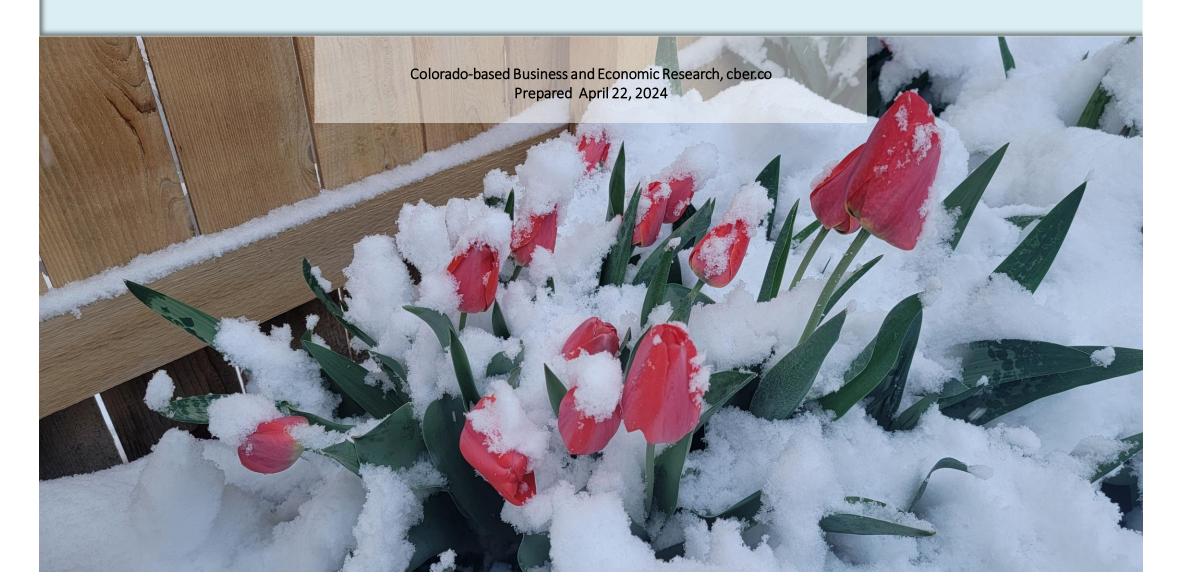
Economic Outlook and Trends through March 2024 United States and Colorado



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. Economists continue to have mixed opinions about the future of the U.S. and Colorado economies, although most opinions are much more optimistic than one year ago.

There was modest growth in Q1 2024. Growth will be slower in Q2 and Q3 as consumers struggle to balance their savings, debt, investment, and spending. Consumers and businesses will struggle with "high" interest rates.

Inflation continues to follow a bumpy path downward. There is uncertainty about the number of rate cuts in 2024.

Contents

This chartbook highlights the following topics.

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

U.S. Forecast, Gross Domestic Product, and Disposable Income

United States Forecast The Conference Board Forecast

The Conference Board (TCB) U.S. Forecast

TCB United States Forecast

The Conference Board U.S. Economic Forecast is the base for this analysis. The April forecast showed minor increases in many areas.

False Alarms

- Beginning in the second half of 2022, TCB called for a shallow recession at the end of 2022 or early 2023.
- The August 2023 forecast called for a mild recession in Q4 2023 and Q1 2024.
- More recently, TCB called for negative real GDP growth in Q2 and Q3 of 2024.
- In these cases, the TCB forecasts made sense at the time, but the recessions did not happen.

What is Likely to Happen

- As inflation dropped, discussions transitioned from rate hikes to rate cuts. Today, there is uncertainty about the number of cuts.
- There will not be a recession in 2024; however, real GDP growth will be less than 1.0% in Q2 and Q3.

Drivers

The TCB forecast identified the following drivers:

- · Increased optimism for the economy.
- Spending on infrastructure investments will continue to support growth.
- The labor markets will remain tight but resilient.

Headwinds

The TCB forecast identified the following headwinds:

- High interest rates have curtailed business investment, and the issuance of building permits.
- The labor force is shrinking as companies retain workers and Baby Boomers retire.
- Volatility caused by fiscal policy and government debt could impact government spending.
- Slower gains in personal income, reduced savings levels, and increased consumer debt will reduce personal consumption.
- The momentum from inflation reduction has slowed.
- Consumers will struggle to balance their income, debt, savings, and spending.

U.S. Real GDP Growth

The Conference Board Forecast (April 11,2024)

Real GDP and Economic Growth

The Conference Board forecast projects real GDP growth of 2.2% in 2024. Real disposable income will increase by 1.2%, and Real personal consumption will increase by 1.7% in 2024. Residential investment will increase by 3.9% in 2024, and non-residential investment will change by 2.5%. Government spending will be solid in 2024 (3.4%), down from 4.1% in 2023.

Other Economic Factors

There will be slower growth in exports in 2024, a decrease from 2.6% to 2.1%. The U.S. unemployment rate will be 4.0% in 2024. The annual PCE inflation will be 2.2% in 2024, and the core rate will be 2.4%. Rate cuts will begin in mid-to-late 2024, and the Fed Funds rate will decline to 4.375%. Rates will reach 3.375% in 2025.

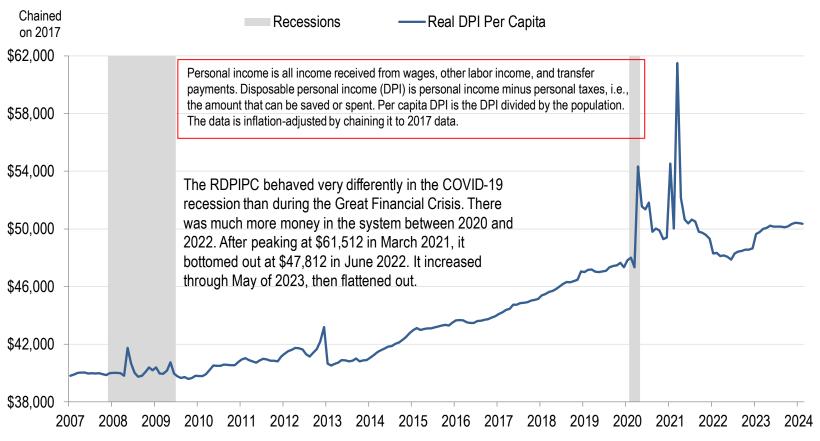
Conference Board US Real GDP Growth Forecast

	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%	2.3%	0.6%	0.6%	1.2%	2.5%	2.2%	1.5%
Real Disposable Income	10.8%	3.3%	0.5%	2.0%	1.1%	0.7%	0.5%	1.0%	4.2%	1.2%	1.4%
Real Personal Consumption	3.8%	0.8%	3.1%	3.3%	2.3%	1.0%	0.3%	0.9%	2.2%	1.7%	1.3%
Residential Investment	-5.3%	-2.2%	6.7%	2.8%	7.0%	4.0%	1.0%	2.0%	-10.6%	3.9%	2.8%
Nonresidential Investment	5.7%	7.4%	1.5%	3.8%	3.3%	0.7%	0.9%	2.0%	4.5%	2.5%	2.5%
Total Gov't. Spending	4.8%	3.3%	5.8%	4.6%	2.6%	2.6%	2.5%	2.4%	4.1%	3.4%	2.4%
Exports	6.8%	-9.3%	5.4%	5.0%	3.0%	1.0%	0.5%	2.0%	2.6%	2.1%	2.3%
Unemployment Rate	3.5%	3.6%	3.7%	3.7%	3.8%	3.9%	4.1%	4.2%	3.6%	4.0%	4.0%
PCE Inflation (%Y/Y)	5.0%	3.9%	3.3%	2.8%	2.5%	2.4%	2.1%	2.0%	3.7%	2.2%	2.0%
Core PCE Inflation (%Y/Y)	4.8%	4.6%	3.8%	3.2%	2.8%	2.4%	2.3%	2.2%	4.1%	2.4%	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 DPI Per Capita (RDPIPC)

In February 2024, RDPIPC was \$50,346. It was down from the prior month and 1.1% greater than February 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	ge)
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%
	2016 2017 2018 2019 2020 2021 2022	Year RDPIPC 2016 \$43,659 2017 \$44,710 2018 \$46,057 2019 \$47,226 2020 \$50,053 2021 \$51,567 2022 \$48,317

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

2023 Colorado GDP Sorted by Sector (Current Dollars)

20	2023 Colorado GDP Sorted by Sector (Current Dollars)									
		GDP Current Dollars				2019-2023	Location	Quotient		
Industry		2019		2022		2023	2022-2023_	CAGR	2023_	LQ Rank_
Real estate and rental and leasing	\$	59,035	\$	74,334	\$	81,798	10.0%	8.5%	1.17	6
Professional, scientific, and technical services	\$	39,274	\$	51,138	\$	58,034	13.5%	10.3%	1.40	2
State and local government	\$	32,419	\$	36,661	\$	39,396	7.5%	5.0%	0.98	12
Construction	\$	24,636	\$	28,666	\$	31,205	8.9%	6.1%	1.36	3
Retail trade	\$	22,336	\$	29,126	\$	31,085	6.7%	8.6%	0.94	23
Information	\$	22,648	\$	30,170	\$	31,071	3.0%	8.2%	1.11	7
Health care and social assistance	\$	24,715	\$	28,751	\$	30,667	6.7%	5.5%	0.79	17
Wholesale trade	\$	22,578	\$	27,593	\$	27,975	1.4%	5.5%	0.91	14
Finance and insurance	\$	22,427	\$	26,685	\$	26,197	-1.8%	4.0%	0.69	19
Accommodation and food services	\$	14,286	\$	18,733	\$	21,366	14.1%	10.6%	1.23	5
Transportation and warehousing	\$	13,385	\$	18,144	\$	19,222	5.9%	9.5%	1.04	11
Durable goods manufacturing	\$	15,790	\$	17,994	\$	18,460	2.6%	4.0%	0.64	20
Mining and oil and gas extraction	\$	14,390	\$	21,183	\$	16,349	-22.8%	3.2%	2.26	1
Administrative services	\$	12,269	\$	14,652	\$	15,109	3.1%	5.3%	0.93	13
Federal civilian government	\$	9,524	\$	11,302	\$	12,303	8.9%	6.6%	1.08	8
Other services (personal)	\$	9,434	\$	11,139	\$	12,143	9.0%	6.5%	1.07	9
Nondurable goods manufacturing	\$	8,499	\$	10,400	\$	10,635	2.3%	5.8%	0.44	21
Management of companies and enterprises	\$	8,268	\$	9,445	\$	10,130	7.3%	5.2%	1.05	10
Arts, entertainment, and recreation	\$	5,934	\$	6,552	\$	7,730	18.0%	6.8%	1.28	4
Utilities	\$	4,513	\$	6,766	\$	6,814	0.7%	10.8%	0.83	16
Military	\$	5,286	\$	6,403	\$	6,581	2.8%	5.6%	0.88	15
Educational services	\$	3,549	\$	4,115	\$	4,490	9.1%	6.1%	0.75	18
Agriculture, forestry, fishing and hunting	\$	2,506	\$	1,340	\$	1,631	21.7%	-10.2%	0.34	22
Total All Industries	\$	397,702	.\$	491,289	\$	520,389	5.9%	7.0%		_

Colorado-based Business and Economic Research https://doi.org/10.1001/j.com/10.1001/j.

GDP sorted by the 2023 sector values. The top three sectors are RERL, PST, and state and local government. Construction, retail trade, information, and health care have similar values.

The table to the left shows the Colorado

Columns 4 and 5 show the growth rate for each sector between 2022-2023 (5.9%) and 2019-2023 (7.0% CAGR). Data highlighted in green had growth rates above these averages. Growth was more broad-based in 2022-2023. Thirteen of the 23 sectors evaluated expanded faster than the state average. Only seven sectors outperformed the state average from 2019 to 2013.

The final two columns list location quotients (LQ) for all sectors. Those in green have an LQ greater than 1.0, i.e., they are a competency for Colorado. For example, mining has the top LQ at 2.26. Sectors with LQs less than 1.0 indicate a sector that is not a significant competency.

Source: BEA, Current Dollars, cber.co.

Population – The Economy – People Fill Jobs

Change in Colorado and U.S. Population 2020 vs. 2023

Rank	State	2020	2023	Change	% Change
1	.California	39,503,200	38,965,193	-538,007	-1.4%
2	.Texas	29,234,361	30,503,301	1,268,940	4.3%
3	.Florida	21,591,299	22,610,726	1,019,427	4.7%
4	.New York	20,104,710	19,571,216	-533,494	-2.7%
5	.Pennsylvania	12,995,477	12,961,683	-33,794	-0.3%
6	.Illinois	12,790,357	12,549,689	-240,668	-1.9%
7	.Ohio	11,798,292	11,785,935	-12,357	-0.1%
8	.Georgia	10,732,390	11,029,227	296,837	2.8%
9	.North Carolina	10,453,812	10,835,491	381,679	3.7%
10	.Michigan	10,070,627	10,037,261	-33,366	-0.3%
11	.New Jersey	9,272,392	9,290,841	18,449	0.2%
12	.Virginia	8,637,193	8,715,698	78,505	0.9%
13	.Washington	7,724,566	7,812,880	88,314	1.1%
14	.Arizona	7,186,683	7,431,344	244,661	3.4%
15	.Tennessee	6,926,091	7,126,489	200,398	2.9%
16	.Massachusetts	6,997,713	7,001,399	3,686	0.1%
17	.Indiana	6,789,098	6,862,199	73,101	1.1%
18	.Missouri	6,154,426	6,196,156	41,730	0.7%
19	.Maryland	6,173,689	6,180,253	6,564	0.1%
20	.Wisconsin	5,896,700	5,910,955	14,255	0.2%
21	.Colorado	5,785,219	5,877,610	92,391	1.6%
22	.Minnesota	5,710,578	5,737,915	27,337	0.5%
23	.South Carolina	5,132,151	5,373,555	241,404	4.7%
24	.Alabama	5,031,864	5,108,468	76,604	1.5%
25	.Louisiana	4,652,022	4,573,749	-78,273	-1.7%
26	.Kentucky	4,508,155	4,526,154	17,999	0.4%

Population

About 54% of the U.S. population resided in the top 10 states in 2023, and the population declined in 6 states between 2020 and 2023 (highlighted in red). Thanks to Texas and Florida, the population in these 10 states increased by 1.5 million, or 0.9%.

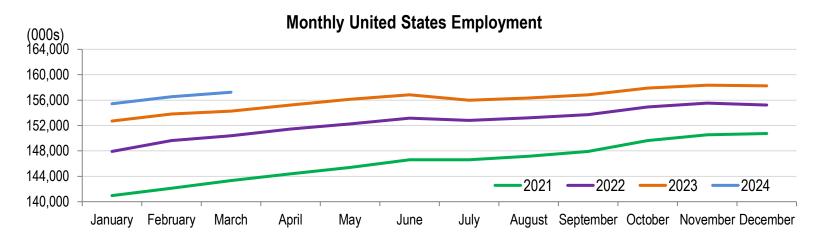
The Colorado population increased by 92,391 between 2020 and 2023, or about 1.6%. It has 5.9 million people and is the 21st largest state. The population increased the most in the Front Range metro areas.

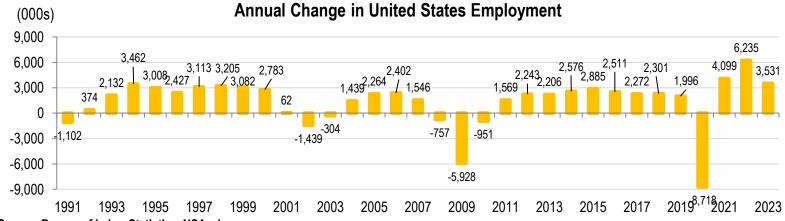
The population in the 40 smallest states and the District of Columbia accounted for 46% of the total in 2023. It increased by about 1.9 million in these states. Seven of these 40 states experienced a decrease in population between 2020 and 2023.

Rank	State	2020	2023	Change	% Change
27	.Oregon	4,245,044	4,233,358	-11,686	-0.3%
28	.Oklahoma	3,965,234	4,053,824	88,590	2.2%
29	.Connecticut	3,577,586	3,617,176	39,590	1.1%
30	.Utah	3,283,982	3,417,734	133,752	4.1%
31	.lowa	3,190,904	3,207,004	16,100	0.5%
32	.Nevada	3,115,840	3,194,176	78,336	2.5%
33	.Arkansas	3,014,348	3,067,732	53,384	1.8%
34	.Kansas	2,938,124	2,940,546	2,422	0.1%
35	.Mississippi	2,958,409	2,939,690	-18,719	-0.6%
36	.New Mexico	2,118,488	2,114,371	<mark>-4,117</mark>	-0.2%
37	.Nebraska	1,963,273	1,978,379	15,106	0.8%
38	.ldaho	1,849,339	1,964,726	115,387	6.2%
39	.West Virginia	1,791,562	1,770,071	-21,491	-1.2%
40	.Hawaii	1,451,181	1,435,138	-16,043	-1.1%
41	.New Hampshire	1,378,702	1,402,054	23,352	1.7%
42	.Maine	1,364,517	1,395,722	31,205	2.3%
43	.Montana	1,087,211	1,132,812	45,601	4.2%
44	.Rhode Island	1,096,444	1,095,962	-482	0.0%
45	.Delaware	991,862	1,031,890	40,028	4.0%
46	.South Dakota	887,852	919,318	31,466	3.5%
47	.North Dakota	779,563	783,926	4,363	0.6%
48	.Alaska	732,964	733,406	442	0.1%
49	.District of Columbia	670,839	678,972	8,133	1.2%
50	.Vermont	642,936	647,464	4,528	0.7%
51	.Wyoming	577,664	584,057	6,393	1.1%
Total	United States	331,526,933	334,914,895	3,387,962	1.0%

U.S. and Colorado Employment and Unemployment and Earnings

Employment and Change in Employment United States





Source: Bureau of Labor Statistics, NSA, cber.co.

U.S. Employment

Average monthly employment through March 2024 was 156.4 million,1.8% greater than for the same period last year. The average monthly change was 234,800.

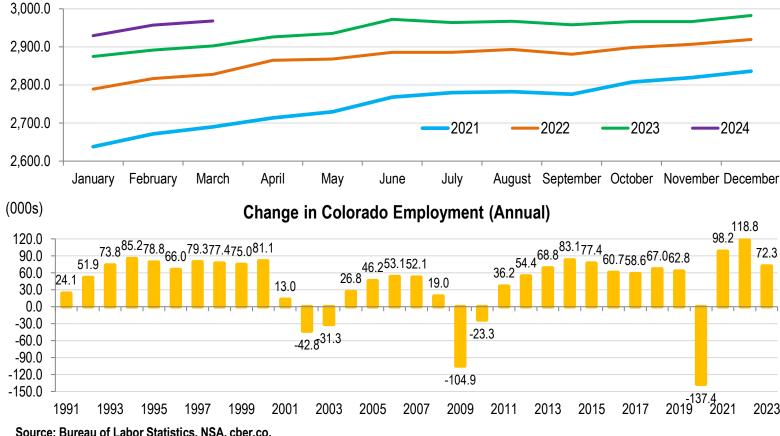
Average annual employment for 2023 was 156.1 million, an increase of 2.3% or about 3.5 million over 2022, while the average monthly change in employment for 2023 was 294,200.

As seen in the chart (lower left), YOY changes in employment from 2012 to 2019 ranged from a low of 2.0 million in 2019 to 2.9 million in 2015.

The change in employment for 2024 will return to pre-pandemic levels or lower.

Employment and Change in Employment Colorado

Colorado Employment



Colorado Employment and Change

Average monthly employment (NSA) through March 2024 was 62,000 more than in 2023, a change of about 5,164 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.

12

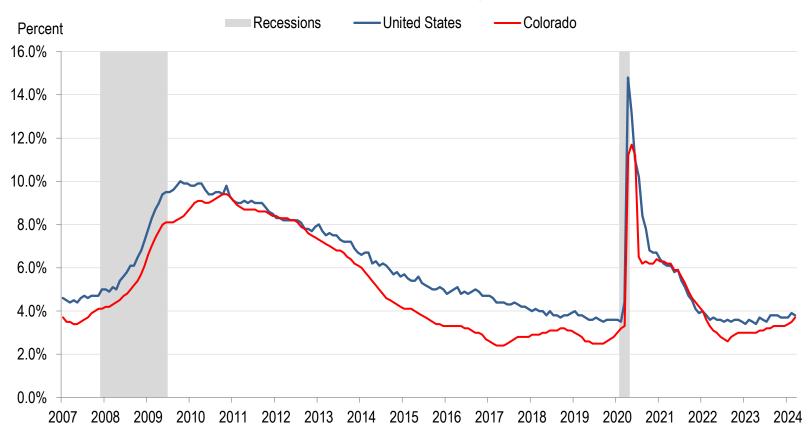
Source: Bureau of Labor Statistics, NSA, cber.co.

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Unemployment Rate

United States and Colorado

U.S. and Colorado Unemployment



Unemployment Rate

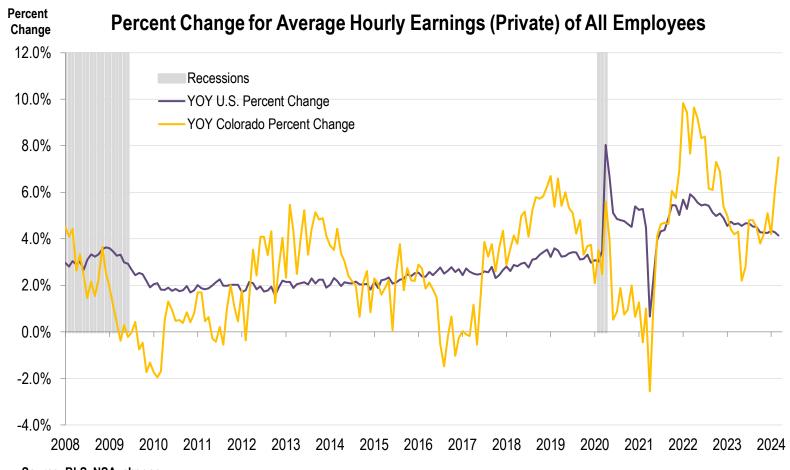
The Colorado unemployment rate was 3.5% (red) in February 2024, and the U.S. rate was 3.9% (blue). The economy operates inefficiently when the unemployment rate is this low.

The U.S. and Colorado unemployment rates will increase in 2024.

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%		

Source: BLS, SA, cber.co.

Percent Change for Average Hourly Earnings of All Employees (Private) U.S. and Colorado



Source: BLS, NSA, cber.co.

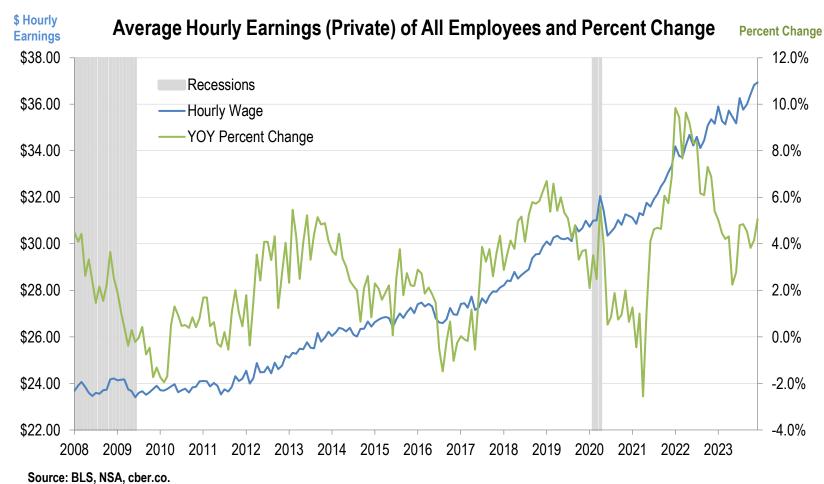
U.S. vs. Colorado **Percent Change in Hourly Earnings**

Historically, the change in Colorado hourly earnings (yellow) have been more volatile than U.S. earnings (purple).

In March 2024 private hourly earnings for Colorado increased 7.5% and the U.S. rate was up 4.1%. The YOY Colorado earnings growth rate peaked at 9.4% in February 2022, and the U.S. earnings growth rate peaked at 8.0% in April 2020.

US Hourly Earnings, Change and CPI				
Year	CPI	Earnings	Change	
2017	2.1%	\$26.31	2.6%	
2018	2.5%	\$27.10	3.0%	
2019	1.7%	\$28.00	3.3%	
2020	1.2%	\$29.36	4.9%	
2021	5.3%	\$30.61	4.3%	
2022	8.5%	\$32.26	5.4%	
2023	3.8%	\$33.72	4.5%	
Source: I	BLS, cber.co			

Average Hourly Earnings of All Employees (Private) Colorado



Hourly Earnings, Percent Change, and CPI February 2024, private hourly earnings for Colorado (blue) were \$37.19, a YOY increase of 5.4% (green).

The rate of YOY earnings growth peaked at 9.4% in February 2022.

For 2021 through 2023, the change in hourly earnings was less than the increase in inflation.

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			

Colorado-based Business and Economic Research https://doi.org/10.1001/j.com/10.1001/j.

Inflation

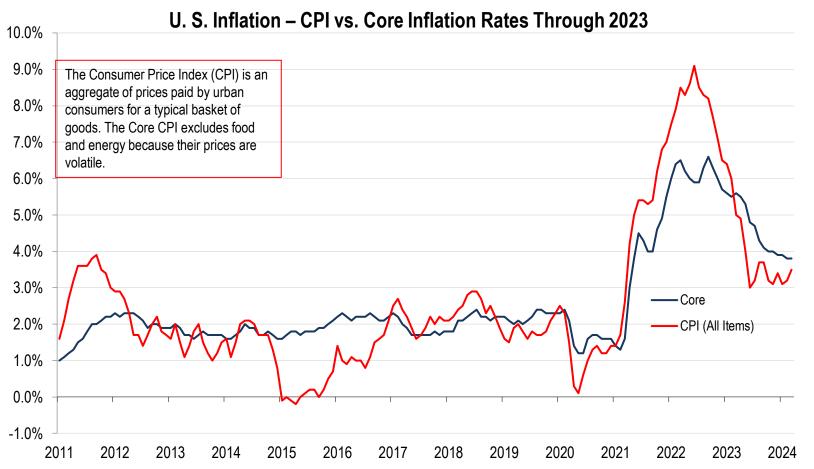
From "Transitory Inflation" to "Higher for Longer"

Inflation Trends

- U.S. inflation decreased since the NSA CPI rate peaked at 9.1% in June 2022 and the core rate topped at 6.6% in September 2022.
- By December 2023, the CPI rate had fallen to 3.4%, and the core rate had dropped to 3.9%.
- In 2024, the CPI rate dropped slightly and has moved sideways.
- The PCE Price Index, used by the Federal Reserve, reported an inflation rate of 2.6% in December 2023. The peak for the PCE Index was 7.1% in June 2022.
- The annual Denver MSA CPI has been more than the U.S. CPI for eight of the past ten years.
- For 2021, 2022, and 2023, U.S. and Denver MSA inflation increased by 17.7%, a CAGR of 5.7%.

Annual CPI				
		Denver		
Year	U.S.	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.co)		

CPI Inflation U.S. CPI vs. Core Inflation



U.S. CPI vs. Core Inflation

In March 2024, the CPI rate (red) was 3.5%, and the core rate (blue) was 3.8%.

The CPI rate peaked at 9.1% in June 2022. By December 2022, the YOY CPI rate had dropped to 6.5%. In February 2024, the rate was 3.2%.

Core inflation peaked at 6.6% in September 2022 and declined to 5.7% in December 2022. In February 2024, it was 3.8%.

The inflation rate is declining; however, consumers struggle with the accumulated effect of three years of inflation. The war on inflation will continue through 2024 and possibly into 2025.

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

Denver MSA All Items CPI vs. Core (All Items less Food and Energy) 10.0% 8.0% ·CPI (All Items) 6.0% 4.0% 2.0% 0.0% -2.0% 2019 2020 2021 2022 2023 2024

Denver MSA CPI vs. Core Inflation

The Denver MSA inflation rate is generally higher than the U.S. rate.

March 2024 was an exception. The U.S. CPI rate was 3.5%, and the Denver MSA rate was 2.8%.

The U.S. March core rate was 3.8% compared to 3.4% for the Denver MSA.

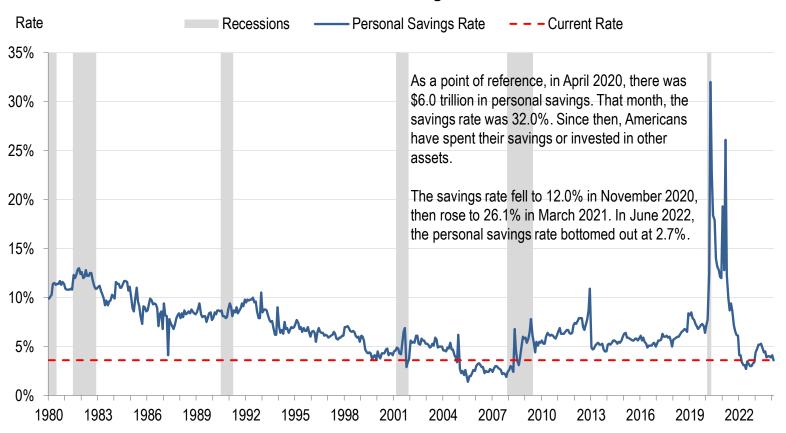
Source: Bureau of Labor Statistics, NSA, Note: Colorado data is only available on a bi-monthly basis since 2019, cber.co.

Saving, Borrowing, Consumption, and the Wealth Effect

U.S. Personal Saving Amount and Rate

Percentage of Disposable Personal Income (DPI)





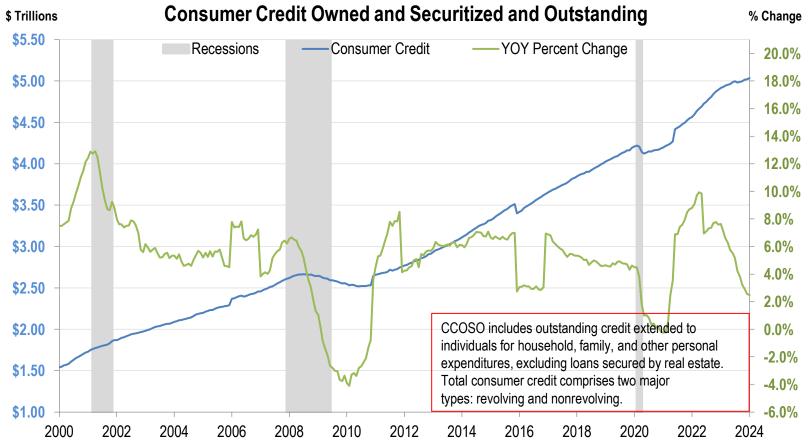
Personal Saving Rate

The March 2024 personal savings rate was 3.6%, and savings were \$745.7 billion, the lowest level since December 2022. In December 2023, savings were \$766.0 billion, and a savings rate of 3.7%.

Year End Personal Savings (Billions) and Rate				
2017	\$748.0	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.

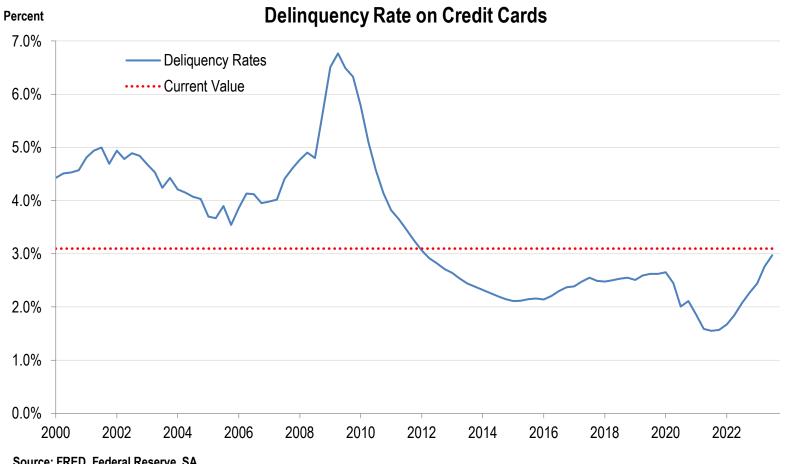
Consumer Credit

In February 2024, the YOY rate of outstanding consumer credit (including consumer loan defaults) increased by 2.5% (green). Securitized credit has been more than \$4.5 trillion since November 2021 (blue).

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: Fl	RED, G-19, cber.c	:0		

Delinquency Rate on Credit Cards

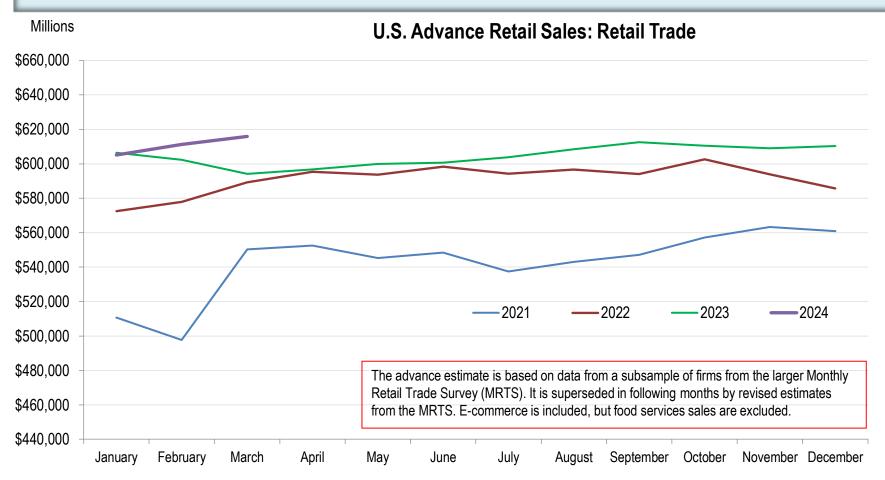


Delinquency Rate on Credit Cards

At the end of Q4 2023, the credit card delinquency rate rose to 3.1%, the highest rate since Q3 2012. The current delinquency rate is below the rate between 2000 and 2012.

Source: FRED, Federal Reserve, SA.

U.S. Advance Retail Sales: Retail Trade Monthly



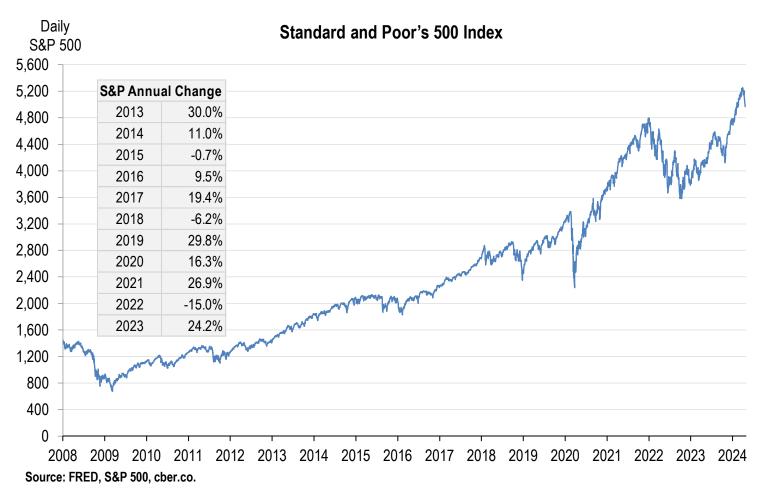
Advance Retail Sales

Retail sales were weak in 2023, and they were weak during the first two months of 2024. YTD sales through March (purple) were 1.6% greater than for the same period in 2023 (green).

Consumers are spending more than expected, given they have reduced their savings and increased their credit card debt.

Annual	Retail Sales	(Trillions)
2017	\$5.04	4.4%
2018	\$5.25	4.1%
2019	\$5.39	2.7%
2020	\$5.57	3.3%
2021	\$6.51	16.9%
2022	\$7.10	8.9%
2023	\$7.26	2.3%
Source: Cer	nsus, cber.co	

Standard and Poor's 500 Index



Market Returns

2020 COVID-19 Policies

February 19, 20203,386 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%

Year-End 2021 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

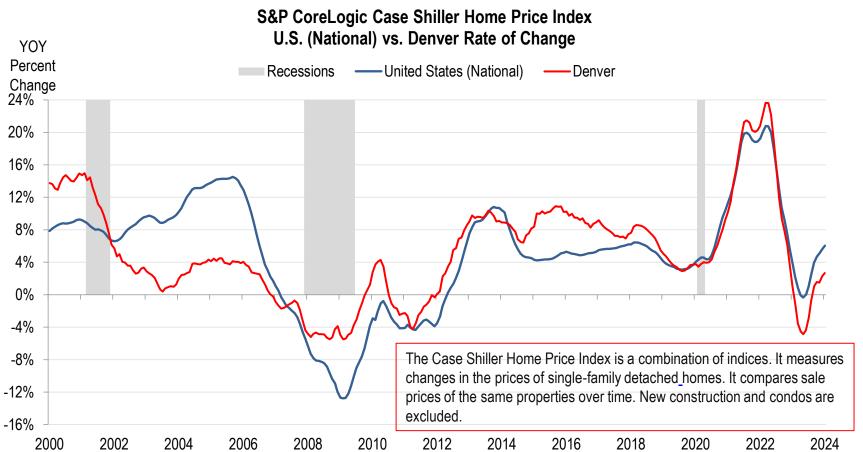
Helped by a Santa Claus rally in December December 29, 2023 4,739 YTD change **+24.2%**

2024

On April 19 4,967.23 YTD change +4.1%.

Case Shiller Home Price Index

YOY National vs. Denver Rate of Change



Change in S&P CoreLogic Case Shiller Index

In January 2024, the YOY change in the U.S. index was +6.0%, and the Denver index changed by 2.3%. Compared to a year ago, housing prices are accelerating.

In retrospect, the 2019 housing market favored buyers, and the U.S. YOY appreciation rate was about 4.0%.

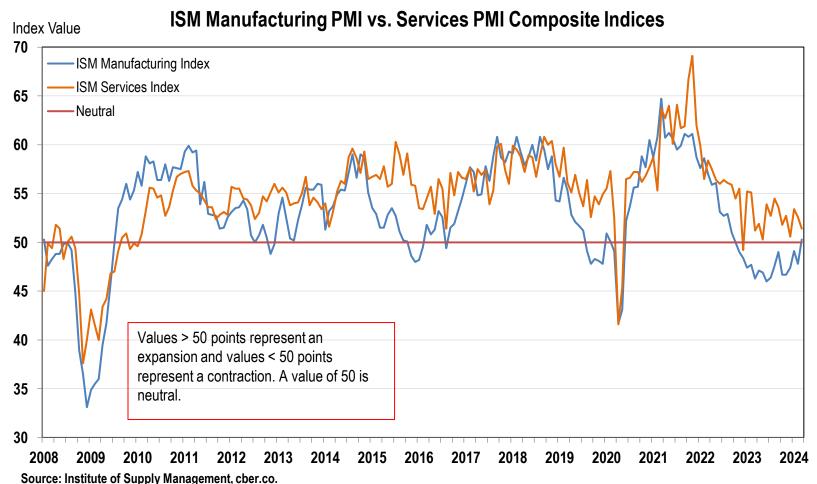
In the summer of 2020, the market began to favor sellers. In August 2021, YOY appreciation for Denver and the U.S. peaked above 20.0%.

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

U.S. Indicators

ISM Purchasing Managers Composite Indices

Manufacturing vs. Services



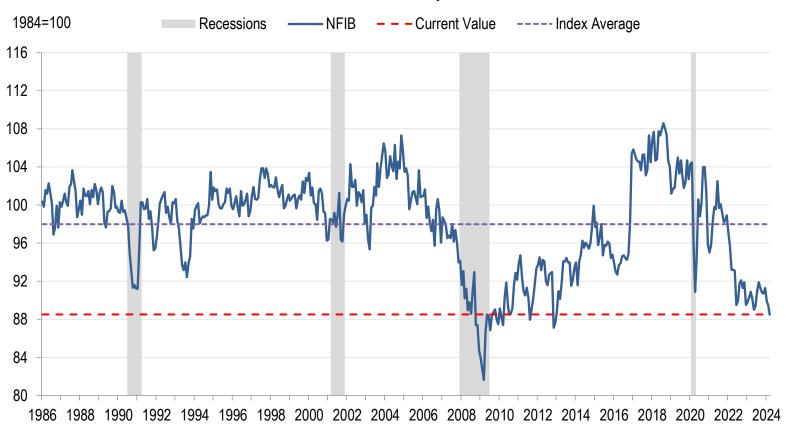
Manufacturing and Services PMI

The ISM manufacturing index (blue) has trended downward after peaking at 64.7 in March 2021. It dropped below 50 in November 2022 and remained there for 2023. It was 50.2 in March 2024. Four of the six largest industries registered growth in March.

The ISM service index (orange) has trended downward since November 2021. It fell below 50 in December 2022 but was above 50 for all of 2023. It fell to 51.4 in March 2024. All 12 industries in the study posted gains in March.

NFIB Small Business Optimism Index United States

NFIB Small Business Optimism Index



NFIB Small Business Index

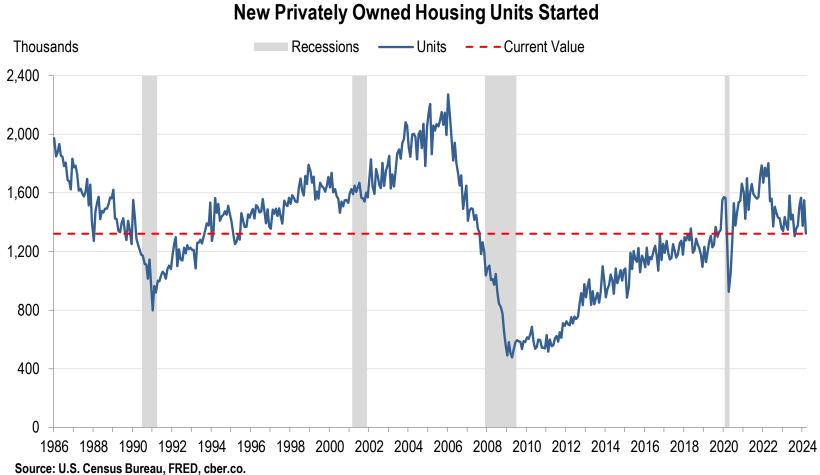
In March 2024, the NFIB index dropped to 88.5 (red dotted line), the 26th consecutive month below the 49-year average of 98.0 (purple dotted line). The March value was the lowest since 2012.

Six of the ten index components decreased. The biggest concern for businesses was inflation, sales, and profits. Overall, business owners are pessimistic about the economy.

The NFIB monthly SBET report is available at https://www.nfib.com/.

Source: NFIB, cber.co.

New Privately-Owned Housing Units Started United States



New Privately Owned Housing Units Started

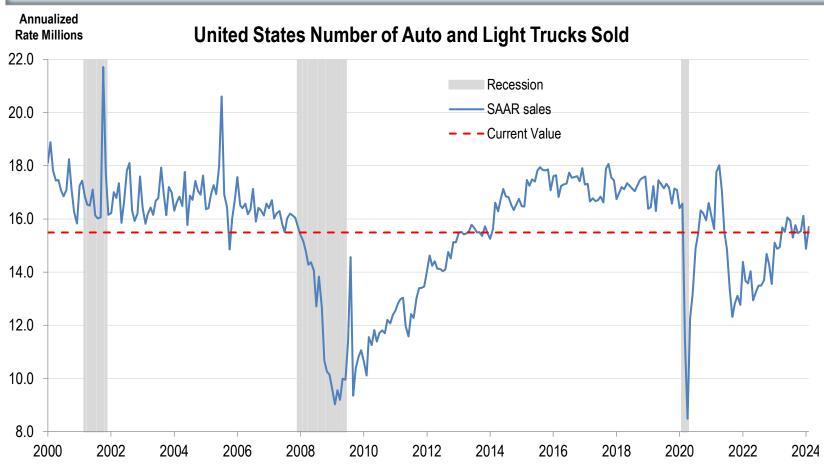
The number of housing starts has been volatile. Starts have been below 1.9 million units SAAR since May 2022. There is demand for housing, even with high interest rates; however, there were only 1.3 million starts in March 2024 (red-

dotted line).

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

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

Monthly (Seasonally Adjusted Annualized Rate in Millions)



ALT Sales SAAR

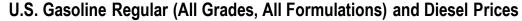
In March 2024, sales increased to 15.5 million (red dotted line).

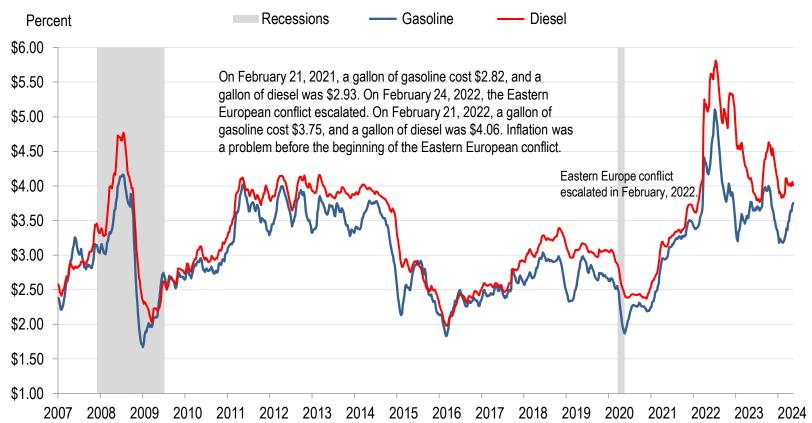
Sales in 2023 ranged from 14.8 to 16.1 million and annual sales were 15.5 million. The industry faces challenges from elevated interest rates and a lack of enthusiasm for EVs.

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	
	Year 2016 2017 2018 2019 2020 2021 2022	

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

Weekly Gasoline (Regular All Formulations) and Diesel Prices United States





Gasoline and Diesel Prices

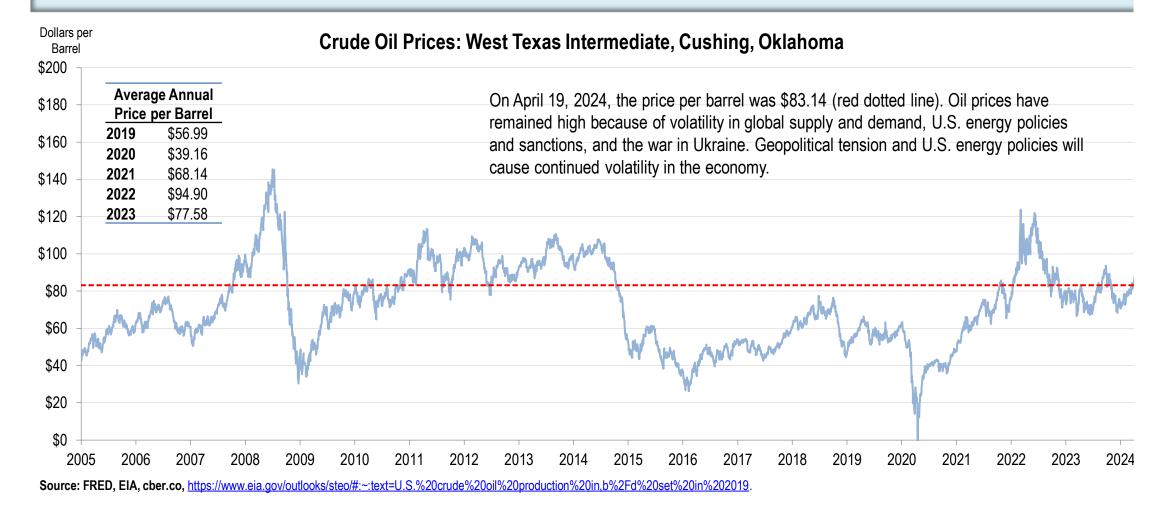
On April 15, 2024, a gallon of gasoline (blue) was \$3.75, down from a peak of \$5.11 on June 30, 2022. The price for a gallon on January 4, 2021, was \$2.34. A gallon of diesel (red) was \$4.02 on April 15, 2024, compared to its peak of \$5.78 on June 13, 2022. On January 4, 2021, the price per gallon was \$2.64.

Average Annual Price				
Year	Diesel	Gasoline		
2015	\$2.71	\$2.63		
2016	\$2.30	\$2.30		
2017	\$2.65	\$2.26		
2018	\$3.18	\$2.90		
2019	\$3.06	\$2.83		
2020	\$2.55	\$2.37		
2021	\$3.29	\$3.22		
2022	\$4.99	\$4.27		
2023	\$4.21	\$3.63		

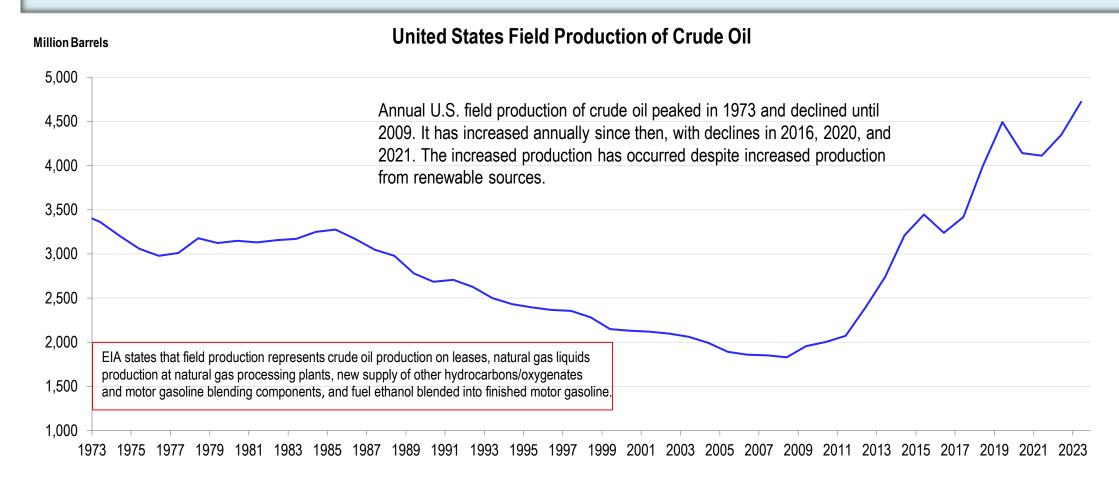
Source: FRED, EIA, https://www.eia.gov/dnav/pet/hist/LeafHandler.ashx?n=PET&s=EMM_EPMO_PTE_NUS_DPG&f=W, cber.co.

Crude Oil Prices

West Texas Intermediate



United States Annual Field Production of Crude Oil 1970 to 2023 (Million Barrels)

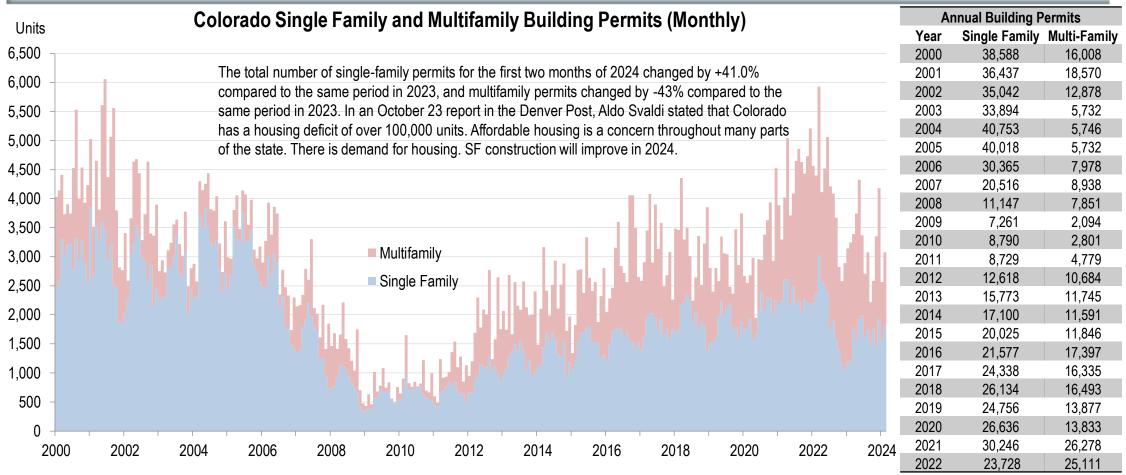


Source: EIA, cber.co.

Colorado Indicators

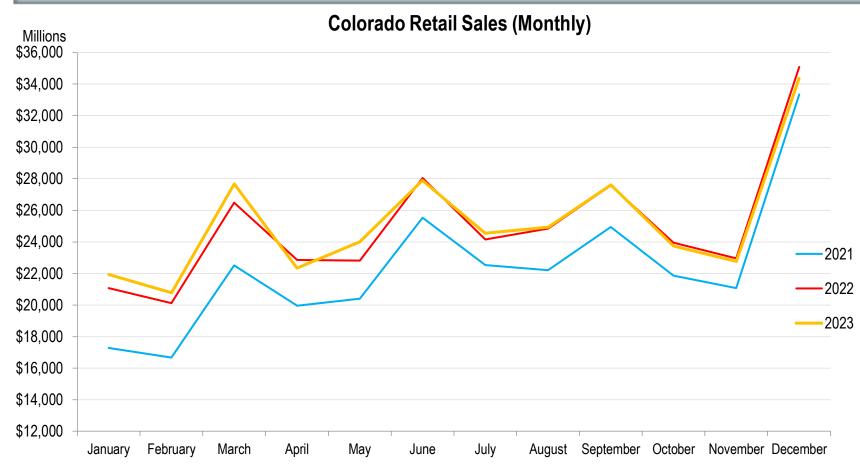
Colorado Residential Building Permits

Single Family and Multifamily Units



Source: TAMU Real Estate Center, U.S. Census Bureau, cber.co.

Colorado Retail Sales Monthly



Colorado Retail Sales

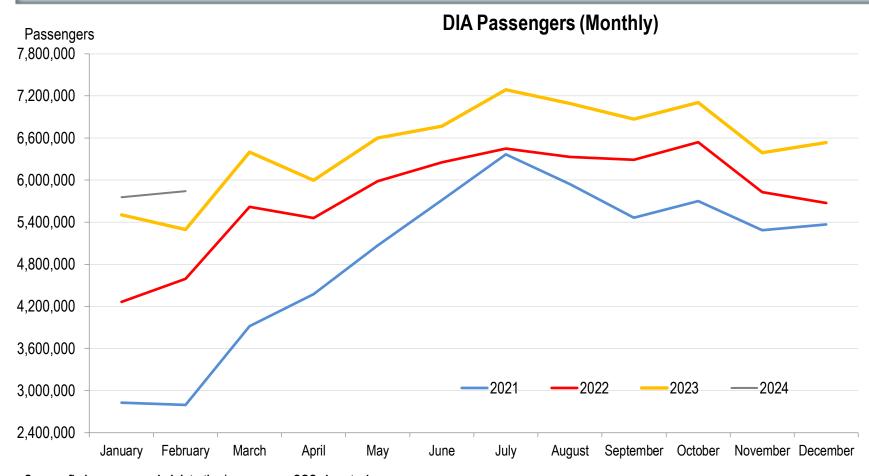
Sales for January 2024 were slightly below January 2023 (not shown on the chart). Sales for 2023 were 0.9% greater than in 2022.

The slowdown in Colorado retail sales parallels the slowdown in U.S. retail sales.

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.

Denver International Airport Passengers Monthly



Air Travel

There were 11.6 million passengers through DIA in January and February (grey line), an increase of 7.4% compared to the first two months of last year.

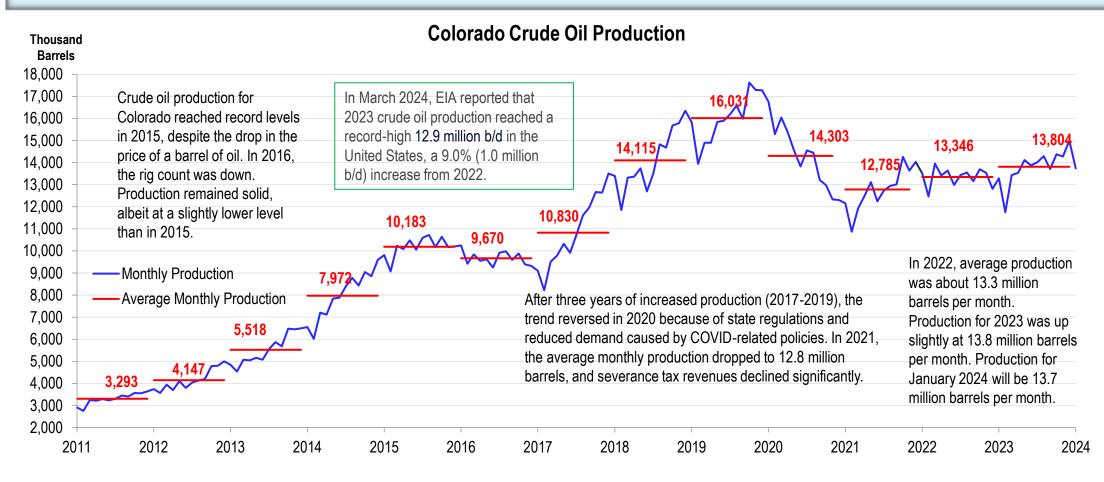
Total passengers for the Colorado Springs (COS) airport were up 9.9% in 2023. There were 2.3 million passengers during this period. There were 343,861 passengers through COS in January and February, a YOY increase of 18.6%.

Year	DIA Passengers	% Change
2023	77,837,917	12.3%
2022	69,286,461	17.8%
2021	58,828,552	74.4%
2020	33,741,129	-51.3%
2019	69,015,703	7.0%
2018	64,494,613	5.1%
2017	61,379,396	5.3%
2016	58,266,515	7.9%

Source: flydenver.com, administration/governance, COS airport, cber.co.

Colorado Field Production of Crude Oil

2011 to 2024 (Thousand Barrels)



Source: EIA, cber.co.

Trends and Forecast

Summary of Trends and Issues for 2024

Economic trends for 2024

- Economic activity and labor markets will be solid but weaker than in 2023.
- Reduced saving levels and mounting consumer debt will cause a reduction in spending.
- The PST sector and advanced technology will continue to drive the Colorado economy.
- Colorado's oil and gas industry will contribute to the economy.
- Affordable housing challenge Colorado business leaders as they attract new employees.
- Residential investment will continue to face challenges despite high demand for housing.
- Office vacancies in downtown Denver will remain high.

Wildcard Issues for 2024

- The economy will become more stable when rate hikes transition to rate
- Equity markets will remain volatile.
- There is a disconnect between Wall Street and Main Street.

- Some energy policies will not have their desired effect.

 The U.S. and international geopolitical situation is unsettled and scary.

 The wars in Eastern Europe and the Gaza Strip will become more divisive within the U.S.
- The elections will be contentious.
- Since the elimination of the Gallagher Amendment, property taxes have been an issue that affects all residents.
- Homelessness and immigration policy will remain a problem for Denver and the state.

Colorado Economic Forecast 2024

In 2024, the Colorado real GDP growth rate will be 1.9% compared to 2.1% for the U.S.

Momentum in the job market will carry into 2024. It will taper off and employment will grow at a slower rate. The unemployment rate will increase 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 other states. Other challenges include high energy and housing costs, labor shortages, and high interest rates.

Colorado Economic Forecast					
	2021	2022	2023	2024	
Real GDP Value (billions) (chained 2017)	\$406.96	\$416.11	\$430.20	\$438.4	
% Change Real GDP	6.8%	2.2%	3.4%	1.9%	
CES Employment (thousands)	2,750.9	2,869.7	2,942.0	2,984.0	
Annual Change (thousands)	98.2	118.8	72.3	42.0	
% Change	3.7%	4.3%	2.5%	1.4%	
Unemployment Rate	5.5%	3.1%	3.2	3.6%	
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 Permits	30,246	24,000	20,000	21,000	
Multi-family Permits	26,278	25,000	19,000	19,000	
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 strong travel activity at the Colorado Springs airport.

The total number of SF and MF 2024 building permits will be slightly higher than in 2023. The construction (housing) and real estate market will remain volatile in 2024. Office vacancies will remain at record-high levels.

State regulations and reduced demand (COVID-related policies) caused a sharp decline in crude oil production in 2021. Annual production has stabilized at more than 160 million barrels.

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

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ABOUT THE AUTHOR

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.