

Economic Outlook and Trends for 2024 United States and Colorado



Colorado-based Business and Economic Research, cber.co
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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. The analysis focuses on available data to forecast tendencies for 2024. A more in-depth forecast will follow the release of benchmark data on March 11, 2024.

Economists continue to have mixed opinions about the future of the U.S. and Colorado economies.

There are strong cases for each of the following scenarios.

- Solid economic growth
- Slowdown in economic activity and the labor market or a soft landing
- Slight recession or downturn.

In addition, there are mixed reviews of the performance of the equity markets – favorable and unfavorable.

We hope for the best! Slower economic activity or a recession are most likely. The economy will improve at the end of the year.

Contents

This chartbook focuses on the following topics.

- Economic Noise 2023 and a Look at 2024
- U.S. Forecast, Gross Domestic Product and Real Disposable Personal Income Per Capita
- U.S. and Colorado Population
- U.S. and Colorado Employment, Unemployment, and Earnings.
- U.S. and Colorado Inflation
- Saving, Borrowing, Consumption, and the Wealth Effect
- U.S. Industry Indicators
- Colorado Industry Indicators
- 2024 Colorado Economic Outlook

2023 Economic Noise and a Look at 2024

The first step in preparing a forecast is to look for the noise from the prior year and determine if it will create uncertainty in the coming year. Fluctuating interest rates, accumulated inflation, a slowdown in the economy, immigration policies, and geopolitical tension were prominent uncertainties in 2023 that will likely continue in 2024. In addition, the Presidential election will create uncertainty.

BLS data - In 2023, the quality of the CES employment data provided by BLS was atypically unsatisfactory. The benchmark revisions in March will report an upward revision of 25,000 to 35,000.

Economic trends during 2023

The following trends made it difficult to forecast economic performance in 2023.

- The labor market slowed; however, it remained resilient.
- Retail sales slowed as the year progressed.
- Federal funding from major programs tapered off.
- Interest rates increased, and business investment slowed.
- After two years, the last Fed rate hike was in July.
- Residential construction increased because there was greater demand.
- The wars in Eastern Europe and the Gaza Strip were costly.
- Some energy policies were less effective than desired.
- Equity markets were volatile, but markets increased.
- The 2022 supply chain problems disappeared in 2023.

Economic trends for 2024

The economy will be weak in Q2 and Q3 2024 but will become more stable in Q4 2024 and 2025.

- The 2024 economic activity and labor markets will be notably weaker than 2023.
- Office vacancies in downtown Denver will get worse.
- Rate hikes will turn to rate cuts as the economy normalizes.
- Reduced savings levels and mounting consumer debt will cause a reduction in spending.
- High tech-related industries will be drivers of the Colorado economy.
- Affordable housing will continue to challenge Colorado leaders in finding workers.

Wildcards for 2024

- Forecasts for the equity markets cover the gamut.
- The U.S. and international geopolitical situation is unsettled – and scary.
- The elections will be driven by concern about the economy.
- Colorado will learn if efforts to address homelessness are working.
- Colorado will continue to be challenged by immigration policy.

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 forecast and analysis.

What Did Not Happen

- In the second half of 2022, TCB called for a shallow recession at the end of 2022 or early 2023. Instead, the economy had modest growth.
- The August 2023 forecast called for a mild recession in Q4 2023 and Q1 2024. The Q3 2023 economy was better than expected, and modest growth occurred in October and November.
- The September, October, and November forecasts called for a slowdown in Q4 2023 and a shallow recession in Q1 2024.

What is Likely to Happen

- Real GDP growth will turn negative in Q2 and Q3, and the labor market will weaken.
- Inflation will approach the Fed's target rate.
- Interest rates will decline.

Drivers

The TCB forecast identified the following drivers:

- Elevated inflation that is moderating.
- Rate cuts are likely.
- Reduced concern about energy disruptions in the Middle East.
- Increased economic stability in Q3 and Q4 of 2024 that carries into 2025.

Headwinds

The TCB forecast identified the following headwinds:

- High interest rates have curtailed business investment – this will diminish.
- Labor markets will remain tight.
- High interest rates will reduce the number of housing permits issued.
- Volatility caused by fiscal policy and debt could impact government spending. Reduction in funding from infrastructure-related legislation.
- Reduced savings levels and increasing consumer debt will reduce personal consumption.
- Political volatility and uncertainty at all levels.

U.S. Real GDP Growth

The Conference Board Forecast (January 2024)

Real GDP and Economic Growth

The Conference Board forecast projects real GDP growth of 2.5% in 2023 and 1.2% in 2024. Real Disposable Income will increase by 1.0%, and real Personal Consumption will increase by 0.9% in 2024. Residential investment will change by 1.1% in 2024, and non-residential investment will change by -0.7% in 2024. Government spending will increase by 3.1% in 2024.

Other Economic Factors

There will be slower growth in exports in 2024, a decrease from 2.4% to 1.4% in 2024. The U.S. unemployment rate will be 3.6% in 2023 and 4.0% in 2024. The annual PCE inflation and core rates will be 2.2% in 2024. Rate cuts will begin in mid-2024, and the Fed Fund rate will decline to 4.125% in 2024 and reach 3.0% in late 2025.

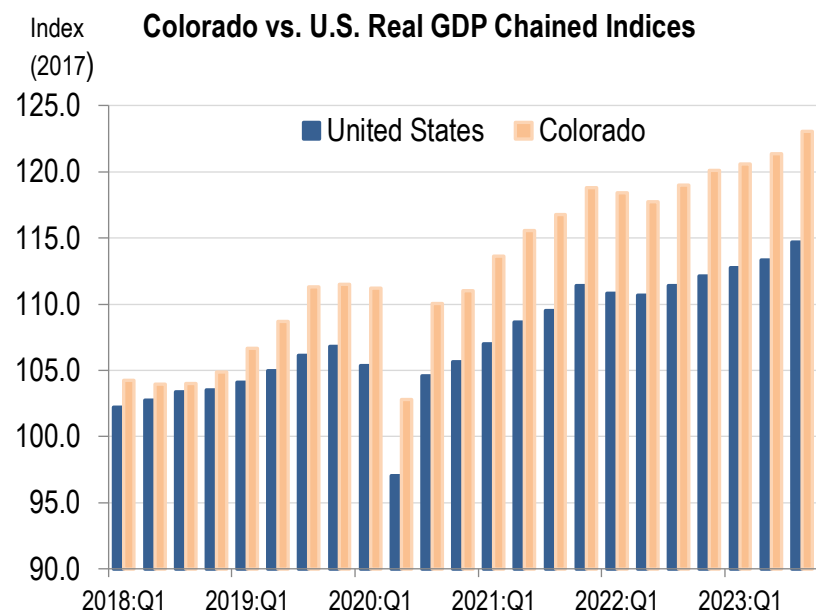
Conference Board US Real GDP Growth Forecast

	Q1 2023	Q2 2023	Q3 2023	Q4 2023	Q1 2024	Q2 2024	Q3 2024	Q4 2024	2022	2023	2024
Real GDP	2.2%	2.1%	4.9%	2.0%	1.0%	-0.7%	-0.4%	1.5%	1.9%	2.5%	1.2%
Real Disposable Income	10.8%	3.3%	-1.0%	-1.0%	1.0%	0.0%	0.0%	1.0%	-6.0%	4.2%	1.0%
Real Personal Consumption	3.8%	0.8%	3.1%	2.3%	1.1%	-0.8%	-1.0%	1.0%	2.5%	2.2%	0.9%
Residential Investment	-5.3%	-2.2%	6.7%	0.0%	0.0%	1.0%	1.0%	2.0%	-9.0%	-10.8%	1.1%
Nonresidential Investment	5.7%	7.4%	-0.1%	-1.1%	5.7%	7.4%	-0.1%	-1.1%	5.2%	4.0%	-0.7%
Total Gov't. Spending	4.8%	3.3%	5.8%	3.7%	2.5%	2.4%	2.2%	2.1%	-0.9%	4.0%	3.1%
Exports	6.8%	-9.3%	5.4%	2.0%	2.0%	1.0%	1.0%	2.0%	7.0%	2.4%	1.4%
Unemployment Rate	3.5%	3.6%	3.7%	3.7%	3.8%	3.9%	4.1%	4.3%	3.6%	3.6%	4.0%
PCE Inflation (%Y/Y)	5.0%	3.9%	3.3%	2.7%	2.5%	2.3%	2.0%	2.0%	6.5%	3.7%	2.2%
Core PCE Inflation (%Y/Y)	4.8%	4.6%	3.8%	3.2%	2.6%	2.3%	2.1%	2.0%	5.2%	4.1%	2.2%

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

GDP

Colorado GDP Index vs. U.S. GDP Index and Contribution to GDP



Source: BEA, SQGDP8, Chain-type quantity indexes for real GDP by State, cber.co.

Colorado/U.S. GDP

Between 2018 and 2023, the Colorado real GDP Index (orange) outperformed the U.S. Index (blue). The index for both was 100 in 2012. In Q3 2022, the index for Colorado was 139.6 and 123.4 for the U.S.

Colorado Chain-type Quantity Indexes for Real GDP by MSA (2017 to 2022)

Between 2017 and 2022, the Denver, Boulder, and Fort Collins MSAs led real GDP growth in Colorado. The growth rates for all three areas were greater than average for the state. The Colorado Springs MSA growth rate was slightly below the rate for the state. The other three MSAs and the Non-Metro areas had growth rates well below the rate for the state.

Year	2017	2018	2019	2020	2021	2022
Denver-Aurora-Lakewood	100	104.442	109.936	110.415	118.393	123.462
Boulder	100	103.668	113.025	111.019	118.696	123.273
Fort Collins	100	104.764	109.853	109.884	117.707	119.611
COLORADO	100	104.282	109.533	108.77	116.205	118.819
Colorado Springs	100	103.291	107.482	110.739	116.642	117.797
Pueblo	100	103.425	107.462	103.477	110.791	109.023
Grand Junction	100	104.408	106.579	103.6	107.52	107.631
Non-Metro	100	101.199	103.666	98.159	106.717	105.071
Greeley	100	111.107	117.204	106.493	108.874	99.335

Source: BEA, Index (2017) CABDP8B, cber.co.

Change in Annual Colorado GDP (Current Dollars)

Sorted by 2022 Sector GDP

Change in Annual Colorado GDP in Millions (Current Dollars)					
	2019 GDP	2022 GDP	Percent 2022 Total	2022 v. 2019 Difference	Percent Difference
Finance, insurance, real estate, rental, and leasing	\$81,462	\$101,018	20.6%	\$ 19,556	20.9%
Government and government enterprises	\$47,228	\$ 54,366	11.1%	\$7,138	7.6%
Professional, scientific, and technical services	\$39,274	\$ 51,138	10.4%	\$ 11,865	12.7%
Information	\$22,648	\$ 30,170	6.1%	\$7,521	8.0%
Retail trade	\$22,336	\$ 29,126	5.9%	\$6,790	7.3%
Health care and social assistance	\$24,715	\$ 28,751	5.9%	\$4,036	4.3%
Construction	\$24,636	\$ 28,666	5.8%	\$4,030	4.3%
Manufacturing	\$24,289	\$ 28,394	5.8%	\$4,105	4.4%
Wholesale trade	\$22,578	\$ 27,593	5.6%	\$5,015	5.4%
Mining, quarrying, and oil and gas extraction	\$14,390	\$ 21,183	4.3%	\$6,792	7.3%
Accommodation and food services	\$14,286	\$ 18,733	3.8%	\$4,447	4.8%
Transportation and warehousing	\$13,385	\$ 18,144	3.7%	\$4,759	5.1%
Administrative services	\$12,269	\$ 14,652	3.0%	\$2,383	2.5%
Other services	\$9,434	\$ 11,139	2.3%	\$1,704	1.8%
Management of companies and enterprises	\$8,268	\$ 9,445	1.9%	\$1,176	1.3%
Utilities	\$4,513	\$ 6,766	1.4%	\$2,253	2.4%
Arts, entertainment, and recreation	\$5,934	\$ 6,552	1.3%	\$617	0.7%
Educational services	\$3,549	\$ 4,115	0.8%	\$566	0.6%
Agriculture, forestry, fishing and hunting	\$2,506	\$ 1,340	0.3%	\$ (1,166)	-1.2%
Total	\$ 397,702	\$ 491,289	100.0%	\$ 93,587	100.0%

Change in Annual Colorado GDP 2019 to 2022

In 2022, 48.2% of the Colorado GDP was in the FIRE, Government, PST, and Information sectors. About 49.2% of the change between 2019 and 2022 was in these sectors. Many of the companies in the PST and Information are in the high-tech industry.

The growth in the retail sector was a result of pandemic-related spending.

The gains in mining occurred despite increased regulations.

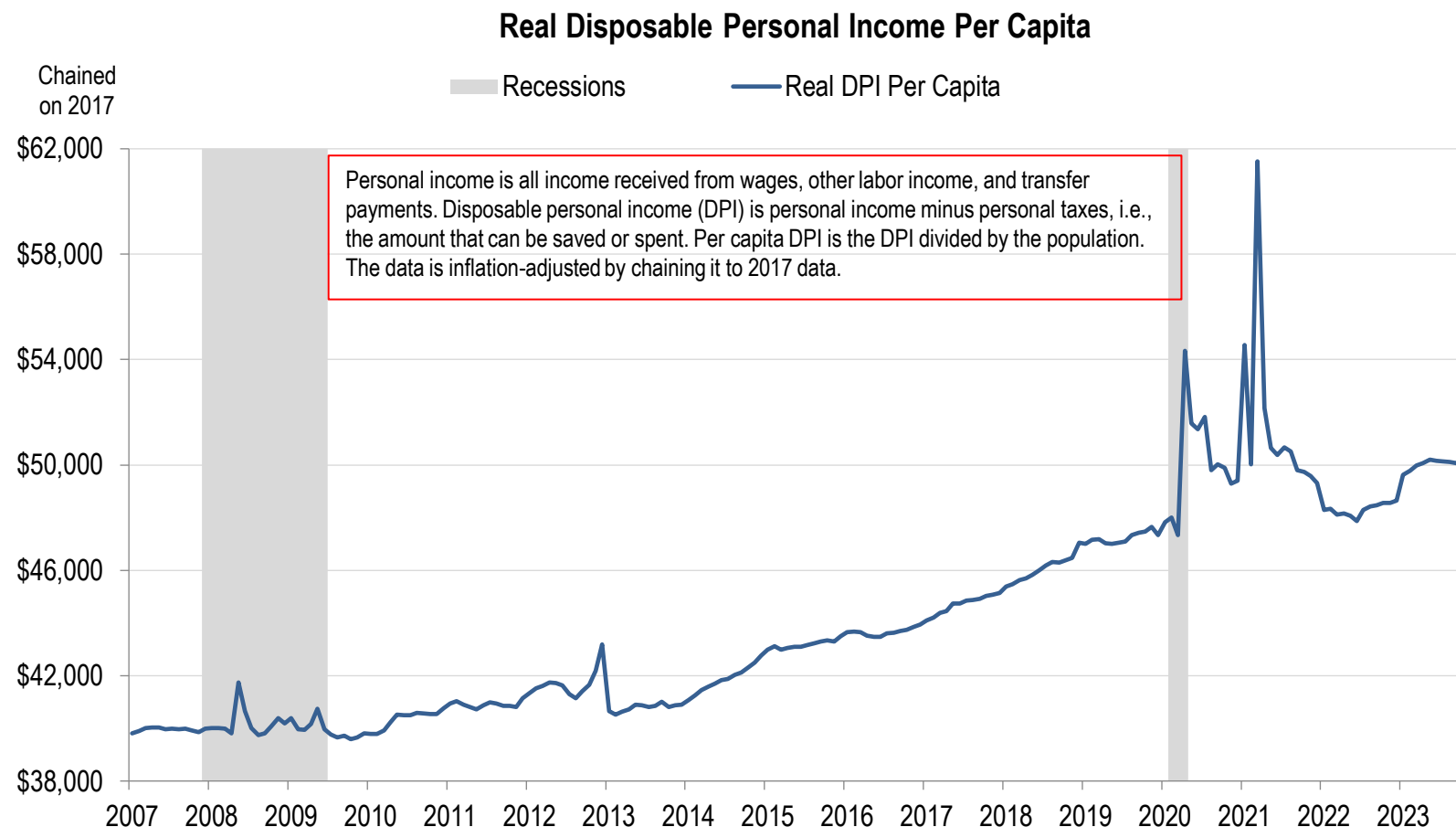
Agriculture had an off year in 2022, which caused the decline for the period.

Source: BEA, cber.co.

Colorado-based Business and Economic Research <https://cber.co>

Real Disposable Personal Income Per Capita

United States



Real DPI Per Capita (RDPIPC)

In November 2023, RDPIPC was \$50,360. It was 3.7% greater than November 2022.

Real Disposable Annual (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	\$50,054	6.0%
2021	\$51,570	3.0%
2022	\$48,313	-6.3%

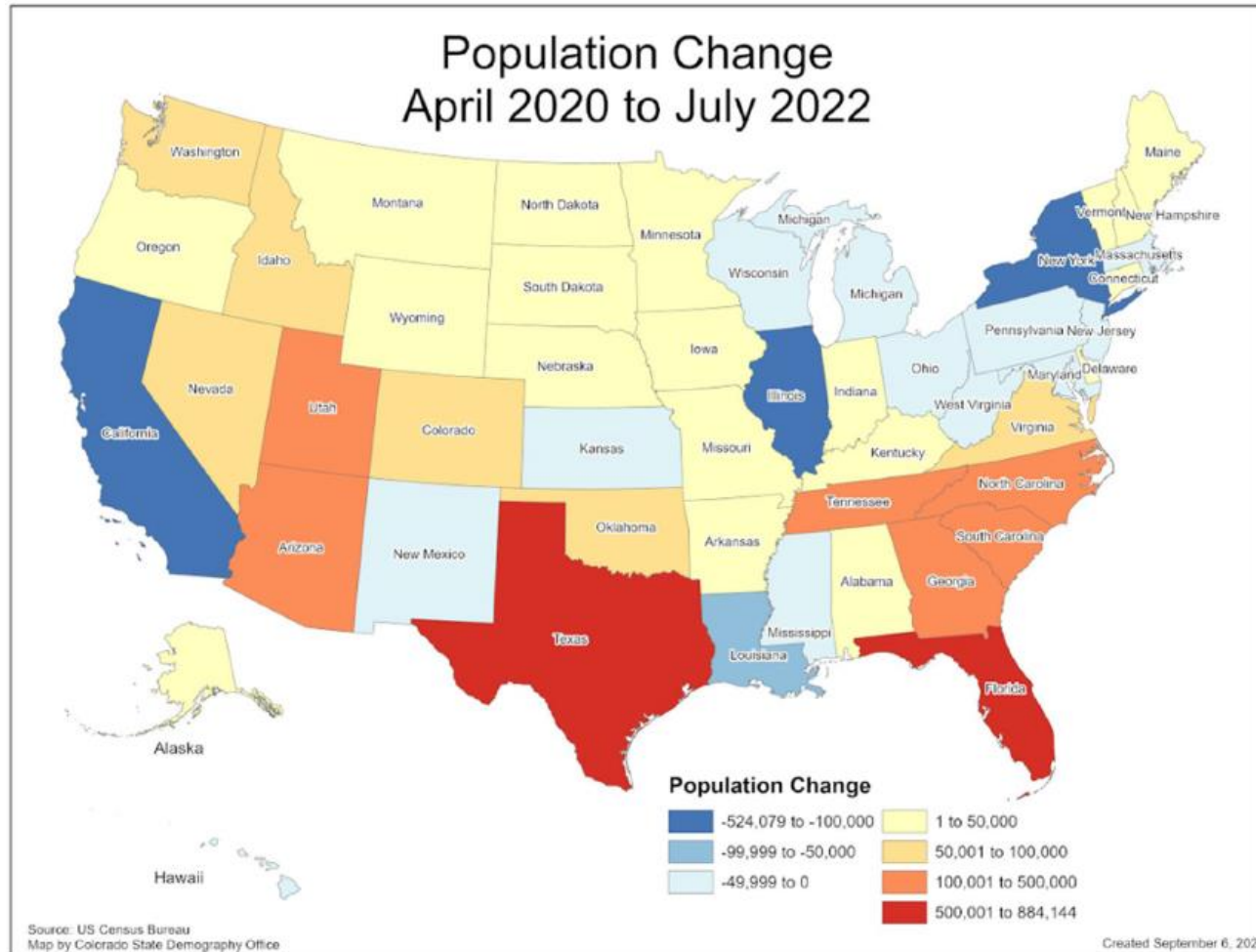
The RDPIPC behaved very differently in the COVID-19 recession than during the Great Financial Crisis. There was much more money in the system between 2020 and 2022. After peaking at \$61,512 in March 2021, it bottomed out at \$47,812 in June 2022. It increased through May of 2023, then flattened out.

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

Population – The Economy – It Begins with a Job

Change in U.S. Population

April 2020 to July 2022



Change in U.S. Population

For this period, the U.S. population increased by 0.6%.

Eighteen states lost population (blue and light blue). California, New York, and Illinois lost the most people (dark blue).

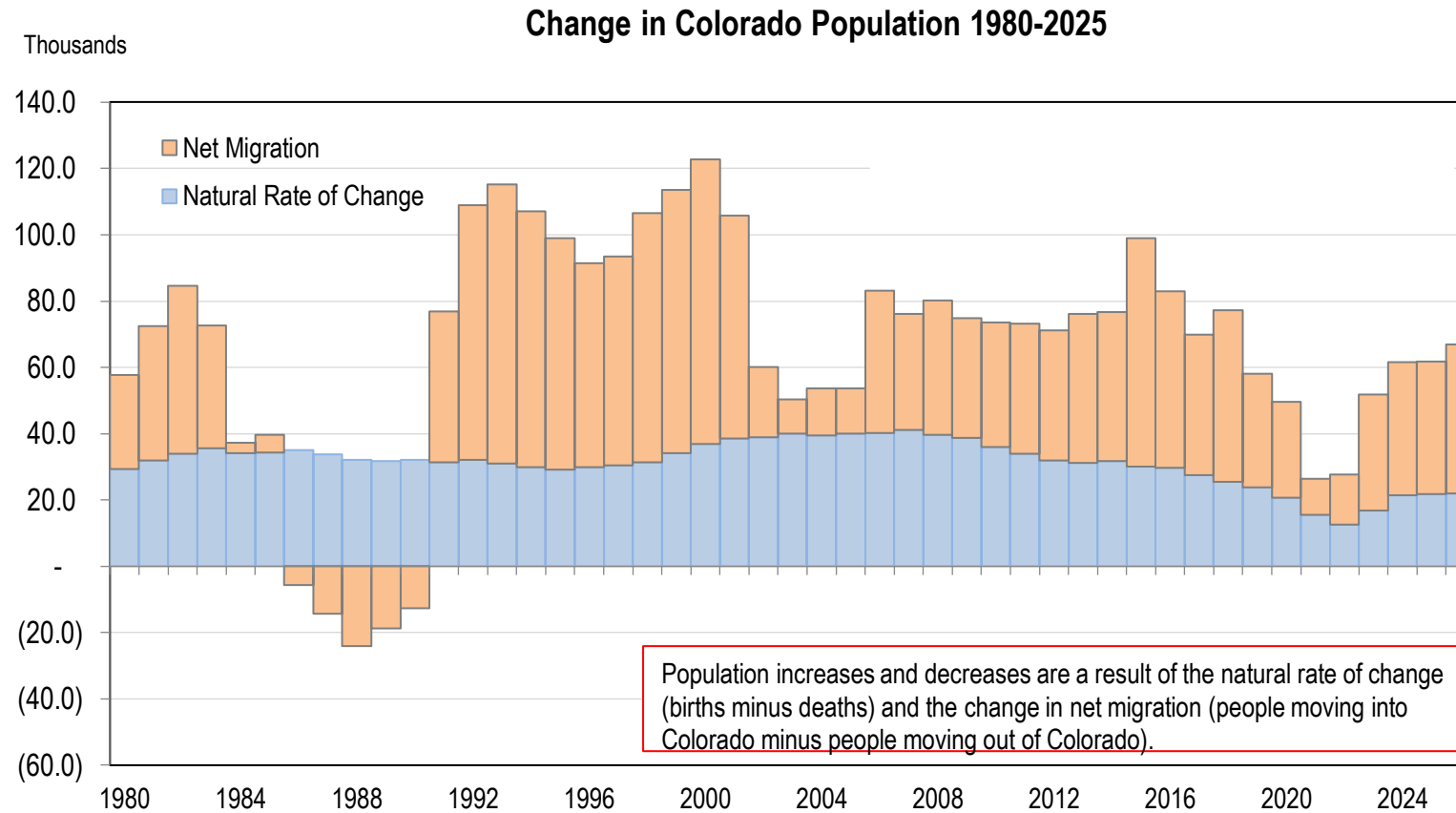
The eight states in orange and dark orange had the most gains, led by Texas and Florida (dark orange).

The Colorado population increased by 1.1%, or 66,193 people. Colorado was ranked 12th in total growth and 18th in percent growth.

Slide from SDO Annual Summit, Nancy Gedeon presentation, file:///C:/Users/Owner/Downloads/2023%20Summit%20Estimates%20v2022%20(3).pdf.

Colorado Population

Components of Change



Components of Change

Since 2000, the Colorado population 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.

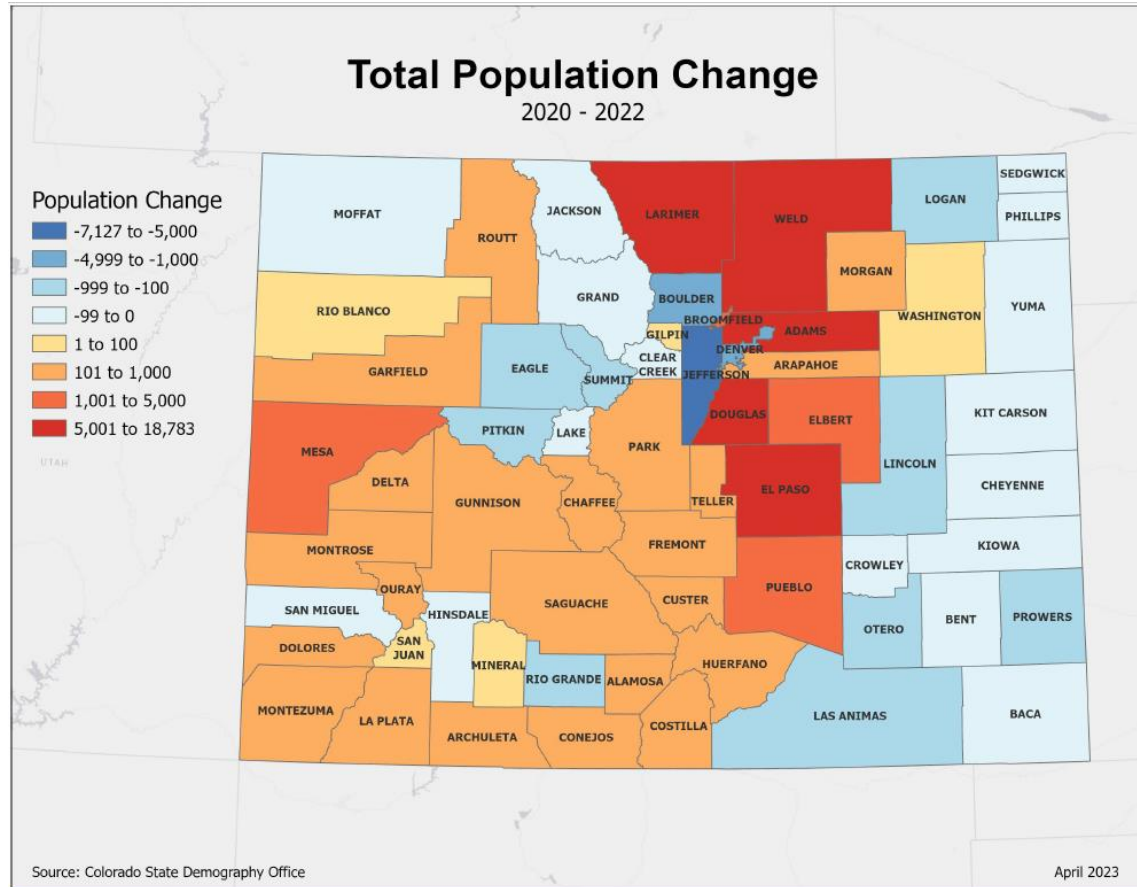
In 2020 and 2021, more significant population changes occurred because of the pandemic-related policies. There were altered migration patterns and fewer births.

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.

Sources: State Demography Office and cber.co.

Colorado-based Business and Economic Research <https://cber.co>

Change in Colorado Population 2020 to 2022



Change in Colorado Population

For this period, the population in 27 of 64 counties decreased. The most significant declines were in Jefferson, Denver, and Boulder counties (dark blue). There were declines in most counties in the eastern third of the state.

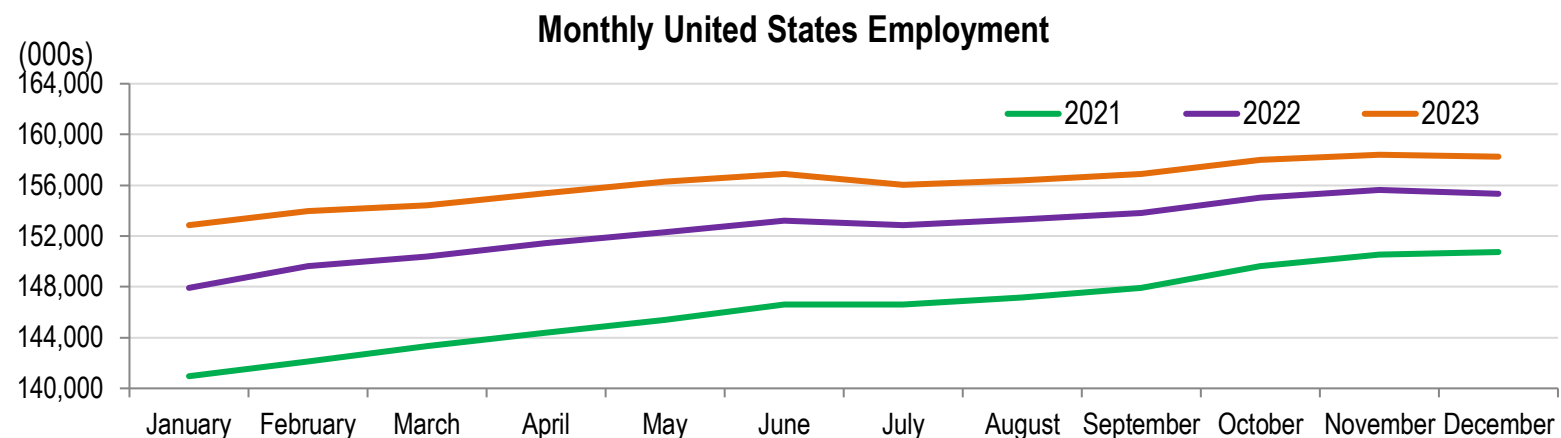
El Paso, Douglas, Adams, Larimer, and Weld counties gained the most people.

Slide from SDO Annual Summit, Nancy Gedeon presentation, file:///C:/Users/Owner/Downloads/2023%20Summit%20Estimates%20v2022%20(3).pdf.

U.S. and Colorado Employment and Unemployment

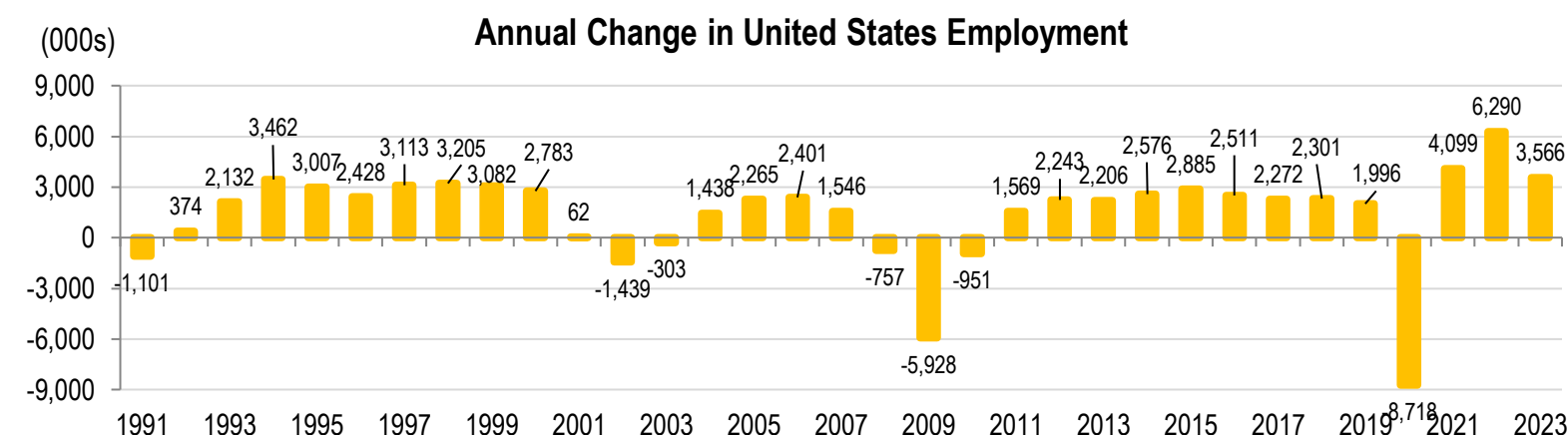
Employment and Change in Employment

United States



U.S. Employment

The YOY December 2023 (orange) monthly change in employment was about 2.9 million more than December 2022 (purple). Annual employment for 2023 was 156.1 million. The average monthly change for 2023 vs. 2022 was 297,000, down from 524,000 for 2022 vs 2021. These changes compare to 197,000 for the period 2012 through 2019.



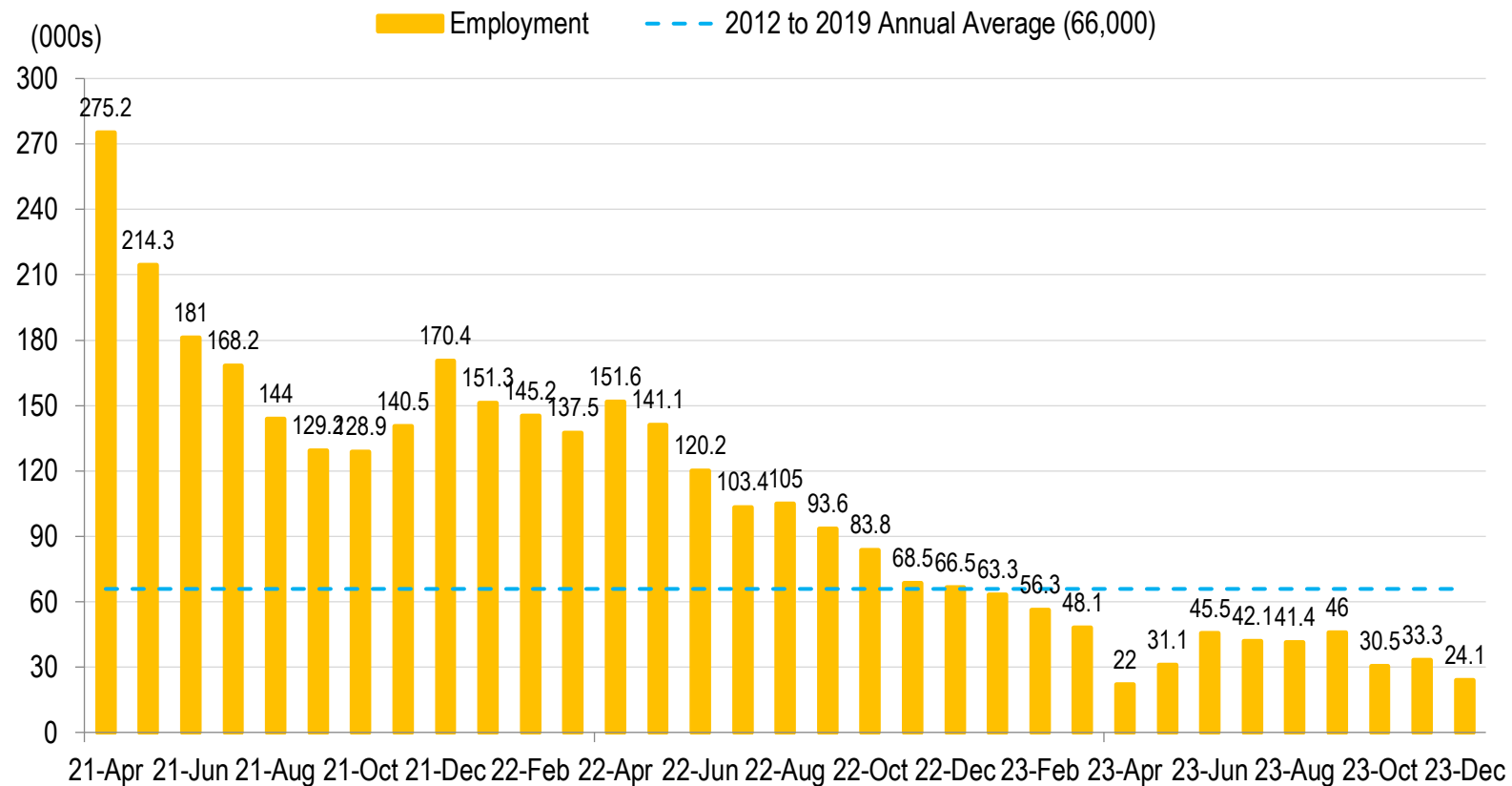
As seen in the annual comparisons to the left, YOY employment from 2012 to 2019 ranged from a low of 2.0 million in 2019 to 2.9 million in 2015. The estimated YOY difference in 2023 vs. 2022 annual employment will be 3.6 million.

Source: Bureau of Labor Statistics, cber.co. Note: This data reflects changes made by BLS and LMI for Q4 2022 and Q1 2023 data.

Change in Colorado Employment

Monthly (April 2021 through November 2023)

YOY Change in Colorado Employment



Estimated Benchmark Revision for 2023

Colorado Labor Market Information (LMI) uses UI data to compile the QCEW employment numbers used by BLS as the foundation for its benchmark revisions to the CES employment data series. In March 2024, BLS will publish the 2023 benchmark revisions.

Colorado LMI recently released reports estimating that the current BLS data understates employment by 20,000 to 30,000 in Q1 and more than 40,000 in Q2.

In other words, the annual change for 2023 vs. 2022 will be between 55,000 and 65,000, compared to 114,000 for 2022 vs. 2021. The average annual change in employment was 66,000 (blue dotted line) for 2012 to 2019.

Source: Bureau of Labor Statistics, cber.co.

Colorado-based Business and Economic Research <https://cber.co>

Change in Colorado Employment

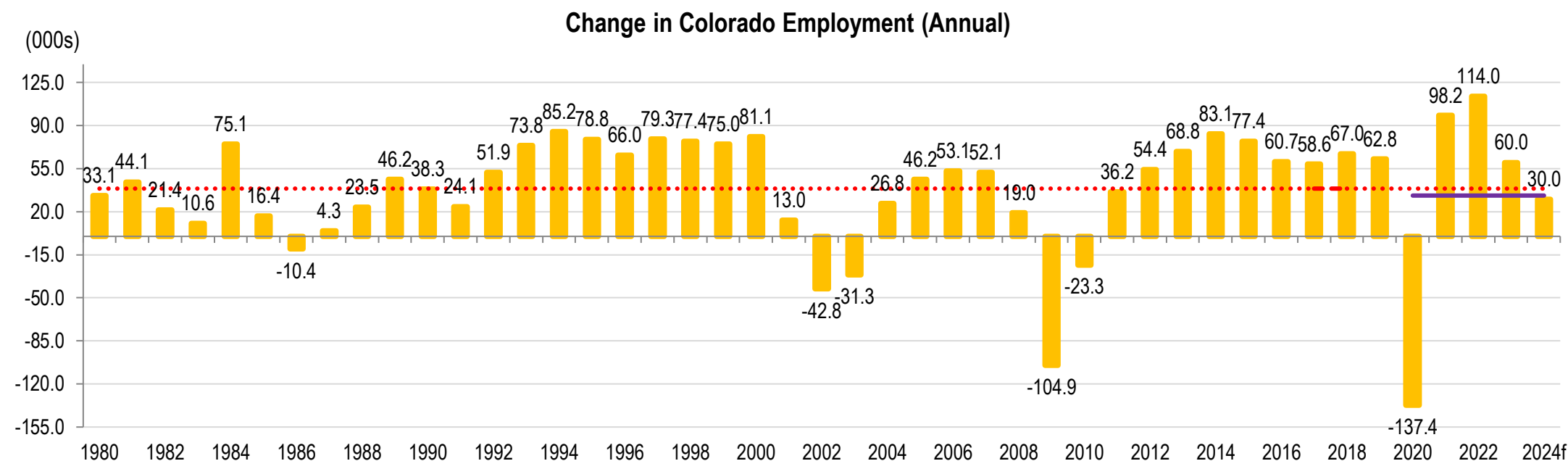
Colorado 1980 to 2024

Change in Colorado Employment – 1980 to 2023

The estimated average annual change in Colorado employment was 38,600 between 1980 and 2024 (red dotted line). Annual employment was above the average in 26 of 45 years. The forecast for 2024 is a change of 30,000.

Change in Colorado Employment – 2020 to 2024

Colorado has had a commendable recovery in employment from the COVID-related policies; however, the estimated average annual change in employment is 33,000 between 2020 and 2024 (short purple line). This level of employment is slightly below the 45-year average annual change in employment for Colorado.

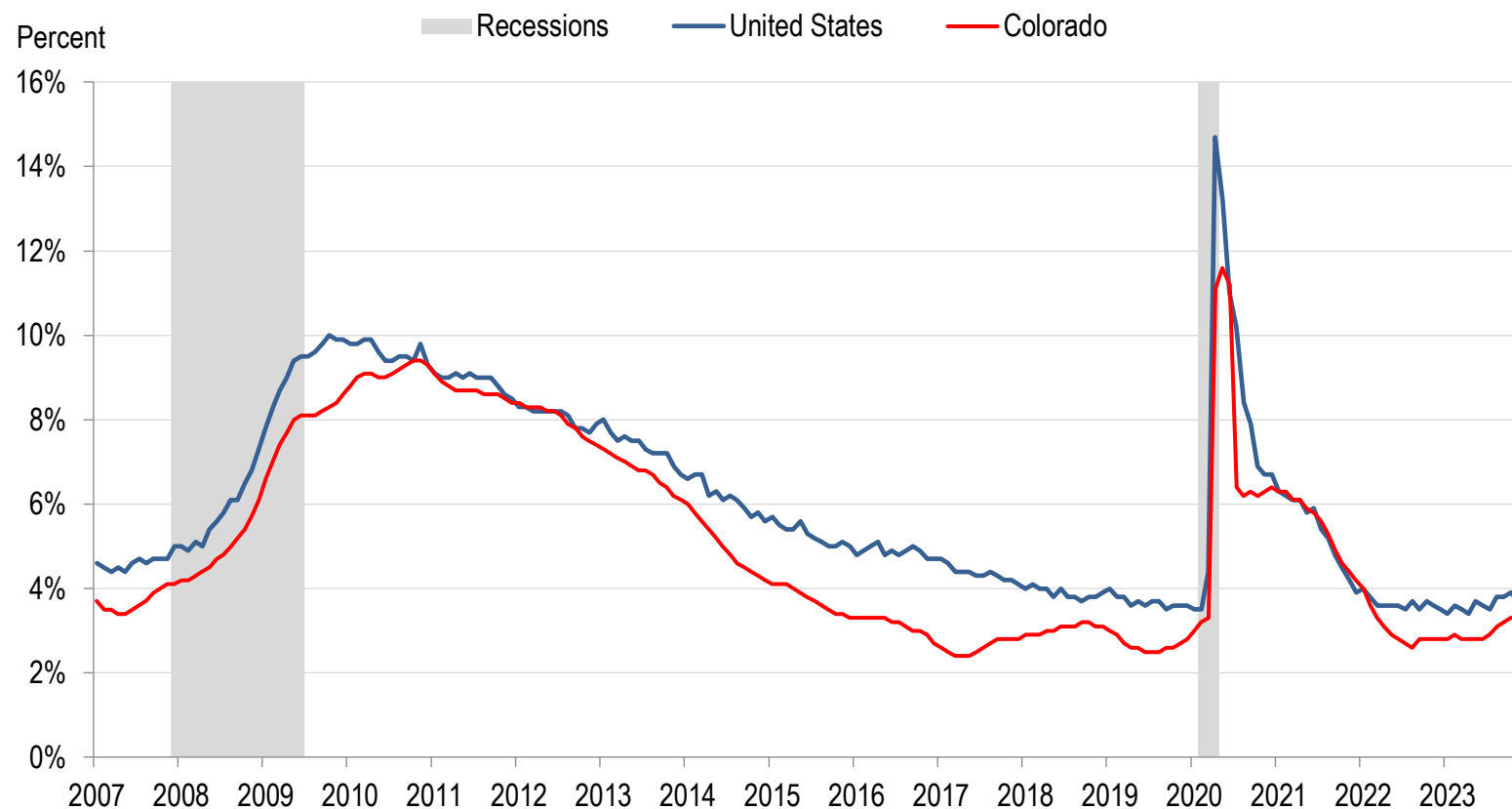


Source: Bureau of Labor Statistics, NSA, cber.co.

Unemployment Rate

United States and Colorado

U.S. and Colorado Unemployment



Source: BLS, SA, cber.co.

Unemployment Rate

The Colorado unemployment rate was 3.4% in December, and the U.S. rate was 3.7%. The economy operates inefficiently when the unemployment rate is this low.

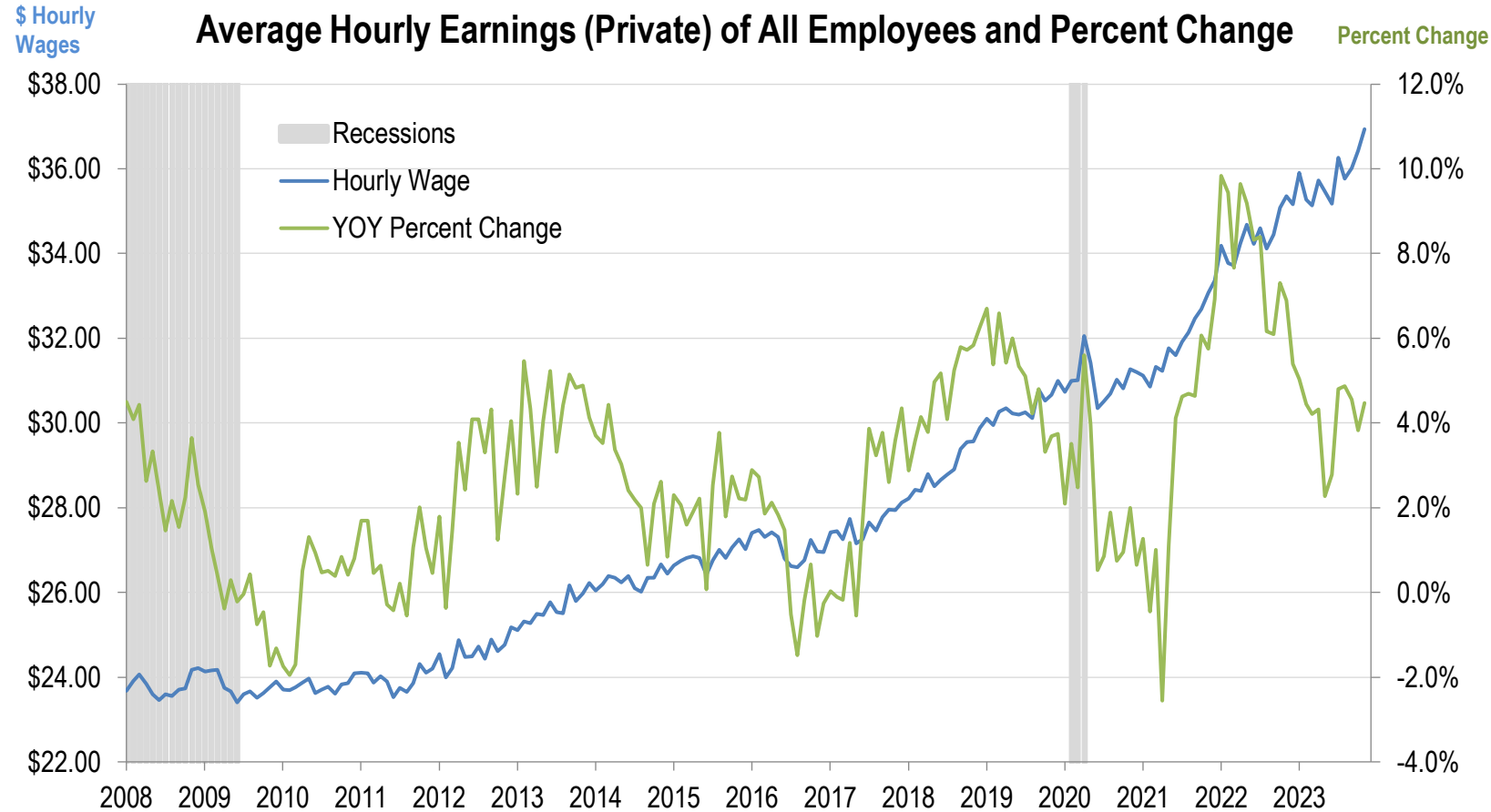
September data shows there were about 105,931 unemployed Coloradans to fill 203,000 job openings. Although there are about 1.92 openings per unemployed worker, companies fill most job openings from the pool of employed workers rather than unemployed workers.

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%

Average Hourly Earnings of All Employees (Private)

Colorado



Source: BLS, NSA, cber.co.

Hourly Earnings and Percent Change
November private hourly wages for Colorado (blue) were \$36.93, a YOY increase of 4.5% (green). The current rate of YOY wage growth peaked at 9.4% in February 2022.

In 2023, YOY monthly hourly earnings were between 2.3% and 5.0% more than the same month in 2022. The YOY Colorado CPI was between 4.5% and 6.4%. The change in hourly earnings was less than the change in inflation.

Annual 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%

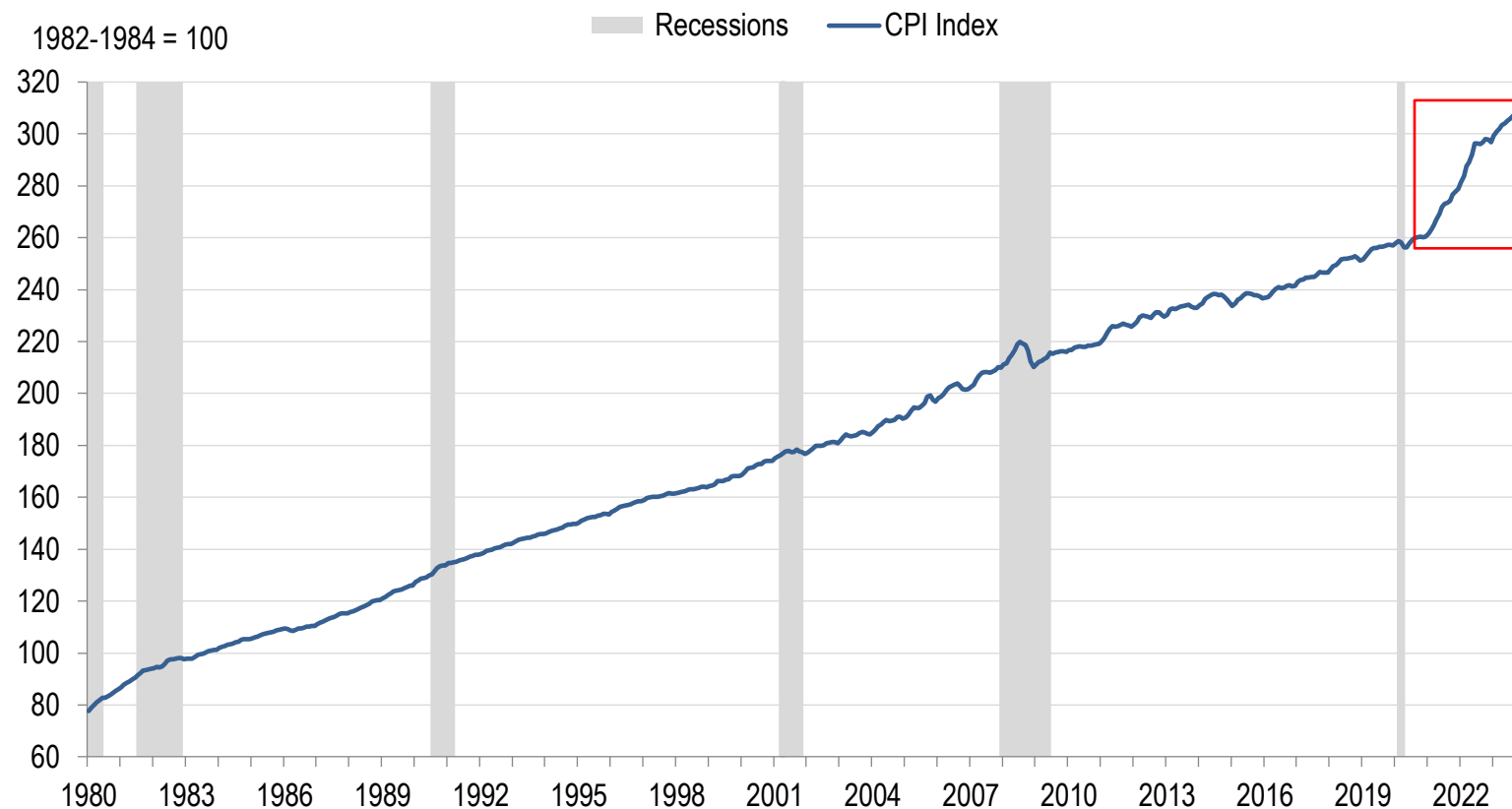
Source: BLS, cber.co

Inflation

CPI Inflation Index Value

United States

U.S. CPI Inflation Index (NSA)



CPI Inflation Index

The chart shows the actual inflation data for the Consumer Price Index. 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.

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

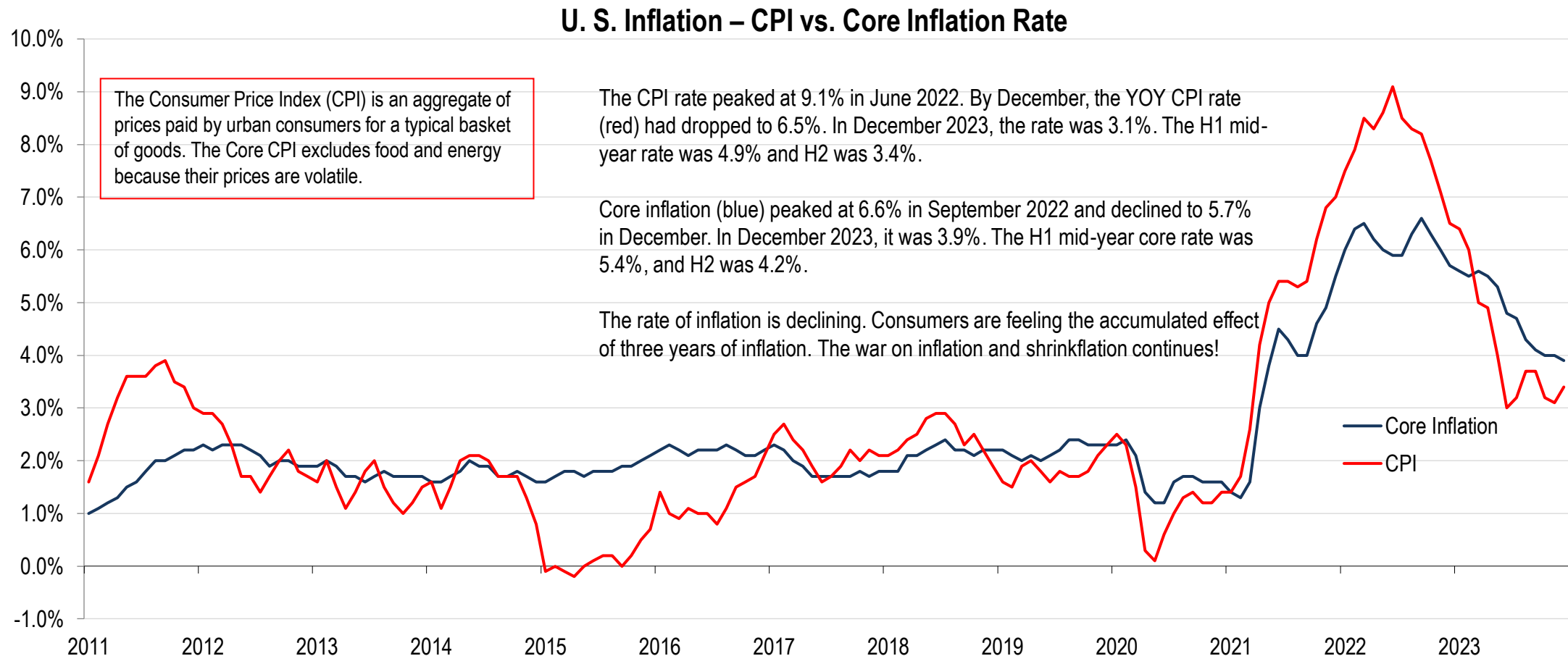
- The increase for December 2023 vs. December 2022 is 3.4%.
- The December annualized 2023 vs. December 2021 increase is 4.9%.
- The December annualized 2023 vs. 2020 increase is 5.6%.

The accumulated effect is significant!

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

CPI Inflation

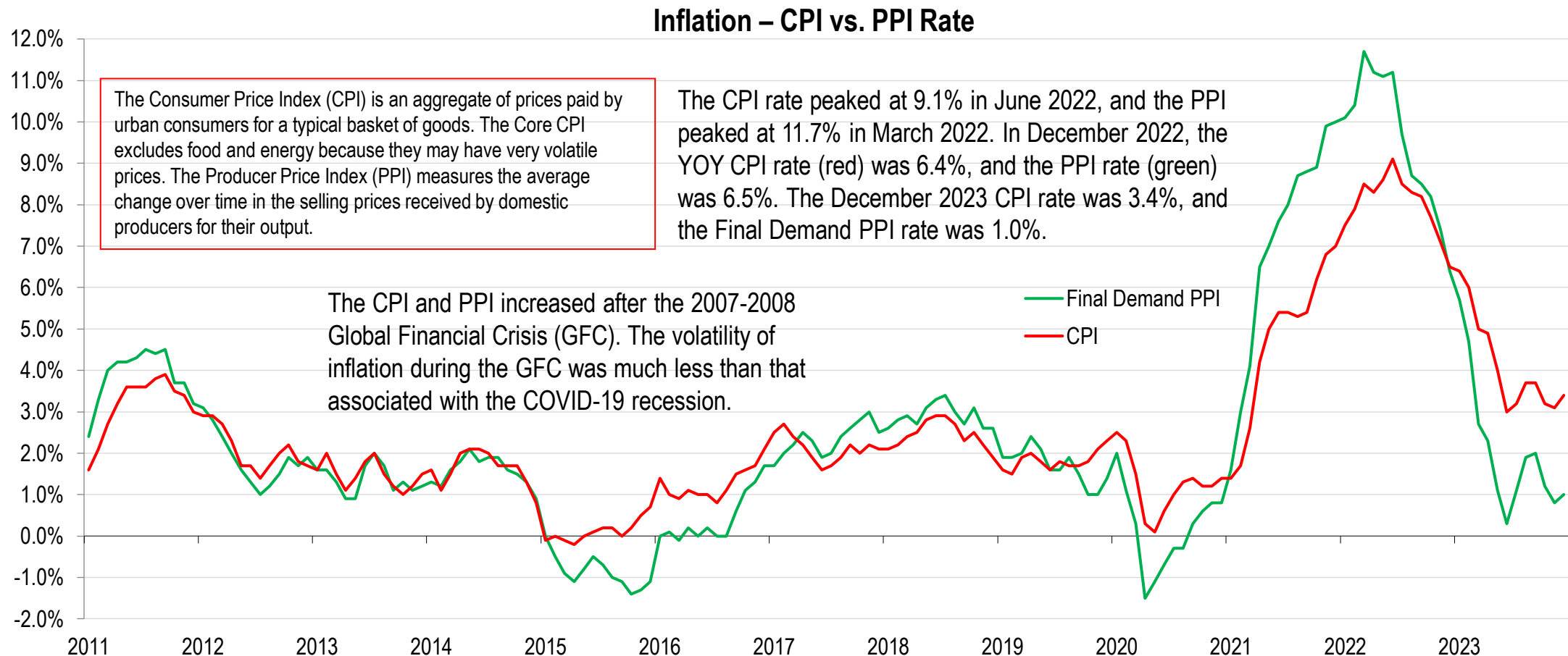
U.S. CPI vs. Core Inflation



Source: Bureau of Labor Statistics, Core Inflation is the CPI less food and energy; CPI All Items City Average NSA, cber.co.
Colorado-based Business and Economic Research <https://cber.co>

U.S. Inflation

CPI vs. Producer Price Index (Final Demand)

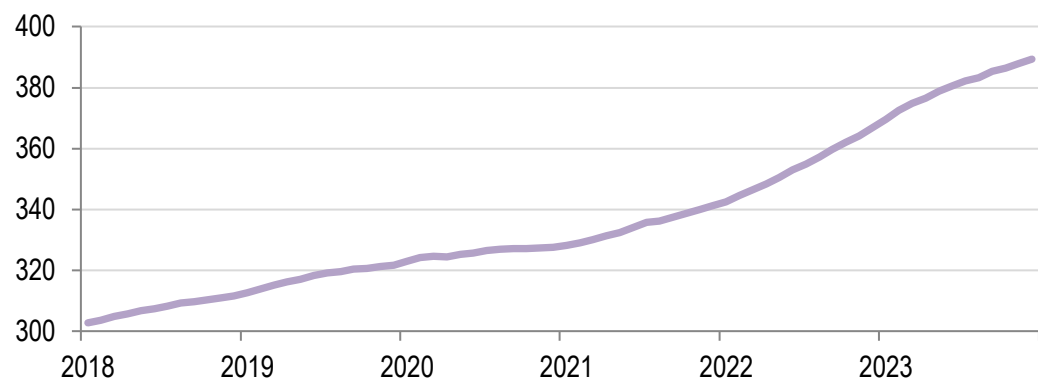


Source: Bureau of Labor Statistics, PPI Commodity Data, Final Demand SA; CPI All Items City Average NSA, cber.co.
Colorado-based Business and Economic Research <https://cber.co>

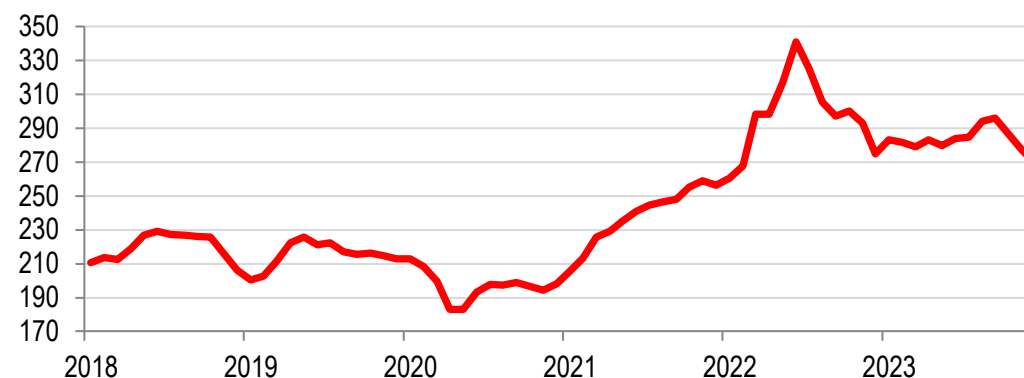
United States CPI Index (Accumulated Effect of Inflation)

Shelter, Food at Home, and Energy

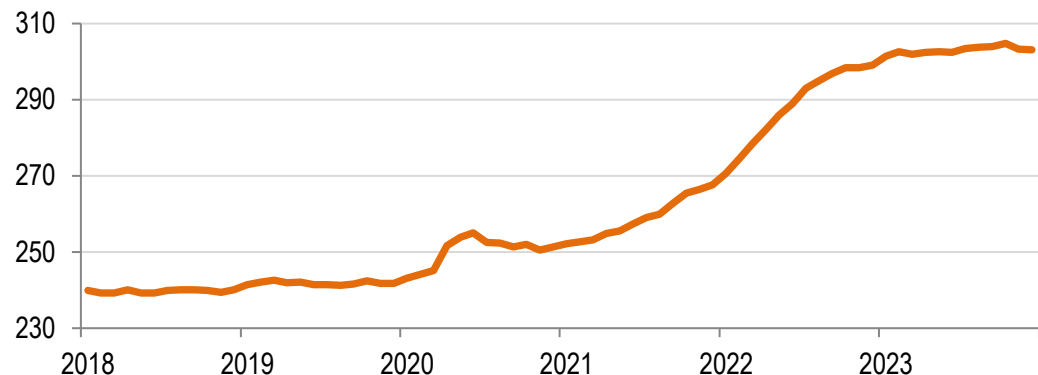
United States Shelter CPI Index



United States Energy CPI Index



United States Food at Home CPI Index



United States CPI Index – Cumulative Effect

The three charts show the actual CPI index numbers from 2018 to December 2023 for Shelter, Food-at-Home, and Energy. Takeaways are:

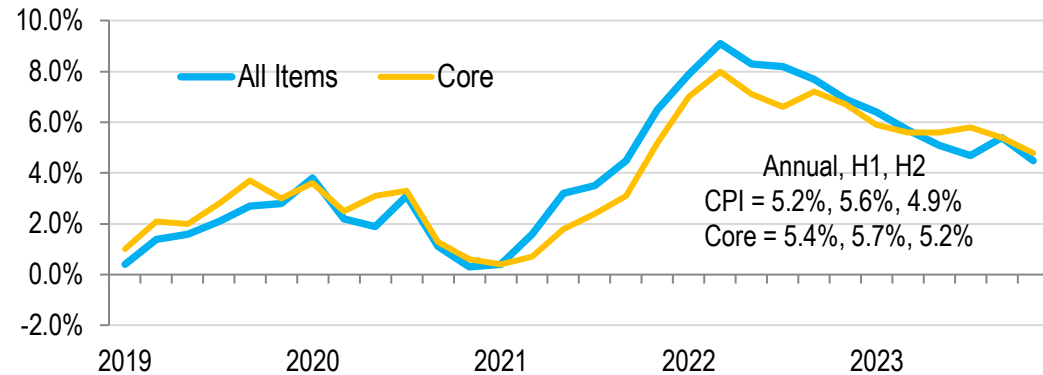
- (Not shown) Between December 2020 and December 2023, the CPI index increased from 260 to 307 or 17.7%.
- (Not shown) Between December 2020 and December 2023, the core CPI index increased from 269 to 312 or 15.9%.
- (Upper left - purple) Between December 2020 and December 2023, the shelter index increased from 328 to 389 or 18.8%.
- (Lower left - orange) Between December 2020 and December 2023, the food-at-home index increased from 251 to 303 or 20.2%. Recently, it has been flat.
- (Above - red) Between December 2020 and December 2023, the energy index increased from 198 to 269 or 34.9%. Recently, it has decreased.

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

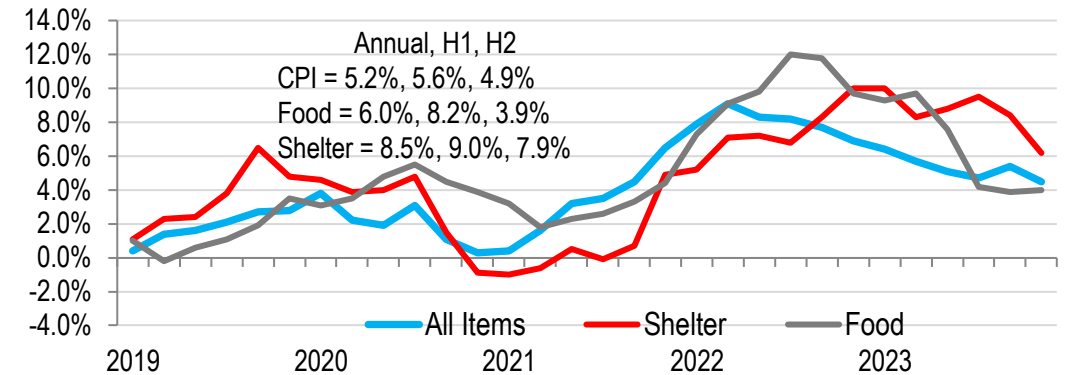
Bi-Monthly Change in Colorado CPI (Accumulative Effect)

All Items vs. Core, Food, Shelter, and Energy Services

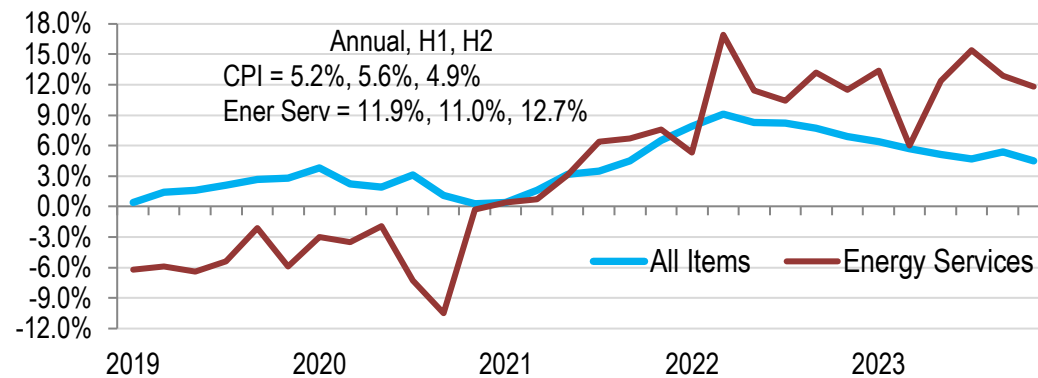
Colorado All Items vs. Core (All less Food and Energy)



Colorado All Items vs. Food and Shelter



Colorado All Items vs. Energy Services



Colorado CPI – Cumulative Effect

Inflation for most Colorado items is published bi-monthly. The charts illustrate three bi-monthly Colorado CPI comparisons. Annual, H1 and H2 year inflation rates are also on the three charts. Takeaways are:

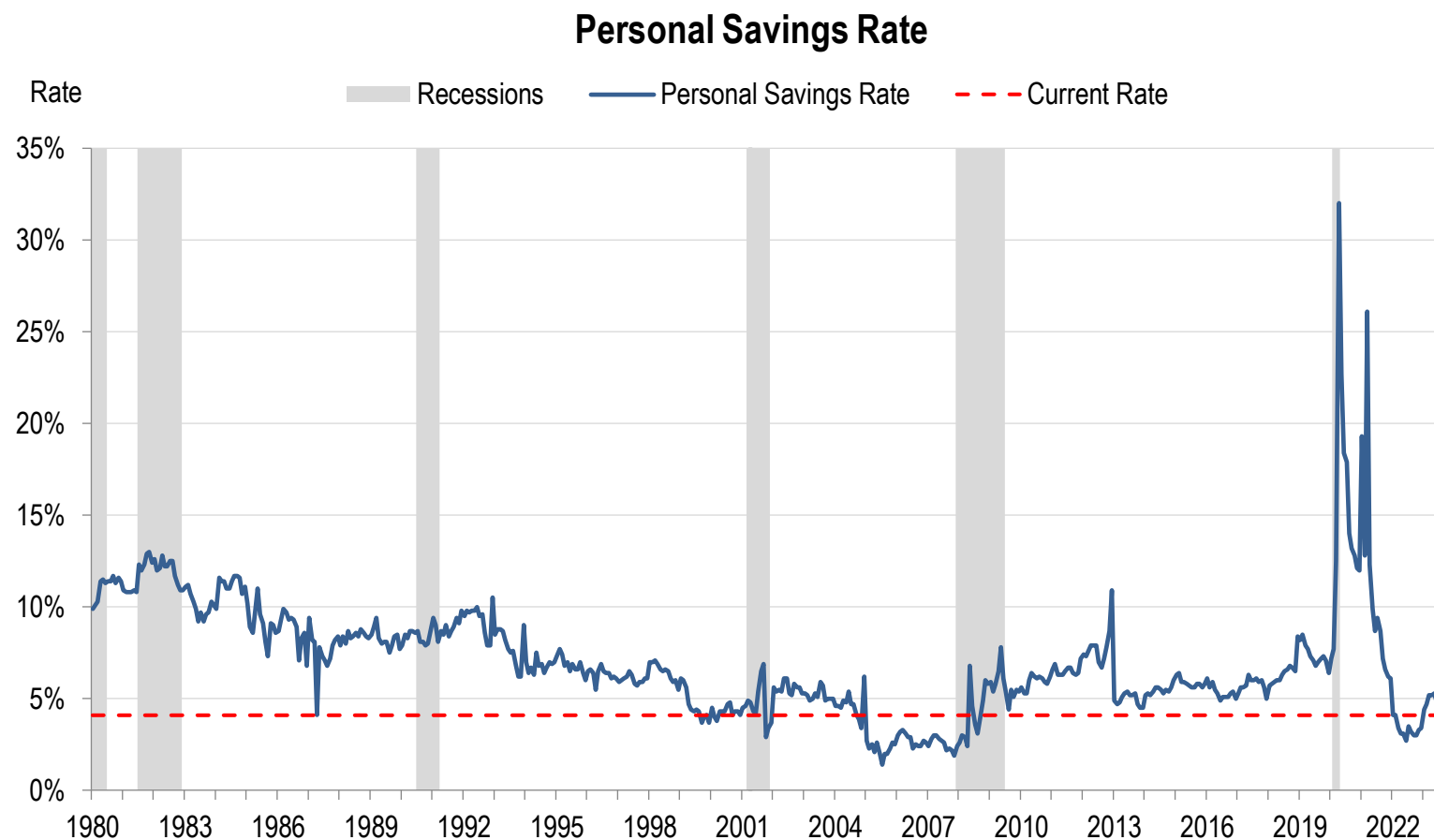
- (Upper left) Both rates are greater than the comparable U.S. CPI rates. They are slowly trending downward.
- (Lower left) Since mid-2021, inflation for energy services (gas and electricity) has been greater than for all items. In November, energy services (brown) inflation decreased to 11.8%. Higher energy inflation will continue, given energy-related policies and utility rate increases. The climate change agenda will be expensive and cause inflation to remain higher than usual.
- (Above) YOY Inflation for shelter (red) was 6.2% in November, down from 8.4% in September. Inflation for food (gray) was 4.0% in November, below the overall rate.

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

Saving, Borrowing, Consumption, and the Wealth Effect

U.S. Personal Savings Amount and Rate

Percentage of Disposable Personal Income (DPI)



Source: Federal Reserve, FRED, cber.co.

Personal Savings Rate

The November 2023 personal savings rate was 4.1%, and savings were \$839.8 billion, down from \$6.0 trillion in April 2020. That month, the savings rate was 32.0%. Since then, Americans have spent their savings or invested in other assets.

The personal savings rate jettisoned to a monthly high of 32.0% in the early stages of the pandemic. It fell to 12.0% in November 2020, then rose to 26.1% in March 2021. In June 2022, the personal savings rate bottomed out at 2.7%.

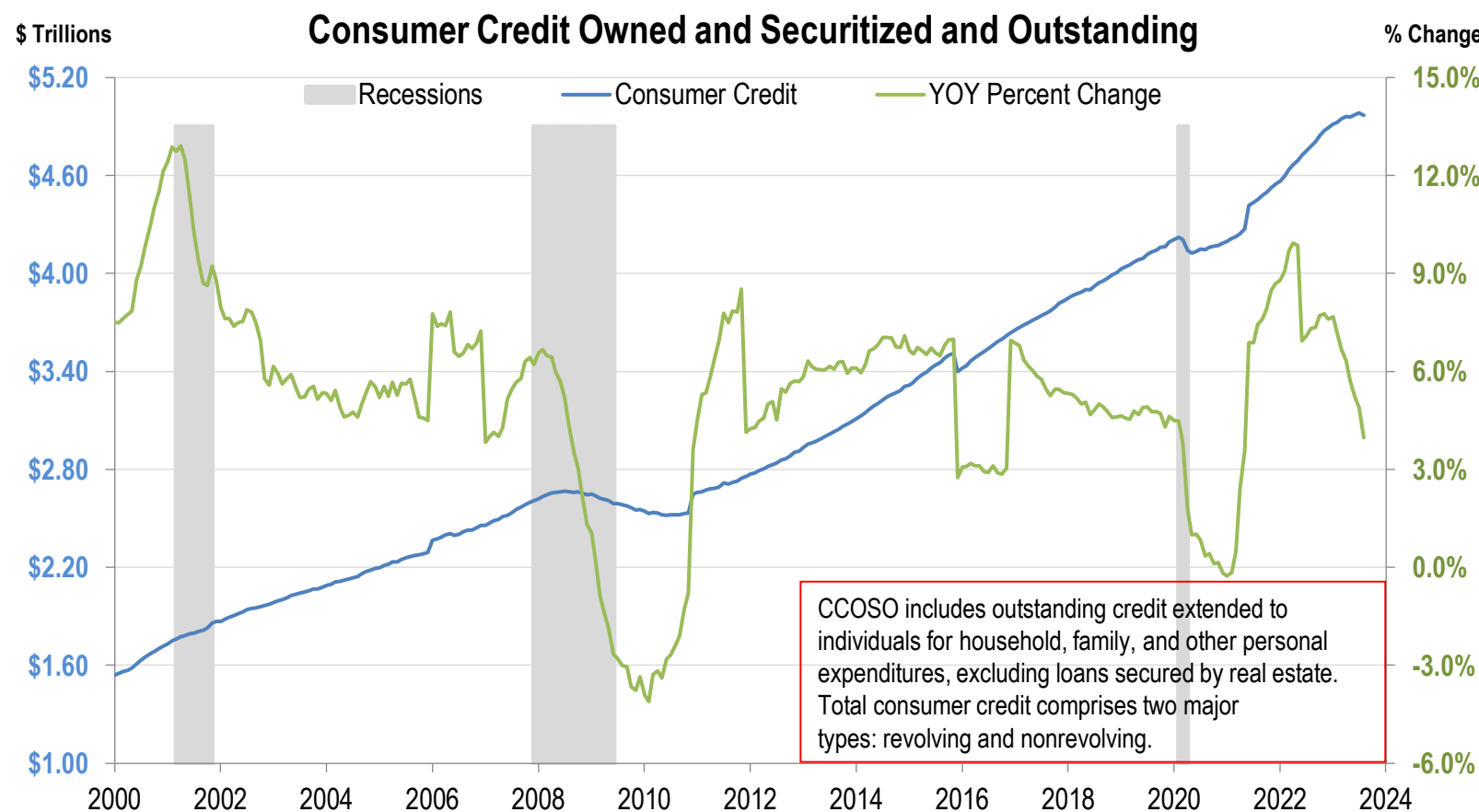
Year End Personal Savings (Billions) and Rate

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%

Source: BEA, cber.co

U.S. Consumer Credit Outstanding

United States



Consumer Credit

In January 2023, the YOY rate of outstanding consumer credit (including consumer loan defaults) increased by 7.7% (green). The YOY rate has since declined and was 2.8% in November 2023. The amount of securitized credit was more than \$5.0 trillion in November 2023.

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).

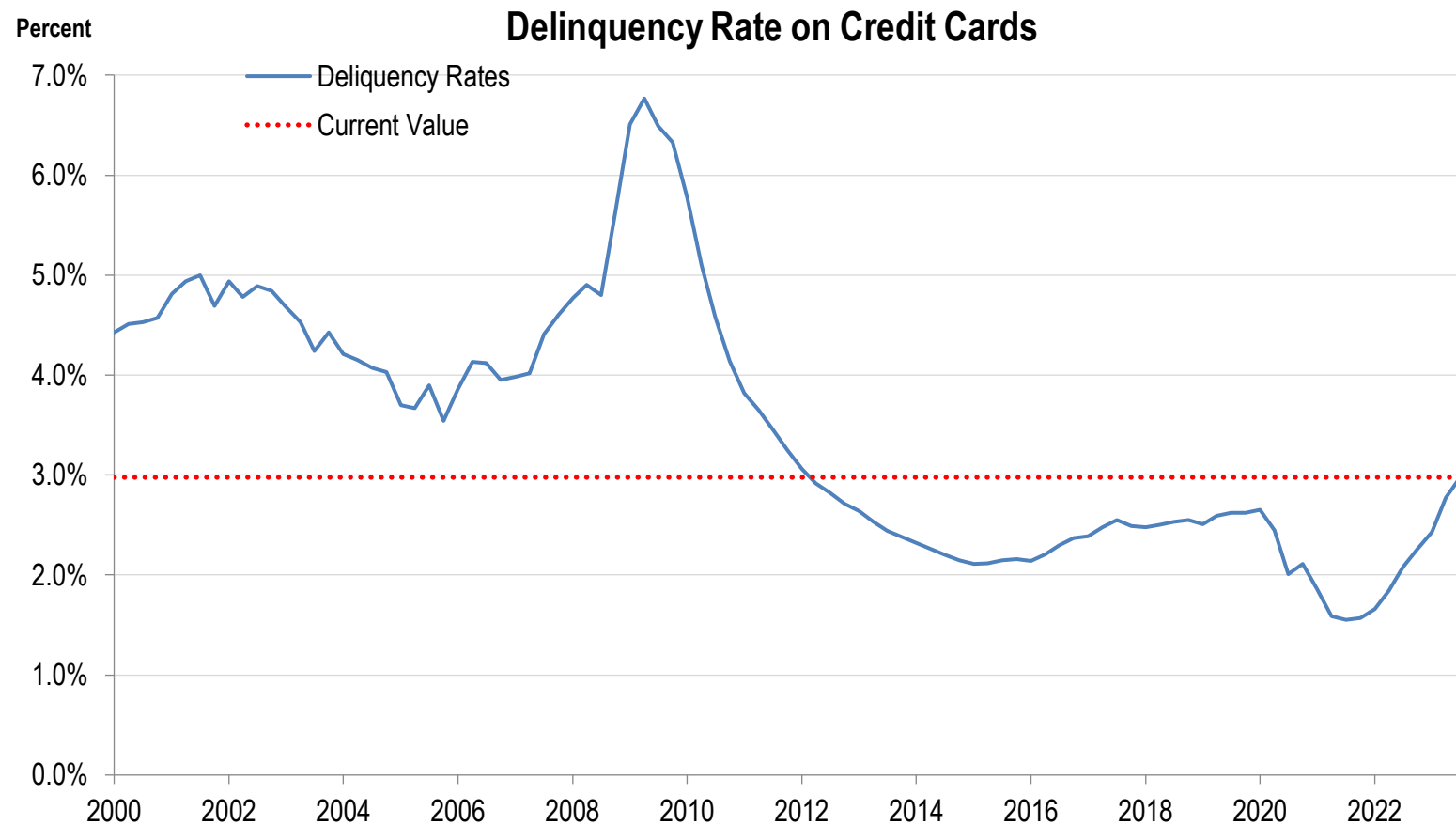
Outstanding Credit (Billions) and Percent Change

2017	\$3,830.8	5.3%
2018	\$4,007.0	4.5%
2019	\$4,192.2	4.6%
2020	\$4,184.9	-0.3%
2021	\$4,431.9	5.9%
2022	\$4,780.8	7.9%

Source: FRED, G-19, cber.co

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

Delinquency Rate on Credit Cards

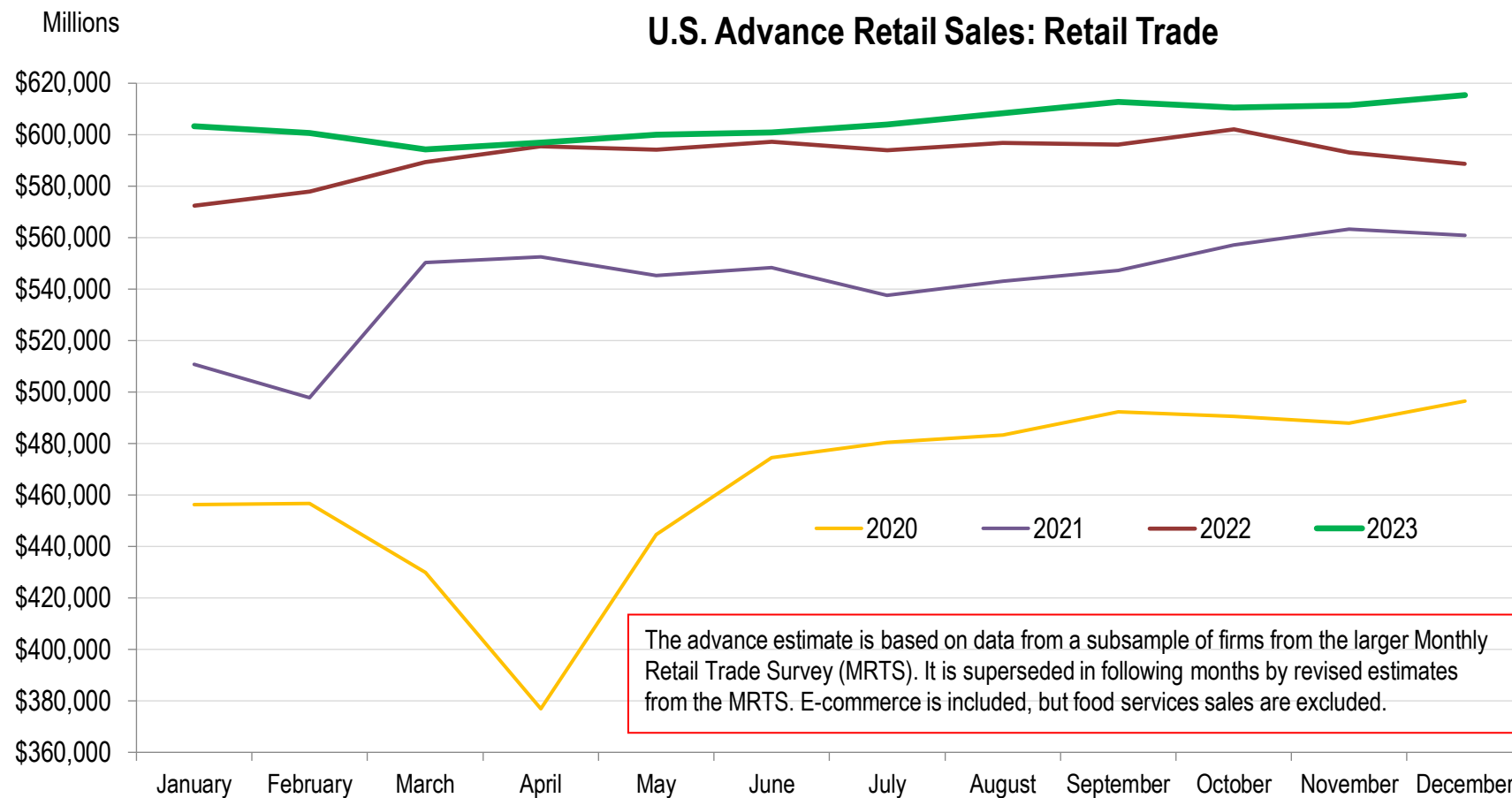


Source: FRED, Federal Reserve, SA.

Delinquency Rate on Credit Cards
In Q2 2023, the credit card delinquency rate rose to 2.98%, the highest rate since Q3 2012. The rate was the highest since Q1 2012 but well below the delinquency rate between 2000 and 2012.

U.S. Advance Retail Sales: Retail Trade

Monthly



Advance Retail Sales

Retail sales were flat in October and November. Total sales through December 2023 (green) were 2.3% greater than 2022 (burgundy). The National Retail Federation (NRF) projected 2023 sales to be 4.0% to 6.0% greater than 2022. The NRF expected holiday sales to be up 3.0% to 4.0% compared to 2022. Holiday sales for 2023 were 3.8% greater than 2022.

Annual Retail Sales (Trillions)

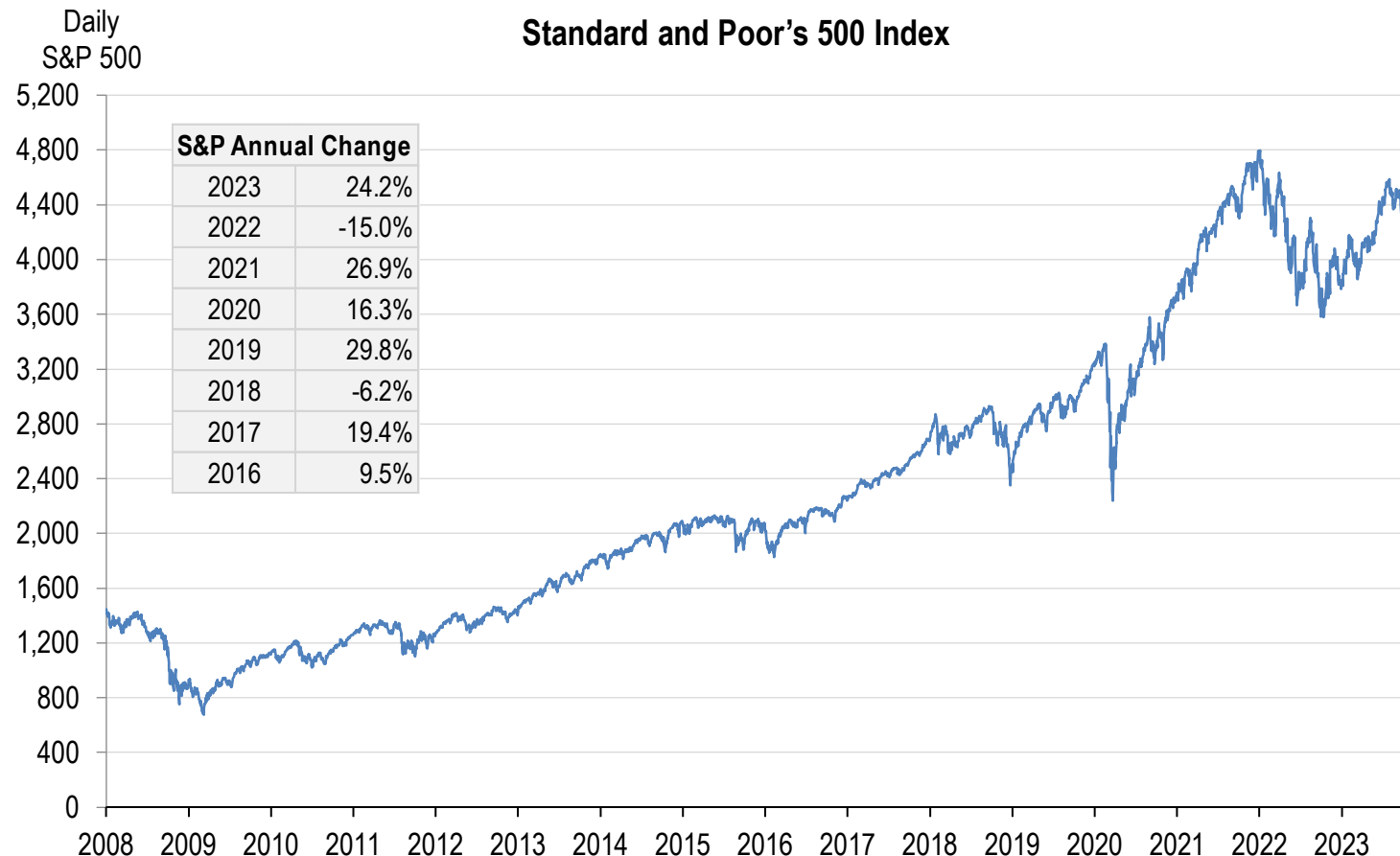
2017	\$5.04	4.4%
2018	\$5.25	4.1%
2019	\$5.39	2.7%
2020	\$5.57	3.3%
2021	\$6.51	16.9%
2022	\$7.10	8.9%

Source: Census, cber.co

Source: U.S. Census Bureau, cber.co. Note: Not adjusted for inflation.

Colorado-based Business and Economic Research <https://cber.co>

Standard and Poor's 500 Index



Source: FRED, S&P 500, cber.co.

Colorado-based Business and Economic Research <https://cber.co>

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%**

Year-End 2021 Bull Market

For most of 2021 – steady growth

December 31, 2021 4,766, a change of **+26.9%**.

2022 Bear Market

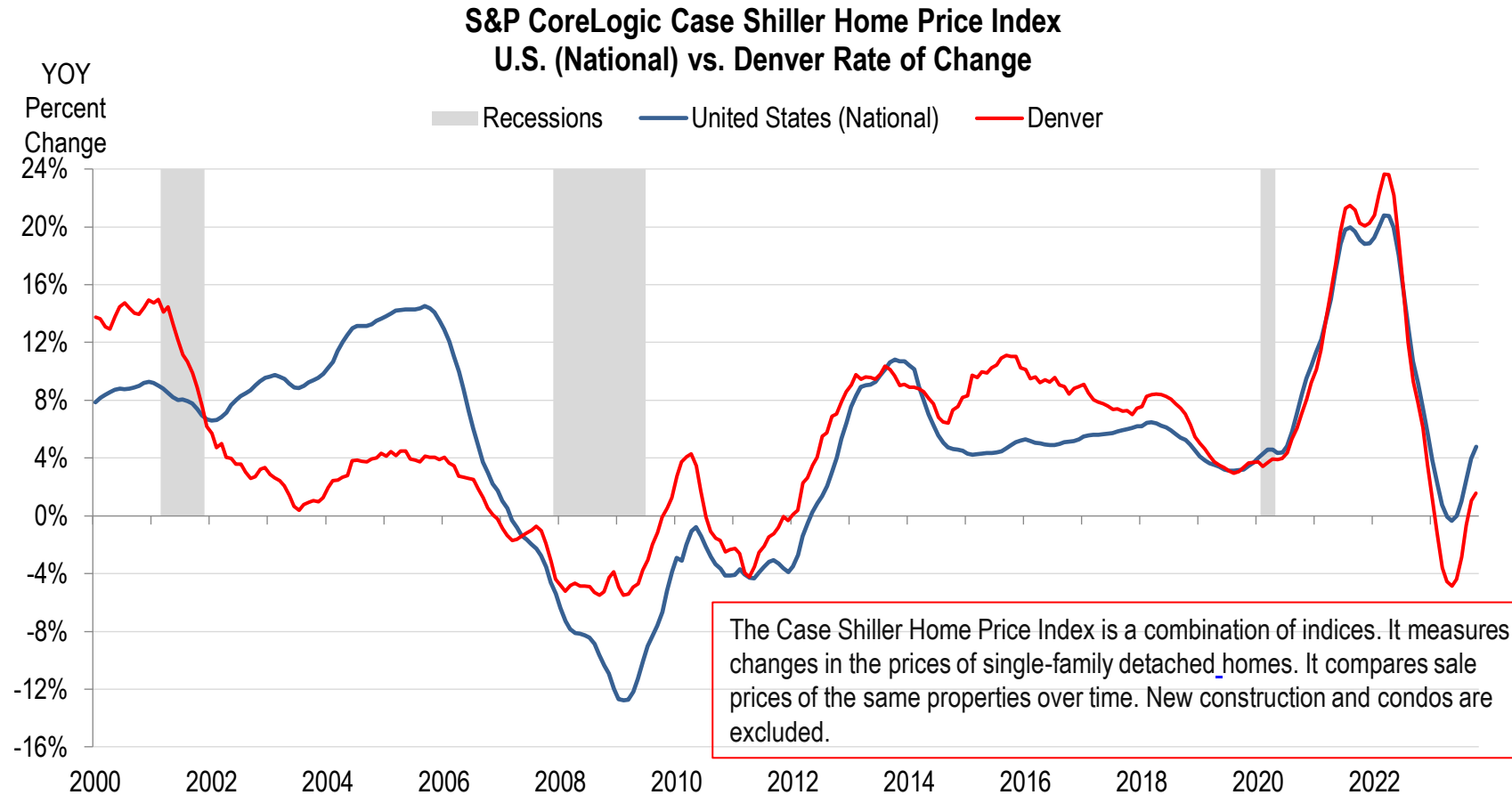
December 31, 2022 3,839, a change of **-15.0%**

2023 Bull Market with the help of a Santa Claus rally

December 29, 2023 4,739 YTD change **+24.2%**

Case Shiller Home Price Index

YOY National vs. Denver Rate of Change



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

Change in S&P CoreLogic Case Shiller Index

In October 2023, the YOY change in the U.S. index was +4.8%, and the Denver index changed by 1.6%. 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%.

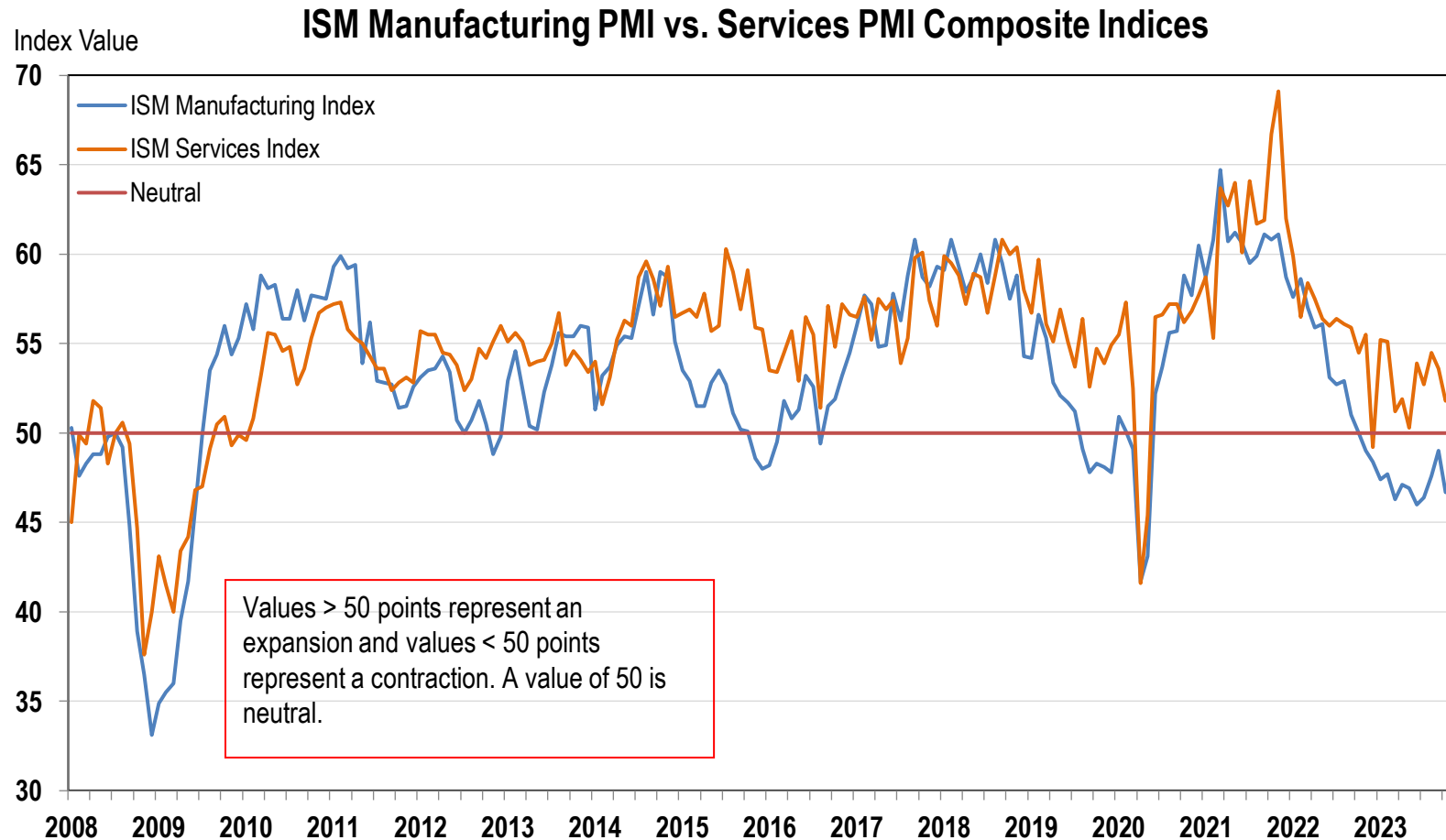
In the summer of 2020, the market began to favor sellers. In August 2021, YOY appreciation for Colorado and the U.S. peaked above 20.0%.

In December 2022, the YOY appreciation for the U.S. was 5.8% (blue) and 3.5% (red) for Denver.

U.S. Industry Indicators

ISM Purchasing Managers Composite Indices

Manufacturing vs. Services



Source: Institute of Supply Management, cber.co.

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Manufacturing and Services PMI

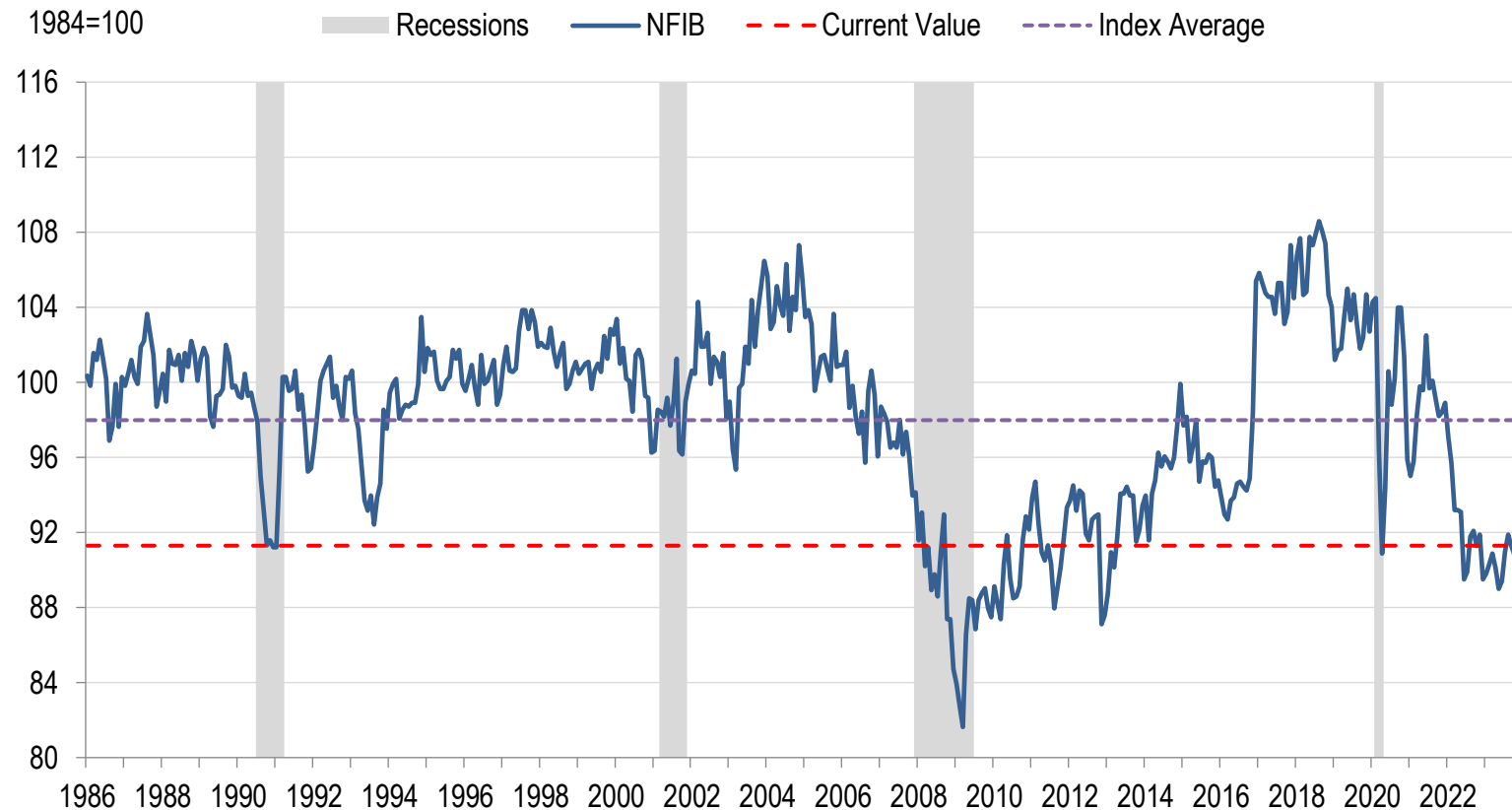
The ISM manufacturing index (blue) has trended downward after peaking at 64.7 in March 2021. It dropped below 50 in November 2022 and remained there for 2023. It was 47.4 in December 2023. None of the six largest industries posted increases in December.

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 50.6 in December. Nine industries showed an increase in December. There was a decline in new orders and employment. Companies were concerned with economic uncertainty, geopolitical events, and labor constraints.

NFIB Small Business Optimism Index

United States

NFIB Small Business Optimism Index



Source: NFIB, cber.co.

NFIB Small Business Index

In December 2023, the NFIB index increased to 91.3 (red dotted line), the 24th consecutive month below the 49-year average of 98.0 (purple dotted line).

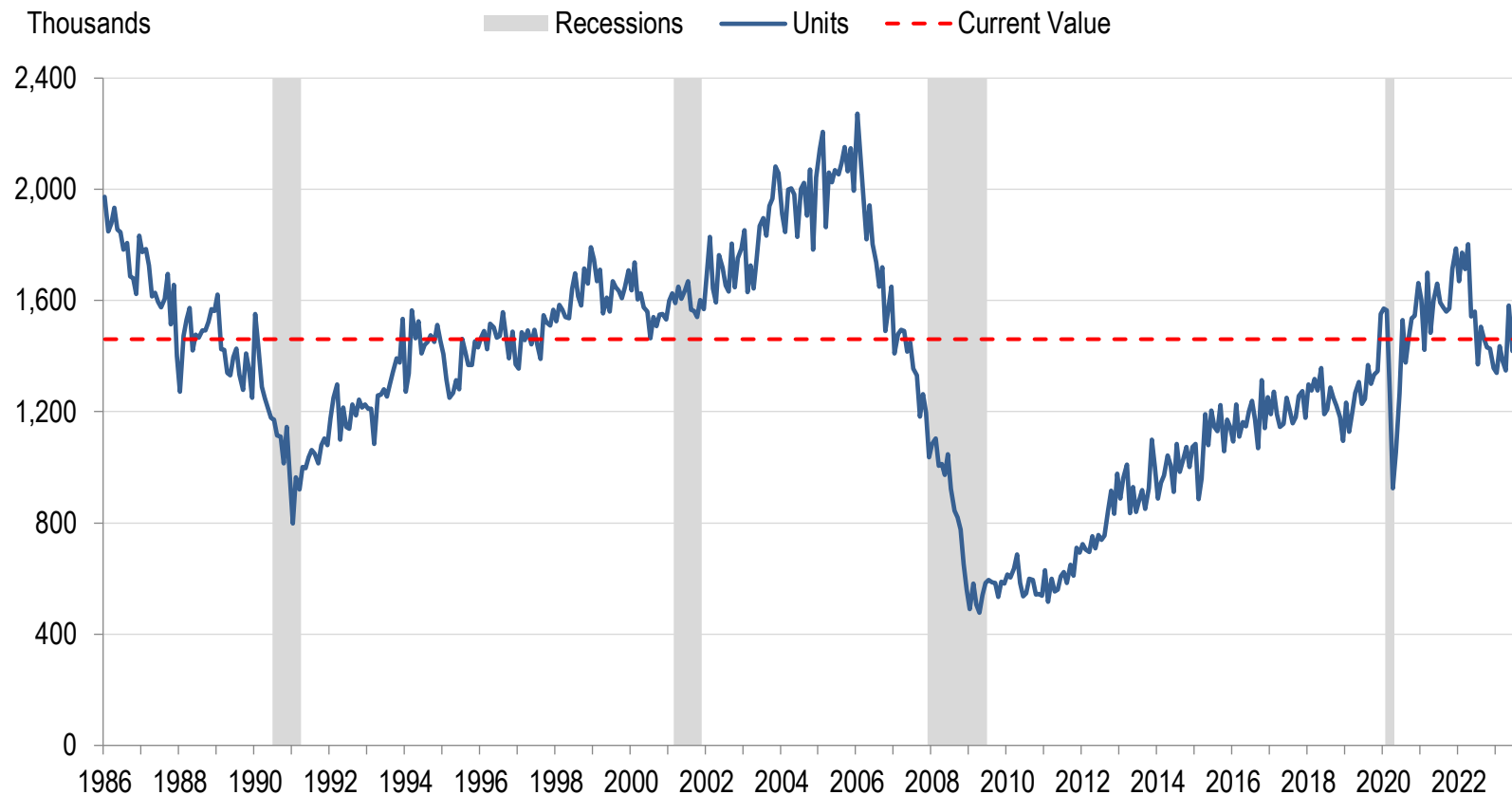
NFIB stated that five of the ten index components increased, three decreased, and two were unchanged. Overall, the growth rate will likely be lower than in 2023. The economy will slow down, possibly delivering the long-predicted recession by year-end.

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



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

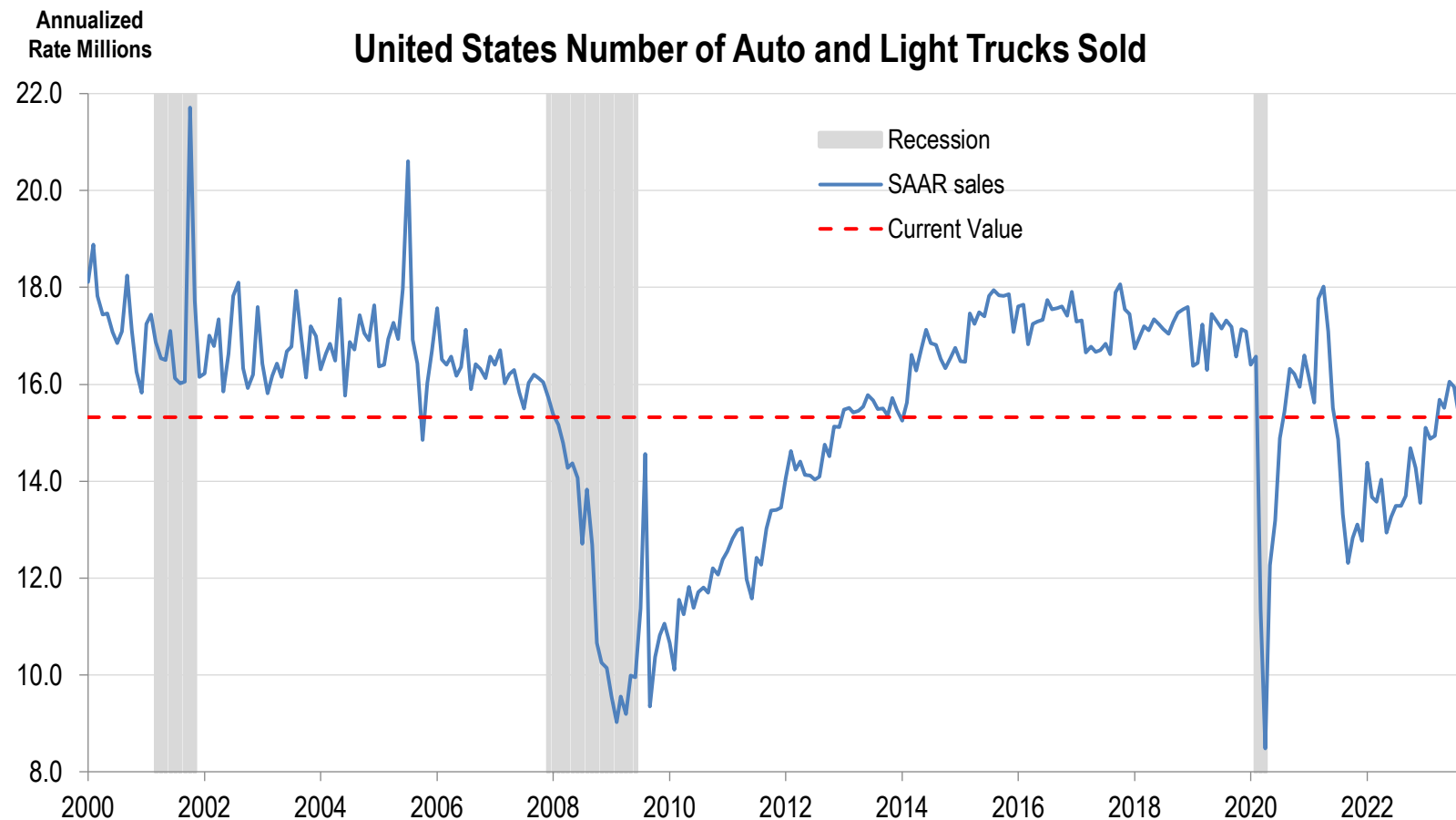
New Privately Owned Housing Units Started

The number of housing starts has been volatile. Starts has been below 1.9 million units SAAR since May 2022. There is demand for housing, even with high-interest rates.

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

Sales in 2023 have ranged from 14.8 to 16.1 million. In November, SAAR sales were 15.3 million (red dotted line). Sales are weak compared to the months leading up to the past two recessions. Interest rates are high, and EVs have lost their luster.

ALT Unit Sales

Year	Units Sold (Millions)
2015	17.4
2016	17.5
2017	17.2
2018	17.2
2019	17.0
2020	14.5
2021	14.9
2022	13.8

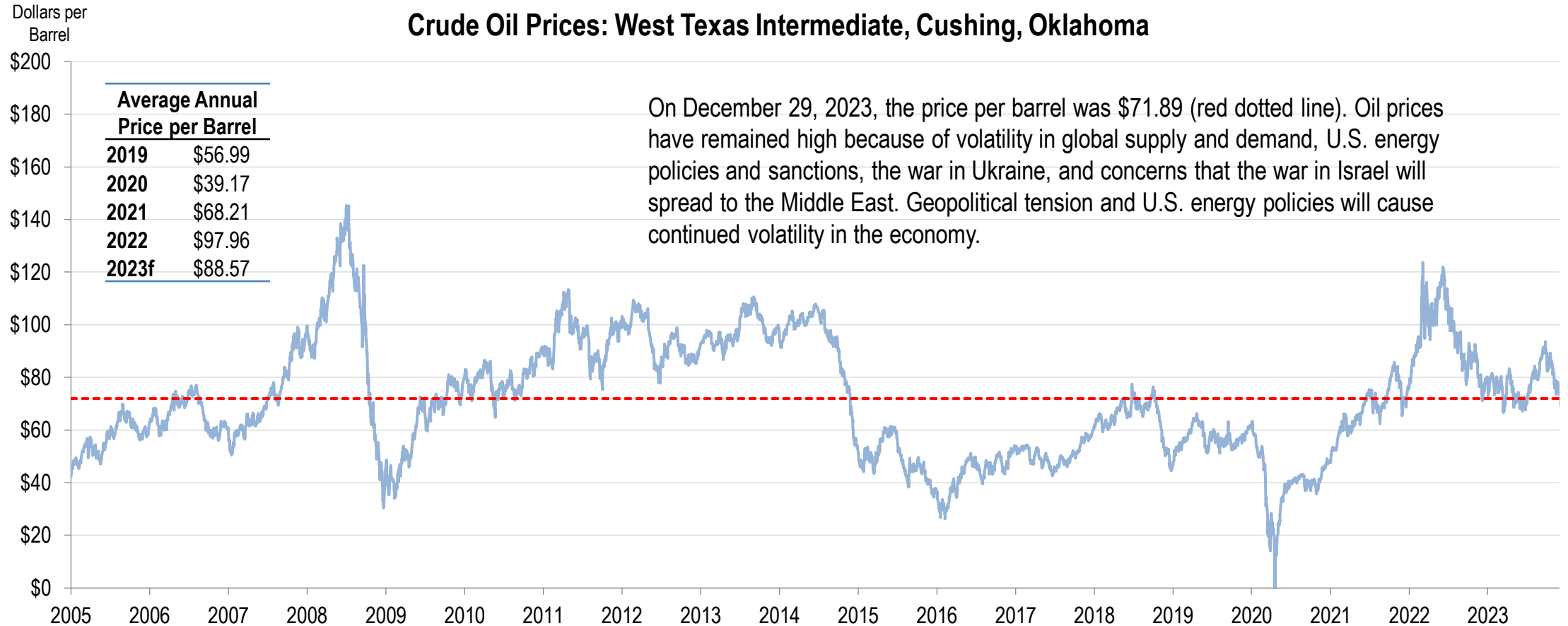
Source: FRED, BEA, Seasonally Adjusted Annualized Rates (SAAR), cber.co.

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Colorado Industry Indicators

Crude Oil Prices

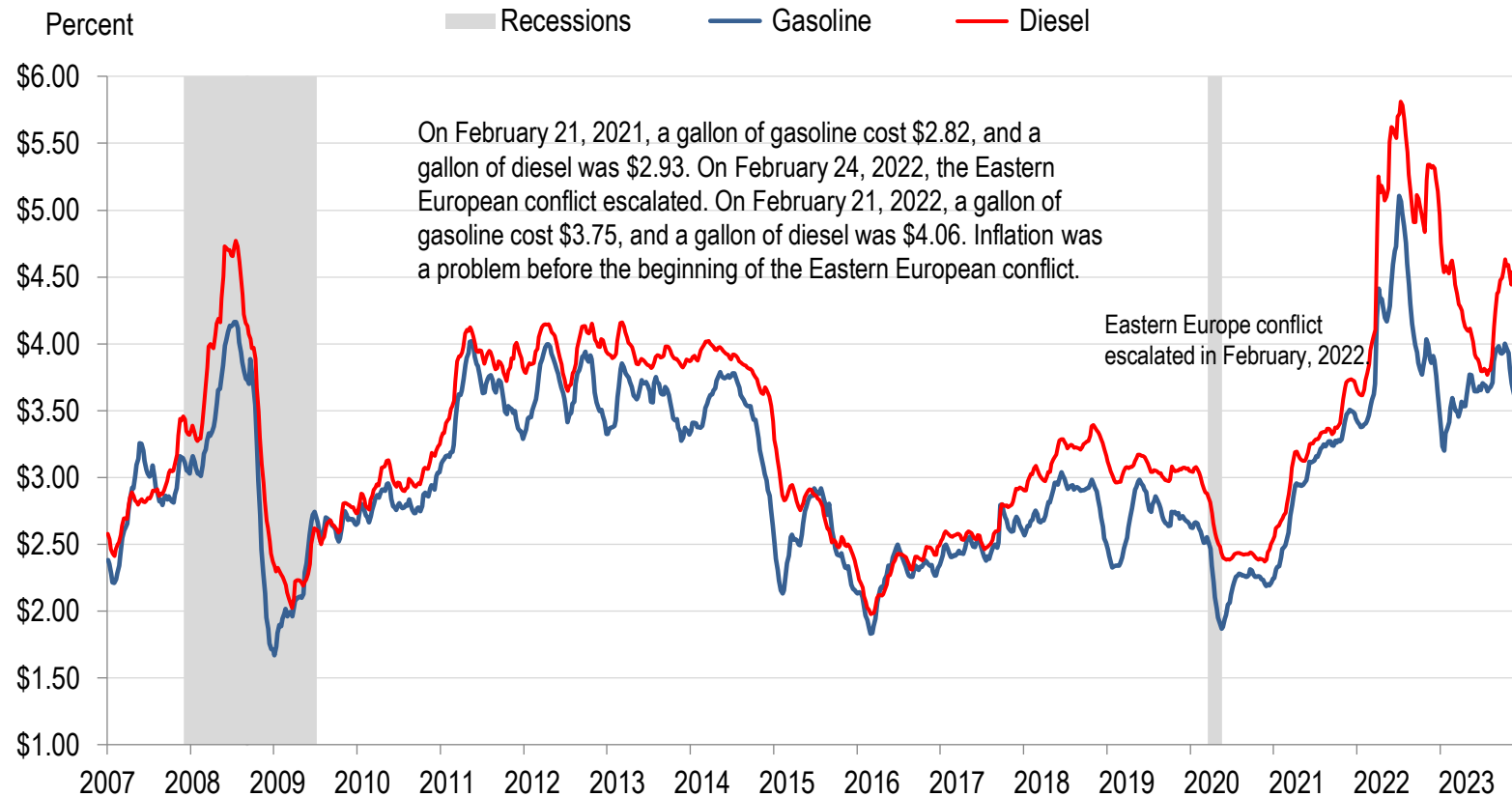
West Texas Intermediate



Source: FRED, EIA, cber.co, <https://www.eia.gov/outlooks/steo/#:~:text=U.S.%20crude%20oil%20production%20in,b%2Fd%20set%20in%202019>.

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

U.S. Gasoline Regular (All Grades, All Formulations) and Diesel Prices



Gasoline and Diesel Prices

On December 25, 2023, a gallon of gasoline (blue) was \$3.24, 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 \$3.91 on December 25, 2023, compared to its peak of \$5.78 on June 13, 2022. On January 4, 2021, the price per gallon was \$2.64.

Average Annual

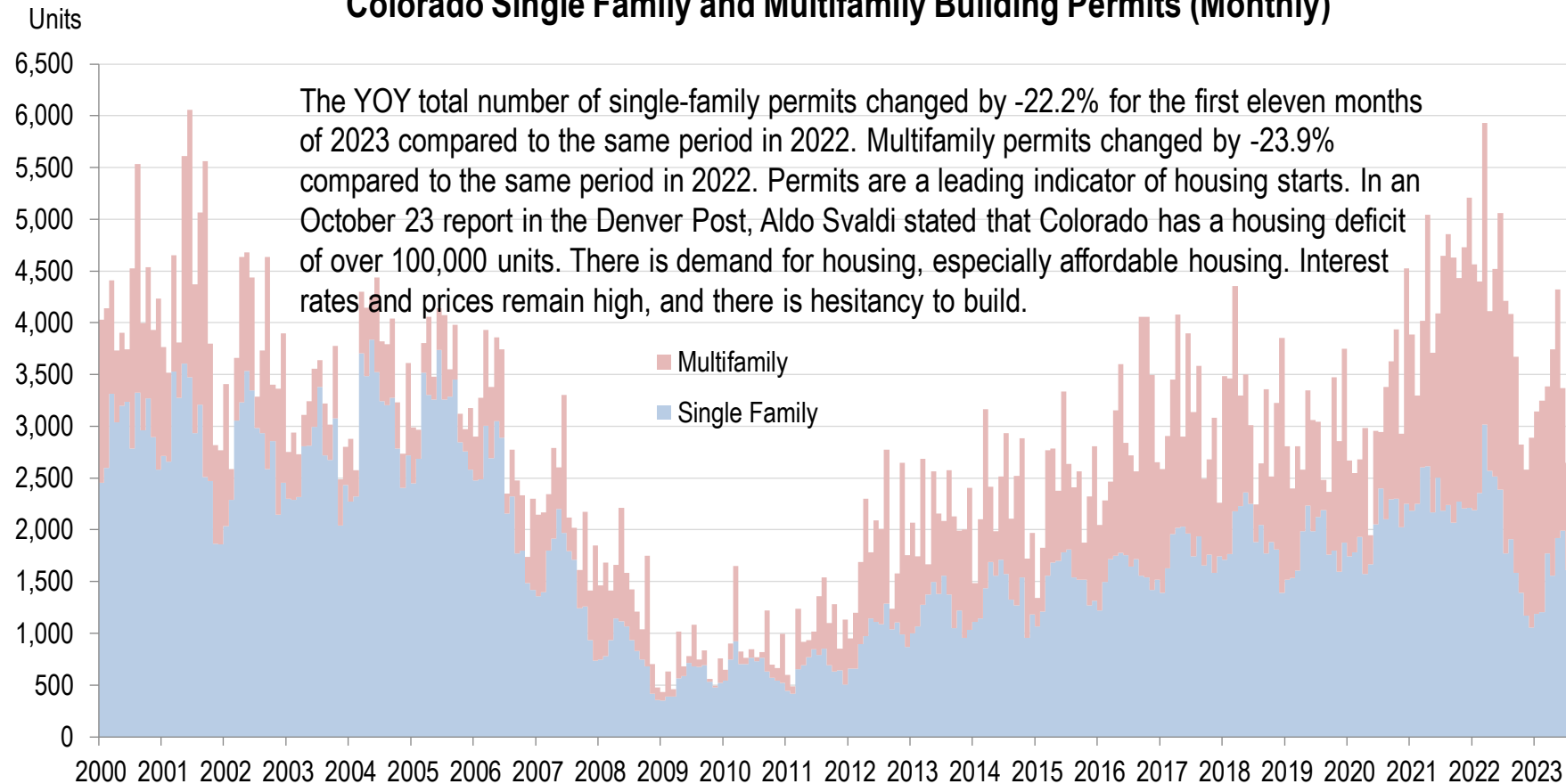
Year	Diesel	Gasoline
2015	\$2.71	\$2.63
2016	\$2.30	\$2.30
2017	\$2.65	\$2.26
2018	\$3.18	\$2.90
2019	\$3.06	\$2.83
2020	\$2.55	\$2.37
2021	\$3.29	\$3.22
2022	\$4.99	\$4.27
2023	\$4.21	\$3.63

Source: FRED, EIA, https://www.eia.gov/dnav/pet/pet_pri_gnd_a_epd2d_pte_dpgal_w.htm, https://www.eia.gov/dnav/pet/hist/LeafHandler.ashx?n=PET&s=EMM_EPM0_PTE_NUS_DPG&f=W, cber.co.

Colorado Residential Building Permits

Single Family and Multifamily Units

Colorado Single Family and Multifamily Building Permits (Monthly)



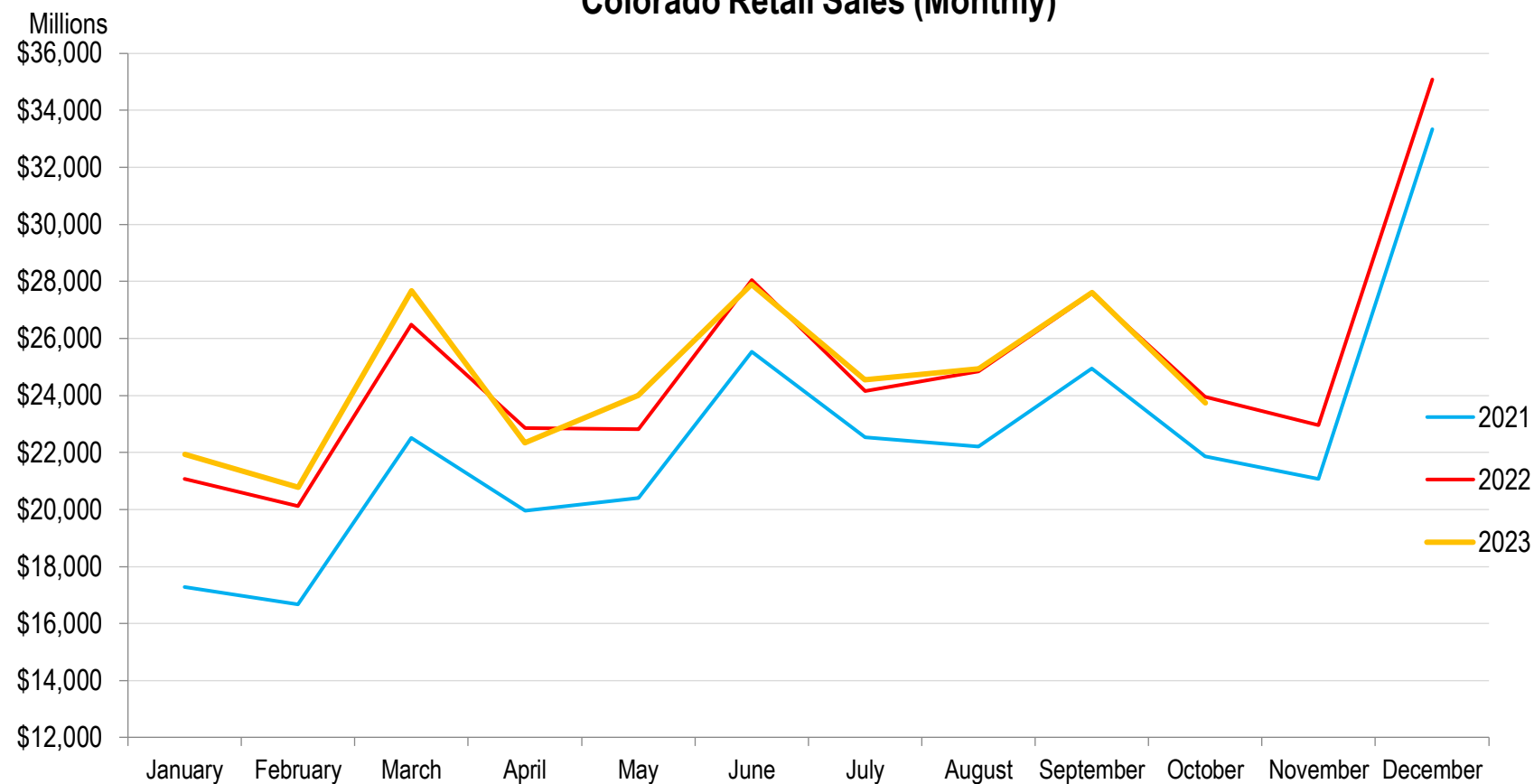
Annual Building Permits		
Year	Single Family	Multi-Family
2000	38,588	16,008
2001	36,437	18,570
2002	35,042	12,878
2003	33,894	5,732
2004	40,753	5,746
2005	40,018	5,732
2006	30,365	7,978
2007	20,516	8,938
2008	11,147	7,851
2009	7,261	2,094
2010	8,790	2,801
2011	8,729	4,779
2012	12,618	10,684
2013	15,773	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

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

Colorado Retail Sales

Monthly

Colorado Retail Sales (Monthly)



Colorado Retail Sales

Sales through October 2023 (yellow) are about 1.5% greater than during the same period in 2022.

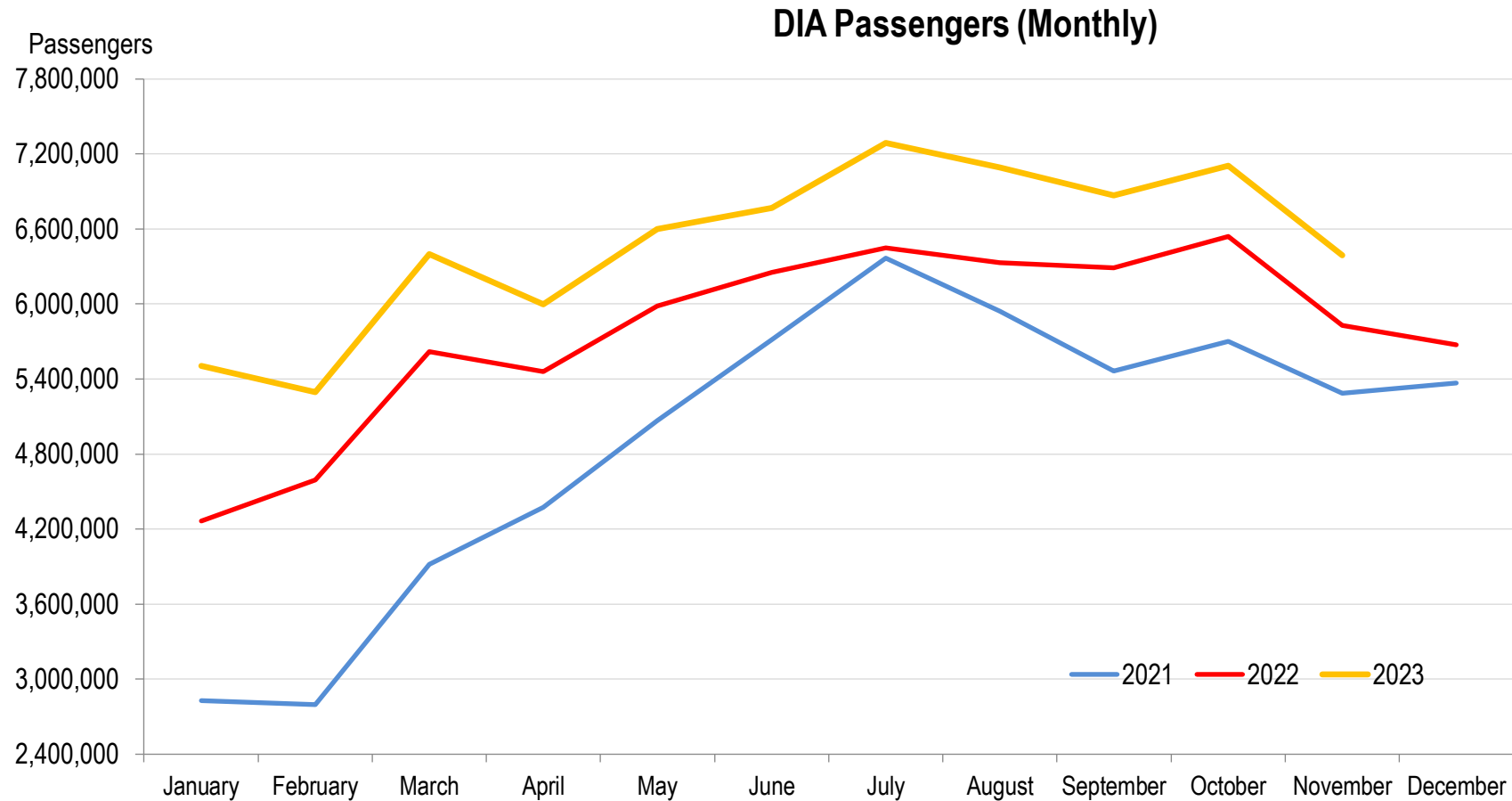
The slowdown in Colorado retail sales parallels the slowdown in U.S. retail sales. Retail sales for 2022 (red) were 11.8% greater than in 2021 (turquoise).

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%

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

Denver International Airport Passengers

Monthly



Source: flydenver.com, COS airport, cber.co.

Air Travel

The number of DIA passengers through November 2023 (yellow) was 12.1% above the November 2022 YTD total (red).

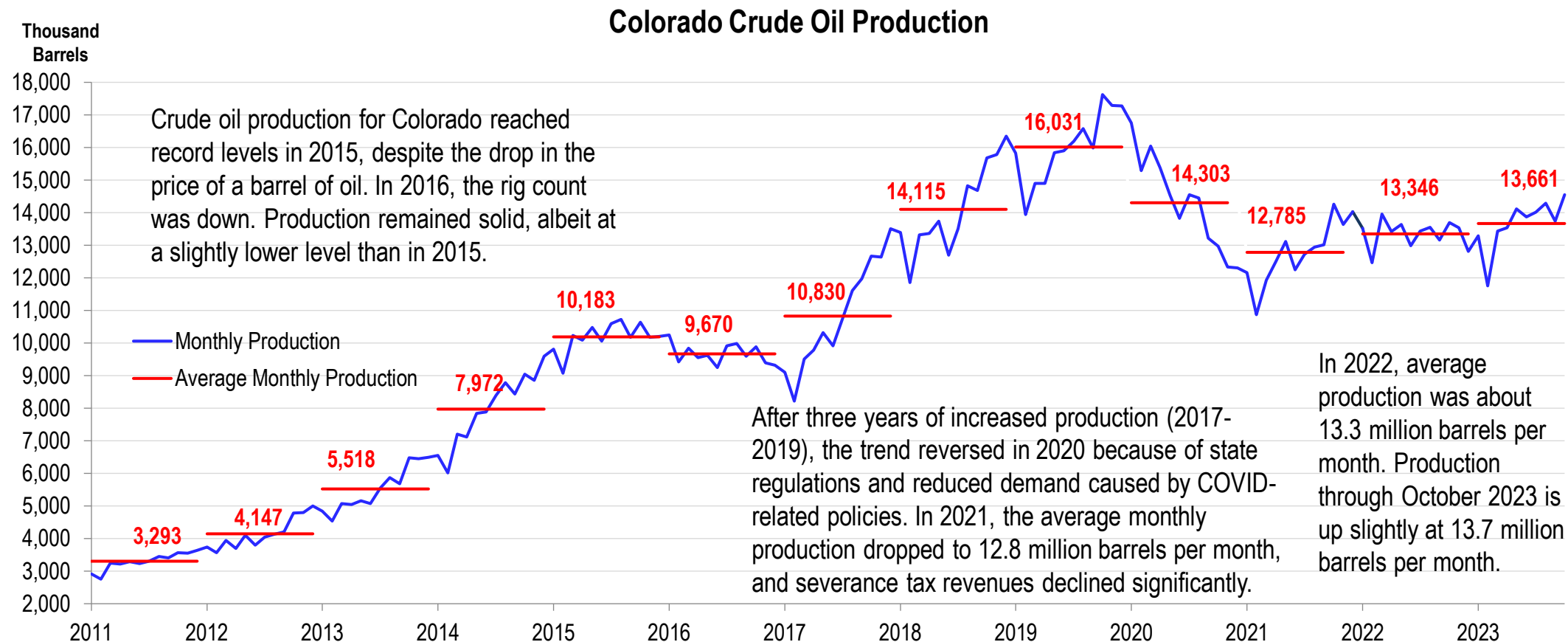
Approximately 77 million passengers will pass through DIA in 2023.

Total passengers through the Colorado Springs airport were up 8.2% YTD through November. There were 2.1 million passengers during this period.

Year	Passengers	% Change
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%

Colorado Field Production of Crude Oil

2011 to 2023 (Thousand Barrels)



Source: EIA, cber.co.

Colorado Economic Outlook

Colorado Economic Forecast 2024

In 2024, the Colorado real GDP growth rate will be 1.9% compared to 1.2% for the U.S.

Colorado's job growth in 2024 will be more volatile and much weaker than in 2023, and the unemployment rate will 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 tight credit conditions.

Colorado Economic Forecast					
	2021	2022	2023	2024	
Real GDP Value (billions) (chained 2017)	\$406.96	\$416.11	\$428.00	\$436.00	
% Change Real GDP	6.8%	2.2%	2.9%	1.9%	
CES Employment (thousands)	2,750.9	2,864.9	2,924.9	2,954.9	
Annual Change (thousands)	98.2	114.0	60.0	30.0	
% Change	3.7%	4.1%	2.1%	1.0%	
Unemployment Rate	5.4%	3.0%	3.0	3.6%	
Retail Sales (billions)	\$268.3	\$299.9	\$304.4	\$310.5	
% Change	17.3%	11.8%	1.5%	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	77.0	82.0	
Single Family Permits	30,246	24,000	20,000	22,000	
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 solid 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 be at record high levels.

Crude oil production has stabilized at about 165 million barrels (annually), after a sharp decline in 2021 because of state regulations and reduced demand because of COVID-related policies.

cber.co
Economic Outlook and Trends For 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.