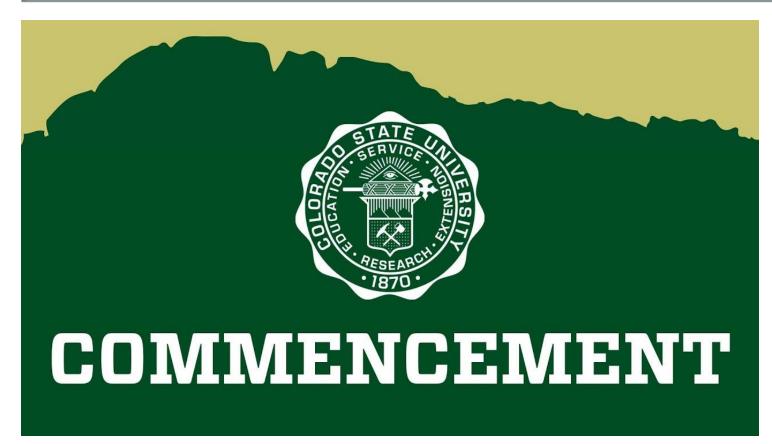
### Economic Outlook and Trends Through April 2023 United States and Colorado



It is that time of the year again at CSU and elsewhere when students will graduate and enter the workforce. They will be a welcome addition to a tight labor market!

Colorado-based Business and Economic Research, cber.co Prepared May 22, 2023

# Economic Outlook and Trends

### **Purpose and Summary**

The purpose of this chartbook is to review the performance and outlook of the Colorado and U.S. economies for 2023. The analysis focuses on employment through April 2023. Colorado has many valuable assets; however, the recent BLS employment data shows a slowdown in employment and economic growth that began in 2022. A partial list of headwinds follows:

- Inflation that is cooling but is stubborn in some categories
- Rising interest rates that may be near their peak
- A banking crisis that has brought about tightening in credit
- Jobs are being added at a declining rate
- · Labor shortages that are unlikely to end
- · Concerns about the debt limit crisis
- Energy policy that will hinder economic growth
- A host of issues related to housing
- Slowdown in Colorado construction (permits)
- The spending and conflict in Eastern Europe.

The chartbook focuses on the following topics.

- Gross Domestic Product and Real Disposable Personal Income Per Capita
- U.S. and Colorado Employment and Unemployment
- Inflation
- Saving, Borrowing, Consumption, and the Wealth Effect
- U.S. Industry Indicators
- Colorado Industry Indicators
- 2023 Colorado Economic Outlook

### Gross Domestic Product and Disposable Income

# U.S. Real GDP – Economic Activity

The Economic Forecast Still Calls for a Recession

### **Conference Board Calls for Recession**

Over the past six months, economists and business leaders have projected various economic scenarios. For example, they say there will be:

- No recession, it will be different this time
- A recession with a soft landing
- A recession with a hard landing
- A doozy of a recession.

### Time will tell.

The Conference Board U.S. GDP Forecast is the base for the 2023 cber.co forecast. In the second half of 2022, TCB called for a shallow recession by the end of 2022 or early 2023. The start of the recession has been pushed to mid-2023, followed by lackluster growth in the first half of 2024.

# U.S. Real GDP Growth The Conference Board Forecast (May 10, 2023)

### **Real GDP and Economic Growth**

The latest Conference Board forecast projects real GDP growth of 0.7% in 2023, with negative growth for the remainder of the year. Real disposable income will increase by 3.7%, and real personal consumption will slip to 0.9%. Residential investment will change by -11.6% and non-residential investment will increase by 0.2%. Government spending will increase by 3.3% in 2023.

### **Other Economic Factors**

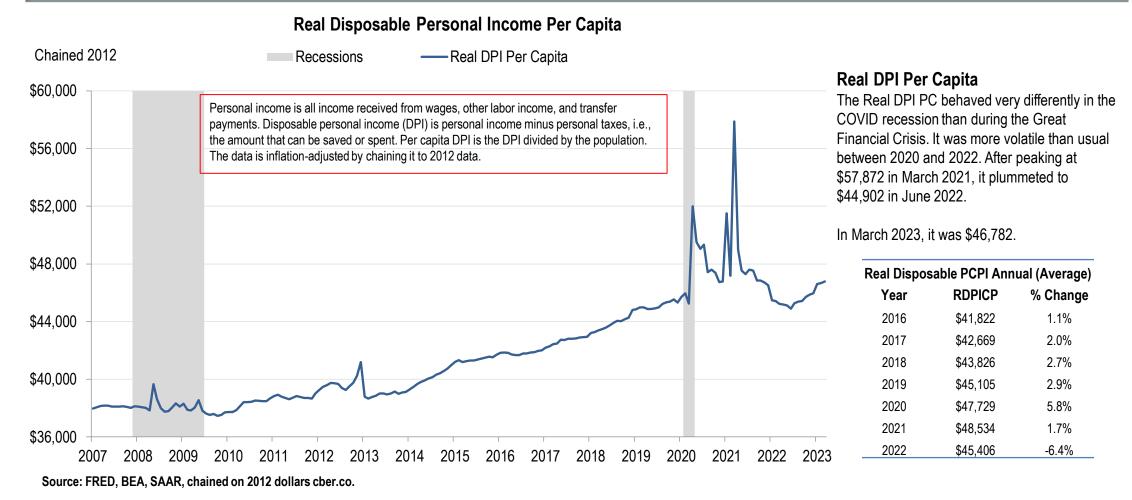
The labor market will remain tight in some industries and occupations. Surprisingly, the U.S. unemployment rate will be 3.6% in 2023. The annual inflation rate will drop to 3.8% in 2023, and the core rate will be 4.0%. Inflation will approach the Fed's target rate in 2024 and economic activity will increase in the second half of the year.

Q1 2022	00.0000			Conference Board US Real GDP Growth Forecast													
	Q2 2022	Q3 2022	Q4 2022	Q1 2023	Q2 2023	Q3 2023	Q4 2023	2022	2023	2024							
-1.6%	-0.6%	3.2%	2.6%	1.1%	-0.6%	-1.6%	-1.2%	2.1%	0.7%	0.4%							
10.6%	-2.3%	3.2%	5.0%	8.0%	2.3%	1.0%	0.6%	-6.1%	3.7%	2.4%							
1.3%	2.0%	2.3%	1.0%	3.7%	-1.0%	-2.4%	-1.8%	2.7%	0.9%	0.6%							
-3.1%	-17.8%	-27.1%	-25.1%	-4.2%	-2.0%	0.0%	0.0%	-10.6%	-11.6%	1.1%							
7.9%	0.1%	6.2%	4.0%	0.7%	-2.3%	-5.9%	-2.0%	3.9%	0.2	-0.5%							
-2.3%	-1.6%	3.7%	3.8%	4.7%	3.2%	2.3%	2.2%	-0.6%	3.3%	2.2%							
-4.6%	13.8%	14.6%	-3.7%	4.8%	4.0%	2.0%	2.0%	7.1%	4.1%	2.1%							
3.8%	3.6%	3.6%	3.6%	3.5%	3.4%	3.5%	3.9%	3.6%	3.6%	4.3%							
6.4%	6.6%	6.3%	5.7%	4.9%	3.8%	3.4%	3.0%	6.3%	3.8%	2.2%							
5.3%	5.0%	4.9%	4.8%	4.7%	4.3%	3.8%	3.2%	5.0%	4.0%	2.2%							
	10.6% 1.3% -3.1% 7.9% -2.3% -4.6% 3.8% 6.4%	10.6%-2.3%1.3%2.0%-3.1%-17.8%7.9%0.1%-2.3%-1.6%-4.6%13.8%3.8%3.6%6.4%6.6%	10.6%-2.3%3.2%1.3%2.0%2.3%-3.1%-17.8%-27.1%7.9%0.1%6.2%-2.3%-1.6%3.7%-4.6%13.8%14.6%3.8%3.6%3.6%6.4%6.6%6.3%	10.6%-2.3%3.2%5.0%1.3%2.0%2.3%1.0%-3.1%-17.8%-27.1%-25.1%7.9%0.1%6.2%4.0%-2.3%-1.6%3.7%3.8%-4.6%13.8%14.6%-3.7%3.8%3.6%3.6%3.6%6.4%6.6%6.3%5.7%	10.6%-2.3%3.2%5.0%8.0%1.3%2.0%2.3%1.0%3.7%-3.1%-17.8%-27.1%-25.1%-4.2%7.9%0.1%6.2%4.0%0.7%-2.3%-1.6%3.7%3.8%4.7%-4.6%13.8%14.6%-3.7%4.8%3.8%3.6%3.6%3.6%3.5%6.4%6.6%6.3%5.7%4.9%	10.6%-2.3%3.2%5.0%8.0%2.3%1.3%2.0%2.3%1.0%3.7%-1.0%-3.1%-17.8%-27.1%-25.1%-4.2%-2.0%7.9%0.1%6.2%4.0%0.7%-2.3%-2.3%-1.6%3.7%3.8%4.7%3.2%-4.6%13.8%14.6%-3.7%4.8%4.0%3.8%3.6%3.6%3.6%3.5%3.4%6.4%6.6%6.3%5.7%4.9%3.8%	10.6%-2.3%3.2%5.0%8.0%2.3%1.0%1.3%2.0%2.3%1.0%3.7%-1.0%-2.4%-3.1%-17.8%-27.1%-25.1%-4.2%-2.0%0.0%7.9%0.1%6.2%4.0%0.7%-2.3%-5.9%-2.3%-1.6%3.7%3.8%4.7%3.2%2.3%-4.6%13.8%14.6%-3.7%4.8%4.0%2.0%3.8%3.6%3.6%3.6%3.5%3.4%3.5%6.4%6.6%6.3%5.7%4.9%3.8%3.4%	10.6%-2.3%3.2%5.0%8.0%2.3%1.0%0.6%1.3%2.0%2.3%1.0%3.7%-1.0%-2.4%-1.8%-3.1%-17.8%-27.1%-25.1%-4.2%-2.0%0.0%0.0%7.9%0.1%6.2%4.0%0.7%-2.3%-5.9%-2.0%-2.3%-1.6%3.7%3.8%4.7%3.2%2.3%2.2%-4.6%13.8%14.6%-3.7%4.8%4.0%2.0%2.0%3.8%3.6%3.6%3.6%3.5%3.4%3.5%3.9%6.4%6.6%6.3%5.7%4.9%3.8%3.4%3.0%	10.6%-2.3%3.2%5.0%8.0%2.3%1.0%0.6%-6.1%1.3%2.0%2.3%1.0%3.7%-1.0%-2.4%-1.8%2.7%-3.1%-17.8%-27.1%-25.1%-4.2%-2.0%0.0%0.0%-10.6%7.9%0.1%6.2%4.0%0.7%-2.3%-5.9%-2.0%3.9%-2.3%-1.6%3.7%3.8%4.7%3.2%2.3%2.2%-0.6%-4.6%13.8%14.6%-3.7%4.8%4.0%2.0%2.0%7.1%3.8%3.6%3.6%3.6%3.5%3.4%3.5%3.9%3.6%6.4%6.6%6.3%5.7%4.9%3.8%3.4%3.0%6.3%	10.6%-2.3%3.2%5.0%8.0%2.3%1.0%0.6%-6.1%3.7%1.3%2.0%2.3%1.0%3.7%-1.0%-2.4%-1.8%2.7%0.9%-3.1%-17.8%-27.1%-25.1%-4.2%-2.0%0.0%0.0%-10.6%-11.6%7.9%0.1%6.2%4.0%0.7%-2.3%-5.9%-2.0%3.9%0.2-2.3%-1.6%3.7%3.8%4.7%3.2%2.3%2.2%-0.6%3.3%-4.6%13.8%14.6%-3.7%4.8%4.0%2.0%2.0%7.1%4.1%3.8%3.6%3.6%3.5%3.4%3.5%3.9%3.6%3.6%6.4%6.6%6.3%5.7%4.9%3.8%3.4%3.0%6.3%3.8%							

Source: The Conference Board and cber.co.

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

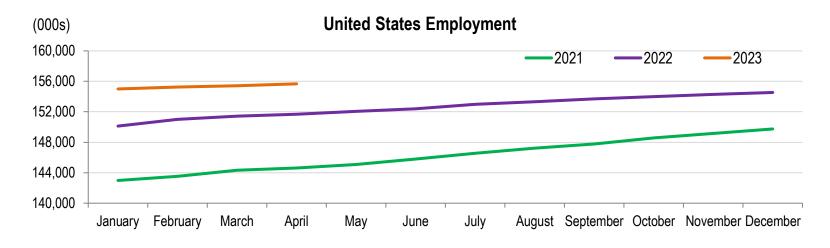
# Real Disposable Personal Income Per Capita United States

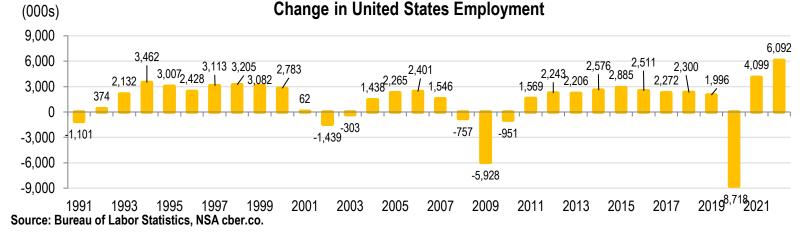


#### Colorado-based Business and Economic Research https:cber.co

### U.S. and Colorado Employment and Unemployment

# Employment and Change in Employment United States



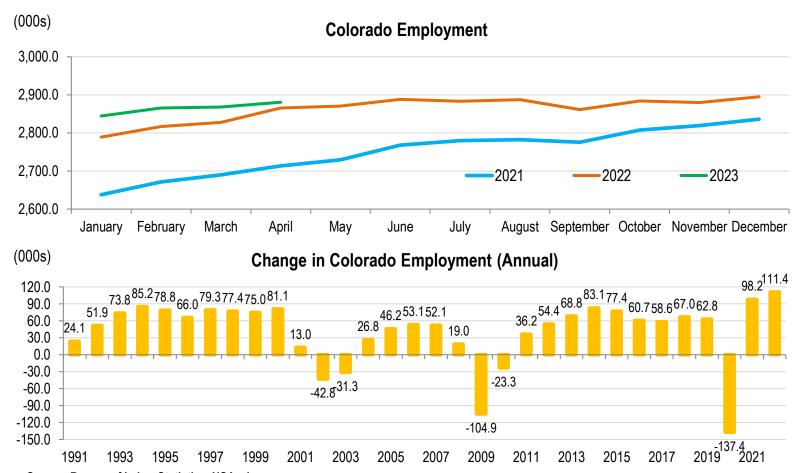


#### **U.S. Employment**

The amount of change in YOY employment has decreased since March 2022. The YOY April 2023 value was about 4.0 million more than April 2022, compared to about 7.1 million for YOY April 2022 vs 2021. The decline in the YOY change will continue through 2023.

The average annual U.S. employment for 2022 (purple) was about 6.1 million more than in 2021 (green). There was record job growth, a low unemployment rate, and a severe shortage of workers in 2022.

# Employment and Change in Colorado Employment Monthly (2021 to 2023) and Annual (1991 to 2022)



#### **Colorado Employment and Change**

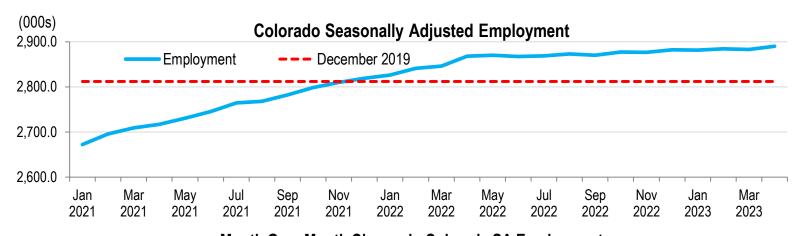
The amount of the change in YOY employment has trended downward since April 2022. There has been slower job growth (green) in the first four months of 2023 compared to the same period in 2022.

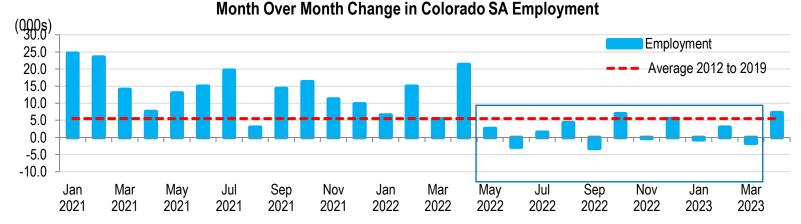
The YOY average monthly employment through April was about 3,300, or about 40,000 for the year. The monthly average will decline in the months ahead.

In 2022, Colorado had record job growth, a low unemployment rate, and a severe shortage of workers. Job growth will be much weaker in 2023 and the first half of 2024.

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

# Employment and Change in Colorado Employment 2021 to Current





**Colorado Total Employment** 

In December 2021, state employment surpassed the December 2019 total (red dotted line). There was steady job growth between December 2021 and April 2022. In May, employment growth tapered off.

Between 2012 and 2019 average monthly employment for Colorado was about 5,500 (red-dotted line). As shown in the chart to the lower left, the actual monthly change over the prior month weaker and volatile. During the eleven months from May 2022 to March 2023, the state experienced weak job growth (blue rectangle). Time will tell whether the increase in April reverses that trend.

Source: Bureau of Labor Statistics, cber.co.

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

# Summary of Colorado Sector Employment (Large) December 2022 vs. April 2023

NAICS Sector	Dec. 2022	Apr. 2023	Apr. less Dec.	Percent Change
Total Employment	2,882.2	2,890.0	7.8	0.27%
Healthcare.	307.7	307.9	0.2	0.06%
Food and Accommodation (AFS)	294.7	299.0	4.3	1.46%
Professional, Scientific, and Technical Services	286	290.4	4.4	1.54%
Retail Trade	273.9	272.5	-1.4	-0.51%
Local Government	266.5	271.7	5.2	1.95%
Construction	182	182.7	0.7	0.38%
Financial Activities	179.6	173.3	-6.3	-3.51%
Administrative Services	156	157.1	1.1	0.71%
Manufacturing	154.6	154.0	-0.6	-0.39%
Total Large Sectors	2,101.0	2,108.6	7.6	0.36%

NAICS Sector	Dec. 2022	Feb. 2023	Feb. 23 less Dec. 22	Percent Change
Large Sectors	2,101.0	2,108.6	7.6	0.36%
Small Sectors	781.2	781.4	0.2	0.03%
Total Employment	2,882.2	2,890.0	7.8	0.27%

Source: BLS CES, cber.co. Note: Jobs are in thousands, SA.

#### Changes in Large Sector Employment for 2023

The nine largest sectors/subsectors accounted for 72.8% of employment in April 2023. Over the first four months, they added 7,600 jobs, or about 97.4% of the total jobs added.

The sectors that did not add jobs were retail trade, financial activities, and manufacturing. These three industries employed 599,800 workers in April. For the first four months of the year, employment changed by -8,300.

The other six sectors employed 1,508,800 workers, and they added 15,900 employees. Employment in the large sectors increased by 7,600.

#### Large and Small Sector Employment for 2023

Overall, seven of nineteen sectors/subsectors did not add workers. There were 7,800 jobs added in the first four months. The Colorado LMI has produced data suggesting the 2023 data may be revised upward.

# Summary of Colorado Sector Employment (Small) December 2022 vs. April 2023

		Apr.		
NAICS Sector	Dec. 2022	2023	Apr. less Dec.	<b>Percent Change</b>
Total Employment	2,882.2	2,890.0	7.8	0.27%
State Government	129.2	129.9	0.7	0.54%
Other Services (Personal)	123.6	122.8	-0.8	-0.65%
Wholesale Trade	115.7	112.7	-3.0	-2.59%
Transportation, Warehousing, and Utilities	111.5	110.0	-1.5	-1.35%
Information	77.7	77.7	0.0	0.00%
Arts, Entertainment, Recreation (AER)	55.5	55.7	0.2	0.36%
Federal Government	53.5	54.2	0.7	1.31%
Management of Corporations and	47.8	48.6		4.0-04
Enterprises			0.8	1.67%
Education (Private)	45.1	47.6	2.5	5.54%
Extractive Industries	21.6	22.2	0.6	2.78%
Total Small	781.2	781.4	0.2	0.03%

Source: BLS CES, cber.co. Note: Jobs are in thousands, SA.

#### **Changes in Small Sector Employment**

The ten smallest sectors/subsectors accounted for about 27.1% of employment in April 2023. Over the first four months, they added 200 jobs, or about 2.6% of the total jobs added.

The sectors that did not add jobs were other services, wholesale trade, TWU, and information. These four industries employed 423,200 workers, and the change in employment was -5,300.

Private education, MCE, state government, the federal government, extractive industries, and AER added jobs during the first four months of 2023. These six industries employed 358,200 workers, and the change in employment was 5,500.

### Unemployment Rate United States and Colorado

- Colorado Recessions Percent 16% 14% 12% 10% 8% 6% 4% 2% 0% 2007 2008 2009 2010 2011 2012 2013 2014 2015 2016 2017 2018 2019 2020 2021 2022 2023

U.S. and Colorado Unemployment

### **Unemployment Rate**

The Colorado unemployment rate returned to 2.8% in March, and the U.S. rate was 3.4%. There will continue to be a shortage of workers in many occupations and industries. The unemployment rate will remain low despite weaker economic growth.

Ann	ual Unemployme	nt 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%
2019 2020 2021	3.7% 8.1% 5.3%	2.7% 6.8% 5.4%

Source: BLS, SA, cber.co.

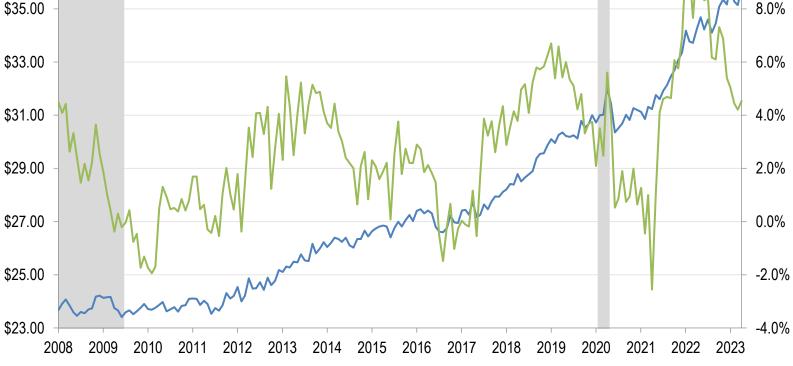
### \$37.00 \$35.00

Hourly Wages

Colorado

\$ Hourly

Wages



**Hourly Wages and Percent Change** 

### Percent Change

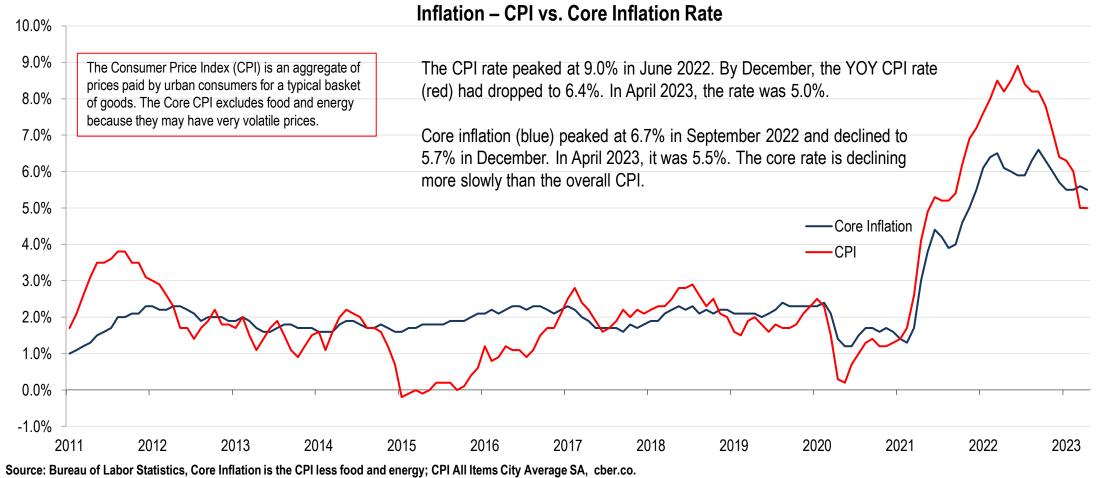
10.0% Hourly Wages and Change Hourly wages (blue) for April were \$35.79, a YOY increase of 4.5% (green). The current rate is down from a peak of 9.4% in February 2022.

Annual Wages and Change									
Year	CO CPI	Wages	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: I	BLS, cber.co								

Source: BLS, cber.co.

### Inflation

# U.S. Inflation CPI vs. Core Inflation



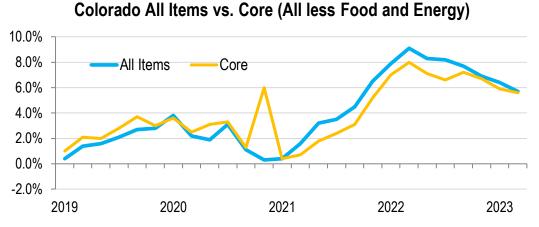
Colorado-based Business and Economic Research https:cber.co

# U.S. Inflation CPI vs. Producer Price Index (Final Demand)

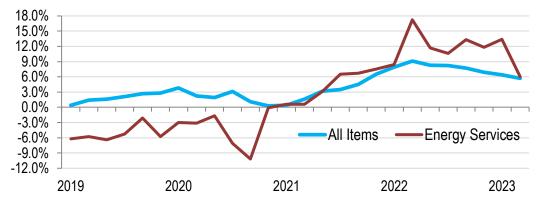
)%					Inflation	– CPI vs.	PPI Rate					
											Λ	
)% )% )%	The Consumer Price urban consumers for excludes food and e prices. The Produce change over time in producers for their o	a typical baske nergy because t r Price Index (P the selling price	et of goods. The they may have PI) measures th	Core CPI very volatile ne average	11.7% i was 6.4 rate wa	n March 202 %, and the s 5.0%, and	2. In Decem PPI rate (gre the Final De	iber 2022, th en) was 6.5 emand PPI r	the PPI peak ne YOY CPI r %. The April ate was 2.4% n in the CPI.	ate (red) 2023 CPI 6. The rapid		
)% )%	$\sim$	2007-2 volatili	2008 Global ty of the GF	PPI increase Financial Cr C is much le e COVID rec	isis. The ss than that				— Final Dem — CPI	and PPI	<u></u>	
)% )% )%												
)% )% 2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	20

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

# **Bi-Monthly Change in Colorado CPI** All Items vs. Core, Food and Shelter, and Energy Services



Colorado All Items vs. Energy Services



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

14.0% 12.0% 10.0% 8.0% 6.0% 4.0% 2.0% 0.0% -2.0% -4.0% All Items Shelter 2019 2020 2021 2022 2023

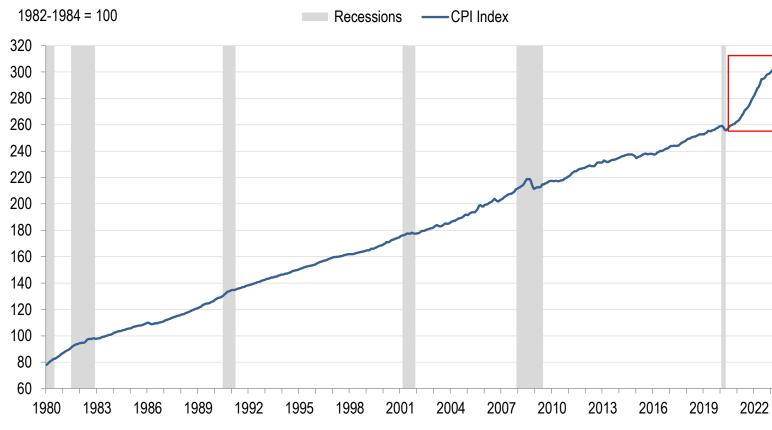
### Colorado All Items vs. Food and Shelter (March)

### **Colorado CPI**

The three charts illustrate that the CPI for each component moves differently than the CPI for all items (blue). Three takeaways are:

- For the past two years, core inflation has been less than inflation for all items (Upper left).
- Since mid-2021, energy services (gas and electricity) inflation has been greater than inflation for all items (Lower left).
- Inflation for food and shelter is currently greater than inflation for all items (Upper right).

# **CPI Inflation Index**



### **CPI Inflation Index**

### **CPI Inflation**

The chart shows the CPI index. The data in the red box shows how strong the inflation has been since 2021. The rate of change of the index can be MOM or YOY.

The YOY CPI data can be tricky because of the base effect. The 2022 CPI rates were calculated based on hefty increases in 2021. In other words, the impact of the inflation may be greater than inferred by the rate.

The YOY 2023 rates have been compared to months when the Fed's inflation fight began to reduce rates.

The base effect will reverse in July, and there will be upward pressure on the rates for the remainder of the year.

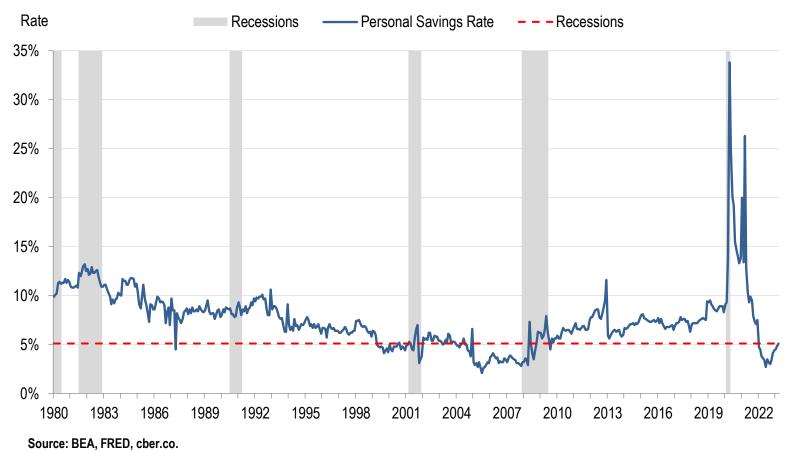
Source: BEA, FRED, cber.co.

### Saving, Borrowing, Consumption, and the Wealth Effect

# U.S. Personal Savings Rate

Percentage of Disposable Personal Income

### **Personal Savings Rate**

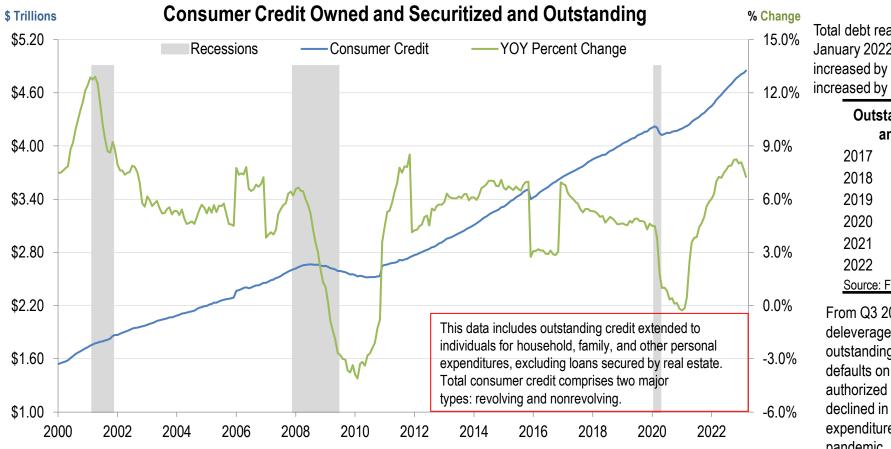


### Personal Savings

The personal savings rate jettisoned to a monthly high of 33.8% in the early stages of the pandemic. It fell to 13.0% in November 2020, then rose to 26.3% in March 2021. In September 2022, the personal savings rate was 3.0%. The March 2023 rate increased to 5.1%, and savings were \$1,001.9 billion, down from \$6.4 trillion in April 2020.

	Year End Personal Savings (Billions) and Rate									
2017	2017 \$948.5 6.3%									
2018	2018 \$1,511.9 9.4%									
2019	\$1,381.3	8.3%								
2020	\$2,402.8	13.8%								
2021	\$1,372.3	7.5%								
2022	2022 \$858.2 4.5%									
Source: B	EA, cber.co	Source: BEA, cber.co								

# U.S. Consumer Credit Outstanding



#### **Consumer Credit**

Total debt reached \$4.9 trillion in March 2023. In January 2022, the YOY rate of consumer debt increased by 6.0% (green). In March 2023, debt increased by 7.3%.

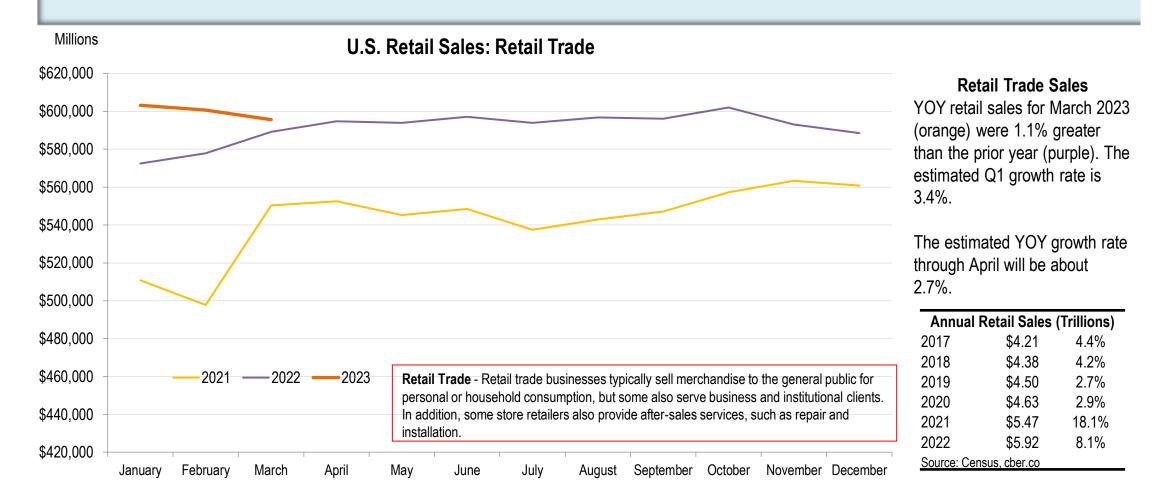
	Outstanding Credit (Billions) and Percent Change								
2017	\$3,830.8	5.3%							
2018	\$4,007.0	4.5%							
2019	\$4,192.2	4.6%							
2020	\$4,184.9	-0.3%							
2021	\$4,431.9	5.9%							
2022	\$4,780.8	7.9%							
Source: FF	RED, G-19, cber.c	:0							

From Q3 2008 to Q4 2010 (blue), consumers deleveraged and decreased the amount of outstanding consumer credit (including consumer defaults on loans). 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.

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

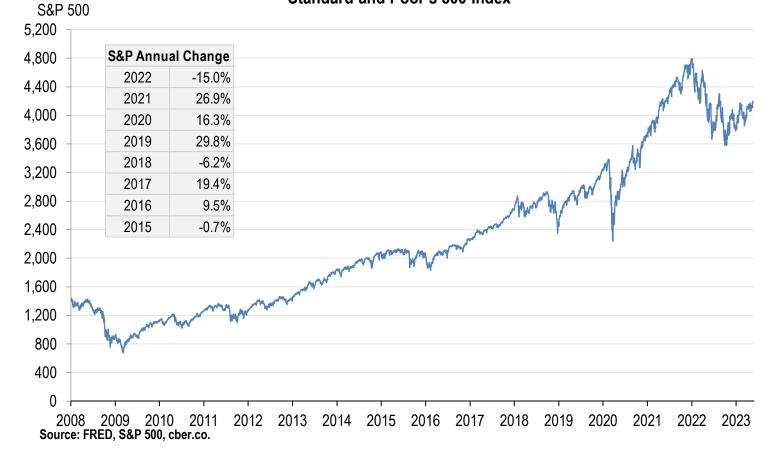
Source: FRED, Federal Reserve, G.19, SA.

### U.S. Retail Sales: Retail Trade Monthly



# Standard and Poor's 500 Index

Standard and Poor's 500 Index



COVID-19 Policies - 2020

February 19, 20203,386March 23, 20202,237change -34% to 1,148August 18, 20203,386bear market was 149 days2020 change was +16.3%

Year-End 2021 Bull Market For most of 2021 – steady growth December 31, 2021 change 26.9% to 4,766.

2022 Bear Market

December 31, 2022 change -15.0% to 3,839.

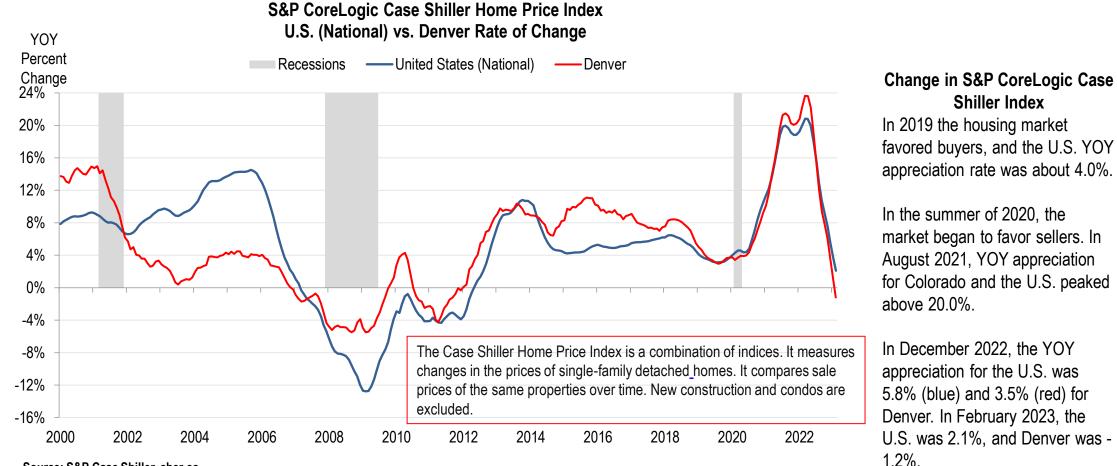
2023

May 19, 2023

YTD change 9.2% to 4,192.

Daily

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

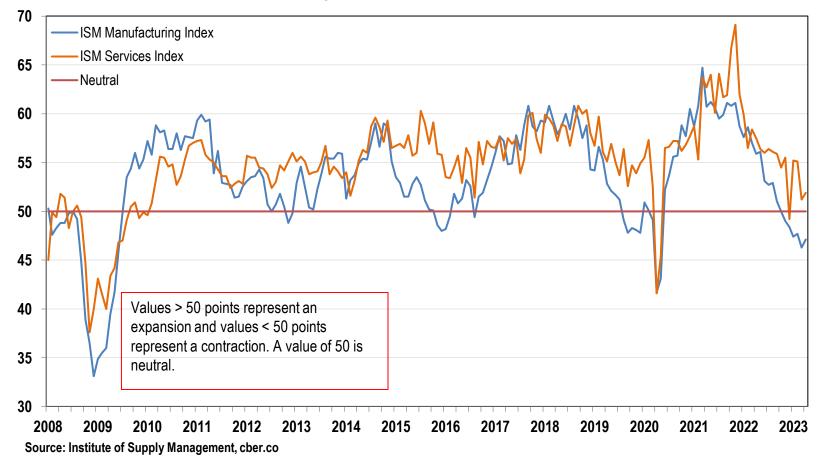


Source: S&P Case Shiller, cber.co.

U.S. Industry Indicators

# ISM Purchasing Managers Composite Indices Manufacturing vs. Services

### ISM Manufacturing PMI vs. Services PMI Composite Indices



### Manufacturing and Services PMI

The ISM manufacturing index (blue) trended downward after peaking at 64.7 in March 2021. It dropped below 50 and has been there for six months. It was 47.1 in April. The employment subindex is the only one of the five subindices that directly factor into the manufacturing PMI with a positive value.

The service index has trended downward since November 2021. It fell below 50 in December 2022 but has been in expansionary territory during the first four months of 2023. It was 51.9 in April.

# NFIB Small Business Optimism Index United States

1984=100 —— NFIB - - - Current Value ..... Index Average Recessions 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 Source: NFIB, cber.co.

NFIB Small Business Optimism Index

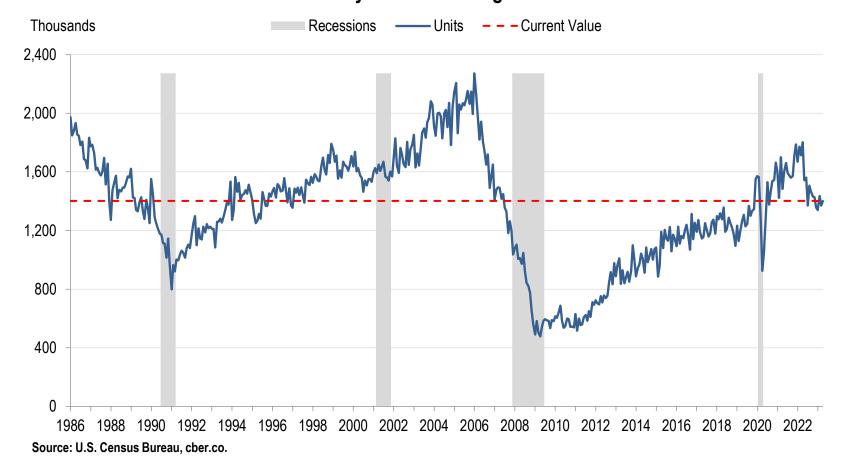
### NFIB Small Business Index

In April 2023, the NFIB index was 89.0 (red dotted line), well below the 49year average of 98.0 (purple dotted line).

The SBET report indicates that business conditions are poor, and the prospects for sales are at recessionary levels. Also, small businesses are concerned about worker issues (availability, quality, and cost). On top of these worries, tighter credit and the debt ceiling debate are now concerns for small business owners.

The NFIB monthly SBET report provides insight into the challenges of being a small business owner in this economy, <u>https://www.nfib.com/</u>.

# New Privately-Owned Housing Units Started United States



New Privately Owned Housing Units Started

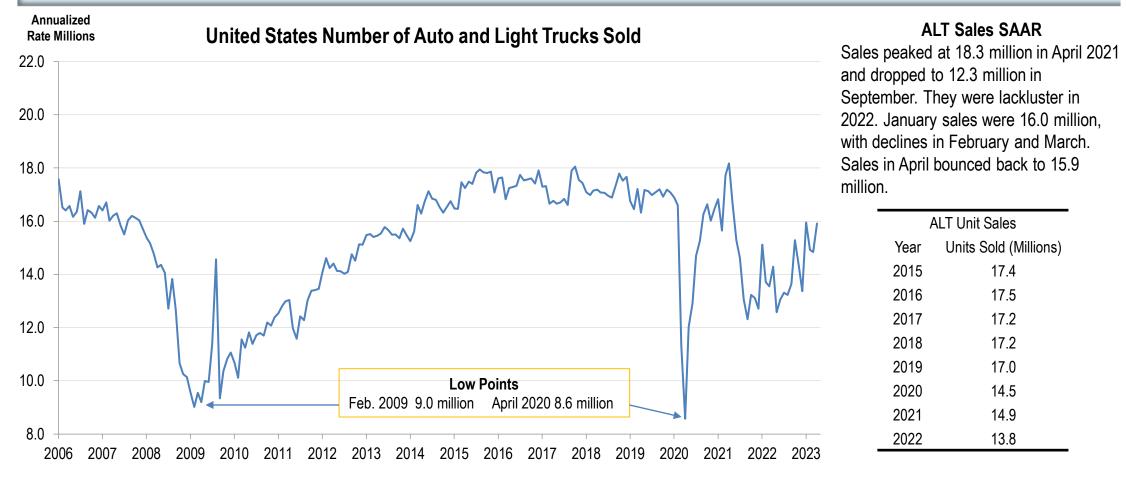
### New Privately Owned Housing Units Started

The number of housing starts has trended downward since April 2022. In April 2023, there were 1.4 million starts.

Inflation, increased interest rates, and other headwinds have caused reduced demand.

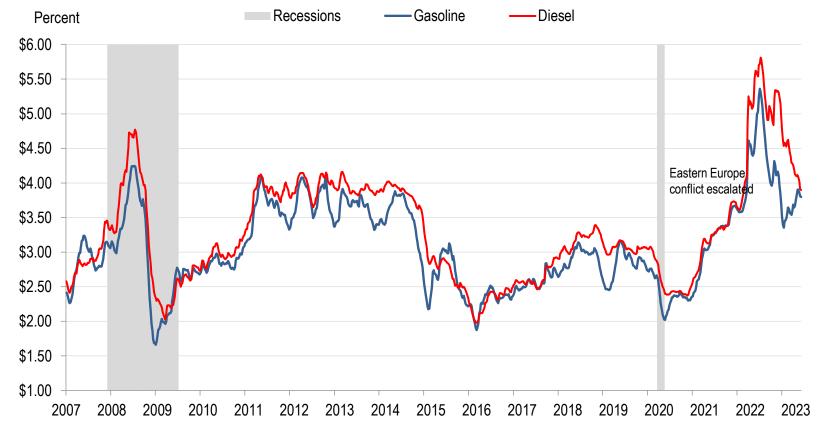
The number of starts has been between 1.3 and 1.5 million since the middle of last July.

# 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 Regular (All Formulations) and Diesel Prices

### **Gas and Diesel Prices**

On May 15, 2023, a gallon of gasoline was \$3.80, down from a peak of \$5.51. A gallon of diesel was \$3.90 compared to its peak of \$5.78.

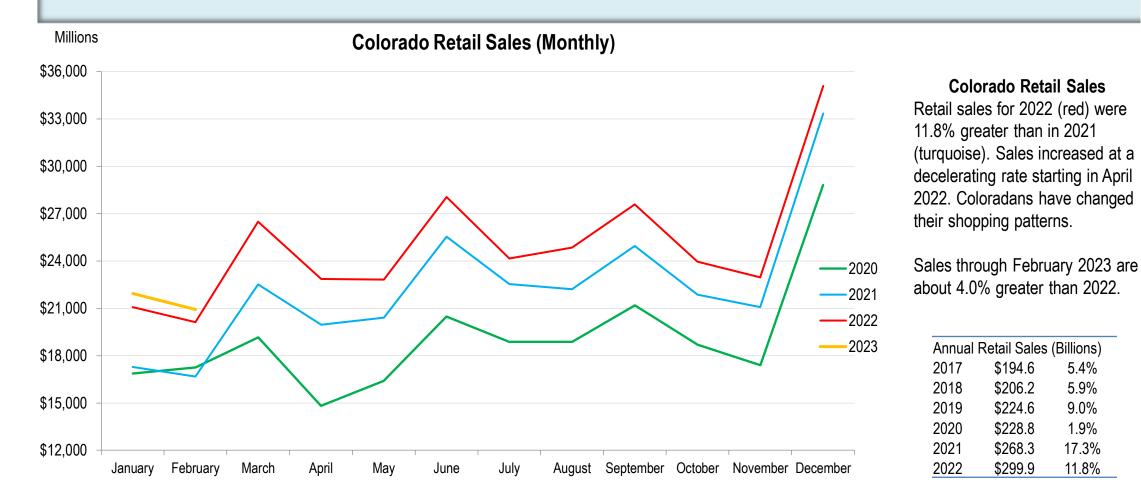
	Average Annual								
Year	Diesel	Gasoline							
2015	\$2.71	\$2.63							
2016	\$2.30	\$2.30							
2017	\$2.65	\$2.26							
2018	\$3.18	\$2.90							
2019	\$3.06	\$2.83							
2020	\$2.55	\$2.37							
2021	\$3.29	\$3.22							
2022	\$4.99	\$4.274							

On February 21, 2021, a gallon of gasoline cost \$2.82, and a gallon of diesel was \$2.93. On February 24, 2022, the Eastern European conflict escalated. On February 21, 2022, a gallon of gasoline cost \$3.75, and a gallon of diesel was \$4.06.

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 Industry Indicators

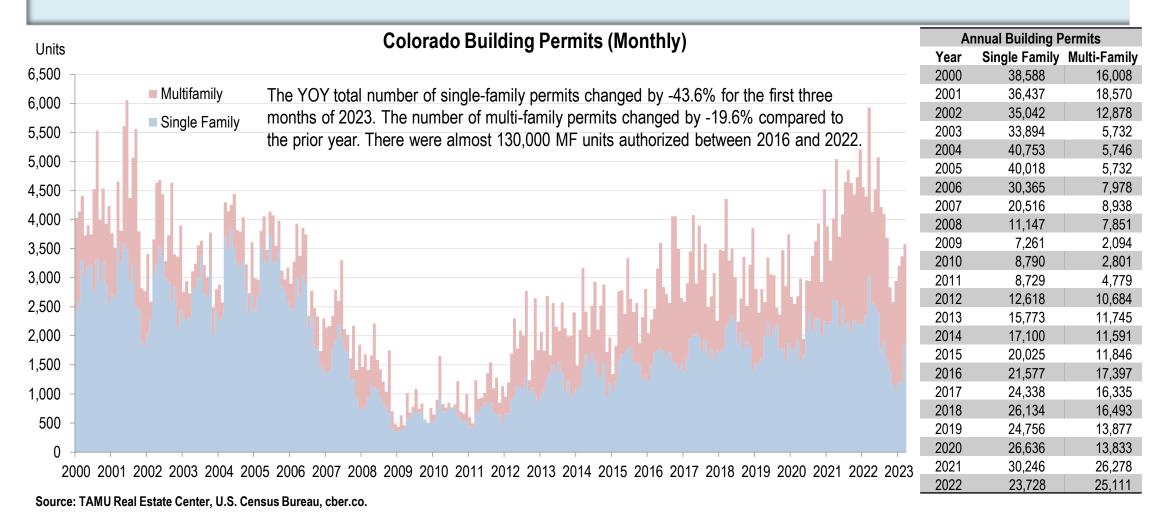
### Colorado Retail Sales Monthly



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

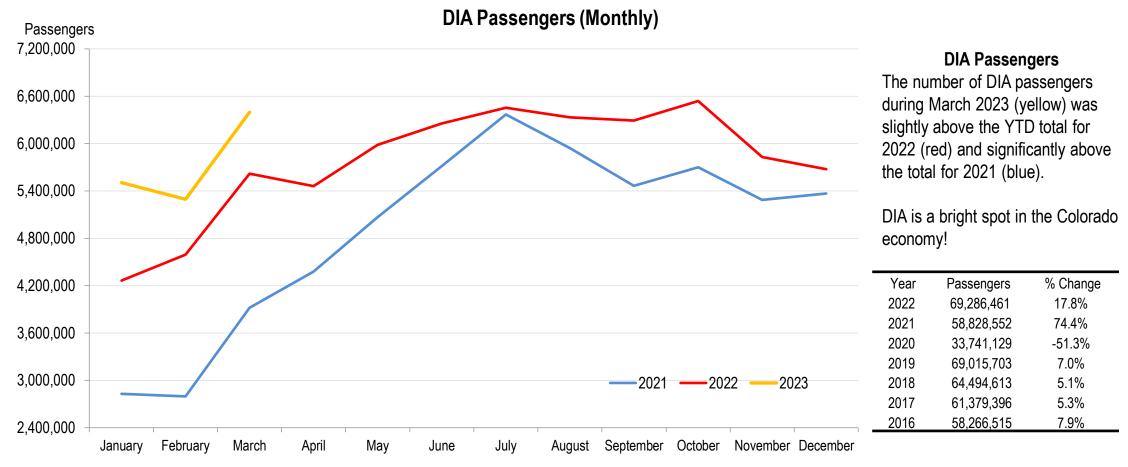
# Colorado Residential Building Permits

Units



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

# Denver International Airport Passengers Monthly



Source: flydenver.com, cber.co.

# Colorado Field Production of Crude Oil 2011 to 2023 (Thousand Barrels)

17,000 Crude oil production for Colorado reached   16,000 record levels in 2015, despite the drop in the   price of a barrel of oil. In 2016, the rig count 14,115   14,000 a slightly lower level than in 2015.   12,000 10,185   11,000 10,185   10,000 Monthly Production   7,000 Average Monthly Production   7,000 5,525   3,293 4,140   3,000 4,140   3,000 3,293	Thousand Barrels			C	Colorado C	rude Oil P	roduction					
Average Monthly Production 7,000 6,000 5,525 4,140 3,293 4,140 4,000 3,293 4,140 4,000 3,293 4,140 4,000 3,293 4,140 4,000 3,293 4,140 4,000 3,293 4,140 4,000 3,293 4,140 4,000 3,293 4,140 4,000 3,293 4,140 4,140 4,000 3,293 4,140 4,000 3,293 4,140 4,000 3,293 4,140 4,140 4,000 3,293 4,140 4,140 4,000 3,293 4,140 4,140 4,000 3,293 4,140 4,000 3,293 4,140 4,000 3,293 4,140 4,140 4,000 3,293 4,140 4,000 5,000 4,140 4,000 5,000 4,140 4,000 5,000 4,140 4,000 5,000 4,140 4,000 5,000 4,140 4,000 5,	16,000 15,000 14,000 13,000 12,000 11,000	record levels in 2015, despit price of a barrel of oil. In 201 was down. Production remai a slightly lower level than in	e the drop l6, the rig o ined solid,	in the count albeit at	5	· · · · · ·					5	27 27 12,175
7,000 6,000 5,525 4,140 4,000 3,293 4,140 5,000 4,000 3,293 5,525 5,525 5,000 4,140 5,000 5,		•	<b>7,969</b>	~~ ~	• • •	$\searrow$						
4,000 3,293 4,140 significantly. In 2022 average monthly production was about 13.1 million barrels per month. 3,000 Production is down in 2023.	7,000 6,000	5,525		regula	ations and re	duced dema	and caused b	by COVID-rel	lated policie	es. In 2021, t	he average	monthly
	4,000	3,293 4,140	1	signif	ficantly. In 20	22 average		•				

Source: EIA, cber.co.

Colorado Forecast

# Colorado Economic Forecast 2023

In 2023, the Colorado real GDP	Colorado	Economic	Forecast		
growth rate will be 1.5% compared to 0.7% for the U.S.	Real GDP Value (billions) (chained 2012) % Change Real GDP	<b>2020</b> \$353.35 -1.4%	<b>2021</b> \$373.76 5.8%	<b>2022</b> \$385.8 3.2%	<b>2023</b> \$391.6 1.5%
Colorado's job growth in 2023 will be more volatile and much weaker than in 2022.	CES Employment (thousands) Annual Change (thousands) % Change Unemployment Rate	2,652.7 -137.4 -4.9% 6.8%	2,750.9 98.2 3.7% 5.4%	2,862.3 111.4 4.0% 3.0%	2,886.3 24.0 0.8% 3.3%
Retail sales for 2023 will increase slower than during the past two years.	Retail Sales (billions) % Change	\$228.8 1.9%	\$268.3 17.3%	\$308.7 12.8%	\$319.5 3.5%
Colorado businesses will continue	Consumer Price Index (CPI)	272.2 2.0%	281.8 3.5%	304.3 8.0%	317.4 4.3%
to face headwinds from increased inflation, interest rate hikes, labor	DIA Passengers (millions)	33.0	59.0	69.0	72.0
shortages, the debt ceiling debate, and the SVB collapse. It will be 2024 before inflation returns to the	Single Family Permits Multi-family Permits	26,636 13,833	30,246 26,278	24,000 25,000	18,000 22,000
Federal Reserve target rate.	Oil Production (thousands) barrels	172,000	142,000	146,000	145,000

The number of DIA passengers in 2022 will remain strong in 2023. The airport should top 72 million passengers in 2023. In addition, there will be solid travel activity through Colorado Springs.

The total number of 2023 building permits will be less than in 2022. Multi-family permits will be popular. Higher input costs, rising prices, and interest rate hikes have negatively impacted construction, home sales, and financial services.

Crude oil production declined in 2021 because of state regulations and reduced demand. Production increased in 2022 and will decline in 2023.

cber.co Economic Outlook and Trends Through April 2023 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. For further information contact Colorado-based Business and Economic Research (cber.co). ©Copyright 2023 by cber.co.

Data contained in the tables, charts, and text of this presentation is from sources in the public domain. With appropriate credit, it may be reproduced and shared without permission. Please reference, "Colorado-based Business and Economic Research" (cber.co). Additional presentations are available at <a href="https://cber.co">https://cber.co</a>.

For additional information contact cber.co at <u>cber@cber.co</u>, <u>gary@garyhorvath.com</u>, or garyhorvath@hotmail.com.

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 Economic Development, 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 grant program, and he served on the 2021 Colorado Legislative Redistricting Commission.