

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 four months of 2022. During that period, the number and magnitude of the headwinds increased.

Colorado and the U.S. continued to add more employees than expected in April. In Colorado, the leading sectors for growth were PST (professional, scientific, and technical services), construction, retail, and AER (arts, entertainment, and recreation).

The 2022 Colorado forecast acknowledges the significant headwinds that could put the economy into a recession. Currently, the momentum of the labor market and economic activity exceeds the obstacles.

The effect of the momentum and headwinds will be discussed in the following areas.

- Colorado and U.S. Population
- U.S. Real GDP
- Colorado and U.S. Employment
- Momentum and a Touch of Headwinds
- Headwinds
- Summary of Colorado Economic and Employment Outlook and Trends

Highlights – Momentum and Headwinds

In April 2022, the headwinds were more severe than in March. Many of the challenges are self-inflicted. They will make for a bumpy road in the months ahead and will diminish economic activity and the addition of jobs. It is necessary to acknowledge the headwinds; however, it is more important to understand when they will end and how they will affect the future.

Momentum

- Labor market has been broad-based. There were more jobs added than expected.
- The level of unemployment is low.
- There is above usual customer demand for goods and services.
- Retail sales are strong.
- Labor shortages have driven higher wages, especially in lower-paying occupations.

Headwinds

- Inflation was a problem before the Eastern European conflict. Consumers have paid higher prices for goods and services. A prime example is rising energy costs, in particular gasoline and diesel.
- The Federal Reserve will continue to raise interest rates to contain inflation.
- There is no easy solution for supply chain disruptions.
- The Eastern European conflict is becoming more complicated.
- There is uncertainty about how COVID-19 variants will spread.
- Labor shortages will get worse as the U.S. and Colorado unemployment rates fall.
- Wage gains benefit workers, but increased expenses may prevent companies from increasing their payroll.
- Consumers and business leaders lack confidence in the economy.
- Political discord.

The R Word

Don't Panic! It Will Happen Soon Enough



News Flash!!

YES, headwinds have prevented the U.S. and Colorado economies from growing more rapidly.

YES, About 8 of 10 reports about a recession are from economists and writers who have stated there will be a recession. Some of them also called for a recession in 2019 (that did not happen).

YES, there is a saying that economists have predicted nine of the last five recessions.

YES, Rather than focus on the headwinds, it is also imperative to look ahead to when they will become less problematic.

Economic Outlook and Trends

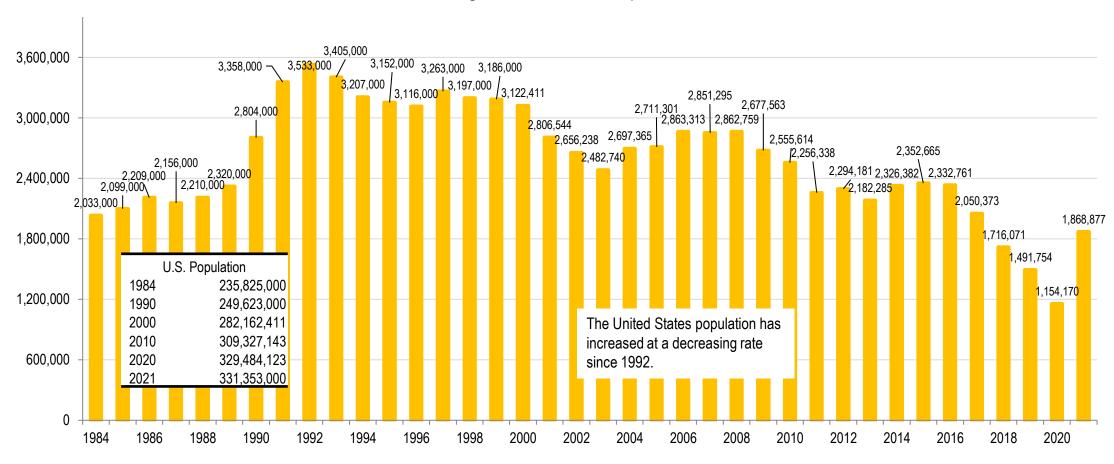
Population – U.S. and Colorado

Since 1992, the U.S. population has increased at a decreasing rate. Between 2010 and 2020, the U.S. population increased by 22.7 million, or 7.4%, to 331.4 million. The population under 18 years DECREASED by 1.4% to 73.1 million because of declining fertility rates in all races. As the population has aged, the culture of our workforce and country have changed. The oldest millennial is 40, and the youngest baby boomer is 56.

In Colorado, the pandemic had a short-term impact on the components of change higher deaths, fewer births, and altered migration. The level of net migration will again increase in 2022. The Colorado population will increase by 716,685 by 2030, and the greatest increase will be in the Northern Colorado (Greeley-Weld) and the Arapahoe-Douglas County regions. The city of Denver is no longer the population center of the state.

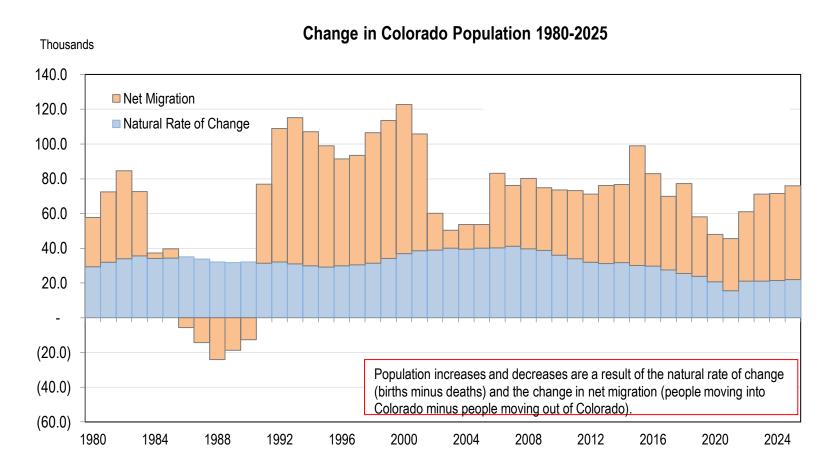
Change in Population United States

Change in United States Population



Colorado Population

Components of Change



Since 2000, the Colorado population has increased at a decreasing rate. There are fewer than anticipated people because of higher death rates, a lower fertility rate, and lower net migration.

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

In 2022, the level of net migration will increase by 40,000 and the population will increase by 61,000. The total Colorado population will be 5,892,162.

Sources: State Demography Office and cber.co.

Front Range County Population (2000-2030) The Base of Power is Changing

As the population has increased, the state's power base has changed.

The following changes will occur over the next decade:

- The combined population share in the top Front Range counties will increase from 81.1% to 84.1%.
- The population share in Boulder, Jefferson, Denver, Arapahoe, and Pueblo counties will increase at a declining rate.
- The El Paso County population surpassed Denver County in 2020.
 The combined population of Larimer and Weld (Northern Colorado) will exceed the Denver population by 2030.
- Adams County has gained prominence because of its population growth. It is also the focal point of the new 8th Congressional district.
- There will be significant growth in Douglas and Arapahoe Counties.

Change in Colorado Population – Ten Front Range Counties The Base of Power is Changing

	2000	2010	2020	2030	2030- 2020	CAGR	% State 2000	% State 2030
BoCo/BroCo/JeffCo								
Boulder	276,254	295,605	330,860	354,742	23,882	0.70%	6.4%	5.5%
Broomfield	38,545	56,107	74,470	94,152	19,682	2.37%	0.9%	1.4%
Jefferson	526,716	535,651	582,782	611,909	29,127	0.49%	12.1%	9.4%
Total	841,515	887,363	988,112	1,060,804	72,692	0.71%	19.4%	16.3%
Denver								
Denver	556,740	604,879	717,632	802,307	84,675	1.12%	12.8%	12.3%
Adams								
Adams	351,734	443,711	520,070	604,681	84,611	1.52%	8.1%	9.3%
Douglas/Arapahoe								
Arapahoe	490,722	574,819	655,044	725,287	70,243	1.02%	11.3%	11.2%
Douglas	180,511	287,124	360,037	417,104	57,067	1.48%	4.2%	6.4%
Total	671,233	861,943	1,015,081	1,142,390	127,309	1.19%	15.5%	17.6%
Northern Colorado								
Larimer	253,087	300,532	359,701	412,984	53,283	1.39%	5.8%	6.4%
Weld	183,074	254,230	331,184	429,763	98,579	2.64%	4.2%	6.6%
Total	436,161	554,762	690,885	842,747	151,862	2.01%	10.1%	13.0%
Southern Colorado								
El Paso	519,803	627,232	731,641	832,460	100,819	1.30%	12.0%	12.8%
Pueblo	141,854	159,496	168,434	179,833	11,399	0.66%	3.3%	2.8%
Total	661,657	786,728	900,075	1,012,294	112,219	1.18%	15.2%	15.6%
Total Ten County	3,519,040	4,139,386	4,831,855	5,465,223	633,368	1.24%	81.1%	84.1%
State	4,338,801	5,050,332	5,782,915	6,499,600	716,685	1.18%	100.0%	100.0%

Economic Outlook and Trends

U.S. Real Gross Domestic Product

The Conference Board U.S. Economic forecast projects real GDP growth will be 2.3% in 2022, down from 5.7% in 2021 and previous forecasts for 2022. Personal consumption will continue to drive economic growth. It will increase by 2.7% in 2022, down from 7.9% growth in 2021 and previous forecasts for 2022.

The national forecast calls for residential construction growth to be slightly negative in 2022. The story in Colorado will be different. Housing demand will exceed supply, in part, because of the Marshall Fire.

As the unemployment rate levels out below 3.5%, companies will continue to struggle to find workers. Finally, inflation will be greater than the target set by the Federal Reserve through 2023 and diminish economic activity.

U.S. Real GDP Growth

The Conference Board Forecast (May 11, 2022)

Real GDP and Economic Growth in 2021

The latest Conference Board forecast reflects a downgrade to account for increased imports and lower inventory restocking. Real GDP growth will be 2.3% for 2022. Inflation will continue to erode consumer purchasing power, and higher interest rates will obviously increase the cost of borrowing.

Other Economic Factors

The U.S. unemployment rate will fall to 3.5% in 2022 and drop to 3.1% in 2023. Inflation will peak in 2022 but remain above the Fed's target rate of 2.0% in 2023. Government spending (infrastructure) will accelerate in the second half of the year and reduce the impact of the headwinds.

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%	6.7%	2.3%	6.9%	-1.5%	2.1%	1.1%	2.1%	5.7%	2.3 %	2.1 %
Personal Consumption	11.4%	12.0%	2.0%	2.5%	2.7%	1.9%	1.1%	1.6%	7.9%	2.7%	1.6%
Residential Investment	13.3%	-11.7%	-7.7%	2.1%	2.1%	2.0%	0.5%	1.0%	9.2%	-0.4%	1.1%
Nonresidential Investment	12.9%	9.2%	1.6%	2.9%	9.2%	8.2%	5.7%	4.0%	7.4%	6.1%	4.4%
Total Gov't. Spending	4.2%	-2.0%	0.9%	-2.6%	-2.7%	0.6%	2.0%	3.6%	0.5%	-0.6%	3.6%
Exports	-2.9%	7.6%	5.3%	22.4%	-5.9%	10.1%	5.1%	3.7%	4.5%	4.8%	4.5%
Unemployment Rate	6.2%	5.9%	5.1%	4.2%	3.8%	3.5%	3.4%	3.2%	5.4%	3.5%	3.1%
PCE Inflation (%Y/Y)	1.8%	3.9%	4.3%	5.5%	6.3%	6.6%	6.3%	4.2%	3.9%	5.8%	3.0%
Core PCE Inflation (%Y/Y)	1.7%	3.4%	3.6%	4.6%	5.2%	5.9%	5.1%	4.4%	3.3%	5.2%	2.9%

Source: The Conference Board and cher.co.

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

Economic Outlook and Trends

U.S. and Colorado Employment

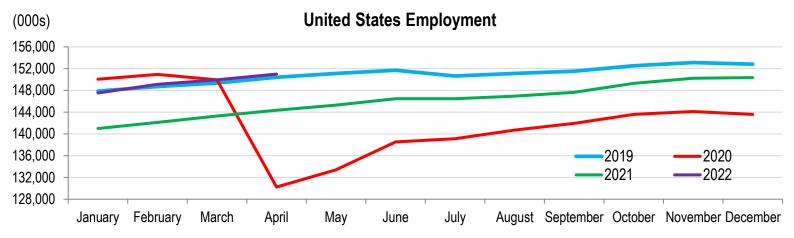
Through the first four months of 2022, the U.S. and Colorado labor markets have been stronger than expected. The rate of growth will taper off as 2022 progresses.

The number of job openings, separations, and quits are at record levels.

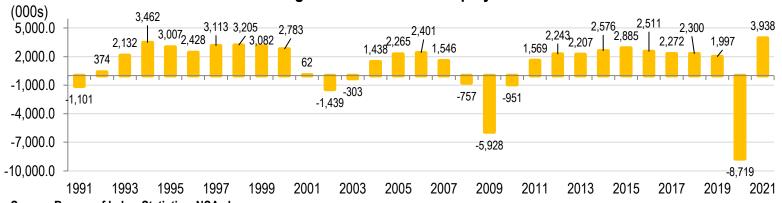
The labor shortages will continue as long as the U.S. and Colorado unemployment rates remain low. On the other hand, as the U.S. and Colorado unemployment rates have declined, the employment-to-population ratios for both have improved. For the U.S., the number of unemployed is lower than during the recovery period following the Great Financial Crisis, an indication of strength in the economy.

Change in Employment

United States



Change in United States Employment



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

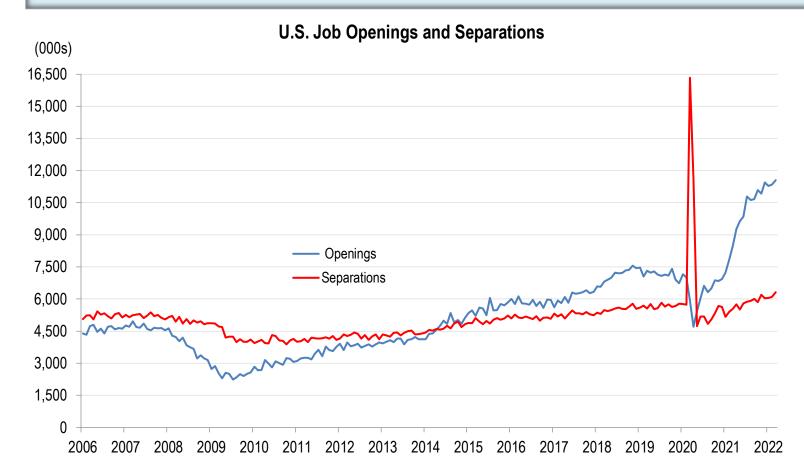
The average annual U.S. employment (NSA), based on the first four months of 2022 (purple), is about 6.7 million greater than the same period in 2021 (green).

It is more appropriate to compare 2022 to 2019. The level of employment for the first four months of 2022 (purple) is similar to the same period in 2019 (blue). The level of 2022 job growth will decline in the second half of the year.

By comparison, average U.S. employment increased by about 2.4 million annually between 2012 and 2019.

Job Openings and Separations

United States



Source: JOLTS, SA, BLS, cber.co.

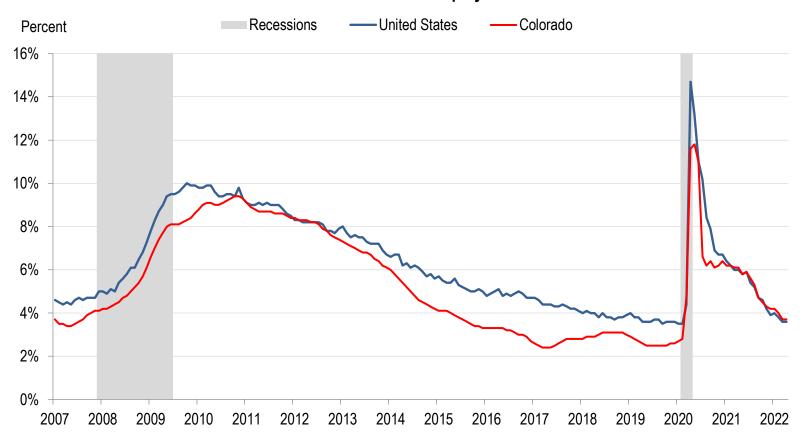
The number of job openings (blue) bottomed out in 2009. They steadily increased over the next decade as the economy improved from the financial crisis of 2007-2008. The openings leveled out in 2019, followed by a sharp decline in 2020 caused by the COVID-19 lockdown policies. In July 2021, there were 10.7 million job openings. The number has been at or above that level through March 2022, when it was at 11.5 million.

Similarly, the number of separations (red) has reached record levels. Boomers have retired, and other workers are using the strong labor market as an opportunity to upgrade their compensation and work environment by switching companies. Since September 2021, at least 70% of the separations have been quits.

Unemployment Rate

United States and Colorado

U.S. and Colorado Unemployment



Unemployment Rate

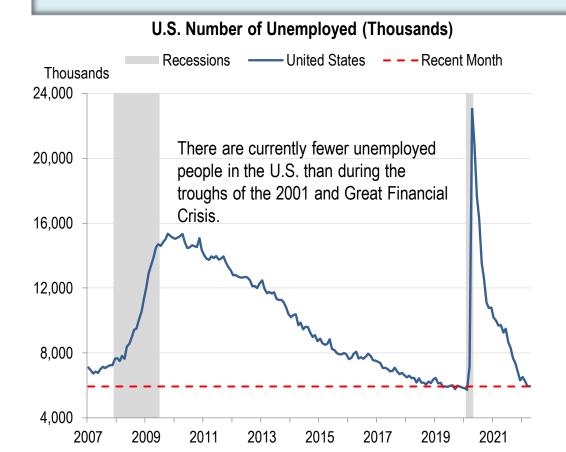
The Colorado and U.S. unemployment rates have been similar in 2021 and 2022. The U.S. and Colorado unemployment rates will bottom out in 2022. More importantly, businesses will continue to struggle to find workers.

	Annual Unemployment Rate							
	Year United States Colorado							
	2016	4.9%	3.1%					
	2017	4.4%	2.6%					
	2018	3.9%	3.0%					
	2019	3.7%	2.6%					
	2020	8.1%	6.9%					
	2021	5.4%	5.2%					
	2022	3.5%	3.5%					
ī								

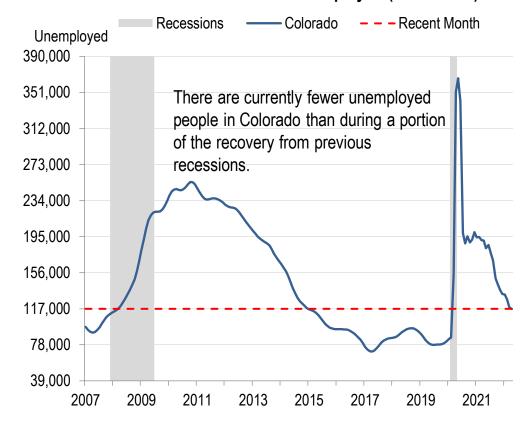
Source: BLS, cber.co.

Number of Unemployed

United States and Colorado

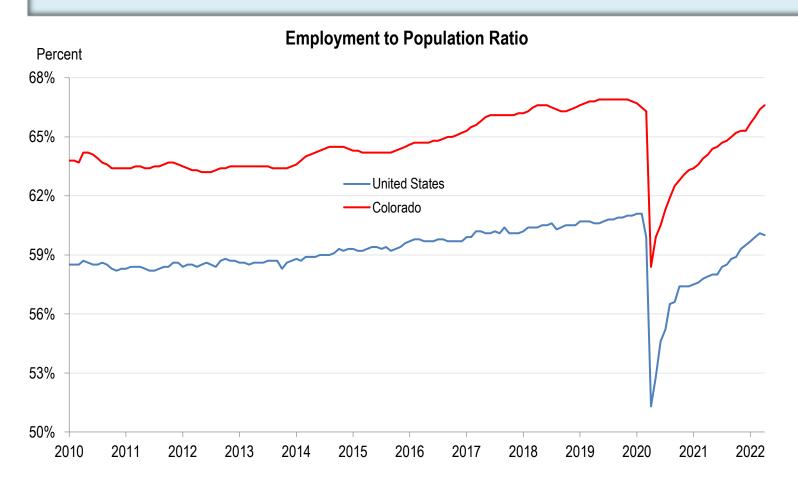


Colorado Number of Unemployed (Thousands)



Source: BLS, cber.co.

Employment-to-Population Ratio United States to Colorado



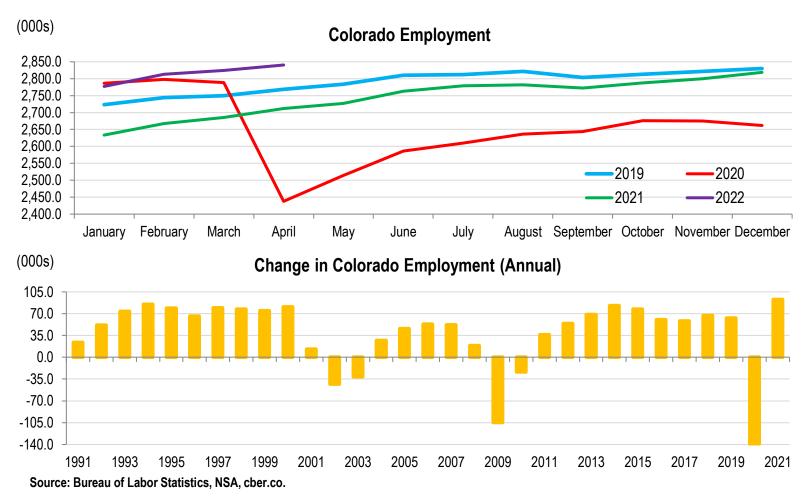
Between 2010 and 2019, the employment-to-population ratios for Colorado and the U.S. gradually increased.

Between May and November 2019, the Colorado ratio was 66.9%. In March 2020, it fell to 58.4% and rebounded to 66.6% in April 2022. The ratio has almost returned to the 2019 level.

In January and February of 2020, the U.S. ratio was 61.1%. In March 2020, it plummeted to 51.3%. It rebounded and was 60.0% in April 2022. The U.S. ratio is 1.1 percentage points from the 2020 peak.

Source: FRED, BLS, cber.co.

Change in Colorado Employment

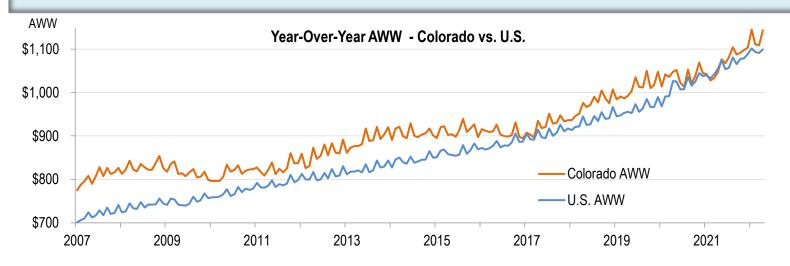


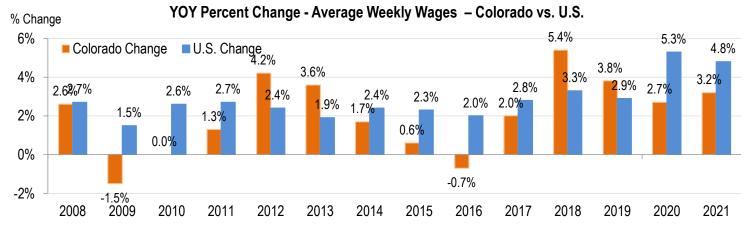
Average annual Colorado employment (NSA), based on the first four months of 2022 (purple), is about 139,700 greater than the same period in 2021 (green).

Because of the disruption caused by COVID-19 policies, it is more appropriate to compare 2022 to 2019. The annualized level of employment for 2022 (purple) is about 67,700 greater than 2019 (blue).

Colorado and U.S. Average Weekly Wage Growth

Private Sector (Not Seasonally Adjusted)





Monthly, Colorado (orange) has historically had a greater AWW than the U.S (blue). Between 2007 and 2022, the gap decreased. In April 2007, it was \$84.24, and the Colorado AWW was 11.6% greater than the U.S. AWW. In April 2022, the gap was \$44.10, and the Colorado AWW was 4.0% greater than the U.S. AWW.

The U.S. growth rate has been greater than the Colorado rate for ten-of-the-fourteen years between 2008 and 2022.

For the first four months of 2022, the Colorado AWW changed from 7.3% to 9.8%, and the U.S. AWW ranged from 4.3% to 5.9%.

Source: Bureau of Labor Statistics, NSA, cber.co. Note: Wages do not include benefits.

Change in Employment

Top Colorado Sectors in Recovery from COVID-19 Policies

Change in Employment (Top Sectors	s in Recovery f	rom COVID-Rela	ated Policies)	
	Dec. 2021	April 2022	Change	
Sector	(000s)	(000s)	(000s)	% Change
Professional, Scientific, and Technical	262.9	269.2	6.3	2.40%
Retail Trade	273.8	280.0	6.2	2.26%
Other Services	116.7	117.9	1.2	1.03%
Wholesale Trade	111.9	112.9	1.0	0.89%
Transportation, Warehousing, and Utilities	106.1	108.8	2.7	2.54%
Management of Companies	44.6	45.1	0.5	1.12%
Financial Activities	180.0	180.8	0.8	0.44%
Federal Government	53.9	53.3	-0.6	-1.11%
Total	1,149.9	1,168.0	18.1	1.57%

These eight sectors/sub-sectors have the fastest recovery from the COVID-19 policies through December 2021. They account for 41.0% of total employment and 43.3% of job growth during the first four months.

The combined employment for these sectors increased by 18,100, or 1.57%, compared to December 2021. The two largest sectors (PST and retail) added the most jobs.

In 2020, the growth in federal government employment was temporary workers for the 2020-21 Census.

Source: BLS, cber.co.

Change in Employment

Colorado Sectors with Slower Recovery from COVID-19 Policies

Change in Employment (Sectors with	Change in Employment (Sectors with Slower Recovery from COVID-19 Policies)						
	Dec. 2021	March 2022	Change				
Sector	(000s)	(000s)	(000s)	% Change			
Food and Accommodation (F&A)	277.8	280.9	3.1	1.1%			
Construction	178.9	184	5.1	2.9%			
Manufacturing	151.2	153.8	2.6	1.7%			
Administrative Services	159.6	163.9	4.3	2.7%			
Education (Private)	44.8	45.8	1	2.2%			
Local Government	263.9	263.9	0	0.0%			
Arts, Entertainment, and Recreation	53.5	59.8	6.3	11.8%			
Healthcare	303.6	306	2.4	0.8%			
Natural Resources (Extractive Industries)	19.8	20.4	0.6	3.0%			
Information	77.7	77.5	-0.2	-0.3%			
State Government	126.1	124.6	-1.5	-1.2%			
Total	1,656.9	1,680.6	23.7	1.43%			

These eleven sectors/sub-sectors had the slowest recovery from the COVID-19 policies through December 2021. Some incurred extensive job losses, and they are low-growth industries.

The combined employment of these sectors increased by 23,700, or 1.43%, compared to December 2021. They accounted for 59% of Colorado employment and 56.7% of total job growth during the first four months of 2022. It is likely that some of the sectors, particularly AER, will be revised downward in the future.

Source: BLS, cber.co.

Economic Outlook and Trends

Momentum and a Touch of Headwinds

The momentum in the labor market is evident in the increased employment and wages and the "low" number of unemployed. Also, there is above-average customer demand for goods, services, travel, and housing.

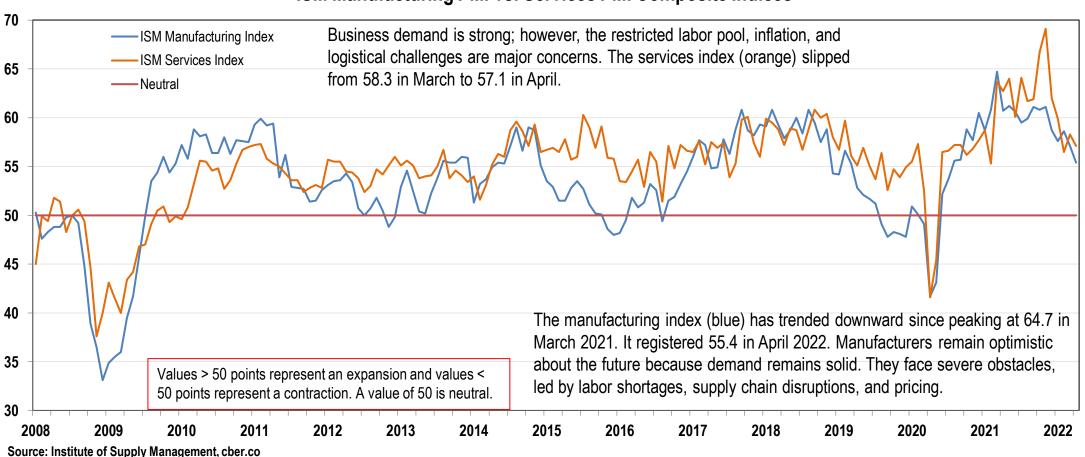
The ISM indices illustrate optimism for the future and concerns about the headwinds challenging manufacturers and service providers.

Currently, consumers have money to spend. There is a reasonable personal savings rate, credit card balances are manageable, and retail sales are strong. In addition, there is strength in the number of building permits, the increased number of DIA passengers, and improved oil production.

ISM PMI Composite Indices

Manufacturing vs. Services

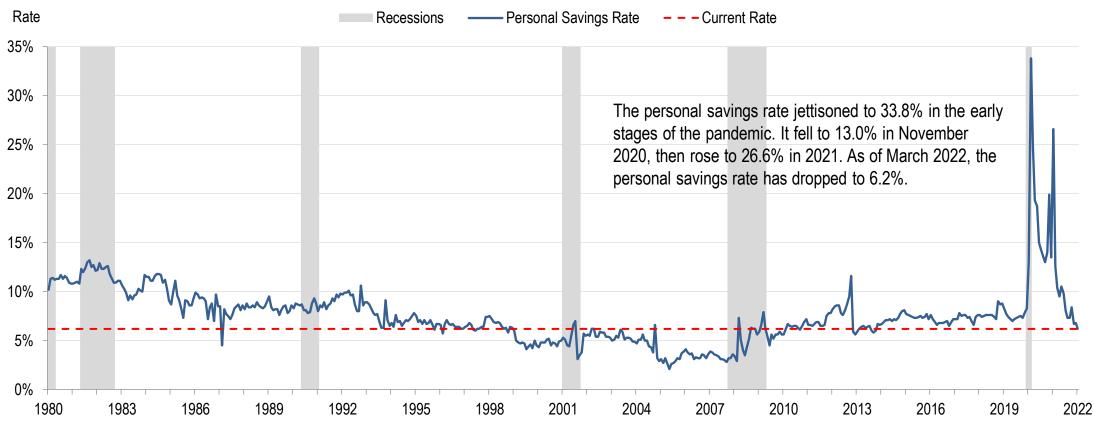
ISM Manufacturing PMI vs. Services PMI Composite Indices



U.S. Personal Savings Rage

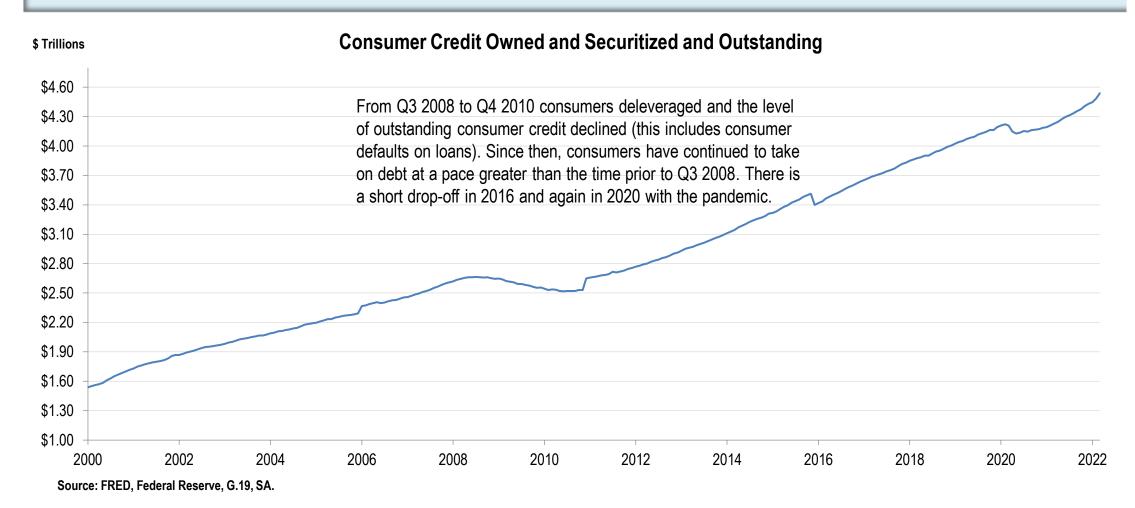
Percentage of Disposable Personal Income



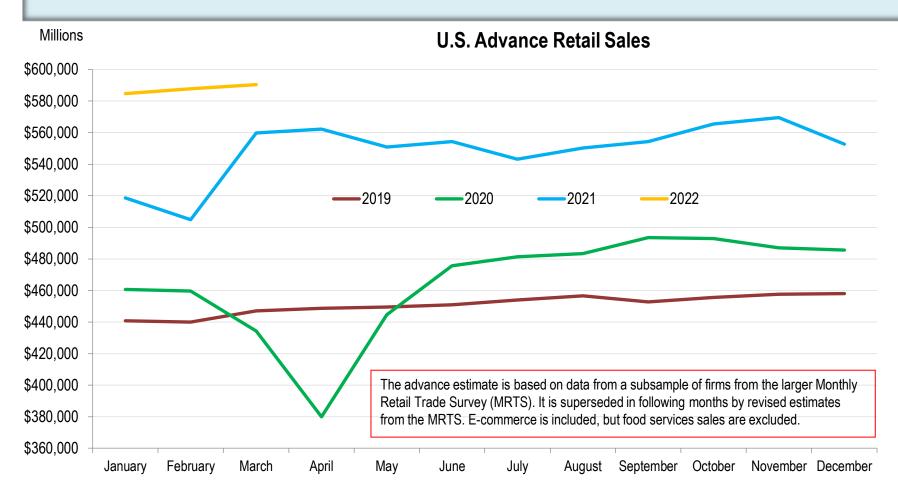


Source: BEA, FRED, cber.co.

U.S. Consumer Credit Outstanding



U.S. Advance Retail Sales Monthly

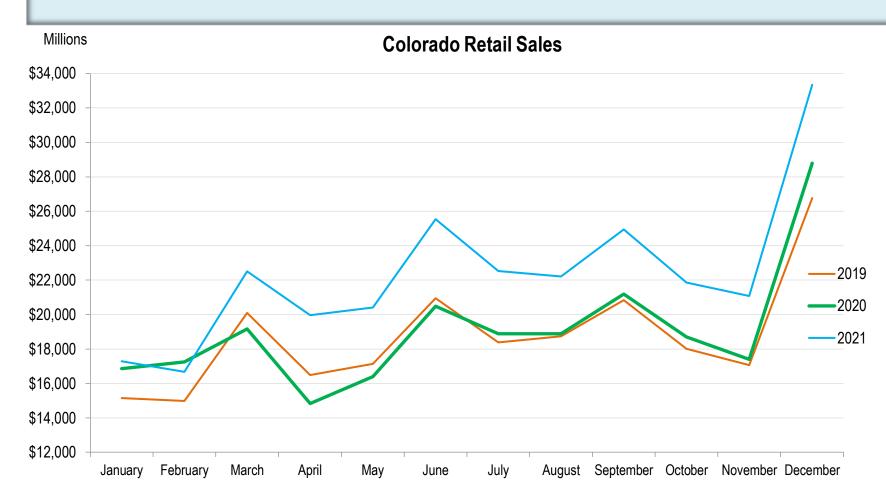


Advance retail sales increased at a surprisingly rapid pace during the pandemic (Green-2000 and Blue-2001). Consumers had money to spend because of stimulus programs, wage increases, increased savings, and the lower levels of credit card debt.

Annual I	Retail Sales	(Trillions)			
2017	\$5.05	4.4%			
2018	\$5.26	4.2%			
2019	\$5.41	3.0%			
2020	\$5.57	3.1%			
2021	\$6.59	18.1%			
Source: Census, cber.co					

Source: U.S. Census Bureau, cber.co. Note: Not adjusted for inflation. Colorado-based Business and Economic Research https://cber.co

Colorado Retail Sales Monthly



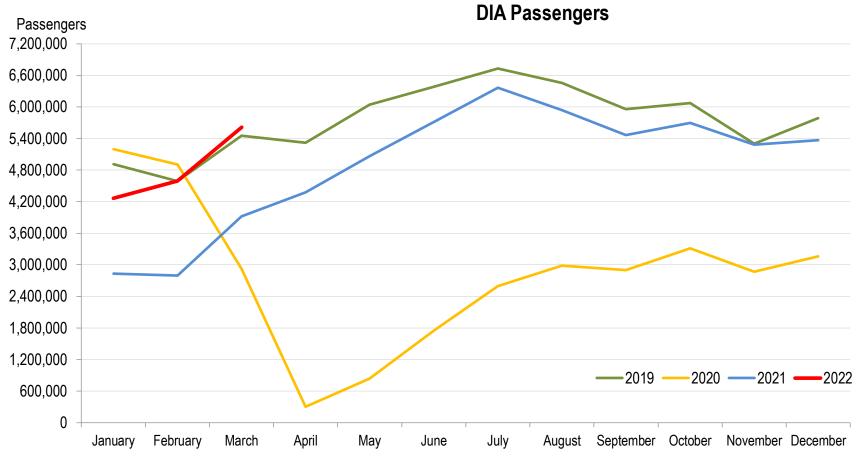
Colorado Retail Sales

Retail sales for 2021 (turquoise) were 17.3% greater than the same period in 2020 (green). The higher level of consumption in 2021 resulted from the wealth effect, increased savings, and inflated prices for retail goods. (Most current data). Sales will increase at a solid but slower rate in 2022.

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%
2022	\$295.2	10.0%

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

Denver International Airport Passengers Monthly



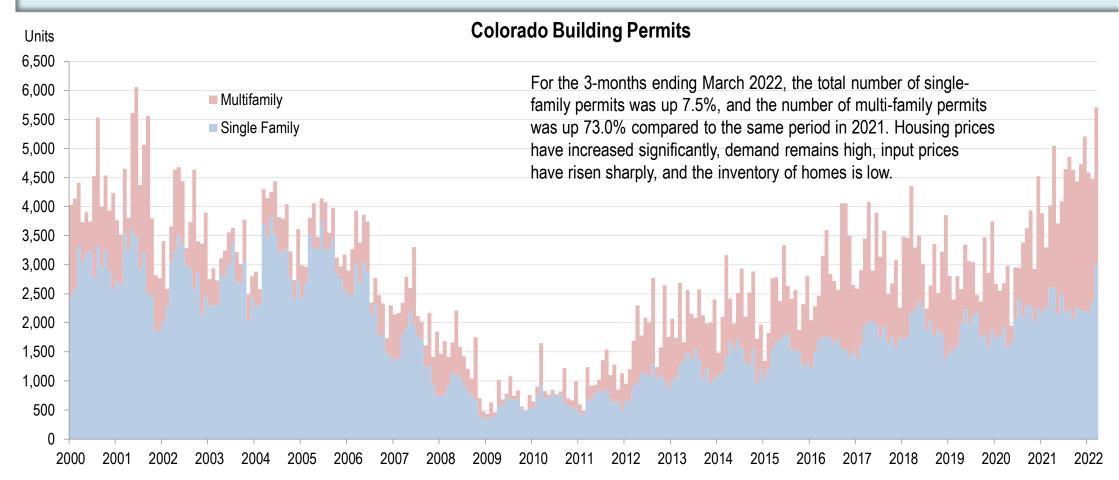
The number of DIA passengers during the first three months of 2022 (red) is below the YTD total for 2019 (green), but above the YTD total for 2020 (yellow).

There were 14.5 million passengers during the first three months of 2022.

Passengers	% Change
64,000,000	8.8%
58,828,552	74.4%
33,741,129	-51.3%
69,015,703	7.0%
64,494,613	5.1%
61,379,396	5.3%
58,266,515	7.9%
	64,000,000 58,828,552 33,741,129 69,015,703 64,494,613 61,379,396

Source: flydenver.com, cber.co.

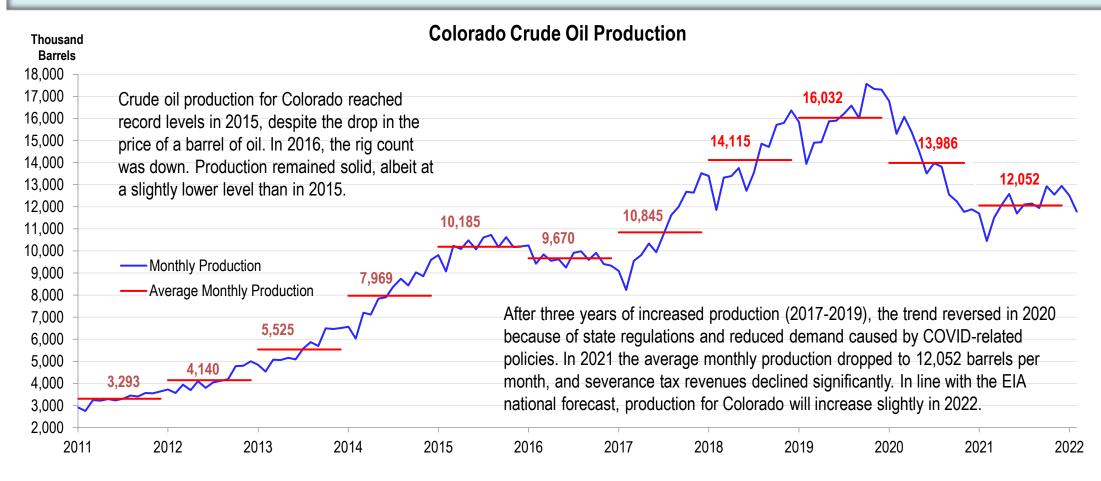
Colorado Residential Building Permits Units



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

Colorado Field Production of Crude Oil

2011 to 2021 (Thousand Barrels)



Source: EIA, cber.co.

Economic Outlook and Trends

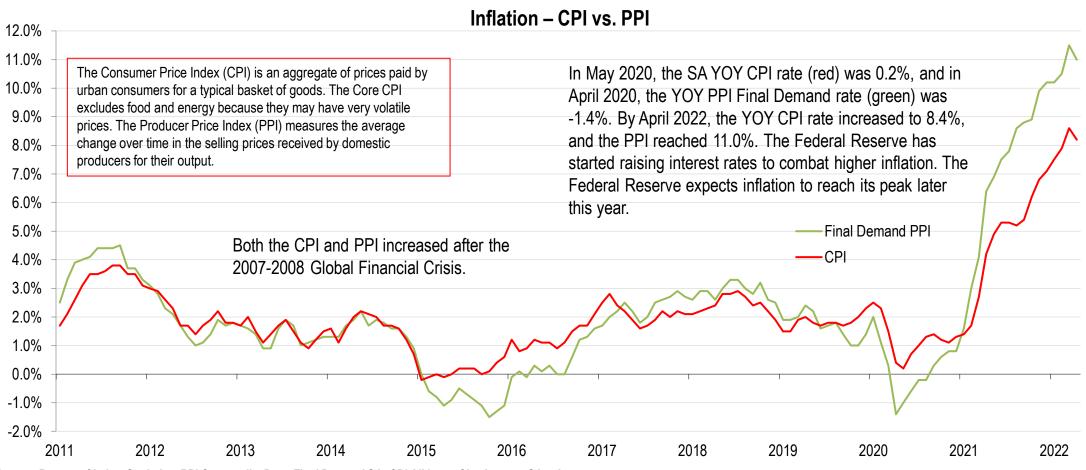
Headwinds

U.S. and Colorado consumers will ultimately pay for rising costs from energy, wages, inputs, housing, supply chain disruptions, and side effects of the conflict in Eastern Europe. The U.S. and Colorado have demonstrated they do not have an answer to their energy problems.

The Federal Reserve interest rate hikes will cause a different set of challenges.

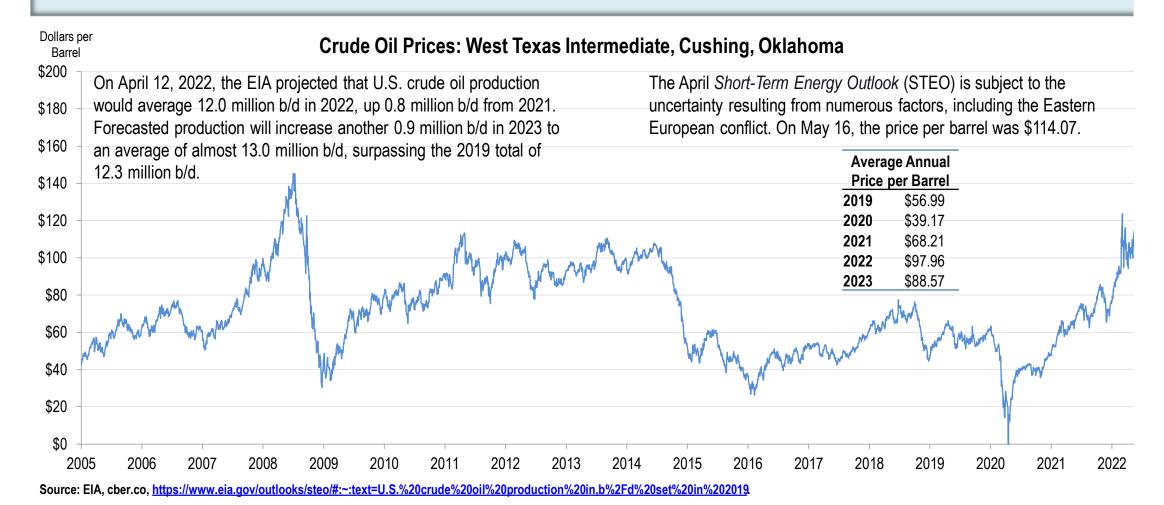
Although the labor market is strong, there are labor shortages in most industries. There are a record number of job openings and quits. The labor shortage will continue as long as the unemployment rate remains low.

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



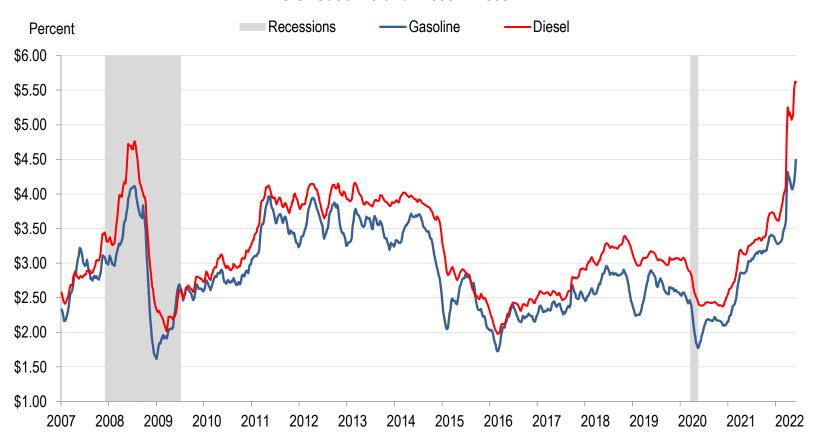
Crude Oil Prices

West Texas Intermediate



Gasoline (Regular All Formulations) and Diesel Prices United States

U.S. Gasoline and Diesel Prices



Gas and Diesel Prices

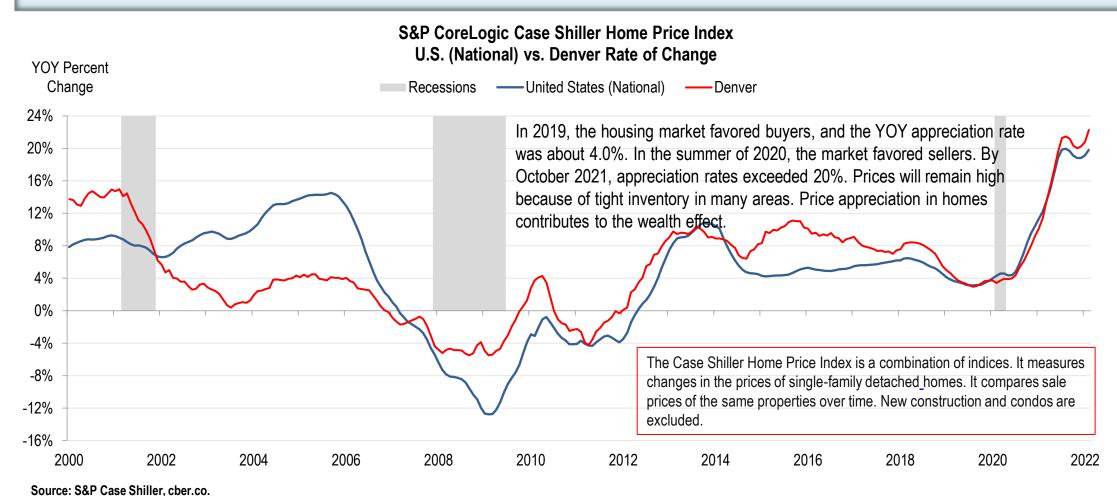
On February 21, 2021, the price for a gallon of gasoline was \$2.63, and a gallon of diesel was \$2.97. On May 16, 2022, the price for a gallon of gasoline was \$4.49, and a gallon of diesel was \$5.61. (The Eastern European conflict escalated on February 24, 2022).

		Average Annua	al	
	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	
_				

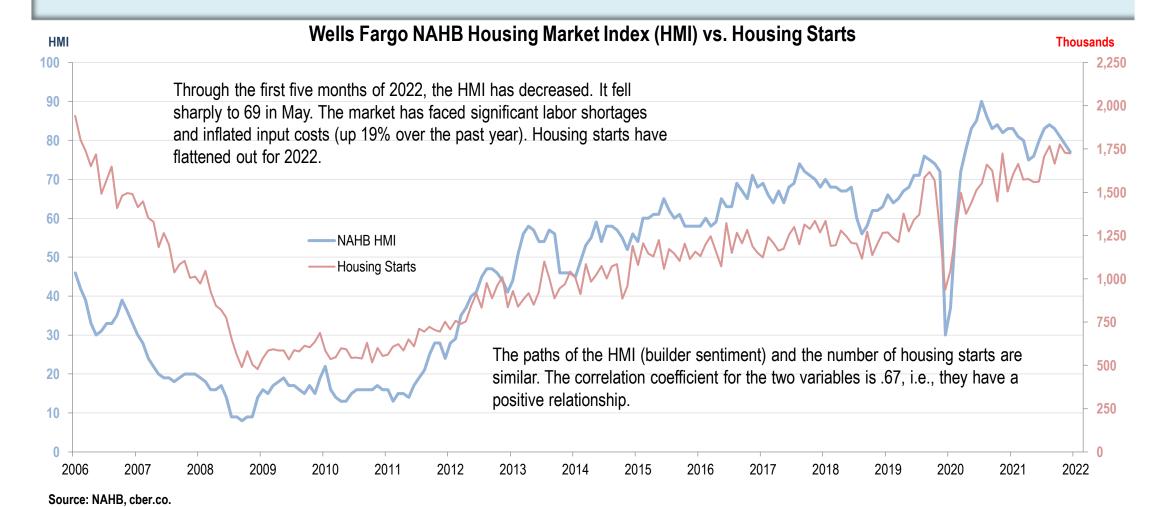
Source: FRED, EIA, cber.co.

Case Shiller Home Price Index

YOY National vs. Denver Rate of Change

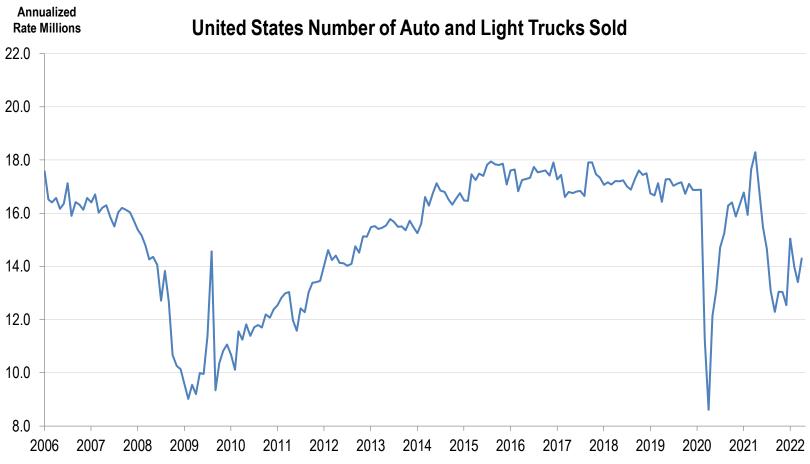


Wells Fargo NAHB HMI vs. Housing Starts United States



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

Monthly (Seasonally Adjusted Annualized Rate in Millions)

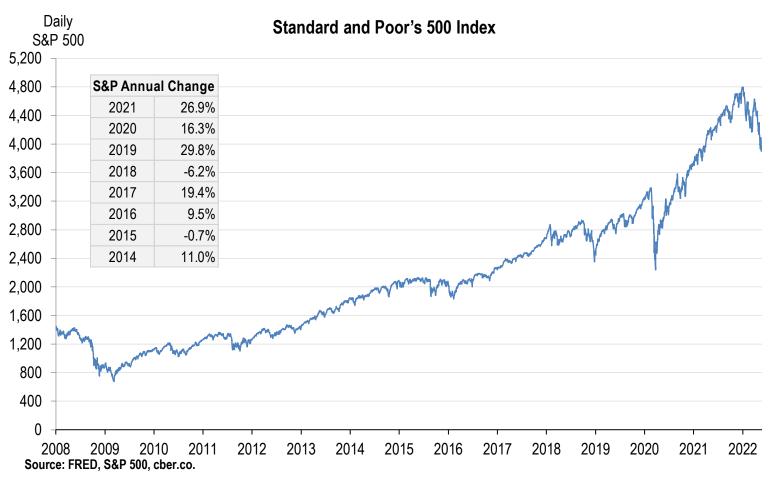


In April 2020, SAAR sales plummeted to 8.6 million units sold (The February 2009 total was 9.0 million). There was a sharp rebound, and sales peaked at 18.3 million in April 2021. In 2021, the industry did not meet the demand for new cars because of supply chain disruptions. Sales in April 2022 were 14.3 million annualized – below expectations.

A	LT 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

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

Standard and Poor's 500 Index



COVID 19 Policies - 2020

After reaching 3,386 on February 19, 2020, the S&P 500 slipped to 2,237 on March 23, a loss of 34% or 1,148 points. On August 18, 2020, the S&P had 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 value at the end of 2020. The appreciation of stocks contributes to the wealth effect of investors.

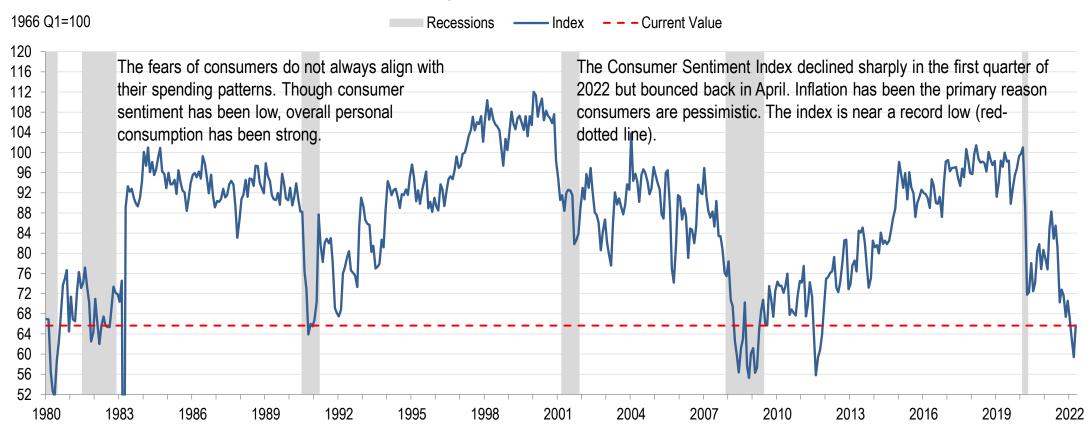
YTD Change

On May 23, 2022, the S&P 500 closed at 3,974, a change of -16.6%, or 792 points off the December 2021 value.

Consumer Sentiment Index

University of Michigan

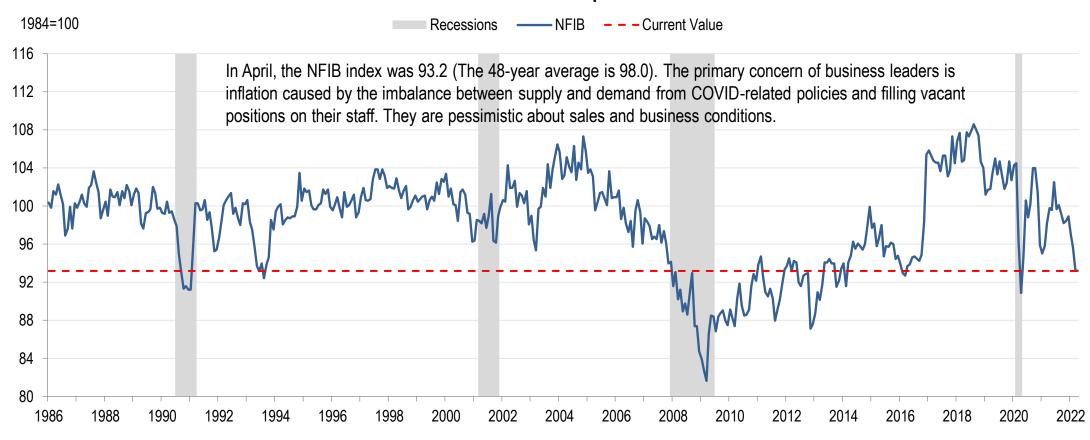
Michigan Consumer Sentiment Index



Source: University of Michigan, cber.co.

NFIB Small Business Optimism Index United States

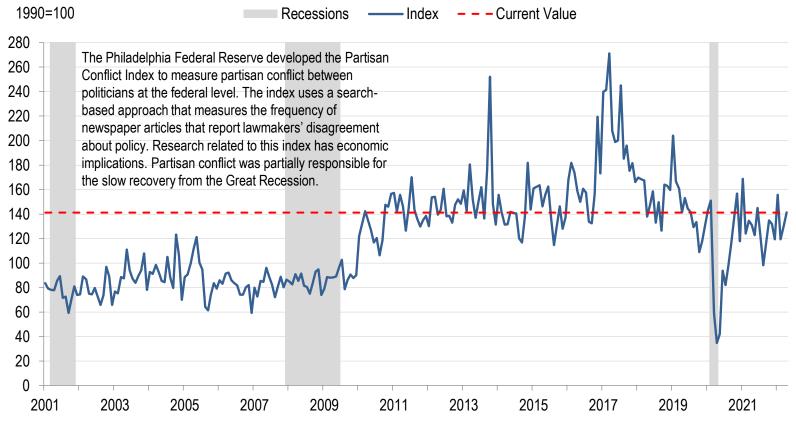
NFIB Small Business Optimism Index



Source: NFIB, cber.co.

Partisan Conflict Index 2001 to 2022

Partisan Conflict Index



Source: Philadelphia Federal Reserve, cber.co.

Most PCI values (blue line) between 1981 and 2011 were less than the current level (red dotted line). The index rose significantly in 2010 with the federal shutdown of the government early in Obama's second term.

The index remained elevated during the years Trump was in office. It peaked in 2017 with the meltdown of both parties on social media and again in 2019 with the Robert Mueller Russian collusion report. The sharp decline in March 2020 coincides with the pandemic, as the country "came together."

The index has risen in the last two months because of the increased global discord.

Economic Outlook and Trends

Summary of Colorado Employment and Economic Outlook and Trends

The momentum from the above-average Colorado employment and wage growth will carry through the remainder of the year. The PTS and AFS sectors will lead the job growth – for different reasons. Enplanements at DIA will be a strong point in the economy. The impact of the Marshall Fire and the low housing inventory bodes well for residential construction. The retail sales industry will continue to evolve. Sales will remain strong, but employment increases will be modest. Over the next decade, Northern Colorado will lead population growth. Population and employment in Denver County will increase more slowly than in other metro counties. Over the next decade, the Colorado population will increase by more than 700,000 people. This increase is a mixed blessing. In the remainder of the year, Colorado must overcome inflation, labor shortages, supply chain disruption, and ineffective public policy – and other challenges that arise.

Colorado Economic Forecast 2022

The Colorado real GDP growth rate will be solid in 2022, but it will taper off as the year progresses.

The state labor market will follow a similar pattern.

Compared to 2021, retail sales will increase at a slower rate than in 2022. A portion of that growth reflects inflated prices.

Colorado businesses will face headwinds from increased inflation, supply chain disruptions, labor shortages, and interest rate hikes. The Colorado CPI will exceed the national rate.

Colorado I	Colorado Economic Forecast						
	2019	2020	2021	2022			
Real GDP Value (billions)	\$356.77	\$346.01	\$366.50	\$380.8			
% Change Real GDP	4.2%	-3.0%	5.9%	3.9%			
CES Employment (thousands)	2,790.1	2,651.1	2,744.0	2,826.0			
Annual Change (thousands)	62.8	-139.0	92.9	82.0			
% Change	2.3%	-5.0%	3.5%	3.0%			
Unemployment Rate	2.7%	7.3%	5.5%	3.5%			
Retail Sales (billions)	\$224.6	\$228.8	\$267.7	\$289.1			
% Change	9.0%	1.9%	17.0%	8.0%			
Consumer Price Index	1.9%	2.0%	3.5%	6.8%			
DIA Passengers (millions)	69.0	33.0	59.0	64.0			
Single Family Permits	24,756	26,489	27,000	28,700			
Multi-family Permits	13,877	13,738	24,000	24,300			
Oil Production (thousands) barrels	189,707	172,000	142,000	155,000			

The number of DIA passengers has increased rapidly over the past year. That trend will continue through 2023 - at least.

There was an increase in building permits issued in 2021. Demand will continue to exceed the supply because of in-migration and the Marshall Fire. Total building permits will be slightly stronger in 2022. Higher input costs, rising prices, and interest rates will impact construction and home sales.

The production of crude oil declined in 2011 because of state regulations. Oil production will increase slightly in 2022.

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

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ABOUT THE AUTHOR

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

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

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