Economic Outlook and Trends through May 2024

United States and Colorado

Colorado-based Business and Economic Research, cber.co Prepared June 28, 2024

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 are more optimistic than one year ago – a recession is unlikely.

There was slower than anticipated growth in Q1 2024. Weak economic growth will continue into Q2 and Q3. Consumers will struggle to balance their savings, debt, investment, and spending as inflation and high interest rates are problematic. Improvement is likely in Q4.

Inflation will continue to follow a bumpy path downward to the target rate.

Earlier in the year, some business leaders expected six rate cuts for 2024. It now appears there may be one or two rate cuts in 2024.

Businesses will face the same challenges as consumers. In addition, they will face various workforce issues.

Contents

This chartbook highlights the following topics.

- U.S. Forecast, U.S. and Colorado Gross Domestic Product, Real Disposable Personal Income Per Capita
- Colorado Population
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U.S. Forecast, Gross Domestic Product, and Disposable Income

United States Forecast

United States Forecast

United States Forecast

The Conference Board (TCB) U.S. Economic Forecast is the base for this analysis. There were minor changes in the June forecast.

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 (So far, it is slower, but not negative).
- In these cases, the TCB forecasts made sense at the time, but the recessions or slowdowns did not happen.

What is Likely to Happen

- As inflation dropped, discussions changed from rate hikes to rate cuts. There are many reasons for the uncertainty about the number and timing associated with the number of cuts. TCB calls for two rate 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:

- Spending on infrastructure investments will continue to support growth.
- The labor markets will remain tight but resilient.
- The housing market has been tentative, which is an improvement.
- There appears to be a light at the end of the tunnel for inflation reduction; however, the final part of the journey will be on a bumpy road.

Headwinds

The TCB forecast identified the following headwinds:

- High interest rates have curtailed business investment.
- The labor force is shrinking as companies retain workers and Baby Boomers retire.
- Political volatility caused by fiscal policy and government debt could impact government spending.
- Slower gains in personal income, reduced savings levels, and increased consumer debt have reduced personal consumption.
- Consumers will struggle to balance their income, debt, savings, and spending.
- There are concerns about a housing bubble and a bear market. We will see.

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U.S. Real GDP Growth The Conference Board Forecast (June 13, 2024)

Real GDP and Economic Growth

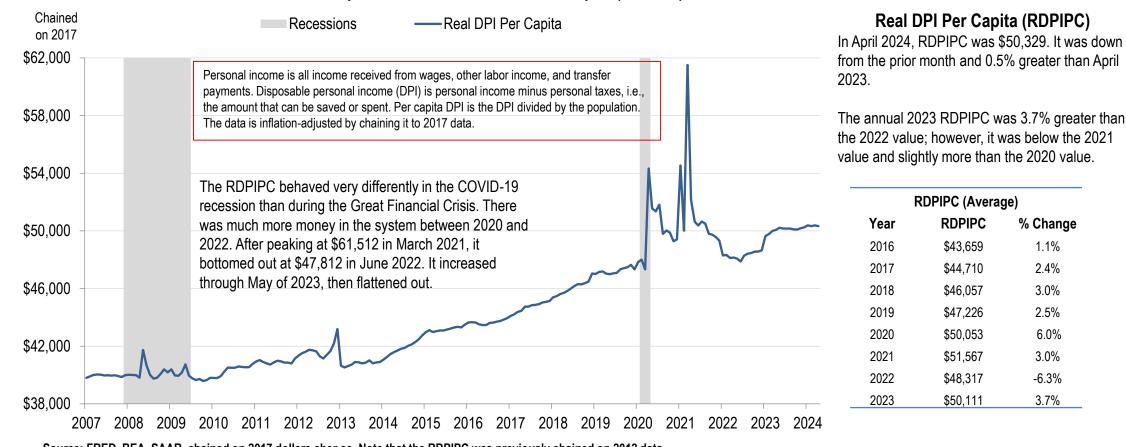
The Conference Board forecast projects real GDP growth of 2.0% in 2024. Real disposable income will increase by 1.2%, and Real personal consumption will increase by 1.9% in 2024. Residential investment will increase by 5.9% in 2024, and non-residential investment will change by 2.8%. Government spending will be solid in 2024 (2.9%), down from 4.1% in 2023.

Other Economic Factors

There will be slower growth in exports in 2024, a decrease from 2.6% to 1.6%. The U.S. unemployment rate will be 4.0% in 2024. The annual PCE inflation will be 2.4% in 2024, and the core rate will be 2.6%. Rate cuts may begin in late 2024 (there may be two), and the Fed Funds rate will decline to 4.875%. 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%	1.3%	0.8%	0.6%	1.2%	2.5%	2.0%	1.5%
Real Disposable Income	10.8%	3.3%	0.5%	0.9%	1.9%	0.7%	0.5%	1.0%	4.1%	1.2%	1.4%
Real Personal Consumption	3.8%	0.8%	3.1%	3.3%	2.0%	1.2%	0.5%	1.0%	2.2%	1.9%	1.3%
Residential Investment	-5.3%	-2.2%	6.7%	2.8%	15.4%	4.0%	1.0%	2.0%	-10.6%	5.9%	2.8%
Nonresidential Investment	5.7%	7.4%	1.5%	3.8%	3.3%	2.0%	1.1%	2.1%	4.5%	2.8%	2.6%
Total Gov't. Spending	4.8%	3.3%	5.8%	4.6%	1.3%	2.0%	2.2%	2.4%	4.1%	2.9%	2.3%
Exports	6.8%	-9.3%	5.4%	5.0%	1.2%	0.7%	0.5%	2.0%	2.6%	1.6%	2.2%
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%	2.8%	2.6%	2.5%	2.4%	3.7%	2.4%	2.0%
Core PCE Inflation (%Y/Y)	4.8%	4.6%	3.8%	3.2%	2.8%	2.6%	2.5%	2.4%	4.1%	2.6%	2.0%
Source: The Conference Board, https://	://www.conferenc	e-board.org/publi	cations/Economic	-Forecast-US. cb	er.co.						

Real Disposable Personal Income Per Capita United States



Real Disposable Personal Income Per Capita (RDPIPC)

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

Population – The Economy – People Fill Jobs

Change in Population By Place in Colorado

Change in Colorado Population by Place

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Rank	Place	July 1, 2020	July 1, 2023	Change
1	Colorado Springs city	480,331	488,664	8,333
2	Aurora city	386,773	395,052	8,279
3	Castle Rock town	73,886	81,415	7,529
4	Windsor town	33,230	40,349	7,119
5	Commerce City city	62,782	68,245	5,463
6	Erie town	30,417	35,269	4,852
7	Parker town	58,879	62,743	3,864
8	Grand Junction city	65,725	69,412	3,687
9	Castle Pines city	11,215	14,747	3,532
10	Greeley city	109,272	112,609	3,337
11	Timnath town	6,740	9,991	3,251
12	Loveland city	76,366	79,352	2,986
13	Frederick town	14,724	17,676	2,952
14	Severance town	7,993	10,820	2,827
15	Thornton city	142,185	144,922	2,737
16	Berthoud town	10,613	13,238	2,625
17	Broomfield city	74,490	76,860	2,370
18	Brighton city	40,293	42,477	2,184
19	Johnstown town	17,369	19,511	2,142
20	Firestone town	16,663	18,589	1,926

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

The U.S. Census Bureau recently released the 2023 population for 270 incorporated places in Colorado. The lists are ranked by change (last column).

At the top of the list were Colorado Springs, Aurora, Castle Rock, Windsor, and Commerce City.

At the bottom of the list are Arvada, Boulder, Westminster, Fountain, and Centennial.

If your city or town is not on the list, go to <u>https://www.census.gov/data/tables/ti</u> <u>me-series/demo/popest/2020s-total-</u> cities-and-towns.html.

Change in Colorado Population by Place						
Rank	Place	July 1, 2020	July 1, 2023	Change		
251	Lone Tree city	14,280	14,063	-217		
252	Manitou Springs city	4,876	4,622	-254		
253	La Junta city	7,314	7,033	-281		
254	Lakewood city	156,247	155,961	-286		
255	Vail town	4,818	4,521	-297		
256	Aspen city	6,997	6,612	-385		
257	Greenwood Village city	15,649	15,205	-444		
258	Federal Heights city	14,394	13,943	-451		
259	Sterling city	13,407	12,954	-453		
260	Longmont city	99,188	98,630	-558		
261	Wheat Ridge city	32,379	31,804	-575		
262	Louisville city	21,174	20,390	-784		
263	Pueblo city	111,899	111,077	-822		
264	Denver city	717,606	716,577	-1,029		
265	Littleton city	45,595	44,451	-1,144		
266	Centennial city	108,196	106,883	-1,313		
267	Fountain city	29,894	28,489	-1,405		
268	Westminster city	116,594	114,875	-1,719		
269	Boulder city	108,123	105,898	-2,225		
270	Arvada city	124,343	121,414	-2,929		

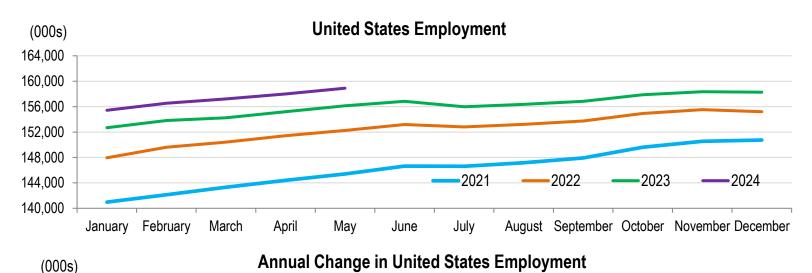
Change in Colorado Population 2020 vs 2023 By State and County

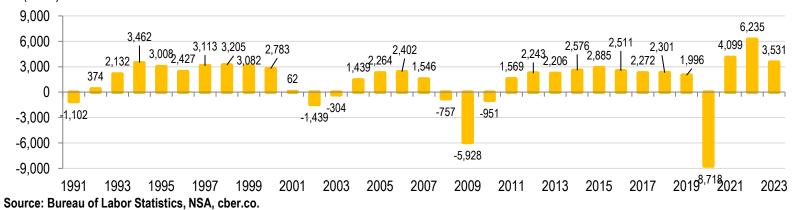
County Po	pulation and Ch	ange	County Po	pulation and Ch	ange	County Population and Change		County Change in Population	
County	July 1, 2023	2023-2020	County	July 1, 2023	2023-2020	County	July 1, 2023	2023-2020	ooung onango in ropulation
Colorado (state)	5,877,610	92,391	Gunnison	17,321	371	Kit Carson	6,994	-68	The U.S. Census Bureau recently
Weld	359,442	27,984	Saguache	6,688	299	Jackson	1,309	-70	released the 2023 population for
Douglas	383,906	23,583	Ouray	5,176	294	Kiowa	1,384	-71	Colorado's 64 counties (sorted by the
Adams	533,365	12,865	Alamosa	16,655	278	Sedgwick	2,299	-90	change in population between 2023
El Paso	744,215	11,831	Routt	25,064	232	Yuma	9862	-109	and 2020).
Larimer	370,771	10,848	Huerfano	7,055	228	Teller	24,617	-127	anu 2020).
Mesa	159,681	3,670	Bent	5,681	208	Baca	3,344	-136	The state negulation increased by
Elbert	28,806	2,590	Grand	15,935	188	Las Animas	14,348	-142	The state population increased by
Broomfield	76,860	2,370	Dolores	2,513	182	Lincoln	5,480	-182	92,391, with the most growth in Weld,
Fremont	50,318	1,440	Costilla	3,628	126	San Miguel	7,868	-186	Douglas, Adams, El Paso, and
Montrose	44,156	1,338	Gilpin	5,926	106	Clear Creek	9,147	-246	Larimer. The population declines in
Chaffee	20,617	1,133	San Juan	802	91	Prowers	11,751	-266	26 counties, most notably Jefferson,
Pueblo	169,422	1,085	Conejos	7,521	70	Rio Grande	11,188	-353	Boulder, Eagle, Denver, and Pitkin.
Garfield	62,707	913	Mineral	944	70	Otero	18,136	-528	
Custer	5,534	811	Moffat	13,327	58	Summit	30,465	-536	
Arapahoe	656,061	789	Rio Blanco	6,569	49	Logan	20,619	-591	
Archuleta	14,189	765	Washington	4,855	42	Pitkin	16,640	-715	
La Plata	56,407	734	Cheyenne	1,727	-19	Denver	716,577	-1,029	
Park	18,117	699	Hinsdale	765	-23	Eagle	54,381	-1,276	
Delta	31,746	690	Lake	7,365	-43	Boulder	326,831	-4,107	
Montezuma	26,531	644	Phillips	4,476	-51	Jefferson	576,366	-6,715	
Morgan	29,524	448	Crowley	5,636	-52	Source: U.S. Censu	s Bureau, https://ww	ww.census.gov/	data/tables/time-

series/demo/popest/2020s-counties-total.htmlcber.co.

U.S. and Colorado Employment and Unemployment and Earnings

Employment and Change in Employment United States





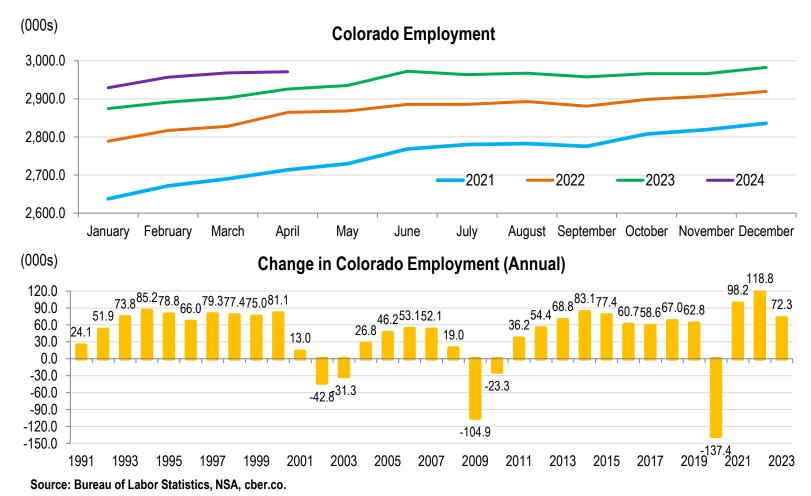
U.S. Employment

Average total employment through May 2024 was 157.2 million,1.8% greater than for the same period last year. The average <u>monthly</u> change in employment for 2024 is 280,000.

Average total employment for 2023 was 156.1 million, an increase of 2.3% or about 3.5 million over 2022. The average <u>monthly</u> change in employment for 2023 was 294,200.

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

Employment and Change in Employment Colorado



Colorado Employment and Change

Through May 2024, the average total Colorado employment was 2,971,100.

The average YOY change in annual employment (NSA) through May 2024 was 57,400.

The average YOY change in <u>monthly</u> employment for 2024 is 4,783 per month.

By comparison, the change in the average <u>monthly</u> 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.

Unemployment Rate United States and Colorado

Recessions -Colorado Percent 16.0% 14.0% 12.0% 10.0% 8.0% 6.0% 4.0% 2.0% 0.0% 2009 2010 2011 2012 2013 2014 2015 2016 2017 2018 2019 2020 2021 2022 2023 2007 2008 2024

U.S. and Colorado Unemployment

S.A. Unemployment Rate

The Colorado unemployment rate was 3.8% (red) in May 2024, and the U.S. rate was 4.0% (blue).

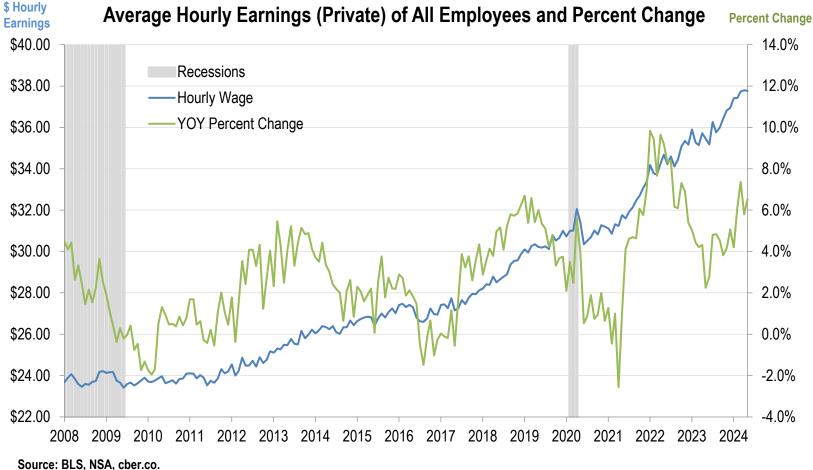
The May rate for men was 4.3% and 3.3% for women. It was 2.4% for individuals with some college education, 4.3% for a high school diploma, and 8.2% for less than a high school diploma.

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%			

Source: BLS, SA, cber.co.

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Average Hourly Earnings of All Employees (Private) Colorado



Hourly Earnings, Percent Change, and CPI The May 2024 private hourly earnings for Colorado (blue) were \$37.77, a YOY increase of 6.5% (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. 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: E	BLS, cber.co				

Colorado Employment and Change in Employment

Colorado Employment and Change, Wage Category, Change in Percentage Share						
Industry Sector Emp. vs. YOY						
	May	YOY	Percent			
Private vs. government employees	2024	Change	YOY			
Total Employment	2,991.1	55.4	1.9%			
Private	2,496.9	29.9	1.2%			
Government	494.2	25.5	5.4%			

Highlights Private vs. Government

Through the first five months of 2024, government employment accounted for 46.0 % of the change in total employment.

Over this period, private sector employment increased by 1.2% and Government employment increased by 5.4%.

Colorado Employment and Change, Wage Category, Change in Percentage Share							
Industry Sector	Emp. vs	s. YOY					
Sectors with more than 145,000 employees	May 2024	YOY Change	Percent YOY				
Healthcare	332.8	12.7	4.0%				
Prof., Scientific, and Tech, Services (PST)	299.8	8.6	3.0%				
Food and Accommodation (F&A)	294.7	5.8	2.0%				
Local Government	291.4	14.3	5.2%				
Retail Trade	273.8	-0.3	-0.1%				
Financial Activities	184.7	4.3	2.4%				
Construction	182.5	-2.3	-1.2%				
Administrative Services	158.9	-0.3	-0.2%				
Manufacturing	152.3	0.9	0.6%				
State Government	145.9	9.2	6.7%				

Colorado Employment and Change, Wage Category, Change in
Percentage Share

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Industry Sector	Emp. vs	s. YOY			
	May	YOY	Percent		
Sectors with less than 145,000 employment	2024	Change	YOY		
Other Services (Personal)	129.0	2.0	49.4		
Wholesale Trade	116.4	-1.4	20.8		
Transp., Warehousing, and Utilities (TWU)	111.6	-3.8	39.4		
Information	75.4	-2.5	-28.0		
Arts, Entertainment, Recreation (AER)	64.2	3.6	25.4		
Federal Government	57.0	2.4	3.5		
Education (Private)	51.2	4.3	29.4		
Mgmt. of Corporations/Enterprises (MCE)	46.7	0.1	28.7		
Extractive Industries	22.2	0.8	10.0		

Highlights

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

Through the first five months of 2024, net employment for the top ten sectors increased by 52,900. Employment increased in seven sectors. Leaders in job growth were local government, healthcare, state government, PST, and F&A.

Highlights

Sectors with < 145,000 Employment (Sorted by Size)

Through the first five months of 2024, net employment increased by 2,500. Employment increased in six of the nine sectors. Leaders in job growth were private education, AER federal government, and other services.

Inflation

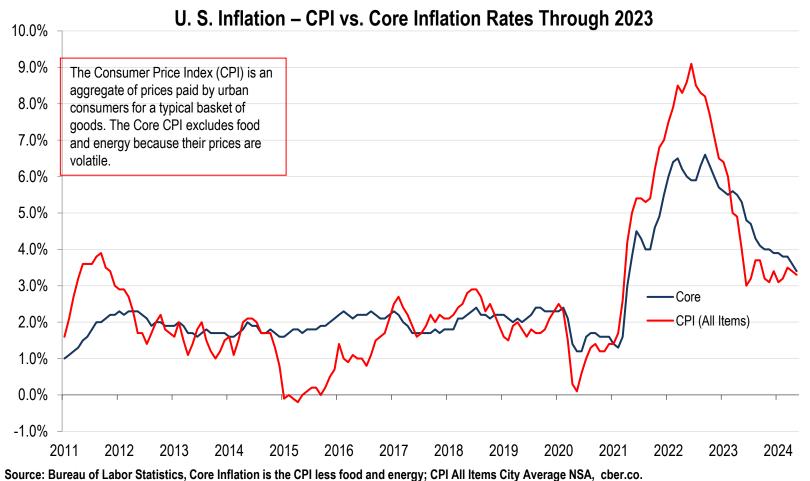
From "Transitory Inflation" to "Higher for Longer"

Inflation Trends

- U.S. inflation has decreased since the NSA CPI rate peaked at 9.1% in June 2022, and the core rate topped at 6.6% in September 2022.
- Some economists thought inflation would return to the Federal Reserve target rate of 2.0% by the end of 2023. In December 2023, the CPI rate had fallen to 3.4%, and the core rate had dropped to 3.9%. In 2024, the CPI rate continued to decline and move sideways. The restrictive monetary policy will not return the inflation rate to the target rate (2.0%) in 2024.
- The peak for the PCE Price Index, the FOMC preferred measure of inflation, was 7.1% in June 2022. The PCE Price Index was 2.6% in December 2023. It was 2.7% in March 2024, and the core PCE rate was 2.8%.
- The annual Denver MSA CPI has been more than the U.S. CPI for eight of the past ten years (see table on the right).
- For 2021, 2022, and 2023, the U.S. and Denver MSA CPI inflation rate increased by 17.7%, a CAGR of 5.7%.
- Stubborn inflation will not return to the target rate until 2025, i.e., higher for longer. The FOMC will not begin rate cuts until it is comfortable that inflation is under control. Patience is required. There may be two interest rate cuts in 2024.

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 May 2024, the CPI rate (red) was 3.3%, and the core rate (blue) was 3.4%.

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. The war on inflation will continue into 2025. It may be Q2 2025 before the rate drops to the Fed's target rate.

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

Denver MSA 10.0% CPI vs. Core Inflation The Denver MSA inflation rate is generally higher than the U.S. 8.0% CPI (All Items) -Core 6.0% 4.0% 2.0% the Denver MSA. 0.0% ٠ -2.0% 2019 2020 2021 2022 2023 2024

Denver MSA All Items CPI vs. Core (All Items less Food and Energy)

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

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rate. Note that the Colorado rate is only published bi-monthly. May 2024 was an exception. The U.S. CPI rate was 3.3%, and the Denver MSA rate was 2.6%. The U.S. March core rate was 3.4% compared to 2.7% for

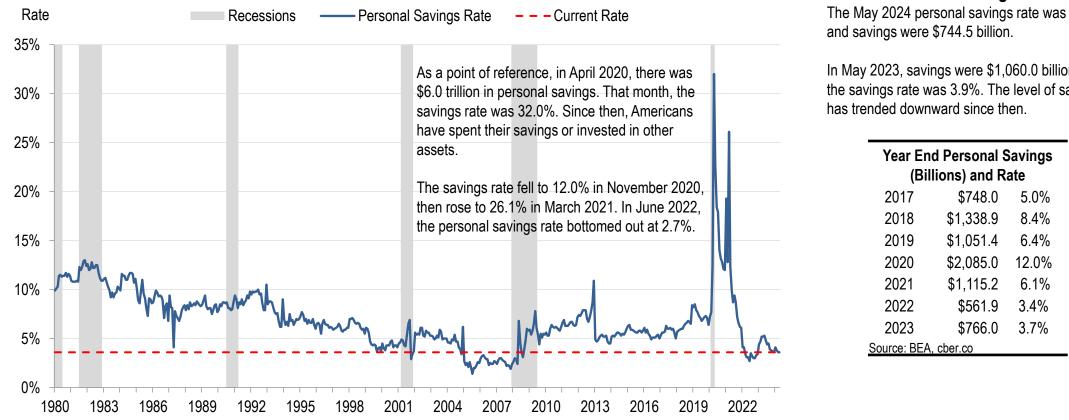
Denver areas of concern are:

- Shelter 4.0%
- Energy services 5.6%
- Food away from home 5.6%. Prices are 31% above May 2021.

Saving, Borrowing, Consumption, and the Wealth Effect

U.S. Personal Saving Amount and Rate Percentage of Disposable Personal Income (DPI)

Personal Savings Rate



Personal Saving Rate

The May 2024 personal savings rate was 3.6%,

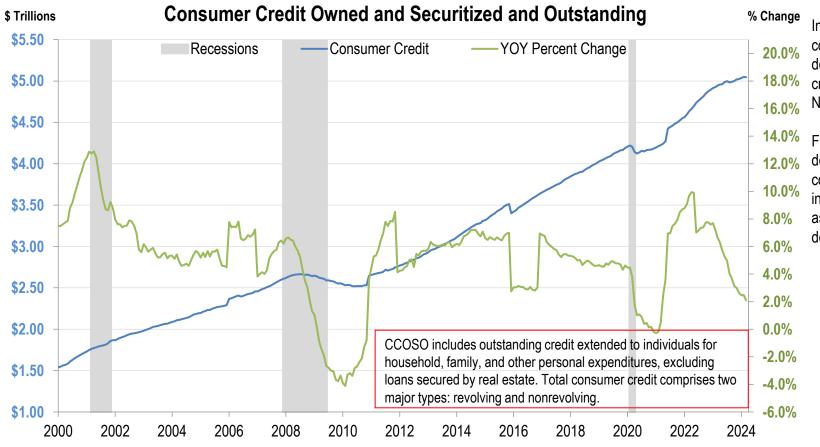
In May 2023, savings were \$1,060.0 billion, and the savings rate was 3.9%. The level of saving

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

Source: Federal Reserve, FRED, cber.co.

U.S. Consumer Credit Outstanding United States



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

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

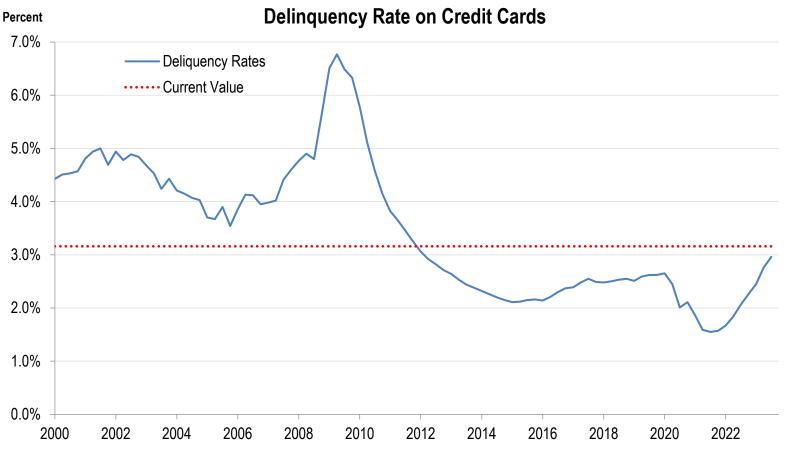
Consumer Credit

In April 2024, the YOY rate of outstanding
consumer credit (including consumer loan defaults) increased by 1.9% (green). Securitized
credit has been more than \$4.5 trillion since
November 2021 (blue). It was \$5.1 trillion in April.

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).

	nding Credit (d Percent Cha	. ,
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



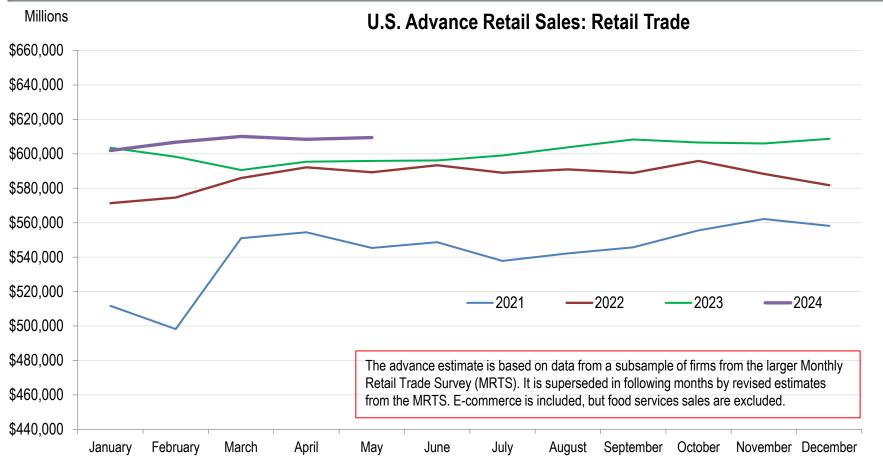
Delinquency Rate on Credit Cards

At the end of Q1 2024, the credit card delinquency rate rose to 3.16% (red dotted line), the highest since Q3 2011. The current delinquency rate is below the rate between 2000 and 2011.

Consumers must balance rising costs (inflation), reduced savings, higher credit card balances, and rising delinquency rates on credit cards.

Source: FRED, Federal Reserve, SA.

U.S. Advance Retail Sales: Retail Trade Monthly



Advance Retail Sales

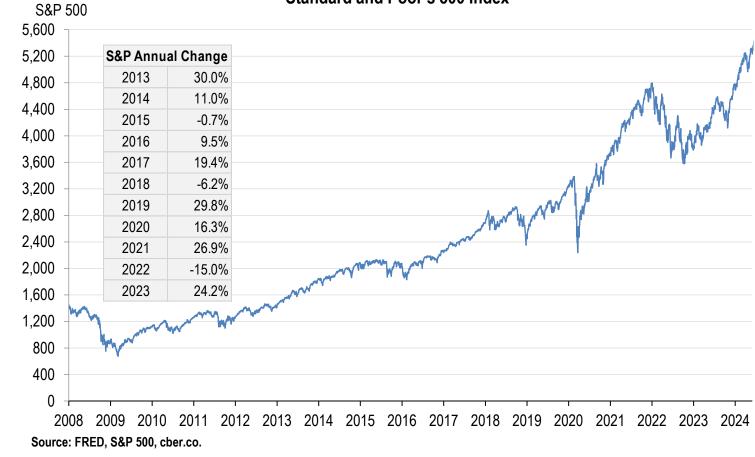
Retail sales were weak in 2023. Sales have been flat in March, April, and May. YTD sales through May (purple) were 1.8% greater than for the same period in 2023 (green).

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	4.2%
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	ensus, cber.co	

Standard and Poor's 500 Index

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%**

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 YTD change +24.2%

2024 Bull Market

June 26 5,477.9 YTD change +14.8%.

Daily

U.S. Indicators

ISM Purchasing Managers Composite Indices Manufacturing vs. Services

ISM Manufacturing PMI vs. Services PMI Composite Indices Index Value 70 -ISM Manufacturing Index ISM Services Index 65 Neutral 60 55 50 45 Values > 50 points represent an 40 expansion and values < 50 points represent a contraction. A value of 50 is 35 neutral. 30 2008 2016 2017 2018 2024 2009 2010 2011 2012 2013 2014 2015 2019 2021 2022 2023 2020 Source: Institute of Supply Management, cber.co.

Manufacturing and Services PMI

The ISM manufacturing index (blue) has trended downward after peaking at 64.7 in March 2021.

It was below 50 for 16 months before posting 50.2 in March 2024. It dropped to 49.2 in April and 48.7 in May. Half of the fourteen manufacturing industries registered growth, and half contracted.

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. In May, it rebounded to 53.8.

New orders and business activity were higher, although they varied by company and industry. Companies continued to have problems hiring people and managing expenses. Inflation and the current interest rates continue to be problematic.

NFIB Small Business Optimism Index United States

1984=100 ------NFIB – – – Current Value Recessions ---- Index Average 116 112 108 104 100 96 92 88 84 80 1986 1988 1990 1992 1994 1996 1998 2000 2002 2004 2006 2008 2010 2012 2014 2016 2018 2020 2022 2024

NFIB Small Business Optimism Index

Source: NFIB, cber.co.

Colorado-based Business and Economic Research https://doi.org/10.1011/j.com/10.1011/j.com/10.1011/j.com/10.1011/j.com/10.1011/j.com/10.1011/j.com/10.1011/j.com/10.1011/j.com/10.1011/j.com/10.1011/j.com/10.1011/j.com/10.1011/j.com/10.1011/j.com/10.1011/j.com/10.1011/j.com/10.1011/j.com/10.1011/j.com/10.1011/j.com/10.1011/j.com/10.1011/j.com/10.1011/j.com/10.1011/j.com/10.1011/j.com/10.1011/j.com/10.1011/j.com/10.1011/j.com/10.1011/j.com/10.1011/j.com/10.1011/j.com/10.1011/j.com/10.1011/j.com/10.1011/j.com/10.1011/j.com/10.1011/j.com/10.1011/j.com/10.1011/j.com/10.1011/j.com/10.1011/j.com/10.1011/j.com/10.1011/j.com/10.1011/j.com/10.1011/j.com/10.1011/j.com/10.1011/j.com/10.1011/j.com/10.1011/j.com/10.1011/j.com/10.1011/j.com/10.1011/j.com/10.1011/j.com/10.1011/j.com/10.1011/j.com/10.1011/j.com/10.1011/j.com/10.1011/j.com/10.1011/j.com/10.1011/j.com/10.1011/j.com/10.1011/j.com/10.1011/j.com/10.1011/j.com/10.1011/j.com/10.1011/j.com/10.1011/j.com/10.1011/j.com/10.1011/j.com/10.1011/j.com/10.1011/j.com/10.1011/j.com/10.1011/j.com/10.1011/j.com/10.1011/j.com/10.1011/j.com/10.1011/j.com/10.1011/j.com/10.1011/j.com/10.1011/j.com/10.1011/j.com/10.1011/j.com/10.1011/j.com/10.1011/j.com/10.1011/j.com/10.1011/j.com/10.1011/j.com/10.1011/j.com/10.1011/j.com/10.1011/j.com/10.1011/j.com/10.1011/j.com/10.1011/j.com/10.1011/j.com/10.1011/j.com/10.1011/j.com/10.1011/j.com/10.1011/j.com/10.1011/j.com/10.1011/j.com/10.1011/j.com/10.1011/j.com/10.1011/j.com/10.1011/j.com/10.1011/j.com/10.1011/j.com/10.1011/j.com/10.1011/j.com/10.1011/j.com/10.1011/j.com/10.1011/j.com/10.1011/j.com/10.1011/j.com/10.1011/j.com/10.1011/j.com/10.1011/j.com/10011/j.com/10011/j.com/10011/j.com/10011/j.com/10011/j.com/10011/j.com/10011/j.com/10011/j.com/10011/j.com/10011/j.com/10011/j.com/10011/j.com/10011/j.com/10011/j.com/10011/j.com/10011/j.com/10011/j.com/10011/j.com/10011/j.com/10011/j.com/10011/j.com/10011/j.com/10011/j.com/10011/j.com/10011/j.com/10011/j.com/10011/j.com/10011/j.com/10011/j.com/10011/j.com/10011/j.com/10011/j.com/10011/j.com/10011/

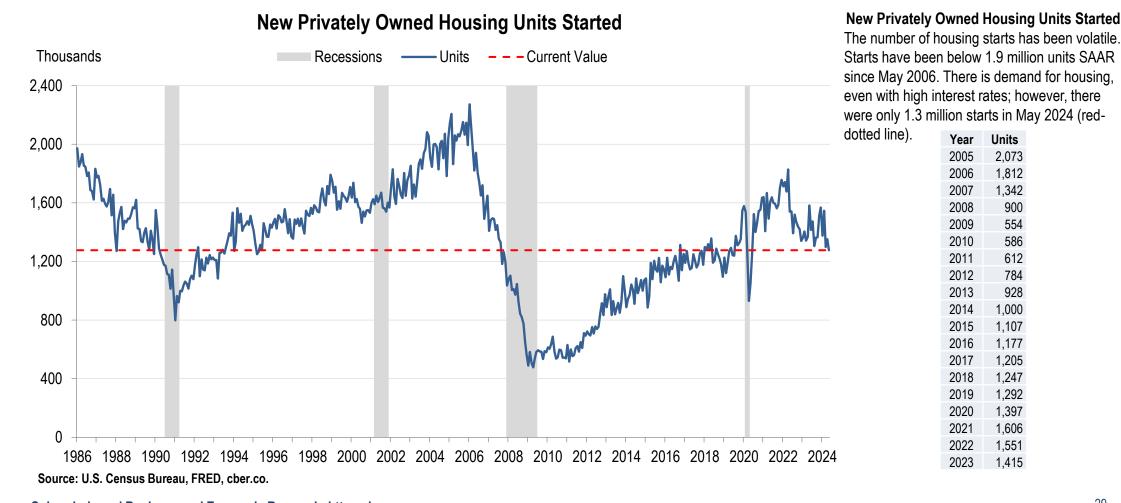
NFIB Small Business Index

In May 2024, the NFIB index rose by 0.8 to 90.5 (red dotted line), the 29th consecutive month below the 50-year average of 98.0 (purple dotted line). The May value was the best for 2024. Five of the ten indices increased, three decreased, and two were unchanged.

Small businesses have many concerns, in addition to inflation and interest rates. Business conditions are weak, business investment is limited, government debt is out of control, leaders are concerned about tax rates, and the elections have created uncertainty.

For more details, the NFIB monthly SBET report is available at https://www.nfib.com/.

New Privately-Owned Housing Units Started **United States**



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

Year

2005

2006

2007

2008

2009

2010

2011

2012 2013

2014

2015

2016

2017

2018

2019

2020

2021

2022

2023

Units

2.073

1,812 1.342

> 900 554

586

612

784

928

1.000

1,107

1.177 1.205

1,247

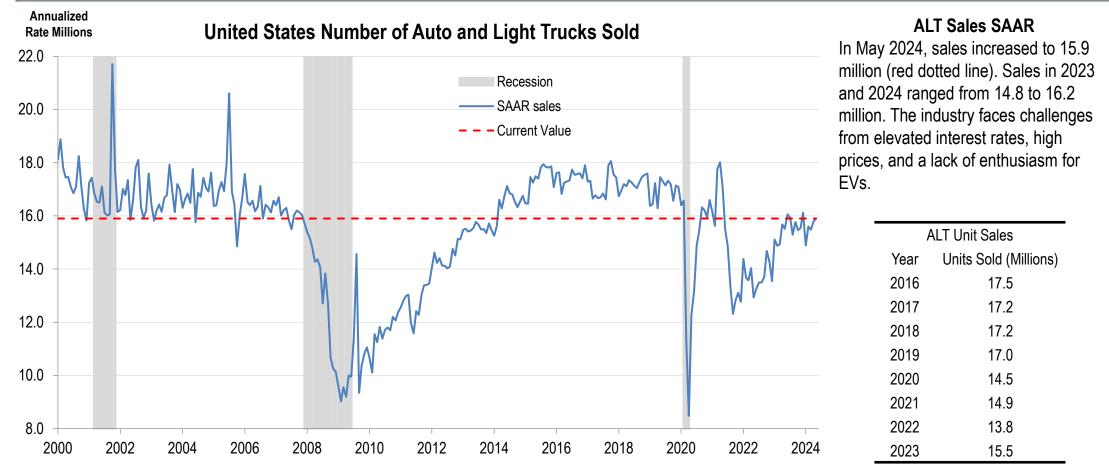
1.292

1.397 1,606

1,551

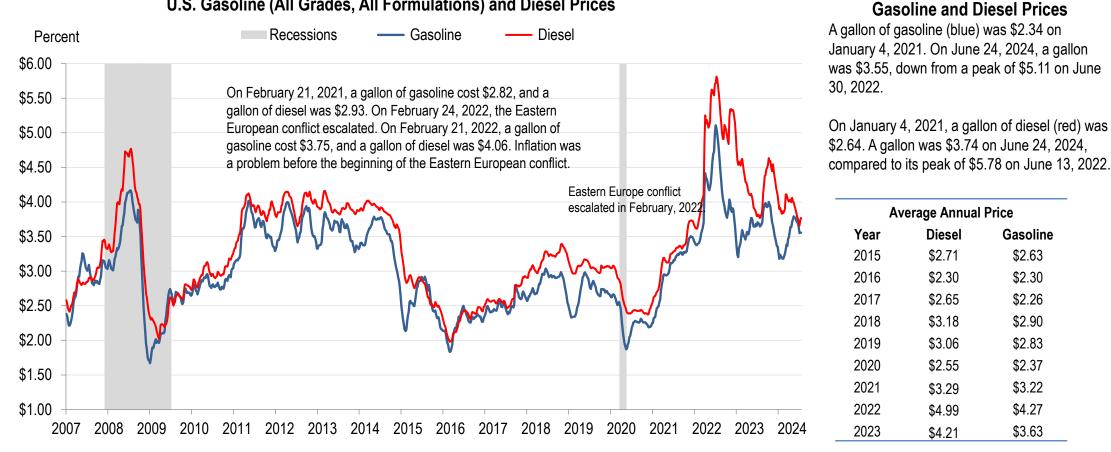
1,415

U.S. Auto and Light Truck (ALT) Sales Monthly (Seasonally Adjusted Annualized Rate in Millions)



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

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



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

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.

Gasoline

\$2.63

\$2.30

\$2.26

\$2.90

\$2.83

\$2.37

\$3.22

\$4.27

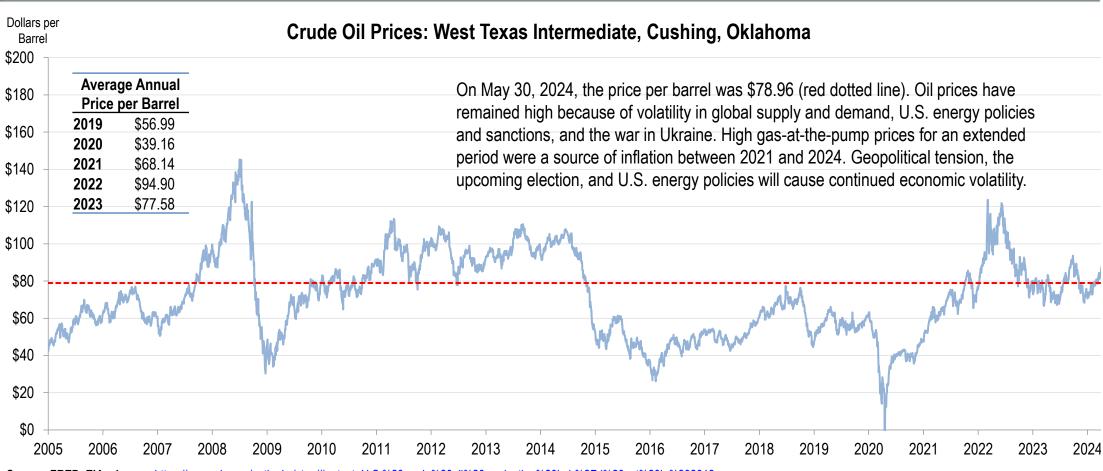
\$3.63

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

Million Barr	united States Field Production of Crude Oil
5,000	
4,500 -	Annual U.S. field production of crude oil peaked in 1973 and declined until 2009. It has increased annually since then, with declines in 2016, 2020, and 2021. The
4,000 -	increased production has occurred despite renewable energy sources.
3,500 -	
3,000 -	
2,500 -	
2,000	
1,500 -	EIA states that field production represents crude oil production on leases, natural gas liquids production at natural gas processing plants, new supply of other hydrocarbons/oxygenates and motor gasoline blending components, and fuel ethanol blended into finished motor gasoline.
1,000 + 19	73 1975 1977 1979 1981 1983 1985 1987 1989 1991 1993 1995 1997 1999 2001 2003 2005 2007 2009 2011 2013 2015 2017 2019 2021 2023

Source: EIA, cber.co.

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

Colorado Indicators

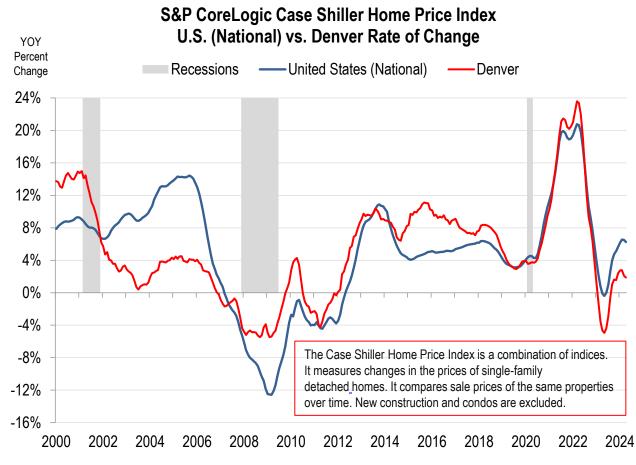
Colorado Residential Building Permits

Single Family and Multifamily Units

nits	Colorado Single Family and Multifamily Building Permits (Monthly)	A	nnual Building P	ermits
		Year	Single Family	Multi-Family
00		2000	38,588	16,008
00	The total number of single-family permits for the first five months of 2024 changed by +22.0%	2001	36,437	18,570
00	compared to the same period in 2023, and multifamily permits changed by -53%. In late 2023,	2002	35,042	12,878
00	Denver Post writer Aldo Svaldi cited a report that Colorado has a housing deficit of over 100,000	2003	33,894	5,732
0	units. The Colorado Springs Government recently reported the city has a shortfall of 16,000 to	2004	40,753	5,746
00 00	28,000 units.	2005	40,018	5,732
00		2006	30,365	7,978
		2007	20,516	8,938
0		2008	11,147	7,851
0 -		2009	7,261	2,094
lah 💾	Multifamily	2010	8,790	2,801
0 -		2011	8,729	4,779
0 -	Single Family	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
0 -		2017	24,338	16,335
0 -		2018	26,134	16,493
		2019	24,756	13,877
0		2020	26,636	13,833
2000	2002 2004 2006 2008 2010 2012 2014 2016 2018 2020 2022 2024	2021	30,246	26,278
		2022	23,728	25,111

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

Case Shiller Home Price Index YOY National vs. Denver Rate of Change

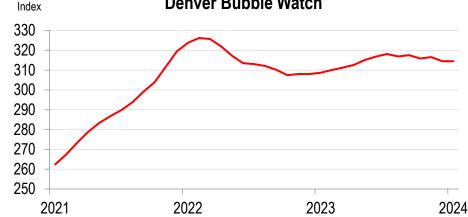


Change in S&P CoreLogic Case Shiller Index

In April 2024, the YOY change in the U.S. index was +6.3%, and the Denver index changed by 1.9%.

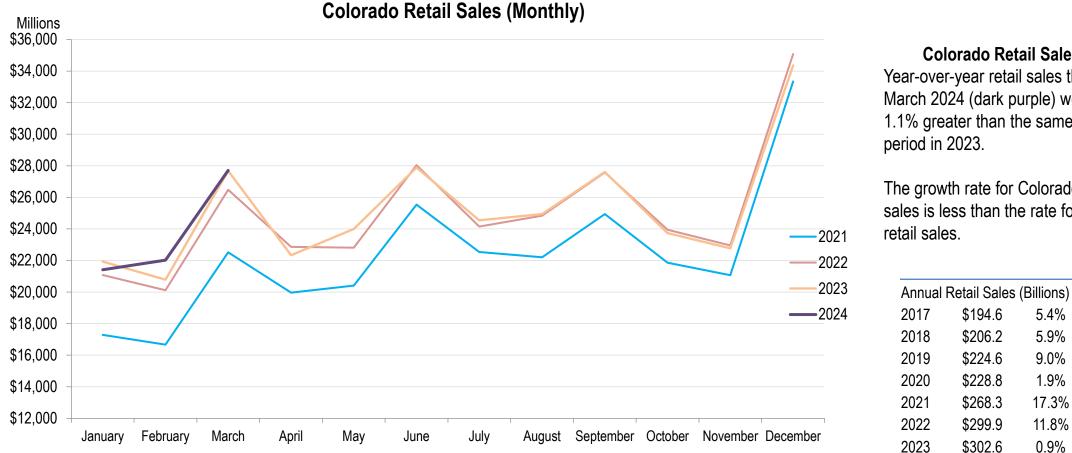
Compared to a year ago, U.S. housing prices are accelerating. The chart below shows the Denver market is in a bubble situation. Current prices are below prices in early 2022. In retrospect, the 2019 housing market favored buyers, and the U.S. YOY appreciation rate was about 4.0%. In the summer of 2020, 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.

Colorado Retail Sales Monthly



Colorado-based Business and Economic Research https://

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

11.8% 0.9%

5.4%

5.9%

9.0%

1.9%

17.3%

Colorado Retail Sales

Year-over-year retail sales through March 2024 (dark purple) were 1.1% greater than the same period in 2023.

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

\$194.6

\$206.2

\$224.6

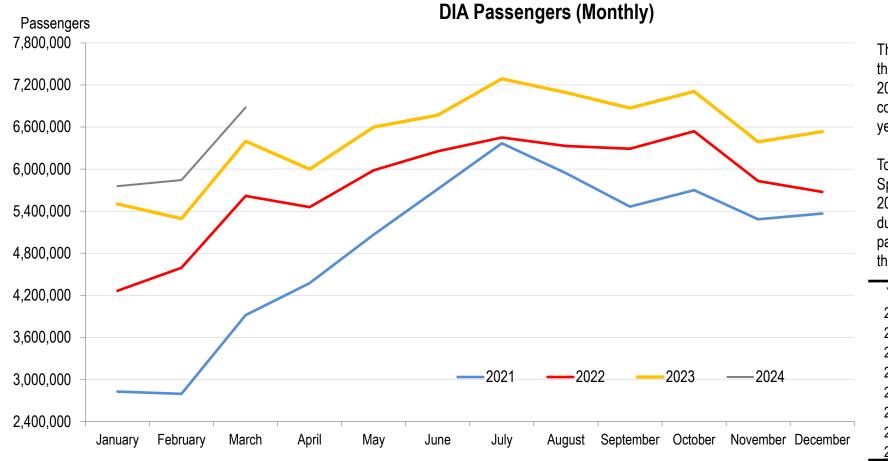
\$228.8

\$268.3

\$299.9

\$302.6

Denver International Airport Passengers Monthly



Air Travel

There were 18.5 million passengers through DIA in the first three months of 2024 (grey line), an increase of 7.5% compared to the first three 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 737,414 passengers through COS (January through April), a YOY increase of 18.5%.

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
<u>2023</u>	77,837,917	2023

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

Colorado Field Production of Crude Oil 2011 to 2024 (Thousand Barrels)

Thousand Barrels			Colorad	o Crude	Oil Produ	ction					
18,000							N				
17,000	Crude oil production for	In March 2024	, EIA report	ed that		16	.081				
16,000	Colorado reached record levels	2023 crude oil	production	reached a			<u>~_</u> _				
5,000	in 2015, despite the drop in the	record-high 12	.9 million b	/d in the			V	14,303	40.0	10	13.804
4,000	price of a barrel of oil. In 2016,	United States,	a 9.0% (1.0) million	14,1		\rightarrow	1	13,3	40	
	the rig count was down.	b/d) increase f	rom 2022.				•			<u>~</u> ~.7°	
3,000	Production remained solid,	,			י ∖∖ _ י			$ \searrow - $	<u> </u>		14,(
2,000	albeit at a slightly lower level	40 402		10,83						V	
1,000	than in 2015.	10,183	∧ 9,67		<u> </u>			V			
0,000 —			3,07	\sim N					1 000	•	
9,000	Monthly Production	072 × V	•~~							2, average p	
3,000		,972		V After th	raa vaara afi	paragod prod	luction (2017	2010) the		out 13.3 mill	lion
7,000	Average Monthly Production	Γ			•	ncreased proc	•	,		per month.	`
	5,518					20 because of	•			tion for 2023	•
6,000								icies. In 2021		at 13.8 milli	
5,000	~ 4.147				• •	production dr			•	onth. Product	
4,000 + /	/- 3,293			barreis,	and severan	ce tax revenu	es declined s	significantly.		t three mont	
3,000 👉										veraged 14.	0 million
2,000									barrels	per month.	
2011	2012 2013 2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024

Source: EIA, cber.co.

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 private ٠ sector job growth. The healthcare and tourism (leisure and hospitality) sectors will also be leaders.
- Colorado's oil and gas industry will continue to contribute to the Colorado economy.
- Colorado lacks sufficient housing and affordable housing. ٠
- 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 cuts.
- Equity markets will remain volatile. •
- There is a disconnect between the performance of Wall Street and Main Street.
- Some energy and climate change policies are not having their desired ٠ effect.
- The U.S. and international geopolitical situations are 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.
- Higher for longer is the mantra for interest rates. 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, Colorado, and the United States.

Trends and Forecast

Colorado Economic Forecast 2024

In 2024, the Colorado real GDP	Colorado Economic Forecast					
growth rate will be 1.6% compared to 1.9% for the U.S.	Real GDP Value (billions) (chained 2017) % Change Real GDP	2021 \$406.96 6.8%	2022 \$416.11 2.2%	2023 \$430.20 3.4%	2024 \$438.40 1.9%	
The job market will taper off to about 50,000 in 2024. The unemployment rate will increase but remain lower than the U.S.	CES Employment (thousands) Annual Change (thousands) % Change Unemployment Rate	2,750.9 98.2 3.7% 5.5%	2,869.7 118.8 4.3% 3.1%	2,942.0 72.3 2.5% 3.2	2,992.0 50.0 1.7% 3.6%	
rate. Retail sales for 2024 will remain	Retail Sales (billions) % Change	\$268.3 17.3%	\$299.9 11.8%	\$302.6 0.9%	\$308.8 2.0%	
sluggish. Inflation has declined, but it is more of a problem in	Consumer Price Index (CPI)	281.8 3.5%	304.4 8.0%	320.3 5.2%	331.0 3.3%	
Colorado than in other states. Other challenges include high	DIA Passengers (millions)	59.0	69.0	77.8	82.0	
energy and housing costs, labor shortages, and elevated interest rates.	Single Family Permits Multi-family Permits	30,246 26,278	24,000 25,000	20,000 19,000	21,000 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 increased 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 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 May 2024 Colorado and the United States

This analysis is for informational purposes only. Any opinions or interpretations of data are those of the presenter. As such, they do not represent the viewpoints of any group or particular organization.
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For additional information contact cber.co at <u>cber@cber.co</u>, <u>gary@garyhorvath.com</u>, or <u>garyhorvath@hotmail.com</u>.

ACKNOWLEDGEMENTS A special thank you to Ana and Allyson Horvath for their review and comments on this publication.

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.