

# Review of Colorado Economy Through November 2021



Colorado-based Business and Economic Research, [cber.co](https://cber.co)  
Prepared December 23, 2021

# Overview

The purpose of this chartbook is to review U.S. and Colorado data that show how both economies are recovering from COVID-19 policies.

The U.S. added 6.1 million employees through the first eleven months of 2021, or about 555,000 per month. By comparison, the monthly average was about 200,000 pre-pandemic.

Colorado employment increased by 138,700 during the first eleven months of 2021, or a monthly average of about 12,600. The average growth was about 5,000 per month in 2019.

Confidence in the labor market is the primary driver of the U.S. and Colorado economies. At the same time, there are considerable headwinds. Currently, the momentum from the growth in the labor markets outweighs the headwinds.

## Chartbook Highlights

### United States

- Real GDP and Partisan Index
- U.S. and Colorado Employment
- Major Indices
- Other Key Metrics

### Colorado

- Colorado Employment
- Select Industry Data
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# Highlights – Momentum and Headwinds

**Through the first eleven months of 2021, the Colorado and United States economies have moved erratically as momentum from the recovery struggled to overcome formidable headwinds. There is reason to feel optimistic about the economy, but there are concerns about the state and federal policies that will provide direction in 2022.**

## **Momentum**

There is greater than normal customer demand for goods and services. Retail sales are strong, and there will be record sales this holiday season. There is roughly \$2.5 trillion in excess savings, and credit card balances are lower than usual. There is confidence in the labor market and increased wages, especially in lower-paying occupations. The wealth effect puts consumers in a spending mood.

Labor shortages may subside because schools have reopened, allowing parents to return to work.

In Colorado, the recovery has been broad-based. About 60% of the jobs added are in the tourism industry.

## **Headwinds**

Inflation will continue into 2022 (energy costs, supply chain disruptions, and wage increases). Businesses will pass on many of these rising costs.

There is uncertainty about how the COVID-19 variants will spread. The lack of snow in Colorado may mean fewer tourists and skiers. Fewer visitors will mean a smaller tourism economy, but it may reduce the spread of COVID variants.

The current labor shortages will continue in 2022. Many older workers have retired, and some will not return to work. Some workers are quitting their jobs for higher wages or better conditions at other companies. Some industries are many months away from being fully opened again for business.

# The United States Economy



# Real Gross Domestic Product and Partisan Index United States

## Key Points

As expected, the economy has expanded more slowly during the second half of 2021. It will be even slower in Q1 2022 because of the current wave of COVID variants.

Real GDP will increase by 5.6% in 2021, with consumer spending of 8.0%.

The Partisan Conflict Index shows that partisanship increased in the second year of Obama's first term. It has remained at a high level during the Trump and Biden administrations.

# U.S. Real GDP Growth

## The Conference Board Forecast (December 15, 2021)

### Real GDP and Economic Growth in 2021

The latest Conference Board forecast shows real GDP growth of 2.3% in Q3 2021, followed by 6.5% in Q4. Real GDP growth for 2021 will be 5.6%, and a growth rate of 8.0% for personal consumption. Real GDP will increase at a rate of 3.5% in 2022. The U.S. unemployment rate will drop from 5.4% in 2021 to 3.8% in 2022.

### Other Economic Factors

Economic growth was better than expected in October and November. It will slow in Q1 2022 because of COVID-19, similar to 2021. The forecast includes the infrastructure package; however, it does not include the BBB social and climate change programs. BBB would add growth in Q1; however, it will cause inflation rates to increase in 2022 and 2023.

### Conference Board US Real GDP Growth Forecast

	Q1 2020	Q2 2020	Q3 2020	Q4 2020	Q1 2021	Q2 2021	Q3 2021	Q4 2021	2020	2021	2022
<b>Real GDP</b>	- 5.1%	- 31.2%	33.8%	4.5%	6.3%	6.7%	2.3%	6.5%	- 3.4%	5.6%	3.5 %
<b>Personal Consumption</b>	- 6.9%	- 33.4%	41.4%	3.4%	11.4%	12.0%	1.7%	5.1%	- 3.8%	8.0%	3.5%
<b>Residential Investment</b>	20.3%	- 30.8%	60.0%	34.4%	13.3%	-11.7%	-8.3%	1.0%	6.8%	9.1%	-0.2%
<b>Nonresidential Investment</b>	- 8.1%	-30.3%	18.7%	12.5%	12.9%	9.2%	1.5%	4.6%	-5.3%	7.5%	4.7%
<b>Total Gov't. Spending</b>	3.7%	3.9%	-2.1%	-0.5%	4.2%	-2.0%	0.9%	2.0%	2.5%	0.8%	2.3%
<b>Exports</b>	-16.3%	- 59.9%	54.5%	22.5%	-2.9%	7.6%	-3.0%	2.0%	- 13.6%	3.6%	3.0%
<b>Unemployment Rate</b>	3.8%	13.1%	8.8%	6.8%	6.2%	5.9%	5.1%	4.3%	8.1%	5.4%	3.8%
<b>PCE Inflation (%Y/Y)</b>	1.7%	0.6%	1.2%	1.2%	1.8%	3.9%	4.3%	5.4%	1.2%	3.8%	3.5%
<b>Core PCE Inflation (%Y/Y)</b>	1.8%	1.0%	1.5%	1.4%	1.7%	3.4%	3.6%	4.3%	1.4%	3.3%	3.5%

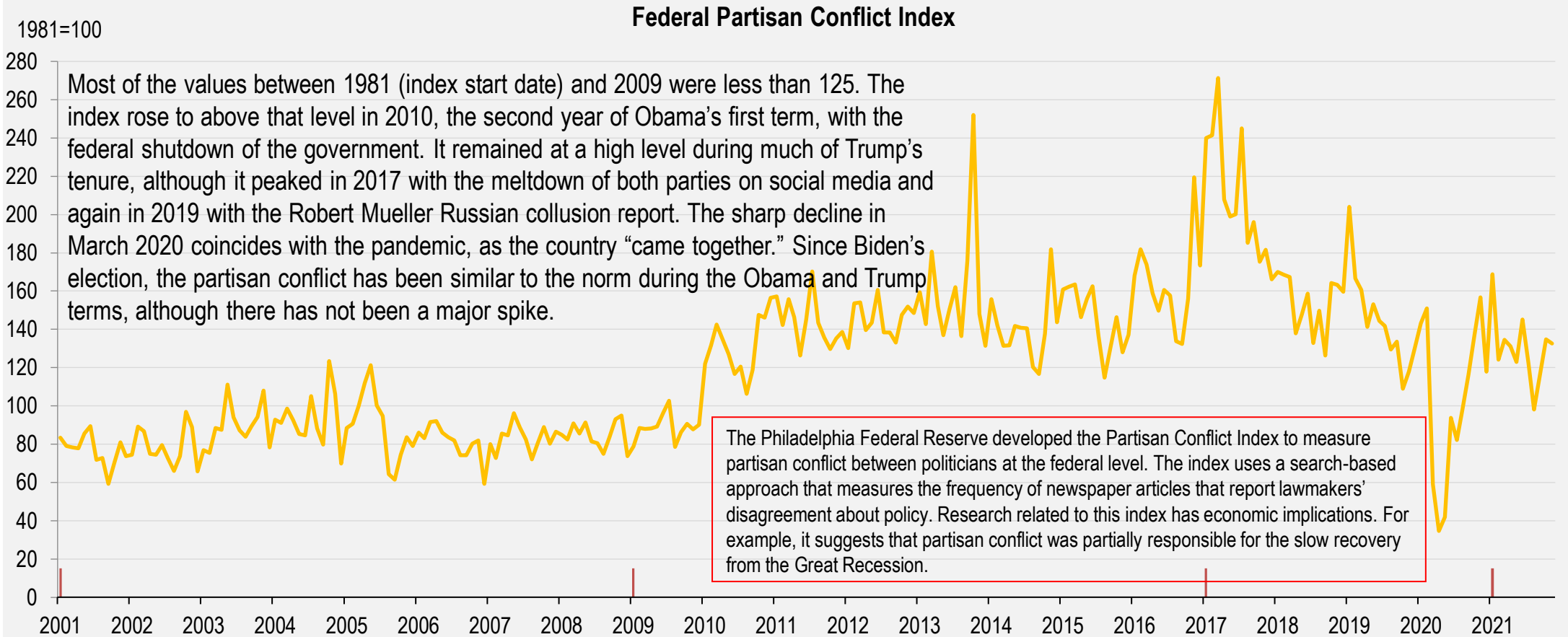
Source: The Conference Board and cber.co.

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

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

# Partisan Conflict Index

2001 to 2021



Source: Philadelphia Federal Reserve, <https://www.philadelphiafed.org/surveys-and-data/real-time-data-research/partisan-conflict-index>, cber.co.

# U.S. and Colorado Employment

## Employment, Employment to Population, Unemployment, JOLTS

### Key Points

U.S. employment increased by 6.1 million through the first 11 months of 2021.

The Colorado unemployment rate continues to be greater than the U.S. rate.

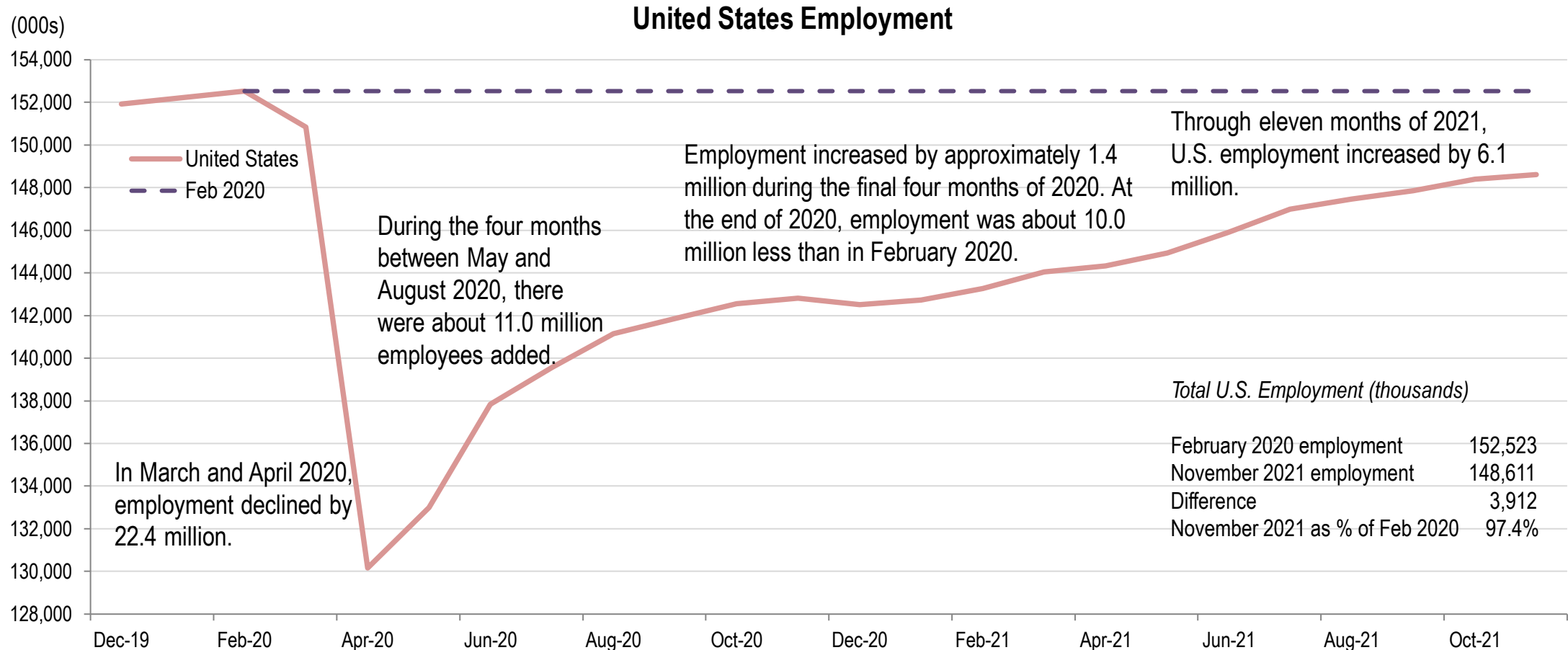
The employment to population ratio for Colorado began trending upward in September. The U.S. rate has increased since July.

The number of job openings is near the record level.



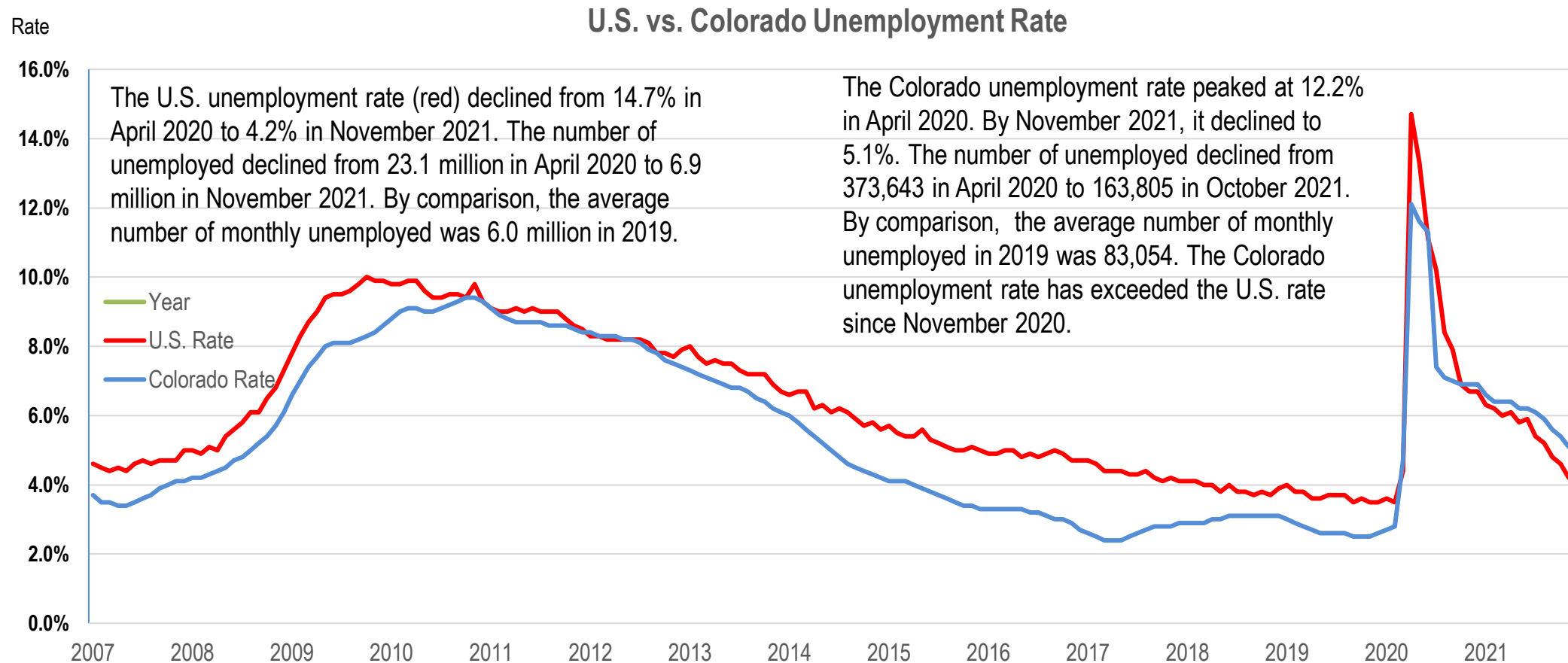
# Employment

## United States



Source: Bureau of Labor Statistics, cber.co.

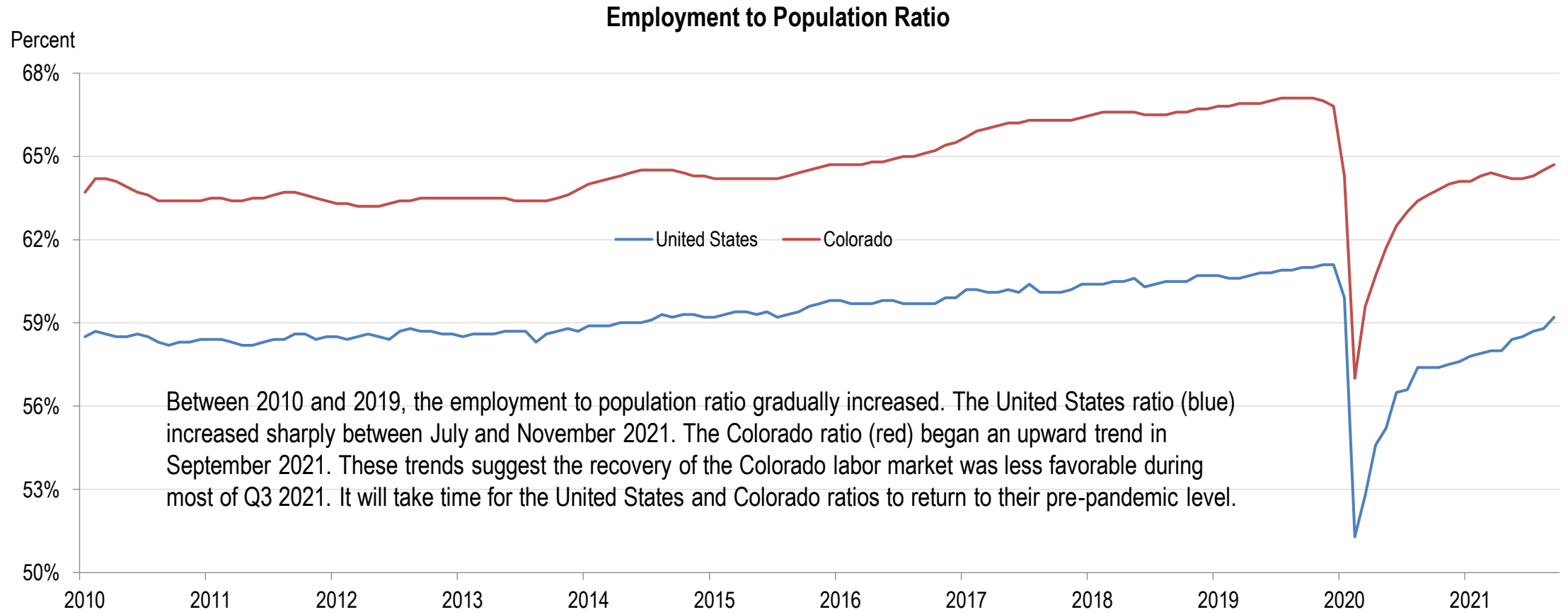
# U.S. and Colorado Unemployment Rate



Source: Bureau of Labor Statistics and cber.co.

# Employment to Population Ratio

## United States to Colorado

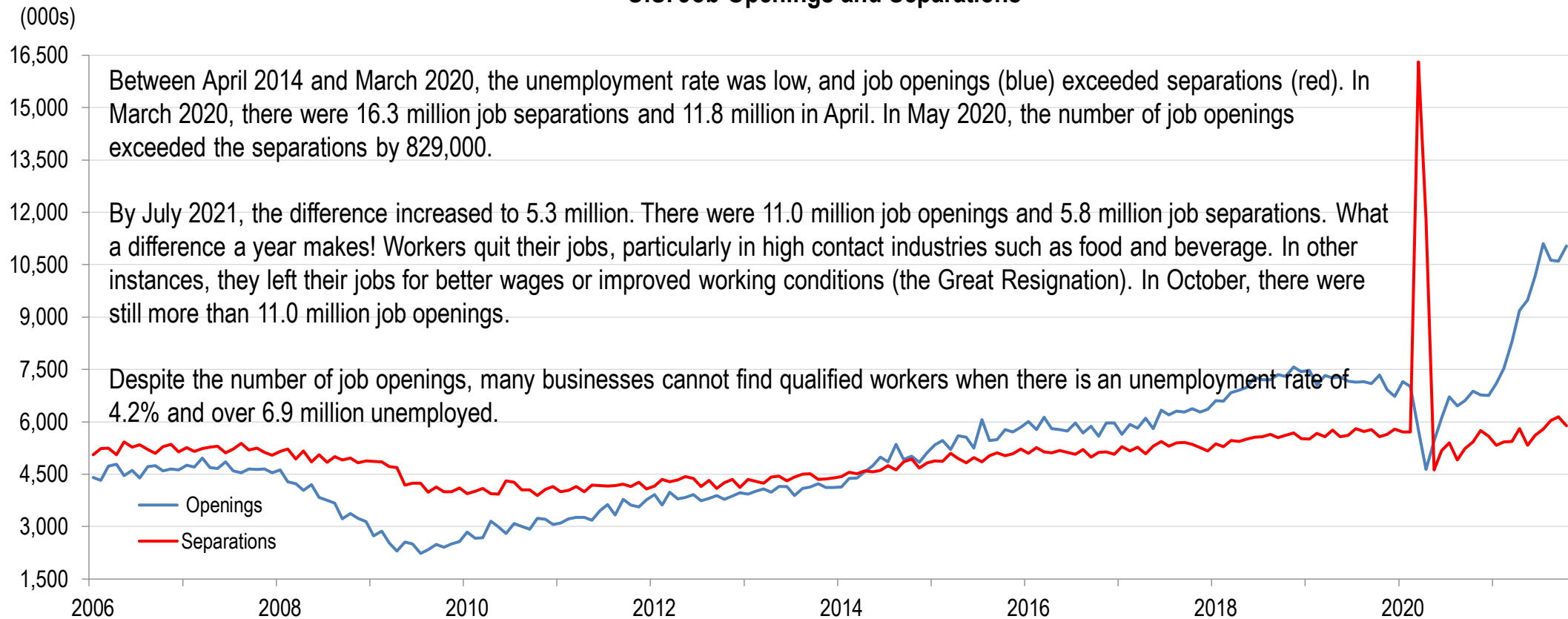


Source: FRED, BLS, cber.co.

# Job Openings and Separations

## United States

**U.S. Job Openings and Separations**



Source: JOLTS, BLS, cber.co.

# Major Indices

Inflation, NAHB, Michigan Consumer Sentiment Index, NFIB Small Business Optimism Index, and Manufacturing and Services PMI Indices

## Key Points

Inflation began to rise in April 2020.

The NAHB HMI and housing starts are solid.

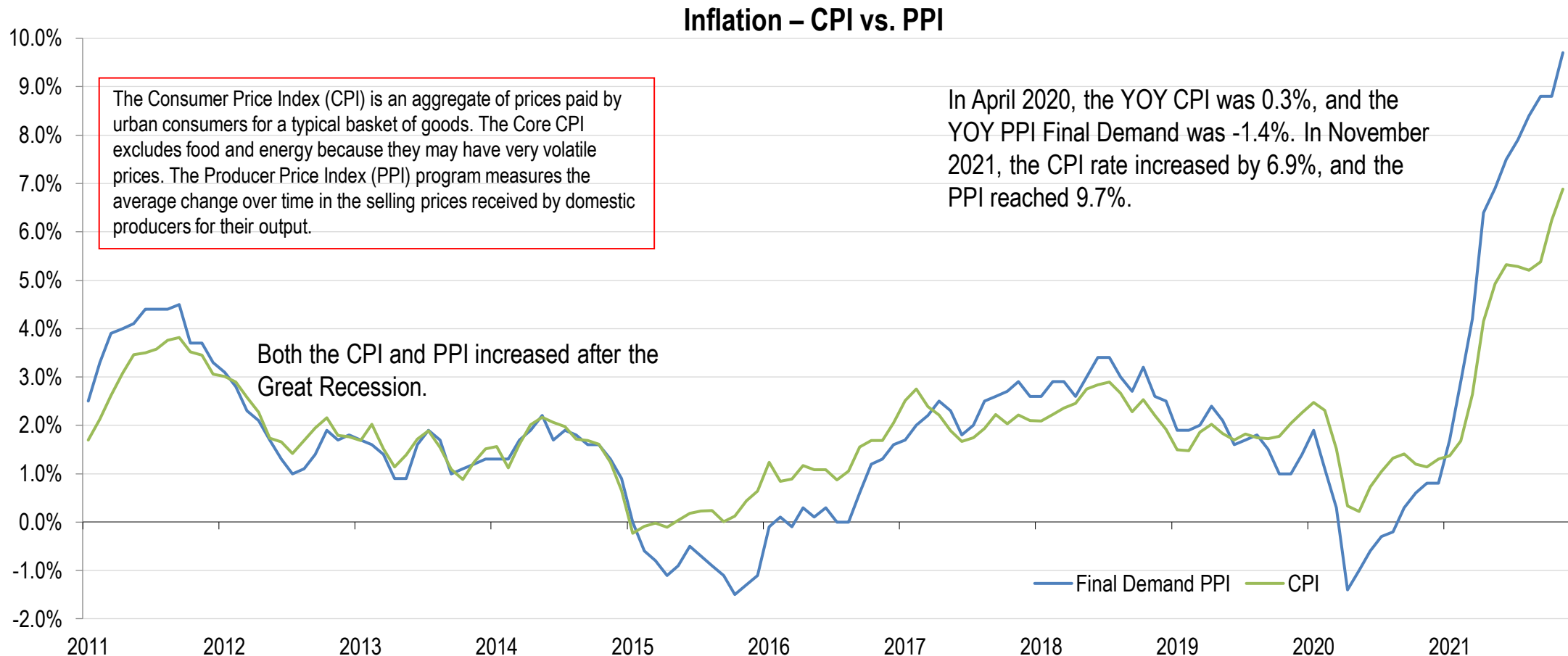
The Michigan Consumer Sentiment Index has been flat since August.

The NFIB Small Business Optimism Index increased slightly in November. There are concerns about the availability and cost of labor and the impact of inflation.

The indices for manufacturing and services have been in expansionary territory for 18 consecutive months. Labor shortages and supply chain issues are a concern.

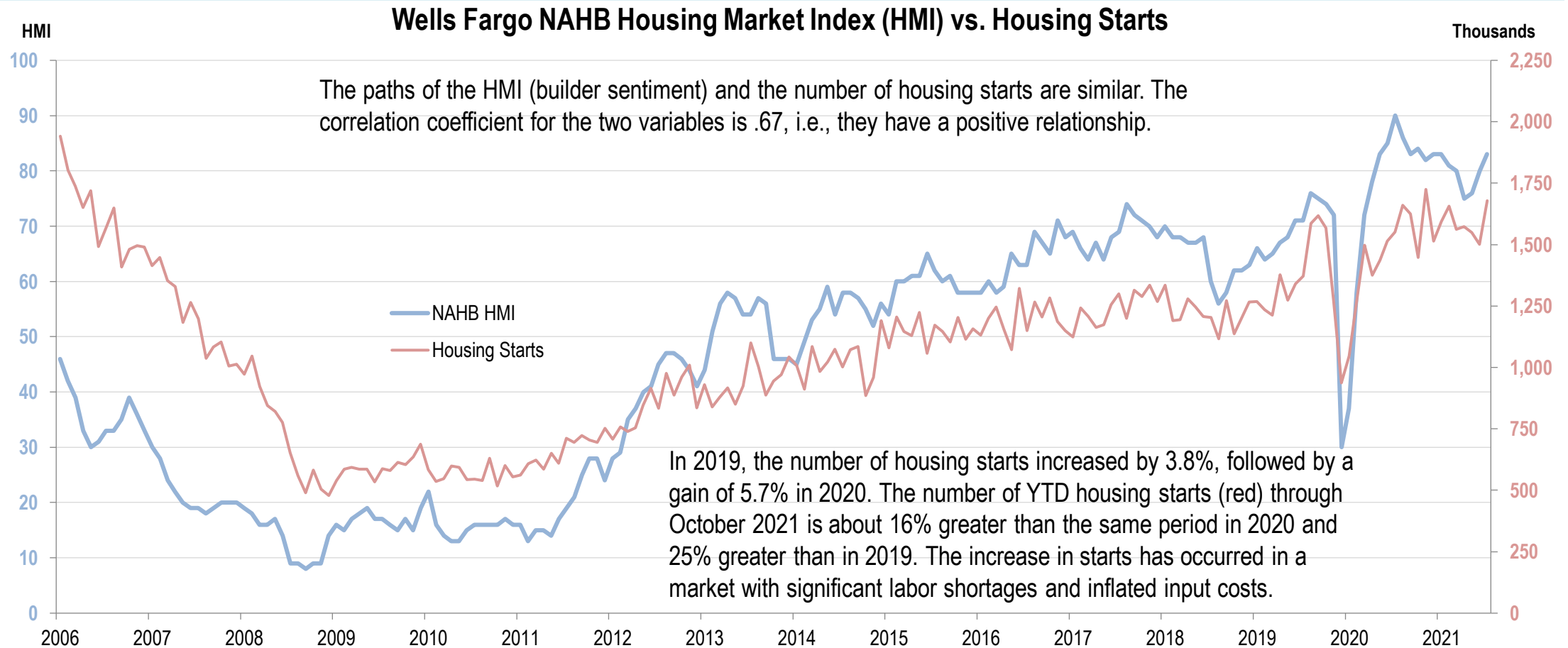
# Inflation

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

# Wells Fargo NAHB HMI vs. Housing Starts

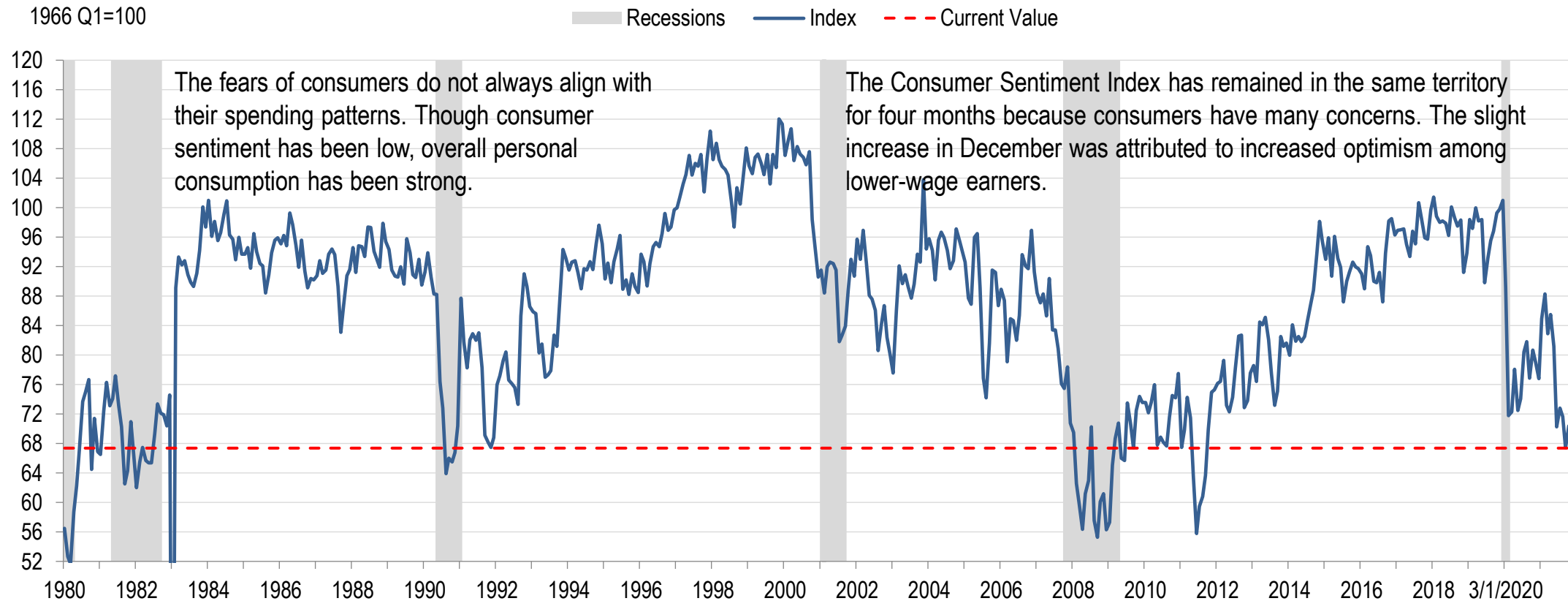


Source: NAHB, cber.co.

# Consumer Sentiment Index

## University of Michigan

### Michigan Consumer Sentiment Index

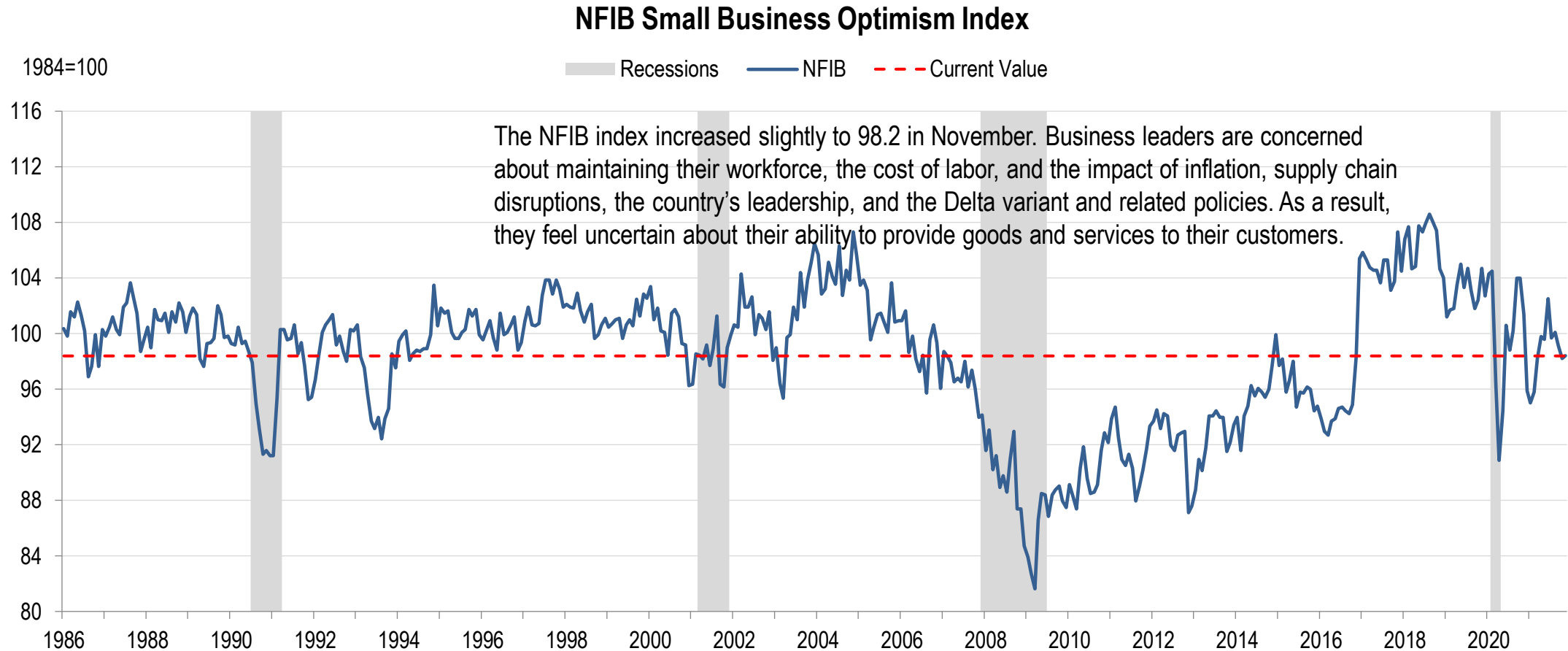


Source: University of Michigan, cber.co.



# NFIB Small Business Optimism Index

## United States

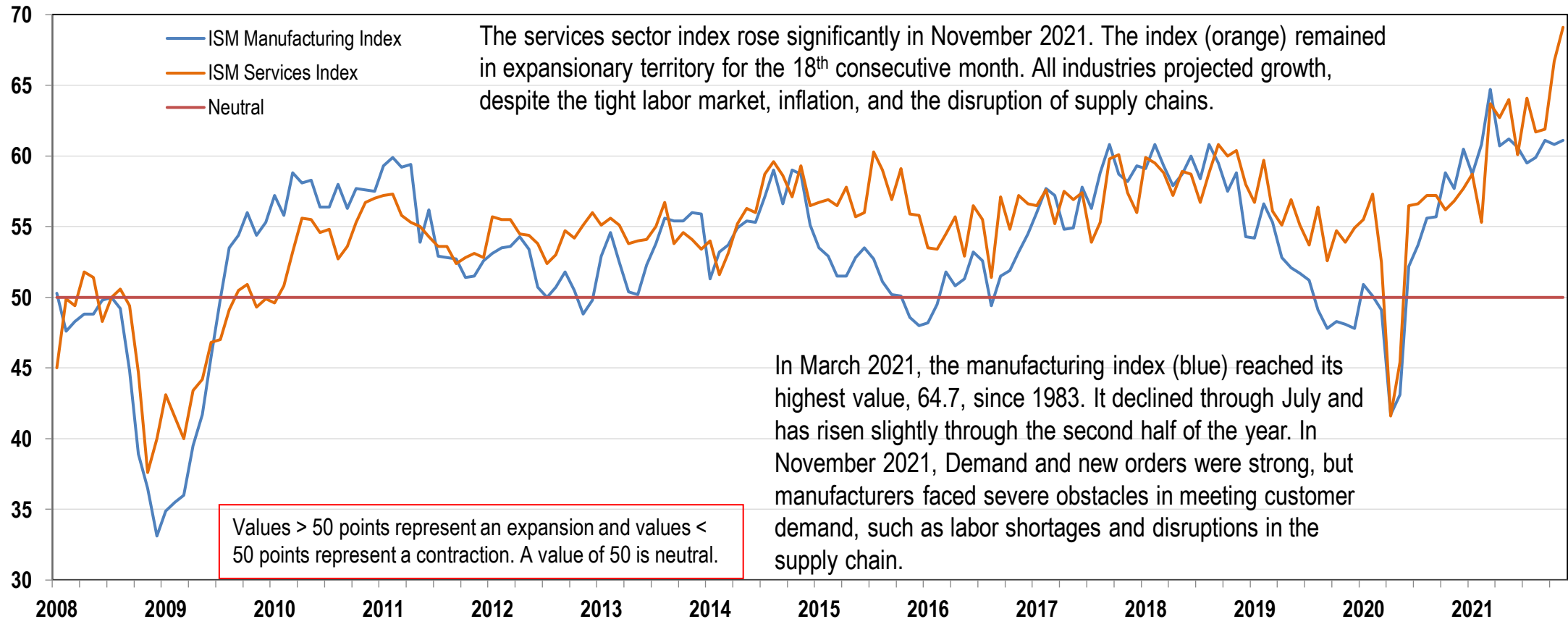


Source: NFIB, cber.co.

# ISM PMI Composite Indices

## Manufacturing vs. Services

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



Source: Institute of Supply Management, [cber.co](https://cber.co)

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

## Other Key Metrics

Advance Retail Sales, Light Truck and Auto Sales, Holiday Sales, S&P 500 Index, and WTI Crude Oil Prices

### Key Points

Retail sales continue to be strong,

Holiday retail sales, which exclude autos, are projected to be exceptionally strong.

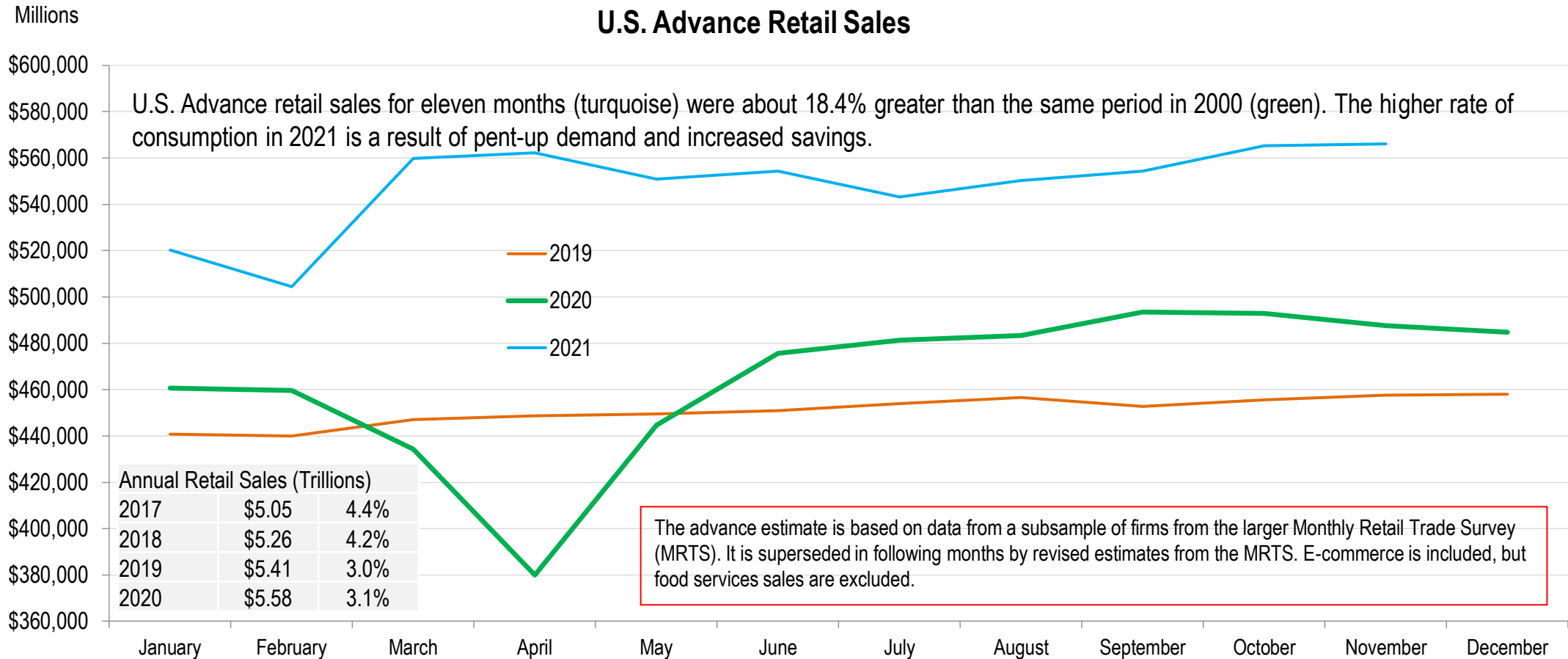
Light truck and auto sales have declined sharply because of supply chain shortages.

The price of oil was about \$70 a barrel in late December.

The S&P Index posted double-digit gains in 2020. Strong growth has continued in 2021, although the market stalled in mid-September.

# U.S. Advance Retail Sales

## Monthly



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

# Retail Sales

## Deck the Halls, Hit the Malls (And Don't Forget Your Local Small Businesses)

Montgomery Wards, Robert May, Johnny Marks, and Gene Autry were at the forefront of commercializing Christmas with the release of the book and classic song, *Rudolph the Red-Nosed Reindeer*.



Rudolph will shine his nose very brightly during the 2021 holiday season. The National Retail Federation projects that 2021 holiday sales will be 8.5% to 10.5% greater than 2020, compared to an increase of 8.2% last year and an average of 3.9% for the past ten years.

Source: National Retail Federation, NABE, IHSmarkit, cber.co. Note: Not adjusted for inflation.  
Colorado-based Business and Economic Research <https://cber.co>

### Fundamentals For Holiday Season

There will be record retail sales

**HO HO HO!**

Many workers have higher wages

There is confidence in the labor market

Credit card balances are lower than usual

Consumers have about \$2.5 trillion in excess savings

People are more likely to spend because of the wealth effect

**BAH HUMBUG!**

Inflation, for example, energy, transportation, food

There continues to be uncertainty about COVID-19

Labor shortages will extend into 2022

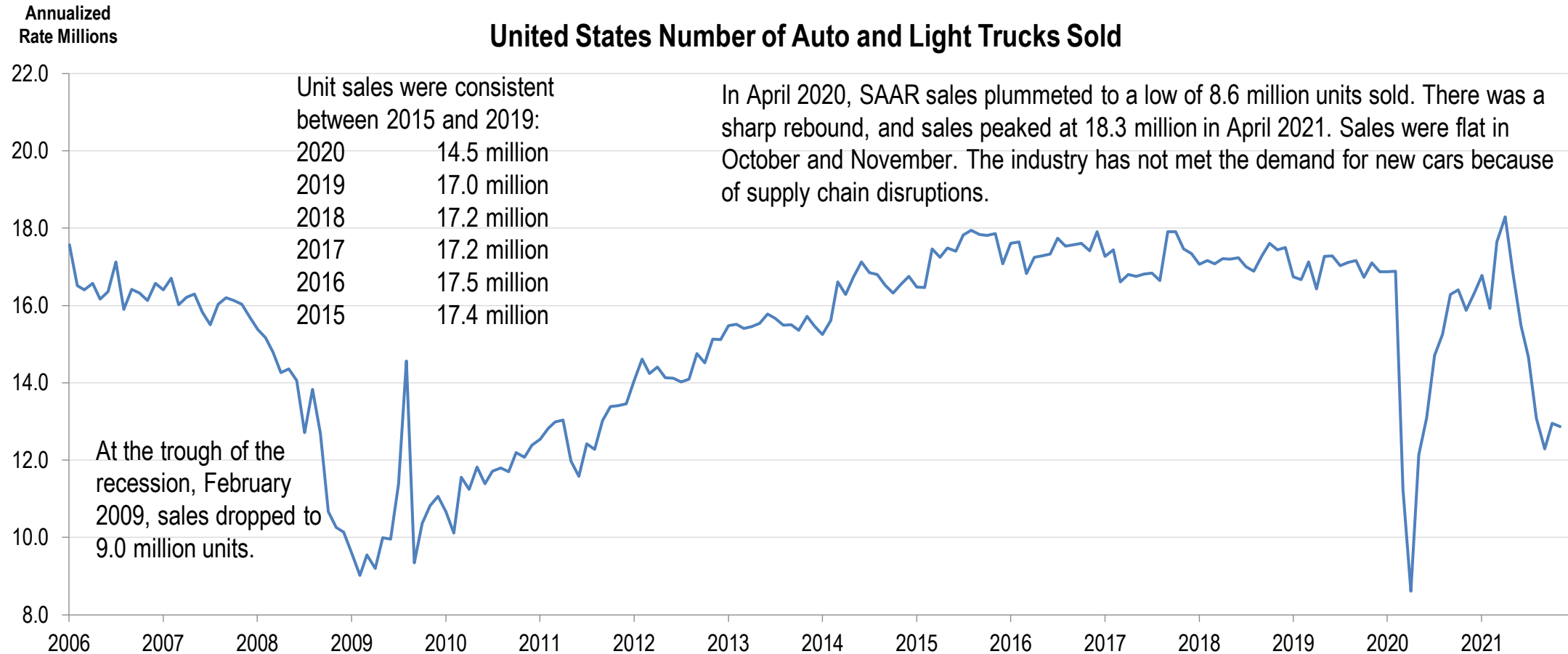
Earlier shopping may be necessary to get preferred gifts

Supply chain disruptions have caused delays and problems with product availability – there will be more e-commerce, gift certificates, and other types of gifts (travel, experiential, etc.)

Increased business costs are likely to be passed on

# 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.

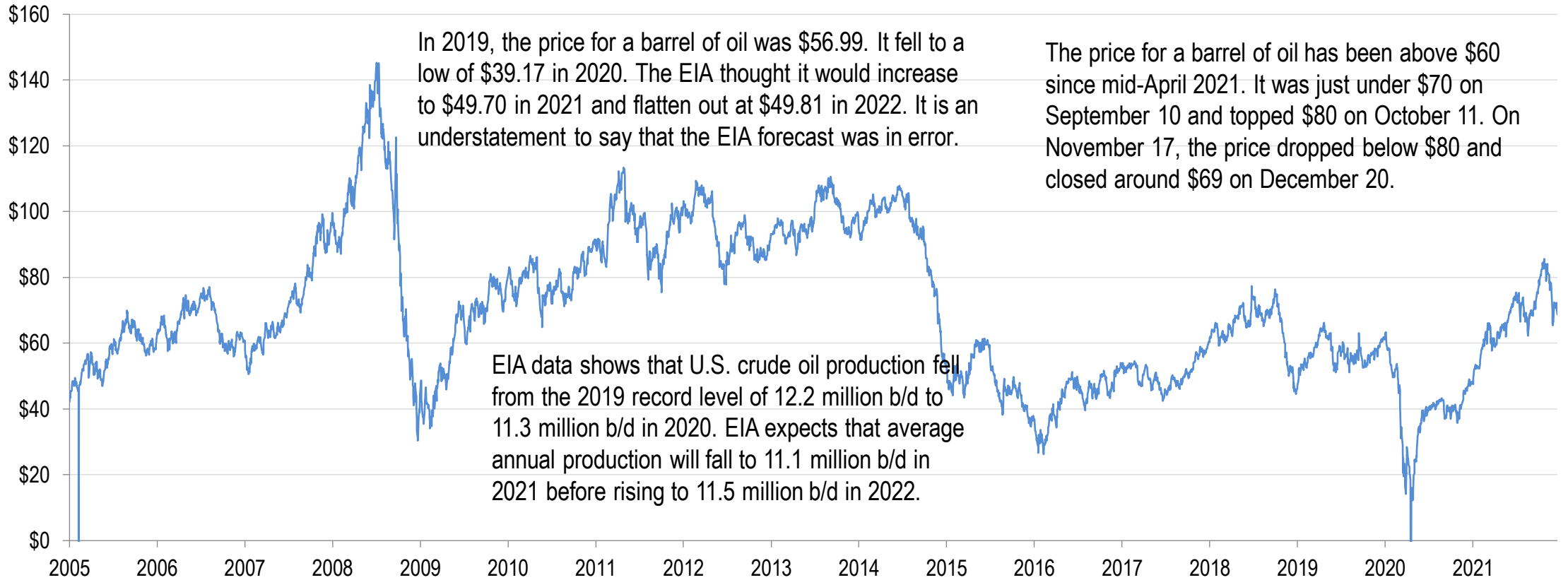
Colorado-based Business and Economic Research <https://cber.co>

# Crude Oil Prices

## West Texas Intermediate

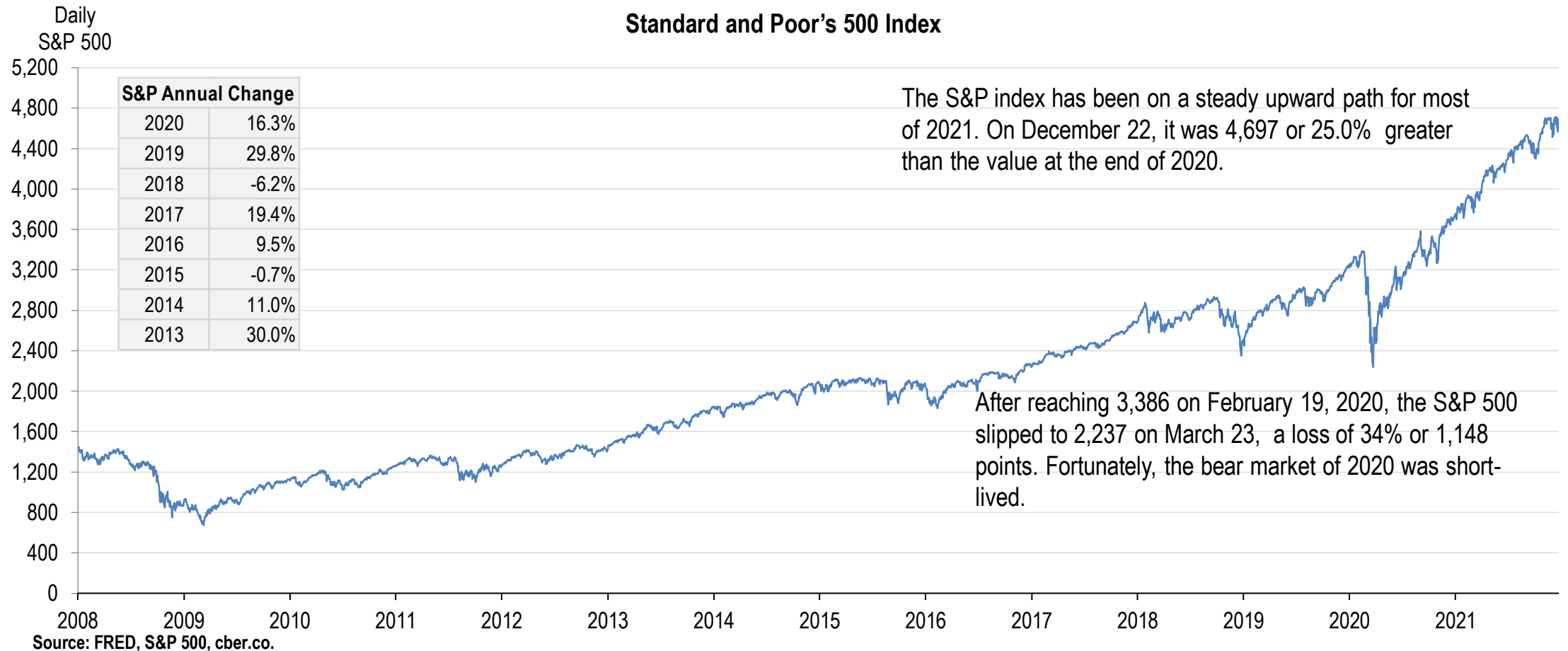
Dollars per  
Barrel

### Crude Oil Prices: West Texas Intermediate, Cushing, Oklahoma



Source: EIA, cber.co.

# Standard and Poor's 500 Index





# Colorado



# Colorado Employment

## Colorado Employment, Employment by Metro Counties, and Summary of Employment

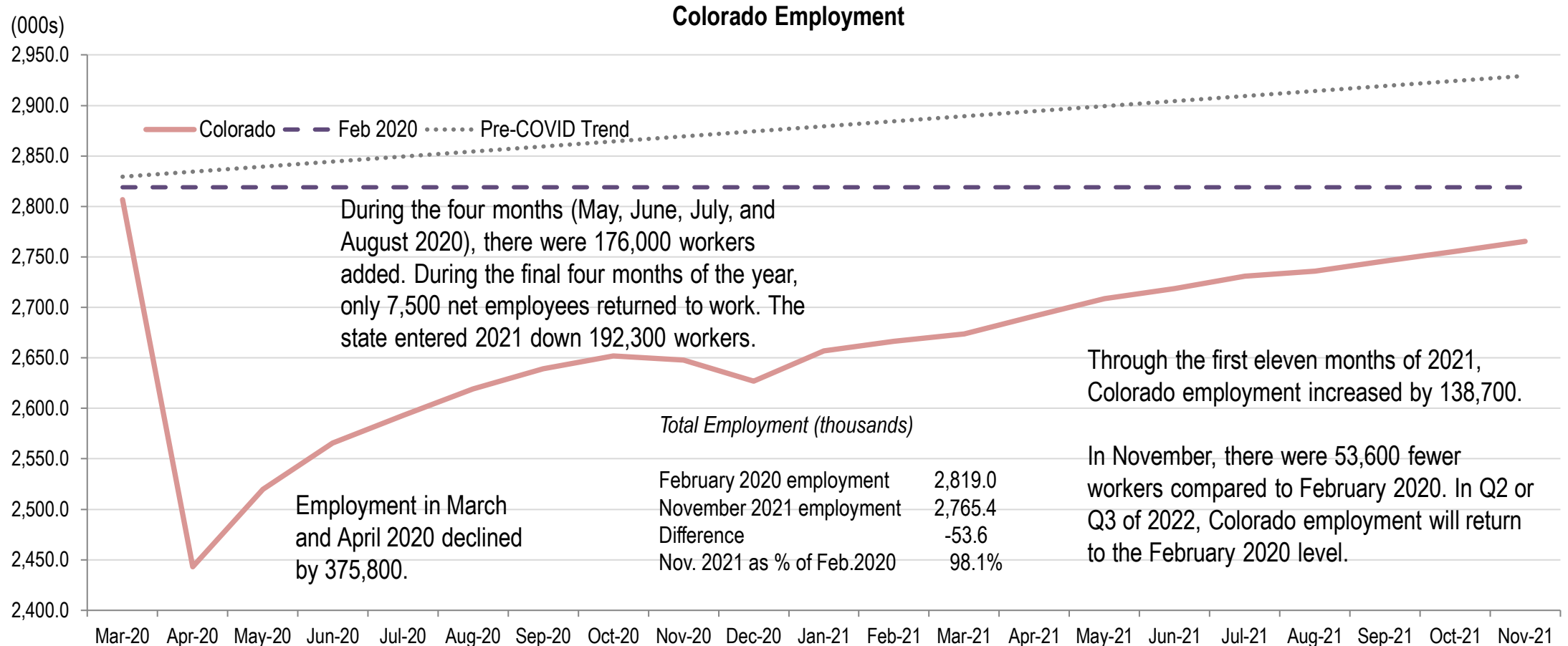
### Key Points

November 2021 seasonally adjusted wage and salary employment for Colorado was 53,600 less than February 2020.

The recovery has been faster in Douglas, El Paso, Adams, and Larimer counties.

The recovery is broad-based. Most of the Colorado employment shortfall is in the leisure and hospitality, state government, administrative, and local government sectors.

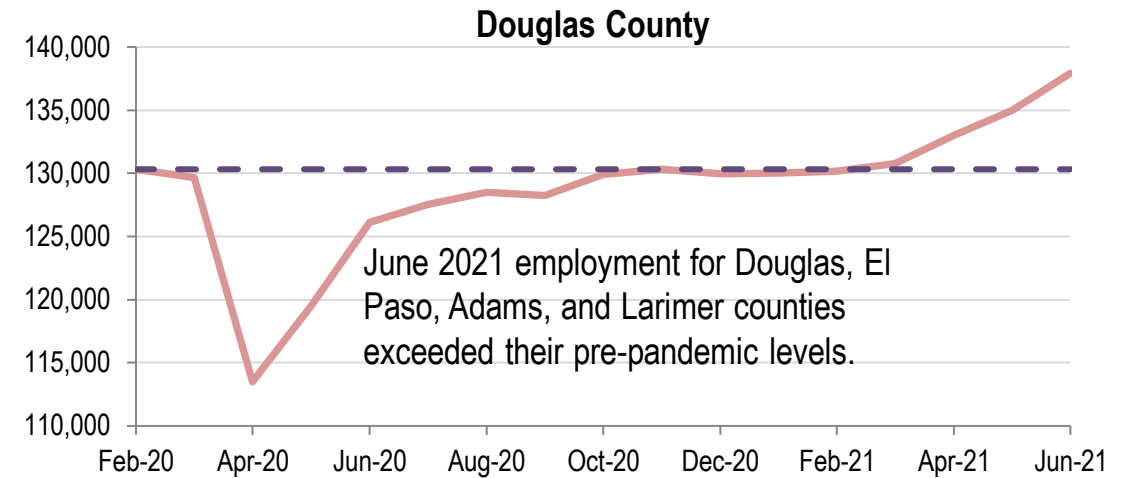
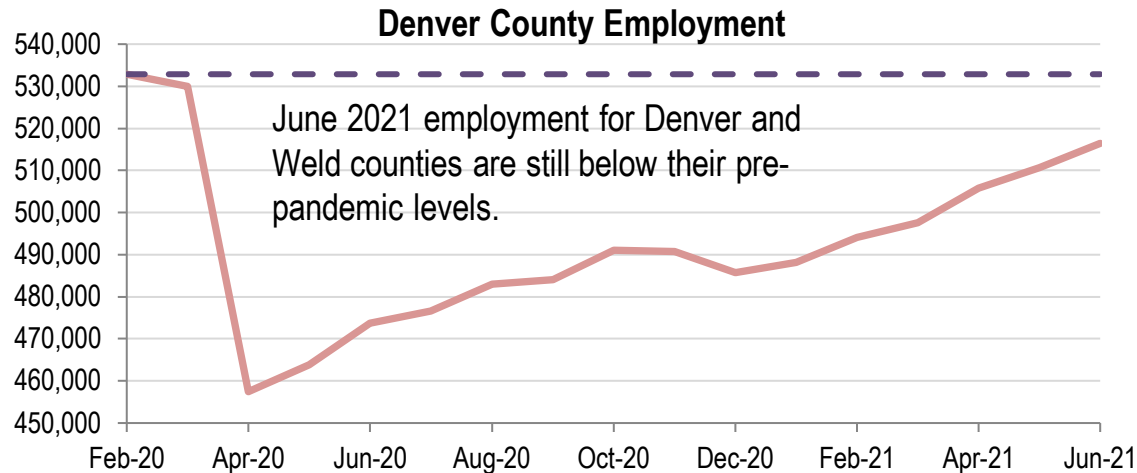
# Employment Colorado



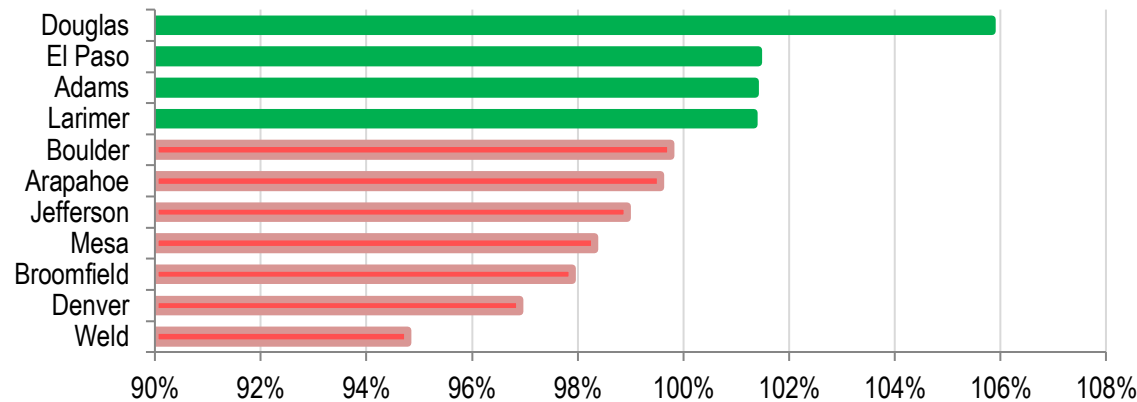
Source: Bureau of Labor Statistics, cber.co.

# Metro County Employment (Quarterly)

Recovery June 2021 Employment as % of February 2020

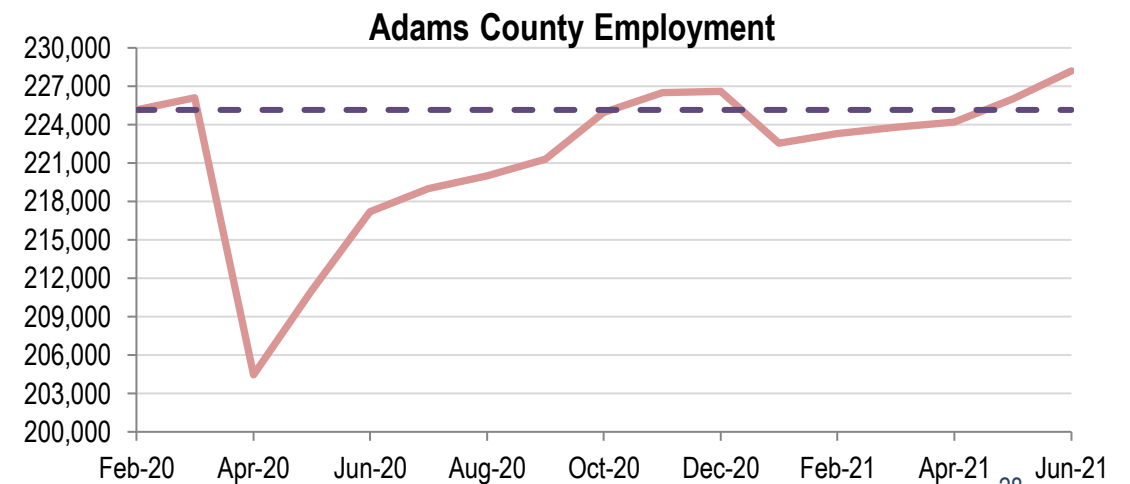


June 2021 Employment as % of February 2020



Source: Bureau of Labor Statistics, cber.co.

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



# Summary of Employment Recovery

## United States and Colorado

Colorado employment through November 2021 was 53,600 below the February 2020 value, and the U.S. October 2021 was 3.9 million below the February 2020 value. Most of the shortfall is in the leisure and hospitality, state government, and local government sectors.

Recovered or Least Losses	Short-Term Recovery (2022)	Mid-Term Recovery (2022+)	Long-Term Recovery (2023+)
<ul style="list-style-type: none"><li>Wholesale trade</li><li>Management of companies</li><li>Trans., warehousing, and util.</li><li>Prof., scientific, and technical</li><li>Federal government</li><li>Retail trade</li><li>Financial activities</li></ul>	<ul style="list-style-type: none"><li>Educational services (private)</li><li>Information</li><li>Manufacturing</li><li>Other services</li></ul>	<ul style="list-style-type: none"><li>Extractive industries</li><li>Healthcare</li><li>Construction</li><li>Administrative</li></ul>	<ul style="list-style-type: none"><li>Local government</li><li>State government</li><li>Arts and entertainment</li><li>Accommodations and food</li></ul>
<p><b>Colorado</b> +28,500. These sectors account for about 37% of total state employment.</p>	<p><b>Colorado</b> -16,000. These sectors account for about 14% of total state employment.</p>	<p><b>Colorado</b> -27,100. These sectors account for about 23% of state employment.</p>	<p><b>Colorado</b> -39,000. These sectors account for about 26% of total state employment.</p>
<p><b>U.S.</b> +211,200. These sectors account for about 35% of total U.S. employment.</p>	<p><b>U.S.</b> -682,200. They account for about 17% of total U.S. employment.</p>	<p><b>U.S.</b> -1,556,700. About 25% of U.S. employment is in these sectors.</p>	<p><b>U.S.</b> -2,284,900. About 23% of U.S. employment is in these sectors.</p>

Source: BLS, cber.co.

# Select Industry Data

Inflation, Retail Sales, DIA Passengers, Building Permits,  
and Oil Production

## Key Points

Inflation has risen rapidly in recent months and will remain high in 2022.

Retail sales have rebounded after a sluggish start in 2021.

The number of passengers at DIA continues to increase.

The total number of permits issued for single-family and multi-family housing through October is significantly greater than the same period in 2020.

The production of oil in Colorado is trending downwards because of state regulations.

# Inflation

Last fall, some of the country's top economists said that pigs would fly before inflation rose significantly. To their chagrin, the rate of inflation rose. At one point, they indicated the flight time of the pigs would be short-lived (transitory). They are now saying inflation will continue into 2022.

The following are examples of the YOY increase in inflation in Denver-Aurora-Lakewood (DAL) for November 2021.

Alcoholic Beverages	3.3%	Housing	5.0%
Apparel	8.1%	Medical	5.6%
Non-Durable Goods	10.5%	Motor Fuel	63.9%
Food and Beverage	4.4%	Recreation	2.4%
Food at home	2.8%	School fees/childcare	0.9%
Household Energy	7.5%	Transportation	20.5%
Household Furnishing	6.5%	Used Vehicles	32.6%

The CPI for DAL is published every two months. The YOY U.S. CPI for the first half of 2021 was 3.4%, and it was 1.9% for Colorado. In November, the YOY U.S. CPI was 6.8%. The Colorado rate was 6.5%, a significant increase over the prior reading.

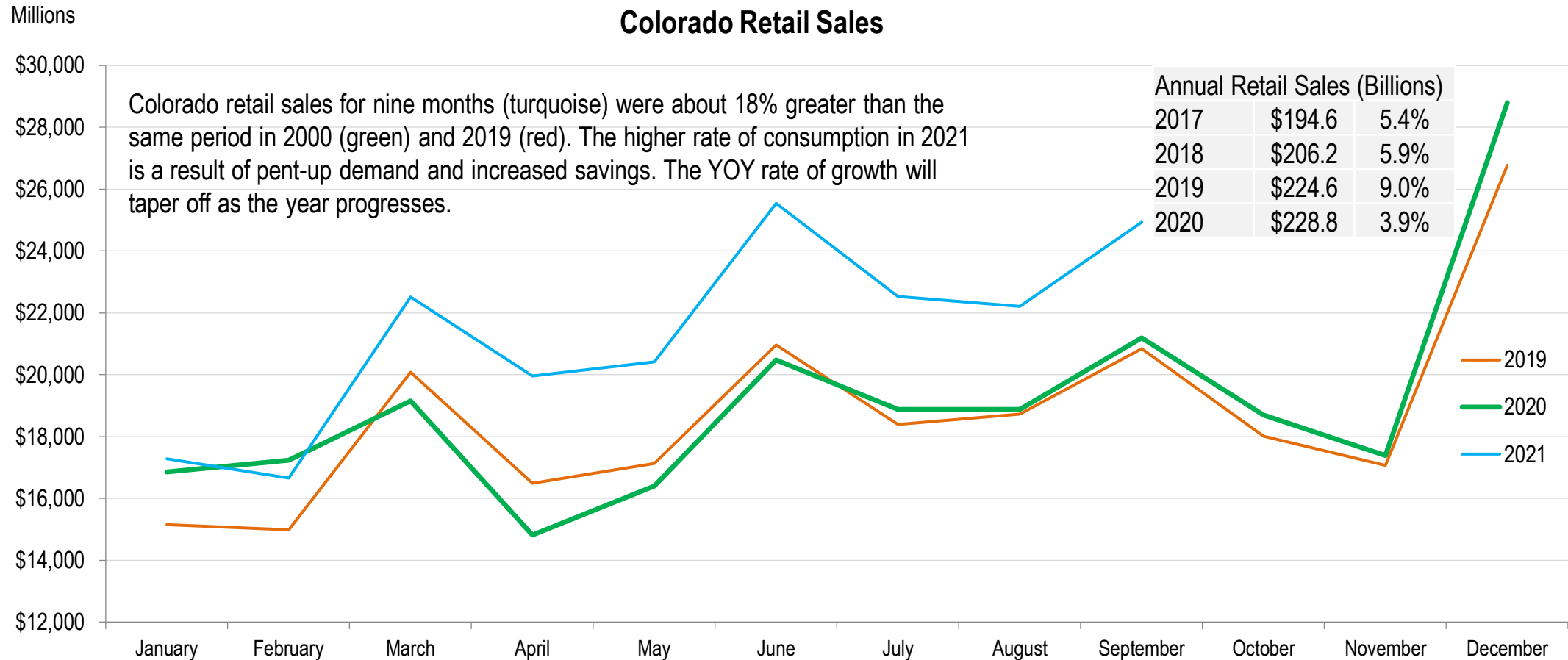
Source: BLS, cber.co.

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



# Colorado Retail Sales

## Monthly



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

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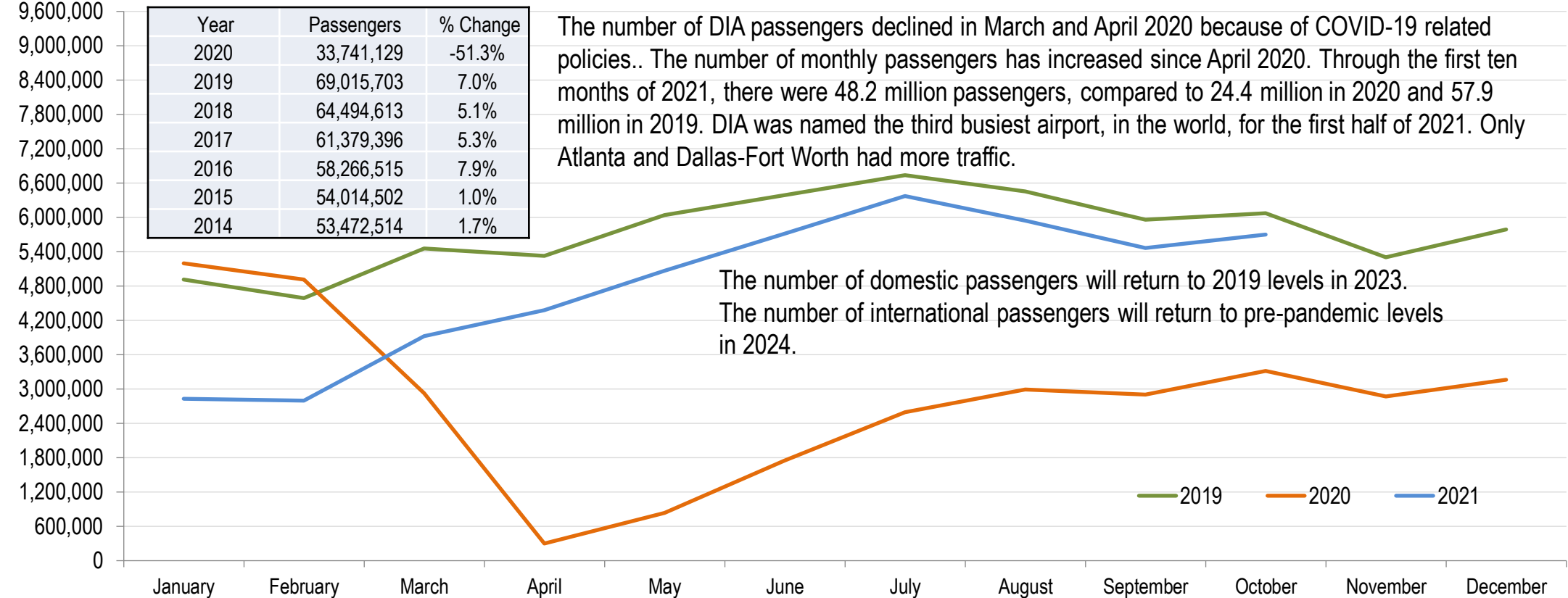


# Denver International Airport Passengers

## Monthly

### DIA Passengers

Passengers

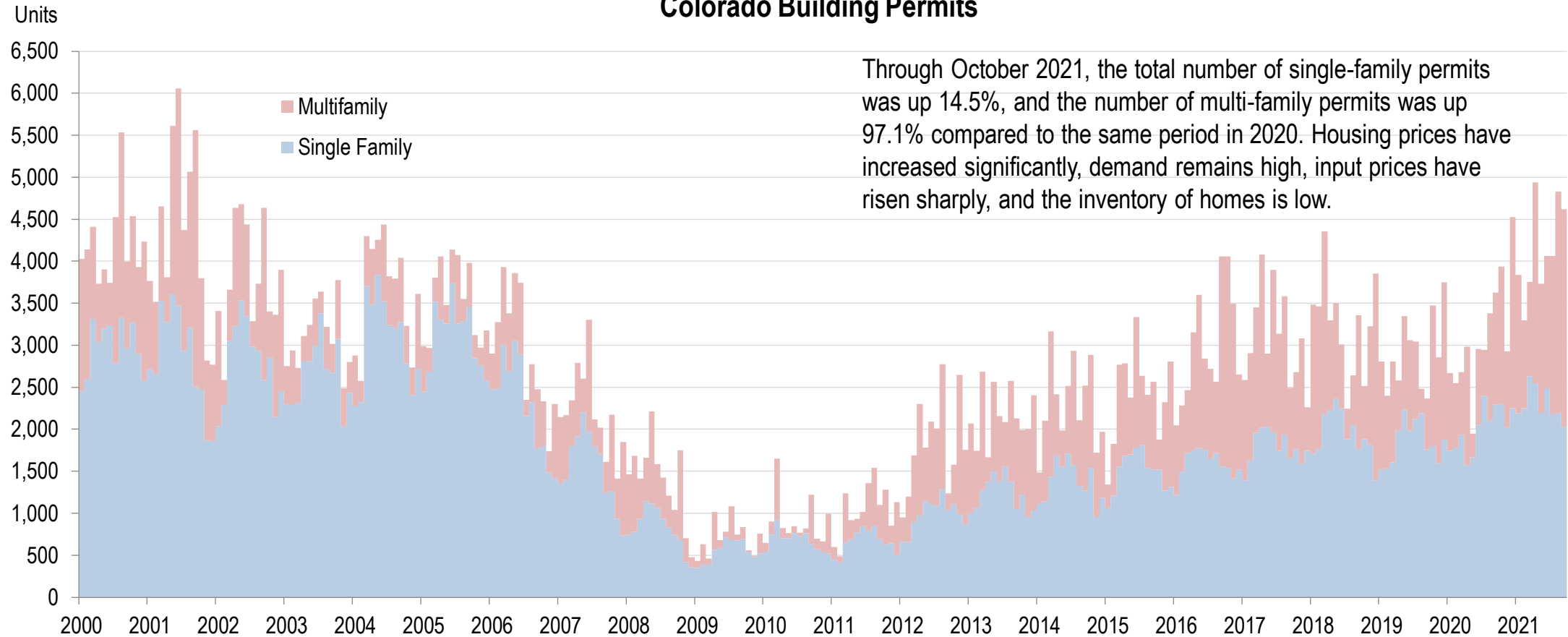


Source: flydenver.com, cber.co.

# Colorado Residential Building Permits

Units

## Colorado Building Permits

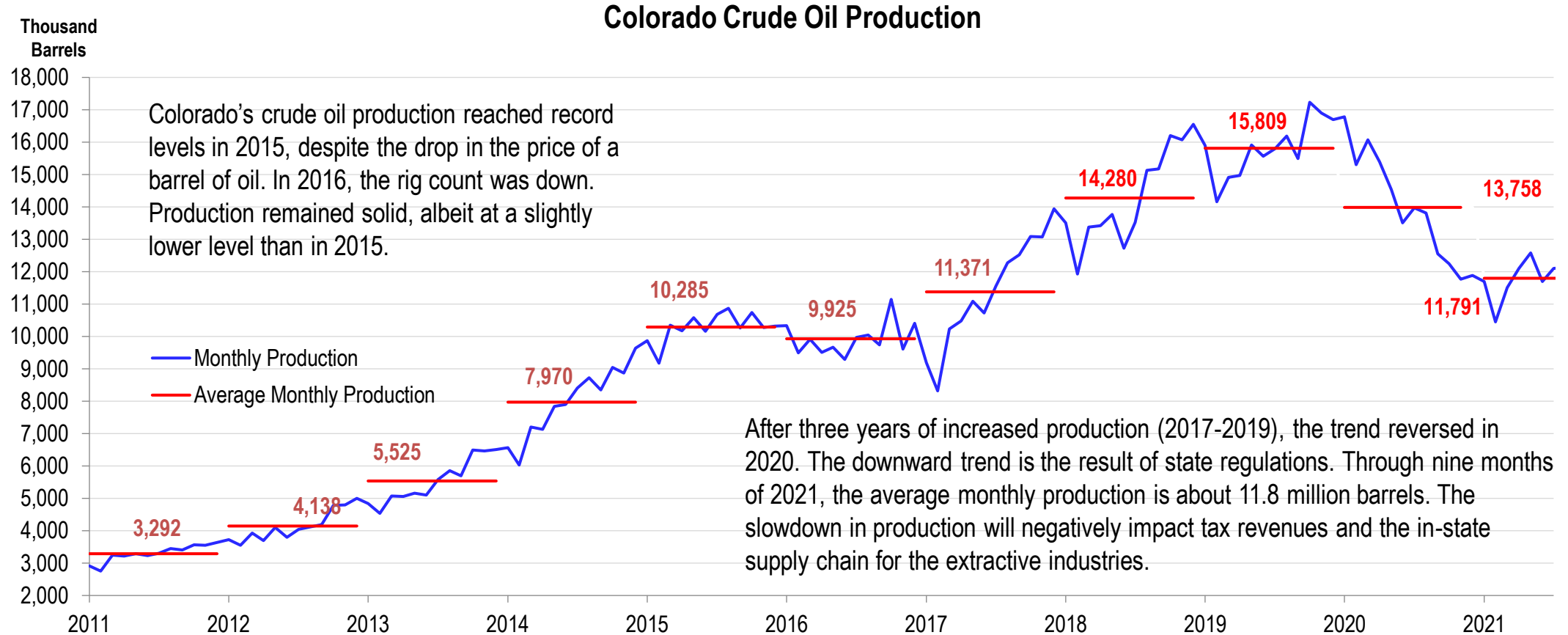


Source: TAMU Real Estate Center, U.S. Census Bureau, cber.co.

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# Colorado Field Production of Crude Oil

## 2011 to 2021 (Thousand Barrels)



Source: EIA, cber.co.

# Summary

Colorado

# Summary of Colorado Forecast

Colorado's real GDP growth rate will be greater than the U.S. in 2021 and 2022.

Employment will return to its 2019 level in Q2 of 2022. The labor market expanded at a faster pace than expected in 2021. It will taper off in 2022.

Retail sales rebounded in 2021 as a result of pent-up demand. Growth will be slower in 2022.

In 2021 and 2022, Colorado inflation will be greater than in recent years. The increased inflation will negatively impact economic growth in the months ahead.

Colorado Economic Forecast				
	2019	2020	2021	2022
<b>Real GDP Value (billions)</b>	\$356.28	\$351.07	\$375.00	\$396.75
<b>% Change Real GDP</b>	3.9%	-1.5%	6.8%	5.8%
<b>CES Employment (thousands)</b>	2,790.1	2,644.6	2,728.6	2,828.6
<b>Annual Change (thousands)</b>	62.8	(145.5)	134.0	100.0
<b>% Change</b>	2.3%	-5.2%	5.1%	2.0%
<b>Unemployment Rate</b>	2.7%	7.3%	6.1%	3.7%
<b>Retail Sales (billions)</b>	\$224.6	\$228.8	\$264.9	\$286.1
<b>% Change</b>	9.0%	1.9%	15.8%	8.0%
<b>Consumer Price Index</b>	1.9%	2.0%	3.2%	3.1%
<b>DIA Passengers (millions)</b>	69.0	33.0	56.0	64.0
<b>Single Family Permits</b>	24,756	26,489	28,900	27,350
<b>Multi-family Permits</b>	13,877	13,738	18,950	14,200
<b>Oil Production (thousands) barrels</b>	189,707	172,000	142,000	155,000

In 2020, the number of passengers through DIA was about half of the 2019 total. Domestic flights will return to their 2019 level in 2023. International flights will return to their pre-pandemic level in 2024.

There was an increase in the number of building permits issued in 2020. There has been strong growth in the number of permits issued in 2021 as demand for new homes remains high. Also, there is a need for affordable housing in many metro and mountain communities.

State regulations and reduced demand caused a decline in oil production in 2020 and 2021. Oil production will increase slightly in 2022.

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#### 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.