

The Denver Skyline from the Colorado State University Spur Campus – National Western Center

Economic Outlook and Trends

Purpose and Overview

The purpose of this chartbook is to review the outlook and performance of the U.S. and Colorado economies. There is more optimism about the economy for the U.S. and Colorado than one year ago. In particular, a recession is unlikely.

After modest economic activity in Q1 (1.5% real GDP), growth was better than expected in Q2 (2.8% real GDP). There will be slower growth during the second half of 2024.

Consumers will struggle to balance their savings, debt, investment, and spending caused by high interest rates and inflation. Inflation will continue to follow a bumpy path downward to the target rate. It will reach the target rate in the middle of next year.

Earlier in 2024, some business leaders expected six rate cuts this year. Rate cuts may begin in September. The mantra "higher for longer" has been painful. Labor issues (shortages, wages, and churn) will be front and center for the next 18 months.

The U.S. and Colorado face economic and political risks that have the potential to strengthen or disrupt the economy through the end of the year.

Contents

This month, the chartbook has a slightly greater emphasis on employment and inflation. It highlights the following topics.

- U.S. Forecast, U.S. and Colorado Gross Domestic Product, Real Disposable Personal Income Per Capita
- Colorado Population
- U.S. and Colorado Employment, Unemployment, and Earnings
- U.S. and Colorado Inflation
- Saving, Borrowing, Consumption, and the Wealth Effect
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U.S. Forecast, Gross Domestic Product, and Disposable Income

United States Forecast Economy is Cooling – No Recession

United States Forecast

The Conference Board (TCB) U.S. Economic Forecast is the base for this analysis. In August, there were minor changes to the July TCB forecast; however, their discussion about the drivers and headwinds was more extensive than usual.

- The economy will lose momentum in H2 2024. Elevated prices and interest rates will
 cause consumers to be more cautious. They will switch to essential but less expensive
 goods and services as they struggle to balance their income, debt, savings, and
 spending.
- Economic activity will stabilize by the end of 2025.
- Auto loan and credit card delinquencies are above pre-pandemic levels.
- Business investment is uneven because of the cost of capital, lower consumer demand, the elections, and geopolitical concerns.
- Businesses are investing in digital transformation, Al, and their workforce.
- There is capital investment in factories but not capital equipment and structures. The
 decline in commercial real estate prices (office market) has reduced business
 investment.
- Government spending will support growth but at lower levels than in the past. Political volatility caused by budget conflicts, debt, tax policy, and the addition or repeal of programs could affect government spending.
- Trade policy is a wildcard.

- Labor markets have cooled from the abnormal post-pandemic economic recovery.
- Baby boomers are continuing to retire. The unemployment rate will remain at or near historic lows.
- The residential market dropped off in Q2 2024 but is likely to return by the end of the year.
- There is a need for housing and affordable housing in many parts of the country;
 however, material costs and interest rates remain high. There are also regional labor shortages for construction workers.
- Wage costs will continue to be a concern, and labor churn will exist because of workforce shortages. The need for significant payroll increases may taper off.
- At the moment, inflation for the goods sector is not a problem. Concerns exist about rising prices in the service industries.
- Inflation will likely reach the target rate in 2025.
- The FOMC is likely to begin rate cuts in September. Rate cuts will remain uneven.
- Political volatility could threaten the economy, cause social unrest, or increase financial volatility.
- Additional risks have the potential to affect economic activity and the labor market.

U.S. Real GDP Growth

The Conference Board Forecast (August 14, 2024)

Real GDP and Economic Growth

The Conference Board Forecast projects real GDP growth of 2.4% in 2024. Real disposable income will increase by 1.3%, and real personal consumption will increase by 2.1% in 2024. Residential investment will increase by 5.0% in 2024, and non-residential investment will change by 3.6%. Government spending will be solid in 2024 (3.2%), down from 4.1% in 2023.

Other Economic Factors

There will be slower growth in exports in 2024, a decrease from 2.6% to 2.0%. The U.S. unemployment rate will be 4.1% in 2024. The annual PCE inflation will be 2.4% in 2024, and the core rate will be 2.6%. Rate cuts will begin in or after September 2024, and the Fed Funds rate will decline to 4.625%. Rates will reach 3.375% in 2025.

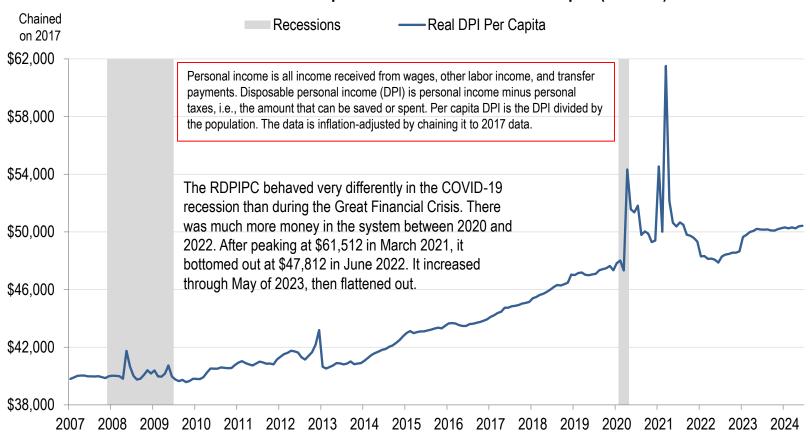
Conference Board US Real GDP Growth Forecast

	Q1 2023	Q2 2023	Q3 2023	Q4 2023	Q1 2024	Q2 2024	Q3 2024	Q4 2024	2023	2024	2025
Real GDP	2.2%	2.1%	4.9%	3.4%	1.4%	2.8%	0.7%	1.0%	2.5%	2.4%	1.6%
Real Disposable Income	10.8%	3.3%	0.5%	0.9%	1.3%	1.0%	1.0%	1.5%	4.1%	1.3%	1.7%
Real Personal Consumption	3.8%	0.8%	3.1%	3.3%	1.5%	2.3%	1.6%	1.6%	2.2%	2.1%	1.9%
Residential Investment	-5.3%	-2.2%	6.7%	2.8%	16.0%	-1.4%	1.0%	2.5%	-10.6%	5.0%	2.8%
Nonresidential Investment	5.7%	7.4%	1.5%	3.8%	4.4%	5.2%	1.0%	1.3%	4.5%	3.6%	2.1%
Total Gov't. Spending	4.8%	3.3%	5.8%	4.6%	1.8%	3.1%	2.4%	2.4%	4.1%	3.2%	2.4%
Exports	6.8%	-9.3%	5.4%	5.0%	1.6%	2.0%	1.0%	1.5%	2.6%	2.0%	2.1%
Unemployment Rate	3.5%	3.6%	3.7%	3.7%	3.8%	4.0%	4.2%	4.3%	3.6%	4.1%	4.1%
PCE Inflation (%Y/Y)	5.0%	3.9%	3.3%	2.8%	2.6%	2.6%	2.3%	2.2%	3.7%	2.4%	2.0%
Core PCE Inflation (%Y/Y)	4.8%	4.6%	3.8%	3.2%	2.9%	2.7%	2.5%	2.4%	4.1%	2.6%	2.0%

Source: The Conference Board, https://www.conference-board.org/publications/Economic-Forecast-US, cber.co.

Real Disposable Personal Income Per Capita United States

Real Disposable Personal Income Per Capita (RDPIPC)



Real Disposable Personal Income Per Capita

In June 2024, RDPIPC was \$50,423. It was more than the prior month and only 0.5% greater than June 2023.

The annual 2023 RDPIPC was 3.7% greater than the 2022 value; however, it was below the 2021 value and slightly more than the 2020 value.

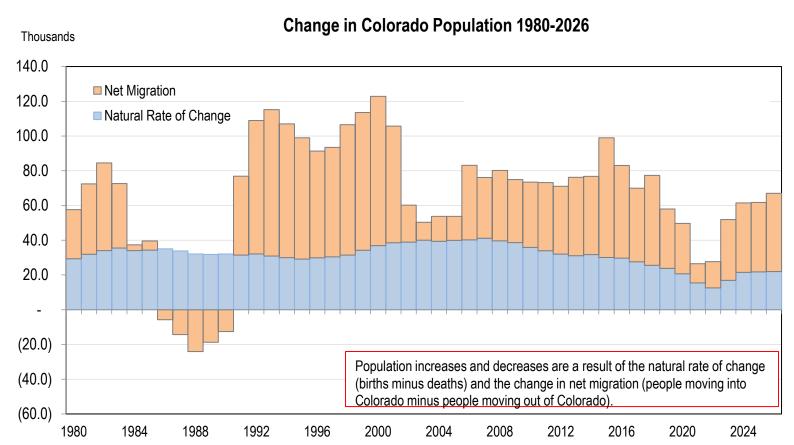
RDPIPC (Average)					
Year	RDPIPC	% Change			
2016	\$43,659	1.1%			
2017	\$44,710	2.4%			
2018	\$46,057	3.0%			
2019	\$47,226	2.5%			
2020	\$50,053	6.0%			
2021	\$51,567	3.0%			
2022	\$48,317	-6.3%			
2023	\$50,111	3.7%			

Source: FRED, BEA, SAAR, chained on 2017 dollars, cber.co. Note that the RDPIPC was previously chained on 2012 data.

Colorado Population

Colorado Population

Components of Change



Components of Change

Since 2000, the population of Colorado has increased at a decreasing rate. There are fewer than anticipated people because of higher death rates, a lower fertility rate, and lower net migration.

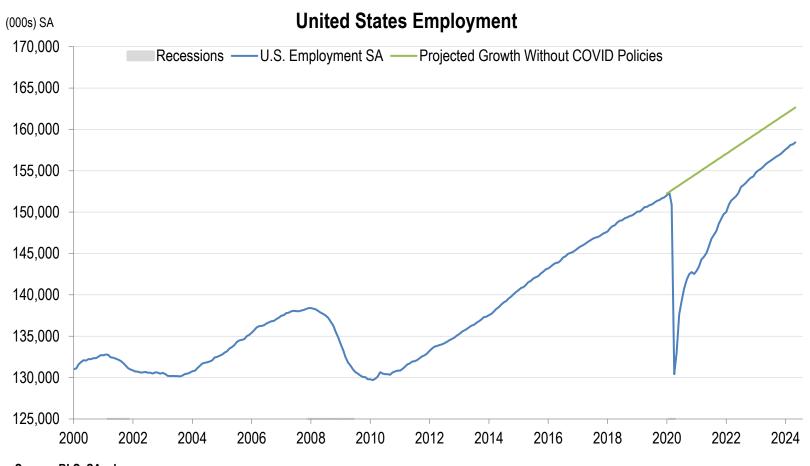
In 2020 and 2021, more significant population changes occurred because of the pandemic-related policies such as altered migration patterns and fewer births.

In 2024, the level of net migration (orange) will increase by 21,500, the natural rate (blue) will increase by 40,000, and the population will increase by 61,500. The total Colorado population will be 6,080,936 in 2026.

Sources: State Demography Office and cber.co.

U.S. and Colorado Employment and Unemployment and Earnings

Employment United States



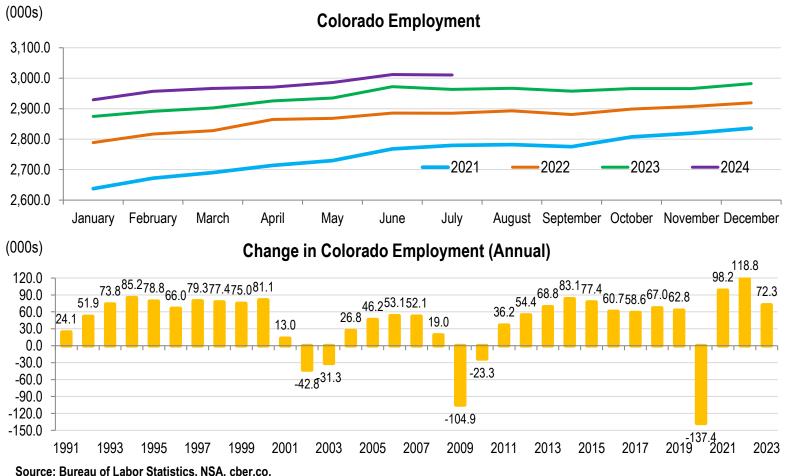
U.S. Employment

Between 2012 and 2019, average monthly U.S. employment increased by about 200,000. The green line projects what employment would have been if that rate had continued through 2024. The average change in monthly employment averaged about 124,000 from 2020 to 2024.

Average total employment through July 2024 was 157.7 million, 1.7% more than for the same period in 2023. The average monthly change in employment for 2024 is 225,314.

Source: BLS, SA, cber.co.

Employment and Change in Employment Colorado



Colorado Employment and Change

Through July 2024, the average total Colorado employment was 2,957,900. The average YOY change in <u>annual employment</u> through July 2024 was 52,400.

The average YOY change in monthly employment for 2024 is 4,369 per month.

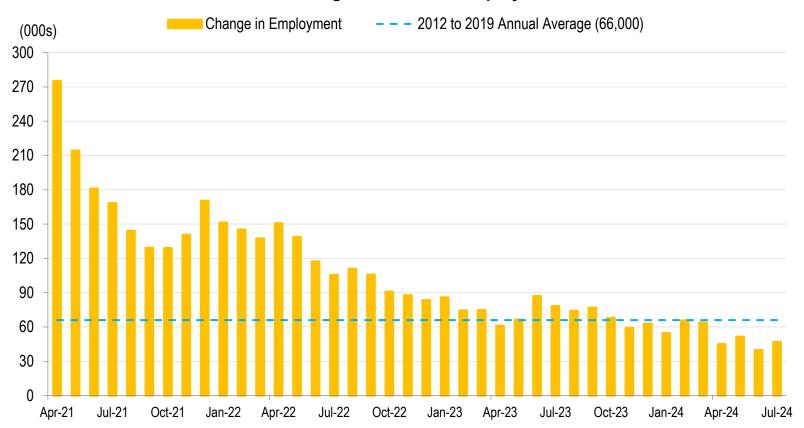
By comparison, the change in the average monthly employment from 2012 to 2019 was 5,500 per month.

The average annual Colorado employment for 2023 was about 72,300 (See lower chart). In 2023, employment changed by an average of 6,025 per month. The change in employment for 2024 is much slower.

Change in Monthly Employment

Colorado

YOY Change in Colorado Employment



Change in Employment

Average annual employment was 66,000 from 2012 to 2019, or 5,500 per month.

April 2021 was the first month after the pandemic that the change in YOY employment was positive. Since then, it has trended downward.

The catch-up period took over two years before the twelve-month rolling average returned to 66,000.

Source: Bureau of Labor Statistics, cber.co.

Colorado Employment and Change in Employment

Colorado Employment YOY Change (000s), YOY Percent Change						
Industry Sector	Er	np. vs. YC	Υ			
· ·	July	YOY	Percent			
Private vs. government employees	2024	Change	YOY			
Total Employment	2,994.0	43.2	1.5%			
Private Employment	2,497.4	24.8	1.0%			
Government Employment	496.6	18.4	3.8%			

Highlights Private vs. Government

The Government sector accounted for 43% of the change in total employment through July 2024, and the private sector accounted for 57%.

Over this period, private sector employment increased by 1.0%, and Government employment increased by 3.8%.

Fourteen of the 19 sectors added jobs.

In July 16.6% of employment was in government jobs and 83.4% were in the private sector.

Colorado Employment YOY Change (0	00s), YOY	Percent	Change
Industry Sector	Emp. vs	s. YOY	
	July	YOY	Percent
Sectors with more than 145,000 employees	2024	Change	YOY
Healthcare	332.4	10.5	3.3%
Prof., Scientific, and Tech, Services (PST)	301.0	5.5	1.9%
Food and Accommodation (F&A)	297.5	8.7	3.0%
Local Government	293.2	9.2	3.2%
Retail Trade	275.7	2.8	1.0%
Financial Activities	185.0	4.0	2.2%
Construction	180.9	-4.2	-2.3%
Administrative Services	155.9	8.0	0.5%
Manufacturing	151.1	-0.4	-0.3%
State Government	146.8	7.7	5.5%
Total Sectors > 145,000 Employees	2,319.5	44.6	1.9%

Highlights Sectors with > 145,000 Employment (Sorted by Size)

YOY employment (June 2024) for the ten largest sectors increased by 44,600, or 1.9%. Employment increased in eight of these sectors. The leaders in absolute job growth were healthcare, local government, F&A, state government, and PST.

Colorado Employment YOY Change (000s), YOY Percent Change							
Industry Sector Emp. vs. YOY							
	July	YOY	Percent				
Sectors with less than 145,000 employment	2024	Change	YOY				
Other Services (Personal)	129.7	1.6	1.2%				
Wholesale Trade	117.9	0.8	0.7%				
Transp., Warehousing, and Utilities (TWU)	115.5	-2.5	-2.1%				
Information	74.1	-2.8	-3.6%				
Arts, Entertainment, Recreation (AER)	60.6	-2.6	-4.1%				
Federal Government	56.6	1.5	2.7%				
Education (Private)	49.3	1.1	2.3%				
Mgmt. of Corporations/Enterprises (MCE)	48.3	1.1	2.3%				
Extractive Industries	22.5	0.4	1.8%				
Total Sectors <145,000 Employees	674.5	-1.4	-0.2%				
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Highlights Sectors with < 145,000 Employment (Sorted by Size)

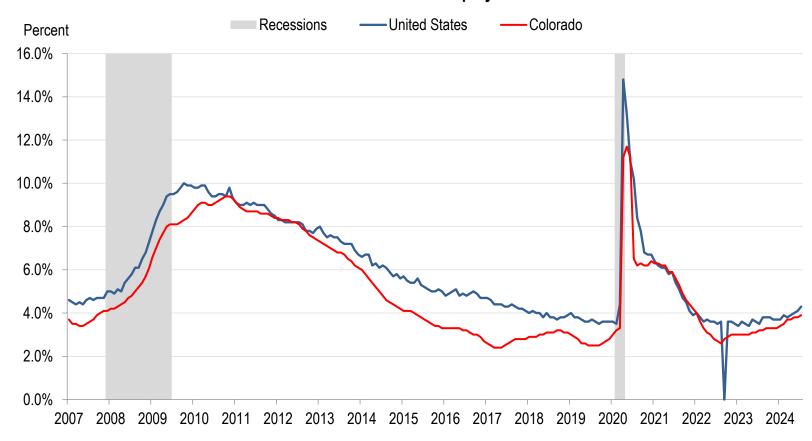
YOY employment changed in these nine sectors by -1,400, or -0.2%. Employment increased in six of these areas. The leaders in absolute job growth were other services, the federal government, private education, and MCE.

Source: BLS, SA, cber.co.

Unemployment Rate

United States and Colorado

U.S. and Colorado Unemployment



Source: BLS, SA, cber.co.

Unemployment Rate (S.A.)

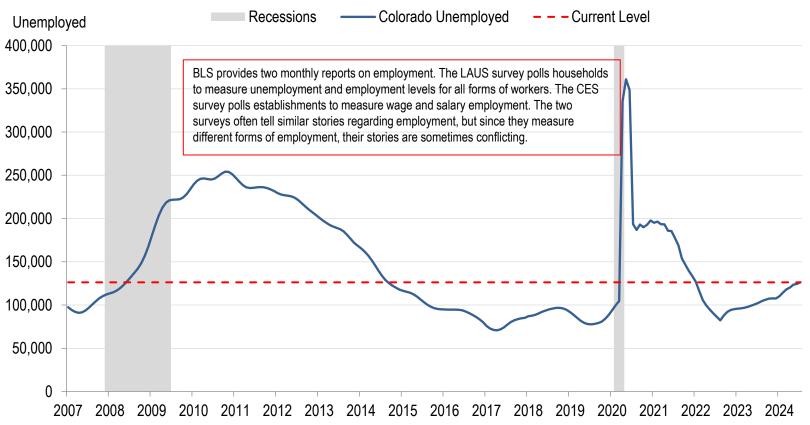
The Colorado unemployment rate was 3.9% (red) in July 2024, and the U.S. rate was 4.3% (blue).

The July (latest year) Colorado rate for men was 4.0% and 3.5% for women. It was 2.4% for individuals with some college education, 2.4% for a college degree, 4.1% for a high school diploma, and 8.0% for less than a high school diploma.

Annual Unemployment Rate					
Year	United States	Colorado			
2016	4.9%	3.1%			
2017	4.4%	2.6%			
2018	3.9%	3.0%			
2019	3.7%	2.7%			
2020	8.1%	6.8%			
2021	5.3%	5.4%			
2022	3.6%	3.0%			
2023	3.6%	3.2%			

Number of Unemployed – Household Survey Colorado

Colorado Number of Unemployed



Number of Unemployed (S.A.)

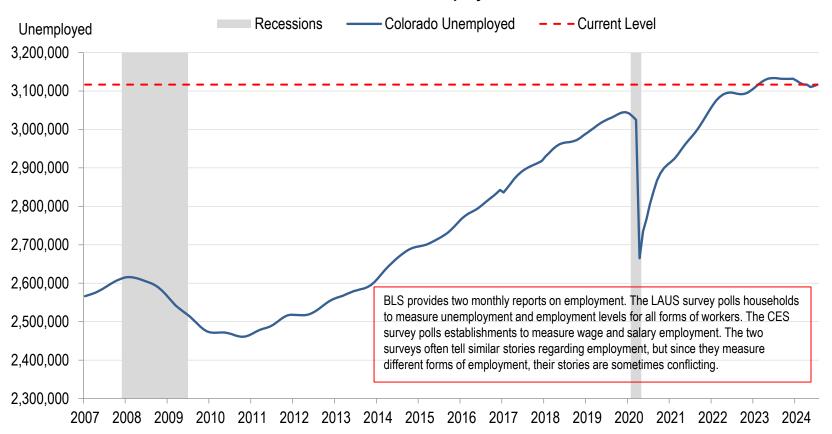
In July 2024, the unemployment rate was 3.9% and the number of unemployed was 126,620.

There are 23,594 more unemployed than in July 2023, when the unemployment rate was 3.5%.

Source: BLS, SA, cber.co.

Number of Employed – Household Survey Colorado

Colorado Number of Employed



Number of Employed (S.A.)

In July 2024, the number of employed was 3,116,648. It was 16,880 less than in July 2023.the prior year.

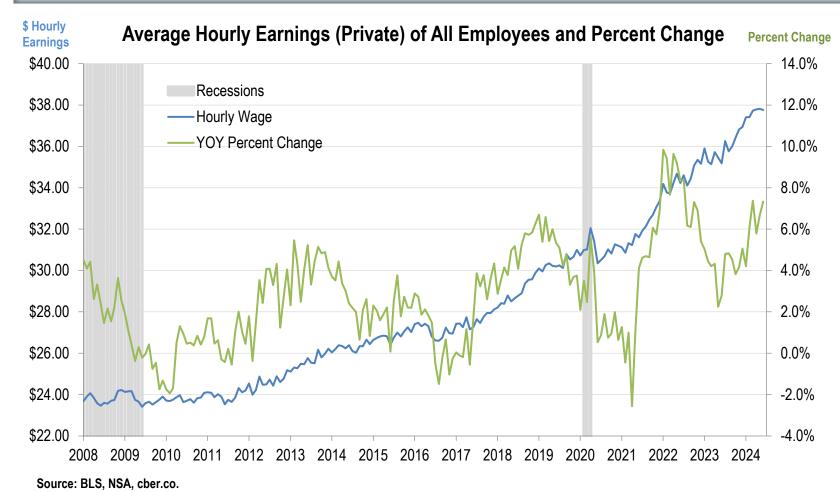
So far in 2024, peak employment was in January (3,121,057), and the lowest level was in April (3,110,412). Employment declined during this period.

Both the household and establishment survey are correct – they measure different forms of employment.

Variations in the participation rate and the size of the labor force have caused changes in employment. Individuals in the household survey are only counted once, even if they have two jobs. In the establishment survey they would be counted twice.

Source: BLS, SA, cber.co.

Average Hourly Earnings of All Employees (Private) Colorado



Hourly Earnings, Percent Change, and CPI
The July 2024 private hourly earnings for

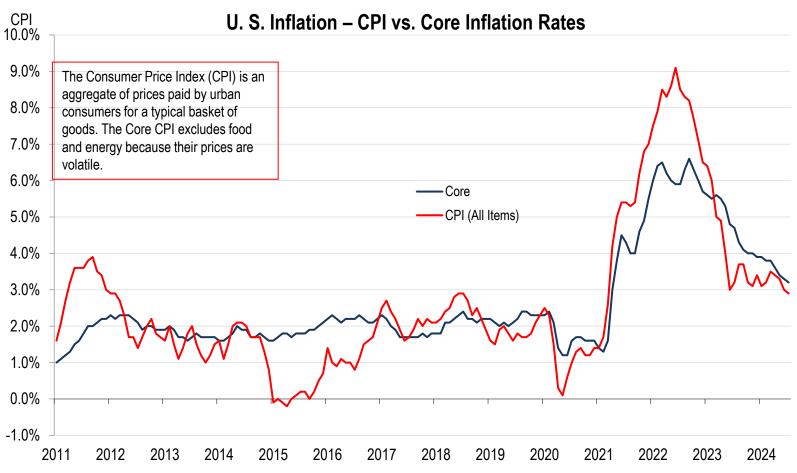
Colorado (blue) were \$37.76, a YOY increase of 7.3% (green). The rate of YOY earnings growth peaked at 9.4% in February 2022. It then declined, and more recently has trended upward since May 2023.

For 2021 through 2023, the change in YOY hourly earnings was less than the increase in inflation. It is currently above the inflation rate.

Colorado Hourly Earnings and Change						
Year	CO CPI	Earnings	Change			
2017	3.4%	\$27.60	2.0%			
2018	2.7%	\$28.92	4.8%			
2019	1.9%	\$30.37	5.0%			
2020	2.0%	\$30.99	2.0%			
2021	3.5%	\$31.97	3.2%			
2022	8.0%	\$34.47	7.8%			
2023	5.2%	\$35.91	4.2%			
Source: I	BLS, cber.co					

U.S. and Colorado Inflation

CPI Inflation U.S. CPI vs. Core Inflation



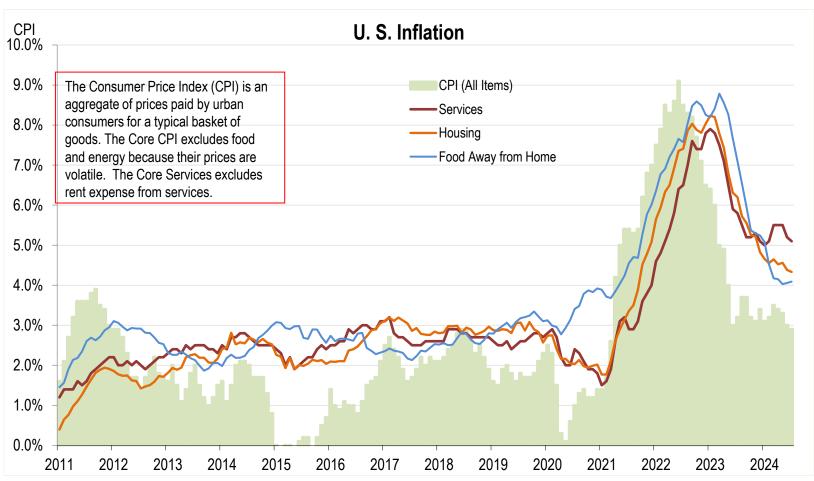
U.S. CPI vs. Core Inflation (NSA) In July 2024, the CPI rate (red) was 2.9%, and the core rate (blue) was 3.2%.

The CPI rate peaked at 9.1% in June 2022. By December 2022, the YOY CPI rate had dropped to 6.5%. In December 2023, the rate was 3.9%.

Core inflation peaked at 6.6% in September 2022 and declined to 5.7% in December 2022. In December 2023, it was 4.2%.

The inflation rate is declining; however, consumers struggle with the accumulated effects of three years of inflation.

CPI Inflation U.S. CPI vs. Services, Housing, and Food Away from Home



U.S. Inflation

July 2024

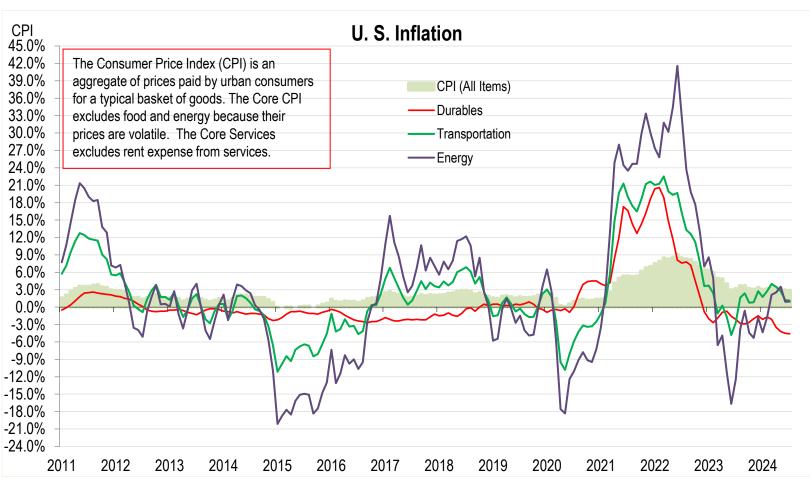
The CPI (light green) was 2.9%.
The Core Rate (not shown) was 3.2%.
Services (burgundy) was 5.1%.
Housing (orange) was 4.3%.
Food away from home (blue) was 4.1%.

Weights

Core rate 79.8% Services 64.0% Housing 45.1% Food away from home 5.4%

These components move in an orderly manner. The services, housing, and FAFH components typically were between 2.0% and 3.0% between 2012 and 2020. They peaked several months after the CPI had peaked and are retreating at a slower rate than the CPI.

CPI Inflation U.S. CPI vs. Durables, Transportation, and Energy



U.S. Inflation (NSA)

July 2024

The CPI (light green) was 2.9%.
The Core Rate (not shown) was 3.2%.
Durables (red) were -4.6%.
Transportation (dark green) was 1.1%.
Energy (purple) was 1.0%.

Weights

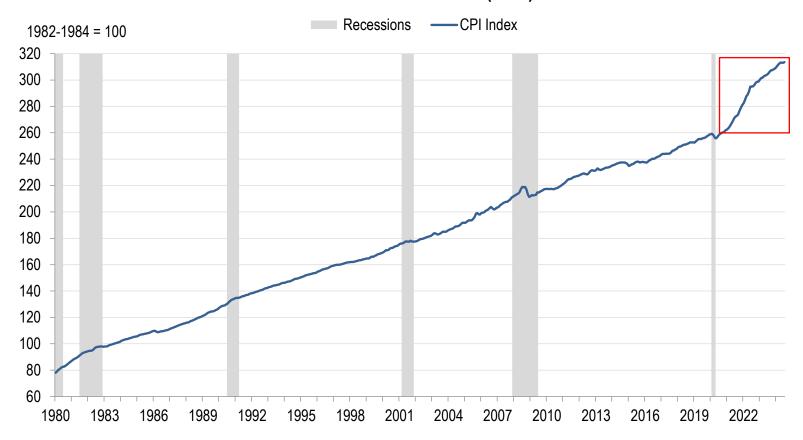
Core rate 79.8% Durables 10.3% Transportation 15.9% Energy 6.7%

These components do not move in an orderly manner. They have lower weights, but their volatility was partially responsible for the uneven monthly increases and declines of the CPI.

CPI Inflation Index Value

United States

U.S. CPI Inflation Index (NSA)



Source: BEA, FRED, NSA, CPI calculator, cber.co.

CPI Inflation Index

The chart shows the actual inflation index use to calculate the CPI. The steep slope of the line in the red box shows the rapid increase since 2021.

If a family had monthly expenses of \$10,000 in January 2021, their inflation-adjusted expenses would be \$11,727 in December 2023 and \$12,025 in July 2024. There was an increase of \$2,025 from January 2021 to July 2024.

The change in the CPI data index can be tricky because of the base effect.

- The increase for December 2023 vs. December 2022 is 3.4%.
- The December annualized 2023 vs. December 2021 increase is 4.9%.
- The December annualized 2023 vs. 2020 increase is 5.6%.

The accumulated effect put a big dent in American pocketbooks that will not be reversed!

From "Transitory Inflation" to "Higher for Longer" Annual and Accumulated Rate of Inflation

Higher for Longer Interest Rates

In 2021, some economists thought inflation was transitory. Next, they thought it would return to the Federal Reserve target rate of 2.0% before December 2023. The FOMC will not begin rate cuts until it is comfortable that inflation is under control. Stubborn inflation will not return to the target rate until 2025, i.e., higher for longer interest rates. The annual Denver MSA CPI has been more than the U.S. CPI for eight of the past ten years.

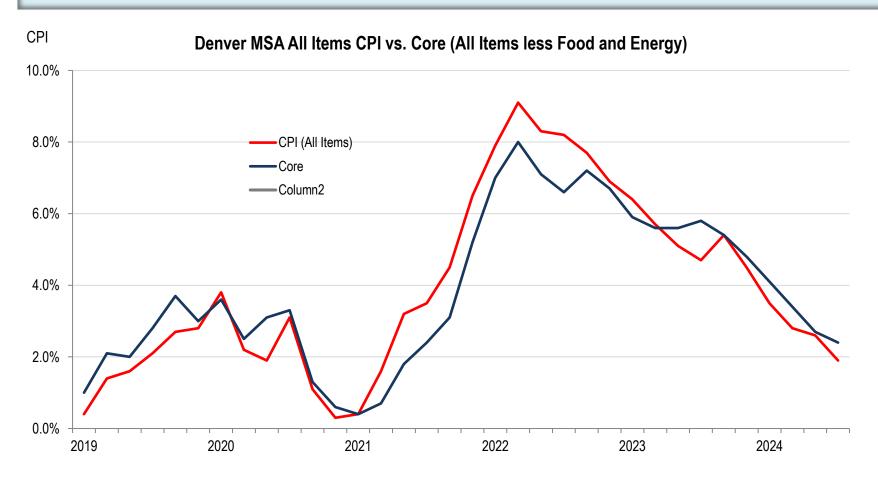
	Annual CPI					
Year	U.S.	Denver MSA				
2014	1.5%	2.8%				
2015	-0.4%	1.2%				
2016	1.0%	2.8%				
2017	2.1%	3.4%				
2018	2.5%	2.7%				
2019	1.7%	1.9%				
2020	1.2%	2.0%				
2021	5.3%	3.5%				
2022	8.5%	8.0%				
2023	3.8%	5.2%				
Source: B	LS, cber.o	co				

Annual and Accumulated Rate of Inflation								
	United	States			Colorado			
2021	2022	2023	All Years	Components	2021	2022	2023	All Years
4.7%	8.0%	4.1%	17.7%	CPI	3.5%	8.0%	5.2%	17.7%
3.6%	6.2%	4.8%	15.2%	Core	2.5%	7.1%	5.4%	15.7%
3.8%	9.6%	5.7%	20.2%	Food and Beverage	2.9%	9.9%	5.9%	19.7%
3.5%	11.4%	5.0%	21.1%	Food at Home	1.8%	11.1%	4.8%	18.5%
4.5%	7.7%	7.1%	20.5%	Food Away From Home	4.4%	9.1%	8.0%	23.0%
3.3%	7.2%	6.4%	17.8%	Housing	1.6%	7.6%	7.8%	17.9%
7.9%	17.7%	1.6%	28.9%	Household Energy	4.4%	12.3%	11.4%	30.6%
6.8%	14.5%	2.4%	25.2%	Fuels and Utilities	2.5%	9.8%	10.5%	24.4%
14.6%	15.5%	0.2%	32.6%	Transportation	13.0%	12.7%	2.2%	30.2%
13.7%	11.9%	-0.4%	26.8%	New and Used Motor Vehicles	8.2%	13.4%	-0.1%	22.6%
35.8%	32.1%	-10.6%	60.4%	Motor Fuel	41.9%	21.1%	-5.6%	62.3%

Accumulated Rate of Inflation

Inflation had a different impact on the various components. For example, there was a temporary increase in sporting goods and appliance prices. The price increase for medical care, professional services, recreation, and wireless phone services was minimal. Price increases in many essential components, such as food, housing, and fuel, are shown in the table above. U.S. motor vehicle insurance increased by 31.5% for all years. The primary reasons were the integration of artificial intelligence, advanced technology, and the high costs of electric vehicles. In some cases of accumulated inflation, deflation occurs, and prices decrease. Disinflation is more likely to occur. Prices will continue to increase but at a slower rate.

Bi-Monthly Change in Denver MSA CPI All Items vs. Core



Denver MSA CPI vs. Core Inflation

The Denver MSA inflation rate is generally higher than the U.S. rate, but the tables may have turned recently.

The U.S. CPI July rate was 2.9%, and the Denver MSA rate was 1.9%. The U.S. July core rate was 3.2% compared to 2.4% for the Denver MSA.

The July rates for the following Denver components (shown in the previous two charts) were less than the U.S. rate: services, housing, food away from home, durables, transportation, and energy.

Note that the Colorado rate is only published bi-monthly and is NSA.

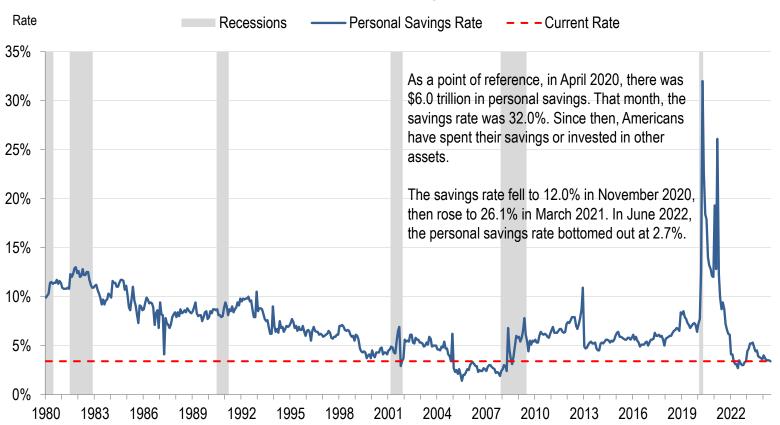
Source: Bureau of Labor Statistics, CPI All Items, NSA, Note: Colorado data is only available on a bi-monthly basis since 2019, cber.co.

Saving, Borrowing, Consumption, and the Wealth Effect

U.S. Personal Saving Amount and Rate

Percentage of Disposable Personal Income (DPI)





Personal Saving Rate

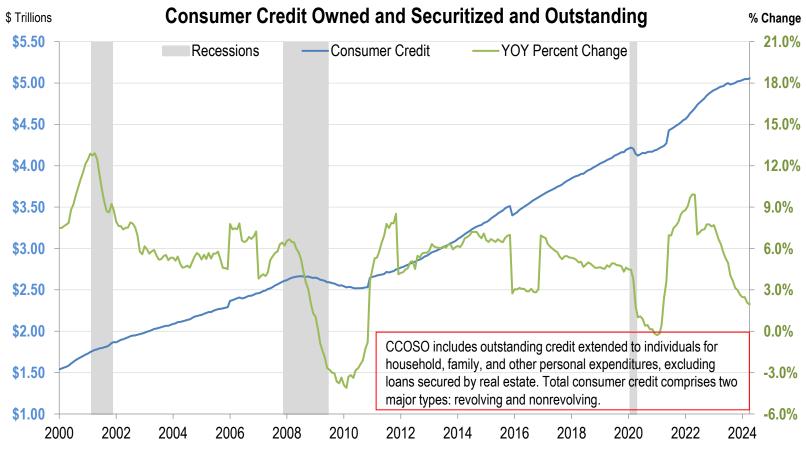
The June 2024 personal savings rate was 3.4%, and savings were \$703.0 billion.

Since 2022, the highest level of savings was in May 2023. They were \$1,060.0 billion, and the savings rate was 5.3%.

Year End Personal Savings (Billions) and Rate						
2017 \$748.0 5.0%						
	•	5.0%				
2018	\$1,338.9	8.4%				
2019	\$1,051.4	6.4%				
2020	\$2,085.0	12.0%				
2021	\$1,115.2	6.1%				
2022	\$561.9	3.4%				
2023	\$766.0	3.7%				
Source: BEA, cber.co						

Source: Federal Reserve, FRED, cber.co.

U.S. Consumer Credit Outstanding United States



Source: FRED, Federal Reserve, G.19, SA.

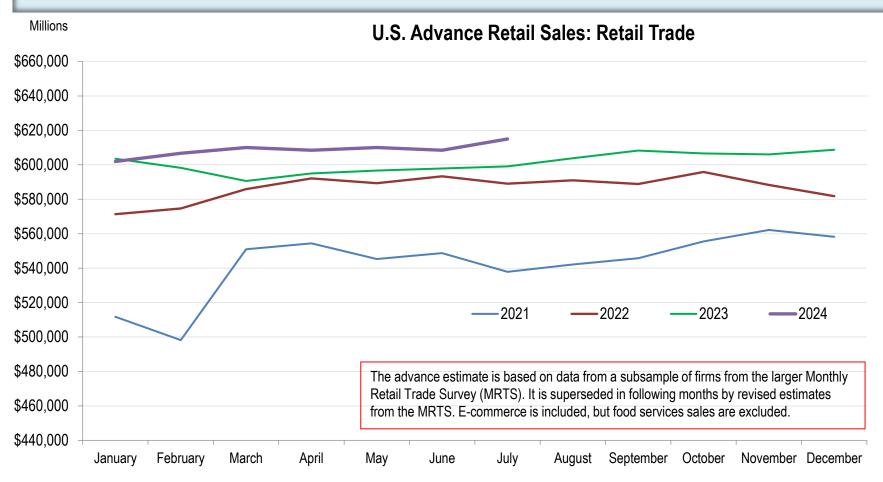
Consumer Credit

In May 2024, the YOY rate of outstanding consumer credit (including consumer loan defaults) increased by 2.1% (green). Securitized credit has been more than \$4.5 trillion since November 2021 (blue). It was \$5.1 trillion in April and May.

From Q3 2008 to Q4 2010, consumers deleveraged and decreased the amount of consumer debt. The amount of credit authorized increased in 2018 and 2019 and declined in 2020 as consumers reduced expenditures and paid off debt during the pandemic (blue).

	Outstanding Credit (Billions) and Percent Change					
2017	\$3,738.3	5.9%				
2018	\$3,922.6	4.9%				
2019	\$4,106.3	4.7%				
2020	\$4,168.2	1.5%				
2021	\$4,375.6	5.0%				
2022	\$4,735.8	8.2%				
2023	\$4,969.9	4.9%				
Source	: FRED, G-19, cber.co					

U.S. Advance Retail Sales: Retail Trade Monthly



Advance Retail Sales

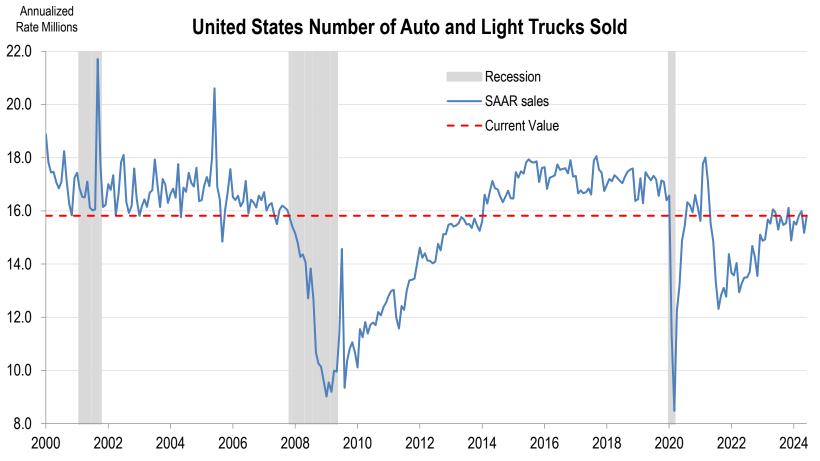
Retail sales were weak in 2023 and the first half of 2024. YTD sales through June (purple) were 1.9% greater than for the same period in 2023 (green). Sales in July were stronger than expected because of Amazon Prime Days and increased auto sales. Higher prices are solving the inflation problem of higher prices. In other words, consumers are spending, but they are being selective in their purchases.

Annual	Retail Sales	(Trillions)
2017	\$5.04	4.4%
2018	\$5.25	4.2%
2019	\$5.40	2.8%
2020	\$5.56	3.0%
2021	\$6.51	17.0%
2022	\$7.04	8.2%
2023	\$7.21	2.4%
Source: Ce	nsus, cber.co	

Source: U.S. Census Bureau, FRED, cber.co. Data updated in April 2024. Note: Not adjusted for inflation.

U.S. Auto and Light Truck (ALT) Sales

Monthly (Seasonally Adjusted Annualized Rate in Millions)



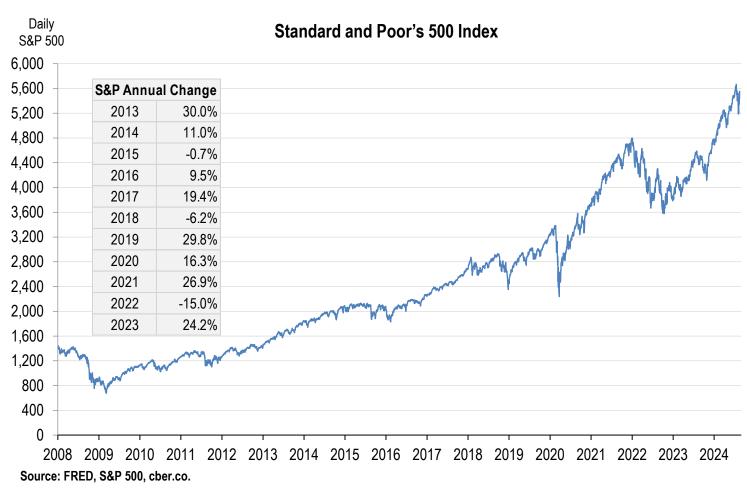
Auto and Light Truck Sales SAAR

In July 2024, auto and light truck sales increased to 15.8 million (red dotted line). Monthly unit sales in 2023 and 2024 were between 14.8 and 16.2 million. The industry faces challenges from elevated interest rates, high prices, high insurance costs, and a lack of enthusiasm for electric vehicles.

ALT Unit Sales			
Year	Units Sold (Millions)		
2016	17.5		
2017	17.2		
2018	17.2		
2019	17.0		
2020	14.5		
2021	14.9		
2022	13.8		
2023	15.5		

Source: FRED, BEA, Seasonally Adjusted Annualized Rates (SAAR), cber.co.

Standard and Poor's 500 Index



Market Returns

2020 COVID-19 Policies

February 19, 2020 3,386

March 23, 2020 2,237 a change of **-34%** to 1,148 August 18, 2020 3,386 bear market was 149 days

2020 change was **+16.3%**

2021 COVID Recovery Bull Market

For most of 2021 – steady growth December 31, 2021 4,766, a change of **+26.9%**.

2022 Bear Market

December 31, 2022 3,839, a change of **-15.0%**

2023 Bull Market

Helped by a Santa Claus rally in December December 29, 2023 4,739 a change of **+24.2%**

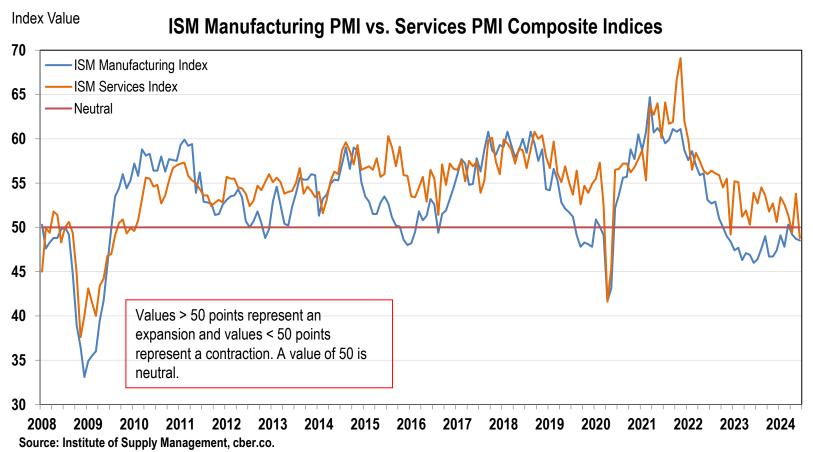
2024 Bull Market

August 16, 2024 5,554 YTD change **+16.5.4%**. The current level is slightly below the peak in July.

U.S. Indicators

ISM Purchasing Managers Composite Indices

Manufacturing vs. Services



Manufacturing and Services PMI

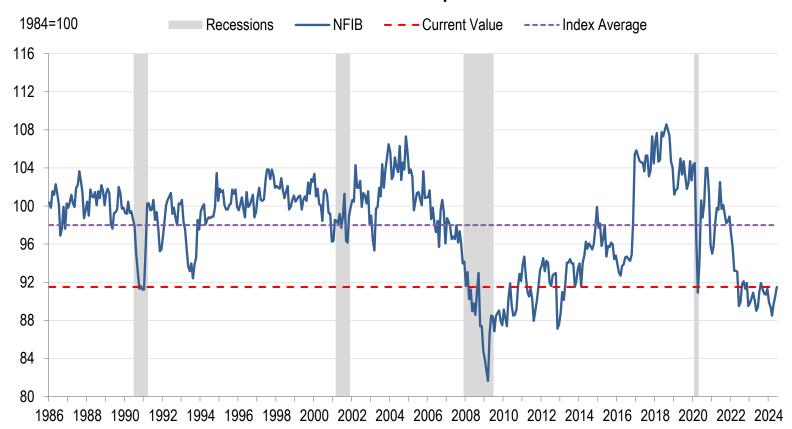
The ISM manufacturing index (blue) was below 50 for 16 months before posting 50.2 in March 2024. It has been below 50 for the past four months and was 46.8 in July. Demand and employment remained weak.

In December 2022, the ISM service index (orange) registered 49.2. Since then, it has been between 50.3 and 55.2 but fell to 49.4 in April 2024. It rebounded to 53.8 in May but plunged to 48.8 points in June. It bounced back to 51.4 in July. Overall, 10 of the service industries posted gains, and 8 reported declines.

June was the second time in four months that the PMIs for manufacturing and services were below 50.

NFIB Small Business Optimism Index United States

NFIB Small Business Optimism Index



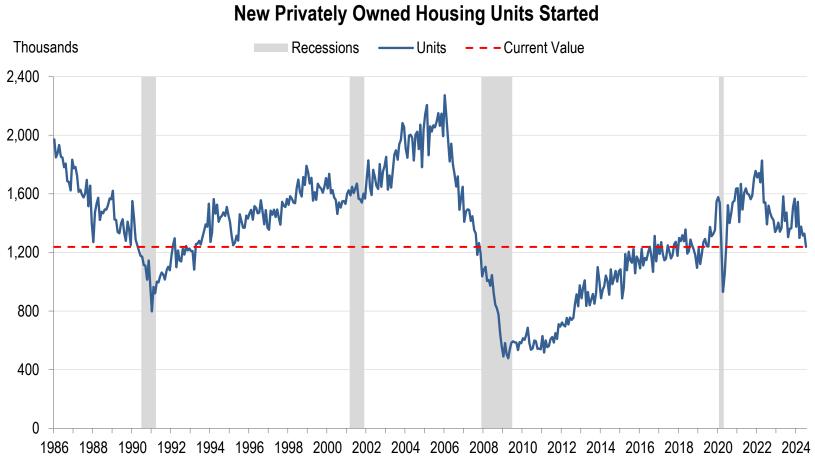
Source: NFIB, cber.co.

NFIB Small Business Index

In July 2024, the NFIB index rose to 93.7 (red dotted line), the 30th consecutive month below the 50-year average of 98.0 (purple dotted line). The July value was the best for 2024. Five of the ten indices increased, two decreased, and three were unchanged.

Main Street is pessimistic about the economy for the rest of 2024. Small businesses have many concerns. In addition to inflation and interest rates, small business owners are concerned about tax and regulatory policies and issues that impact their ability to operate their businesses. For more details, the NFIB monthly SBET report is available at https://www.nfib.com/.

New Privately-Owned Housing Units Started United States



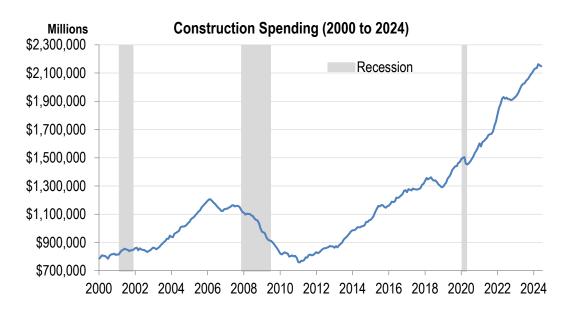
New Privately Owned Housing Units Started

The number of housing starts has been volatile. Starts have been below 1.9 million units SAAR since May 2006. There is demand for housing, even with high interest rates; however, there were only 1.24 million starts in July 2024 (red-dotted line).

Units Started (Annual)					
Year	Units		Year	Units	
2005	2,073		2016	1,177	
2006	1,812		2017	1,205	
2007	1,342		2018	1,247	
2008	900		2019	1,292	
2009	554		2020	1,397	
2010	586		2021	1,606	
2011	612		2022	1,551	
2012	784		2023	1,415	
2013	928				
2014	1,000				
2015	1,107				

Source: U.S. Census Bureau, FRED, cber.co.

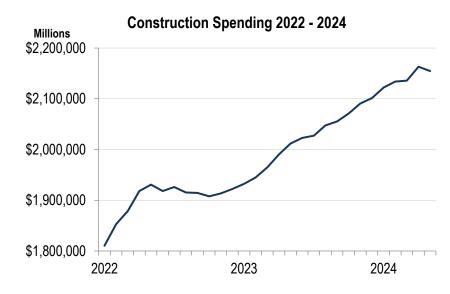
Construction Spending United States

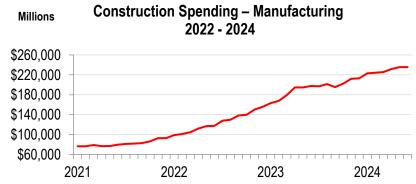


Construction Spending

Construction spending trended down beginning in May 2022 and remained stagnant through the end of the year. Spending was solid in 2023 but turned flat again in 2024. Federal funds have supported the construction of manufacturing facilities (bottom right) since 2022.

Source: FRED, U.S. Census Bureau, cber.co.

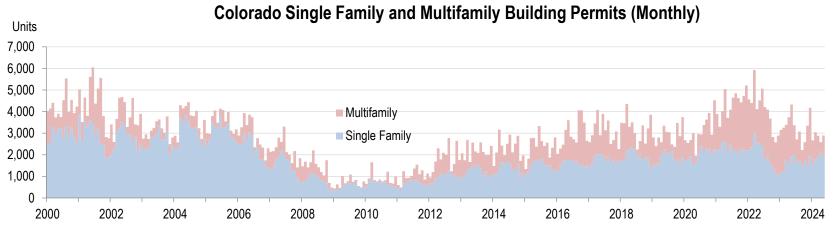




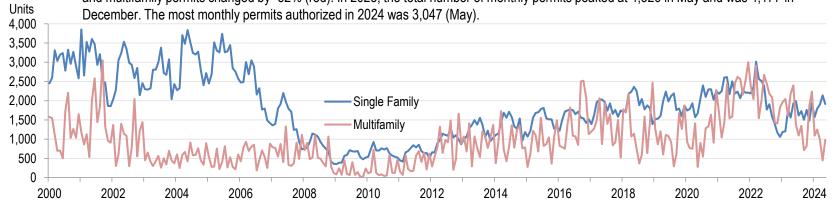
Colorado Indicators

Colorado Residential Building Permits

Single Family and Multifamily Units



The total number of single-family permits for the first six months of 2024 changed by +15.0% (blue) compared to the same period in 2023, and multifamily permits changed by -52% (red). In 2023, the total number of monthly permits peaked at 4,326 in May and was 4,177 in December. The most monthly permits authorized in 2024 was 3.047 (May).



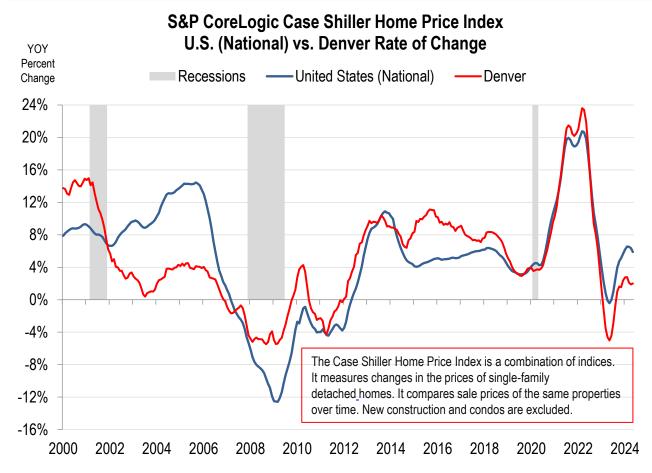
Source: TAMU Real Estate Center	r, U.S. Census Bureau, cber.co.
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Annual Building Permits				
Year	Single Family	Multi-Family		
2000	38,588	16,008		
2001	36,437	18,570		
2002	35,042	12,878		
2003	33,894	5,732		
2004	40,753	5,746		
2005	40,018	5,732		
2006	30,365	7,978		
2007	20,516	8,938		
2008	11,147	7,851		
2009	7,261	2,094		
2010	8,790	2,801		
2011	8,729	4,779		
2012	12,618	10,684		
2013	15,773	11,745		
2014	17,100	11,591		
2015	20,025	11,846		
2016	21,577	17,397		
2017	24,338	16,335		
2018	26,134	16,493		
2019	24,756	13,877		
2020	26,636	13,833		
2021	30,246	26,278		
2022	23,728	25,111		

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Case Shiller Home Price Index

YOY National vs. Denver Rate of Change

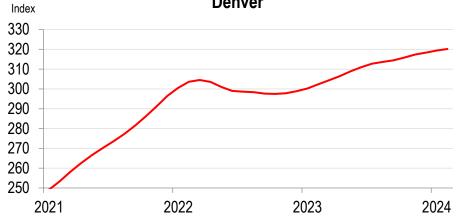


Change in S&P CoreLogic Case Shiller Index

In May 2024, the YOY change in the U.S. index was +5.9%, and the Denver index changed by 2.0%.

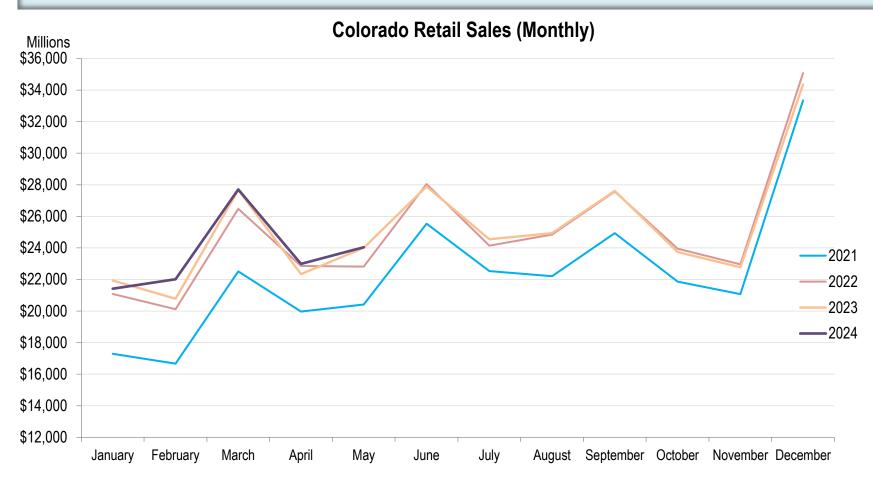
In retrospect, the 2019 housing market favored buyers, and the U.S. YOY appreciation rate was about 4.0%. In the summer of 2020, the market began to favor sellers. In August 2021, YOY appreciation for Denver and the U.S. peaked above 20.0%.

S&P CoreLogic Case Shiller Home Price Index Denver



Source: FRED, S&P Case Shiller, cber.co.

Colorado Retail Sales Monthly



Colorado Retail Sales

Year-over-year retail sales through May 2024 (dark purple) were 1.2% greater than for the same period in 2023.

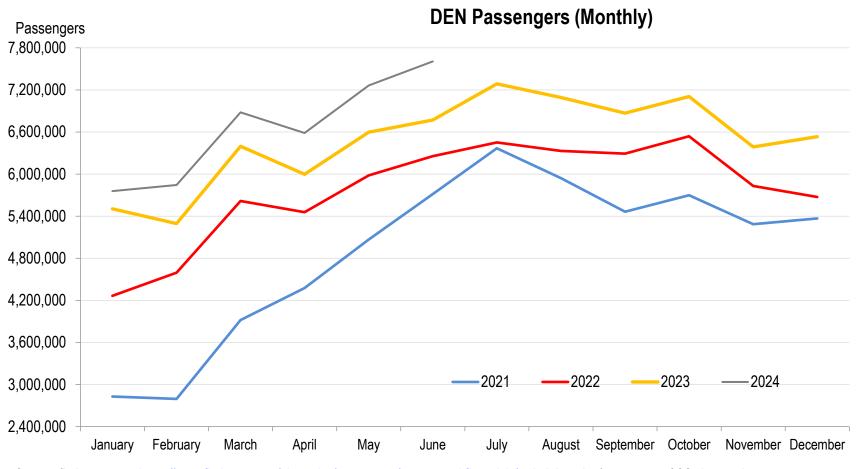
The growth rate for Colorado retail sales is slightly less than the rate for U.S.

Annual Retail Sales (Billions)				
2017	\$194.6	5.4%		
2018	\$206.2	5.9%		
2019	\$224.6	9.0%		
2020	\$228.8	1.9%		
2021	\$268.3	17.3%		
2022	\$299.9	11.8%		
2023	\$302.6	0.9%		

Source: Colorado Department of Revenue, https://cdor.colorado.gov/retail-sales-reports, cber.co. Note: Not adjusted for inflation.

DEN and COS Passengers

Monthly



Air Travel

There were 39.9 million passengers through DIA in the first six months of 2024 (grey line), an increase of 9.2% compared to the first six months of last year.

There were 2.3 million passengers through COS in 2023. Through six months in 2024, there were 1,189,079 passengers, a YOY increase of 15.9%.

Year	DIA Passengers	% Change
2016	58,266,515	2016
2017	61,379,396	2017
2018	64,494,613	2018
2019	69,015,703	2019
2020	33,741,129	2020
2021	58,828,552	2021
2022	69,286,461	2022
2023	77,837,917	2023

Source: flydenver.com, https://www.flydenver.com/about-den/governance/reports-and-financials/, administration/governance, COS airport, cber.co.

Colorado Forecast

Colorado Economic Forecast 2024

In 2024, the Colorado real GDP growth rate will be 2.1%, slightly below the U.S. rate.

The job market will taper off to about 50,000 in 2024. The unemployment rate will increase significantly but remain lower than the U.S. rate.

Retail sales for 2024 will remain sluggish. Inflation has declined, but it is more of a problem in Colorado than in many other states. Other challenges include high energy and housing costs, labor shortages, and elevated interest rates.

Colorado Economic Forecast					
	2021	2022	2023	2024	
Real GDP Value (billions) (chained 2017)	\$406.96	\$416.11	\$430.20	\$439.40	
% Change Real GDP	6.8%	2.2%	3.4%	2.1%	
CES Employment (thousands)	2,750.9	2,869.7	2,942.0	2,992.0	
Annual Change (thousands)	98.2	118.8	72.3	50.0	
% Change	3.7%	4.3%	2.5%	1.7%	
Unemployment Rate	5.5%	3.1%	3.2	3.7%	
Retail Sales (billions)	\$268.3	\$299.9	\$302.6	\$308.8	
% Change	17.3%	11.8%	0.9%	2.0%	
Consumer Price Index (CPI)	281.8	304.4	320.3	331.0	
,	3.5%	8.0%	5.2%	3.3%	
DIA Passengers (millions)	59.0	69.0	77.8	82.0	
Single Family (SF) Permits	30,246	24,000	20,000	20,000	
Multi-family (MF) Permits	26,278	25,000	19,000	15,000	
Oil Production (thousands) barrels	153,423	160,149	163,932	165,000	

More than 80 million passengers will pass through DIA in 2024. There will be increased travel activity at the Colorado Springs airport.

The total number of SF and MF 2024 building permits will be less than in 2023. There will be weaker MF growth. The construction (housing) and real estate markets will remain volatile in 2024. Office vacancies will remain at high levels.

Annual production of crude oil has stabilized at more than 160 million barrels. Fossil fuels will play an integral role in the U.S. and Colorado economies in the future.

cber.co Economic Outlook and Trends through July 2024 Colorado and the United States

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Gary Horvath has produced annual employment forecasts of the state economy for over 30 years. They have been supplemented by monthly economic updates and indices that track economic performance over the short term. In addition, he has directed three statewide analyses that included reviews of all 64 county economies.

Horvath was the principal investigator for a state and federally funded project to prepare a nanotechnology roadmap for Colorado. As well, he was a co-founder of the Colorado Photonics Industry Association, a trade group for Colorado's Photonics cluster. Horvath has been an active board member of the group since its inception.

Horvath has also served on the Board of Directors for the Economic Development Council of Colorado, Northwest Denver Business Partnership, Adams County Regional Economic Partnership, and Broomfield Economic Development Corporation. Horvath has also been the chair of the photonics/electronics committee in the Governor's Office of Economic Development and International Trade early stage and proof of concept Advanced Industries grant program, and he served on the 2021 Colorado Legislative Redistricting Commission.