

What's On the Horizon for the U.S. and Colorado Economies?

On July 2, BLS reported the U.S. added 850,000 jobs in June. Over the first six months of 2021, the U.S. added 3.3 million jobs. The U.S. is 6.7 million jobs below the pre-pandemic total.

On July 23, BLS reported that Colorado added 10,800 jobs in June. Total employment over six months increased by about 92,900. The growth through six months was uneven across geographies, industries, and occupations. Colorado is 99,400 jobs below the pre-pandemic total.

The economy is recovering, but there are many questions. What is driving the recovery? Is the growth in economic activity masking other problems? How long is it going to take for the Colorado labor market to return to its pre-pandemic level?

Are clouds, sunshine, or double rainbows on the horizon? Most likely, there will be a mixture of all three.



Topics

Change in employment

Percent change in employment

Change in employment (men and women)

Summary of employment recovery

The recovery for Colorado, Idaho, and Utah

Working age population

Unemployment by occupation

Job openings and separations

High propensity business applications

GDP

Inflation

DIA passengers

Conclusion

Change in Employment

The labor market continues to improve, and the recovery is occurring faster than the Great Recession. Economists are waiting for the NBER to announce an official end to the COVID-19 recession. When will the U.S. and Colorado labor markets return to pre-pandemic levels?

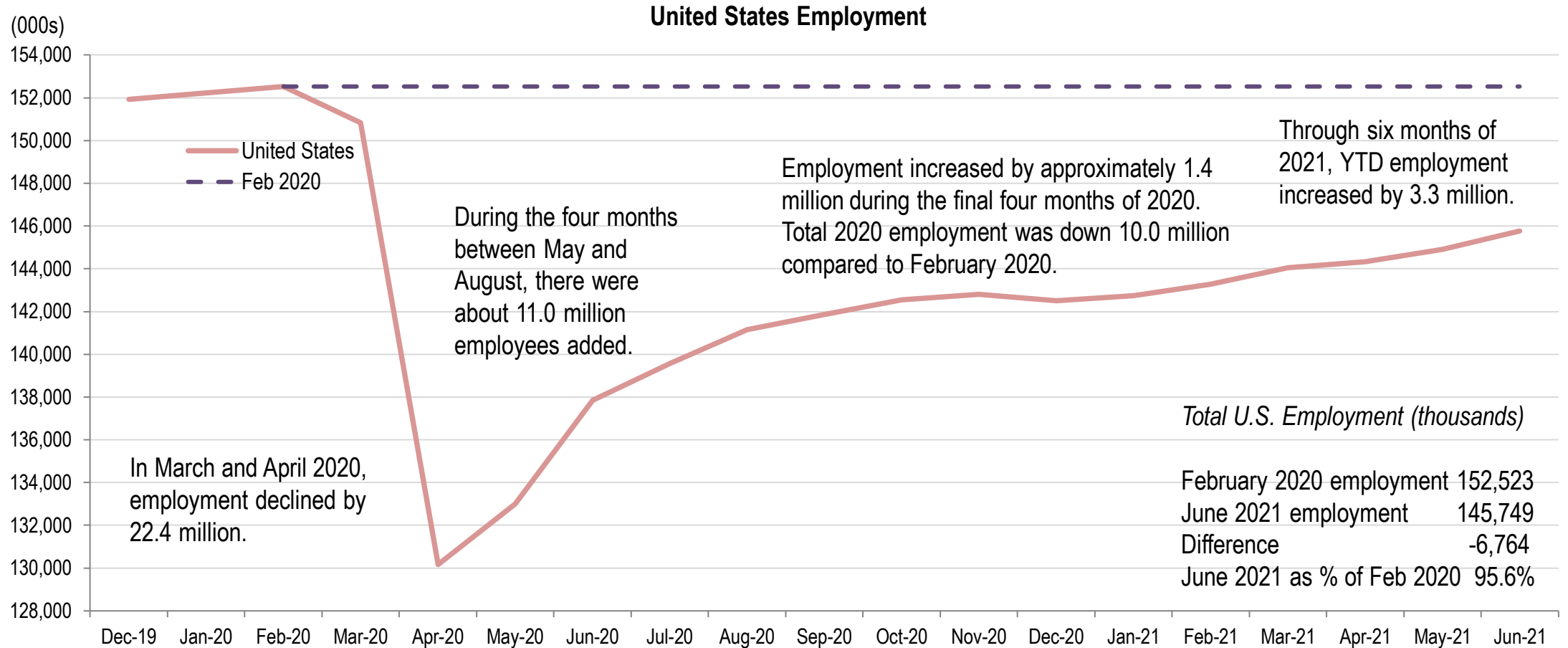
Jobs are being added unevenly across industries and occupations.

Through six months of 2021, total U.S. employment is 6.7 million less than the pre-pandemic level. YTD employment has increased by an average of 550,000 jobs per month. If that rate of growth continues, total employment will return to its pre-pandemic level in mid-2022.

Through six months, Colorado employment has increased by 92,900. It still needs to add 99,400 employees to reach its pre-pandemic level. Total employment will return to the February 2020 level in 2022.

Change in Employment

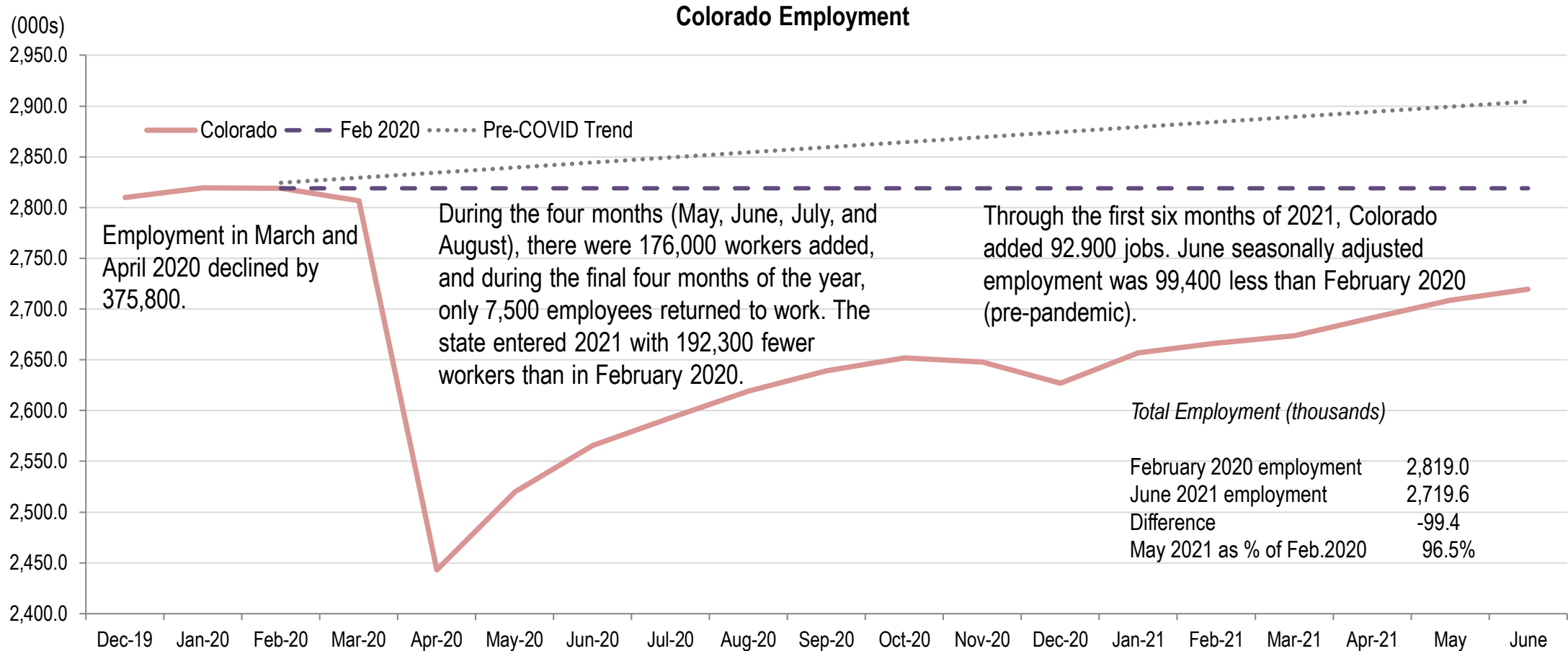
United States



Source: Bureau of Labor Statistics, cber.co.

Change in Employment

Colorado



Source: Bureau of Labor Statistics, cber.co.

Percent Change in Employment

United States vs. Colorado

How uneven is the recovery? Why is it so uneven?

U.S. and Colorado employment will return to pre-pandemic levels in 2022.

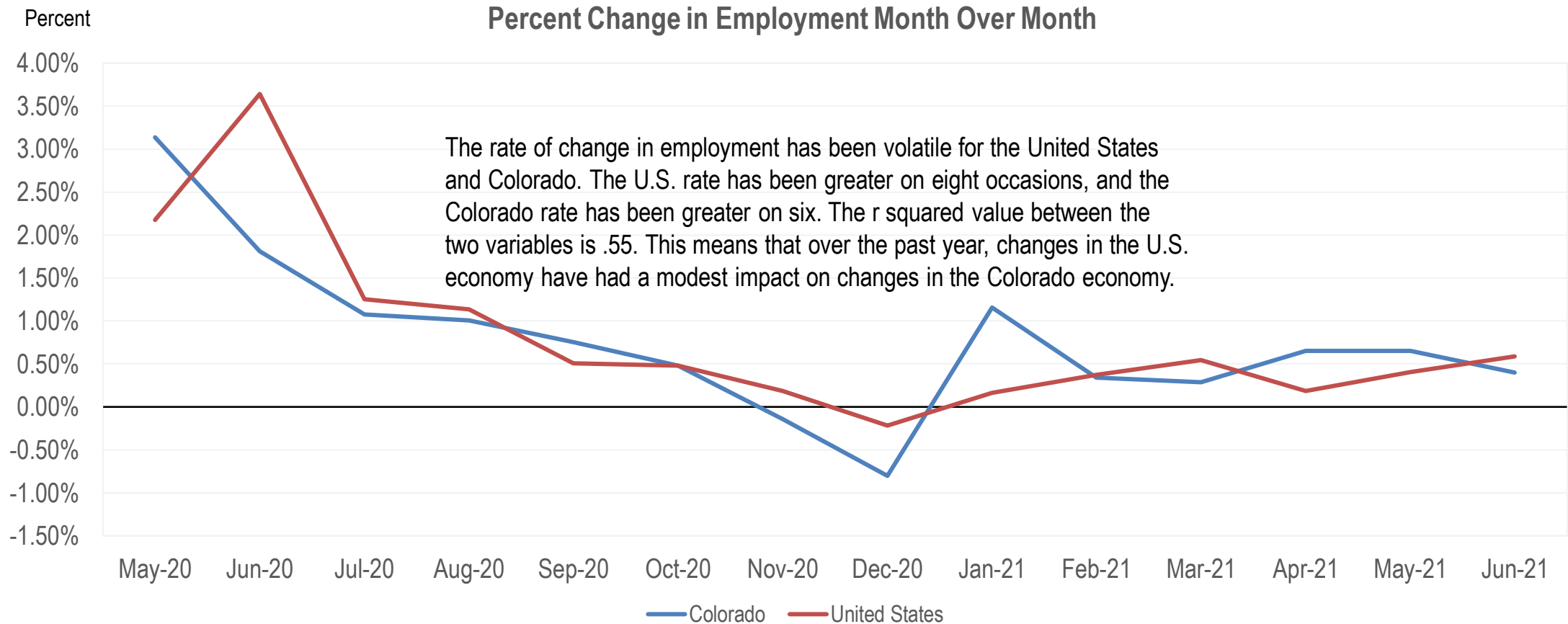
Jobs are being added at different rates across the states because regional COVID-19-related policies vary by region and within each state. Over the past year, the rate of change has trended downward. Eventually, it will return to a growth rate similar to 2019 – barring problems that are unforeseen at the moment.

At the macro level, the U.S. and Colorado general employment levels move in the same direction; however, their monthly rates of change often move in different directions.

Between 2016 and 2019, the average monthly change in U.S. employment was 190,000, or an annual growth rate of about 1.6%. Colorado added about 5,000 jobs per month, an annual growth rate of about 2.4%.

Percent Change in Employment (MOM)

United States vs. Colorado



Change in Employment (Men and Women)

United States

The COVID-19 recession hit women much harder than men. Are women being rehired? Are the deterrents that caused the Shecession still in place?

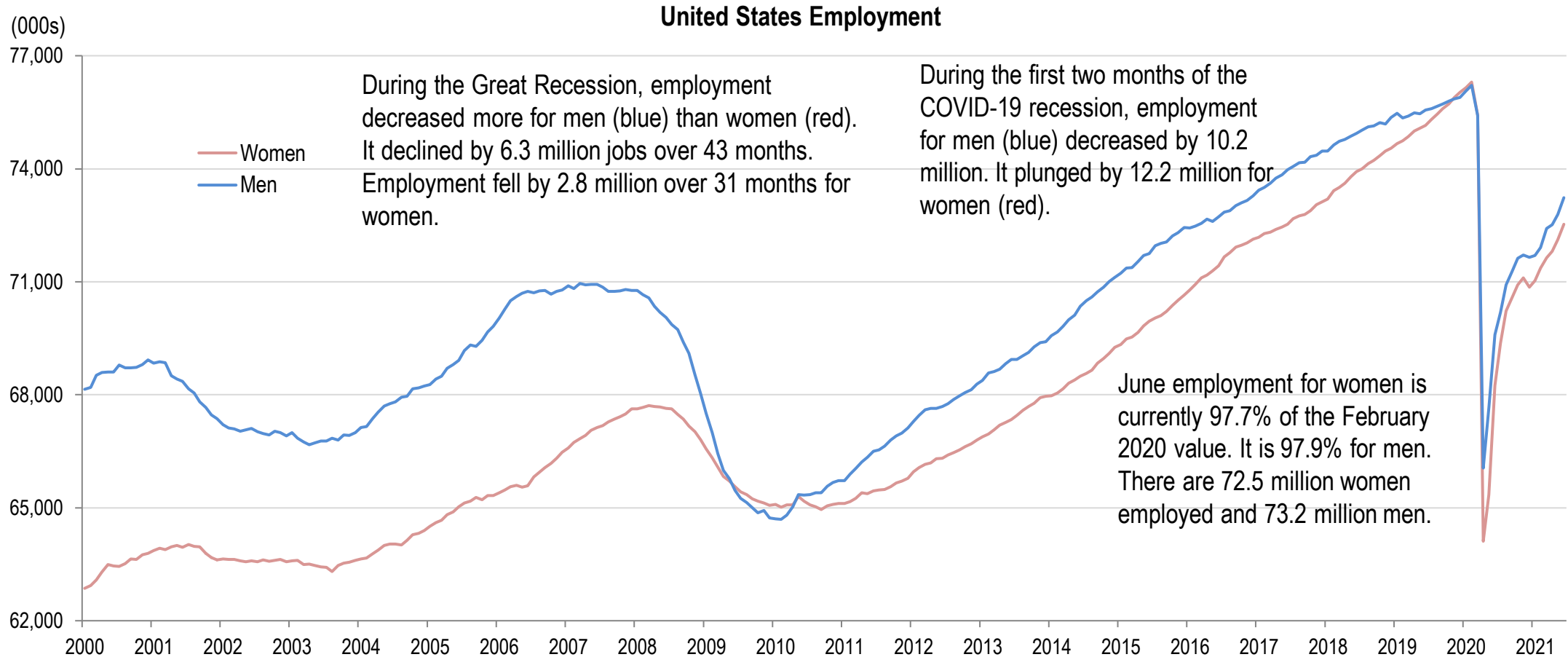
In February 2020, the number of men and women employees was about the same.

There were about 2.0 million more men employed than women after the job separations in March and April 2020.

About 410,000, or 48%, of the total employees added in June 2021, were women. Overall, there were about 700,000 more men employees than women at that time.

Change in Employment (Men and Women)

United States



Source: Bureau of Labor Statistics, cber.co.

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

Summary of Employment Recovery

United States and Colorado

Which industries have recovered the fastest? How long will it take for the Colorado and U.S. labor markets to return to their pre-pandemic levels?

In Colorado, sectors that employ about half of the wage and salary employees have recovered, or they will recover in the near term. It will take more than a year for the remaining sectors to recover. The U.S. employment situation is less favorable.

The recovery will take longer than desired because of this difference in the rate at which industries have recovered.

The questions outnumber the answers, and answers are scarce.

- Have the stimulus packages effectively increased employment? Is additional stimulus capable of increasing employment?
- Retail sales are strong because of savings and stimulus payments. How will retail employment evolve? Will retail growth slow when the savings rate declines? Will the evolution of the retail trade industry impact municipalities that rely on retail sales taxes as a primary source of revenue?
- How many people will not be able to find employment?

Summary of Employment Recovery

United States and Colorado

Employment through June 2021 was 99,400 below the value for February 2020. Most of the shortfall is in the tourism and state and local government sectors. The sectors in the two columns on the right may recover in late 2022 or 2023.

Recovered or Least Losses

- Wholesale trade
- Management of companies
- Transportation, warehousing, and utilities
- Professional, scientific, and technical services
- Federal government

Colorado +14,300.

These sectors account for about 21% of total employment.

U.S. -370,000

These sectors account for about 19% of total employment.

Short-Term Recovery (2021)

- Retail trade
- Financial activities
- Healthcare

Colorado -6,600.

These sectors account for about 28% of state employment.

U.S. -1.2 million.

They account for about 30% of total U.S. employment.

Mid-Term Recovery

- Manufacturing
- Construction
- Administrative services
- Information
- Other services

Colorado -35,000.

These sectors account for about 22% of state employment.

U.S. -1.9 million.

About 25% of all employment is in these sectors.

Long-Term Recovery

- State government
- Local government
- Arts and entertainment
- Accommodations and food
- Extractive industries
- Educational services

Colorado -72,100.

These sectors account for about 28% of total state employment.

U.S. -4.1 million.

About 26% of U.S. jobs are in these sectors.

Source: BLS, cber.co.

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

Employment

The Recovery for Colorado, Idaho, and Utah

Idaho was the first state whose employment returned to the pre-pandemic level (December 2020), and Utah was the second (February 2021). How does Colorado's recovery compare to these two states?

Idaho and Utah had faster recoveries than Colorado. They are smaller states, and they were affected less by COVID-19 related policies.

In Idaho and Utah, employment growth occurred at a decelerating rate between May and September. In Colorado, that period lasted from May through December, including two months of job losses when Idaho and Utah were adding workers.

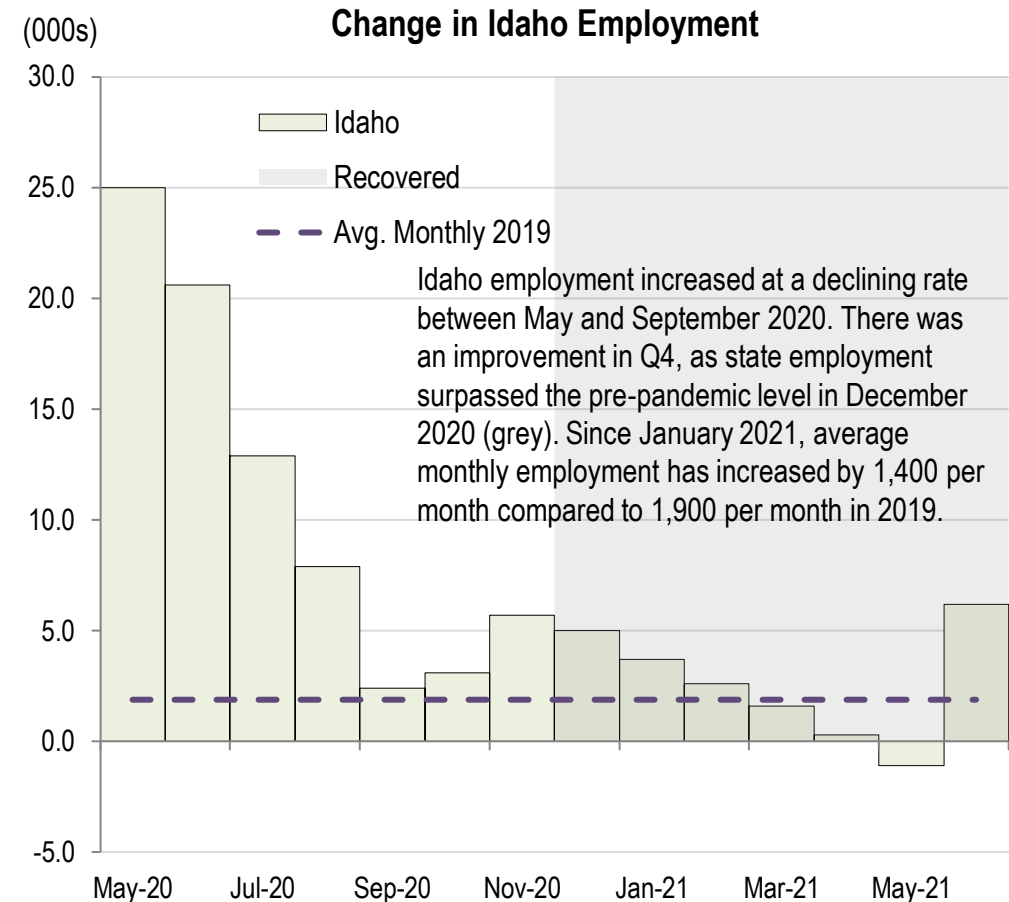
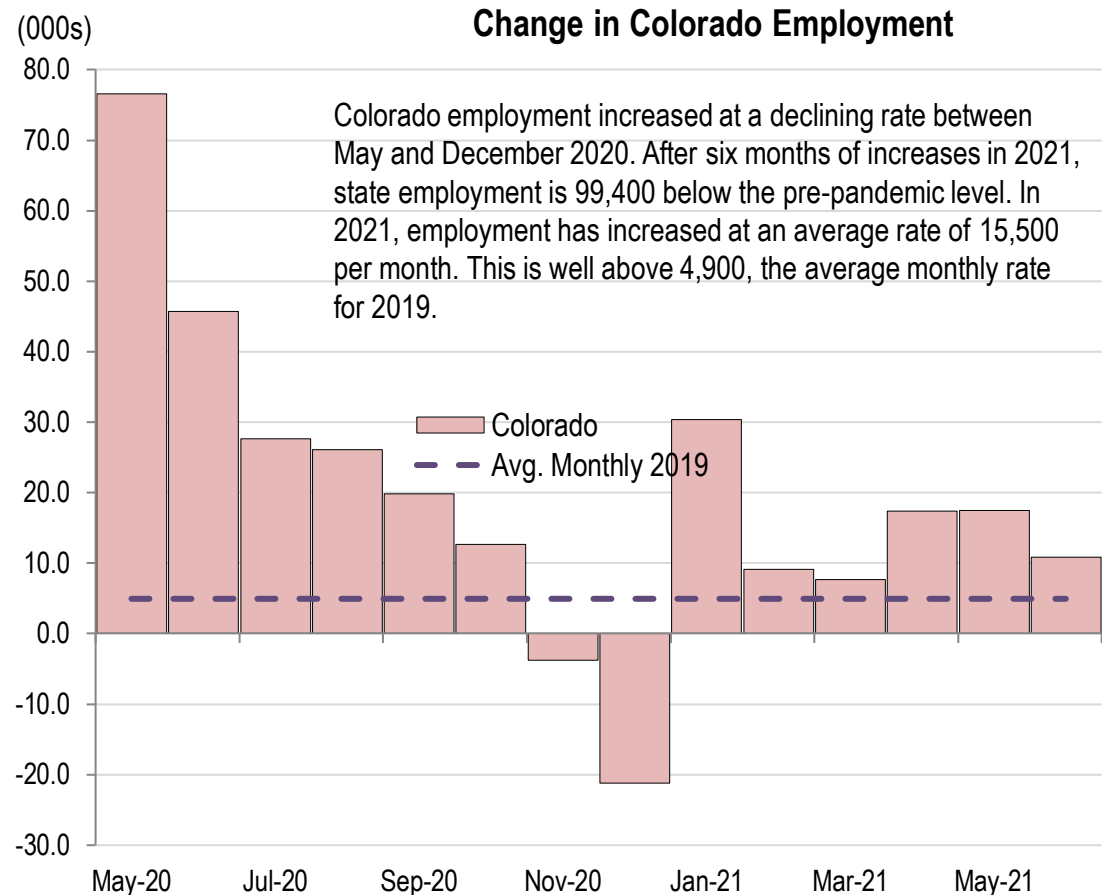
Idaho returned to its pre-pandemic level in December 2020. Since January 2021, the rate of job growth was below the 2019 average.

Utah returned to its pre-pandemic level in February 2021. Since March, the rate of job growth was above the 2019 monthly average.

This comparison between the three states suggests there will be a point when the rate of growth for Colorado will return to a level near the 2019 average.

Change in Employment (Colorado vs. Idaho)

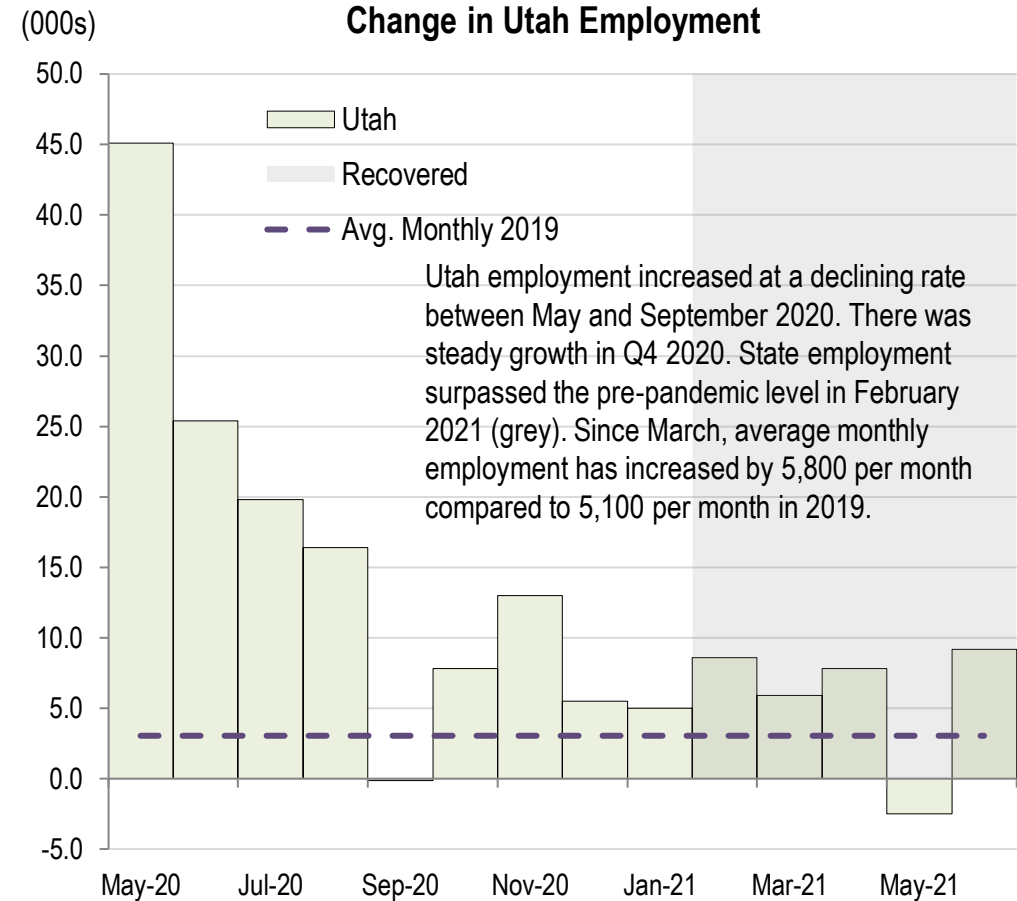
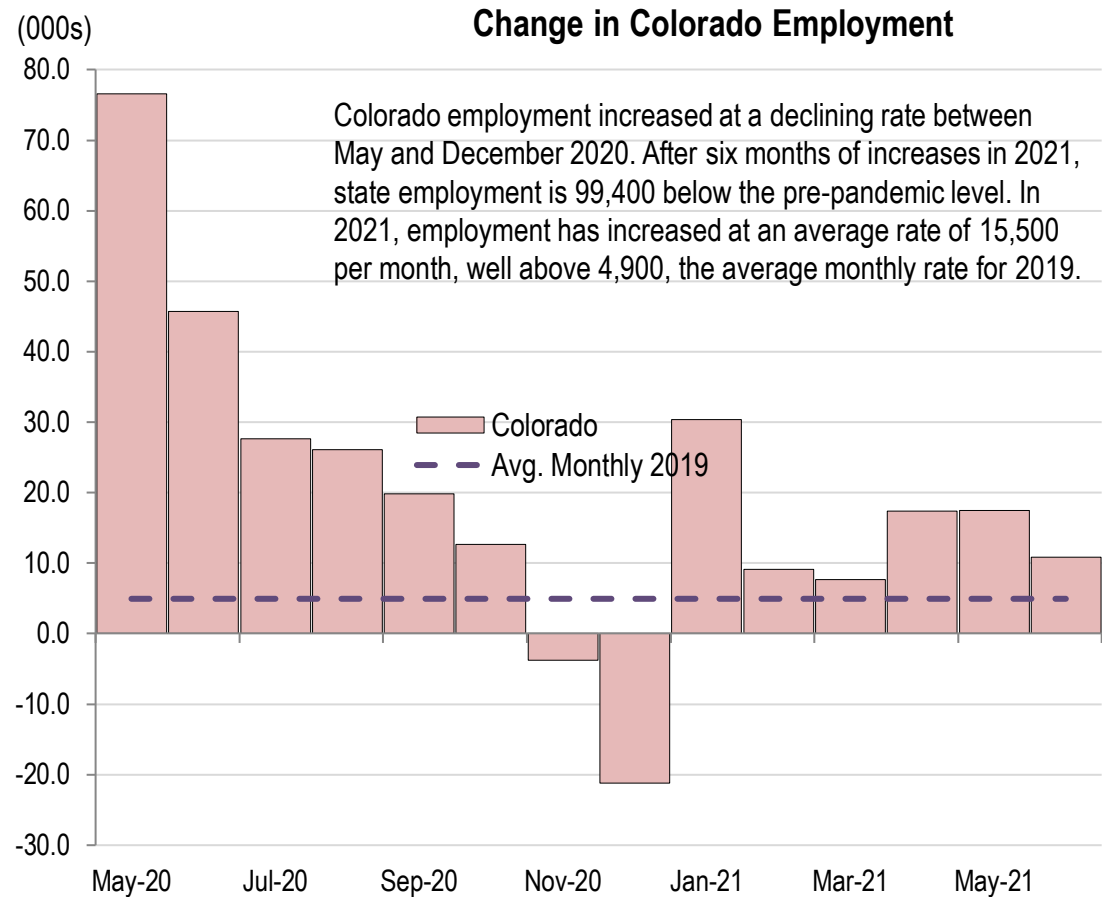
May 2020 to June 2021 vs. Average Jobs Added in 2019



Source: Bureau of Labor Statistics, cber.co.

Change in Employment (Colorado vs. Utah)

May 2020 to June 2021 vs. Average Jobs Added in 2019



Source: Bureau of Labor Statistics, cber.co.

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

Change in Population (Age 20 to 64)

Colorado

Is the working-age population growing fast enough to keep up with the needs of the state's workforce?

The state's working-age population is not growing fast enough to meet the needs of the state's workforce. As a point of reference, wage and salary employment increased by about 60,000 per year between 2016 and 2019.

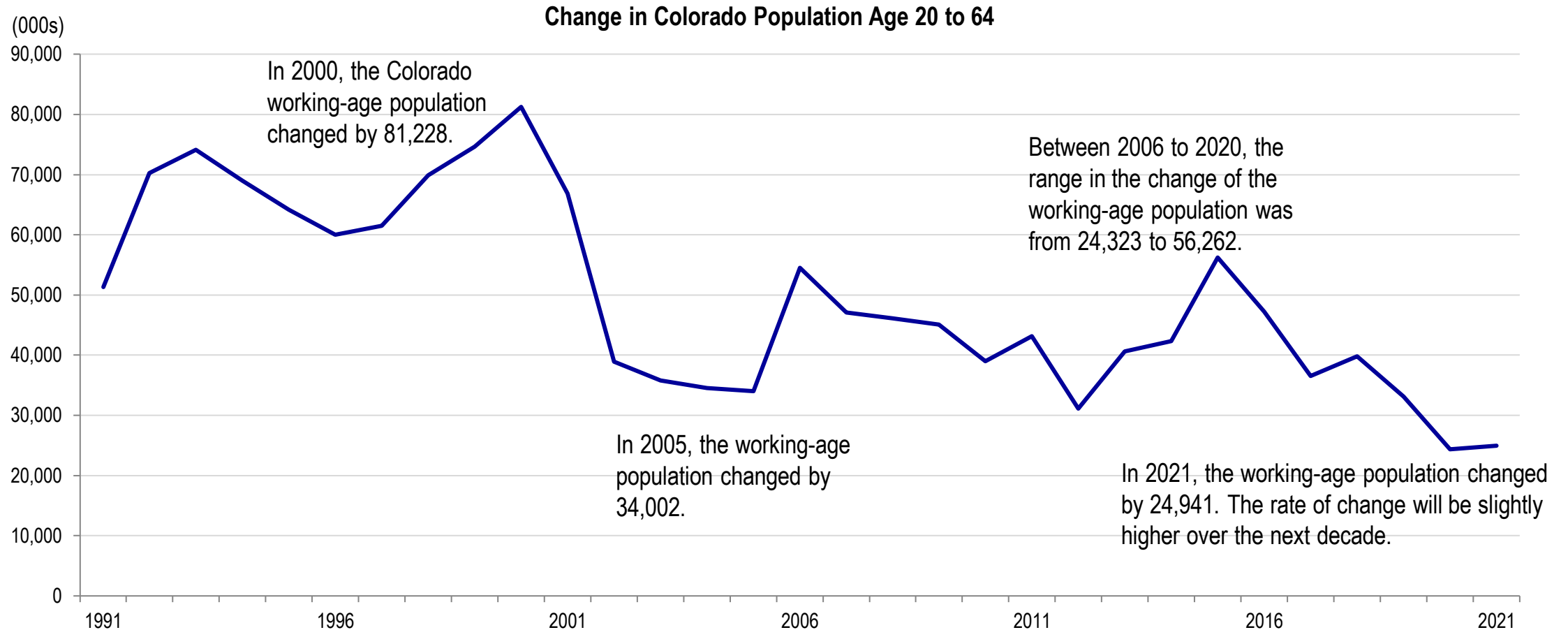
In 2000, the Colorado working-age population (20 to 64) changed by 81,228.

In 2021, with a much larger population, it will only change by 24,941. It will increase slightly over the next decade.

The reduced fertility rate and lower net migration have decreased the growth rate for the working-age population. The lack of affordable housing, increased congestion, and unfavorable tax and public policy have negatively affected net migration.

Change in Population (Age 20 to 64)

Colorado



Source: Bureau of Labor Statistics, cber.co.

Unemployment by Occupation

How does the unemployment rate and number of unemployed vary by occupation?

There are lower unemployment rates for occupations with higher education and skills requirements.

There are higher unemployment rates for occupations with lower education and skills requirements.

In addition, there is a skills mismatch between the two groups.

It will take time for the supply and demand to reach equilibrium.

There will be some people who will not find jobs.

U.S. Unemployment by Standard Occupation Code (SOC)

June 2021

Unemployment by Occupation – June 2021				
	Total Unemployed (000s)	Total Rate	Men's Rate	Women's Rate
Management occupations	623	3.1%	2.8%	3.6%
Business and financial operations occupations	255	2.8%	2.8%	2.8%
Computer and mathematical occupations	128	2.2%	2.1%	2.7%
Architecture and engineering occupations	111	3.4%	3.3%	4.0%
Life, physical, and social science occupations	87	5.3%	5.4%	5.1%
Community and social service occupations	85	2.9%	0.9%	3.9%
Legal occupations	55	3.0%	2.7%	3.3%
Education, training, and library occupations	461	5.2%	5.7%	5.0%
Arts, design, entertainment, sports, and media occupations	322	9.2%	8.5%	9.8%
Healthcare practitioners and technical occupations	177	1.8%	2.2%	1.7%
Healthcare support occupations	297	5.8%	6.1%	5.8%
Protective service occupations	130	4.1%	3.3%	6.6%
Food preparation and serving related occupations	914	10.9%	10.8%	10.9%
Building and grounds cleaning and maintenance occupations	391	6.6%	5.5%	8.3%
Personal care and service occupations	378	9.1%	17.0%	6.7%
Sales and related occupations	1,938	6.0%	4.2%	7.7%
Office and administrative support occupations	906	6.2%	6.5%	6.1%
Farming, fishing, and forestry occupations	115	8.6%	8.1%	9.9%
Construction and extraction occupations	776	8.7%	8.7%	8.8%
Installation, maintenance, and repair occupations	199	3.9%	4.1%	1.4%
Production occupations	580	6.8%	6.9%	6.6%
Transportation and material moving occupations	1,067	8.6%	8.1%	10.5%

Nine of 22 Standard Occupational Classification codes (SOC) categories have unemployment rates less than 4.5% (green). There are 1.8 million unemployed in these SOC codes. Generally, these are higher-paying occupation categories.

Two occupation categories have unemployment rates between 4.5% and 5.5% (blue). Eleven occupation categories have an unemployment rate of 5.5% or more (orange). There are about 8.2 million unemployed in the categories that have an unemployment rate greater than 4.5%. Many of these occupations pay lower wages.

Job Openings and Separations

United States

Why is there such a large gap between the number of job openings and separations?

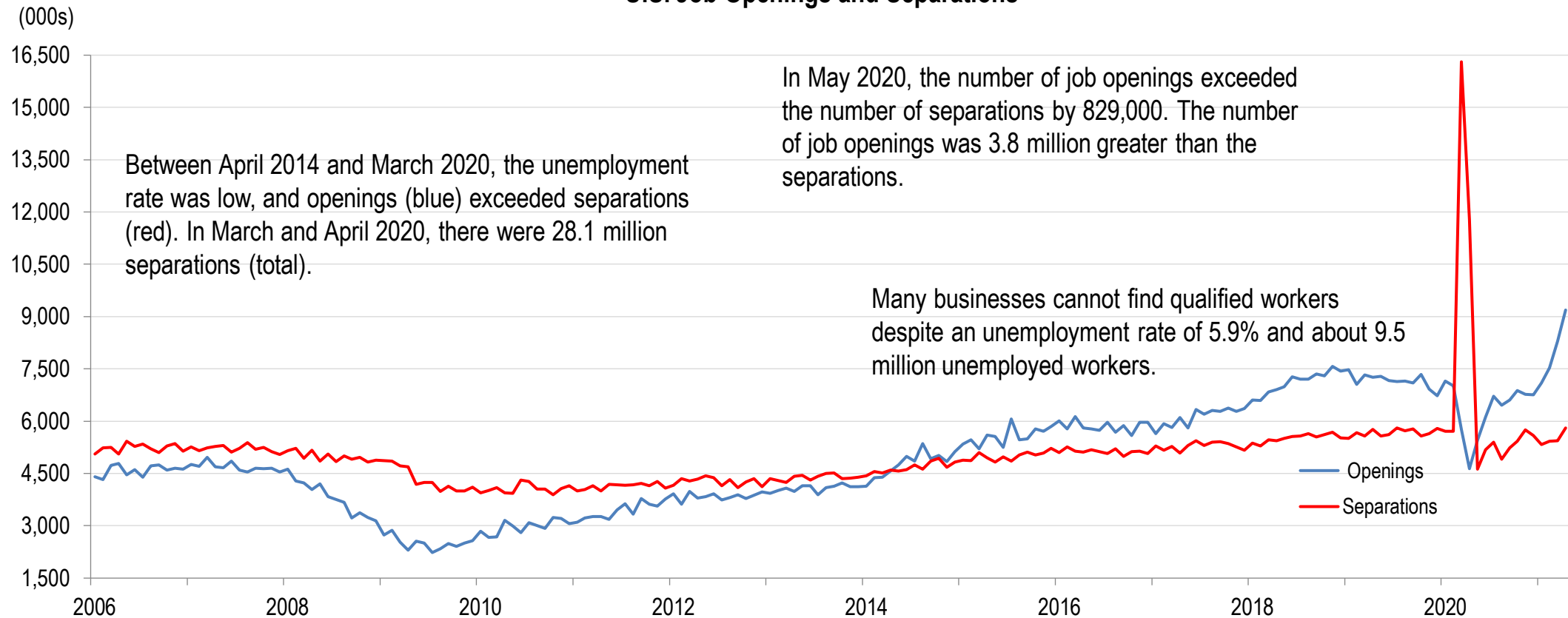
For the past year, the number of job separations has been lower than pre-pandemic. There are multiple challenges in closing the gap between job separations and openings.

- Different state COVID-19 policies have caused an uneven recovery. Larger states have recovered more slowly.
- In some cases, the unemployed did not want to return for safety reasons (the Great Resignation) or because they were receiving unemployment or stimulus benefits.
- The size of the working-age population is increasing at a decreasing rate.
- Industries and occupations are evolving. In some cases that evolution has been accelerated by the pandemic.
- There is a mismatch of skills.

Job Openings and Separations

United States

U.S. Job Openings and Separations



Source: JOLTS, BLS, cber.co.

Weekly High Propensity Business Applications

U.S. and Colorado

Are people starting businesses rather than trying to find jobs with an established employer? If so, what types of business are they opening, and how will they impact Colorado?

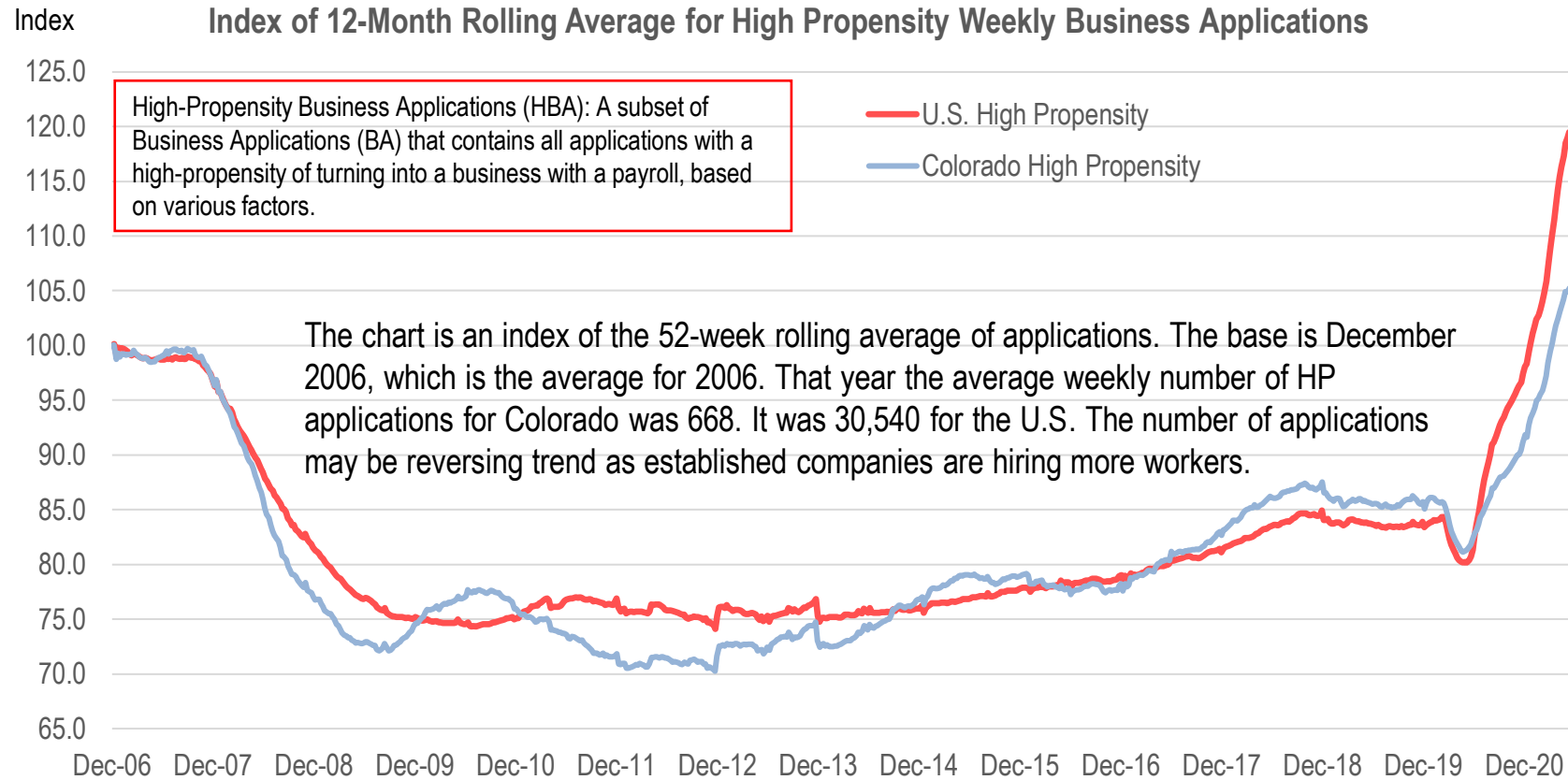
Coloradans are starting businesses and high propensity businesses at a greater rate than neighboring states. For example, the number of Utah applications is well below the number for Colorado, possibly because their wage and salary employment has returned to pre-pandemic levels.

The number of Colorado high propensity applications is in the top one-third of all states. Also, the percentage of Colorado applications is growing slower than the U.S. rate because the absolute growth in larger states such as Florida, Texas, and California is significantly more than in Colorado.

The mix of new Colorado businesses, by industry, is not known. Some will add value to the community, while others add value regionally or nationally.

Weekly High Propensity Business Applications

Index of High Propensity 2017 through 2021 (12 month rolling average)



Change in Applications

In December 2007, the number of high propensity applications for Colorado (blue) and the U.S. (red) declined. The number of applications were flat from 2008 to 2015. At that point, they increased gradually until early 2020 when both Colorado and U.S. applications increased sharply. In 2006, Colorado had about 2.2% of applications. By 2021 the state's share declined to 1.9%. Most likely, this occurred because of the increase of applications in larger states.

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

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Real GDP Growth

What is the relevance of the growth in the real GDP?

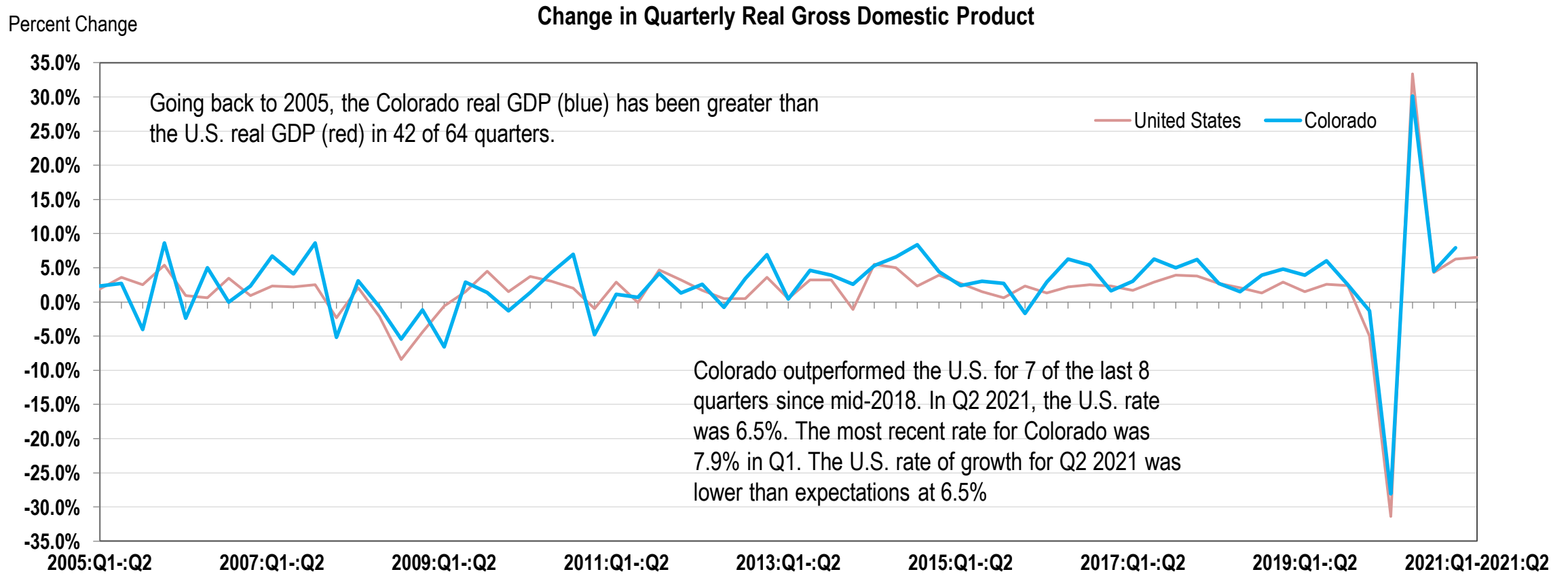
It means the output from the more prominent and faster-growing industries is masking the challenges faced by weaker and evolving market segments and the labor market.

Historically, the rate of growth for the Colorado real GDP has exceeded the U.S. rate. Specifically, the Colorado rate has topped the U.S. rate for seven of the past eight quarters.

Colorado real GDP passed the pre-pandemic value in Q1 2021. The U.S. will exceed its Q4 2019 value in Q2 2021.

Colorado had the fifth-best real GDP for all states during Q1 2021. The technology, finance and real estate, trade, and foodservice industries led to the growth in real GDP in Q1.

Change in Real Gross Domestic Product Colorado vs. U.S. (Quarterly)

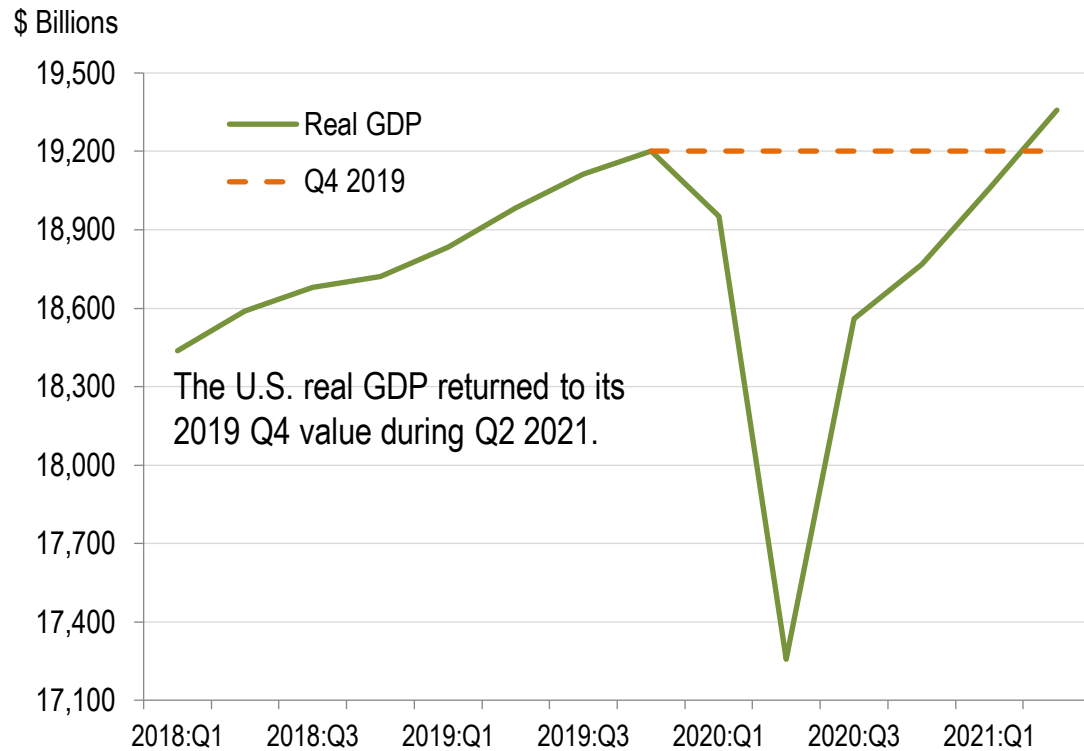


Source: Bureau of Economic Analysis. Note: U.S. real GDP is summary of states GDP.

Real GDP Value

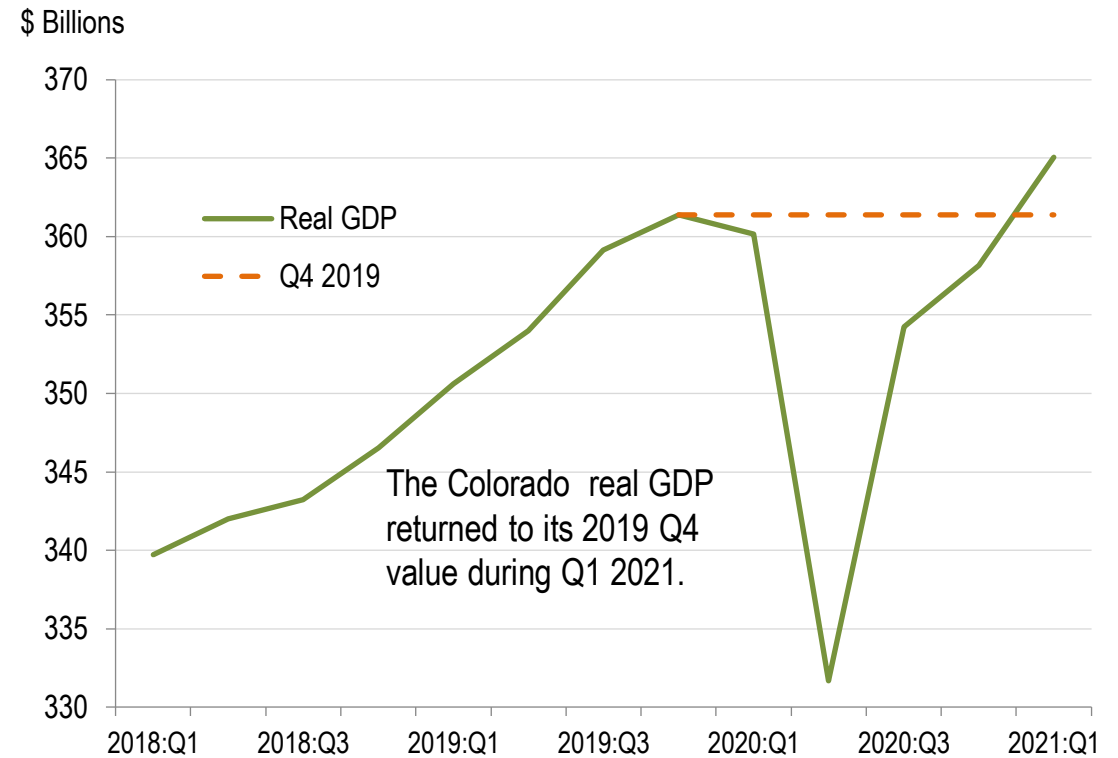
Colorado vs. GDP

US Real GDP



Source: bea.gov, chained 2012, SQGDP9 and Table 1.1.6, cber.co.

Colorado Real GDP



Inflation

Is the current inflation going to be short-term, long-term, or will it turn into hyperinflation?

Last fall, the Federal Reserve stated that inflation would be minimal in the months ahead.

Inflation has arrived, and it is much greater than expected. Some economists believe that if the current inflation is transitory (short-termed), it has been caused by pent-up demand and supply chain issues and that it will go away when these issues disappear.

On the other hand, some economists believe it will be tough to get inflation under control, given the excessive stimulus spending. The most notable economist to take this stance is Lawrence Summers, who served in key economic positions under Clinton and Obama. Summers expects U.S. inflation to be above 5% by the end of the year. He stated that the Fed will only remove the punch bowl after it sees people staggering around drunk.

The prospects for inflation are a real unknown. We can only hope that Summers is wrong.

Inflation

Last fall, some of the country's top economists said that pigs would fly before inflation rose significantly. They have recently indicated the flight time of the pigs will be short-lived.

The following are examples of the YOY increase in inflation in Colorado for May 2021.

Recreation	-13.9%	Household Energy	3.1%
Medical	0.9%	Food, not at home	4.4%
Housing	1.4%	Household Furnishing	7.6%
Food	2.4%	Transportation	17.4%
School fees/childcare	2.6%	Apparel	26.4%
Electricity	2.6%	Used Vehicles	28.6%
Alcoholic Beverages	2.7%	Motor Fuel	68.1%

The overall May CPI for Colorado was 3.2% (the most recent data).

U.S. inflation rose from 4.9% in May to 5.3% in June.

Source: BLS, cber.co.

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DIA Passengers

How fast is the recovery in passengers at DIA? Why is this an important indicator?

Are people flying for business or pleasure? Are people flying domestic or international?

The number of DIA passengers is an indicator of the global economy, the willingness of Americans to travel, and a sign of what lies ahead for the state tourism industry.

People are more comfortable traveling. There is uncertainty about how the shift to remote work and virtual meetings will affect the travel industry.

The number of domestic passengers will return to 2019 levels in 2023.

The number of international passengers will return to pre-pandemic levels in 2024.

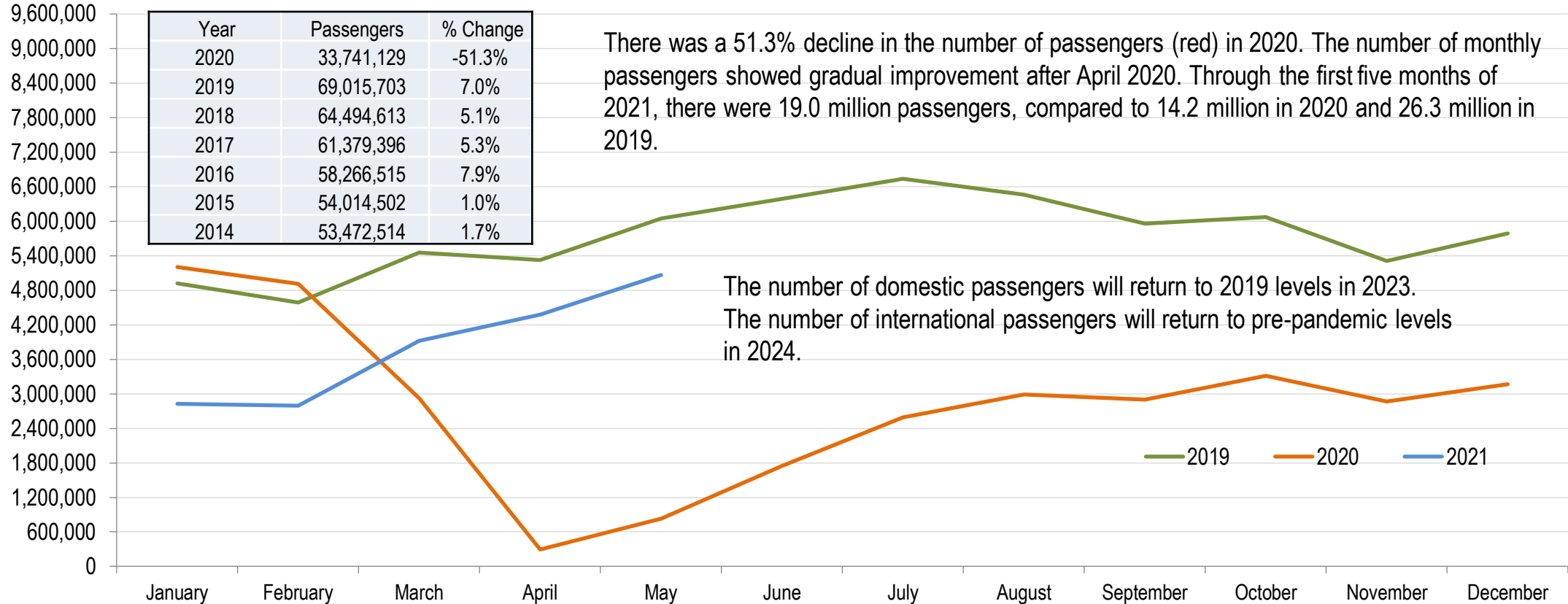
The slow rate of return will cause a delayed recovery for the tourism and travel industries.

Denver International Airport Passengers

Monthly

DIA Passengers

Passengers

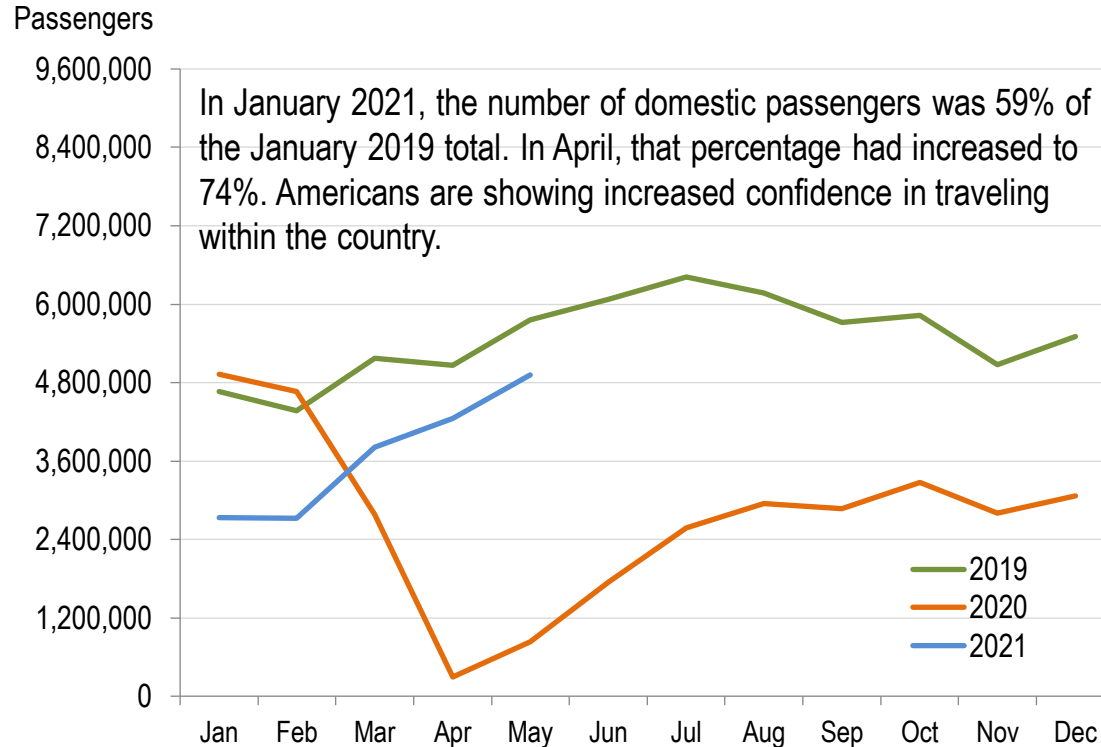


Source: flydenver.com, cber.co.

Denver International Airport Passengers

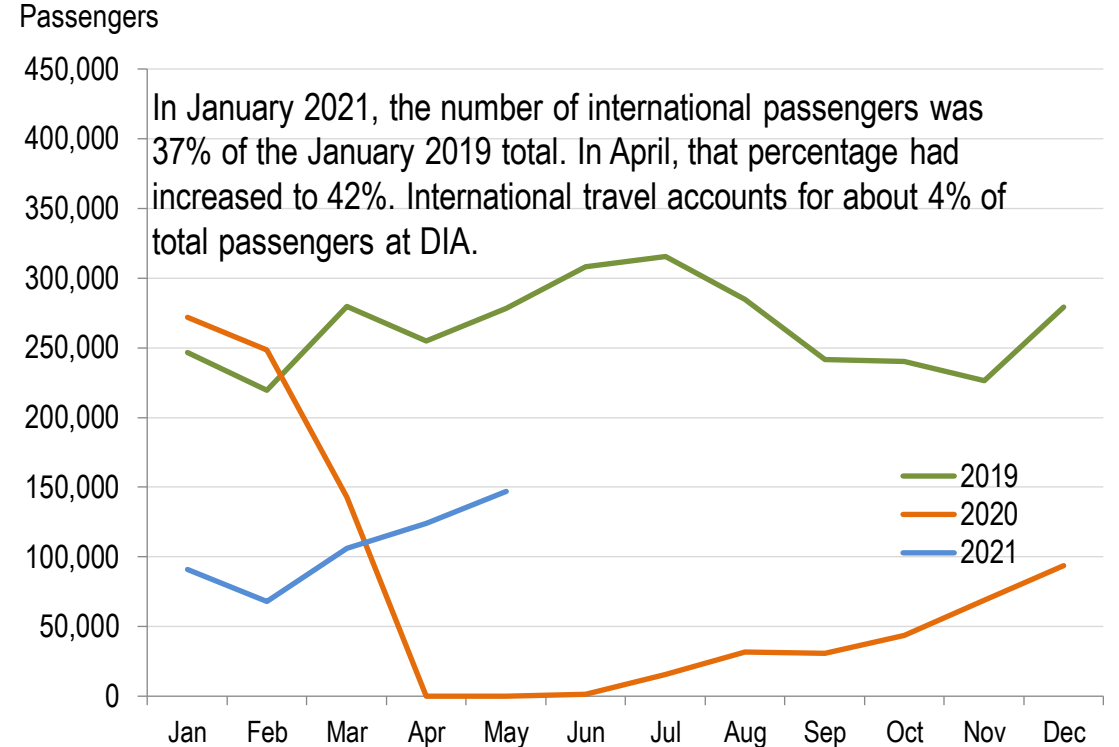
Monthly Domestic and International Passengers

DIA Domestic Passengers



Source: flydenver.com, cber.co.

DIA International Passengers



Conclusion

Employment Recovery

Rate of recovery - The recovery of U.S. and Colorado employment is slower than desired. It continues to be uneven across geographic regions, industries, and occupations. More women are returning to the workforce.

Leading states in recovery - The level of employment in Idaho and Utah returned to pre-pandemic levels earlier than in other states. As expected, their rate of job growth declined as they approached and reached their pre-pandemic level.

Job openings - The number of job openings continues to increase. There are many reasons that businesses are struggling to find qualified workers, and applicants are not having trouble finding a job.

Unemployment by occupations - There tends to be a lower rate of unemployment for occupations with higher wages and a higher rate of unemployment for occupations with lower wages.

Recovery of Real GDP and Other Metrics

Real GDP - The value of the Colorado real GDP returned to its pre-pandemic level in Q1 2021, and the U.S. real GDP returned in Q2 2021. The strong growth was driven by personal consumption.

Inflation - During the fall of 2020, the Federal Reserve projected minimal growth of inflation. Inflation increase during Q1 and Q2 of 2021. The response from the Federal Reserve was that the inflation would be temporary. Other noted economists have projected hyperinflation.

DIA passengers - The number of DIA passengers is a harbinger of the rate of recovery for the state tourism industry. The number of passengers will return to its pre-pandemic level in 2023.

High propensity business applications - The number of high propensity applications increased during the pandemic. Presumably, people started businesses rather than going to work for an established organization. The rapid growth in the number of applications may be reversing the trend.

cber.co

What is on the Horizon for the U.S. and Colorado Economies – July 2021

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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.