenue from Amendments 50 and 77, because it is not subject to TABOR.

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

FY 2021-22. Preliminary figures from the Office of the State Controller indicate cash fund revenue subject to TABOR totaled \$2.69 billion in FY 2021-22, an increase of 20.0 percent from the prior fiscal year. Nearly 70 percent of this increase in cash fund revenue in FY 2021-22 is attributable to the sizable increase in severance tax revenue, which increased by \$310.3 million in FY 2021-22 as a result of significantly elevated energy prices.

FY 2022-23 through FY 2024-25. Total cash fund revenue subject to TABOR in the current FY 2022-23 is expected to total \$2.77 billion. Revenue will increase by \$85.5 million, or 3.2 percent, from FY 2021-22, with most of the growth occurring in transportation-related revenue, severance tax revenue, and other cash funds revenue. Cash fund revenue growth is expected to accelerate modestly

to 3.7 percent in FY 2023-24, before slowing in FY 2024-25 to 1.8 percent. Relative to June, multiple cash fund forecasts were revised upwards for the current FY 2022-23, including transportation-related revenue, gaming revenue, insurance-related revenue, and other cash funds revenue, while severance tax and marijuana tax revenue were revised downwards. Marijuana Tax Cash Fund revenue declined by 23.9 percent in FY 2021-22, and is expected to decline by another 19.9 percent in the current FY 2022-23, before increasing throughout the rest of the forecast period.

Transportation-related revenue subject to TABOR increased by 6.4 percent in FY 2021-22. The revenue increase was driven by motor fuel and aviation fuel tax revenues as commuter traffic and travel activity began to normalize after plummeting in 2020. Energy prices spiked in the second quarter of 2022, reducing motor fuel consumption but boosting sales tax revenue from aviation fuel, which is assessed as a percentage of the price of the fuel. Revenue is expected to increase by 3.0 percent in FY 2022-23 as travel activity continues to improve and road usage fees enacted in Senate Bill 21-260 go into effect in April 2023. Revenue is expected to increase by 9.7 percent in FY 2023-24 and 6.2 percent in FY 2024-25. The forecast for transportation-related revenue is presented in Table 14.

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. Motor fuel tax receipts grew by 6.7 percent in FY 2021-22, and are expected to reach pre-pandemic peak levels in 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. Growing motor fuel revenue is expected to be partially offset by reduced revenue from the road safety surcharge through FY 2023-24. Senate Bill 21-260 and House Bill 22-1351 temporarily reduced the road safety surcharge by \$11.10 in calendar years 2022 and 2023, before it returns to its original rate in 2024.

Senate Bill 21-260 created a road usage fee on gasoline and diesel fuel, created retail delivery fees, and made other transportation-related fee adjustments that impact state revenue subject to and exempt from TABOR. Fee revenues in the forecast were further adjusted by House Bill 22-1351, which delayed the aforementioned road usage fee implementation until April 2023. Lastly, House Bill 22-1254 made both upward and downward changes to fee assessments that will influence the transportation-related revenue outlook during the forecast period and beyond.

Severance tax revenue, including interest earnings, totaled \$325.0 million in FY 2021-22, an increase from \$14.7 million in the prior year. Severance tax revenue is expected to increase again in FY 2022-23 as market pressures keep oil and gas prices near historic levels into 2023. Collections are expected to decline in FY 2023-24 and FY 2024-25 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 15.

Table 14
Transportation Revenue by Source
Dollars in Millions

	Preliminary FY 2021-22	Estimate FY 2022-23	Estimate FY 2023-24	Estimate FY 2024-25	CAAGR*
Highway Users Tax Fund					
Motor and Special Fuel Taxes	\$633.3	\$654.9	\$665.3	\$672.5	2.0%
Percent change	6.7%	3.4%	1.6%	1.1%	
Road Usage Fees	\$0.0	\$14.9	\$90.9	\$122.4	
Percent change	NA	NA	509.3%	34.7%	
Total Registrations	\$387.8	\$344.5	\$375.0	\$414.8	2.3%
Percent change	-3.1%	-11.2%	8.9%	10.6%	
<i>Registrations</i>	\$244.2	\$234.2	\$228.4	\$232.2	
<i>Road Safety Surcharge</i>	\$110.4	\$74.5	\$109.7	\$144.7	
<i>Late Registration Fees</i>	\$33.2	\$35.8	\$36.9	\$38.0	
Other HUTF Receipts ¹	\$51.6	\$74.0	\$77.2	\$78.9	15.2%
Percent change	7.5%	45.5%	4.3%	2.2%	
Total HUTF	\$1,072.7	\$1,088.4	\$1,208.3	\$1,288.6	6.3%
Percent change	3.0%	1.5%	11.0%	6.6%	
State Highway Fund (SHF) ²	\$21.3	\$22.6	\$22.9	\$23.1	2.8%
Percent change	15.5%	6.3%	1.2%	1.1%	
Other Transportation Funds	\$135.4	\$154.8	\$157.3	\$162.7	6.3%
Percent change	41.8%	14.3%	1.6%	3.4%	
<i>Aviation Fund</i> ³	\$46.4	\$52.6	\$48.2	\$48.8	
<i>Multimodal Transp. Options Fund</i> ⁴	\$0.0	\$6.8	\$7.6	\$8.1	
<i>Law Enforcement-Related</i> ⁵	\$6.7	\$6.6	\$6.5	\$6.4	
<i>Registration-Related</i> ⁶	\$82.4	\$88.7	\$94.9	\$99.4	
Total Transportation Funds	\$1,229.4	\$1,265.7	\$1,388.5	\$1,474.4	6.2%
Percent change	6.4%	3.0%	9.7%	6.2%	

Totals may not sum due to rounding.

**CAAGR: Compound average annual growth rate for FY 2021-22 to FY 2024-25.*

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

²Includes only SHF revenue subject to TABOR.

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

⁴Retail delivery fee revenue credited to the fund under SB 21-260.

⁵Includes revenue from driving under the influence (DUI) and driving while ability impaired (DWAI) fines.

⁶Includes 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 collections from **oil and natural gas** reached historic levels in FY 2021-22, totaling \$308.7 million, and are forecast to increase further in FY 2022-23 to \$322.6 million. Despite relatively minor increases in production, elevated energy prices have resulted in exceptionally strong collections from oil and gas producers in FY 2021-22, and are expected to continue for FY 2022-23. According to various energy market forecasts, prices for oil and gas are expected to remain near historic highs through 2022, before declining through 2023 and 2024. Alongside declining prices, oil and gas collections are forecast to decline to \$245.2 million in FY 2023-24 and to \$176.5 million in FY 2024-25.

Table 15
Severance Tax Revenue Forecast by Source
Dollars in Millions

	Preliminary FY 2021-22	Estimate FY 2022-23	Estimate FY 2023-24	Estimate FY 2024-25	CAAGR*
Oil and Gas	\$308.7	\$322.6	\$245.2	\$176.5	-17.0%
Percent Change	54406.3%	4.5%	-24.0%	-28.0%	
Coal	\$3.2	\$3.1	\$2.9	\$2.5	-8.3%
Percent Change	68.3%	-4.9%	-4.6%	-15.0%	
Molybdenum and Metallics	\$2.7	\$2.6	\$2.5	\$2.4	-3.8%
Percent Change	22.0%	-2.5%	-5.0%	-4.0%	
Total Severance Tax Revenue	\$314.6	\$328.3	\$250.6	\$181.4	-16.8%
Percent Change	6591.5%	4.3%	-23.7%	-27.6%	
Interest Earnings	\$10.3	\$9.6	\$9.7	\$9.4	-3.1%
Percent Change	3.5%	-7.4%	1.9%	-3.4%	
Total Severance Tax Fund Revenue	\$325.0	\$337.9	\$260.3	\$190.8	-16.3%
Percent Change	2113.0%	4.0%	-22.9%	-26.7%	

*CAAGR: Compound average annual growth rate for FY 2021-22 to FY 2024-25.

After falling precipitously in early 2020, oil and gas prices surged in 2021 and remain well above pre-recession levels. As of early September 2022, oil cost about \$91 per barrel while natural gas cost about \$9.20 per million BTU. For comparison, oil cost about \$60 per barrel and natural gas cost \$2.20 per million BTU at the end of 2019. According to the Energy Information Administration, oil prices are expected to decline slowly but remain above \$90 per barrel through most of 2023. Natural gas prices are expected to continue rising through 2022 before finally falling to around \$5.25 per million BTU in early 2023.

After increasing by 68 percent in FY 2021-22 to \$3.2 million, **coal severance tax** revenue is expected to fall in FY 2022-23 by about 5 percent, to \$3.1 million. Similar to many other commodities, coal prices increased significantly in 2021 and 2022, which put upward pressure on coal severance tax revenue. Further, HB 21-1312 phased out certain tax credits for coal production in the state, which will moderate declines in collections through FY 2023-24. With coal prices expected to level out and then decline in the near future, coal severance tax revenue is expected to decline through the forecast period.

Metal and molybdenum mines paid approximately \$2.7 million in severance taxes on the value of minerals produced in FY 2021-22 and are expect to pay \$2.6 million in FY 2022-23. In 2021, prices for molybdenum increased nearly 100 percent. Prices have since come down from this peak, but still remain elevated. Higher prices have placed upward pressure on severance tax collections from this source as well.

Finally, **interest earnings** on severance tax revenue were approximately \$10.3 million in FY 2021-22 and are forecast to decline to \$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.

Gaming revenues have more than rebounded following the pandemic casino shutdowns in 2020. Increased gaming activity attributable to Amendment 77 converged with strong economic conditions and pent-up demand. Amendment 77 allowed gaming communities to remove bet limits and permit more games, which also brought new investment into each area. Along with renovations of existing properties, the Monarch Casino recently finished its multi-year expansion project, and the construction of the new Chamonix casino hotel in Cripple Creek will double the town's room capacity and is expected to boost gaming revenues into the next fiscal year. Tax revenue is expected to grow by 6.4 percent in FY 2023-24, increase another 2.8 percent in FY 2023-24, then slow to 1.5 percent in FY 2024-25.

Most gaming revenue is subject to TABOR. Revenue attributable to gaming expansions enacted under Amendment 50 and Amendment 77 (extended gaming), is TABOR-exempt. Senate Bill 22-216 modified the allocation of limited and extended gaming revenue through the forecast period. The bill set limited gaming revenue subject to TABOR at about \$114.0 million for FY 2021-22. As tax revenues grow, gaming revenue subject to TABOR – including fees and interest – is expected to increase by 3.1 percent in FY 2022-23 to \$119.0 million. Gaming revenue subject to TABOR is expected to grow 2.8 percent in FY 2023-24 and 1.5 percent in FY 2024-25.

Sports betting was legalized in the state after the passage of Proposition DD at the November 2019 election. Betting launched on May 1, 2020, and grew rapidly into 2021. Revenue collected from sports betting activity includes licensing fees, 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. Sports betting revenue subject to TABOR ended FY 2021-22 up 4.4 percent over the prior fiscal year, reaching \$2.5 million, and is included in the Other Cash Funds forecast.

In FY 2021-22, sports betting taxes exempt from TABOR totaled \$12.4 million, up about 53.0 percent from FY 2020-21. Betting activity continues to grow, and combined with legislative changes that will limit the amount of free bets that can be deducted from net sports betting proceeds, robust growth in sports betting revenue is anticipated through the forecast period.

Marijuana tax revenue totaled \$369.9 million in FY 2021-22, a 12.9 percent decrease from the prior fiscal year, the first annual decline in revenue since recreational marijuana was introduced in 2014. Marijuana tax revenues are forecast to decline again in FY 2022-23 by 14.2 percent to \$317.3 million, as shown in Table 16. The decline in marijuana tax revenue is largely due to a return to normal consumption patterns after the COVID pandemic, alongside reduced marijuana tourism from neighboring states. Marijuana collections increased dramatically during and after the COVID-19-induced recession, and appear to be returning to more normal levels as travel and activity restrictions have faded. Alongside this return to normal, a growing number of states are legalizing recreational and medical marijuana use, including some of Colorado's bordering states, which has reduced marijuana tourism to Colorado. Despite the anticipated decline in FY 2022-23, marijuana tax revenue is expected to remain 21 percent higher than in FY 2018-19. Marijuana tax revenue is expected to continue its upward trend in FY 2023-24 and FY 2024-25, albeit with slower growth rates than seen

historically. 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 16.

Table 16
Tax Revenue from the Marijuana Industry
Dollars in Millions

	Preliminary FY 2021-22	Estimate FY 2022-23	Estimate FY 2023-24	Estimate FY 2024-25	CAAGR*
Proposition AA Taxes					
Special Sales Tax	\$258.7	\$226.4	\$238.2	\$247.5	-1.5%
State Share of Sales Tax	\$232.9	\$203.8	\$214.3	\$222.7	
Local Share of Sales Tax	\$25.9	\$22.6	\$23.8	\$24.7	
15% Excise Tax	\$99.4	\$81.5	\$85.2	\$87.9	-4.0%
Total Proposition AA Taxes	\$358.1	\$307.9	\$323.3	\$335.3	-2.2%
Percent Change	-12.4%	-14.0%	5.0%	3.7%	
2.9 Sales Tax (Subject to TABOR)					
2.9% Sales Tax on Medical Marijuana	\$9.2	\$7.2	\$7.6	\$7.9	-5.2%
2.9% Sales Tax on Retail Marijuana	\$2.3	\$2.1	\$2.2	\$2.2	-1.5%
TABOR Interest	\$0.2	\$0.2	\$0.2	\$0.2	
Total 2.9% Sales Tax	\$11.8	\$9.4	\$9.9	\$10.3	-4.3%
Percent Change	-23.9%	-19.9%	5.1%	4.0%	
Total Marijuana Tax Revenue	\$369.9	\$317.3	\$333.3	\$345.7	-2.2%
Percent Change	-12.9%	-14.2%	5.0%	3.7%	

*CAAGR: Compound average annual growth rate for FY 2021-22 to FY 2024-25.

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 \$258.7 million in FY 2021-22. Revenue from the special sales tax is expected to decline to \$226.4 million in FY 2022-23, a 12.5 percent decrease from the prior year. Expectations for FY 2022-23 were revised down from the June forecast based on weaker-than-expected collections and a further decline in the wholesale price of marijuana. Revenue is expected to grow through the rest of the forecast period, reaching \$238.2 million in FY 2023-24 and \$247.5 million by FY 2024-25. 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.

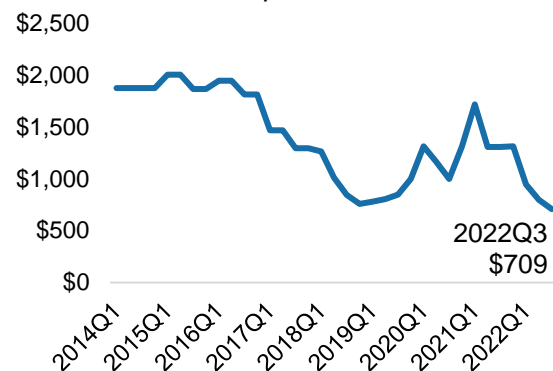
The excise tax is the second-largest source of marijuana revenue and is dedicated to the BEST Fund for school construction. After several years of strong growth, marijuana excise tax revenue fell in FY 2021-22 and is forecast to fall again in FY 2022-23. Slowing demand and declining wholesale prices will continue to weigh on excise tax collections through the current fiscal year. Revenue from marijuana excise taxes totaled \$99.4 million in FY 2021-22, and is expected to fall further, to \$81.5 million in FY 2022-23. Revenue collections are expected to grow through the rest of the forecast period.

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 \$709 per pound for the third quarter of 2022 as shown in Figure 6. After facing upward pressure in 2020 due to increased demand and

constrained supply, the wholesale price has declined since. The wholesale price is a significant determinant of excise tax revenue, and remains both an upside and downside risk to the forecast.

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 \$9.2 million in FY 2021-22, and is expected to generate \$7.2 million in FY 2022-23. Retail marijuana dispensaries remitted \$2.3 million in sales tax in FY 2021-22. Collections are expected to decline in FY 2022-23 to \$2.1 million and then to increase modestly throughout the rest 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.

Figure 6
Calculated Average Wholesale Rate
Cost per Pound



Source: Colorado Department of Revenue.

Table 17
Federal Mineral Lease Revenue Distribution
Dollars in Millions

	Preliminary FY 2021-22	Estimate FY 2022-23	Estimate FY 2023-24	Estimate FY 2024-25
Total FML Revenue	\$125.1	\$157.7	\$132.4	\$135.1
Bonus Payments (portion of total revenue)	\$3.8	\$4.7	\$4.0	\$4.1
Local Government Permanent Fund	\$1.9	\$2.4	\$2.0	\$2.0
Higher Education FML Revenue Fund	\$1.9	\$2.4	\$2.0	\$2.0
Other (non-bonus) FML Revenue	\$121.4	\$152.9	\$128.5	\$131.0
State Public School Fund	\$58.6	\$73.9	\$62.0	\$63.3
Colorado Water Conservation Board	\$12.1	\$15.3	\$12.8	\$13.1
DOLA Grants	\$24.3	\$30.6	\$25.7	\$26.2
DOLA Direct Distribution	\$24.3	\$30.6	\$25.7	\$26.2
School Districts	\$2.1	\$2.6	\$2.2	\$2.2
Higher Education FML Revenue Fund	\$1.9	\$2.4	\$2.0	\$2.0

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.

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

As shown in Table 17, FML revenue totaled \$125.1 million in FY 2021-22, a 51.3 percent increase from FY 2020-21. In FY 2022-23, FML revenue is forecast to increase 26 percent to \$157.7 million. The rapid increase in natural gas prices that started in 2021 has led to elevated FML revenues. Prior to the recession, natural gas prices were around \$2.20 per million BTU. As of September 2022, prices were

about \$9.20 per million BTU and are expected to continue rising modestly through January 2023. Prices are expected to fall through much of 2023, leading to declining FML revenues in FY 2023-24.

Table 18
Unemployment Insurance Trust Fund
Revenues, Benefits Paid, and Fund Balance
Dollars in Millions

	Actual FY 2021-22	Estimate FY 2022-23	Estimate FY 2023-24	Estimate FY 2024-25	CAAGR*
Beginning Balance	(\$1,014.2)	(\$133.1)	\$320.9	\$978.2	
Plus Income Received					
UI Premium	\$783.8	\$941.9	\$1,054.5	\$1,104.5	12.11%
Solvency Surcharge	\$0.0	\$0.0	\$134.3	\$218.2	
Interest	\$0.0	\$0.0	\$9.6	\$29.3	
Other**	\$581.1				
Total Revenues	\$1,364.9	\$941.9	\$1,198.4	\$1,352.1	-0.31%
Percent Change	127.1%	-31.0%	27.2%	12.8%	
Less Benefits Paid	(\$483.8)	(\$487.9)	(\$541.1)	(\$623.9)	8.85%
Percent Change	-76.1%	0.8%	10.9%	15.3%	
Ending Balance	(\$133.1)	\$320.9	\$978.2	\$1,706.3	
Solvency Ratio					
Fund Balance as a Percent of Total Annual Private Wages	-0.09%	0.19%	0.53%	0.87%	

Totals may not sum due to rounding.

**CAAGR: Compound average annual growth rate for FY 2021-22 to FY 2024-25.*

***Other income includes Coronavirus Relief Funds and Title XII Repayment Funds applied to federal loans outstanding.*

After ending FY 2020-21 with a deficit of \$1.0 billion, the balance of the **Unemployment Insurance (UI) Trust Fund** improved in FY 2021-22. Forecasts for UI revenue, benefit payments, and year-end balances are shown in Table 18. Revenue to the UI Trust Fund is not subject to TABOR and is therefore excluded from Table 13. 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 13.

UI benefits paid continue to decline after seeing an unprecedented increase during the pandemic recession. As a consequence, the fund was nearly depleted on June 30, 2020, and became insolvent on August 18, 2020, triggering a move to the highest premium rate schedule beginning January 1, 2022.

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. FUA loans were extended interest-free until September 6, 2021, at 2.28 percent during the remainder of 2021 and at 1.59 percent in 2022. Colorado made an interest payment of \$1.5 million in September 2021 from Coronavirus Relief Funds. As of September 16, 2022, Colorado has \$33.1 million in federal loans outstanding, down from \$1.013 billion in March 2022. Colorado is one of five states with remaining outstanding FUA loans, which range from Colorado's \$33.1 million to California's \$17.8 billion. Under the current forecast, the state's remaining loans are expected to be repaid by 2023.

This forecast incorporates adjustments to fund revenues and loan balances enacted with **Senate Bill 20-207** and **Senate Bill 22-234**. Senate Bill 22-207 suspends the solvency surcharge for 2021 and 2022, and, beginning in 2022, incrementally increases the chargeable wage base to \$17,000 in 2022, \$20,400 in 2023, \$23,800 in 2024, and \$27,200 in 2025. Senate Bill 22-234 continues the suspension of the solvency surcharge for 2023, and allocated American Rescue Plan Act funds for repayment of FUA loans and interest. Pursuant to Senate Bill 22-234, \$580 million was used to repay outstanding FUA loans in May 2022, while \$20 million was set aside for the required September 30, 2022, interest payment on remaining outstanding loans.

The amount of UI benefits paid declined in FY 2021-22, to \$483.8 million, and is expected to increase along with covered employment and wages, to \$487.9 million in FY 2022-23, \$541.1 million in FY 2023-24, and \$623.9 million in FY 2024-25. The solvency surcharge is expected to be applied in FY 2023-24 and FY 2024-25, as the June 30, 2023 and June 30, 2024, fund balances are expected to fall shy of the 0.7 percent of annual private wages threshold required to turn it off. Fund revenues are expected to increase through the forecast period, allowing continued repayment of federal loans outstanding and an improvement in the UITF balance and shifting employers to lower premium rate schedules in January 2024 and January 2025. At over \$1.6 billion on June 30, 2025, and 0.87 percent of annual private wages, the UITF balance is forecast to exceed the \$1.1 billion pre-pandemic fund balance, which was also 0.87 percent of annual private wages.

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Economic Outlook

The U.S. and Colorado economies continue to grow, but inflation has taken its toll. Rapidly rising prices from energy and housing to food and vehicles have eroded real gains in earnings and income, household financial cushions, consumer spending, business activity, and trade. Imposing and persistent inflationary pressures have also prompted the Federal Reserve to raise interest rates and reduce asset purchases, measures that have increased borrowing costs and have further influenced access to credit, asset prices, business activity, and construction. Indeed, inflation and the associated monetary policy response have emerged as the primary threats to the economic expansion. While inflationary risks are more balanced in the current outlook and data indicate inflation may have peaked in June, unexpected price shocks due to energy markets, the war in Ukraine, or further supply-chain disruptions continue to pose risks to the forecast.

Other areas of the economy continue to recover impressively. The labor market is strong, with a low unemployment rate and employment reaching or exceeding pre-pandemic levels in most sectors. Although tighter monetary policy is expected to cool labor demand, the forecast anticipates that with near-record levels of job openings, there is room to rein in inflationary pressures without decreasing employment levels. The forecast assumes tighter monetary policy will result in a lower inflationary environment without pushing the economy into recession, though this is a narrow path with significant downside risk.

The current outlook is characterized by the transition from the rapid post-recession recovery to slower growth more typical of pre-pandemic trends. Savings rates, government transfer payments, household debt, and consumer behavior are normalizing and influencing consumer spending, the main driver of economic activity. Although household finances remain healthy overall, savings cushions have thinned and access to credit is tighter. Higher borrowing costs have had an immediate impact on housing markets, causing sales and building activity to decline. Further, consumers have begun the transition back to spending on many services in place of heightened spending on goods during the pandemic, depressing demand in the goods-producing sectors.

Risks to the outlook include reduced business investment dampened by higher borrowing costs and slower building activity, a worsening global outlook, a near-term housing market correction, and ongoing pandemic-related disruptions that continue to influence markets despite becoming more geographically and industry-isolated. The risk of recession within the forecast period has risen since the June forecast.

Tables 19 and 20 on pages 70 and 71 present histories and expectations for key indicators for the U.S. and Colorado economies, respectively.

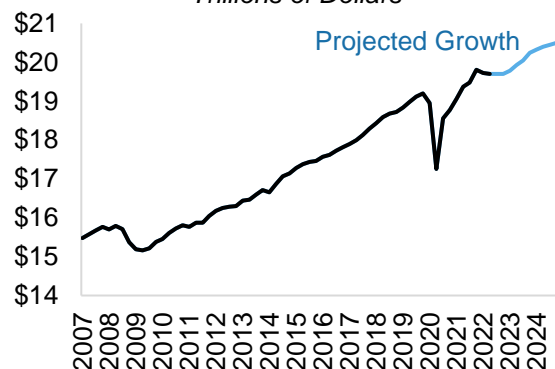
Gross Domestic Product

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 U.S. GDP contracted at an annual rate of 1.6 percent in the first quarter of 2022 as the war in Ukraine worsened ongoing international supply chain problems. Elevated crude oil prices and tighter monetary policy contributed to another decline in the second quarter, with real U.S. GDP falling by another 0.6 percent.

Supply constraints and attendant inflation have emerged as the primary threat to the economic expansion, with a tight labor market, elevated energy prices, and tighter monetary policy also expected to slow growth through the remainder of 2022 and beyond.

- Real U.S. GDP will rebound in the second half of 2022, but grow by just 1.4 percent over year-ago levels as inflation erodes the potential for expansion. Real economic output is projected to increase at rates of 1.5 percent in 2023 and 2.1 percent in 2024.

Figure 7
U.S. Real Gross Domestic Product
Trillions of Dollars



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

Consumer spending continues to slow.

Consumer spending, as measured by personal consumption expenditures, makes up more than two-thirds of total economic activity. It accounted for a majority of the decline in GDP during the pandemic recession and has been largely responsible for the recovery. Faced with an eroding dollar, consumer spending has slowed in 2022. The latest estimates indicate consumer spending increased at an annualized rate of 1.5 percent in the second quarter after growing by 1.8 percent in the first quarter. High fuel, rent, and food prices have caused many consumers to buy less.

Consumers continue to shift their spending from goods to services. During the height of the pandemic, consumers purchased electronics, appliances, furniture, and food at grocery stores, while service-related businesses, such as restaurants, entertainment, and hotels and tourism suffered. Since late 2021, spending habits have shifted as consumption patterns return to their pre-pandemic balance between goods and services. Inflation-adjusted consumer spending on services increased 3.6 percent in the second quarter of 2022, while spending on goods declined by 2.4 percent.

Residential and nonresidential construction has dragged down business investment. Business investment, as measured by gross private domestic investment, began the year up 5.0 percent in the first quarter of 2022. However, business investment declined by 13.2 percent in the second quarter as investment in nonresidential and residential structures dropped by 13.2 percent and 16.2 percent, respectively. Rising mortgage rates and borrowing costs have dampened demand for new and existing housing units and made nonresidential projects more expensive.

U.S. trade balance narrows. After declining by 4.8 percent in the first quarter of 2022, exports grew by 17.6 percent in the second quarter, while imports increased by 2.8 percent. The significant increase in exports is mainly attributable to the war in Ukraine and high energy prices. Many U.S. suppliers, specifically natural gas and fertilizer producers, have stepped up in providing key commodities to Europe. According to the Energy Information Association, during the first four months of 2022, the U.S. exported 74 percent of its natural gas to Europe compared with an annual average of 34 percent last year. Inflationary pressures have also pushed up the value of crude and refined oil exports.

Government spending continues to decline. Government expenditures contracted at an annual rate of 1.8 percent in the second quarter of 2022. Federal, state, and local spending has been steadily falling since the second quarter of 2021 as pandemic-era stimulus programs come to a close.

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 a period of very strong growth, growth rates for the state may slip closer to the nationwide average. Additionally, after a decade of rising rents and double-digit appreciation in home prices, high housing costs may impede hiring in many regions of the state.

Labor Markets

Even in the face of formidable economic headwinds, the labor market remains strong. Employers in most sectors have surpassed pre-pandemic payrolls, and Colorado is ahead of the nation by most measures. Competition for workers remains strong, but plentiful job opportunities, rapid wage growth, and inflation-eroded financial cushions are pushing and pulling workers back into the labor market, helping to ease labor shortages. Tighter monetary policy is expected to cool labor demand, but with near-record job openings there is room to reign in inflationary pressures without decreasing employment levels. Employment levels in Colorado reached pre-pandemic levels in February 2022, and will reach pre-COVID trend levels in mid-2023.

- U.S. nonfarm employment is expected to increase by 3.6 percent in 2022 and 2.5 percent in 2023. The U.S. unemployment rate is expected to decline from 5.4 percent in 2021 to 3.6 percent in 2022 and to fall below pre-pandemic rates, averaging 3.4 percent in 2023.
- Nonfarm employment in Colorado is expected to outpace national trends, growing 4.0 percent in 2022 before slowing to 2.0 percent in 2023. The Colorado unemployment rate is expected to decline from 5.4 percent in 2021 to 3.4 percent in 2022 before falling further to 3.1 percent in 2023.

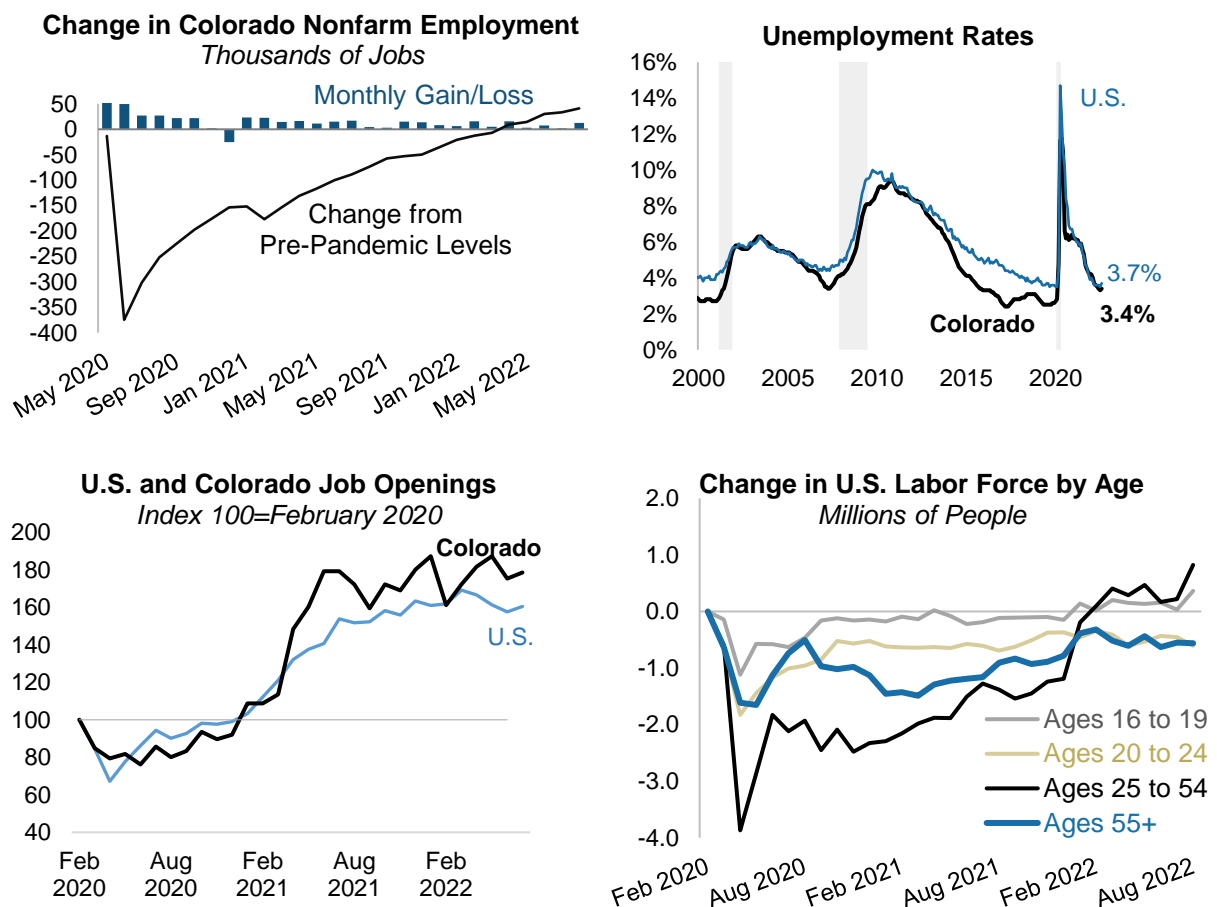
Colorado's employment gains are moderating, but they remain ahead of the nation. Just over two years after the recovery began, employment has recovered to pre-recession levels nationally and more than recovered in Colorado. The state gained 12,400 jobs in August, and has regained 429,900 jobs since losing 374,500 between February and April 2020, a recovery rate of 114.8 percent compared with 101.1 percent nationally. The state's employment recovery slowed over the summer, averaging 6,250 jobs gained per month between May and August, compared with average monthly job gains of 10,800 per month from January to April 2022 (Figure 8, top left). Year-over-year, statewide job growth was 3.9 percent in August, still above the long-term trend, with the largest job gains in leisure and hospitality, which was up by 9.9 percent (31,500 jobs) since August 2021. It is important to note that state employment data are subject to frequent revisions.

Colorado's unemployment rate ticked up to 3.4 percent in August, below the August national rate of 3.7 percent (Figure 8, top right). The unemployment rate has fallen from its peak rate of almost 12.0 percent in May 2020 to its current 3.4 percent in only 27 months, compared to the 60 months required to fall to the same level from the peak unemployment rate (9.4 percent) during the Great Recession. Colorado's unemployment rate is the nation's 24th lowest, equal to Arkansas and

Tennessee. At 1.9 percent, Minnesota has the lowest rate, while the highest rate belongs to New York (4.7 percent).

Competition for workers remains high, driving growth in the labor force. As in the nation, job openings in Colorado remain at historic levels, averaging 224,000 per month in 2022, compared to the pre-pandemic average of 147,000 per month (Figure 8, bottom left). There were 2.0 job openings per unemployed person in Colorado from March through July 2022, up from a rate of 1.7 in February. Colorado's labor force participation rate was 69.6 percent in August, equal to the rate reached in March 2020, well ahead of the 62.4 percent rate nationwide and the second highest among the 50 states behind Nebraska (69.9 percent).

Figure 8
Selected U.S. and Colorado Labor Market Indicators



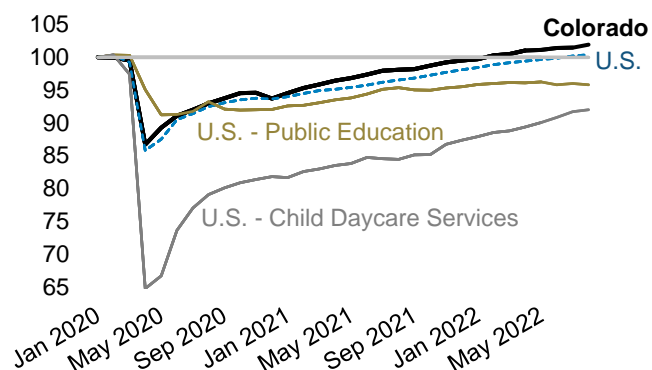
Source: U.S. Bureau of Labor Statistics. Data are seasonally adjusted. Job openings are through July 2022; all other data are through August 2022.

Health concerns and child care constraints continue to abate, while household savings are eroding with time and inflation. These factors are pushing the U.S. prime-age labor force participation rate above pre-pandemic levels, while participation rates for younger workers remain notably suppressed, indicating some longer-term scarring as the pandemic disrupted the transition from school into the workforce. Additionally, older workers have yet to return to the labor force at pre-pandemic rates despite the threat of inflation and financial market volatility to retirement earnings (Figure 8, bottom right).

Gaps in jobs recovery remain for certain areas and industries. Work has been slow to normalize in some sectors, with notable employment gaps remaining in lower-wage sectors reliant on in-person work. Employment in child care and local public schools, for example, remained down by 8.0 percent and 4.2 percent, respectively, in August 2022 compared to February 2020 levels (Figure 9). Employment gains and strong wage growth in some lagging sectors may signal ongoing market adjustments to close these gaps, particularly in the private sector where employers can raise wages more quickly.

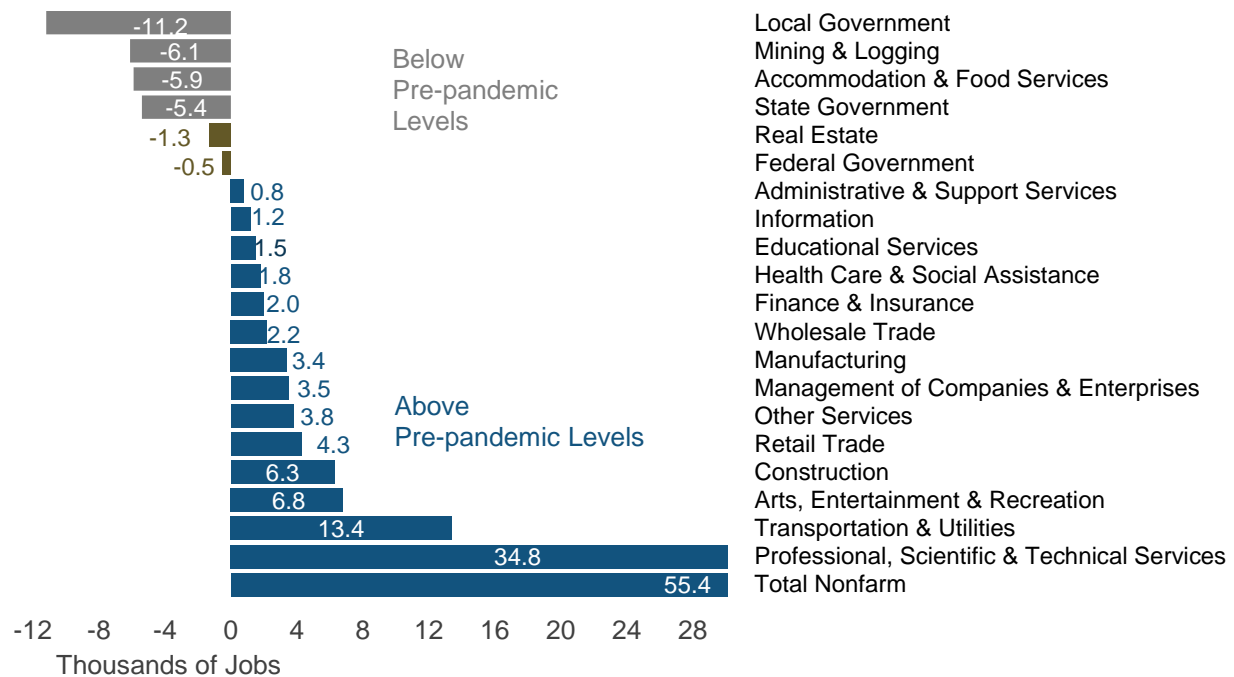
Weld County, Pueblo County, and the latter's neighbors along the southern front range continue to experience relatively high rates of unemployment. Conversely, Mesa County and El Paso County continue to lead other regions in jobs recovered since February 2020. While recovery gaps have largely closed across gender, ethnicity, and educational attainment, black Coloradans continue to experience high rates of unemployment, with a twelve-month average of 10.4 percent through July 2022, 6.4 percentage points higher than pre-recession levels. This compares with a twelve-month average unemployment rate of 3.2 percent for white Coloradans, 0.8 percentage points above pre-recession levels.

Figure 9
Nonfarm Employment
Change from Pre-Pandemic Levels
Index 100 = February 2020



Source: U.S. Bureau of Labor Statistics. Data are seasonally adjusted. Data are through August 2022

Figure 10
Change from Pre-Pandemic Levels in Colorado Employment by Industry
Change from February 2020 to August 2022

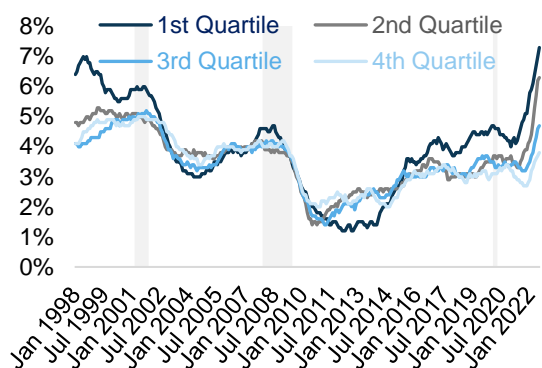


Source: U.S. Bureau of Labor Statistics with Legislative Council Staff calculations. Data are seasonally adjusted.

As shown in Figure 10, nearly all private industry sectors have regained the jobs lost between February 2020 and April 2020. Among those lagging, accommodation and food services is down 5,900 of the 138,300 lost, and real estate is down 1,300 jobs of the 6,500 lost. State and local government employment also lags pre-pandemic levels, with public sector job losses concentrated in education. The mining and logging sector has continued to shed jobs since the pandemic's onset, and is down an additional 3,700 jobs since April 2020, for a total of 6,100 jobs lost since February 2020. Sectors with the fastest recovery rates include finance and insurance; transportation and utilities; professional, scientific, and technical services; and management of companies and enterprises. Employment recovery in high-wage industries continues to outperform that of medium- and low-wage industries, where aggregate employment hovers at its pre-pandemic level. Total nonfarm employment exceeds pre-pandemic levels by 55,400 jobs, with professional, scientific, and technical services employment up by 34,800.

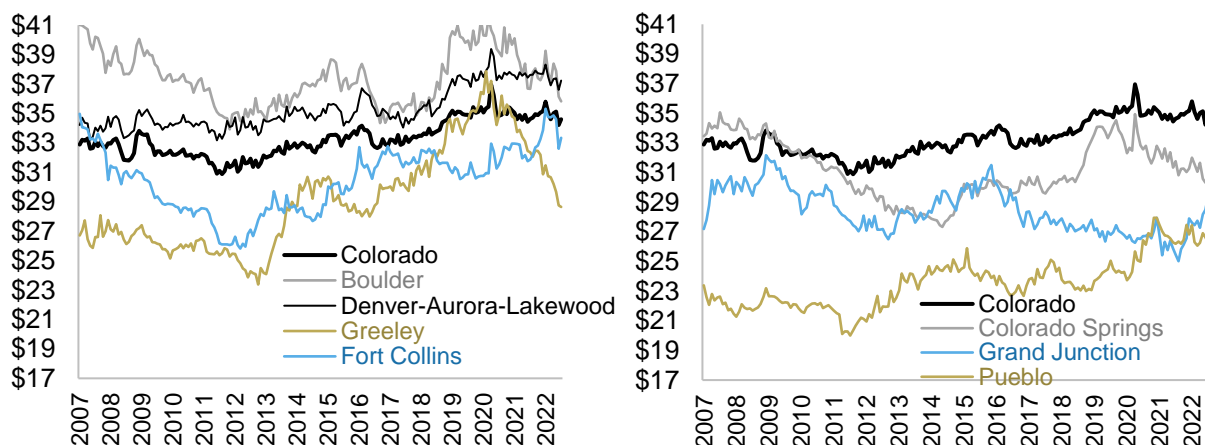
Nominal wage growth continues to increase, led by lowest-wage workers. According to data from the Atlanta Federal Reserve Wage Growth Tracker, nominal wage growth (not adjusted for inflation) for the nation was 5.5 percent in July, compared to a three-year average of 3.6 percent from 2019 to 2021. Growth varied across industries, reflecting labor supply constraints and wage flexibility, ranging from highs of 6.3 percent in leisure and hospitality and 6.2 percent in trade and transportation, to lows of 4.8 percent in public administration and 5.0 percent in education and health. Wages for earners in the lowest (first) quartile are up by 7.3 percent in July 2022, compared with those in the highest (fourth) wage quartile, up by 3.8 percent (Figure 11). In Colorado, nominal wages are rising rapidly, but compensation for many workers is not keeping up with inflation, eroding workers' purchasing power. Statewide, nominal hourly wages are up by 8.4 percent year-over-year through July, but real wages have declined in recent months.

Figure 11
Nominal Hourly Wage Growth
Twelve-Month Moving Average



Source: Atlanta Fed Wage Growth Tracker. Data are through July 2022.

Figure 12
Real Average Hourly Wages by Region
2020 Dollars

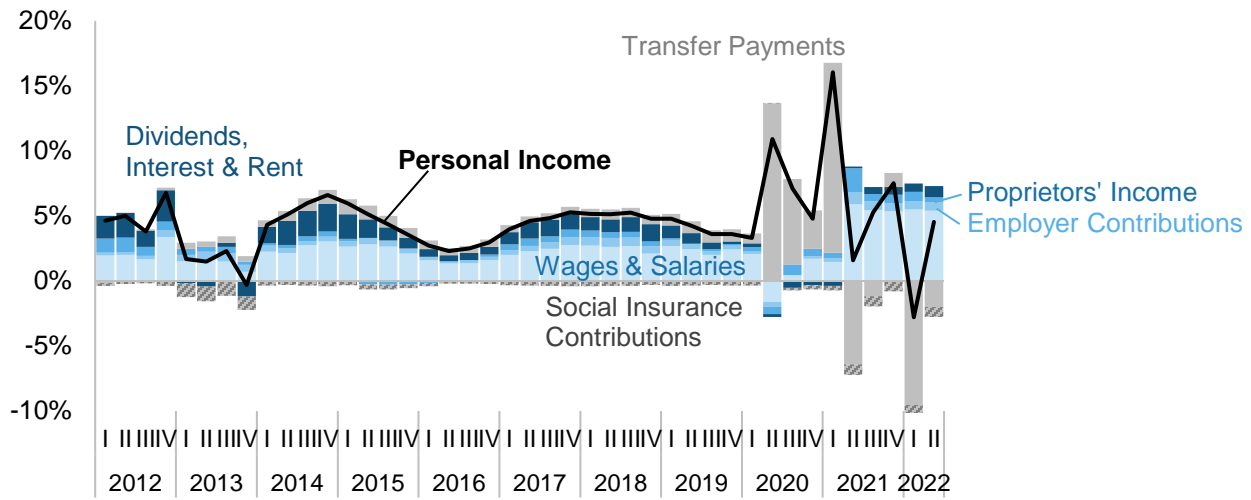


Source: U.S. Bureau of Labor Statistics. Data are adjusted for inflation using the U.S. city average CPI-U inflation index. Data are not seasonally adjusted and are through July 2022.

Personal Income

Personal income measures income received by households from all sources, including wage income, business ownership, investments, and government support. Personal income determines household contributions to income tax revenue, and foreshadows current and future consumer spending and contributions to sales tax receipts. A history of contributions to year-over-year growth in personal income is shown in Figure 13.

Figure 13
U.S. Personal Income and Its Contributions
Contributions to Percent Change, Year-over-Year



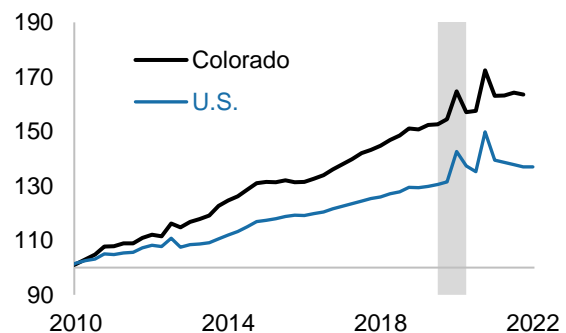
Source: U.S. Bureau of Economic Analysis with Legislative Council Staff calculations. Data shown at seasonally adjusted annualized rates.

Wages and salaries buoy personal incomes amid declining transfer payments post-pandemic. During the pandemic, incomes were bolstered by extraordinary levels of federal government support, including direct payments to individuals, expanded unemployment insurance benefits and Paycheck Protection Program loans. This government support is recorded as transfer payments for purposes of personal income. As these programs have expired, transfer payments have had a negative contribution to personal income relative to the prior year, bringing down overall growth.

U.S. personal income fell 2.8 percent year-over-year in the first quarter of 2022, the first decline since 2013. Although wage and salary incomes contributed an impressive 5.5 percent to personal income growth, these were more than offset by a negative 9.5 percent contribution from transfer payments. Personal income bounced back in the second quarter, growing 4.5 percent year-over-year as wage and salary increases held strong and the drag from the reduction in transfer payments eased.

Effect of inflationary pressures on real income growth expected to ease over the forecast period. Persistent strength in nominal wages and salaries suggests that nominal personal income growth will rebound and increase both nationally and in Colorado through the forecast period. However, households must now contend with rapidly increasing prices for most goods and services. While most sources of income are expected to grow at rates consistent with a healthy expansion, inflationary pressures are expected to leave many households with reduced purchasing power relative to last year. As shown in Figure 14, U.S. personal income adjusted for inflation has fallen for the past five

Figure 14
Real Personal Income
 Index 100 = 2010Q1



Source: U.S. Bureau of Economic Analysis. Data are seasonally adjusted and adjusted for inflation using the national PCE price index.

quarters, but remains above pre-pandemic levels. Real personal income in Colorado fell by a 1.6 percent annualized rate in the first quarter of 2022 as transfer payments rolled off. With a tight labor market and inflation expected to slow through the forecast period, real personal income is expected to rebound to positive growth for both the U.S. and Colorado.

- The drop-off in federal support will slow personal income growth in 2022, when total personal income will increase 3.3 percent nationally and 6.0 percent in Colorado over year-ago levels. In 2023, personal income will grow at rates of 5.7 percent and 5.5 percent nationally and in Colorado, respectively.
- Robust wage and salary growth is expected to continue, with increases of 10.3 percent in 2022 and 6.3 percent in 2023 for the U.S., and 11.3 percent in 2022 and 6.2 percent in 2023 in Colorado.

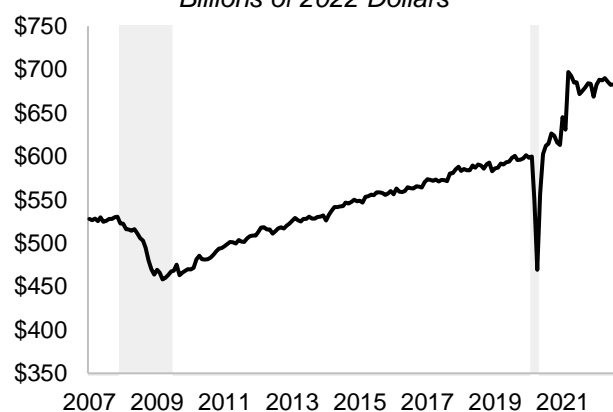
Consumer Activity

Consumer spending is the main driver of the U.S. economy. Through the first half of 2022, consumer spending outpaced inflation, partially offsetting declines in several other areas of economic activity. Consumer activity in Colorado is expected to improve over the forecast period despite current headwinds. Consumers will need to adjust to waning federal stimulus, higher interest rates, persistent inflation, and continued supply chain disruptions. Persistently low consumer sentiment is also a downside risk that could dampen consumptive behavior in the year ahead.

Real U.S. consumer spending continues to grow as demand for services resurges. In the second quarter of 2022, real (inflation-adjusted) personal consumption expenditures rose at a 1.5 percent annual rate, down from a 1.8 percent pace in the first quarter. Positive consumer spending partially offset contractions in other areas of the economy, including business investment and government spending. Spending on services continued to grow at a robust pace as consumers increasingly returned to pre-pandemic activities. Despite improvement, real spending on service categories such as health care, transportation, and recreation remain below pre-pandemic peaks. Services spending is expected to contribute to economic activity through the forecast period.

Increased spending on services offset declines in real spending on durable and nondurable goods in the second quarter. Notably, spending fell for motor vehicles and parts, furnishings, and household durables. For nondurable goods, spending on food and beverages fell at a 10.8 percent annual rate, and spending on gas and energy fell at an annual rate of 6.4 percent. Weaker spending on durable and nondurable goods is expected in the near-term as consumers revert back to some pre-pandemic spending patterns.

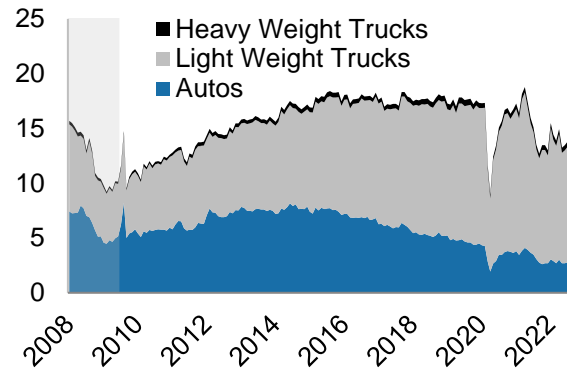
Figure 15
Real U.S. Retail and Food Service Sales
Billions of 2022 Dollars



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

U.S. retail trade growth is sputtering. Retail trade encompasses industries that primarily sell goods directly to individual consumers. U.S. retail trade and food services sales were up 1.7 percent year-over-year in July 2022. However, sales remained below the March 2021 peak level (Figure 15). Inflationary pressures have outpaced spending in many retail categories, including motor vehicles and parts, furniture and home furnishings, electronics and appliances, food and beverages, health and personal care, clothing and accessories, sporting goods and hobbies, and general merchandise stores. Retailers in these categories may be increasingly limited in their ability to pass price increases onto consumers as real earnings for many workers continue to decline. Over the forecast period, real sales are expected to flatten in the near term, before rising modestly through the rest of the forecast period. Encouragingly, unit sales of motor vehicles were up from May to July, despite remaining well below their pre-recession peak (Figure 16).

Figure 16
U.S. New Vehicle Sales
Thousands of Units

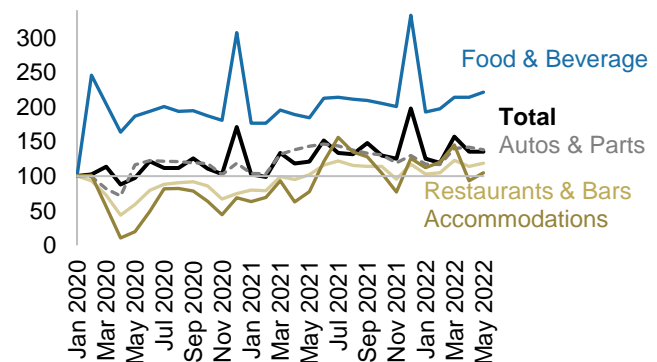


Source: U.S. Bureau of Economic Analysis, Supplemental Estimates. Seasonally-adjusted annual rates through July 2022.

Colorado retail sales show resiliency.

Seasonally adjusted retail sales have grown for 25 consecutive months as of May 2022, after falling during the pandemic recession. In May, Colorado's retail sales were up nearly 12.0 percent year-over-year. Retail sales in the state have exceeded their pre-pandemic level significantly, up more than 35.0 percent from January 2020. Like the nation, high prices for gasoline and diesel have significantly contributed to Colorado's nominal growth in retail sales over the past year. Beyond inflationary contributions, retail sales have been bolstered by increased travel and a resurgence of service industries that were suppressed during the pandemic, including restaurants, hotels, event venues, and recreational activities. Through the first five months of the year, food and drinking services sales were up about 24.0 percent year-to-date, and hotels were up nearly 58.0 percent. Over the forecast period, sales are expected to slow as energy prices moderate. As borrowing costs rise and the impacts of pandemic-related government support fade, durable goods purchases are also expected to slow.

Figure 17
Colorado Retail Sales
Index January 2020 = 100



Source: Colorado Department of Revenue. Data are not seasonally adjusted and are through May 2022.

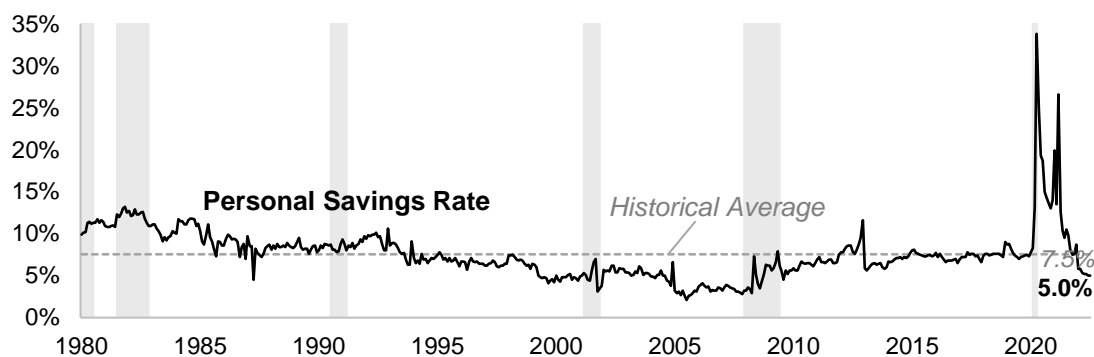
Year-ahead spending expectations for the nation's households fall from recent highs. According to the New York Fed's Survey of Consumer Expectations, household spending expectations for the year ahead fell over the summer from a series high in May, but remained well above pre-pandemic levels. Expectations declined across age, education, and income groups. Concurrently, households reported

credit was harder to access than one year ago, with those reporting credit was either somewhat or much harder to access steadily increasing since April 2021.

Household Finance and Debt

Household savings are falling and household debt is rising. Indicators of household finances are weakening as prices rise and incomes fail to keep up. Household balance sheets have been bolstered by a variety of sources since 2020, including government transfer payments and exceptionally strong nominal wage and salary growth. Additionally, COVID restrictions and virus concerns encouraged less spending on services in 2020 and 2021, resulting in a spike in household savings well above the historical average (Figure 18).

Figure 18
U.S. Personal Savings Rate*
Percent



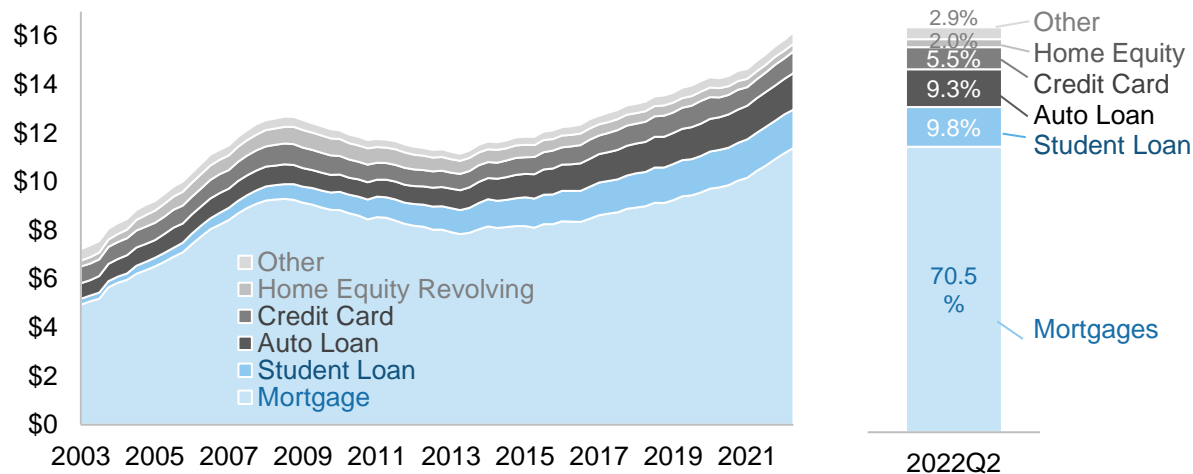
Source: U.S. Bureau of Economic Analysis. Data are through June 2022.

*The personal savings rate is the ratio of personal saving to disposable personal income.

The savings rate normalized by the end of 2021 and has fallen steadily throughout 2022, reaching 5.0 percent in July, the lowest rate since the Great Recession. Despite strong growth in nominal personal income and wages, high inflation is diminishing the purchasing power of household incomes, causing households to spend a higher percentage of their incomes for the same level of real consumption. Some households may still have excess savings, but most lower-income households have spent down the excess savings acquired early in the pandemic, according to checking account balances.

In nominal terms, the total amount of household debt has also accelerated over the past year, largely driven by rising mortgage debt as home prices surged and a high volume of sales translated into more new mortgages. High credit card debt, on the other hand, often indicates that households are straining to have enough cash on hand. Credit card debt is on the rise, up 12.7 percent from a year ago, but it remains 4.3 percent below 2019 levels and signals that the level of borrowing is not necessarily unsustainable. Additionally, debt payments as a percent of disposable income is rising but still well below pre-pandemic levels, another signal that the current level of borrowing is not yet a concern.

Figure 19
U.S. Household Debt Composition
Trillions of Dollars
Percent Share



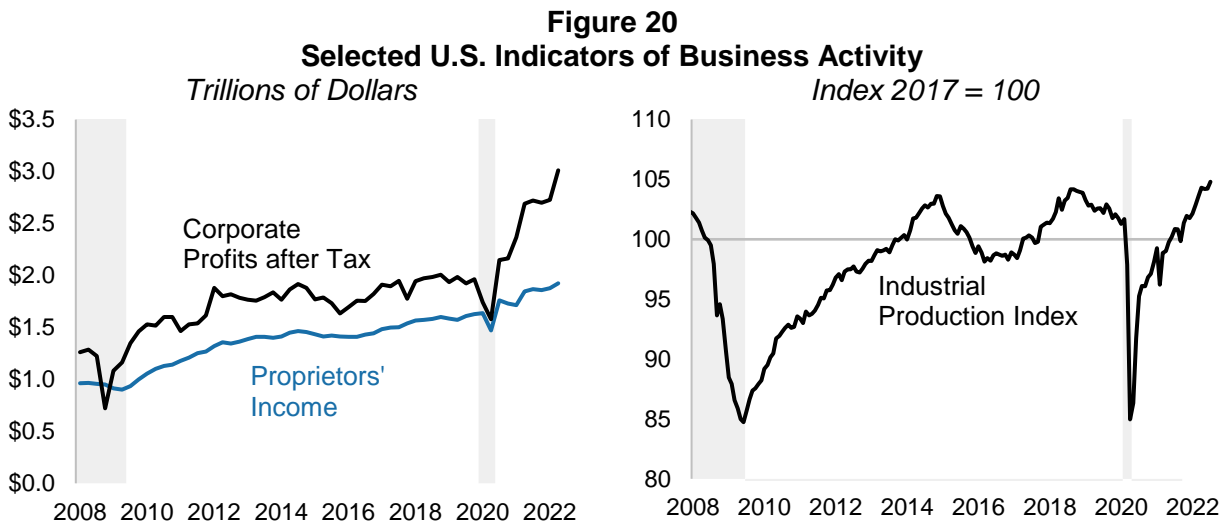
Source: Federal Reserve Bank of New York / Equifax. Data are through the second quarter of 2022.

Student loan debt is growing more slowly. Student loan debt makes up 9.8 percent of total debt, for a total of \$1.6 trillion in the second quarter of 2022. Student loan debt is growing more slowly than in the past, likely due to the pause in interest accrual on federal student loans and declining enrollment in higher education. Additionally, President Biden announced that the U.S. Department of Education will provide up to \$10,000 in debt cancellation for individuals making less than \$125,000 per year (\$250,000 for married couples), and up to \$20,000 for Pell Grant recipients under the same income limit. According to an analysis by University of Pennsylvania’s Wharton School of Business, this will translate to an estimated \$468.6 billion dollars of loan forgiveness², which equates to nearly 30 percent of student loans and 2.9 percent of total debt.

Business Activity

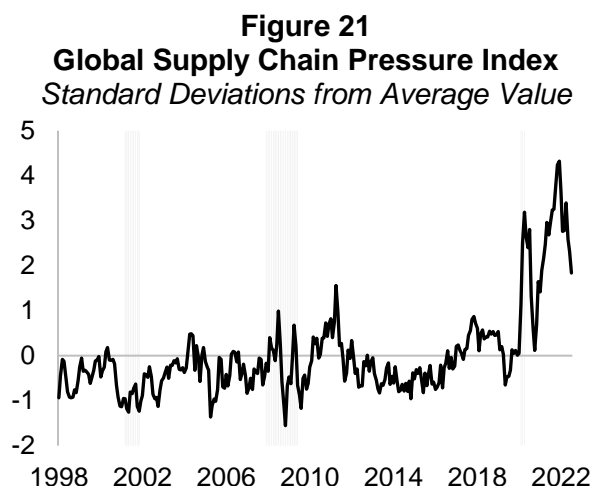
Business activity surged above pre-pandemic levels in 2021 and now shows slowing positive growth, but many downside risks dampen the outlook moving forward. Supply chain disruptions, labor shortages, and high input prices have been a drag on business activity, but appear to be easing slightly. Waning demand may become a bigger concern for businesses as inflation reduces the purchasing power of many households and reduces excess savings. Additionally, rising interest rates will increase the cost of corporate investment and expansion while further dampening demand.

² Che, Junlei and Smetters, Kent. “The Biden Student Loan Forgiveness Plan: Budgetary Costs and Distributional Impact”. University of Pennsylvania Wharton School of Business. August 26, 2022.
<https://budgetmodel.wharton.upenn.edu/issues/2022/8/26/biden-student-loan-forgiveness>



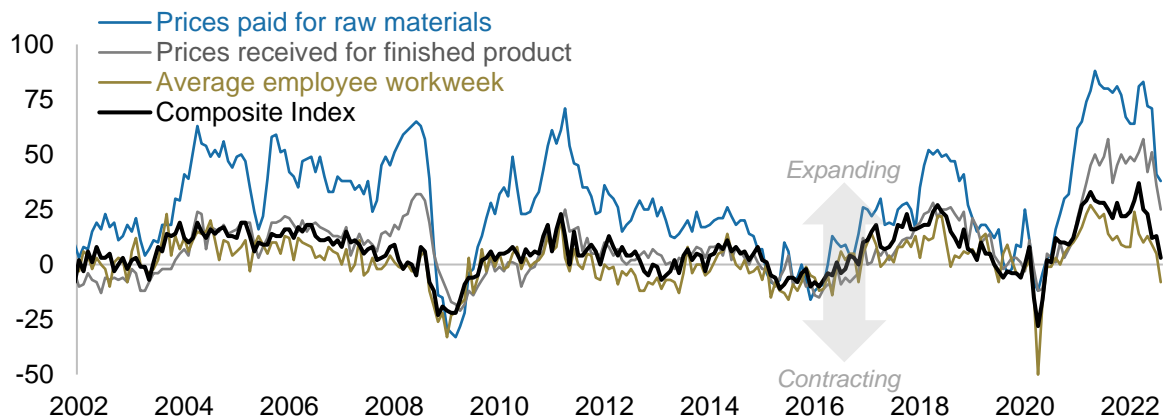
Despite headwinds, business income and profits and industrial production continue to expand. Business incomes, including corporate profits and nonfarm proprietors' incomes, climbed to record highs throughout 2021 and still show positive growth through July 2022 (Figure 20, left). Corporate profits rose by 6.1 percent in the second quarter of 2022 compared to the preceding quarter, despite supply chain disruptions and high input costs. Industrial production also continues to grow (Figure 20, right). The industrial production index measures real output from manufacturing, mining, and utilities compared to output in 2017. Total industrial production is up 3.9 percent in July 2022 compared to July 2021, indicating that production is still growing at a healthy pace. However, slowing consumer demand poses a risk to industrial production in 2023.

Supply chain distributions remain significant but are starting to ease. Supply chain disruptions have stalled deliveries and increased prices across the globe as a result of labor shortages and restrictions from the COVID-19 pandemic. The Federal Reserve Bank of New York's index of global supply chain pressures measures the impact of global transportation costs, delivery times, and backlogs (Figure 21). Supply chain pressure remains high compared to historical levels, but has fallen dramatically since the peak in December of 2021. This decline is broad-based across most subcomponents of the index. As virus concerns wane and demand for labor comes more in line with supply, supply chain pressure is expected to continue to ease over the forecast period. However, the potential for near- and medium-term labor strikes or lockouts raise the risk of resurgent supply chain disruptions for industries relying on freight rail and UPS.



Growth in domestic manufacturing activity is slowing, but remains positive. The pace of activity is slowing. The Federal Reserve Bank of Kansas City produces a monthly manufacturing index for the Tenth District region, which includes Colorado and several surrounding states. In August 2022, the index showed that activity was higher than the month prior, but growing much more slowly than in 2021 (Figure 22). Many subcomponents of the index were negative, including production, volume of shipments, and volume of new orders, meaning that more respondents were seeing declines in these areas than those seeing increases. Additionally, the majority of survey respondents indicated ongoing price pressures for raw inputs, but the number of respondents reporting increases has declined since April. Lastly, fewer firms reported backlogs of orders and the diffusion index for average employee workweek was negative, indicating that labor shortages may be less of a burden.

Figure 22
Tenth District Manufacturing Index
Diffusion Index, Change from a month ago



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

Despite headwinds, new business filings are strong in Colorado. New business applications are up 1.3 percent through early August 2022 compared with the same period in 2021, and up over 30 percent compared with 2019. In contrast, the U.S. as a whole is down 8.8 percent in 2022 compared to the same period in 2021. This trend suggests higher optimism and expectations among entrepreneurs in Colorado than those in the rest of the nation.

Monetary Policy and Inflation

Inflationary pressures may have reached their peak in the United States. Following a historic rise in prices over the past year, data suggests consumers may be in for a reprieve. 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 remained at rates not seen since the early 1980s, with average prices in August 8.2 percent higher than they were in August 2021 (Figure 23). However, price increases in July and August showed significant moderation from the pace of inflation observed in the spring of 2022.

After driving much of the rapid increase over the past year, energy and transportation costs are now helping to ease inflation. Month-over-month, energy prices decreased by 4.6 percent in July and 5.0 percent in August. Likewise, overall transportation costs fell by 2.1 percent in July and 2.3 percent in August, reversing a portion of the formidable price increases observed in the spring. However,

prices are still elevated significantly compared to August 2021, with energy prices 23.9 percent higher and transportation prices 13.4 percent higher (Figure 23, right).

In August, the sharp decline in energy prices was offset by broad-based inflation across the rest of the basket of goods and services used to calculate the consumer price index. Food prices increased 0.8 percent over the last month (11.4 percent year-over-year), housing prices increase by 0.8 percent over the last month (7.8 percent year-over-year), and medical care increased by 0.7 percent over the last month (5.4 percent year-over-year). Assuming that energy price declines continue to offset broader price pressures, it appears that inflation may have peaked for now in the United States.

Figure 23
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 inflation? In recent months, inflation has been driven by three main factors:

- **Higher demand for goods.** As the economy has recovered from pandemic lows, consumer activity has rebounded—until recently driven primarily by spending on goods as spending on services recovered more slowly. Unprecedented federal fiscal stimulus and low interest rates supported significant consumer activity and borrowing.
- **Supply chain disruptions.** Global supply chains have been challenged by pandemic-related shutdowns, slowdowns at manufacturing plants, and port closures across the globe. Some of the largest inflationary impacts to date have been concentrated in the transportation sector, reflecting vehicle production disruptions and semiconductor chip shortages.
- **Geopolitical tensions.** The invasion of Ukraine has spurred additional inflationary pressures. The conflict further disrupted supply chains, and international sanctions placed on Russia have constrained the supply of certain goods. Most notably, the prices of oil, gas, and agricultural commodities, such as wheat and sunflower oil, spiked in the wake of the invasion.

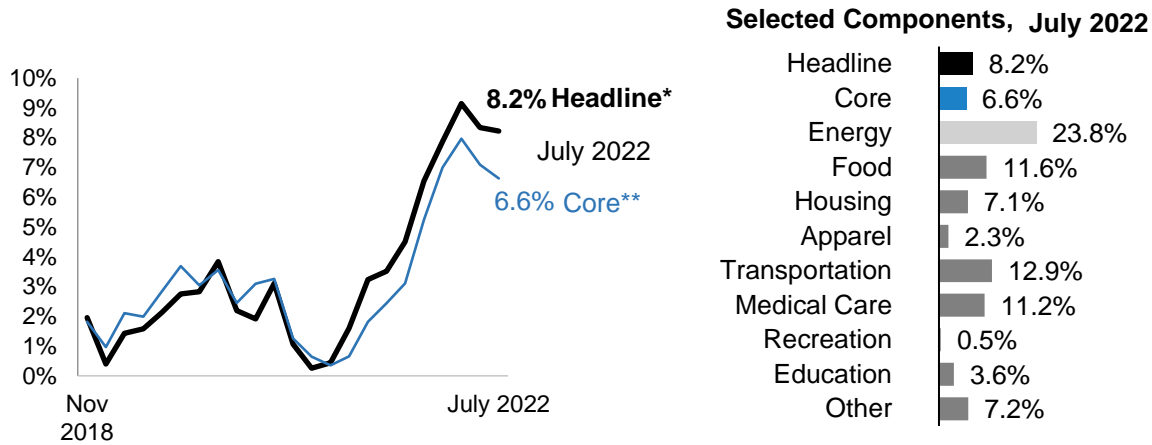
How long will inflationary pressures last? As discussed above, some inflationary pressures have started to wane, specifically energy prices. Additionally, demand pressure may abate as many consumers are expected to delay or shift their consumption activity in response to growing prices and higher interest rates, and as the global economy slows. However, many other sources of inflationary pressure are expected to remain. Supply chain disruptions are expected to persist through 2022, maintaining elevated price pressures for various goods. These pressures are expected to eventually decline, as supply chains diversify, production and manufacturing activity increases to meet demand, and the impact of the pandemic continues to soften. 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 the on-the-ground conflict.

- Headline inflation for U.S. urban consumers is expected to rise by 7.9 percent in 2022 and 4.3 percent in 2023. Headline inflation in the Denver-Aurora-Lakewood combined statistical area is expected to rise faster, at 8.2 percent in 2022 and 4.7 percent in 2023.

Additional monetary policy tightening expected throughout 2022. In response to accelerating inflation and its persistence, the Federal Reserve started on a path of tightening monetary policy beginning in early 2022. The Federal Reserve increased its benchmark interest rate, the federal funds rate, by a combined 2.25 percentage points across four hikes in March, May, June, and July. The Federal Reserve is expected to increase this rate three more times by year end. Additionally, the Federal Reserve has begun tapering asset purchases. As a result, short- and longer-term interest rates are expected to continue to rise in 2022, raising the cost of borrowing, stifling demand, and, in turn, helping to ease inflationary pressures. There is significant uncertainty regarding the degree these changes will ease price pressures, and whether the Federal Reserve can engineer a soft landing amid supply chain disruptions and shifting geopolitical tensions. Rapid tightening in monetary policy raises new demand-side risks as access to credit for would-be borrowers, including homebuyers, becomes scarce. Inflation is expected to remain well above the Federal Reserve's target of 2.0 percent through 2023.

Colorado inflationary pressures appear to have peaked in March 2022. After beginning to rise sharply in early 2021, inflation appears to have peaked in Colorado. Figure 24 shows the recent path of inflation as measured by the Denver-Aurora-Lakewood CPI-U index and inflation among select components. In March 2022, year-over-year headline inflation reached 9.1 percent and core inflation reached 8.0 percent. By July, year-over-year headline inflation declined to 8.2 percent, and core inflation fell to 6.6 percent. The largest contributors to inflation in July were housing (adding 3.2 percentage points to headline inflation), transportation (2.3 percentage points), and food (1.5 percentage points). Housing is 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. The recent changes in monetary policy have begun to dampen home sale prices, as discussed below. However, rents are expected to continue their rise through 2022 and put upward pressure on overall inflation.

Figure 24
Denver-Aurora-Lakewood 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.*

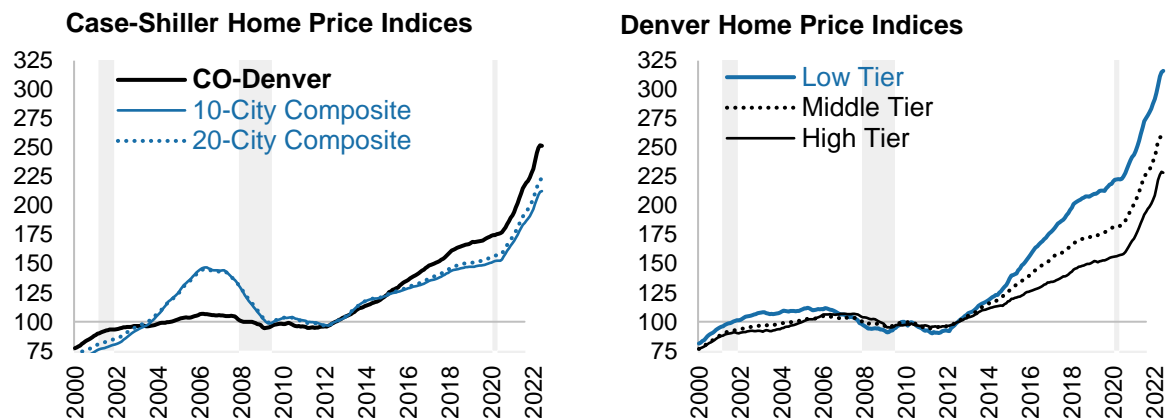
Real Estate and Construction Activity

Residential real estate remains strong, but key industry indicators are signaling a pull-back. Housing prices around the country skyrocketed through early 2022, a product of high household savings, low interest rates, demographic contributors, pandemic distortions, and demand that has substantially outstripped supply. Along with pandemic-inspired relocations, many homebuyers accumulated considerable savings during 2020 when opportunities for discretionary spending were choked by public health restrictions and federal transfer payments spiked. As competition for national housing stock increased, supply was limited by rising construction costs and supply chain disruptions that were exacerbated by 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 18.7 percent over the 12 months ending in June 2022, considerably outpacing even the fastest periods of home price appreciation during the 2000s (Figure 25, left).

Similar to the nation, Colorado's residential market began to boom in 2021. Home prices soared 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 25, right). While real estate values have surged statewide, the Federal Housing Finance Agency reports the fastest rates of appreciation in Boulder (+24.0 percent), Fort Collins (+22.9 percent), Denver (+22.8 percent), Colorado Springs (+22.1 percent), Pueblo (+20.8 percent), and Greeley (+20.6 percent) year-over-year ending in the second quarter of 2022. According to the Colorado Association of Realtors, the statewide median sales price for a single family house was \$580,000, while the U.S. median sales price was \$439,000.

However, key indicators are showing that the market has passed an inflection point as rising mortgage rates have limited buying power for prospective purchasers. In July, sales of new single family houses in the U.S. were down 29.6 percent from the same month last year, and the number of new housing starts was also down, declining by 8.1 percent from July 2021. The number of new housing permits issued has been on a declining trend since March.

Figure 25
Selected Home Price Indicators
Index 100 = July 2012



Source: S&P Dow Jones Indices LLC. Data are seasonally adjusted and are through June 2022.

In Colorado, homebuilders have pulled almost 15,000 single family permits through June 2022, down 17.1 percent from the same period one year earlier. However, demand for multifamily homebuilding through the year remains strong. Through June 2022, the number of permits pulled to construct multifamily units was up 35.5 percent from the same period one year ago. Low apartment vacancy rates and rising rents continue to drive demand for multifamily permits.

Home prices are expected to fall over the remainder of 2022 as 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 dramatic rise since December 2021, reaching 6.0 percent in September 2022. High home prices coupled with rising borrowing costs are expected to squeeze many would-be homebuyers, 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 high housing costs are expected to shape net migration in the state.

Builders face considerable headwinds in responding to low inventory, including construction supply chain disruptions and a shortage of skilled labor. Home losses from the Marshall Fire in late December 2021, 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. However, the cooling construction market looks to be providing a little relief on building materials. In July, the Producer Price Index for residential construction materials rose 16.0 percent year-over-year, down from the peak rate of 23.7 percent in March.

- Residential construction activity is expected to begin to fall from its elevated level, with the number of permits issued contracting by 3.0 percent in 2022, and by 8.8 percent in 2023.

Nonresidential construction activity remains mixed as headwinds linger. U.S. nonresidential construction spending, not adjusted for inflation, was up 1.1 percent through June compared to the same period last year. According to Associated Builders and Contractors, many contractors continue to report that they are operating at capacity even as construction activity underwhelms, suggesting that the nonresidential construction market continues to be hindered by supply chain disruptions and worker shortages. Contractors have been able to pass along these higher costs to project owners for now, but continued monetary policy tightening and deteriorating confidence in the economy could begin to impact profit margins, suppressing appetites for additional investment. There is a growing risk of project postponements as costs continue to increase.

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. Public sector investment is expected to remain elevated into 2024 as funds disseminated through the 2021 Infrastructure Investment and Jobs Act are spent.

- The value of nonresidential construction starts in Colorado is expected to slow from early-year highs, growing by 5.1 percent in 2022 before declining by 6.9 percent in 2023.

Energy Markets

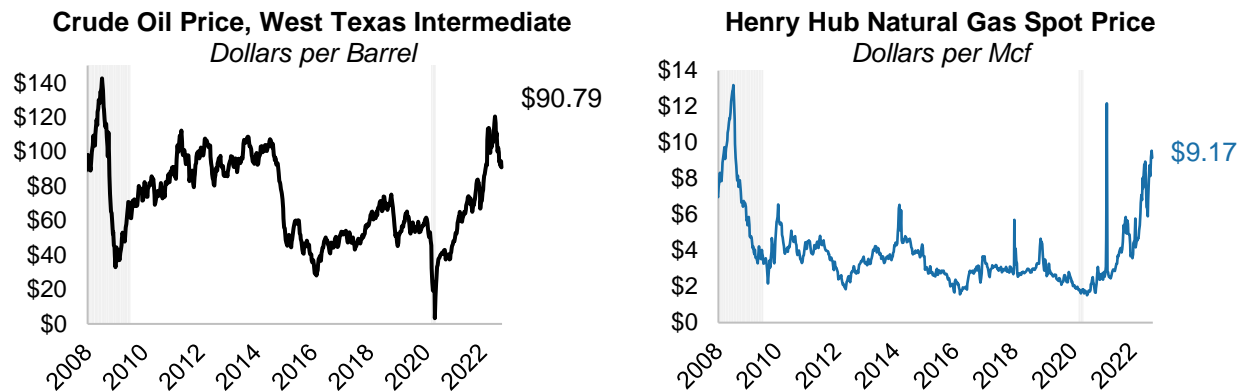
Energy prices remain elevated but have begun to ease. Both the COVID-19 pandemic and the war in Ukraine sent shockwaves through energy markets, resulting in intense price and production volatility. With initial lockdowns, the onset of the COVID-19 pandemic dramatically reduced demand for oil and gas, pushing fuel prices to nearly zero and leading producers to cut production in response. As the economy began to normalize, demand for oil and gas rebounded faster than supply, causing consistent upward price pressure throughout 2021 and early 2022. Further cuts in supply due to the war in Ukraine placed even greater pressure on prices earlier this year.

Fortunately, global production of liquid fuels was finally able to outpace consumption beginning in the second quarter of 2022, and oil prices fell by 25 percent over the three-month period between early June and early September. With supply finally surpassing demand, energy prices are expected to moderate and/or decline through the remainder of 2023. After peaking at around \$115 per barrel in early June 2022, the price of a barrel of West Texas Intermediate crude is expected to average about \$89 per barrel in 2023, according to the Energy Information Administration (Figure 26, left). Similarly, average retail prices for gasoline have fallen from their peak of \$4.93 per gallon in June 2022 to \$3.69 in early September 2022, and are expected to average \$3.59 in 2023.

In contrast to other energy prices, natural gas is expected to rise modestly through the rest of 2022, before declining sharply in early 2023. A significantly warmer-than-average summer led to higher-than-expected demand for natural gas in the electricity-generating sector, leading to declining inventories and higher price pressures. Further, export demand for U.S. natural gas has risen significantly as the war in Ukraine curtailed natural gas supplies in Europe. After registering about \$7.28 per million BTU in July 2022, prices are expected to rise to \$7.71 per million BTU in January 2023, according to the Energy Information Administration (Figure 26, right). An anticipated decline in

consumption of natural gas in 2023, alongside rising production, will result in prices falling below \$4.50 per million BTU for much of 2023.

Figure 26
U.S. Energy Prices

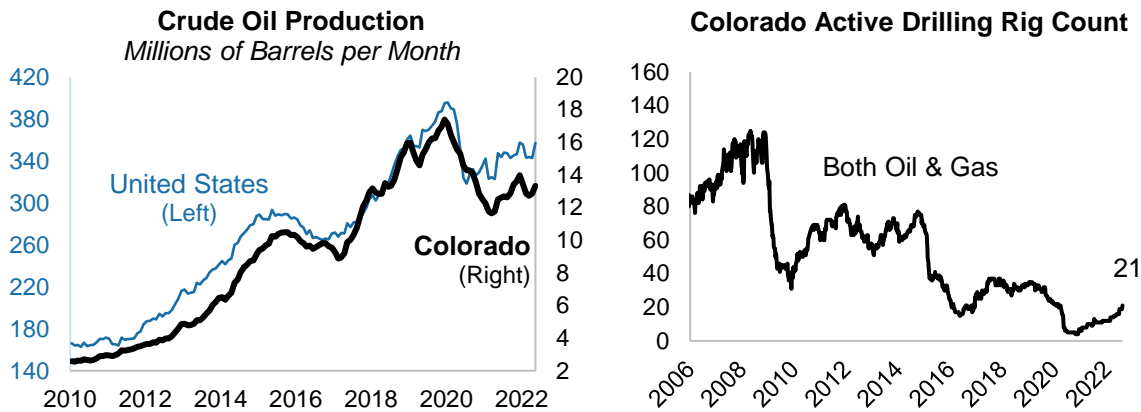


Source: U.S. Energy Information Administration. Weekly average prices. Data are not seasonally adjusted and are through the week of September 9, 2022.

Recovery of oil and gas production in Colorado lags behind the nation. Oil and gas production in both the U.S. and Colorado declined at the onset of the recession in early 2020 (Figure 27, left). Nationally, natural gas production fell by nearly 10 percent shortly after the recession began, while oil production fell about 25 percent. Nationally, natural gas production reached pre-pandemic levels in November 2021, while oil production remained about 8.5 percent below pre-pandemic levels as of July 2022.

Colorado suffered a larger pull-back in production and has recovered more slowly than the United States overall. Oil production shrank by over 32.0 percent following the recession and remained about 22 percent below pre-recession levels as of May 2022 (Figure 27, left). Natural gas production has yet to rebound in Colorado, and has been generally in decline since January 2020. As of May 2022, natural gas production was about 12 percent below the pre-recession peak. Further, the number of active oil and gas drilling rigs in Colorado remains just below pre-recession levels (Figure 27, right).

Figure 27
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 May 2022.

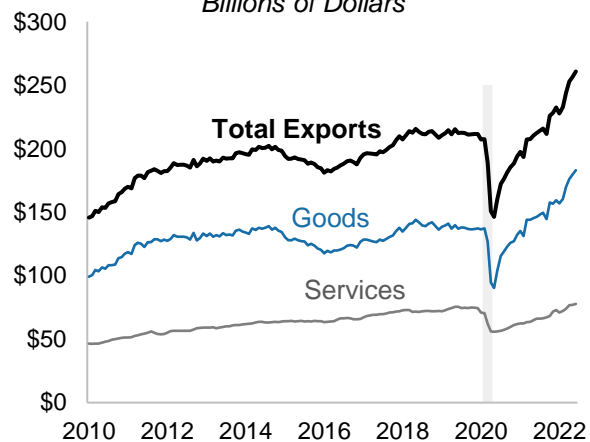
Source: Baker Hughes. Data are not seasonally adjusted. Data are through August 2022.

Global Economy and International Trade

Inflationary concerns, central bank tightening, ongoing supply chain disruptions, and the war in Ukraine are weighing on the global economic outlook. Risks of an economic downturn have risen worldwide, with Europe in particular facing a worse economic outlook than the United States.

The International Monetary Fund continues to downgrade its global outlook. The International Monetary Fund (IMF) revised down its 2022 forecast for global economic output in July as monetary policy tightening and post-pandemic transitioning weighed on advanced economies through the first half of the year, and economic growth in China slowed significantly. The IMF revised down its outlook for 2022 by 0.4 percentage points, projecting 3.2 percent growth in real economic output, and 0.7 percentage points for 2023 to 2.9 percent. The effects of tighter financial conditions, the ongoing war in Ukraine, and slowdown in China are expected to ripple through many emerging and developing countries. The IMF continues to view risks to the forecast as weighted to the downside.

Figure 28
U.S. Monthly Exports
Billions of Dollars



Source: U.S. Bureau of Economic Analysis (balance of payments basis). Data are through June 2022 and are seasonally adjusted but not adjusted for inflation.

For the United States and advanced economies in the Euro area, historically high inflation has prompted central banks to continue to raise interest rates and pull back monetary support. The IMF notes the tightening has raised borrowing costs and impacted global equity prices and housing markets. Although long-term inflation expectations have remained stable, wages have not kept pace with prices, and inflation has eroded some household spending power. The IMF revised up its 2022

inflation outlook, projecting 10.5 percent in the United Kingdom, 7.3 percent in the Euro area, and 9.5 percent for emerging market and developing economies. Overall, the forecast for global inflation was revised up by 0.9 percentage points to 8.3 percent in 2022, and by 0.9 percentage points to 5.7 percent for 2023.

Extended COVID lockdowns in China caused the IMF to downgrade the country's outlook. The organization projects China's economy will grow 3.3 percent this year before rising to 4.6 percent in 2023. The lockdowns have had a significant impact on China's economy, resulting in a 2.6 percent decline in real GDP during the second quarter, according to the IMF. China's lockdowns have not only impacted the global economy through ongoing supply shortages, but domestic consumption activity has also been severely reduced. China's economy is also on the verge of a real estate crisis as regulators are now requiring firmer financial plans for developments, stunting construction and beginning to pop the nationwide property valuation bubble.

U.S. trade volume continues to expand in 2022, due in part to rapid energy price growth. U.S. trade volumes improved over the latter half of 2021 and ended the year up 22.0 percent according to data from WiserTrade. Through June 2022, the nation continued to post rapid growth in the dollar value of both exports and imports of goods, and total trade volume accelerated, up nearly 27.0 percent year-to-date. Exports to Canada and Mexico were up more than 19.0 percent year-to-date through June, and imports were up by nearly 26.0 percent. Together, those two neighbors comprised about 32 percent of growth in U.S. trade volumes year-to-date. Trade with both countries is topped by commodities related to motor vehicles and energy, both of which have experienced rapid price increases over the past year.

Despite COVID lockdowns in China, imports from the country were up about 15 percent through the first half of the year, led in part by many types of electronic products. The pace of imports from China is expected to improve over the latter half of the year with improved pandemic conditions; however, the trajectory will depend on China's response to COVID outbreaks and could vary considerably from current expectations.

Colorado exports, led by high-tech products and beef, are increasing with inflation. Like the nation, the dollar value of Colorado's exports and imports were on track to outpace last year's growth through the first six months of 2022 with trade volumes up 27.0 percent year-to-date. Colorado's exports rose about 17.0 percent year-to-date and imports were up nearly 33.0 percent. Specifically, imports of crude oil were up about 73.0 percent year-to-date and comprised about one-third of growth in imports over the past year.

Exports to the state's two largest foreign trading partners diverged in the first half of the year. Exports to Canada were up 24.8 percent, while exports to Mexico were down 2.9 percent. The IMF projects Canada's GDP will grow 3.4 percent in 2022, while Mexico's is set to grow 2.4 percent. Growth in each market bodes well for the state's manufacturers of petroleum products and high-tech items like aircraft and other transportation equipment. So far this year, Colorado's best performing export commodities included civilian aircraft and parts (up 167.2 percent), beef products (up 20.8 percent), and oil (up 8.3 percent).

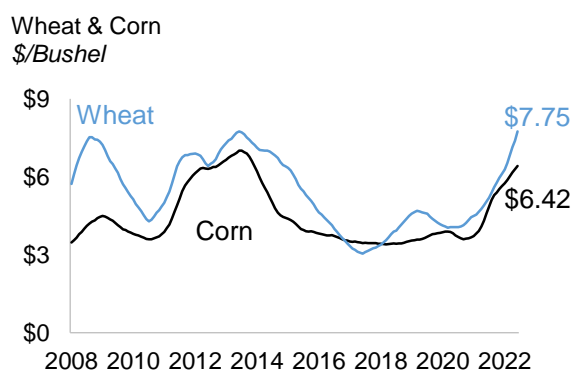
Agriculture

Conditions in Colorado's agricultural economy remain solid, with farm income stronger than a year ago, but producers face rising headwinds from increasing farm loan interest rates, persistent drought, higher input costs, and volatility in commodity prices. While recent gains in farm income continue to bolster farm credit conditions for those in the Federal Reserve's Tenth District, which includes Colorado,³ producers and lenders report growing concerns about 2023. Specifically, farm real estate values are moderating and a larger share of producers have reported that significant increases in production costs have impacted profitability.

Grain prices are volatile, remain at multiyear highs.

Prices for many agricultural commodities fell between June and July 2022, and a record wheat harvest in Russia, along with a July agreement establishing a Black Sea export corridor for Ukrainian grain shipments, are expected to increase wheat supplies and ease prices. However, a late August crop survey in the U.S. Corn Belt showed significant deterioration in crop conditions due to heat and drought, and sent many commodity prices on the rebound. Grain prices remain well above historical averages, and in Colorado continue to reach record levels, with statewide corn and wheat prices in June rising to \$7.96 per bushel and \$10.30 per bushel, respectively (Figure 29).

Figure 29
Prices Received for Colorado Grain Crops



Source: National Agricultural Statistics Service. Data shown as twelve-month moving averages. Data through June 2022.

While higher grain prices are driving higher profits or offsetting low yields for some farmers, ranchers face higher feed prices, and farmers face higher energy and fertilizer costs. Farm production expenses have increased sharply in 2022, driven by supply-chain disruptions, labor shortages, geopolitical turmoil, and adverse weather.

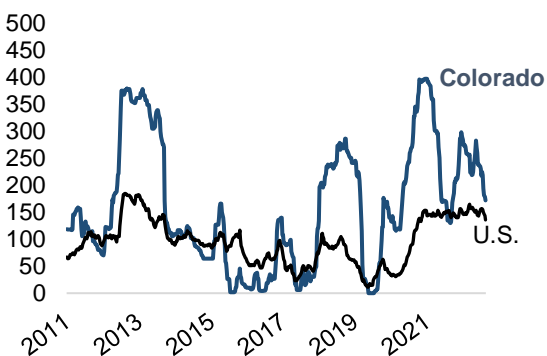
Winter wheat harvest was hampered by weather, pests. Colorado's winter wheat harvest was completed in late July, with drought, hail, and pests, taking an extreme toll on production and yields. Colorado's wheat producers saw an estimated 1.7 million acres harvested, a high rate of abandonment of dryland acreage planted, and yields ranging from 5 to 40 bushels per acre. Those values compare unfavorably against the state's average production during the 2010s, when yields averaged 39 bushels per acre and over 2.0 million acres were harvested yearly.

Food price inflation continues at record pace. Food price inflation continued at a record pace, registering 11.4 percent year-over-year in August 2022, well above the 20-year historical average of 2.4 percent. In addition to other price pressures, the ongoing outbreak of highly pathogenic avian influenza continues to impact the U.S. egg-layer flock, driving an 82.3 percent year-over-year increase in egg prices. Because consumers purchase food more frequently than other products, price increases in these products can significantly impact inflation expectations, as well as household budgets.

³ 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.

According to the USDA food price outlook, food price inflation is expected to remain elevated through 2022 before returning to historical norms in 2023.

Figure 30
Drought Severity and Coverage Index,
Colorado



Source: U.S. Drought Monitor. Data are through August 25, 2022.

Drought conditions improve with summer monsoon. Drought conditions statewide improved over the summer months, with a productive monsoon season cutting a wide swathe through the drought from north to south along the Front Range and Sangre de Cristo mountains. According to the U.S. Drought Monitor, the area of extreme or exceptional drought is down to 5 percent of the state, from 15.5 percent three months ago, and is concentrated in the Republican River basin in the state's northeast. Areas of no drought have expanded to 13 percent of the state, up from 1 percent three months ago, but down from almost 50 percent one year ago. As indicated by the Drought Severity and Coverage Index, Colorado's drought conditions are substantially improved in

2022, but remain worse than in most years since 2013, with a third year of La Niña conditions forecasted to bring dry fall conditions.

Summary

The Colorado and national economies continue to expand, with positive consumer spending and a robust labor market indicating continued growth. Jobs are abundant, and ample household savings have helped to shrink the gap between rising incomes and even faster rising prices. However, the risk of a near-term recession has escalated considerably as the Federal Reserve takes aggressive steps to counteract pervasive inflation. Inflationary pressure has diverse causes, including pent-up demand, a household savings glut, supply chain challenges, tight labor markets, and energy market disruptions associated with the war in Ukraine. Their effect is erosive to household finances, wiping away most or all income gains for many, while posing challenges for private investment. The coming months will illuminate the inflation response to monetary policy treatment, as well as any persistent impacts for households and businesses. This forecast anticipates continued, yet slowing, expansion, but the path forward has narrowed. With a worsening economic outlook around the world, the possibility of a national downturn looms.

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 evolving monetary policy, an in-progress housing market correction, the war in Ukraine, and ongoing pandemic-related uncertainty.

Downside risks. Inflationary shocks and any resultant monetary policy response continue to pose risks to the economic outlook. The war in Ukraine continues to pose a sizable risk to inflation through energy and food markets. Countries in the Euro area remain highly vulnerable to disruptions in Russian energy imports, and many countries rely on wheat and other Ukrainian commodities. Further, tight labor markets and high commodity prices may provide the kindling for a wage-price

spiral that could result in even stronger and more durable inflation than forecast. In this instance, more aggressive monetary policy tightening is likely, which could strangle economic growth. Anticipation of monetary policy missteps elevates the risk of financial market instability, dampening economic activity. The pandemic's trajectory remains a risk to economic activity. Overseas lockdowns and additional business closures could exacerbate supply chain disruptions, and elevated health concerns could dampen in-person service industry activity. Home prices are moderating, consistent with a market correction, but a more severe collapse in prices would erase significant household wealth and wreck consumer confidence. 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 the real estate, insurance, and finance industries depending on their severity.

Upside risks. Energy prices have moderated since the last forecast, and a sustained drop over the next year would ease inflationary concerns and reduce risks of more aggressive monetary policy responses. Further, a resolution to the war in Ukraine and accompanying drop in commodity prices pose an upside risk to the forecast, especially with more energy stability for European markets. Sooner than expected easing in supply chain disruptions or faster-than-expected resolution of labor market imbalances 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 19
National Economic Indicators

Calendar Years	2017	2018	2019	2020	2021	Legislative Council Staff Forecast		
						2022	2023	2024
Real GDP (<i>Billions</i>) ¹	\$18,079.1	\$18,606.8	\$19,032.7	\$18,384.7	\$19,427.3	\$19,699.3	\$19,994.8	\$20,414.6
Percent Change	2.3%	2.9%	2.3%	-3.4%	5.7%	1.4%	1.5%	2.1%
Nonfarm Employment (<i>Millions</i>) ²	146.6	148.9	150.9	142.1	146.1	151.4	155.1	158.2
Percent Change	1.6%	1.6%	1.3%	-5.8%	2.8%	3.6%	2.5%	2.0%
Unemployment Rate ²	4.4%	3.9%	3.7%	8.1%	5.4%	3.6%	3.4%	3.3%
Personal Income (<i>Billions</i>) ¹	\$16,850.2	\$17,706.0	\$18,424.4	\$19,627.6	\$21,092.8	\$21,788.9	\$23,030.8	\$24,136.3
Percent Change	4.7%	5.1%	4.1%	6.5%	7.5%	3.3%	5.7%	4.8%
Wage and Salary Income (<i>Billions</i>) ¹	\$8,474.7	\$8,900.5	\$9,323.5	\$9,444.1	\$10,343.8	\$11,409.2	\$12,128.0	\$12,722.3
Percent Change	4.7%	5.0%	4.8%	1.3%	9.5%	10.3%	6.3%	4.9%
Inflation ²	2.1%	2.4%	1.8%	1.2%	4.7%	7.9%	4.3%	2.7%

Sources

¹U.S. Bureau of Economic Analysis. Real gross domestic product (GDP) is adjusted for inflation and shown in 2012 dollars. Personal income and wages and salaries not adjusted for inflation.

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

Table 20
Colorado Economic Indicators

Calendar Years	2017	2018	2019	2020	2021	Legislative Council Staff Forecast		
						2022	2023	2024
Population (<i>Thousands, as of July 1</i>) 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 (<i>Thousands</i>) ²	2,660.0	2,726.9	2,790.0	2,651.3	2,745.3	2,857.9	2,915.0	2,961.7
Percent Change	2.2%	2.5%	2.3%	-5.0%	3.5%	4.1%	2.0%	1.6%
Unemployment Rate ²	2.6%	3.0%	2.6%	6.9%	5.4%	3.4%	3.1%	3.1%
Personal Income (<i>Millions</i>) ³	\$309,658	\$331,955	\$350,390	\$370,392	402,230	\$426,364	\$449,814	\$474,554
Percent Change	6.9%	7.2%	5.6%	5.7%	8.6%	6.0%	5.5%	5.5%
Wage and Salary Income (<i>Millions</i>) ³	\$160,963	\$170,904	\$182,944	\$187,128	206,306	\$229,681	\$243,921	\$259,044
Percent Change	6.5%	6.2%	7.0%	2.3%	10.2%	11.3%	6.2%	6.2%
Housing Permits (<i>Thousands</i>) ¹	40.7	42.6	38.6	40.5	56.5	54.8	50.0	52.5
Percent Change	4.4%	4.8%	-9.4%	4.8%	39.7%	-3.0%	-8.8%	5.0%
Nonresidential Construction (<i>Millions</i>) ⁴	\$6,154.9	\$8,146.4	\$5,166.7	\$5,462.3	\$5,602.9	\$5,888.6	\$5,482.3	\$5,668.7
Percent Change	2.8%	32.4%	-36.6%	5.7%	2.6%	5.1%	-6.9%	3.4%
Denver-Aurora-Lakewood Inflation ⁵	3.4%	2.7%	1.9%	2.0%	3.5%	8.2%	4.7%	2.3%

Sources

¹U.S. Census Bureau. 2020 population numbers reflect the 2020 Census, while other numbers reflect the July 1 estimates. Residential housing permits are the number of new single- and multifamily housing units permitted for building.

²U.S. Bureau of Labor Statistics.

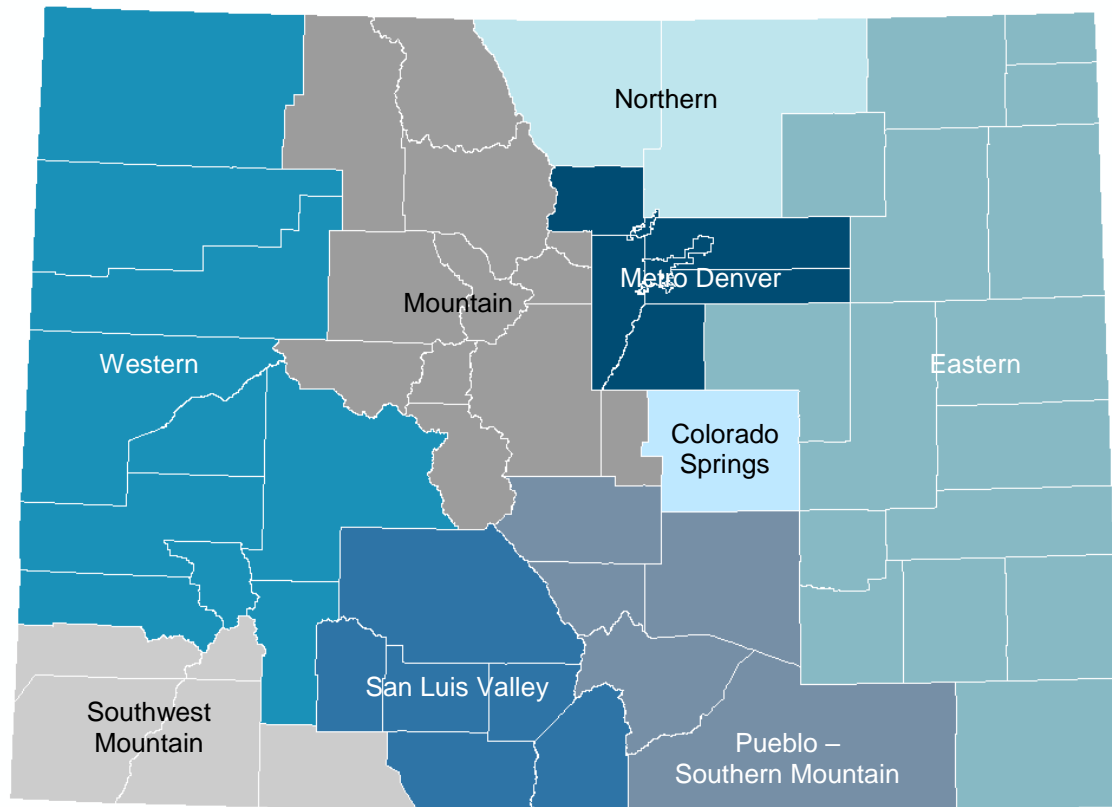
³U.S. Bureau of Economic Analysis. Personal income and wages and salaries not adjusted for inflation.

⁴F.W. Dodge.

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

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

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. Through the first half of the year, employers in the region are adding employees to their payrolls at a strong pace, though some industries continue to struggle from the impacts of the pandemic and related recession. Nonresidential construction continues to improve in 2022 despite facing several headwinds in the industry. The region, specifically Denver and Boulder, continues to struggle with housing affordability, causing potential homeowners to look for homes outside these counties, and in turn slowing the region's residential construction activity. Economic indicators for the region are summarized in Table 21.



Table 21
Denver Metro Region Economic Indicators
Adams, Arapahoe, Boulder, Broomfield, Denver, Douglas, and Jefferson Counties

	2018	2019	2020	2021	YTD 2022
Employment Growth ¹					
Denver-Aurora-Lakewood MSA	2.6%	2.3%	-5.0%	3.5%	5.0%
Boulder MSA	2.9%	2.3%	-5.6%	3.5%	5.3%
Unemployment Rate ²	2.9%	2.5%	7.0%	5.4%	3.4%
Housing Permit Growth ³					
Denver-Aurora-Lakewood Single Family	7.9%	-6.1%	1.5%	16.3%	-3.0%
Boulder Single Family	15.7%	-9.5%	-6.2%	-34.4%	-20.7%
Nonresidential Construction Growth ⁴					
Value of Projects	46.8%	-37.1%	-10.9%	2.4%	14.2%
Square Footage of Projects	-10.7%	-8.1%	-7.2%	28.6%	7.9%
Level (<i>Thousands</i>)	17,193	15,797	14,664	18,852	11,189
Number of Projects	-18.3%	-11.5%	-0.6%	13.9%	8.7%
Level	771	682	678	772	436
Housing Market ⁵					
Average Sale Price – Single Family	8.2%	2.7%	8.0%	19.9%	13.7%
Inventory – Single Family	7.2%	11.2%	-38.2%	-46.4%	61.7%
Home Sales – Single Family	-5.2%	5.3%	7.8%	1.9%	-12.4%
Retail Sales Growth ⁶	4.9%	8.9%	0.1%	17.4%	16.3%

MSA = Metropolitan statistical area. NA= not available.

¹U.S. Bureau of Labor Statistics, CES (establishment survey). Seasonally adjusted. Data through June 2022.

²U.S. Bureau of Labor Statistics, LAUS (household survey). Seasonally adjusted. Data through June 2022.

³U.S. Census Bureau. Growth in the number of residential building permits. Data through June 2022.

⁴F.W. Dodge. Data through June 2022.

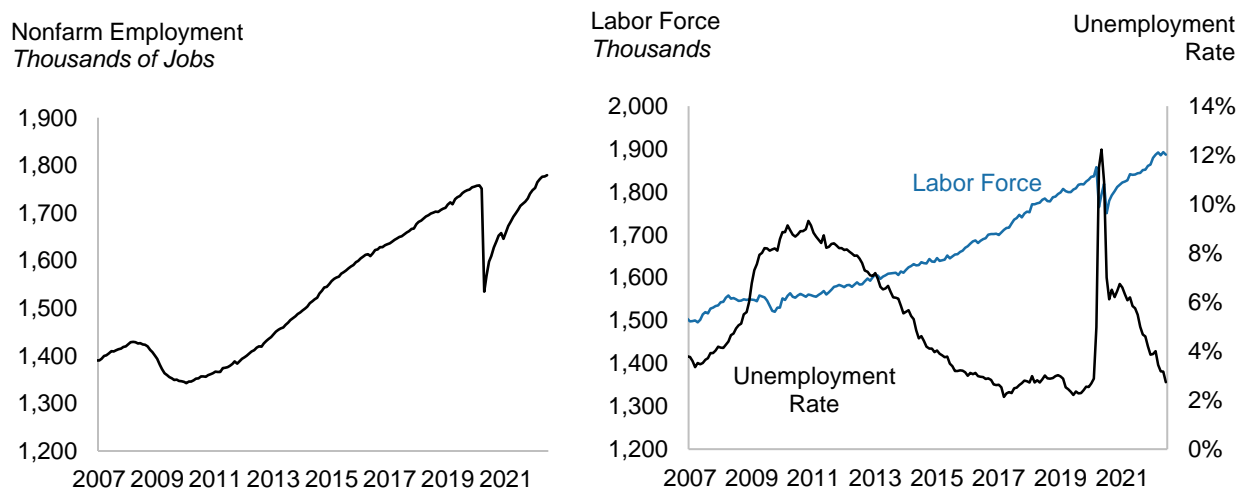
⁵Colorado Association of Realtors. Data through June 2022.

⁶Colorado Department of Revenue. Data through May 2022.

Labor market. The metro Denver region's labor market continued to add jobs at a steady pace through the first half of 2022. Through June, the Denver-Aurora-Lakewood metropolitan statistical area added 27,400 new jobs, up 5.0 percent from the same period one year ago, while the Boulder metropolitan statistical area added 4,100 new jobs, or 5.3 percent. After a slight dip in December 2020, the region has been steadily adding jobs with counts exceeding pre-pandemic levels in January 2022 (Figure 31, left). Job growth has been seen across most major industries, especially in the professional and business services and leisure and hospitality sectors.

After spiking to 7.0 percent in 2020, the region's average unemployment rate dropped to 5.4 percent in 2021. The unemployment rate has steadily continued to tick down, averaging 3.4 percent in 2022 through June, although it still remains higher than the pre-pandemic rate of 2.3 percent (Figure 31, 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, promoting a faster recovery than most other regions in the state and nationally.

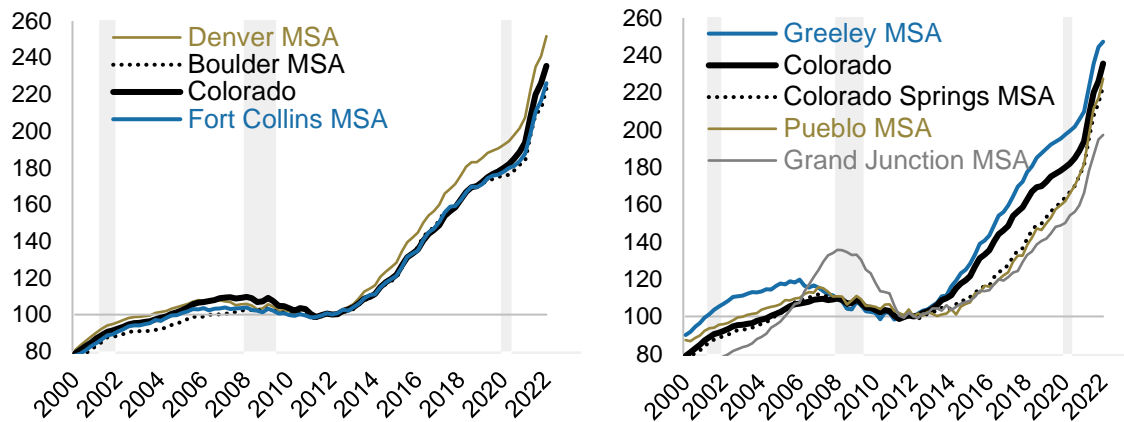
Figure 31
Metro Denver Region Labor Market Activity



Source: U.S. Bureau of Labor Statistics. Data are seasonally adjusted and shown through June 2022.

Housing market. After rapid home price appreciation through 2021 and into early 2022, the metro Denver region's housing market is showing signs of slowing down. According to data from the Federal Housing Finance Agency, in the first quarter of the year, home prices were up 21.4 percent over year-ago levels in the Denver-Aurora-Lakewood metropolitan statistical area, and up 21.7 percent in Boulder, slightly outpacing national rates of appreciation of 19.4 percent (Figure 32). However, recent increases in mortgage rates and inflation has made purchasing a home more expensive for many buyers and has begun to cool the market. The number of single family homes available in the region was up 61.7 percent in July from the same month one year prior, and home sales were down 12.4 percent. Despite these headwinds, housing remains expensive with the median listing price in July reaching \$595,000, up 13.7 percent from last year.

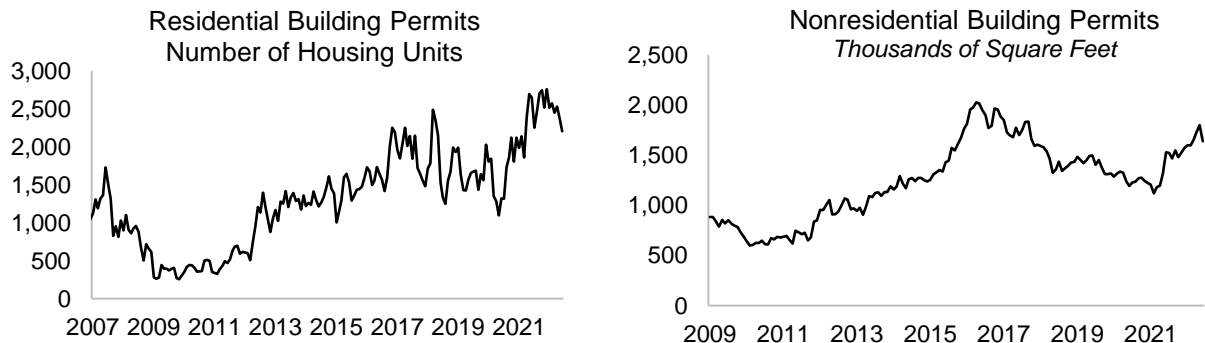
Figure 32
FHFA All-Transaction Home Price Indices
Index 100 = 2012Q1 (Recessionary Trough in Grey Bars)



Source: Federal Housing Finance Agency (FHFA). Data are seasonally adjusted and through 2022Q1.

Residential construction. After robust growth in 2021, residential construction activity in the Denver-Aurora-Lakewood metropolitan statistical area has cooled. The number of single family permits pulled by homebuilders through the first half of the year was down 3.0 percent over year-ago levels (Figure 33, left). In the Boulder metropolitan statistical area, the number of new single family permits continued to decline through the first six months of this year after falling 34.4 percent in 2021. The lack of affordability continues to hamper new residential construction in the metro Denver region. Homebuyers are being pushed out to the suburban and exurban areas of the region that offer relatively more affordable options. Douglas, Arapahoe, and Adams counties and are seeing the highest levels of construction activity. In addition, remote work options are motivating many homebuyers to seek larger homes over crowded urban areas.

Figure 33
Metro Denver Region Construction Activity



Source: U.S. Census Bureau. Data shown as three-month moving averages. Data are not seasonally adjusted and are through June 2022.

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

Nonresidential construction. Nonresidential building activity in the metro Denver region has been steadily improving since early 2021 (Figure 33, right). Though momentum has slowed in recent months, the number of new projects remains at elevated levels and is up year-to-date. Through June, the number of new nonresidential building permits in the metro Denver region was up 14.2 percent

from year-ago levels. These projects are expected to add over 11 million square feet to region's nonresidential inventory, a 7.9 percent increase from last year. However, the nonresidential construction market still faces several headwinds. 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 development that supports e-commerce, such as warehousing space. In addition, rising costs and shortages of both labor and construction, combined with rising interest rates, will continue to impede the construction industry.

Retail Sales. After robust growth in 2021, consumer spending, as measured by retail sales, continued to grow at strong rate in the metro Denver region through the first half of 2022. Through June, retail sales are up 16.3 percent compared to the same period last year. Higher gasoline, automobile, and building material costs contributed to the robust growth.

Colorado Springs Region

The Colorado Springs region encompasses El Paso County and is home to the state's second-largest city. The regional economy recovered quickly from the pandemic-induced recession, with nonfarm employment levels surpassing pre-pandemic highs earlier than any other region, but employment growth has slowed in 2022. The tight housing market shows signs of loosening as inventories rebound and the volume of home sales declines. Indicators for the Colorado Springs regional economy are presented in Table 22.



Table 22
Colorado Springs Region Economic Indicators
El Paso County

	2018	2019	2020	2021	YTD 2022
Employment Growth¹					
Colorado Springs MSA	2.2%	2.5%	-2.7%	3.5%	3.9%
Unemployment Rate²	3.6%	3.1%	6.9%	5.6%	3.4%
Housing Permit Growth³					
Total	15.4%	-3.8%	25.7%	34.7%	36.6%
Single Family	9.6%	-4.1%	24.4%	0.7%	-5.4%
Nonresidential Construction Growth⁴					
Value of Projects	20.9%	0.5%	47.1%	0.8%	-30.5%
Square Footage of Projects	9.3%	5.3%	124.5%	-48.6%	-37.4%
Level (Thousands)	2,841	2,992	6,719	3,450	1,141
Number of Projects	-1.3%	-31.1%	16.3%	-28.0%	56.0%
Level	543	374	435	313	220
Housing Market⁵					
Average Sale Price – Single Family	9.9%	5.8%	13.2%	18.2%	14.7%
Level (Thousands)	\$346	\$366	\$417	\$492	\$549
Inventory – Single Family	3.0%	-9.8%	-34.7%	-30.0%	82.8%
Home Sales – Single Family	-5.3%	1.9%	6.2%	4.0%	-4.5%
Retail Sales Growth⁶	9.2%	6.5%	8.6%	18.3%	13.7%

MSA = Metropolitan statistical area. NA= not available.

¹U.S. Bureau of Labor Statistics, CES (establishment survey). Seasonally adjusted. Data through June 2022.

²U.S. Bureau of Labor Statistics, LAUS (household survey). Seasonally adjusted. Data through June 2022.

³U.S. Census Bureau. Growth in the number of residential building permits. Data through June 2022.

⁴F.W. Dodge. Data through July 2022.

⁵Colorado Association of Realtors. Data through July 2022.

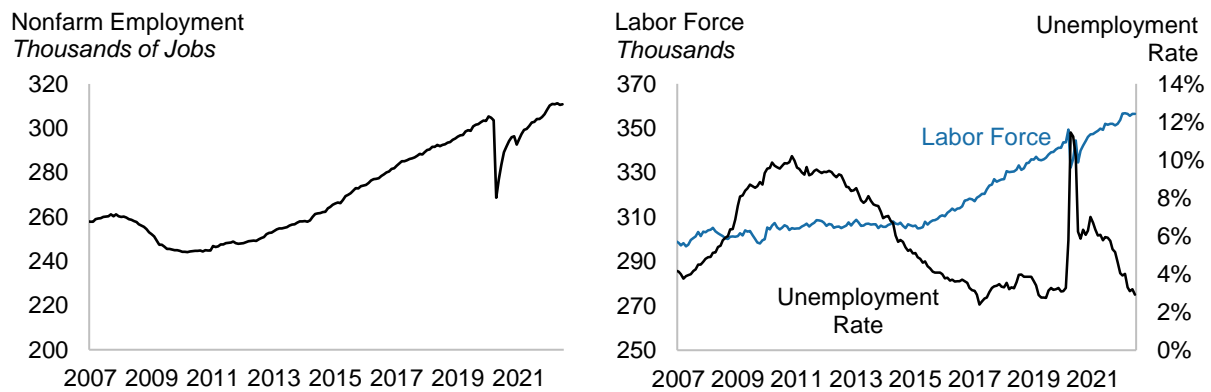
⁶Colorado Department of Revenue. Data through May 2022.

Labor market. The labor market in Colorado Springs remains tight with an unemployment rate of 2.9 percent in June, despite slowing gains in employment and labor force participation to-date in 2022. Employment in Colorado Springs rebounded more quickly from the pandemic-induced recession than other regions, as the region's economy relies less on the sectors that were most severely affected - such as oil and gas, leisure and hospitality, and tourism. Key employers, such as those in national defense, experienced fewer pandemic-induced disruptions, while the addition of an Amazon fulfillment center in the summer of 2021 brought more jobs to the region. Colorado Springs employers added jobs at a faster rate than those in other regions in 2021, but employment growth has stagnated since, growing by only 0.2 percent to-date in 2022 (Figure 34, left). Low unemployment rates may

constrain employment growth due to a lack of available labor, a problem which should be eased by a quickly growing population.

El Paso County is the state's most populous county, and its population growth has outpaced that of the state as a whole every year since 2016. Projections from the State Demography Office indicate that its population will continue to grow more quickly than Denver's and the state's over the next five years. The growing population contributed to a larger labor force (Figure 34, right), which has bolstered employment growth in recent years and may help ease labor shortage issues going forward.

Figure 34
Colorado Springs Labor Market Activity



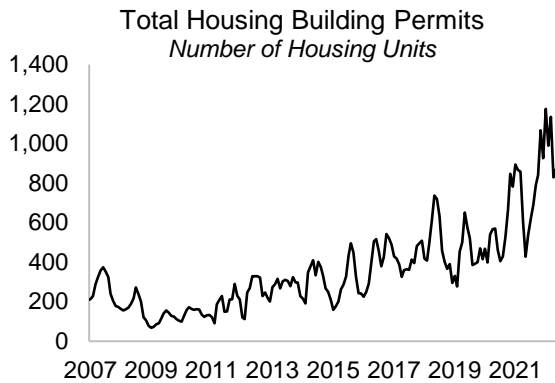
Source: U.S. Bureau of Labor Statistics; CES data (left) and LAUS data (right). Data are seasonally adjusted through June 2022.

Housing market. Demand has outpaced supply of housing in Colorado Springs over the past two years, but there are signs that the market is moving closer to equilibrium. Home prices in Colorado Springs tend to be lower than the state as a whole, but prices are quickly increasing as the population continues to grow. According to Colorado Association of Realtors, average home prices in El Paso County increased more quickly than home prices statewide. As of July 2022, However, there are signs that demand for housing is coming more in line with supply, as the average time a single family home is on the market before sale is 14 days, up from 7 days last year.

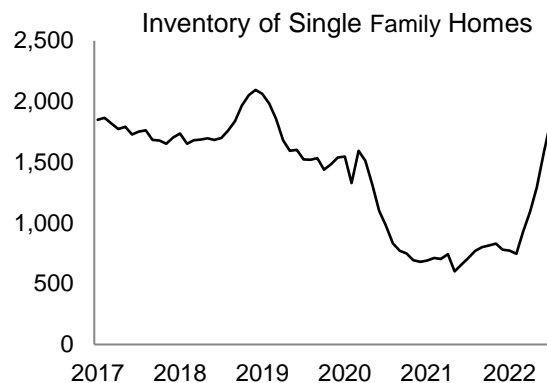
The supply of homes available to buyers plummeted in 2020 and 2021 as demand rose steeply, but has rebounded in 2022. Inventory of single family homes has now surpassed pre-pandemic levels (Figure 35, right) and is up 82.8 percent so far in 2022 compared to the same period in 2021. The rebound in inventories is driven by a lower volume of home sales combined with growth in homebuilding.

Residential homebuilding continues to be strong. Permits issued to homebuilders increased by roughly 26 percent in 2020 and 35 percent last year, and are again on pace to post strong gains, up 36.6 percent through June 2022 compared with the same period in 2021 (Figure 35, left). Most of this building growth comes from multifamily housing, as single family permits are down 5.4 percent year-to-date after posting solid gains the prior two years.

Figure 35
Colorado Springs Residential Construction and Inventory



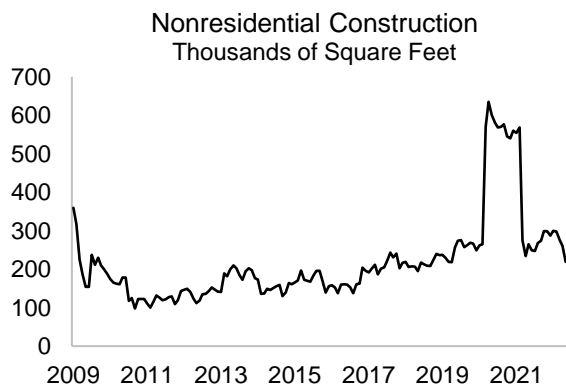
Source: U.S. Census Bureau. Data are shown as three-month moving averages through June 2022.



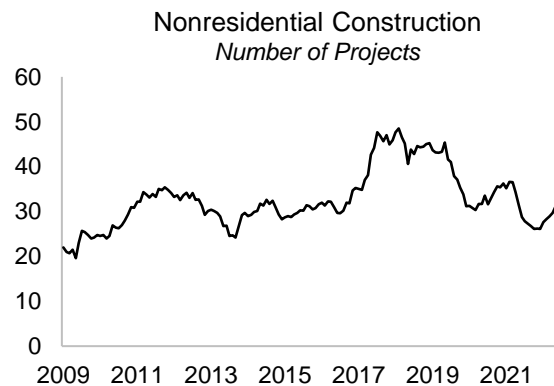
Source: Colorado Association of Realtors. Data are seasonally adjusted through June 2022.

Nonresidential construction. Nonresidential construction activity is up from 2021 in terms of number of projects, but remains below pre-pandemic levels. Nonresidential construction saw an unprecedented surge in activity in 2021 due to Amazon’s new 3.7 million square foot fulfillment center. This spike in 2021 caused 2022 year-to-date construction activity to fall in both dollar value and square footage. Firms are expected to face headwinds from inflation in construction materials, labor constraints, and rising interest rates over the coming year. Public sector construction is expected to rise as funds distributed through the 2021 Infrastructure Investment and Jobs Act are distributed and spent.

Figure 36
Colorado Springs Nonresidential Construction



F.W. Dodge. Data shown as twelve-month moving averages. Data through June 2022.



F.W. Dodge. Data shown as twelve-month moving averages. Data through June 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 and has taken longer to recover than other areas of the state. Labor market data suggest significant improvements in regional employment, and robust residential construction activity continues. Indicators for the regional economy are presented in Table 23 and discussed below.



Table 23
Pueblo Region Economic Indicators
Custer, Fremont, Huerfano, Las Animas, and Pueblo Counties

	2018	2019	2020	2021	YTD 2022
Employment Growth					
Pueblo Region ¹	0.5%	1.0%	-2.6%	2.4%	5.3%
Pueblo MSA ²	0.5%	1.2%	-2.7%	1.2%	4.8%
Unemployment Rate ¹	4.5%	3.9%	7.6%	7.6%	5.1%
Housing Permit Growth ³					
Pueblo MSA Total	30.2%	3.8%	18.4%	24.0%	-3.8%
Pueblo MSA Single Family	36.2%	3.0%	19.4%	24.0%	-3.8%
Nonresidential Construction Growth ⁴					
Value of Projects	222.9%	45.2%	26.2%	175.3%	-36.5%
Square Footage of Projects	145.1%	-19.7%	37.7%	278.3%	-43.4%
Level (Thousands)	397	318	438	1,658	273
Number of Projects	50.0%	23.3%	86.5%	2.9%	-6.5%
Level	30	37	69	71	29
Housing Market ⁵					
Average Sale Price – Single Family	9.6%	9.5%	16.2%	24.1%	9.5%
Level (Thousands)	\$206	\$226	\$265	\$326	\$343
Inventory – Single Family	-1.2%	-8.9%	-23.9%	-27.0%	59.5%
Home Sales – Single Family	-3.8%	0.3%	14.1%	7.3%	9.8%
Retail Sales Growth ⁶	8.4%	8.5%	4.2%	13.4%	21.8%

MSA = Metropolitan statistical area. NA = not available.

¹U.S. Bureau of Labor Statistics, LAUS (household survey). Data through June 2022.

²U.S. Bureau of Labor Statistics, CES (establishment survey). Seasonally adjusted. Data through June 2022.

³U.S. Census Bureau. Growth in the number of residential building permits. Data through June 2022.

⁴F.W. Dodge. Data through June 2022.

⁵Colorado Association of Realtors. Data through July 2022.

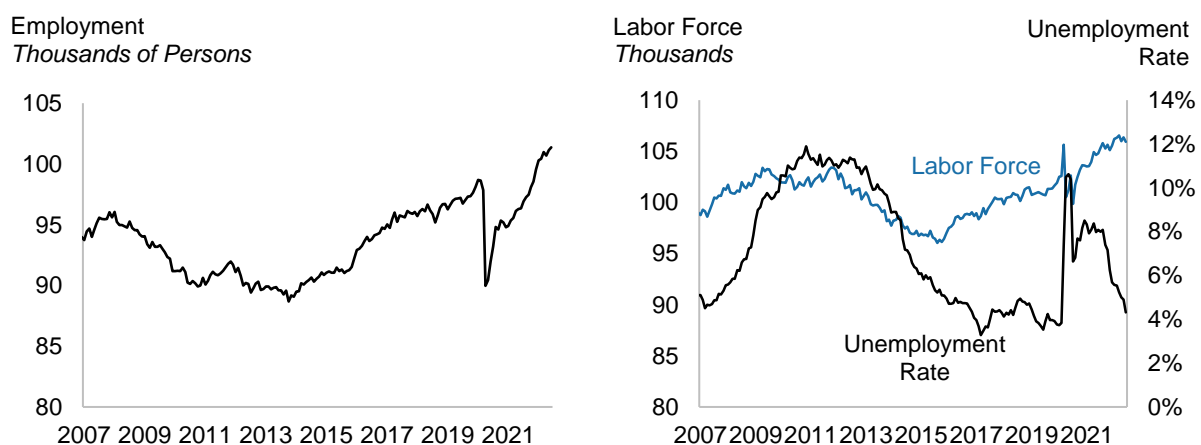
⁶Colorado Department of Revenue. Data through May 2022.

Labor market. Employment in the region was severely impacted by the pandemic-induced recession, but household employment is now showing healthy growth. The health care and social assistance sector makes up the largest share of employment in this region, and nationally has been slower to recover from the pandemic-induced recession than employment as a whole. Seasonally adjusted regional employment surpassed the pre-recession peak in December 2021, and was 2.8 percent higher than pre-pandemic levels as of June 2022 (Figure 37, left).

The regional unemployment rate remains significantly higher in the Pueblo region than in any other region of the state (Figure 37, right). The seasonally adjusted unemployment rate was 4.3 percent in June 2022, exceeding the state's unemployment rate by 1.4 percentage points. Although the unemployment rate is high, it is falling more quickly than in any other region, and is expected to fall further as employers absorb the remaining labor market slack.

The regional labor force population continues to grow – an encouraging sign after a period of decline in the early 2010s. Labor force growth is concentrated in Pueblo County where the labor force has increased by 879 people between June 2022 and June 2021. Custer county has also experienced impressive growth in the labor force, increasing by 6.1 percent year-over-year. The State Demography Office estimates that Las Animas County's population tends to have the weakest growth, and projects that populations in Custer, Fremont, and Huerfano counties will begin to decrease in 2022. The region has an older population and little in-migration, relative to the state as a whole, contributing to this decline.

Figure 37
Pueblo Region Labor Market Trends



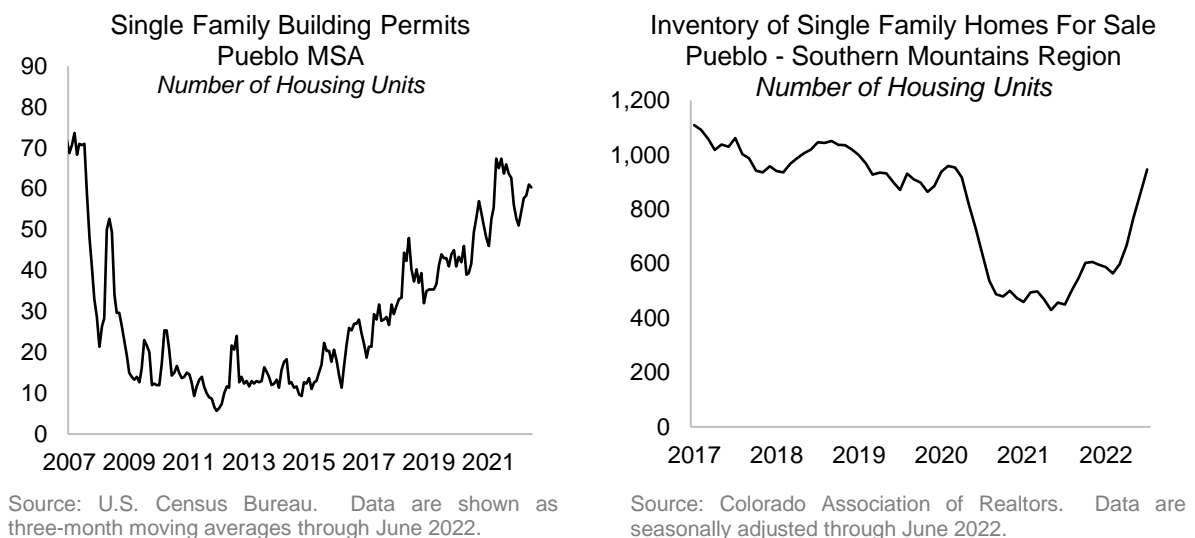
Source: U.S. Bureau of Labor Statistics; LAUS (household survey) for LCS Pueblo – Southern Mountains Region. Data are seasonally adjusted and are through June 2022.

Housing market. Home prices in the Pueblo region have nearly doubled since early 2017. The Colorado Association of Realtors indicates that median single family sale prices in Pueblo County reached \$326,250 in July 2022, up 4.8 percent from July 2021. Single family homes in Pueblo County remain on the market for longer, 47 days, on average, compared to the statewide average of 25 days. Data are sparse for other counties in the region, but suggest similar patterns of appreciation in Fremont County, which includes Cañon City and Florence. Despite such robust growth, average housing prices in the Pueblo region are lower than any other region in the state.

The region's slow population growth suggests home price increases likely reflect other demand-side factors, including improved household incomes, low interest rates through early 2022, and faster appreciation among lower priced properties. Home prices are expected to moderate during the forecast period as interest rates rise and population declines in some counties.

Homebuilding in the Pueblo region remains at its highest level since the Great Recession (Figure 38, left). According to the Pueblo city planning department, much of the new single family building in Pueblo is happening in subdivisions that have been stagnant for over a decade. Bolstered by strong construction, inventory of single family homes for sale has rebounded substantially in 2022, getting back to pre-pandemic levels, which should ease housing price growth (Figure 38, right).

Figure 38
Pueblo – Southern Mountains Residential Construction and Inventory



Nonresidential construction. Nonresidential construction activity peaked in 2021, when builders added \$415.8 million in new structures, headlined by the EVRAZ North America long rail mill that broke ground in Pueblo in July 2021. EVRAZ announced that the Pueblo steel mill, one of Pueblo's largest employers, is being offered for sale, but the sale is not impacting construction of the long rail mill. Nonresidential construction activity has since slowed in 2022, but remains well above its pre-pandemic level. Firms are expected to continue with strong capital investments, but they face headwinds from inflation in construction material costs and rising interest rates. Public sector construction is expected to rise as funds distributed through the 2021 Infrastructure Investment and Jobs Act are distributed and spent.

Northern Region

Larimer and Weld counties comprise the diverse economies of the northern region. Following the recession, the labor market in the northern region began to heal quickly, but as the broader economic recovery has continued, the region has lagged behind the rest of the state. While the area has seen strong price appreciation for residential housing in recent years, residential construction slowed in early 2022. After suffering a significant disruption to nonresidential construction following the recession, activity appears to be rebounding in early 2022. Economic indicators for the region are summarized in Table 24.



Table 24
Northern Region Economic Indicators
Weld and Larimer Counties

	2018	2019	2020	2021	YTD 2022
Employment Growth ¹					
Fort Collins-Loveland MSA	2.6%	2.2%	-4.7%	3.5%	4.4%
Greeley MSA	4.7%	3.6%	-7.1%	-0.4%	3.5%
Unemployment Rate ²	2.7%	2.3%	6.3%	5.1%	3.3%
State Cattle and Calf Inventory Growth ³	9.5%	8.0%	1.9%	4.0%	2.1%
Natural Gas Production Growth ⁴	17.1%	22.0%	8.3%	-2.9%	-1.1%
Oil Production Growth ⁴	29.5%	10.7%	-11.9%	-10.4%	6.2%
Housing Permit Growth ⁵					
Fort Collins-Loveland MSA Total	8.4%	-18.2%	-0.3%	13.3%	-15.5%
Fort Collins-Loveland MSA Single Family	-14.1%	-4.9%	34.7%	-0.1%	-29.1%
Greeley MSA Total	25.0%	-2.2%	9.1%	15.5%	25.6%
Greeley MSA Single Family	32.1%	-8.4%	28.1%	3.8%	7.3%
Nonresidential Construction Growth ⁶					
Value of Projects	64.9%	-71.6%	74.3%	-29.7%	15.6%
Square Footage of Projects	-27.6%	-16.2%	5.2%	-0.7%	90.6%
Level (Thousands)	2,892	2,424	2,549	2,531	2,017
Number of Projects	13.4%	-17.1%	-12.0%	-8.1%	-1.8%
Level	322	267	235	216	108
Housing Market ⁷					
Average Sale Price - Single Family	7.4%	3.2%	6.9%	16.8%	17.0%
Level (Thousands)	\$412	\$426	\$457	\$532	\$605
Inventory - Single Family	6.3%	14.5%	-21.7%	-44.3%	24.7%
Home Sales - Single Family	0.8%	2.7%	9.8%	2.3%	-13.7%

MSA = Metropolitan statistical area.

¹U.S. Bureau of Labor Statistics, CES (establishment survey). Seasonally adjusted. Data through June 2022.

²U.S. Bureau of Labor Statistics, LAUS (household survey). Seasonally adjusted. Data through June 2022.

³National Agricultural Statistics Service. Cattle and calves on feed through July 2022.

⁴Colorado Oil and Gas Conservation Commission. Data through June 2022.

⁵U.S. Census Bureau. Growth in the number of residential building permits. Data through June 2022.

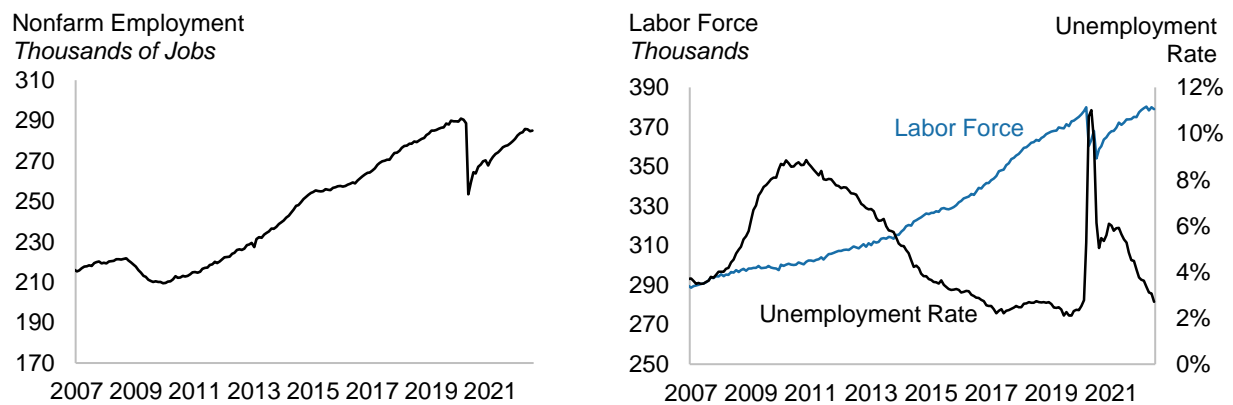
⁶F.W. Dodge. Data through June 2022.

⁷Colorado Association of Realtors. Data through July 2022.

Labor market. The northern region's labor market saw some of the fastest job growth and lowest unemployment rates in the state leading up to 2020 (Figure 39). Following the recession, the region's labor market was quick to improve but has since struggled to keep up with the rest of the state as the recovery has continued. Year-to-date job growth registered 4.1 percent as of June 2022, compared to 4.8 percent for the state overall. Further, while Colorado as a whole has exceeded pre-recession employment levels by about 37,000 jobs, employment in the northern region remains 5,500 jobs below pre-recession levels. The region is experiencing a relatively low unemployment rate compared to the state as a whole, however; regional unemployment registered 2.7 percent in June 2022 compared with the statewide rate of 2.9 percent.

The northern region's labor market, especially in Weld County, is dependent on the oil and gas industry, where employment levels remain about 4,000 jobs below pre-recession levels. Employment is not expected to fully recover until pandemic conditions improve and energy markets return to pre-crisis levels.

Figure 39
Northern Region Labor Market Activity



Source: U.S. Bureau of Labor Statistics, CES (establishment survey). Seasonally adjusted. Data through June 2022.

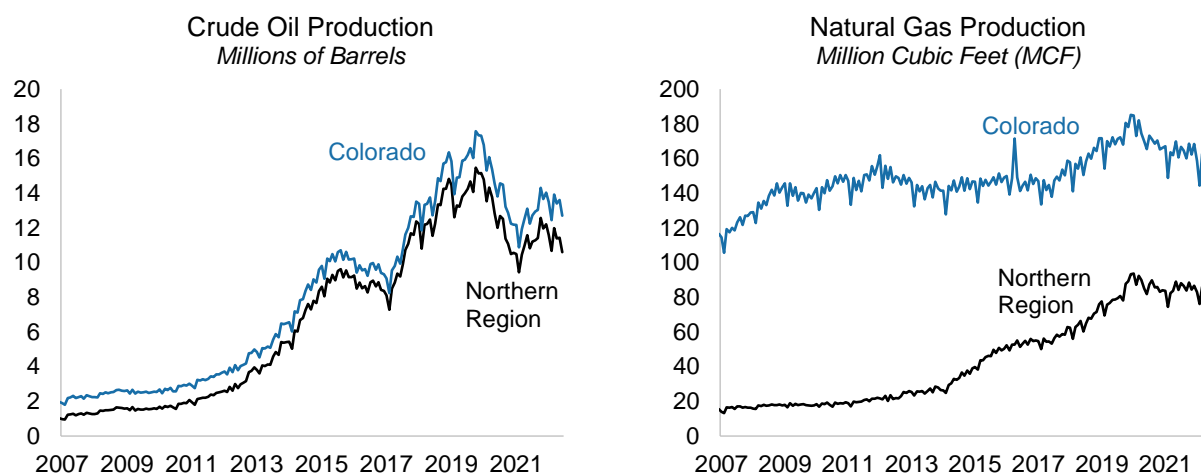
Source: U.S. Bureau of Labor Statistics, LAUS (household survey). Seasonally adjusted. Data through June 2022. Includes Legislative Council Staff adjustments prior to 2010.

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 caused by 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 have modestly improved, cattle and calf inventories have rebounded, growing 4.0 percent in 2021, and 2.1 percent year-to-date as of June 2022.

Energy sector. Weld County's economic activity, largely driven by the oil and gas, faced headwinds as a result of the recession. Demand for oil and gas fell significantly as a result of the recession and pandemic-related restrictions, causing prices and production levels to fall. With the sharp rebound in energy prices however, oil and gas industry profits and associated tax revenue have shot upwards. Employment and production levels, however, have not experienced the same rapid growth, with both remaining below pre-recession levels.

Oil and gas production throughout the state declined significantly as a result of the collapse in demand and significant declines in prices (Figure 40). Oil production in the northern region fell by 11.9 percent in 2020 and another 10.4 percent in 2021. Year-to-date as of June 2022, however, oil production has grown by 6.2 percent. Natural gas production, particularly in the northern region, did not suffer as badly as oil production. Production continued to grow in 2020, before shrinking by 2.9 percent in 2021 and by an additional 1.1 percent as of June 2022. Higher than average prices throughout 2022 and increased demand for oil and gas in the near- and medium-term is expected to spur additional production in the region.

Figure 40
Colorado Energy Production



Source: Colorado Oil and Gas Conservation Commission. Monthly data through June 2022.

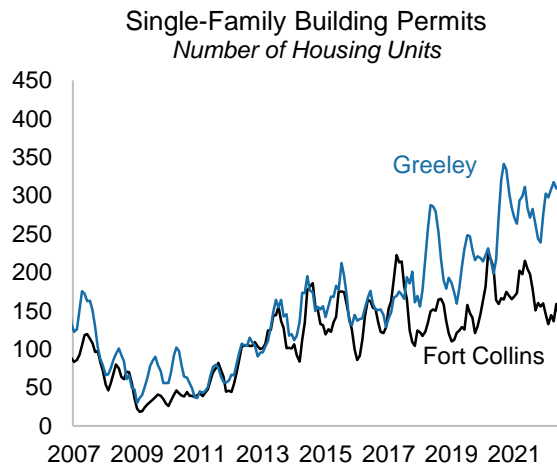
Housing. Household behavior during and after the pandemic-induced recession spurred incredibly fast home price appreciation across the region, just as it did across the state and country. The average single family home sale price in the region jumped 17.0 percent year-to-date in 2022 to \$605,000, following a similar 16.8 percent jump in 2021. Home price appreciation is expected to cool in the near term as a result of rising interest rates. Sizable differences remain with respect to the two counties that make up the northern region; the average single family home sale price in July 2022 was about \$559,000 in Weld County, versus \$686,000 in Larimer County.

Residential housing construction activity has also been strong in the northern region, with 9 percent growth in 2021 and 27 percent growth year-to-date in 2022. While overall activity has been strong, a significant divergence between the Greeley area and the Fort Collins area began in 2022. Total housing permit growth in the Greeley area (Weld County) has increased over 25 percent year-to-date in 2022, whereas it has declined by over 15 percent in the Fort Collins area (Larimer County). Affordability concerns and more open land has likely attracted more construction activity to the Greeley area.

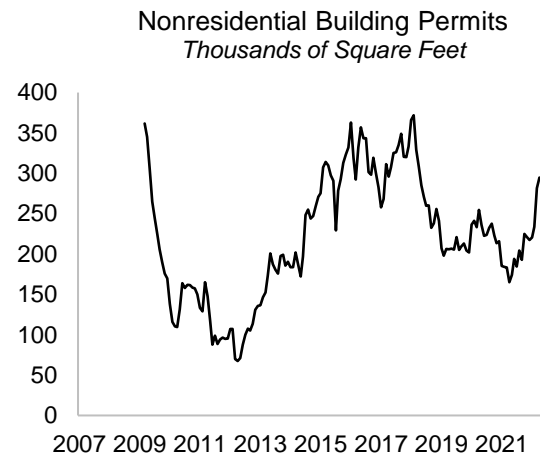
Nonresidential construction. The effects of the COVID-induced recession materialized for nonresidential construction in 2021 for the northern region, with the value of new projects declining by 29.7 percent, the number of projects declining by 8.1 percent, and total square footage declining by 0.7 percent compared to 2020 (Figure 41, right). Through June 2022, however, nonresidential construction has picked up, with the value of projects increasing by 15.6 percent over the same period

in 2021, the square footage of projects increasing by 90.6 percent, while the total number of projects has declined by only 1.8 percent. Future commercial construction activity will depend on the trajectory of the economy, energy markets, and interest rates.

Figure 41
Northern Region Construction Activity



Source: U.S. Census Bureau. Data shown as three-month moving averages. Data are not seasonally adjusted and are through June 2022.



Source: F.W. Dodge. Data shown as twelve-month moving averages. Data are not seasonally adjusted and are through June 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 labor force, with 10 of the 16 counties losing residents from 2020 to 2021. Rising production costs and drought conditions offset the boost from skyrocketing crop prices for the region's agricultural producers. Consistent with historical trends, labor markets continue to outperform those in most other regions of the state. Economic indicators for the region are presented in Table 25.

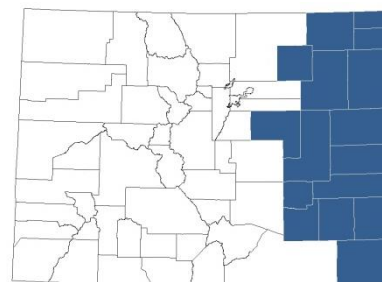


Table 25
Eastern Region Economic Indicators

Baca, Bent, Cheyenne, Crowley, Elbert, Kiowa, Kit Carson, Lincoln, Logan, Morgan, Otero, Phillips, Prowers, Sedgwick, Washington, and Yuma Counties

	2018	2019	2020	2021	YTD 2022
Employment Growth ¹	2.1%	1.0%	-4.3%	2.0%	4.1%
Unemployment Rate ¹	2.7%	2.4%	4.2%	4.2%	2.6%
Crop Price Changes ²					
Wheat (\$/Bushel)	34.6%	-7.0%	6.3%	37.7%	59.1%
Corn (\$/Bushel)	2.8%	9.3%	-4.6%	53.8%	28.9%
Alfalfa Hay (Baled, \$/Ton)	23.5%	14.3%	-6.6%	2.0%	-3.8%
Livestock ²					
State Cattle and Calf Inventory Growth	2.6%	8.0%	1.9%	4.0%	2.1%
Milk Production	8.8%	5.5%	7.1%	2.3%	0.1%
Housing Market ⁴					
Average Sale Price – Single Family	6.7%	7.2%	6.3%	18.0%	17.0%
Level (Thousands)	\$283	\$303	\$328	\$382	\$426
Inventory – Single Family	12.8%	3.5%	-22.6%	-28.9%	53.4%
Home Sales – Single Family	5.1%	0.6%	4.2%	9.9%	6.2%
Housing Permit Growth ³	43.4%	0.2%	22.3%	21.7%	8.8%
Retail Sales Growth ⁵	9.4%	13.6%	3.3%	12.5%	18.2%

NA = not available.

¹U.S. Bureau of Labor Statistics, LAUS (household survey). Data through June 2022.

²National Agricultural Statistics Service statewide data. Data through June 2022.

³F.W. Dodge. Data through June 2022.

⁴Colorado Association of Realtors. Data through July 2022.

⁵Colorado Department of Revenue. Data through May 2022.

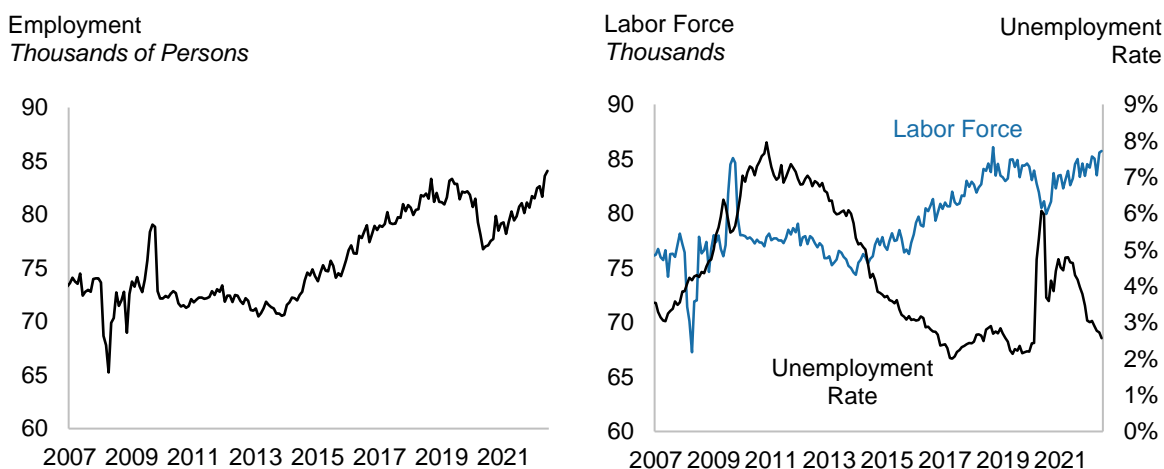
Agriculture and livestock. The eastern plains is the largest agricultural region in the state, driving much of the region's economy. The continued economic recovery, supply-chain disruptions, and rising costs for farmers, combined with adverse weather events, sent grain prices skyrocketing in 2021. Colorado corn and wheat prices reached multi-year highs in 2021, up 53.8 percent and 37.7 percent, respectively, from 2020. Historic gains accompanied by volatility have continued into 2022, compounded by recent geopolitical turmoil, pushing prices for corn and wheat up 28.9 percent and 59.1 percent, respectively, through June compared with the same period last year.

While higher crop prices and rising farm real estate values have bolstered farm finances in recent quarters, higher farm loan interest rates, drought conditions, and rising costs for key agricultural inputs including fertilizers, pesticides, fuel, machinery, and trucking cloud the outlook for the region's producers.

Drought conditions have improved throughout much of the eastern plains over the summer, although unlike last summer, none of the region is drought-free. According to the U.S. Drought Monitor, severe drought has mostly receded from the region, leaving moderate drought and abnormally dry conditions through most of the region. An exception is the northeast corner of the state, where swathes of extreme and exceptional drought have developed. Shrinking river flows and groundwater levels in the eastern plains are of growing concern to the region's farmers, many of whom rely on irrigation for crops such as corn and wheat. A multi-state water compact governing the Republican River in northeastern Colorado will require the region's farmers to retire 25,000 irrigated acres of Colorado farmland in the coming years. Senate Bill 22-028 will provide \$30 million to bolster efforts to comply with the water compact, including providing funding to buy and retire wells and irrigated acreage.

Labor market. In addition to the natural resources and mining sector (which includes agriculture), key private sector employers are in the trade, transportation, and utilities; education and health services; and manufacturing sectors. Consistent with the state as a whole, regional labor market indicators continue to strengthen, with the unemployment rate nearing record lows amidst rising employment and a growing labor force. Employment in the eastern plains is up 4.1 percent through June, compared with the same period last year, and has exceeded pre-pandemic levels by 4.2 percent, outpacing the statewide average employment recovery (Figure 42, left). The region's unemployment rate fell to 1.9 percent in June, bringing the 2022 average to 2.6 percent, the lowest among the state's nine regions (Figure 42, right).

Figure 42
Eastern Region Labor Market Activity

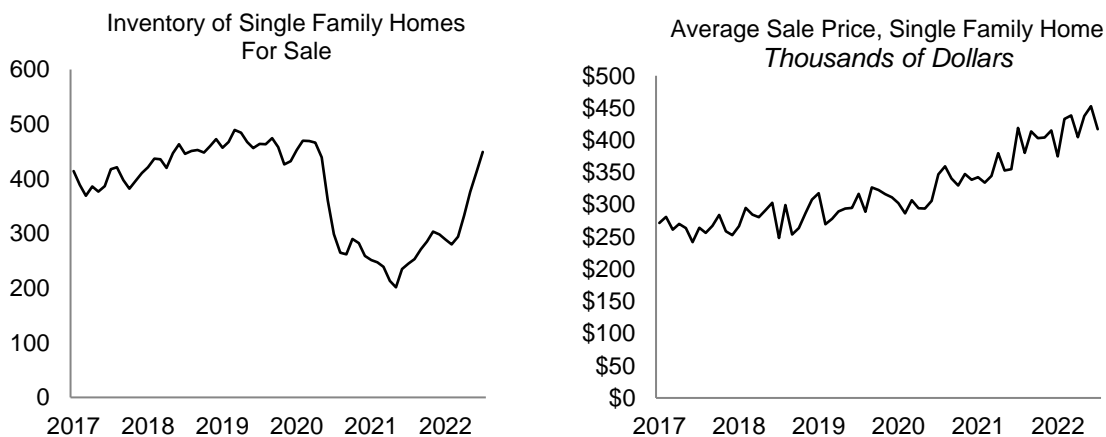


Source: U.S. Bureau of Labor Statistics, LAUS (household survey). Seasonally adjusted. Data through June 2022. Includes Legislative Council Staff adjustments prior to 2010.

Housing. As elsewhere in the state and nation, counties across the eastern plains face housing shortages and affordability challenges. Counties bordering the front range metropolitan areas are experiencing population growth and rapid home price appreciation as people move from urban to suburban and exurban areas in search of more affordable housing. Housing permits are up 8.8 percent through June 2022, compared with the same period last year, with Elbert County accounting for over half of this activity. Many rural counties in the eastern part of the region face housing affordability issues as well, associated with aging housing stock and few housing starts combined with low incomes.

Housing inventory for sale continues to recover after declining by over 20 percent in both 2020 and 2021. Inventory is up by 53.4 percent through July 2022, compared with the same period in 2021, and is approaching pre-pandemic levels (Figure 43, left). Supply and demand pressures are contributing to rising home prices, which at \$426,000 on average are up by 17.0 percent through July 2022 compared with the same period last year (Figure 43, right). Regional trends are heavily influenced by the housing market in Elbert County, which accounts for almost 40 percent of the inventory of single family homes for sale in the region, and where average home prices, at over \$782,000, are up 16.0 percent through July 2022 compared with the same period last year.

Figure 43
Eastern Region Housing Market Activity



Source: Colorado Association of Realtors. Data are seasonally adjusted and through July 2022.

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, with a large share of workers employed in leisure and hospitality industries. The pandemic had severe impacts on the region; however, regional labor markets have recovered quickly with encouraging employment growth and a low unemployment rate. The region has benefited from the rapid economic recovery, increased travel activity, and strong retail sales during the recovery, but has been challenged by rapidly rising home prices and sluggish construction activity. Economic indicators for the mountain region are presented in Table 26.



Table 26
Mountain Region Economic Indicators

Chaffee, Clear Creek, Eagle, Gilpin, Grand, Jackson, Lake, Park, Pitkin, Routt, Summit, and Teller Counties

	2018	2019	2020	2021	YTD 2022
Employment Growth ¹	2.9%	1.8%	-7.8%	7.3%	7.7%
Unemployment Rate ¹	2.6%	2.2%	8.3%	4.4%	2.4%
Housing Permit Growth ²	68.0%	12.0%	-34.0%	30.7%	-12.2%
Nonresidential Construction Growth ²					
Value of Projects	-78.0%	40.6%	84.5%	-55.0%	-47.7%
Square Footage of Projects	-65.1%	29.2%	20.9%	-20.8%	-45.6%
Level (Thousands)	708	915	1,106	876	215
Number of Projects	17.7%	-37.0%	69.6%	10.3%	-19.0%
Level	73	46	78	86	34
Housing Market ³					
Average Sale Price - Single Family	2.5%	12.6%	19.1%	33.1%	13.2%
Level (Thousands)	\$842	\$941	\$1,261	\$1,507	\$1,663
Inventory - Single Family	-7.4%	5.1%	-30.7%	-43.2%	8.0%
Home Sales - Single Family	-3.0%	-1.6%	22.3%	1.3%	-20.3%

NA = Not available.

¹U.S. Bureau of Labor Statistics, LAUS (household survey). Data through June 2022.

²F.W. Dodge. Data through June 2022.

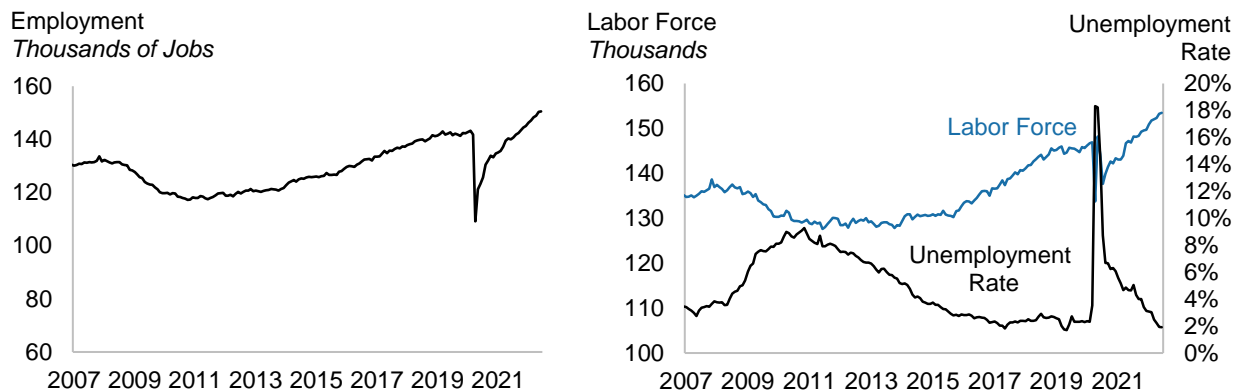
³Colorado Association of Realtors. Data through July 2022.

⁴Colorado Department of Revenue. Data through May 2022.

Labor market. Labor market indicators continue to show sustained recovery in the region as the unemployment rate continues to fall concurrent with rising employment and a growing labor force. The region was among the hardest hit early in the pandemic and recorded the state's highest unemployment rate; however, a rapid recovery in the leisure and hospitality sector, resurgent recreation industry, and dynamic business responses contributed to a rapidly falling unemployment rate. Data indicate that the mountain region recorded one of the state's lowest unemployment rates in June 2022, reaching a post-pandemic low of 1.9 percent, on par with pre-pandemic lows. At the same time, regional employment posted its 15th consecutive month of year-over-year gains and outpaced all other areas of the state. Year-to-date, the region has also posted the state's fastest labor force growth. As of June, data indicate the region's labor force is about 5 percent larger than pre-pandemic levels (Figure 44, right). Employment is expected to continue to grow through the remainder of 2022, however the pace of growth is expected to slow from the rapid increase recorded

over the first half of the year. Employment growth is expected to be constrained by slower growth in the labor force and low levels of unemployment.

Figure 44
Mountain Region Labor Market Activity



Source: U.S. Bureau of Labor Statistics; LAUS. Data are seasonally adjusted and are through June 2022. Includes Legislative Council Staff adjustments prior to 2010.

Retail sales. Retail sales fell nearly 25 percent year-over-year in April 2020 at the height of the pandemic shutdowns. However, business activity quickly resumed as pandemic conditions eased over late 2020 and into 2021. The strong recovery continued at the beginning of this year, with sales up more than 27 percent year-to-date through the first six months of 2022. The year started off strong for ski resort communities that were aided by late season snow and resurgent skier traffic after crowd limitations were lifted. Rapid price growth has also boosted overall sales growth.

Despite strong growth through the first half of 2022, sales have slowed significantly since the start of the year. Regional retail sales were up nearly 34 percent year-over-year in January but were up just 9.7 percent in May. Communities further from the Front Range were impacted by higher gas prices during the summer that deterred would-be visitors. Visitor traffic may also have lagged as some communities focused less on marketing as areas struggled to keep up with demand following the pandemic.

As sales have slowed, real gains have likely been impacted by inflationary pressures. July's gains, for instance, were only 1.2 percentage points higher than the 8.5 percent year-over-year increase in the Denver-Aurora-Lakewood Consumer Price Index, the closest indicator of inflation in the region, over the same time. Growth is expected to have slowed further over the summer and sales are expected to trend closer to 2021 levels over the latter half of the year. While an expected transition of consumer spending back to previous levels of spending on travel and related services will support some spending growth, slower economic activity, daily ski pass limits, and inflationary pressures are expected to weigh on potential increases.

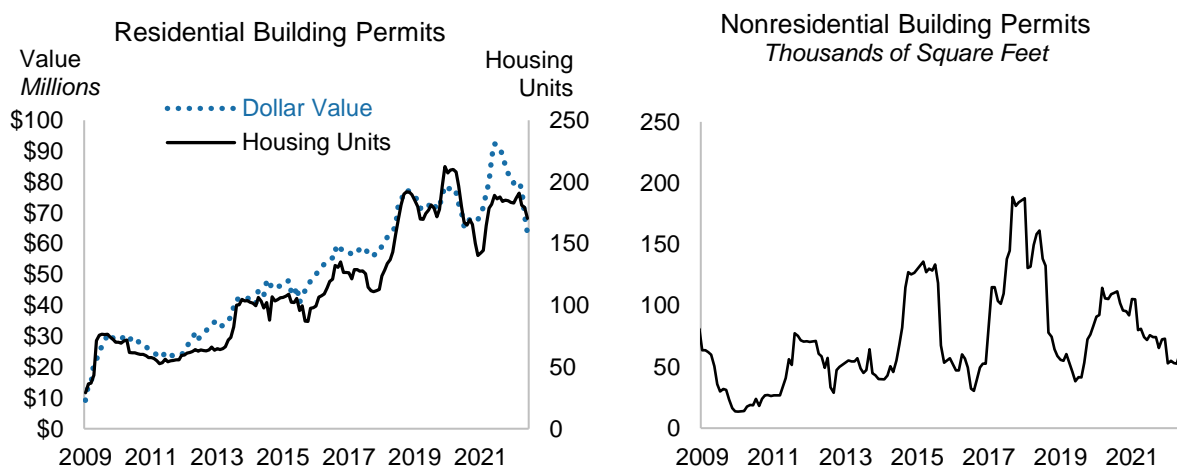
Housing. The residential housing market continued to slow in the mountain region after an initial post-pandemic surge in 2020. In 2021, data indicates single family home sales increased by just 1.3 percent as rapid price appreciation and low inventory dampened opportunities for many buyers. The market has slowed further in 2022. Through the first seven months of the year, sales were down by 20.3 percent year-to-date amid rising interest rates that impacted affordability and dampened demand. However, the market transition has also caused inventory levels to shift. Despite being well

below pre-pandemic levels – about 2,000 homes in July compared with a peak of more than 3,900 in August 2019 – single family home inventory was up 8.0 percent year-to-date.

Construction. In contrast to other regions in the state, residential construction in the mountain region fell in 2020 despite strong sales and price growth. Although activity rebounded in 2021, permit issuances through the first half of 2022 were down 12.2 percent year-to-date (Table 26). Permits are expected to end the year down from 2021 levels on higher interest rates and faster cooling in the housing market. Downside pressures will be partially offset by efforts to expand affordable housing in many mountain communities.

Nonresidential construction continued to track well below prior year levels through the first half of 2022, with the value of projects down nearly 48 percent year-to-date and square footage down nearly 46 percent. Nonresidential construction is on track to fall for the second-consecutive year as businesses and investors navigate the high cost of labor and materials and increased cost of project financing. It should be noted that nonresidential construction in smaller markets is highly variable and can be heavily influenced by a few large projects. Rising interest rates and construction costs are expected to impact financing activity for new projects and will weigh on activity compared with the prior year.

Figure 45
Mountain Region Construction Activity



Source: F.W. Dodge. Data shown as twelve-month moving averages. Data are not seasonally adjusted and are through June 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 and its lowest household incomes. The economy of the region's six counties is largely agricultural. The region's labor market continues to tighten. While a recent trade agreement and state legislation may help offset ongoing supply chain disruptions, worsening drought conditions and continued water shortages plague the region's agricultural producers. Economic indicators for the region are summarized in Table 27.



Table 27
San Luis Valley Region Economic Indicators
Alamosa, Conejos, Costilla, Mineral, Rio Grande, and Saguache Counties

	2018	2019	2020	2021	YTD 2022
Employment Growth ¹	2.9%	1.0%	-4.5%	3.3%	5.8%
Unemployment Rate ¹	4.0%	3.6%	6.3%	5.7%	3.5%
Barley ²					
Acres Harvested	53,000	52,000	47,000	47,000	NA
Crop Value (\$/Acre)	\$660	\$672	\$709	\$538	NA
Potatoes ²					
Acres Harvested	55,000	51,000	53,800	52,200	NA
Crop Value (\$/Acre)	\$3,942	\$4,709	\$4,494	\$4,160	NA
Housing Permit Growth ³	16.3%	-11.1%	13.9%	28.6%	-29.1%
Housing Market ⁴					
Average Sale Price – Single Family	11.9%	8.1%	18.7%	30.5%	12.0%
Level (Thousands)	\$203	\$226	\$270	\$343	\$349
Inventory – Single Family	-9.5%	-28.7%	-25.3%	-44.0%	4.1%
Home Sales – Single Family	0.6%	-15.9%	27.8%	7.1%	-26.9%
Retail Sales Growth ⁵	10.1%	5.0%	8.8%	17.1%	13.5%
National Park Recreation Visits ⁶	-9.0%	19.1%	-12.5%	30.6%	-17.2%

NA = Not available.

¹U.S. Bureau of Labor Statistics, LAUS (household survey). Data through June 2022.

²National Agricultural Statistics Service, statewide data. Data through June 2022.

³F.W. Dodge. Data through June 2022.

⁴Colorado Association of Realtors. Data through July 2022.

⁵Colorado Department of Revenue. Data through May 2022.

⁶National Park Service. Data through July 2022. Recreation visits for Great Sand Dunes National Park and Preserve.

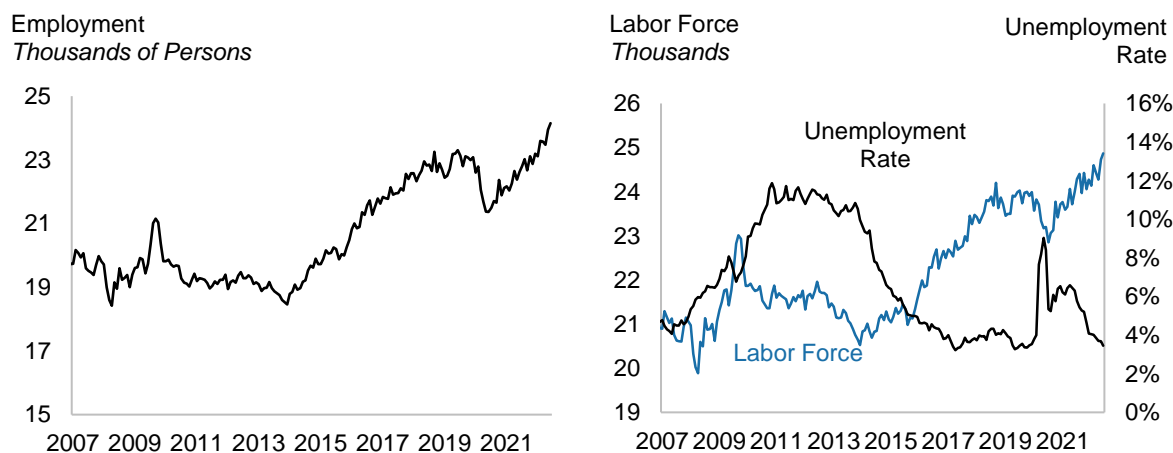
Agricultural industry. With over 70 varieties grown in the region, the San Luis Valley is the second biggest potato-producing area in the United States after Idaho. Other principal crops include hay, lettuce, wheat, and barley, a key input for Coors beer, with hemp and quinoa acreages on the rise. Through August 23, and ahead of the September harvest, potato shipments for the 2021-22 marketing year were down 4.8 percent compared with the same period last year. After being mired in negotiations for several years, a recently completed trade agreement with Mexico is expected to boost potato shipments for San Luis Valley producers, whose closer proximity to the border gives them an advantage over Idaho producers.

The region is a high desert, typically receiving less than eight inches of precipitation annually. Irrigation for crops relies on groundwater, reservoirs, and rivers fed by winter snowpack, which has been depleted by the impacts of climate change. Weather and access to water remain significant

concerns for San Luis Valley agriculture producers, even with an active monsoon season that has brought much-needed additional precipitation to the San Luis Valley. Through mid-August, the monsoon completely mitigated drought conditions along the Sangre de Cristo mountains and knocked the severe and extreme drought that characterized the entire region in May down to abnormally dry conditions, according to the U.S. Drought Monitor. The precipitation has not, however, refilled reservoirs and mitigated groundwater concerns, and areas of the valley are at risk of well shutoffs to meet the Rio Grande Water Conservation District’s water sustainability goals. Senate Bill 22-028 will provide \$30 million to help bolster efforts to recover the aquifers in the region’s Rio Grande basin.

Labor market. In addition to the natural resources and mining sector (which includes agriculture), key sectors for regional employment include trade, transportation, and utilities; education and health services; leisure and hospitality; and government services, including Adams State University. Labor markets continue to tighten in 2022, with employment in the region up 5.8 percent through June, compared with the same period in 2021 (Figure 46, left). The unemployment rate dropped to a post-pandemic low of 2.9 percent in June, bringing the 2022 average to 3.5 percent (Figure 46, right), just above that of the Colorado Springs and Denver Metro regions.

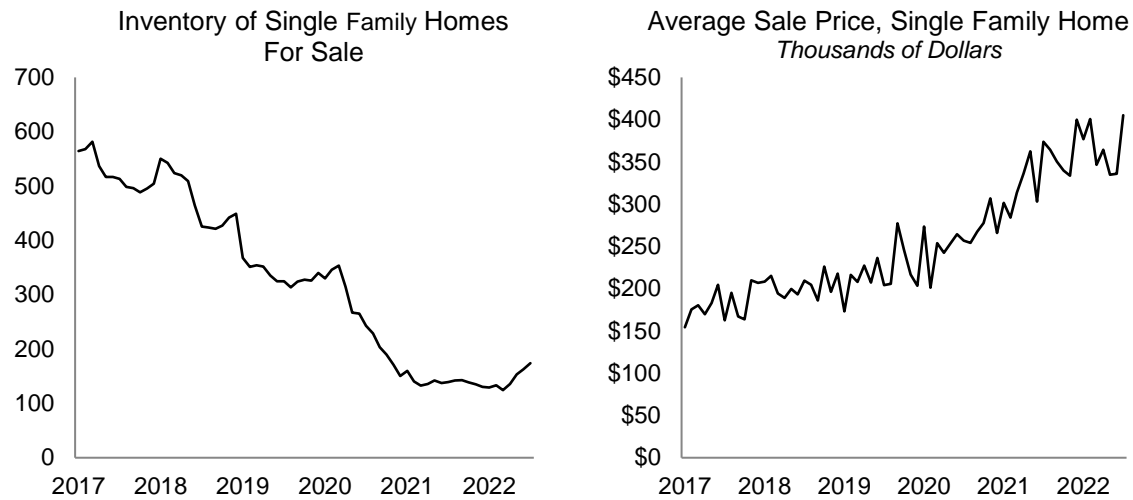
Figure 46
San Luis Valley Labor Market Activity



U.S. Bureau of Labor Statistics, LAUS (household survey). Seasonally adjusted. Data through June 2022. Includes Legislative Council Staff adjustments prior to 2010.

Housing and population. Among the state’s nine regions, the San Luis Valley is among the most ethnically diverse, with over 50 percent of its population identifying as Hispanic, compared with the statewide share of 25 percent. With 20 percent of its population aged 65 and over, compared with the statewide share of 16 percent, the San Luis Valley economy faces labor force challenges, as well as shifting demands for housing, health care and other services associated with an aging population.

Figure 47
San Luis Valley Housing Market Activity

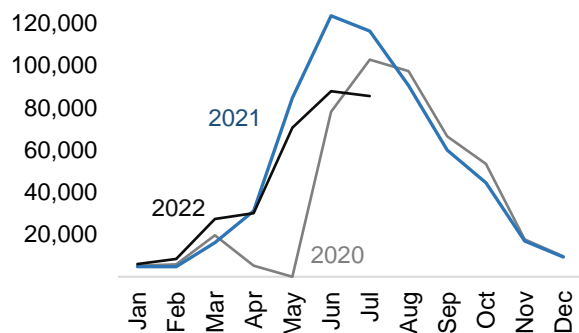


Source: Colorado Association of Realtors. Data are seasonally adjusted and through July 2022.

After increasing by 28.6 percent in 2021, housing permits issued in the San Luis Valley are down by 29.1 percent through June 2022, compared with the same period in 2021. As in the state's other regions, housing markets in the San Luis Valley were hot in 2021, with declining inventory pushing up housing prices (Figure 47). Prices moderated somewhat in recent months as inventory recovered, but are up 12.0 percent through July 2022, compared with the same period last year, according to the Colorado Association of Realtors. At \$349,000, the average price of a single-family home sold in the area in 2022 remains well below the statewide average price of \$715,000.

Tourism. Visits to the Great Sand Dunes National Park and Preserve were up 30.6 percent in 2021 following pandemic-related park closures and dampened tourist activity in early 2020. Through July 2022, park visits have moderated, and are down 17.2 percent compared with the same period in 2021 (Figure 48).

Figure 48
Visits to Great Sand Dunes National Park and Preserve



Source: National Park Service. Data through July 2022.

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 swaths of the region, shutting down popular tourist destinations altogether. Following the pandemic-induced recession, the western region's labor market recovered faster than the state overall but has recently stalled. Additionally, after a strong rebound in 2021, the construction and tourism industries have also slowed in the area. Economic indicators for the region are summarized in Table 28.

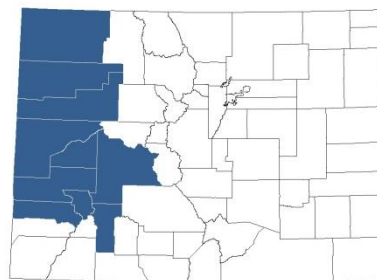


Table 28
Western Region Economic Indicators
Delta, Garfield, Gunnison, Hinsdale, Mesa, Moffat, Montrose, Ouray, Rio Blanco, and San Miguel Counties

	2018	2019	2020	2021	YTD 2022
Employment Growth ¹					
Western Region	2.7%	1.2%	-5.1%	5.3%	5.6%
Grand Junction MSA	2.5%	1.4%	-5.0%	4.5%	4.7%
Unemployment Rate ²	3.4%	3.0%	6.8%	5.1%	3.2%
Natural Gas Production Growth ³	5.2%	-0.9%	-7.8%	-8.3%	-9.2%
Housing Permit Growth ⁴	15.5%	-11.7%	30.3%	21.9%	-19.1%
Nonresidential Construction Growth ⁴					
Value of Projects	2.8%	64.7%	-66.9%	220.7%	-4.0%
Square Footage of Projects	27.4%	7.0%	-26.4%	50.7%	41.1%
Level (<i>Thousands</i>)	608	651	479	722	558
Number of Projects	18.0%	20.3%	22.5%	32.2%	0.0%
Level	59	71	87	115	47
Housing Market ⁵					
Average Sale Price - Single Family	0.8%	3.3%	18.7%	26.1%	7.0%
Level (<i>Thousands</i>)	\$334	\$347	\$421	\$519	\$523
Inventory - Single Family	-9.2%	-12.3%	-26.9%	-42.4%	10.9%
Home Sales - Single Family	3.3%	-7.2%	12.4%	1.6%	-17.0%
National Park Recreation Visits ⁶	-5.8%	2.3%	-0.1%	12.7%	-38.1%

MSA = Metropolitan statistical area.

¹U.S. Bureau of Labor Statistics, CES (establishment survey). Seasonally adjusted. Data through June 2022.

²U.S. Bureau of Labor Statistics, LAUS (household survey). Seasonally adjusted. Data through June 2022.

³Colorado Oil and Gas Conservation Commission. Data through June 2022.

⁴F.W. Dodge. Data through June 2022.

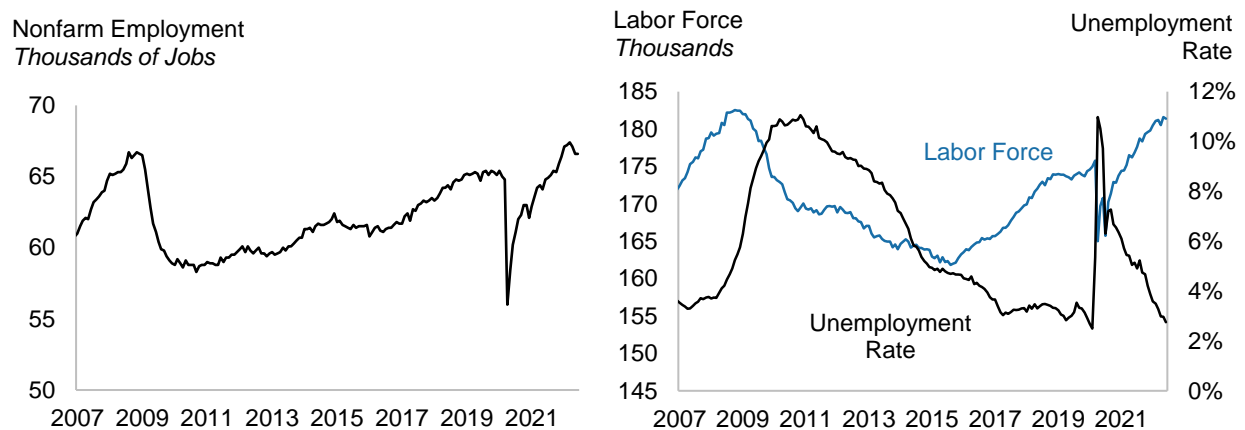
⁵Colorado Association of Realtors. Data through July 2022.

⁶National Park Service. Recreation visits for Black Canyon of the Gunnison National Park, Colorado National Monument, Dinosaur National Monument, and Curecanti National Recreation Area. Data through July 2022.

Labor market. Employment levels in the western region rebounded quickly following the pandemic-induced recession, exceeding pre-recession levels by late 2021, several months ahead of the state overall. Further, the region's 2.7 percent unemployment rate as of June 2022 is one of the state's lowest, with only the mountain and eastern plains region with a lower rate (Figure 49, right). However, beginning in mid-2022, employment growth in the region began to slow and even decline

marginally (Figure 49, left). Year-to-date, employment growth in the region stands at 5.6 percent, just below the state average of 5.8 percent, but this figure obscures the decline in recent months.

Figure 49
Western Region Labor Market Activity



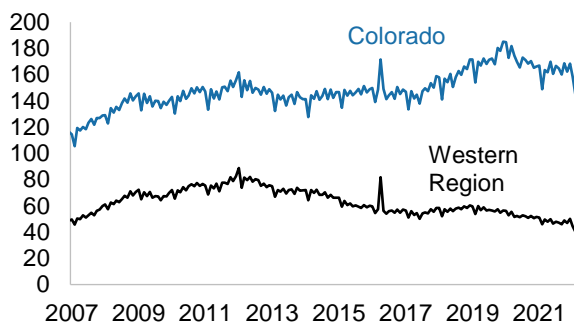
Source: U.S. Bureau of Labor Statistics; CES (left) and LAUS (right). Data prior to 2010 adjusted by Legislative Council Staff. Data are seasonally adjusted and are through June 2022.

Construction. The residential construction industry surged in 2020 and 2021, spurred by a shift in demand toward more rural areas and larger houses as a result of the pandemic. As of June 2022, however, the number of housing permits issued to builders has decreased by 19.1 percent over the same period in 2021. This slowdown in residential construction is at odds with the intense price appreciation for homes in the area. The average sale price for a single family home rose by nearly 19 percent in 2020 and by 26 percent in 2021. As of July 2022, home prices are up another 7 percent over the same period in 2021. Under normal circumstances, this sharp increase in prices should spur additional residential construction, however given the volatile nature of the current economy, builders may be struggling with labor, building material shortages, and expectations for a cooling market as interest rates rise.

Nonresidential construction suffered a slowdown in 2020, but bounced back with strong growth in 2021. This growth was 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. As of June 2022, however, nonresidential construction activity has slowed with a 4.0 percent decrease in the value of projects, and no growth in the number of projects underway compared to the same period in 2021. The weakness in nonresidential construction is likely overstated when comparing to 2021, since the COVID-19 related restrictions created a backlog of projects that began in 2021.

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 8.3 percent in 2021, natural gas production shrank by an additional 9.2 percent in 2022 year-to-date through June (Figure 50). Natural gas prices have moderated since spiking in early 2021 but are expected to remain well above 2020 prices through 2022.

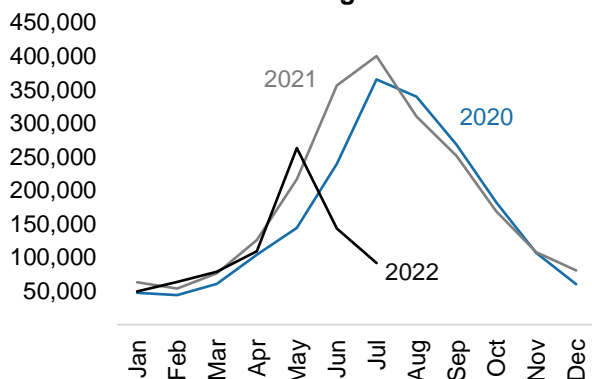
Figure 50
Natural Gas Production
Billion Cubic Feet (BCF)



Source: Colorado Oil and Gas Conservation Commission. Data through June 2022.

Tourism. Visits to national parks in the western region declined marginally in 2020, despite travel restrictions associated with the COVID-19 pandemic and wildfires across much of the state (Figure 51). National park visitation picked up in 2021, increasing by nearly 13 percent, as individuals pursued outdoor activities as a safer way to recreate in the face of the pandemic. Park visitation in 2022 has fallen significantly, declining by 38 percent on a year-to-date basis compared to 2021. Much of this decline in visitation is attributable to ongoing roadwork on US 50, which has restricted travel to the Black Canyon of the Gunnison National Park and the Curecanti National Recreation Area.

Figure 51
Visits to Western Region National Parks



Source: National Park Service. Recreation visits for Black Canyon of the Gunnison National Park, Colorado National Monument, Dinosaur National Monument, and Curecanti National Recreation Area. Data through July 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 areas of the state with a heavy reliance on tourism, the COVID-19 pandemic significantly impacted regional economic activity. The regional economy continues to expand, with recent data pointing to a strengthening labor market and a return to travel and tourism. To start the year, the region has been challenged by ongoing drought conditions, a slowing residential real estate market, and slower home building activity. Economic indicators for the region are summarized in Table 29.



Table 29
Southwest Mountain Region Economic Indicators
Archuleta, Dolores, La Plata, Montezuma, and San Juan Counties

	2018	2019	2020	2021	YTD 2022
Employment Growth ¹	1.7%	-0.3%	-5.1%	5.3%	5.5%
Unemployment Rate ¹	3.2%	2.9%	6.7%	5.2%	2.9%
Housing Permit Growth ²	24.1%	-33.9%	12.4%	18.4%	-30.8%
Housing Market ³					
Average Sale Price - Single Family	7.1%	7.3%	16.0%	25.4%	19.2%
Level (Thousands)	\$416	\$452	\$541	\$656	\$735
Inventory - Single Family	-3.7%	-10.4%	-29.3%	-47.5%	-0.2%
Home Sales - Single Family	-0.3%	-13.5%	31.3%	-1.2%	-16.8%
Retail Sales Growth ⁴	2.6%	5.6%	10.3%	20.1%	7.0%
National Park Recreation Visits ⁵	-7.6%	-2.1%	-48.1%	87.2%	-11.2%

NA = Not available.

¹U.S. Bureau of Labor Statistics, LAUS (household survey). Data through June 2022.

²F.W. Dodge. Permits for residential units. Data through June 2022.

³Colorado Association of Realtors. Seasonally adjusted. Data through July 2022.

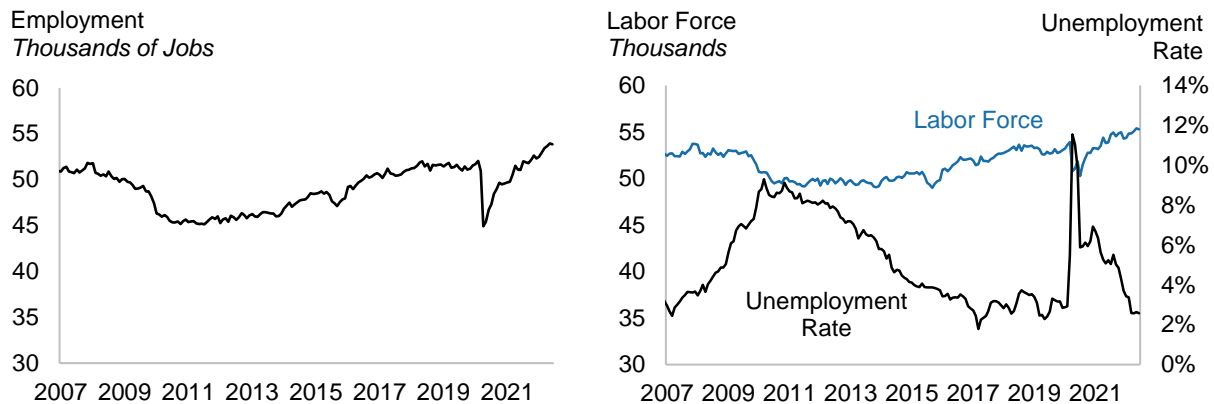
⁴Colorado Department of Revenue. Seasonally adjusted. Data through May 2022.

⁵National Park Service. Recreation visits for Mesa Verde National Park and Hovenweep National Monument. Data through July 2022.

Labor market. The region's labor market continued to improve rapidly through the second quarter of 2022. By June, the unemployment rate fell to 2.6 percent, its lowest level since summer 2019 and one of the lowest in the state. Through June, employment for the region's households continued to expand and was up 5.5 percent compared with the same period in 2021 (Figure 52). In June, employment in the region was more than 4.0 percent higher than pre-pandemic levels, with the labor force rising to a similar level. Indeed, the region's labor force was one of the fastest in the state to recover following the pandemic.

While employment and the labor force continued to climb through the second quarter, growth is expected to slow over the latter half of the year. High energy prices impacted travel for many visitors over the summer and likely eased pressure for additional workers in tourist-oriented markets. Employment gains will also slow as the low unemployment rate and slowing labor force growth constrain the supply of available workers.

Figure 52
Southwest Mountain Region Labor Market Activity



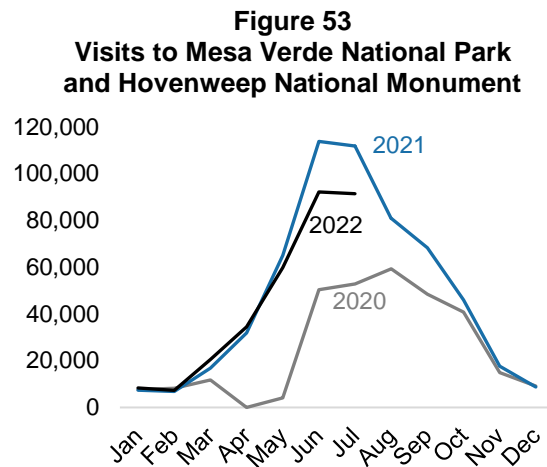
Source: U.S. Bureau of Labor Statistics; LAUS. Data are seasonally adjusted and are through June 2022.

Retail sales. Emerging from the recession, the region's retail sales increased more than 20.0 percent in 2021, faster than the 17.3 percent pace recorded statewide. However, growth slowed significantly from the end of 2021 to May 2022. In May, retail sales were up just 4.7 percent year-over-year with inflationary pressures likely impacting real sales gains. Notably, prices in the Denver-Aurora-Lakewood area, the closest indicator of inflation in the region, were up 8.5 percent over the same time, indicating a decline in real sales.

Housing. Like national and statewide trends, the housing market in the southwest mountain region recorded robust construction activity emerging from the recession, which further accelerated through the first half of 2021. The number of residential construction permits issued to builders began to slow through the latter half of the year, but remained up 18.4 percent at year end. Permit activity slowed further in 2022, with data indicating issuances were down 31.0 percent through the first seven months of the year. Construction has likely been impacted by rising interest rates that have reduced demand from potential buyers as well as affected project financing.

Home sales in the region were mixed in 2021 as declining sales in La Plata and Archuleta counties were partially offset by increased sales in Dolores and Montezuma counties. Overall, sales dropped region-wide as inventory continued to decline and contributed to rapid home price appreciation. Through July 2022, single family home sales were down 16.8 percent year-to-date. Inventory was also down through July and is on pace for its fifth consecutive annual decline. In July, the average price of a single family home was up 19.2 percent year-to-date, a slight moderation compared with the 25.4 percent rate of growth recorded in 2021. Amid slower sales, price growth is expected to moderate further over the latter half of the year.

Tourism. Figure 53 compares monthly visits to Mesa Verde National Park and nearby Hovenweep National Monument from 2020 to 2022. Visits in 2022 significantly lagged year-ago levels to start the summer months, despite tracking closely with 2021 levels through the first four months of the year. As of July, visits were down more than 11 percent year-to-date. Both locations were likely impacted by high gas and energy prices over the summer that reduced visitor traffic. Passenger traffic at the Durango-La Plata County airport decreased from May to July after trending closer to 2019 levels to start the year. Smaller regional airports have struggled with fewer flight offerings as airlines have dealt with staff shortages. Travel may have also been impacted by high ticket prices. In July, passenger traffic was down 11.6 percent compared with July 2019, and was down 3.3 percent year-to-date.



Source: National Park Service. *Data through July 2022.

Appendix: Historical Data

National Economic Indicators

Calendar Years	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021
GDP (\$ <i>Billions</i>) 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	\$22,996.1
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%	10.1%
Real GDP (\$ <i>Billions</i>) 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	\$19,427.3
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 (\$ <i>Billions</i>) 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	\$21,092.8
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%	7.5%
Wage & Salaries (\$ <i>Billions</i>) 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	\$10,343.8
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%	9.5%
Nonfarm Employment (<i>Millions</i>) 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

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

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

³Federal Reserve Board of Governors.

Colorado Economic Indicators

Calendar Years	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021
Nonfarm Employment (<i>Thousands</i>) 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 (\$ <i>Millions</i>) 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	\$402,230
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%	8.6%
Per Capita Income (\$ ²)	\$42,953	\$40,093	\$40,790	\$43,658	\$45,630	\$47,404	\$50,797	\$52,339	\$52,390	\$55,294	\$58,471	\$61,087	\$64,034	\$69,016
Percent Change	2.1%	-6.7%	1.7%	7.0%	4.5%	3.9%	7.2%	3.0%	0.1%	5.5%	5.7%	4.5%	4.8%	7.8%
Wage & Salary Income (\$ <i>Millions</i>) 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	\$206,306
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%	10.2%
Retail Trade Sales (\$ <i>Millions</i>) ³	\$74,760	\$66,345	\$70,738	\$75,548	\$80,073	\$83,569	\$90,653	\$94,920	NA	NA	NA	NA	NA	NA
Percent Change	-0.8%	-11.3%	6.6%	6.8%	6.0%	4.4%	8.5%	4.7%						
Housing Permits ⁴	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	56,524
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%	39.7%
Nonresidential Construction (\$ <i>Millions</i>) ⁵	\$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 (<i>Thousands, July 1</i>) ⁴	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.

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

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

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

⁴U.S. Census Bureau. Residential housing permits are the number of new single and multi-family housing units permitted for building. 2010 and 2020 population numbers reflect the decennial Census, while other numbers reflect July 1 estimates.

⁵F.W. Dodge.