Economic Outlook and Trends Through September 2022

United States and Colorado

cber.co
Colorado-based Business and Economic Research
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Economic Outlook and Trends

Purpose and Summary
The purpose of this chartbook is to review the performance of the Colorado and U.S. economies for the first nine months of 2022. Throughout the year, there has been a long list of headwinds: inflation, energy issues, Fed rate hikes, increased input costs, labor shortages, wage increases, supply chain disruptions, housing issues, and controversial policies and legislation, and spending related to the conflict in Eastern Europe.

As the year progressed, inflation became a bigger problem. The Federal Reserve raised interest rates in an attempt to curtail economic growth.

The economy will slip into a shallow recession by the end of 2022 or early 2023. In addition to the near-term slowdown, there will be weak economic activity and job growth in 2023.

The discussion focuses on the following topics.

- U.S. Real GDP
- Inflation
- U.S. and Colorado Employment
- Inflation and Consumption
- Industry Indices, Housing Construction, and Extractive Industries
- Summary of Colorado Economic and Employment Outlook and Trends.

Highlights – Economic Slowdown

The economy will likely slip into a shallow recession or period of weak economic activity and job growth in late 2022 or early 2023. The discussion is no longer about whether there will be a recession. The concern is now about its intensity and duration.

Losing Momentum
The labor market has been strong throughout 2022. More recently, growth in the labor market is no longer broad-based.

The rate hikes by the Fed have caused the housing, construction, and financial markets to slow – and in some regions, these industries entered a recession in the first half of the year.

The low industry and occupational unemployment rates illustrate how difficult it is for some companies to find workers.

Consumers have reduced their level of personal savings. In addition, they have increased their credit card consumption.

Retail employment is flat or weak in some regions.

Energy policy has played havoc with economic activity.

Inflation and Rate Hikes
Hopefully, political football will take a time out after the election. Inflation and rising interest rates are at the top of the long list of headwinds that have upset the apple cart.

The Federal Reserve has the unenviable task of containing inflation by raising interest rates. In addition, they must deal with the ill effects of supply chain disruptions, global inflation, labor shortages, low unemployment rates, policies related to the Eastern European conflict, energy, and fiscal policy.

Economic Outlook and Trends

U.S. Real Gross Domestic Product

The Conference Board U.S. Economic Forecast projects real GDP growth will slip to 1.5% in 2022, down from 5.9% in 2021.

Real disposable income, personal consumption, and construction spending (residential and nonresidential) will be noticeably less in 2022 and 2023. Government spending and the unemployment rate will increase. The recession will hit in Q4 2022 and be broad-based, relatively mild, and short.

At the moment, there is greater optimism for the service sectors. The labor market will remain tight, particularly in occupations that require specific training or person-to-person contact.

Inflation will decrease in 2023 but remain above the Fed's targeted rate into 2024.

U.S. Real GDP Growth

The Conference Board Forecast (October 12, 2022)

Real GDP and Economic Growth

The latest Conference Board forecast points to real GDP growth of 1.5% for 2022. Personal consumption has deteriorated as the year has progressed and will be 2.4% this year. Residential and nonresidential investments will experience declines caused by the Fed rate hikes. The U.S. will enter a broad-based recession by the end of 2022.

Other Economic Factors

The labor market reflected strong but decelerating job growth in the first nine months of 2022. The downward trend will continue into 2023. The U.S. unemployment rate will increase slightly to 3.7% in 2022 and 4.2% in 2023. PCE Inflation peaked in late Q2. It will be 6.1% in 2022 and 2.9% in 2023.

Conference Board US Real GDP Growth Forecast

	Q1 2021	Q2 2021	Q3 2021	Q4 2021	Q1 2022	Q2 2022	Q3 2022	Q4 2022	2021	2022	2023
Real GDP (YoY)	6.3%	7.0%	2.7%	7.0%	-1.6%	-0.6%	0.5%	-0.8%	5.9%	1.5%	0.0%
Real Disposable Income	52.4%	-28.8%	-4.6%	-4.9%	--10.6%	-1.5%	-0.5%	-1.0%	1.9%	-6.7%	-0.4%
Real Personal Consumption	10.8%	12.1%	3.0%	3.1%	1.3%	2.0%	0.7%	-0.8%	8.3%	2.4%	-0.1%
Residential Investment	11.6%	--4.8%	-5.8%	-1.1%	-3.1%	-17.8%	-20.0%	-10.0%	10.7%	-8.7%	-7.4%
Nonresidential Investment	8.9%	9.9%	0.6%	1.1%	7.9%	0.1%	3.1%	--2.0%	6.4%	3.1%	-0.7%
Total Gov't. Spending	6.5%	-3.0%	-0.2%	--0.9%	-2.3%	-1.6%	2.0%	2.5%	0.6%	-0.9%	2.9%
Exports	0.4%	4.8%	-1.1%	23.5%	-4.6%	13.8%	6.0%	0.0%	6.1%	6.3%	0.8%
Unemployment Rate	6.2%	5.9%	5.1%	4.2%	3.8%	3.6%	3.6%	3.9%	5.4%	3.7%	4.2%
PCE Inflation (%Y/Y)	1.9%	4.0%	4.5%	5.7%	6.4%	6.6%	6.3%	5.0%	4.0%	6.1%	2.9%
Core PCE Inflation (%Y/Y)	1.7%	3.5%	3.9%	4.7%	5.3%	5.0%	4.8%	4.3%	3.5%	4.9%	2.8%

Source: The Conference Board and cber.co.

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

Economic Outlook and Trends

U.S. and Colorado Employment

Through the first nine months of 2022, the U.S. and Colorado labor markets have exceeded growth expectations. There are not enough workers to fill open jobs. Some companies have addressed the problem with automation.

In addition, companies have raised wages to attract workers. Unfortunately, wage gains are lower than the rate of inflation.

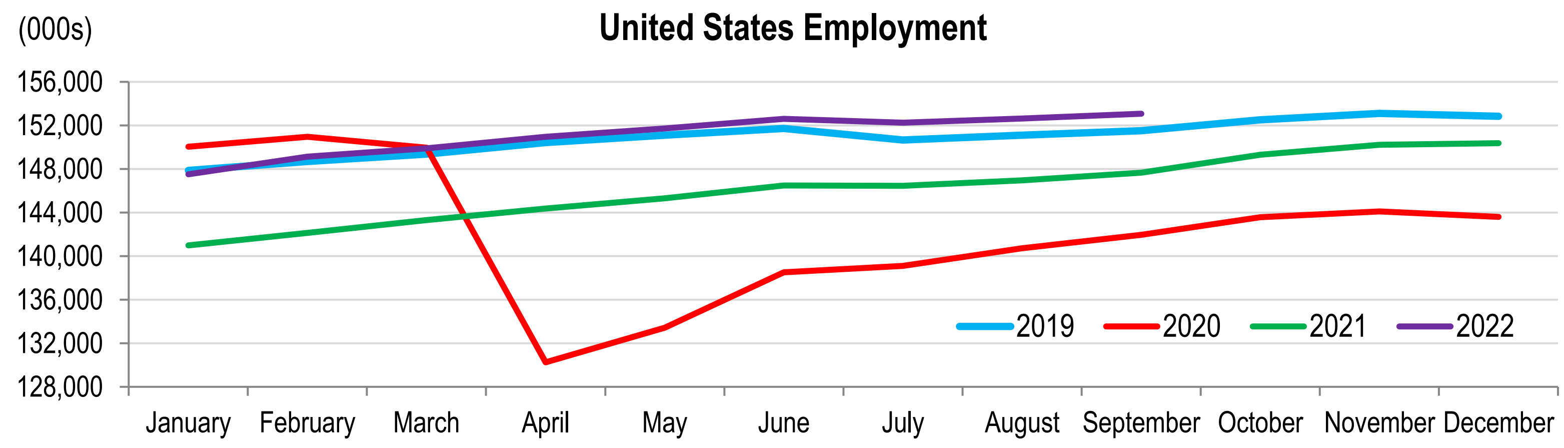
There are signs that the broad-based growth is coming to an end.

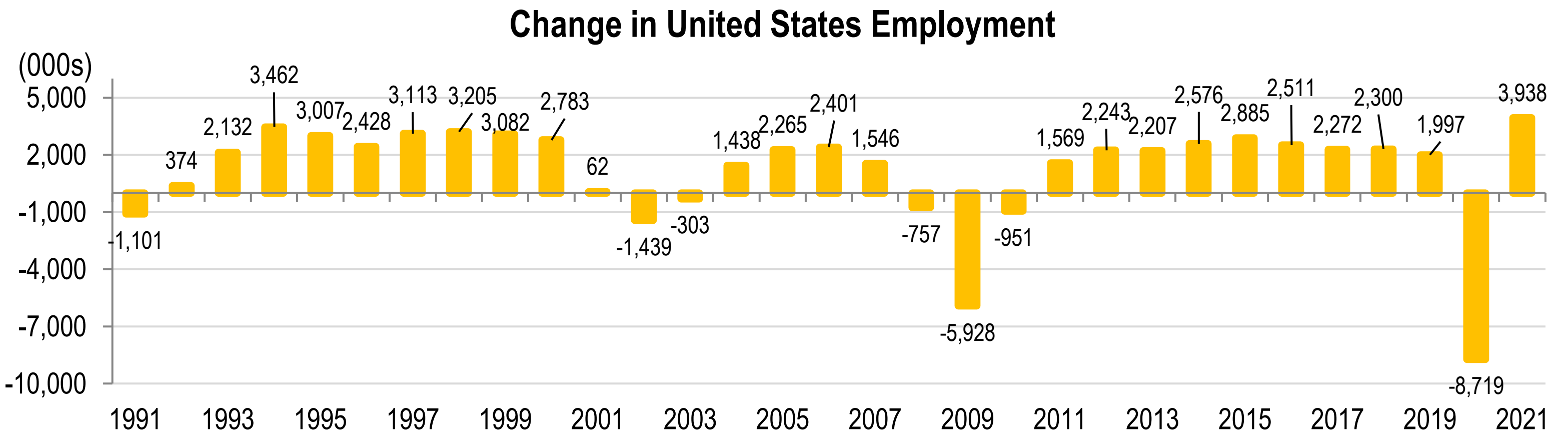
In some industries, companies have not laid off workers. Instead, they plan fewer job openings in the future.

The employment-to-population ratio has improved as the unemployment rate has decreased.

Employment and Change in Employment

United States





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

Average annual U.S. employment (NSA) through the first nine months of 2022 (purple) is about 6.2 million more than the same period in 2021 (green).

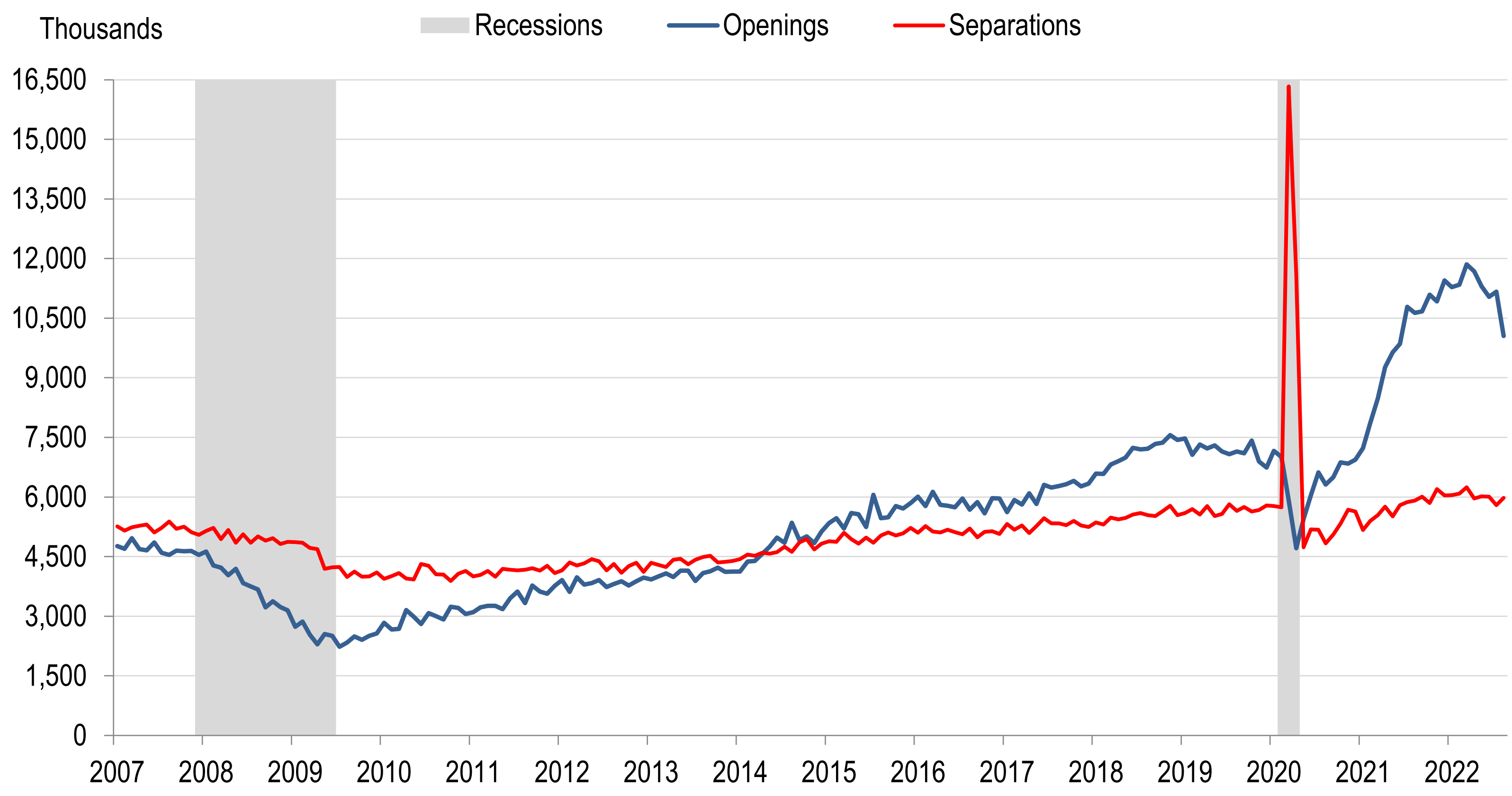
By comparison, the average U.S. employment through the first nine months of 2022 is about 822,400 more than the same period in 2019 (blue).

Until recently, there has been stronger than expected, broad-based employment growth in 2022. As a result, the U.S. has a low unemployment rate and a severe shortage of workers. Job growth will increase slower in Q4 of 2022 and remain weak into 2023.

Wage growth has been solid in many occupations and industries but less than the inflation rate.

Job Openings and Separations

United States



Source: BLS, SA, cber.co.

Openings

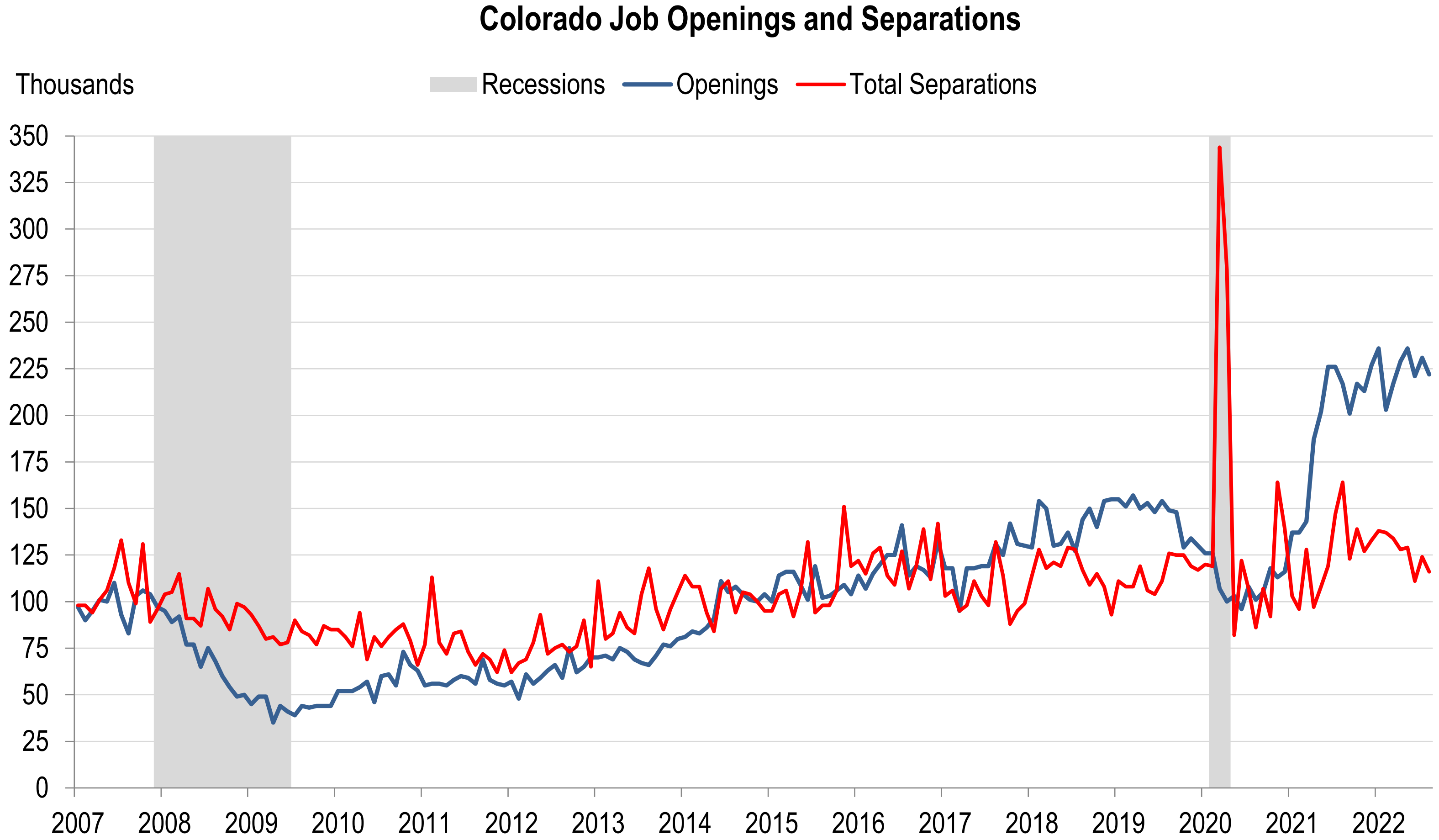
The number of U.S. job openings (blue) bottomed out in 2009. After the Great Financial Crisis, openings steadily increased over the next decade and leveled out in 2019. COVID-19 lockdown policies caused the decline in 2020. In July 2021, there were 10.7 million job openings. They peaked at 11.9 million openings in March 2022 but fell to 10.1 million in August 2022.

Separations

The August 2022 data reflected about 5.9 million separations (red). The average level for 2018 and 2019 was 5.6 million. Boomers retired, and other workers used the strong labor market to switch companies, increase their compensation, or improve their work environment. In August 2022, about 80% of the separations were quits.

Job Openings and Separations

Colorado



Source: BLS, SA, cber.co.

Openings

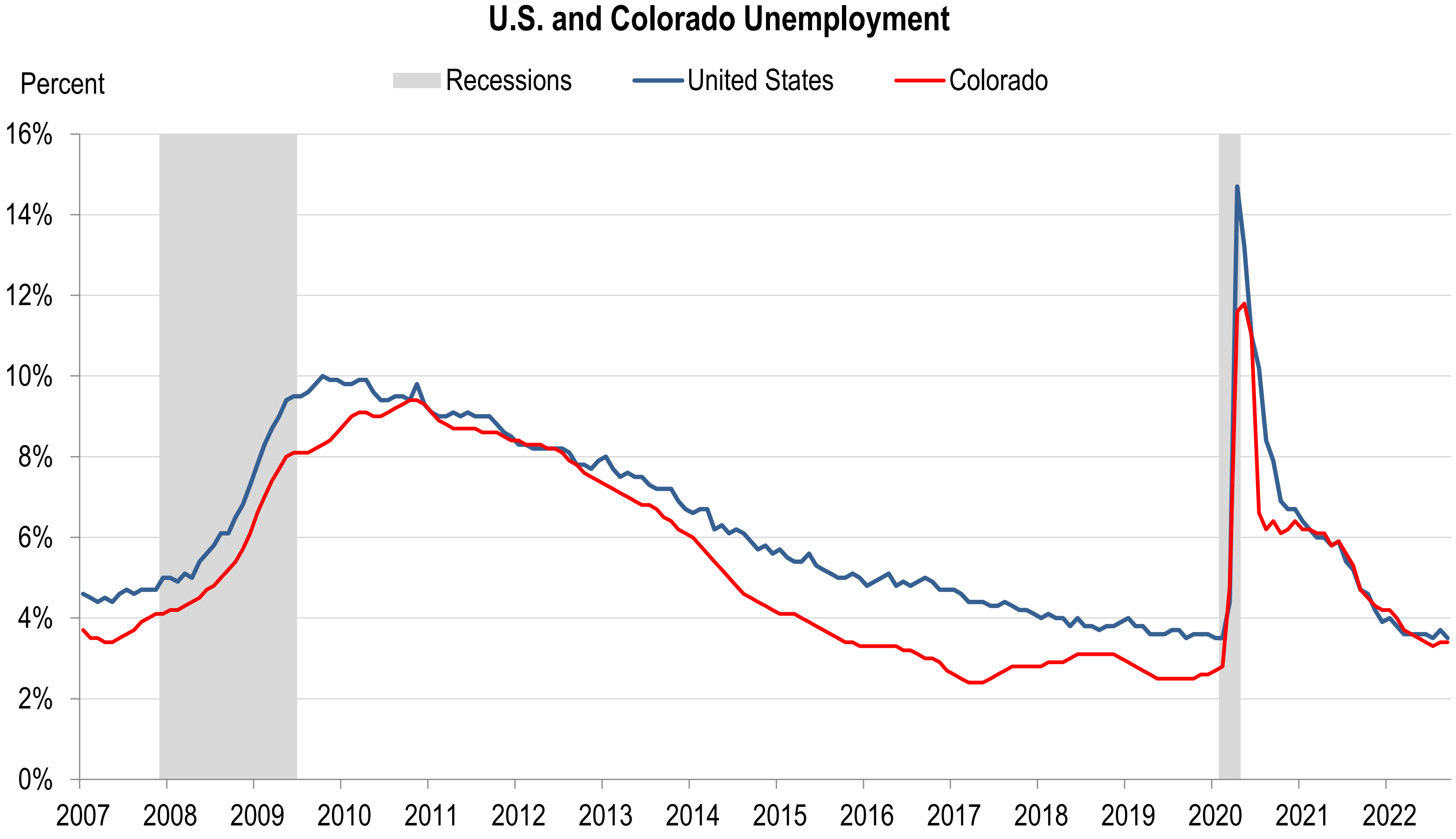
The number of Colorado job openings (blue) bottomed out in 2010 at about 35,000. After the Great Financial Crisis, openings steadily increased over the next decade. They peaked in the summer of 2019, then declined in March 2020 because of COVID-19 lockdown policies. They bottomed out in June 2020 at 96,000. In August 2022, there were 225,000 job openings.

Separations

There were 116,000 separations (red) in August 2022. The average level for 2018 and 2019 was 115,800. In August, the quits were 64% of separations.

Unemployment Rate

United States and Colorado



Source: BLS, SA, cber.co.

Unemployment Rate

The Colorado and U.S. unemployment rates were similar in 2021 and 2022. The September unemployment rate was 3.4% for Colorado and 3.5% for the U.S. There will continue to be a shortage of workers despite the low unemployment rate and upcoming recession.

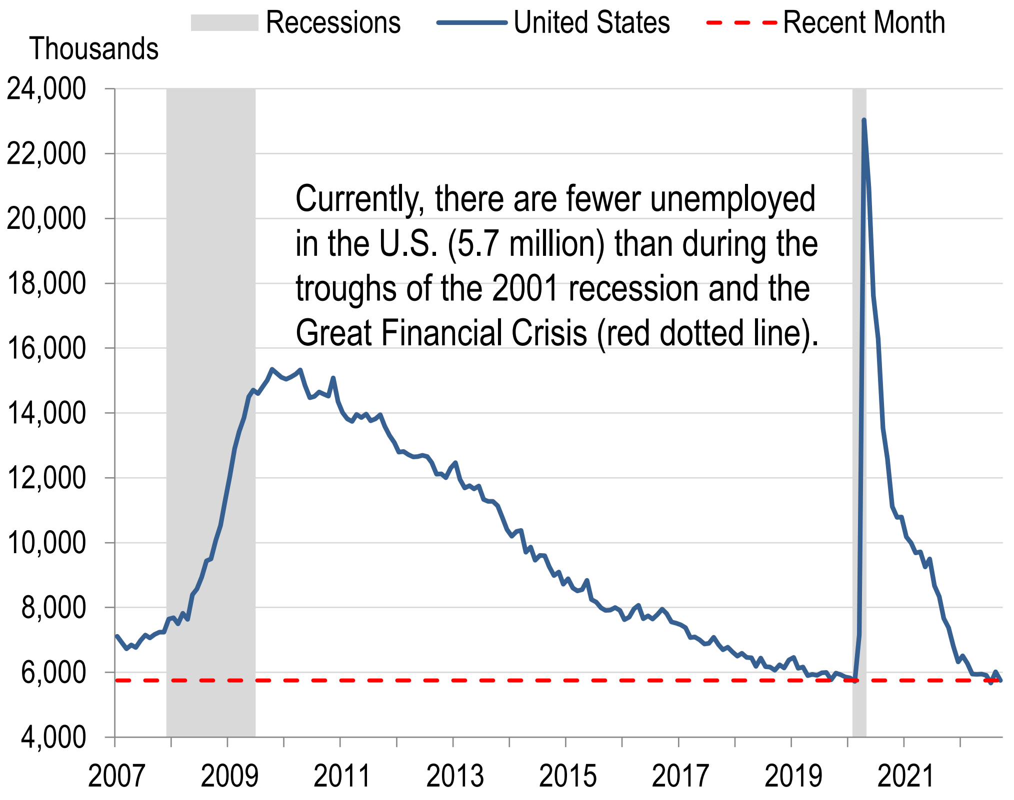
Annual Unemployment Rate

Year	United States	Colorado
2016	4.9%	3.1%
2017	4.4%	2.6%
2018	3.9%	3.0%
2019	3.7%	2.6%
2020	8.1%	6.9%
2021	5.4%	5.2%
2022	3.7%	3.6%

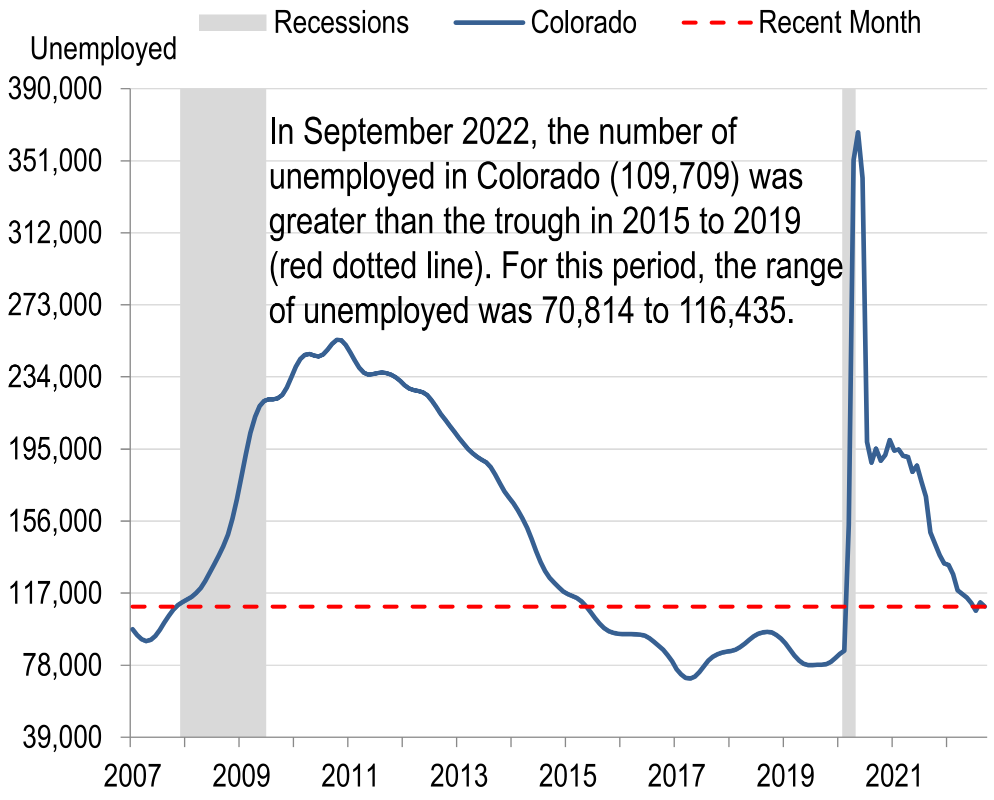
Number of Unemployed

United States and Colorado

U.S. Number of Unemployed (Thousands)



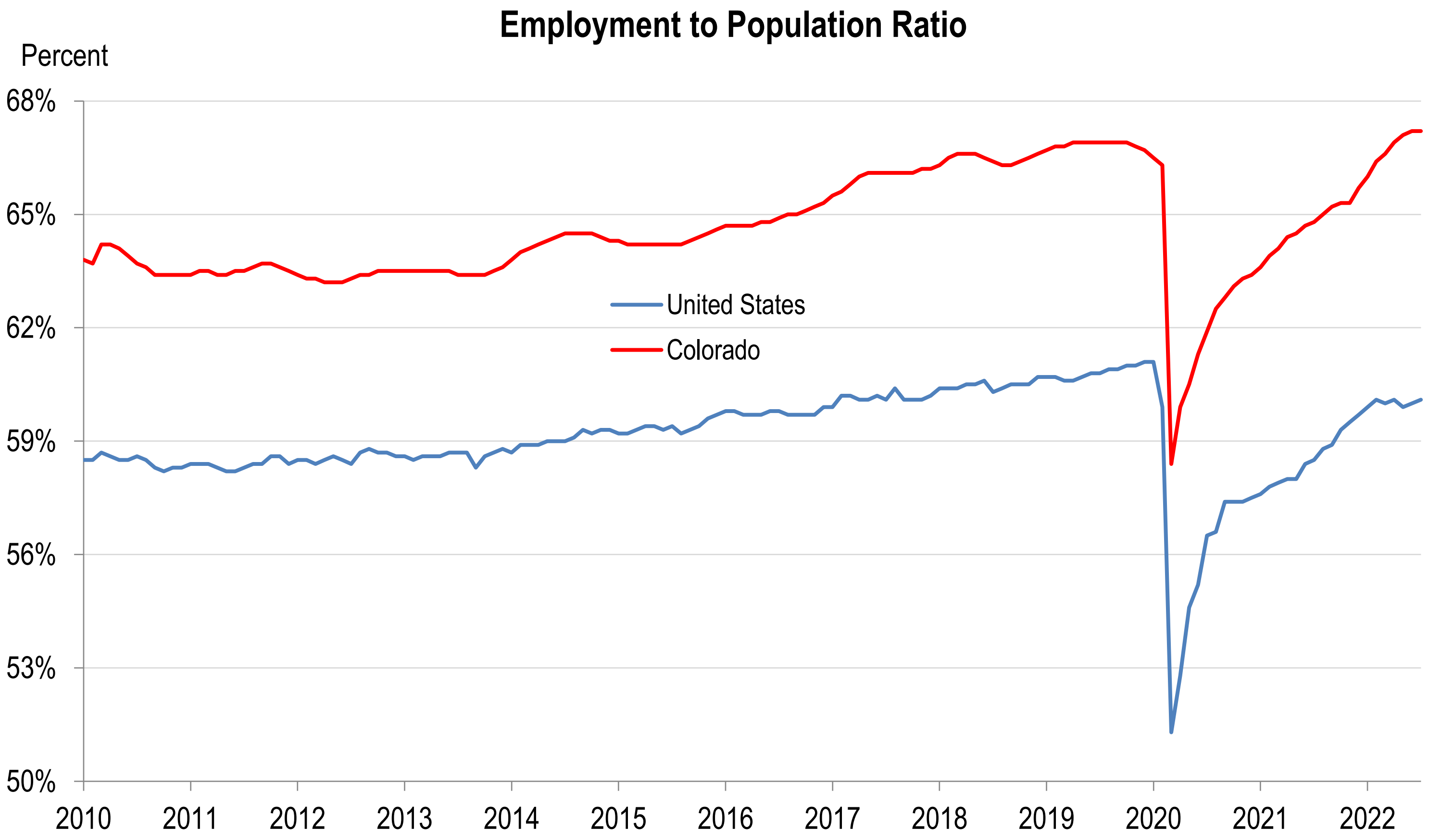
Colorado Number of Unemployed (Thousands)



Source: BLS, cber.co.

Employment-to-Population Ratio

United States to Colorado



Source: FRED, BLS, cber.co.

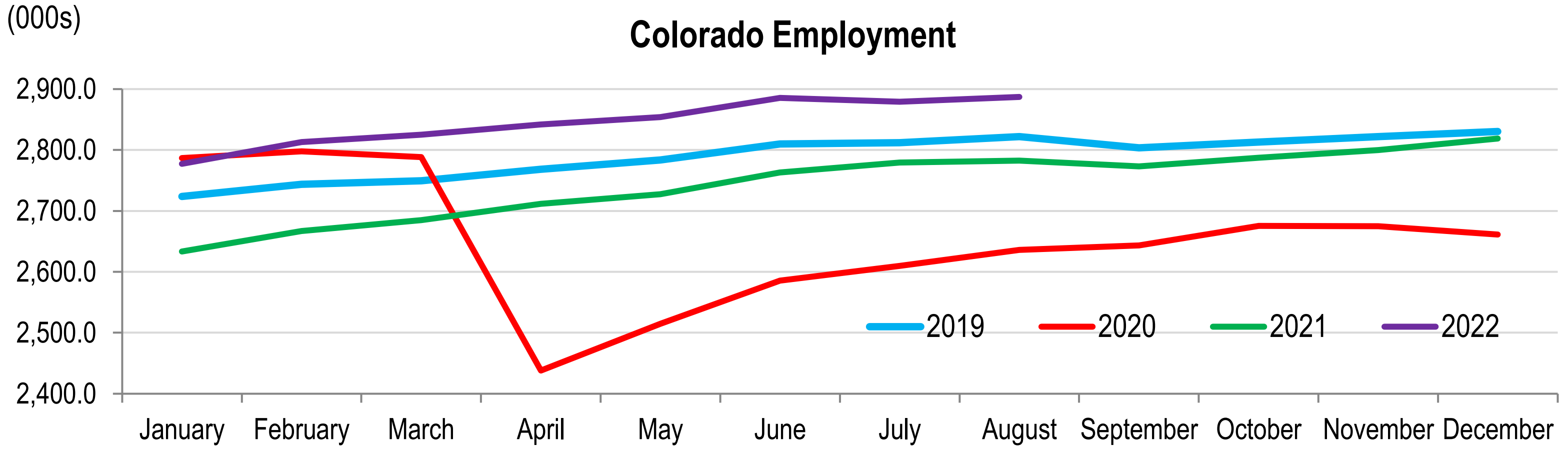
Between 2010 and 2019, the employment-to-population ratios for Colorado and the U.S. gradually increased.

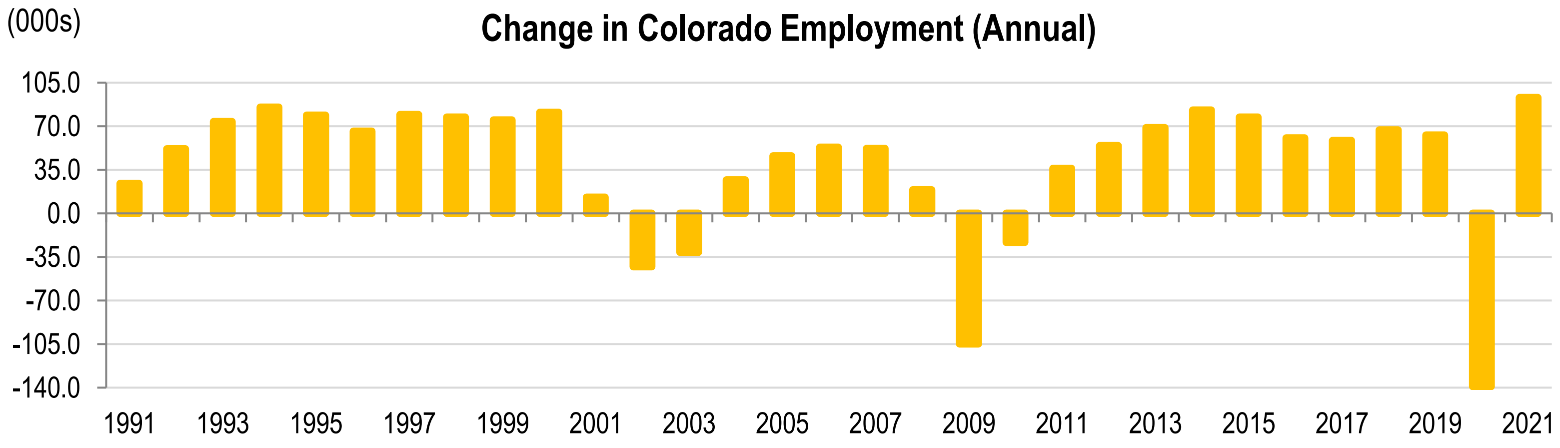
Between May and November 2019, the Colorado ratio peaked at 66.9%. In March 2020, it fell to 58.4% because of COVID-19 lockdown policies. It rebounded and was 67.1% in September 2022.

In January and February of 2020, the U.S. ratio was 61.1%. In March 2020, it plummeted to 51.3% because of COVID-19 lockdown policies. It rebounded and was 60.1% in August and September 2022. The U.S. ratio is 1.0 percentage points below the pre-pandemic peak in 2020 (61.1%).

Employment and Change in Colorado Employment

Colorado





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

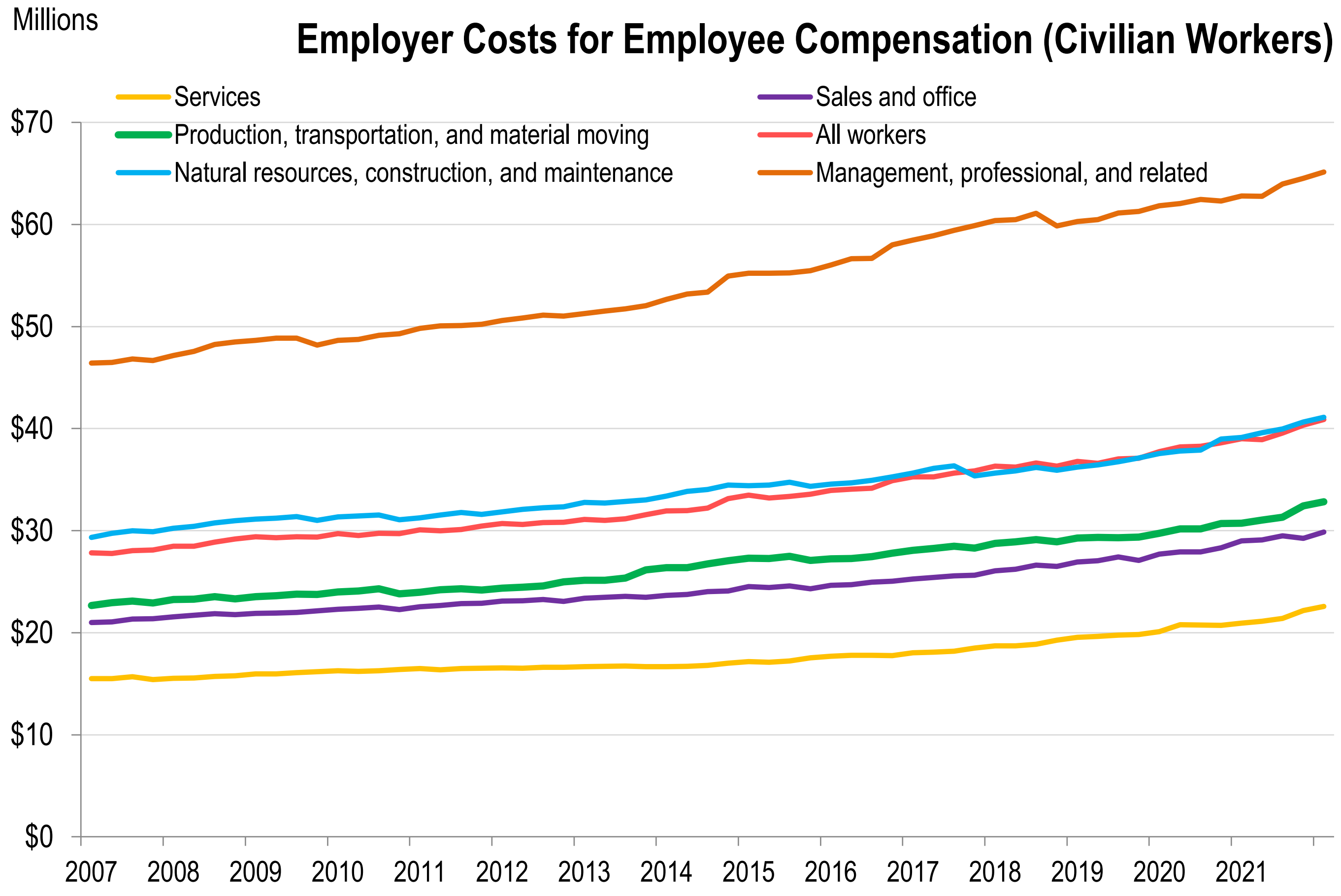
Job growth has been stronger than expected through nine months The average annual Colorado employment (NSA), based on the first nine months of 2022 (purple), is about 126,900 more than the same period in 2021 (green). The annualized level of employment for the first nine months of 2022 (purple) is about 70,100 more than in 2019 (blue).

The following sectors are below their February 2020 (pre-pandemic) levels:

- Local Government (-8,300)
- Extractive Industries (-6,300)
- State Government (-4,900)
- Food and Accommodation (-4,500)
- Financial Activities (-700)
- Federal Government (-200).

Employer Costs for Employee Compensation

Quarterly Cost of Compensation (Cost per Hours Worked) by Occupation



Change in Compensation Q1 2022 vs. Q1 2021

Over the past year, compensation has increased across all occupations. Frequently, the occupations with the lowest hourly rate have had the largest rate of increases. The wage increases, in this table, are lower than the increase in inflation.

Year over Year Change in Compensation				
Color	Occupation	Wages	YOY Change	YOY%
Orange	Mgmt. and Prof.	$65.15	$2.35	3.7%
Blue	Nat. Res., Const., Maint.	$41.10	$1.97	5.0%
Red	**All Workers**	**$40.90**	**$1.89**	**4.8%**
Green	Prod., Transp., Mat. Moving	$32.84	$2.12	6.9%
Purple	Sales and Office	$29.85	$0.86	3.0%
Yellow	Services	$22.56	$1.62	7.7%

Source:Bureau of Labor Statistics, cber.co. Note: Not adjusted for inflation.

Change in Employment

Colorado Sectors with 2022 Growth that is Less than the State Rate (2.7%)

Change in Employment Sectors with Growth Less Than the State Rate			
Sector	9/2022 (000s)	9/22 vs 12/21 (000s)	% Change
Manufacturing	155.0	3.8	2.5%
Food and Accommodation (F&A)	284.2	6.4	2.3%
Extractive Industries	20.2	0.4	2.0%
Wholesale Trade	114.1	2.2	2.0%
Local Government	267.7	3.8	1.4%
Information	78.7	1.0	1.3%
State Government	127.4	1.3	1.0%
Retail Trade	275.5	1.7	0.6%
Federal Government	53.1	-0.8	-1.5%
Financial Activities	175.5	-4.5	-2.5%
Total	1,551.4	15.3	1.0%

Total employment for the state increased by 2.7% between December 2021 and September 2022. These sectors/sub-sectors had a growth rate that is less than that amount.

They increased by an average of 1.0%.

The combined employment of these sectors accounted for 54% of Colorado employment and 20% of total job growth during this period.

Sectors add jobs at different rates for different reasons. For example, the government is not a growth industry, financial services are volatile, there are always shortages for healthcare positions, and the retail sector is evolving and sensitive to inflation.

Source: BLS, SA, cber.co.

Change in Employment

Colorado Sectors with 2022 Growth That is Greater Than the State Rate (2.7%)

Summary

Change in Employment Sectors with a Growth Rate Greater Than the State Rate

Sector	9/2022 (000s)	9/22 vs 12/21 (000s)	% Change
Arts, Entertainment, Recreation (AER)	64.9	11.4	21.3%
Education (Private)	48.1	3.3	7.4%
Other Services (Personal)	122.8	6.1	5.2%
Transportation, Warehousing, and Utilities	111.2	5.1	4.8%
Professional, Scientific, and Technical Services	275.1	12.2	4.6%
Management of Corporations and Enterprises	46.6	2	4.5%
Administrative Services	166.3	6.7	4.2%
Healthcare	312.4	8.8	2.9%
Construction	184.0	5.1	2.9%
Total	1,331.4	60.7	4.8%

Summary Change in Employment (000s)

	9 2022	9/22 vs 12/21	% Change
Greater than State Rate	1,331.4	60.7	4.8%
Less than State Rate	1,551.4	15.3	1.0%
Total	2,882.8	76.0	2.7%

Source: BLS, SA, cber.co.

Total employment for the state increased by 2.7% between December 2021 and September 2022.

These sectors/sub-sectors had a growth rate more than that amount. They increased by an average of 4.8%.

The combined employment of these sectors accounted for 46% of Colorado employment and 80% of total job growth during the first eight months.

Sectors such as AER, administrative services, and healthcare recently recovered jobs lost during the pandemic. On the other hand, PST and MCE are consistently strong performers. Construction is typically more volatile than other sectors.

Economic Outlook and Trends

Inflation and Consumption

Inflation is at the top of a long list of headwinds. After peaking during the summer, the PCE has started its long descent back to the Fed's target rate.

Consumers will adapt their purchasing patterns to account for higher prices and increase credit card consumption. They have already reduced funds from their personal savings.

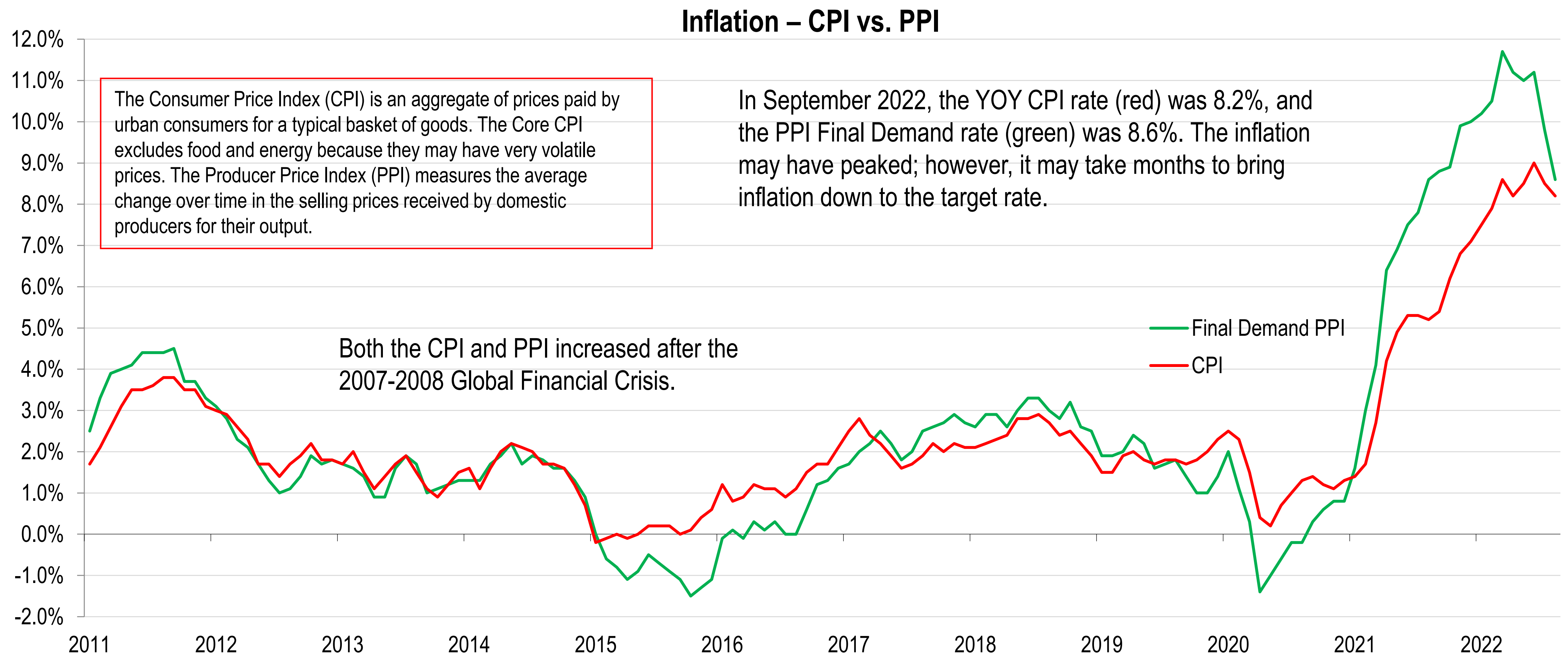
The Michigan Consumer Index indicates consumers are not confident in the economy, but they continue to spend. Auto sales and retail consumption are tapering off.

Colorado will find that inflation is highest for the most critical items: food, energy, housing, medical, recreation, and transportation.

Overall passenger traffic at DIA has rebounded with fewer business travelers.

The S&P 500 is -20+% compared to the 2021 year-end value, affecting the personal wealth effect.

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 SA, cber.co.

Inflation
Denver-Aurora-Lakewood vs. U.S.

The CPI for the first half of 2022 was 8.3% for the U.S. and 8.6% for Colorado. The September YOY CPI rate was 8.3% for the U.S. and the 7.7% for Colorado. Mid-year CPI rates for select categories are listed below.

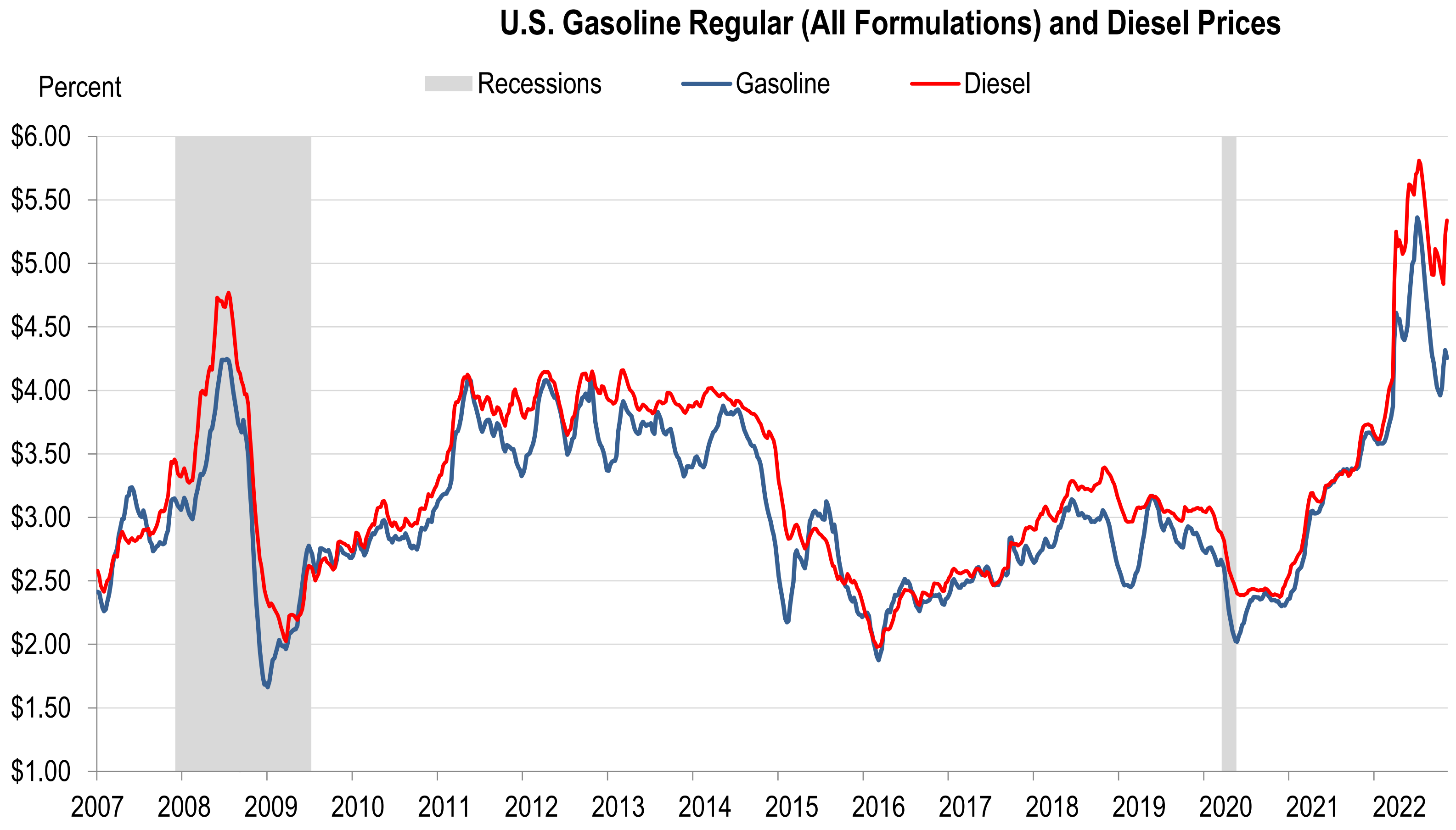
At the mid-point of the year, most areas that were important to Coloradans were well above the Fed's target rate of 2.0%.

Consumer Purchasing Index for Denver-Aurora-Lakewood and the U.S. – First Half of 2022

	Denver	U.S.			Denver	U.S.
Alcoholic Beverages	4.2%	3.6%		Housing	6.9%	6.5%
Apparel	4.2%	5.7%		Meats, Poultry, Fish, Eggs	14.5%	13.2%
Dairy	6.4%	8.3%		Medical	10.1%	3.2%
Food and Beverage	8.8%	8.6%		Motor Fuel	38.4%	47.2%
Food at Home	9.0%	10.2%		Non-Alcoholic Beverage	7.5%	8.9%
Food Away From Home	9.5%	7.1%		Recreation	6.1%	4.6%
Fruits and Vegetables	5.1%	7.6%		School Fees/Childcare	-0.3%	2.4%
Household Energy	12.4%	16.8%		Transportation	19.3%	20.6%
Household Furnishings	6.3%	9.5%		Used Vehicles	28.6%	25.8%

Source: BLS, cber.co.

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



Source: FRED, EIA, https://www.eia.gov/dnav/pet/pet_pri_gnd_a_epd2d_pte_dpgal_w.htm, cber.co.

Gas and Diesel Prices

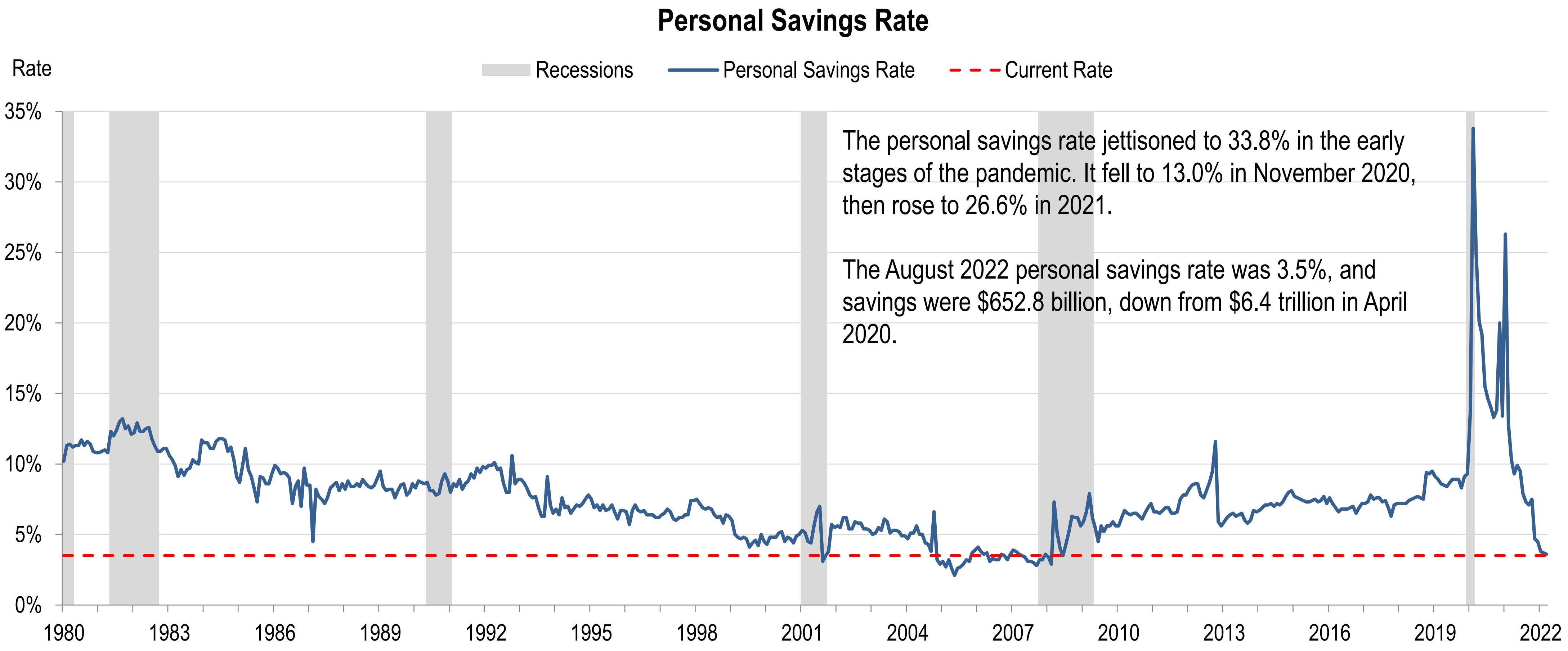
On February 21, 2021, the price for a gallon of gasoline was $2.82, and a gallon of diesel was $2.93, a year before the Eastern European conflict escalated (2/24/2022). On October 17, 2022, a gallon of gasoline was $4.26, down from a peak of $5.51. A gallon of diesel was $5.34 compared to its peak of $5.78.

Average Annual

Year	Diesel	Gasoline
2015	$2.71	$2.43
2016	$2.30	$2.14
2017	$2.65	$2.42
2018	$3.18	$2.72
2019	$3.06	$2.60
2020	$2.55	$2.17
2021	$3.29	$3.01

U.S. Personal Savings Rage

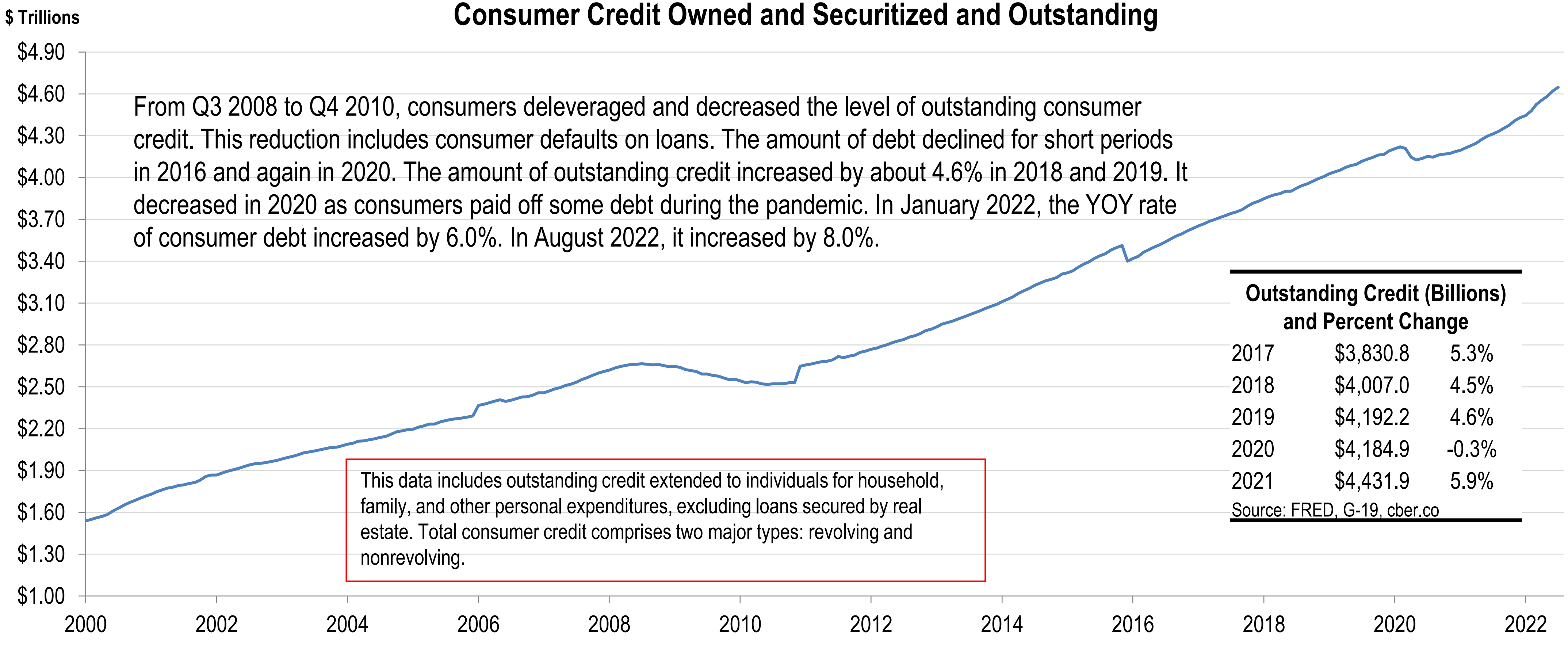
Percentage of Disposable Personal Income



Source: BEA, FRED, cber.co.

U.S. Consumer Credit Outstanding

Consumer Credit Owned and Securitized and Outstanding



From Q3 2008 to Q4 2010, consumers deleveraged and decreased the level of outstanding consumer credit. This reduction includes consumer defaults on loans. The amount of debt declined for short periods in 2016 and again in 2020. The amount of outstanding credit increased by about 4.6% in 2018 and 2019. It decreased in 2020 as consumers paid off some debt during the pandemic. In January 2022, the YOY rate of consumer debt increased by 6.0%. In August 2022, it increased by 8.0%.

This data includes outstanding credit extended to individuals for household, family, and other personal expenditures, excluding loans secured by real estate. Total consumer credit comprises two major types: revolving and nonrevolving.

Outstanding Credit (Billions) and Percent Change

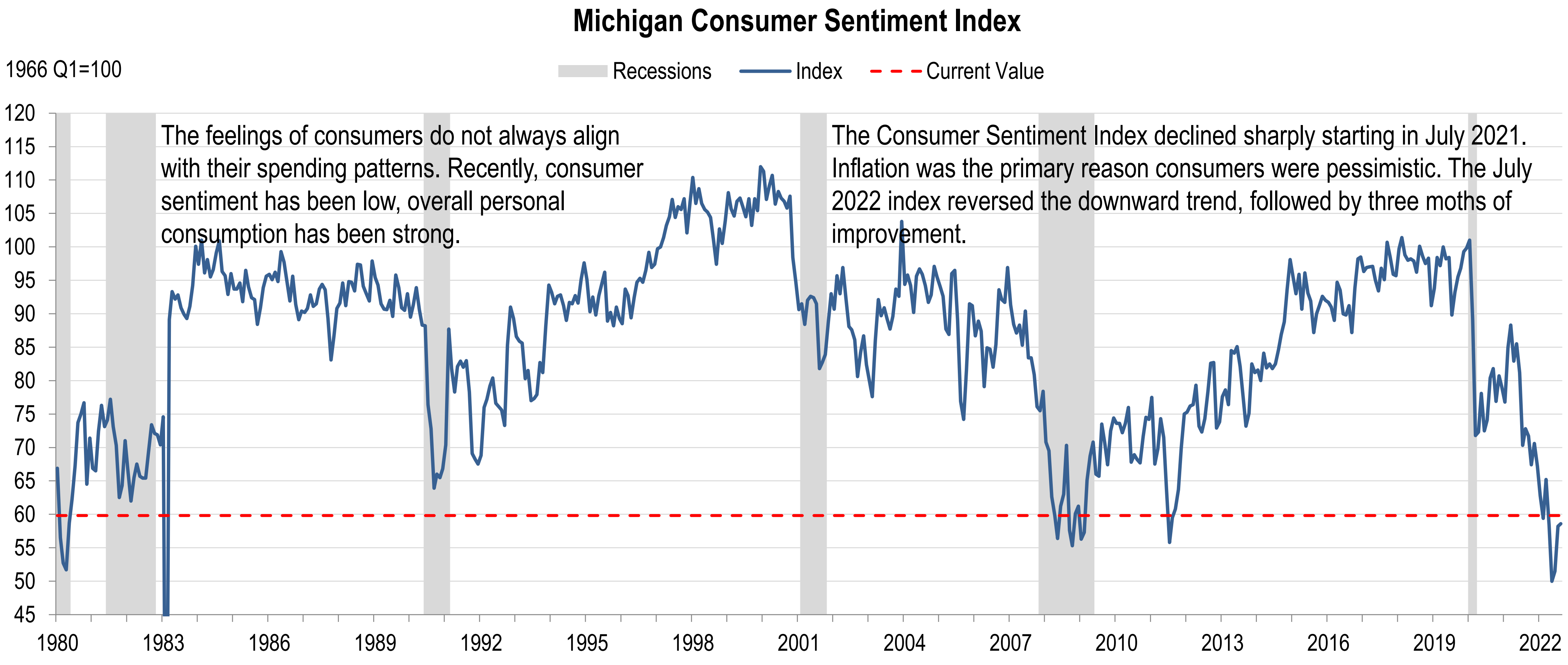
2017	$3,830.8	5.3%
2018	$4,007.0	4.5%
2019	$4,192.2	4.6%
2020	$4,184.9	-0.3%
2021	$4,431.9	5.9%

Source: FRED, G-19, cber.co

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

Consumer Sentiment Index

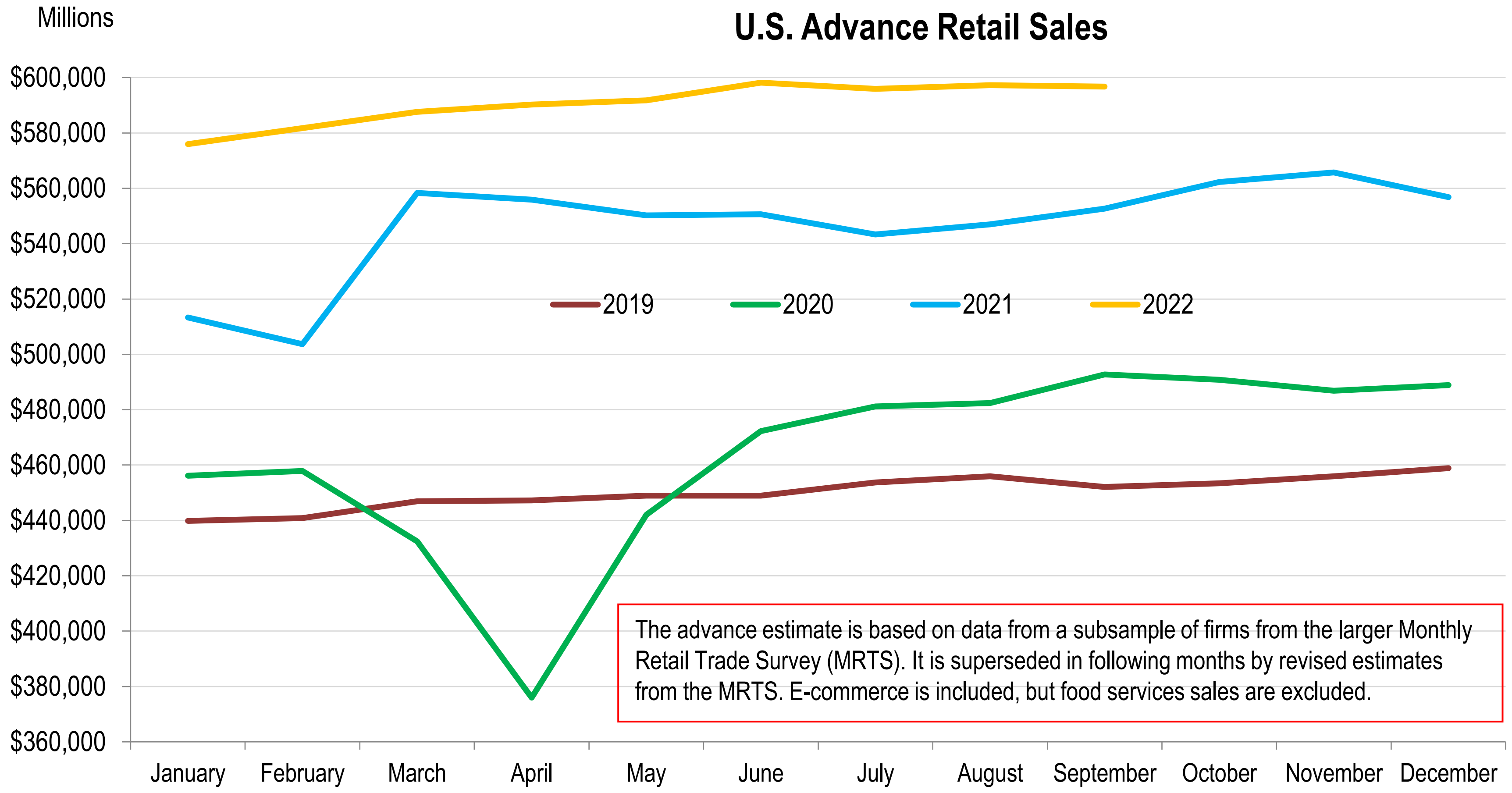
University of Michigan



Source: University of Michigan, cber.co.

U.S. Advance Retail Sales

Monthly



Sales through the first nine months of 2022 (yellow) were 9.0% greater than the same period in 2021 (blue). The YOY rate of growth will continue to decline as the year progresses. The National Retail Federation projected that 2022 sales would be 6.0% to 8.0% greater than the 2021 value. That appears to be a reasonable projection.

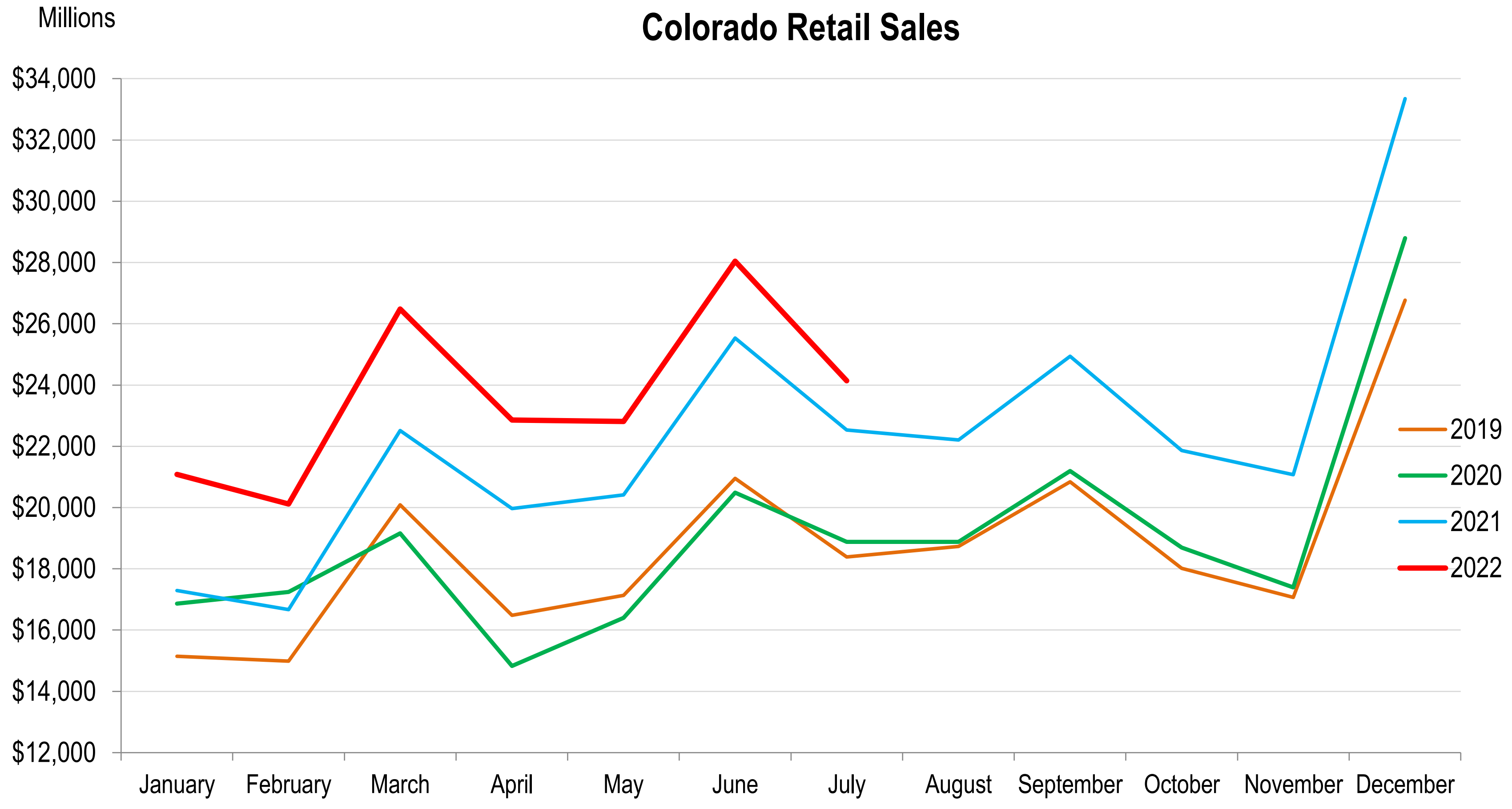
Annual Retail Sales (Trillions)

2017	$5.05	4.4%
2018	$5.26	4.2%
2019	$5.40	2.7%
2020	$5.56	2.9%
2021	$6.56	18.0%

Source: Census, cber.co

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

Colorado Retail Sales
Monthly



Colorado Retail Sales

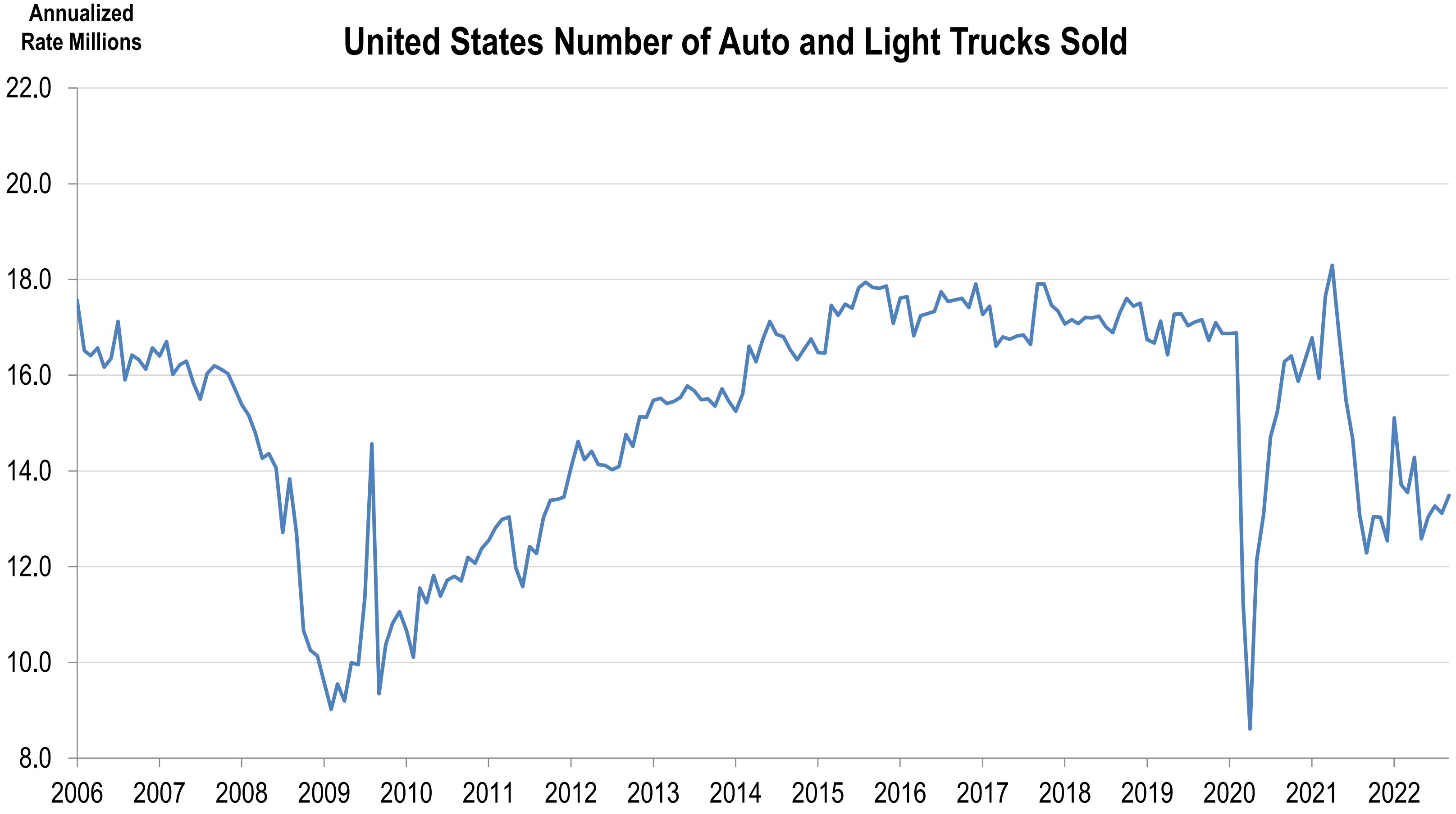
Average retail sales for the first seven months of 2022 (red) were 14.2% greater than the same period in 2021 (turquoise).

Sales for 2022 have increased at a decelerating rate starting in February.

Annual Retail Sales (Billions)		
2017	$194.6	5.4%
2018	$206.2	5.9%
2019	$224.6	9.0%
2020	$228.8	3.9%
2021	$268.3	17.3%
2022f	$295.2	10.0%

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

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.

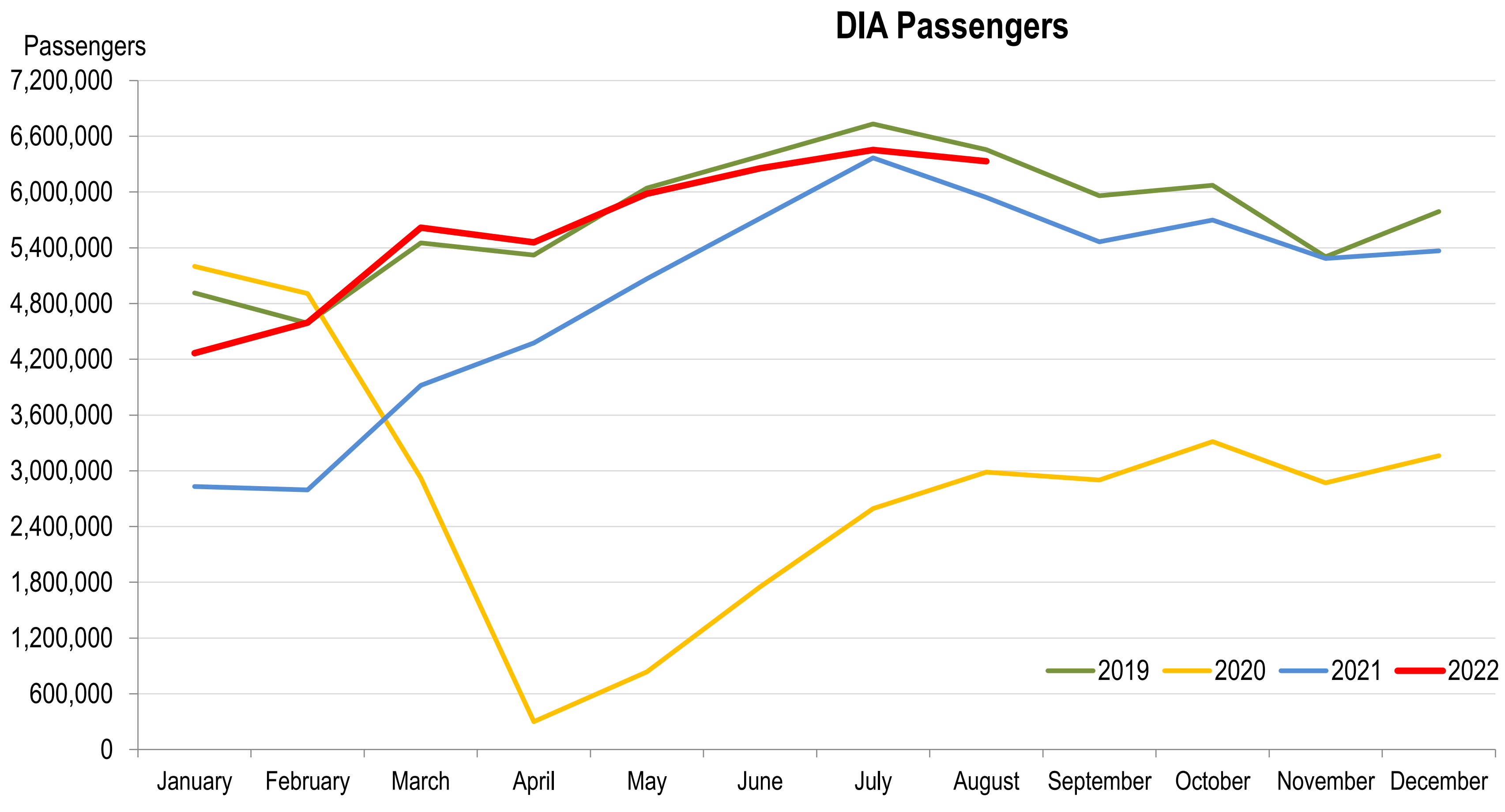
In April 2020, SAAR sales plummeted to 8.6 million units (The February 2009 total was 9.0 million). There was a sharp rebound, and sales peaked at 18.3 million in April 2021.

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	15.0
2022 (f)	16.5

In 2021, the industry did not meet the demand for new cars because of supply chain disruptions. Sales in September 2022 were below expectations at 13.5 million annualized.

Denver International Airport Passengers
Monthly



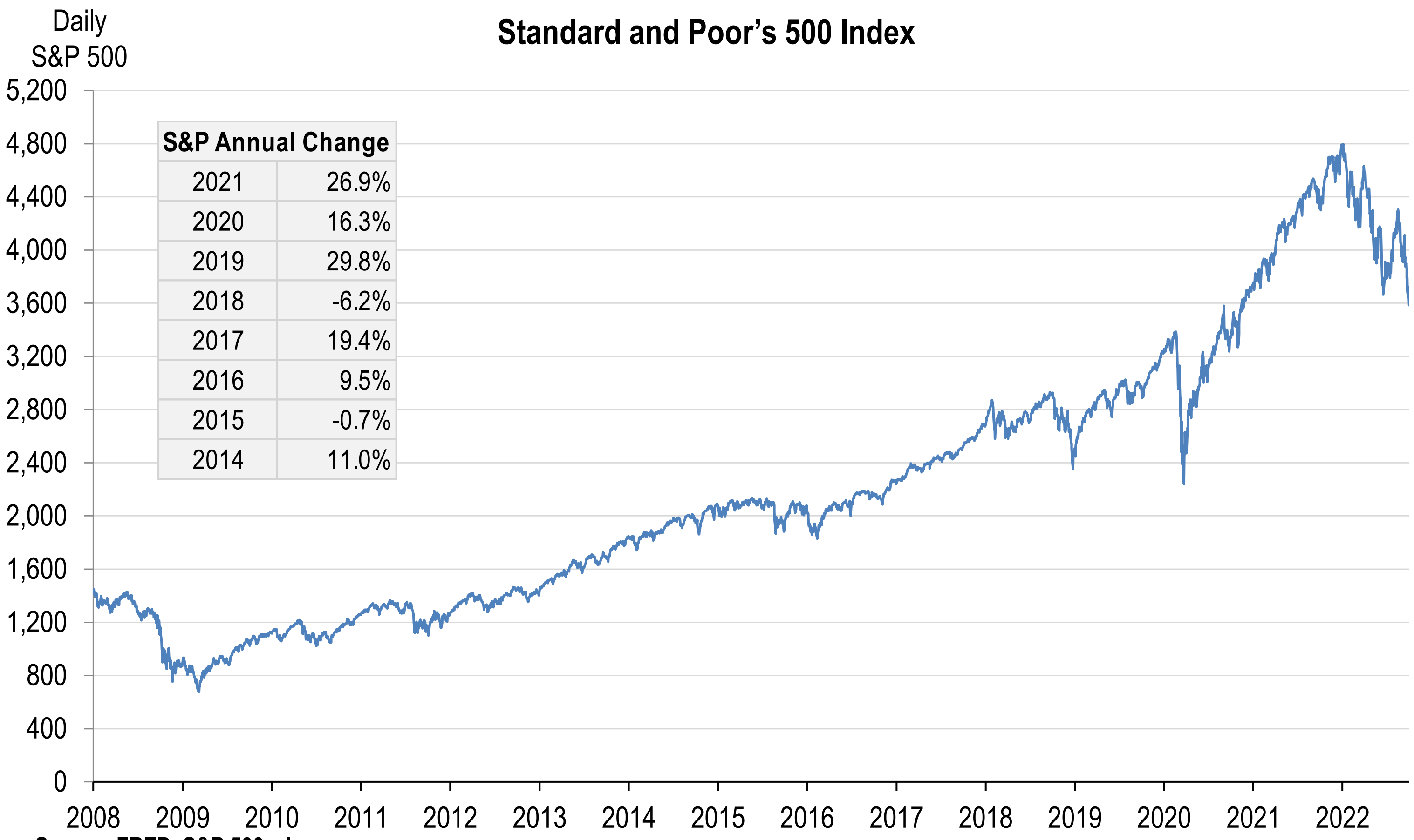
Source: flydenver.com, cber.co.

The number of DIA passengers during the first eight months of 2022 (red) is slightly below the YTD total for 2019 (green) but significantly above the YTD total for 2021 (blue). Business travelers have not returned to pre-COVID levels.

There were 45.0 million DIA passengers during the first eight months of 2022.

Year	Passengers	% Change
2022	64,000,000	8.8%
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%

Standard and Poor's 500 Index



S&P Annual Change	
2021	26.9%
2020	16.3%
2019	29.8%
2018	-6.2%
2017	19.4%
2016	9.5%
2015	-0.7%
2014	11.0%

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

COVID-19 Policies Bear Market - 2020
After reaching 3,386 on February 19, 2020, the S&P 500 slipped to 2,237 on March 23, 2020, a loss of 34% or 1,148 points. On August 18, 2020, the S&P returned to 3,386. The bear market of 2020 was short-lived (149 days).

Year-End 2021
The S&P index increased at a steady rate for most of 2021. On December 31, it was 4,766 or 26.9% greater than the December 2020 closing value.

YTD Change - 2022 Bear Market
On July 16, 2022, the S&P 500 closed at 3,667, a change of -23.1%, or 1,099 points off the December 31, 2021, value. The October 21, 2022 value was 3,753, 21.3% of the closing value for 2021.

Economic Outlook and Trends

Industry Indices, Construction, Housing, and Extractive Industries

Job growth is no longer broad-based. Ironically, companies in many industries will continue to experience labor shortages in select occupations.

The NFIB and NAHB indices have contractionary values. On the other hand, the ISM Services and Manufacturing indices are in expansionary territory (ISM Manufacturing is borderline).

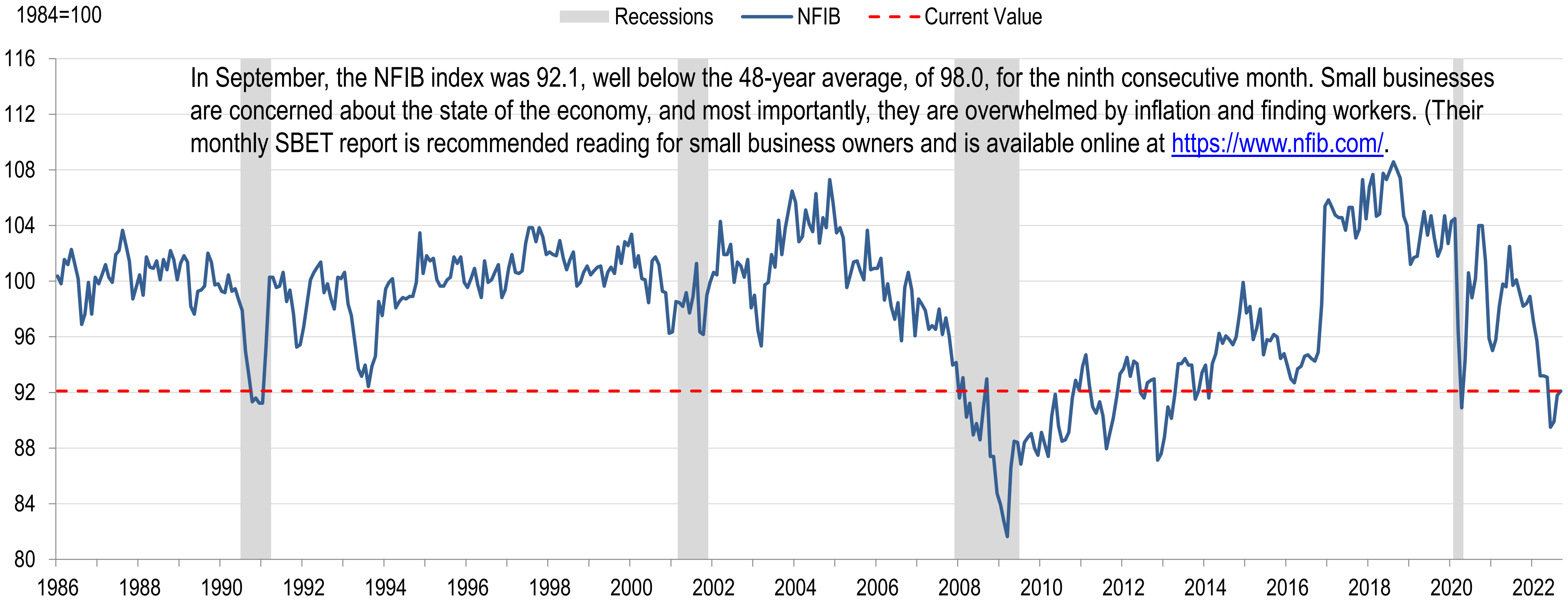
In Colorado, the number of building permits is increasing at a decelerating rate, and the rate of home price appreciation (Case Shiller) has decreased.

Colorado oil production has stabilized. Erratic energy policy has caused oil prices to be volatile. As a result, retail gasoline and diesel prices are significantly higher than two years ago. Refineries are producing at capacity.

NFIB Small Business Optimism Index

United States

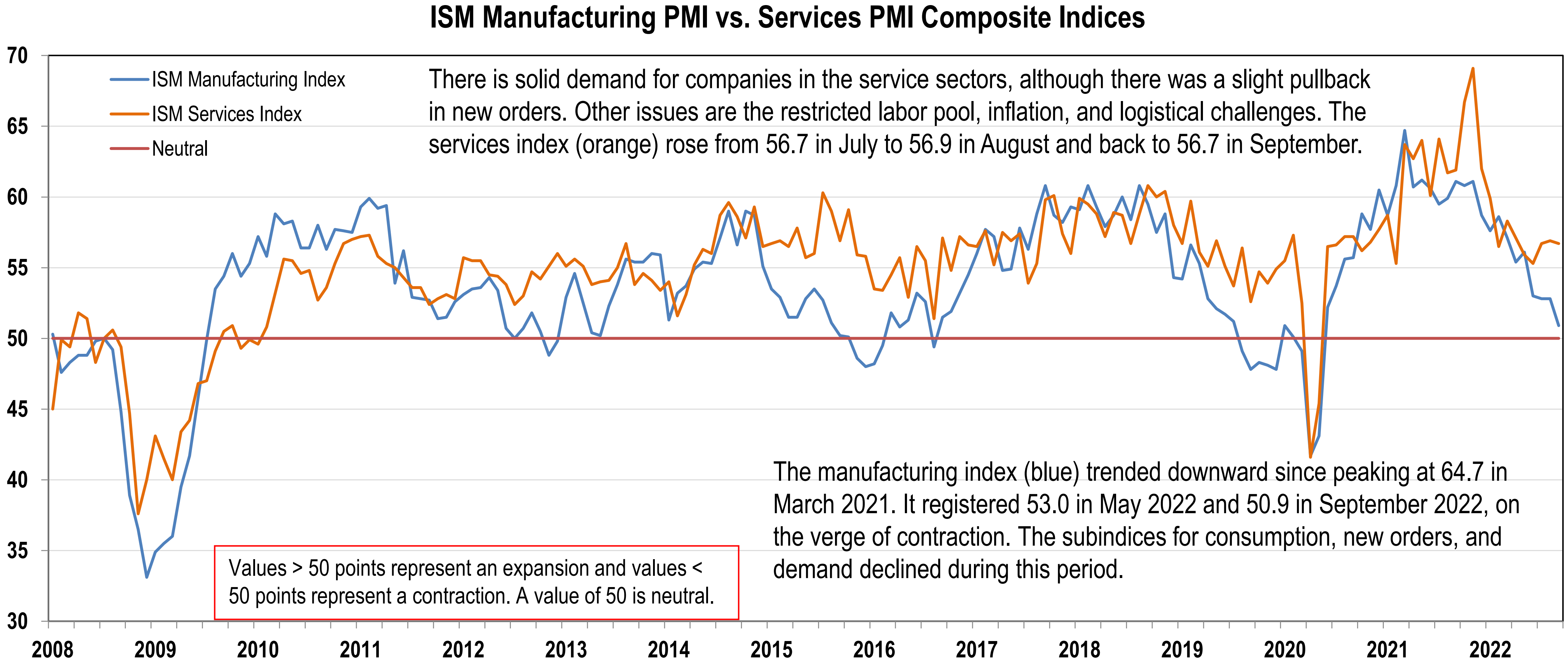
NFIB Small Business Optimism Index



Source: NFIB, cber.co.

ISM PMI Composite Indices

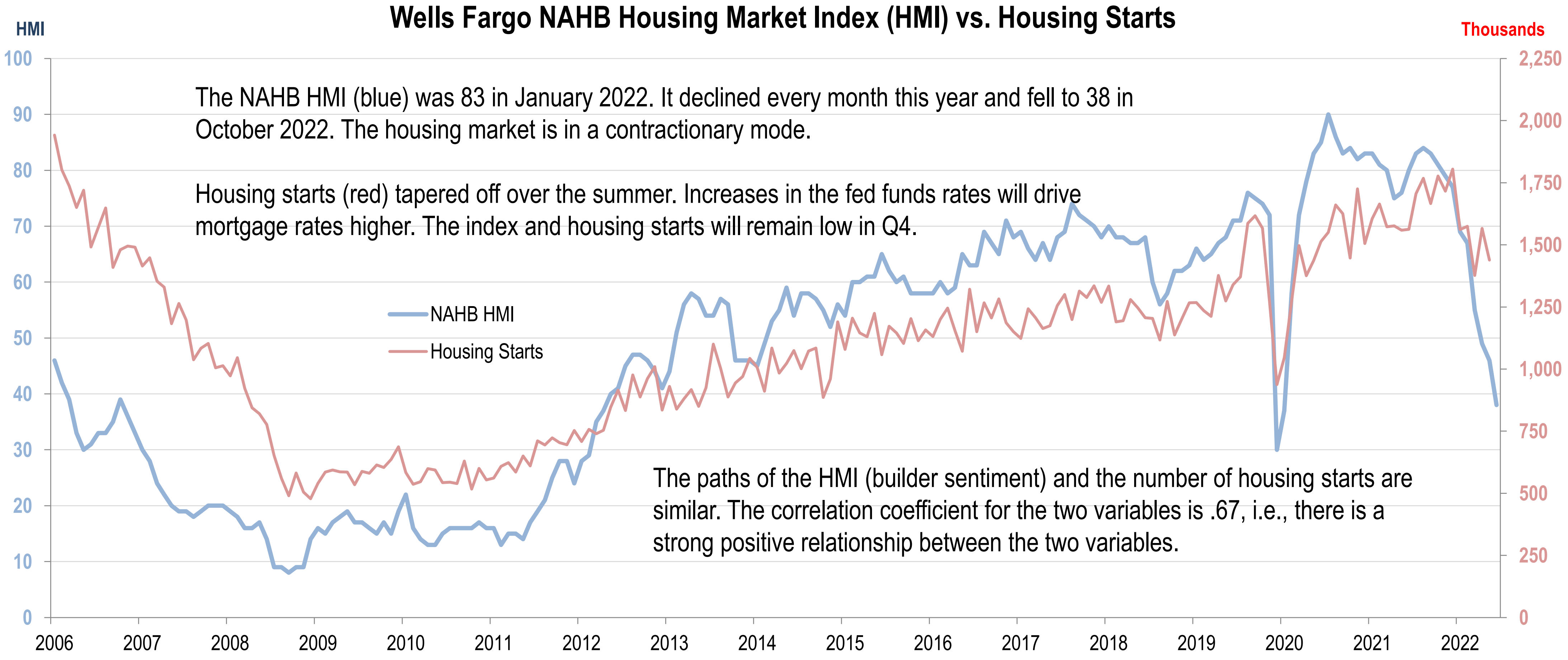
Manufacturing vs. Services



Source: Institute of Supply Management, cber.co

Wells Fargo NAHB HMI vs. Housing Starts

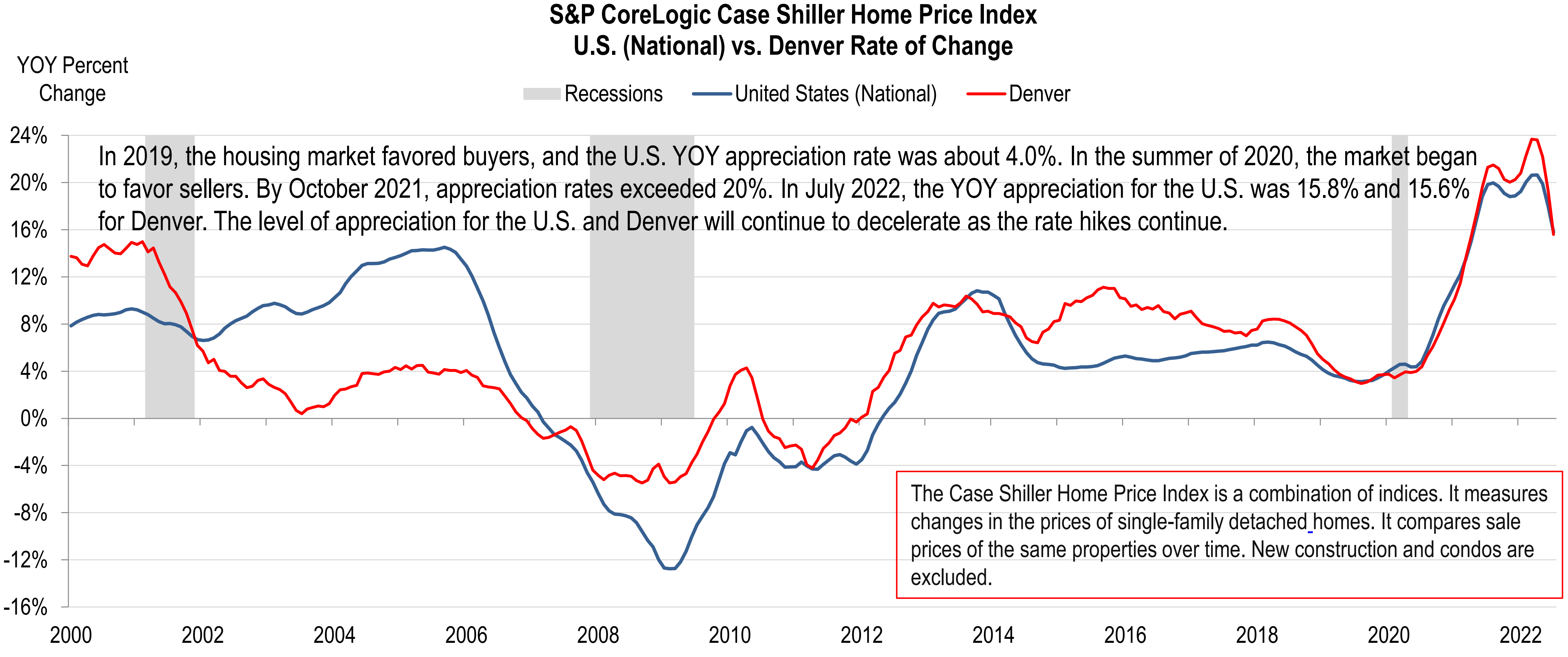
United States



Source: NAHB, cber.co.

Case Shiller Home Price Index

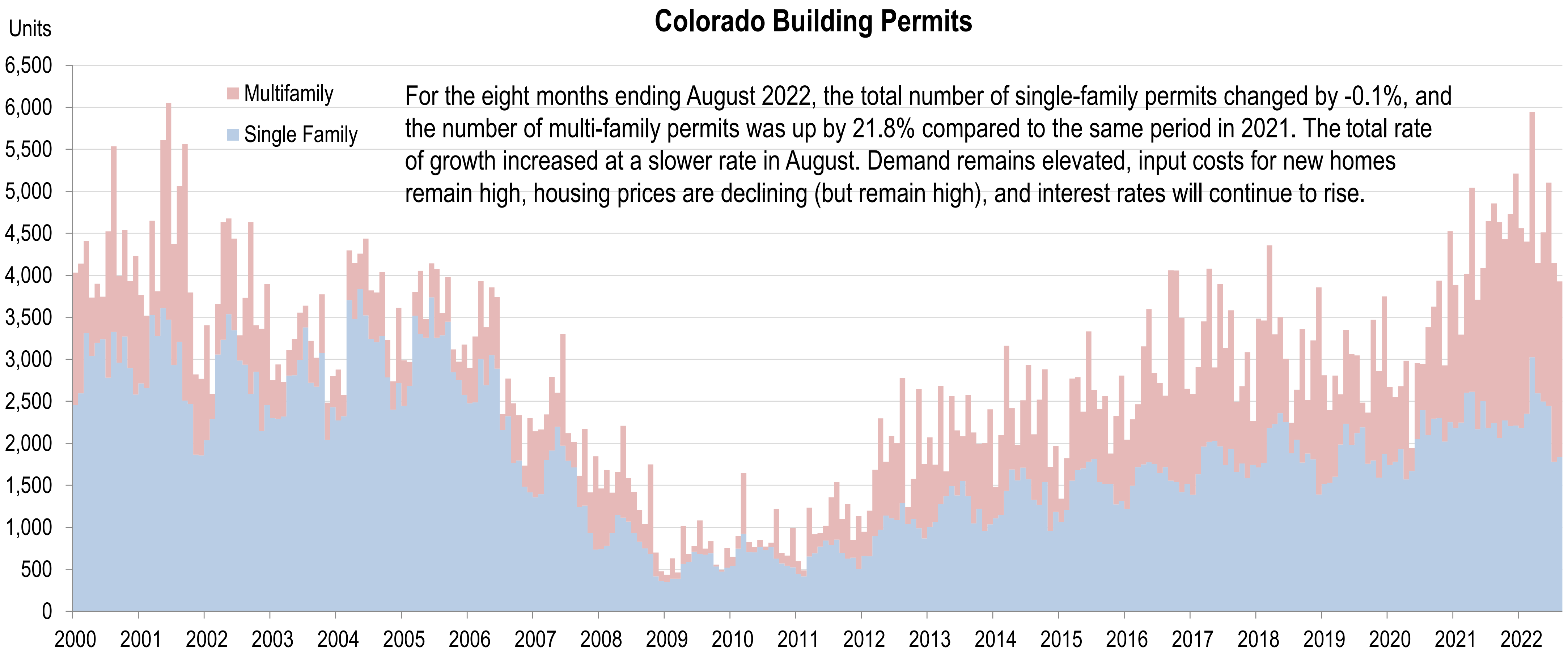
YOY National vs. Denver Rate of Change



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

Colorado Residential Building Permits

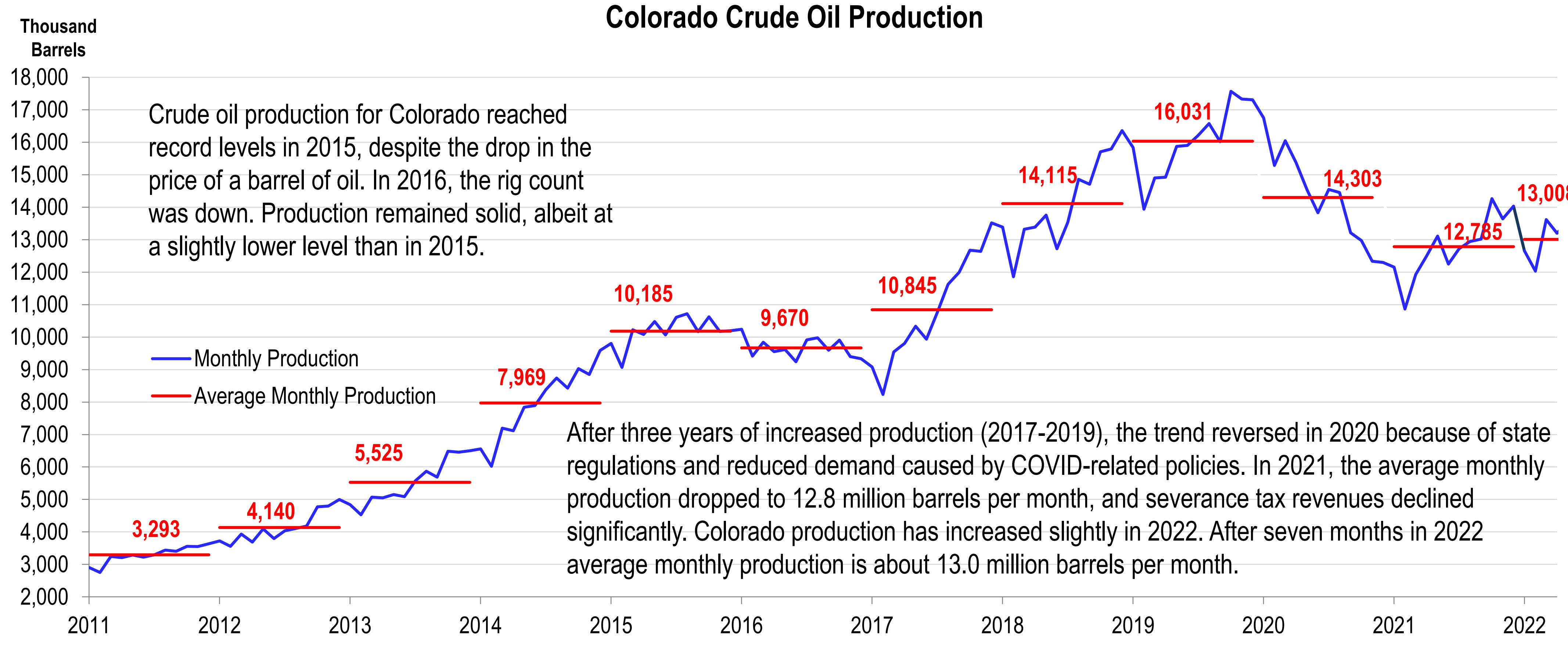
Units



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

Colorado Field Production of Crude Oil

2011 to 2022 (Thousand Barrels)

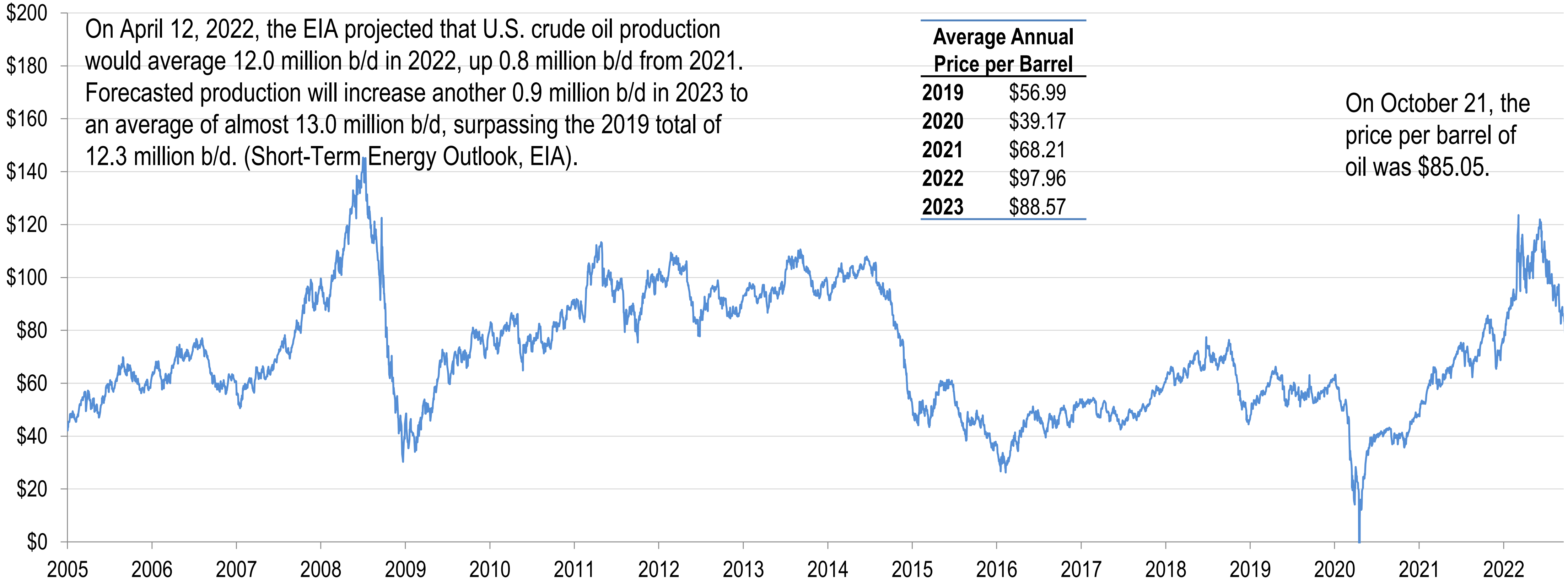


Source: EIA, cber.co.

Crude Oil Prices

West Texas Intermediate

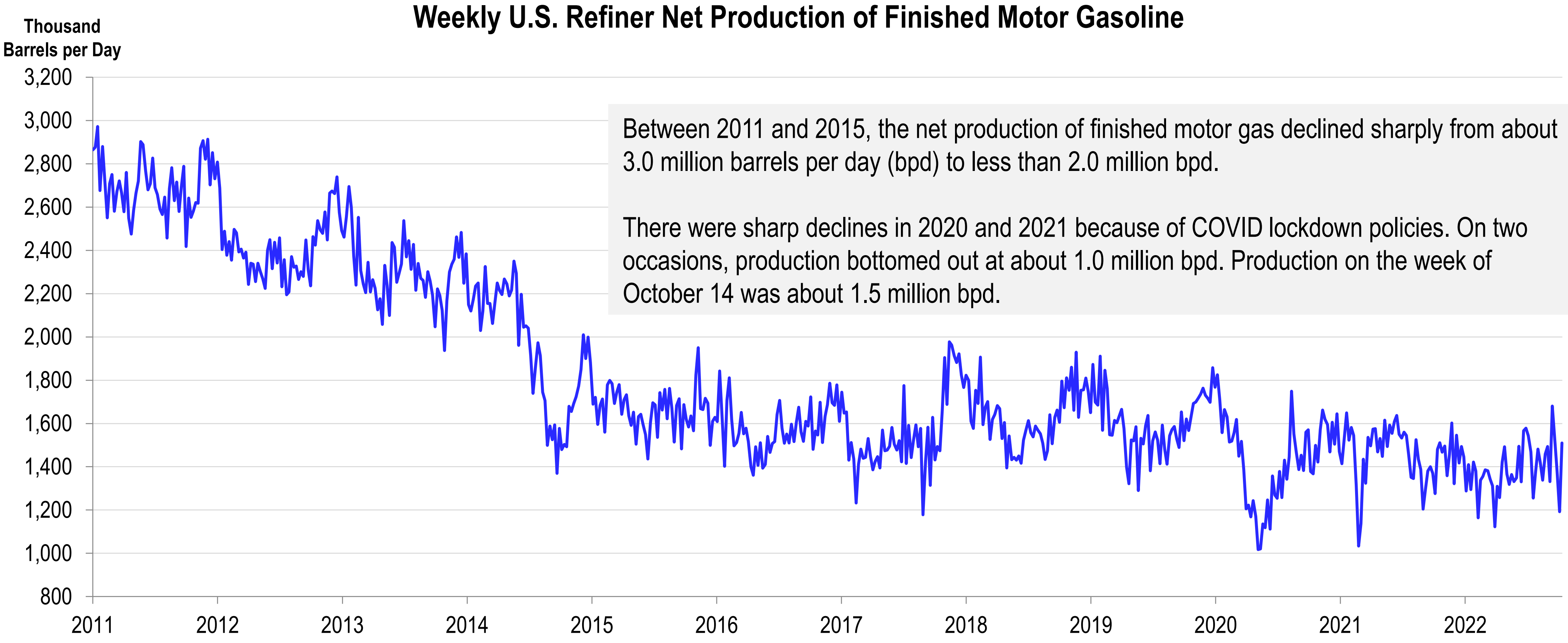
Crude Oil Prices: West Texas Intermediate, Cushing, Oklahoma



Average Annual Price per Barrel	
2019	$56.99
2020	$39.17
2021	$68.21
2022	$97.96
2023	$88.57

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

Weekly U.S. Refiner Net Production of Finished Motor Gasoline
(Thousand Barrels per Day)



Between 2011 and 2015, the net production of finished motor gas declined sharply from about 3.0 million barrels per day (bpd) to less than 2.0 million bpd.

There were sharp declines in 2020 and 2021 because of COVID lockdown policies. On two occasions, production bottomed out at about 1.0 million bpd. Production on the week of October 14 was about 1.5 million bpd.

Source: EIA, cber.co.

Economic Outlook and Trends

Summary of Colorado
Employment and Economic Outlook and Trends

This year, Colorado will add about 98,000 jobs. Job growth in 2023 will be dismal.

As usual, the PST sector will be a leader in job growth in 2022 and 2023.

Government, healthcare, extractive industries, and leisure and hospitality employment returned to their pre-pandemic levels in 2022.

In 2022 and 2023, tourism activities have bounced back, and the number of passengers at DIA has been a strong point in the economy. Business travel has not returned.

The low housing inventory bodes well for residential construction; however, demand has softened because of increased interest rates and price appreciation.

Retail sales will decelerate as consumer spending is affected by inflation and higher interest rates.

Colorado Economic Forecast 2022

The 2022 Colorado real GDP growth rate will be significantly less than 2021.

The state labor market has been stronger than expected through nine months. Slower growth will continue into Q4 and 2023.

Retail sales for 2022 will be stronger than in 2021. Slower sales will occur in 2023.

Colorado businesses will face headwinds from increased inflation, interest rate hikes, labor shortages, supply chain disruptions, and public policy.

Colorado Economic Forecast

	2019	**2020**	**2021**	**2022**
Real GDP Value (billions)	$356.77	$346.01	$365.90	$375.41
% Change Real GDP	4.2%	-3.0%	5.8%	2.6%
CES Employment (thousands)	2,790.1	2,651.1	2,744.0	2,842.0
Annual Change (thousands)	62.8	-139.0	92.9	98.0
% Change	2.3%	-5.0%	3.5%	3.6%
Unemployment Rate	2.7%	7.3%	5.5%	3.6%
Retail Sales (billions)	$224.6	$228.8	$267.7	$292.9
% Change	9.0%	1.9%	17.0%	9.4%
Consumer Price Index	1.9%	2.0%	3.5%	7.6%
DIA Passengers (millions)	69.0	33.0	59.0	66.0
Single Family Permits	24,756	26,489	27,000	29,000
Multi-family Permits	13,877	13,738	24,000	26,000
Oil Production (thousands) barrels	189,707	172,000	142,000	146,000

Colorado inflation has peaked. The return to the Fed's target rate will take time.

The number of DIA passengers in 2022 will surpass 2021 but will be less than the record total for 2019. Business travel is lagging.

The total number of 2022 building permits will be slightly more than in 2021. Higher input costs, rising prices, and interest rates will negatively impact construction, home sales, and financial services.

The production of crude oil declined in 2021 because of state regulations and reduced demand. Oil production will increase slightly in 2022.

cber.co
Economic Outlook and Trends Through September 2022
Colorado and the United States

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

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

Horvath has also served on the Board of Directors for the Economic Development Council of Colorado, Northwest Denver Business Partnership, Adams County 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.