## Review of Colorado Economy Through March 2021





cber.co Colorado-based Business and Economic Research Prepared April 20, 2021

## Overview

The purpose of this chartbook is to review U.S. and Colorado indicators that show both economies are recovering from COVID-19 policies at a faster pace than anticipated several months ago. The federal stimulus will lead to more robust economic activity into 2022.

COVID-19 policies have had different impacts on industry sectors and MSA areas. As a result, they are recovering at different rates. The value for the real U.S. GDP will return to the pre-pandemic level during Q2 2021. Total employment will return to pre-pandemic levels in 2022 or 2023.

#### Highlights

#### **United States**

- Real GDP
- Employment and Unemployment
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- S&P 500 and WTI Oil Prices
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#### Colorado

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## Highlights

#### **Key Points**

- The re-opening of the economy and the federal stimulus have improved economic activity and the labor market.
- Economic activity is recovering faster than expected six months ago.
- The labor market is improving unevenly across geographies and industries.
- The equity markets remain strong.
- The price of oil is above \$60 per barrel.
- In Colorado, the most significant number of job losses are in Denver, Colorado Springs, and Boulder.
- Colorado sectors with the highest rate of job recovery are financial activities, TWU, MCE, federal government, and retail trade. Sectors with the lowest rate of job recovery are state and local government, leisure and hospitality, and other services.
- Sectors with higher wages have recovered more quickly.

#### Questions

- Will COVID-19 vaccinations prevent the virus in the long term?
- How will stimulus funding impact the economy?
- Are the criticisms of the extensive federal stimulus justified?
- How many months will it take for the labor force participation rate to return to pre-pandemic levels?
- What disruptions will occur in the supply chains as a result of COVID-19 policies?
- Will inflation or stagflation become a problem?
- How long will interest rates remain low?
- What will it take to increase the overall labor force participation rate?
- Is increased taxation for corporate America and wealthy Americans a feasible way to finance stimulus programs?

## The United States Economy



#### Real Gross Domestic Product United States

#### **Key Points**

The near-term forecasts for economic activity continue to improve. Real GDP will grow by 6.0% in 2021 and a more modest rate in 2022.

The value of real GDP will return to pre-COVID levels in Q2 2021.

It will take U.S. employment much longer to return to pre-COVID levels, most likely in 2022 or 2023.

## U.S. Real GDP Growth The Conference Board Forecast (April 14, 2021)

#### Real GDP in 2021

The Conference Board April 14 forecast calls for real GDP growth of 5.0% in Q1 2021, up from 4.3% in Q4 2020. Real GDP growth for 2021 will be 6.0%, with an increase in personal consumption of 7.2%. There will be strong growth in the housing market (17.9%). The value of real GDP will return to prepandemic levels in Q2 2021.

#### Assumptions of the Forecast

There will be a reduction in the number of new COVID-19 cases and, mobility will increase as restrictions are relaxed. The federal stimulus programs will support increased personal consumption and business investment. The labor markets will improve as the year progresses and, economic activity will taper off to a more modest level in 2022.

Conference Board 2021 US Real GDP Growth Forecast											
	Q1 2020	Q2 2020	Q3 2020	Q4 2020	Q1 2021	Q2 2021	Q3 2021	Q4 2021	2019	2020	2021
Real GDP	- 5.0%	- 31.4%	33.4%	4.3%	5.0%	8.6%	6.8%	4.2%	2.2%	- 3.5%	6.0%
Personal Consumption	- 6.9%	- 33.2%	41.0%	2.3%	7.7%	9.5%	7.9%	5.1%	2.4%	- 3.9%	7.2%
Residential Investment	19.0%	- 35.5%	63.0%	36.6%	12.0%	16.0%	12.0%	7.0%	-1.7%	6.1%	17.9%
Nonresidential Investment	-6.7%	-27.2%	22.9%	13.1%	7.6%	7.7%	7.7%	6.1%	2.9%	-4.0%	7.7%
Total Gov't. Spending	1.3%	2.5%	-4.8%	-0.8%	0.4%	0.9%	0.9%	1.5%	2.3%	1.1%	-0.2%
Exports	- 9.5%	- 64.4%	59.6%	22.3%	3.0%	8.6%	6.6%	6.1%	-0.1%	- 12.9%	6.4%
Unemployment Rate	3.8%	13.1%	8.8%	6.8%	6.2%	5.6%	5.0%	4.6%	3.7%	8.1%	5.3%
PCE Inflation (%Y/Y)	1.3%	-1.6%	3.7%	1.5%	1.8%	2.3%	2.1%	2.1%	1.6%	1.4%	2.0%
Core PCE Inflation (%Y/Y)	1.6%	-0.8%	3.4%	1.3%	1.6%	2.2%	2.0%	2.2%	1.6%	1.4%	2.0%
Source: The Conference Board and	cber.co.										

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

## U.S. Real GDP Change Between 2019 and 2020

The following table shows the value of real GDP for each industry, the absolute change in the real GDP, and the relative change in real GDP. The table is sorted by the second column (real GDP for 2020).

#### Change in U.S. Real GDP by Industry

Industry Description	Real GDP 2020	Change 2019 vs 2020	Rate
All industry total	18,426,076	(665,586)	-3.5%
Finance, insurance, real estate, rentals	3,645,073	10,174	0.3%
Professional and business services	2,462,994	(55,933)	-2.2%
Government and government enterprises	2,183,071	(46,472)	-2.1%
Manufacturing	2,152,600	(62,745)	-2.8%
Education, health care, and social services	1,563,961	(95,743)	-5.8%
Information	1,283,532	39,572	3.2%
Retail trade	1,087,282	(30,968)	-2.8%
Wholesale trade	1,049,146	(43,335)	-4.0%
Construction	652,071	(12,535)	-1.9%
Leisure and hospitality	526,585	(201,805)	-27.7%
Transportation and warehousing	502,095	(73,778)	-12.8%
Mining and oil and gas extraction	447,123	(57,193)	-11.3%
Other services (except government)	326,840	(47,191)	-12.6%
Utilities	295,921	10,230	3.6%
Agriculture, forestry, fishing and hunting	257,159	13,552	5.6%

#### **Key Points**

The real GDP for the U.S. in 2020 was -3.5%.

The real GDP rates of growth for the industries highlighted in green were positive. The rates were negative for the industries not highlighted.

The industries with the highest rates of decline had fewer employees. As pandemic restrictions have been relaxed, the impact on many of these industries have declined.

It will be necessary for consumers to regain confidence in traveling and attending events in large venues before the hospitality, transportation, and entertainment sectors improve.

The economy performed better than anticipated in Q1 2021. There will be strong growth during the second half of the year. The real GDP will increase by 6.0% in 2021.

#### Source: Bureau of Economic Analysis, cber.co.

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

## Employment and Unemployment United States and Colorado

#### **Key Points**

U.S. employment in March 2021 was 94.5% of the total for February 2020.

Both the LFPR and the unemployment rate for Colorado and the U.S. have improved over the past year. The Colorado unemployment rate is greater than the U.S. Four states have an unemployment rate of 2.9%. At the other end of the spectrum, Hawaii has a rate of 9.0%.

Idaho and Utah are the top two states for the job recovery.

## Change in Employment United States

(000s) 154.000 ⊐	United States Employment	
152,000 -		-
150,000 -	United States	
148,000 -	Feb 2020 Employment increased by approximately 1.4 employment employment	
146,000 -	Total employment for 2020 was down 10.0 million	
144,000 -	During the four months million compared to February 2020.	
142,000 -	between May and	
140,000 -	about 11.0 million	
138,000 -	employees added. Total U.S. Employment (thousands)	
136,000 -	In March and April 2020	
134,000 -	employment declined by 22.4 million.	
132,000 -	Difference -8 403	
130,000 -	Mar 2021 as % of Feb 2020 94.5%	
128,000 +	Dec-19 Jan-20 Feb-20 Mar-20 Apr-20 May-20 Jun-20 Jul-20 Aug-20 Sep-20 Oct-20 Nov-20 Dec-20 Jan-21 Feb-21 M	lar-21

Source: Bureau of Labor Statistics, cber.co.

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

## Labor Force Participation Rate (LFPR) United States Total, Men, and Women



Source: FRED, BLS, cber.co.

## U.S. and Colorado Unemployment Rate

#### U.S. Unemployment vs. Colorado Unemployment Rate Rate 16.0% The U.S. unemployment rate (red) rose from 3.5% in February 2020 to 14.7% in April. It dropped to 6.7% in 14.0% U.S. Rate November and remained there in December. By March 2021, the number of unemployed dropped to 6.0%. The 12.0% Colorado Rate number of unemployed fell from 23.1 million in April 2020 to 9.7 million in March 2021 10.0% 8.0% 6.0% The Colorado unemployment rate peaked at 12.2% in April 2020. It declined to 6.4% in September and 4.0% stayed there in October and November. The number of unemployed dropped from 373,643 in April to 205,377 2.0% in March 2021. The Colorado unemployment rate has been greater than the U.S. since November 2020. 0.0% 2007 2008 2009 2010 2011 2012 2013 2014 2015 2016 2017 2018 2019 2020

Source: Bureau of Labor Statistics and cber.co.

## Unemployment Rates by States March 2021

Une	employment Rate	e < 4.5%	Unemplo	yment Rate Betwo	een 4.6% and 6.4%
Rank	State	Rate	Rank	State	Rate
1	Nebraska	2.9	18	Georgia	4.5
2	South Dakota	2.9	19	Florida	4.7
3	Utah	2.9	20	Ohio	4.7
4	Vermont	2.9	21	Maine	4.8
5	New Hampshire	3.0	22	Kentucky	5.0
6	Idaho	3.2	23	Tennessee	5.0
7	lowa	3.7	24	Michigan	5.1
8	Kansas	3.7	25	South Carolina	5.1
9	Alabama	3.8	26	Virginia	5.1
10	Montana	3.8	27	North Carolina	5.2
11	Wisconsin	3.8	28	Wyoming	5.3
12	Indiana	3.9	29	Washington	5.4
13	Minnesota	4.2	30	West Virginia	5.9
14	Missouri	4.2	31	Oregon	6.0
15	Oklahoma	4.2	32	Maryland	6.2
16	Arkansas	4.4	33	Mississippi	6.3
17	North Dakota	4.4	34	Colorado	6.4

In March, the U.S. unemployment rate dropped to 6.0%. Thirty states had unemployment rates lower than the national rate (green).

Twenty-three states had an unemployment rate of 5.0% or less. No states had unemployment rates in double digits.

About 16.9% of the U.S. labor force is in the 17 states, with unemployment rates less than 4.5% (column 1).

About 36.1% of the U.S. labor force is in the 18 states, with unemployment rates between 4.6% and 6.4% (column 2).

About 47% of the U.S. labor force is in the 16 states and D.C., with unemployment rates greater than 6.4% (column 3).

The states with the largest labor forces are CA, TX, FL, NY, PA, IL, OH, GA, NC, and MI. About 53% of the U.S. labor force resides in these 10 states.

	e is > 6.4%	
Rank	State	Rate
35	Delaware	6.5
36	Alaska	6.6
37	Arizona	6.7
38	Massachusetts	6.8
39	Texas	6.9
40	Illinois	7.1
41	Rhode Island	7.1
42	Louisiana	7.3
43	Pennsylvania	7.3
44	New Jersey	7.7
45	District of Columbia	7.8
46	Nevada	8.1
47	California	8.3
48	Connecticut	8.3
49	New Mexico	8.3
50	New York	8.5
51	Hawaii	9.0

## Recovery by State March 2021 – Sorted by Percent of Recovery

The following tables show the February 2020 employment, change from February 2020, and percent of recovery by state. Colorado is ranked 27<sup>th</sup> in its percent of recovery. They are ranked 32<sup>nd</sup> in absolute recovery.

Percent Recovery by State (Ranked 1-17)			Percent Recovery by State (Ranked 18-34)					Percent Recovery by State (Ranked 35-51)						
Rank	State	Feb 2020	3/21 vs 2/20	Rate	Rank	State	Feb 2020	3/21 vs 2/20	Rate	Rank	State	Feb 2020	3/21 vs 2/20	Rate
1	Idaho	773.4	10.4	101.3%	18	Indiana	3,163.8	-131.9	95.8%	35	Oregon	1,973.0	-132.4	93.3%
2	Utah	1,572.2	11.3	100.7%	19	Oklahoma	1,701.7	-74.1	95.6%	36	Illinois	6,142.8	-412.8	93.3%
3	Montana	488.0	-6.0	98.8%	20	New Hampshire	689.0	-31.5	95.4%	37	Pennsylvania	6,092.6	-414.1	93.2%
4	South Dakota	442.8	-7.5	98.3%	21	Maine	640.0	-30.4	95.3%	38	Connecticut	1,696.3	-116.0	93.2%
5	Nebraska	1,032.4	-24.3	97.6%	22	Wyoming	288.6	-13.8	95.2%	39	Michigan	4,452.9	-320.1	92.8%
6	Arkansas	1,292.4	-30.7	97.6%	23	Delaware	468.0	-22.8	95.1%	40	Alaska	329.8	-25.0	92.4%
7	Alabama	2,086.5	-64.1	96.9%	24	Kentucky	1,957.0	-96.0	95.1%	41	Louisiana	1,993.5	-155.7	92.2%
8	Tennessee	3,153.7	-98.8	96.9%	25	Wisconsin	2,997.8	-148.0	95.1%	42	New Jersey	4,229.6	-332.3	92.1%
9	North Carolina	4,626.6	-157.0	96.6%	26	Virginia	4,091.0	-203.4	95.0%	43	New Mexico	861.9	-67.8	92.1%
10	Mississippi	1,163.2	-40.5	96.5%	27	Colorado	2,819.0	-146.2	94.8%	44	Rhode Island	507.2	-40.3	92.1%
11	Arizona	2,993.1	-104.6	96.5%	28	West Virginia	718.7	-37.3	94.8%	45	Vermont	314.5	-25.8	91.8%
12	South Carolina	2,196.4	-78.7	96.4%	29	Washington	3,513.1	-182.9	94.8%	46	Massachusetts	3,733.4	-306.7	91.8%
13	Texas	12,970.0	-469.2	96.4%	30	Ohio	5,609.9	-295.0	94.7%	47	California	17,660.9	-1,527.3	91.4%
14	Georgia	4,666.5	-180.5	96.1%	31	Maryland	2,779.0	-150.9	94.6%	48	District of Columbia	803.4	-71.5	91.1%
15	Kansas	1,428.8	-55.8	96.1%	32	North Dakota	440.3	-24.4	94.5%	49	New York	9,835.1	-987.3	90.0%
16	Missouri	2,926.6	-114.7	96.1%	33	Florida	9,072.1	-518.5	94.3%	50	Nevada	1,442.8	-146.6	89.8%
17	lowa	1,590.9	-65.0	95.9%	34	Minnesota	2,996.3	-191.1	93.6%	51	Hawaii	662.3	-111.9	83.1%

Source: Bureau of Labor Statistics, cber.co.

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

## **Business Applications**

#### United States

#### **Key Points**

## U.S. business and high propensity applications for 2020 increased at a faster rate than in 2019.

Through the first fifteen weeks of 2021, U.S. applications and high propensity applications increased at a significantly greater rate than in 2020. The rate of growth in 2021 has been better than expected.

## U.S. Weekly Business Applications Total and High Propensity 2019 through 2021



#### Weekly Business Applications

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

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

#### There were 4.3 million business applications (burgundy) in 2020, a 22.4% increase over 2019. The number of applications through the first 15 weeks of 2021 is

**Business Applications** 

61.8% greater than the same period in 2020.

## High Propensity Business Applications

There were 1.3 million high propensity applications (green) in 2020, a 14.9% increase over 2019. The number of high propensity applications through the first 15 weeks of 2021 is 48.1% greater than the same period in 2020.

## Major Indices

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

#### **Key Points**

The housing market was strong in 2020. Growth will continue at a modest pace in 2021.

The Michigan Consumer Sentiment Index turned up in April.

The NFIB Small Business Optimism Index advanced slightly in March.

The indices for manufacturing and services have increased for ten consecutive months. They are in expansionary territory.

## 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



#### **NFIB Small Business Optimism Index**

Source: NFIB, cber.co.

# ISM PMI Composite Indices

Manufacturing vs. Services

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



## S&P 500 Index and WTI Crude Oil Prices

#### **Key Points**

The S&P Index posted double-digit gains in 2020. Strong growth has continued in 2021.

In 2020 the price for a barrel of oil declined because of lower demand. Oil was in the \$40 range through the second half of the year and approached \$50 near the end of 2020. In mid-April, it was above \$60 per barrel.

## Standard and Poor's 500 Index



### Crude Oil Prices West Texas Intermediate



Source: FRED, EIA, cber.co.



## Summary United States

The forecast for 2021 has been revised upwards as a result of a stronger-than-expected labor market. The value of real GDP will return to its pre-pandemic level in Q1 2021.

As the economy continues to reopen, more people will return to work. Job growth will occur unevenly throughout the year.

Total employment will return to its 2019 level in 2022 or 2023. The unemployment rate will continue to decline.

U	.S. Forecas	ŧ		
	2019	2020	2021	2022
Real GDP Value (trillions)	\$19.09	\$18.42	\$19.52	\$20.21
% Change Real GDP	2.2%	-3.5%	6.0%	3.5%
% Change in Personal Consumption	2.4%	-3.8%	7.2%	4.2%
CES Employment (millions)	150.9	142.2	147.8	151.0
Annual Change (millions)	2.03	-8.82	4.50	3.00
% Change	1.3%	-5.8%	3.5%	2.0%
Unemployment Rate	3.7%	8.1%	5.8%	5.3%
Light Vehicle Sales (millions)	17.0	14.5	15.9	16.6
Consumer Price Index	1.8%	1.2%	2.4%	2.2%
Housing Starts (millions) SAAR	1.29	1.38	1.43	1.46
WTI Price of Oil (price per barrel)	\$56.99	\$39.17	\$61.00	\$55.00
Crude Oil Production (million b/d)	12.2	11.3	11 1	11.5

Pent-up demand and stimulus support will drive personal consumption higher in 2021.

Light vehicle sales will gradually improve and approach 17 million units in 2023.

Inflation will be slightly above the Federal Reserve's target of 2.0%.

The number of housing starts will increase in 2021 as interest rates remain low. Construction will be challenged with input prices and supply chain issues.

Crude oil production and prices will remain flat in 2021. Prices will increase in 2022.

Source: FRED, BEA, BLS, Census Bureau, EIA, cber.co.

## Colorado





#### **Key Points**

The real GDP rate for Colorado was more favorable than the U.S. rate in 2020. This trend will continue in 2021.

In 2020, there was positive real GDP growth for financial activities, PBS, information, manufacturing, construction, and utilities.

Last year, the following industries were impacted the most by pandemic policies: agriculture, other services, transportation and warehousing, tourism, and EHS.

## Real Gross Domestic Product Colorado vs. United States (Annual)

# Percent Real GDP Rate Colorado vs. United States

GDP (green) increase than the U.S. (blue) in years. The three year Great Recession (high blue box) were when higher than Colorado. The Colorado real GE higher for two reasons the percentage chang occurs, in part, becau

Between 2007 and 2019, The Colorado GDP (green) increased at a higher rate than the U.S. (blue) in 10 of the 13 years. The three years following the Great Recession (highlighted by the blue box) were when the U.S. rate was higher than Colorado.

The Colorado real GDP rate has been higher for two reasons. The difference in the percentage change of growth occurs, in part, because the mix of Colorado industries is different from the U.S. It also happens for mathematical reasons. Colorado has a smaller economy than the U.S.

#### -4.0%

1.0%

0.0%

-1.0%

-2.0%

-3.0%

2007 2008 2009 2010 2011 2012 2013 2014 2015 2016 2017 2018 2019 2020 2021

In 2020, Colorado's real GDP

decline than in the Great

Recession.

declined by -1.5%, a lower rate of

#### Source: BEA, cber.co.

## Colorado Real GDP Change Between 2019 and 2020

The following table shows the value of real GDP for each industry, the absolute change in the real GDP, and the rate change in real GDP. The table is sorted by the real GDP for 2020. There are some significant differences compared to the U.S.

#### Change in Colorado Real GDP by Industry (Millions), Chained on 2012

Industry Description	Real GDP 2020	Change 2019 vs 2020	Rate
All industry total	351,068	(5,212)	-1.5%
Finance, insurance, real estate, rentals	66,581	987	1.5%
Professional and business services	56,078	172	0.3%
Government and government enterprises	39,585	(550)	-1.4%
Information	28,484	3,160	12.5%
Manufacturing	25,645	144	0.6%
Education, health care, and social services	23,783	(1,222)	-4.9%
Mining and oil and gas extraction	20,218	(161)	-0.8%
Retail trade	19,438	(222)	-1.1%
Wholesale trade	18,651	(335)	-1.8%
Construction	17,142	133	0.8%
Leisure and hospitality	12,363	(3,899)	-24.0%
Transportation and warehousing	10,704	(1,282)	-10.7%
Other services (except government)	6,431	(830)	-11.4%
Utilities	3,881	280	7.8%
Agriculture, forestry, fishing and hunting	3,326	(917)	-21.6%

#### **Key Points**

The real GDP for the U.S. in 2020 was -3.5%. It was -1.5% for Colorado.

The real GDP for the industries highlighted in green were positive. The top performing sectors typically included the larger industries.

The smallest industries had the largest rates of decline. They were affected the most by pandemic-related policy. As pandemic restrictions are relaxed, the impact on these industries will decrease.

It will be necessary for consumers to regain confidence in traveling and attending events in large venues for tourism and entertainment related industries to recover.

The outlook is for stronger economic activity beginning in Q2 2021.

#### Source: Bureau of Economic Analysis, cber.co.

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

## **Population Change**

Colorado

#### **Key Points**

The estimated state population for 2020 was 5,813,209. It increased by 762,877 compared to 2010, for a CAGR of 1.42%.

Eleven counties had CAGRs greater than the state rate.

Thirty-four counties had positive CAGRs less than the state rate.

Nineteen counties decreased between 2010 and 2020.

## Change in Colorado Population by County High Growth Counties 2010 to 2020

The following three slides contain the estimated changes in Colorado population for Colorado counties from 2010 to 2020. The State Demography Office (SDO) released the estimates in March 2021.

The data illustrate the differences in the size of Colorado's 64 counties and changes in their population.

The counties are divided into three groups based on their growth rate:

- Eleven counties had CAGRs greater than the state rate.
- Thirty-four counties had positive CAGRs less than the state rate.
- Nineteen counties decreased between 2010 and 2020.

## Change in Colorado Population 2010 vs. 2020 Top Growth Counties (11), CAGR > 1.42%

The projected state population for 2020 is 5,813,209. It increased by 762,877 compared to 2010, for a CAGR of 1.42%.

Eleven counties had CAGRs greater than the state rate of 1.42%.

The 2020 population in these counties was 3,117,114. It increased by 547,598 or a CAGR of 1.91%.

These 11 counties represent 54.7% of the total 2020 population and 71.8% of the state's growth between 2010 and 2020.

The growth in two regions is noteworthy (El Paso, Douglas, and Elbert) and (Broomfield, Adams, Weld, and Larimer).

	Counties with CAGR Greater than 1.42%							
Rank	Counties	2020 Population	2020 minus 2010	CAGR				
1	Weld	331,546	77,316	2.69%				
2	Broomfield	71,803	15,696	2.50%				
3	Douglas	356,811	69,687	2.20%				
4	Denver	735,822	130,943	1.98%				
5	Larimer	360,937	60,405	1.85%				
6	Custer	5,053	781	1.69%				
7	Elbert	27,286	4,179	1.68%				
8	Adams	523,709	79,998	1.67%				
9	Archuleta	14,137	2,077	1.60%				
10	Park	18,978	2,716	1.56%				
11	El Paso	731,032	103,800	1.54%				

Source: SDO and cber.co

## Change in Colorado Population 2010 vs. 2020 Middle Growth Counties (34), CAGR > 0.0% and <1.42%

Counties with CAGR Less Than 1.42%

Counties with CAGR Less Than 1.42%

Rank	Counties	2020 Population	2020 minus 2010	CAGR	Rank	Counties	2020 Population	2020 minus 2010	CAGR
12	Arapahoe	574,819	86,544	1.41%	30	Eagle	52,057	3,333	0.62%
13	Chaffee	17,797	2,600	1.37%	31	Grand	14,790	929	0.61%
14	Gunnison	15,309	2,213	1.36%	32	Mesa	147,155	8,419	0.56%
15	Gilpin	5,463	722	1.25%	33	Pueblo	159,496	9,047	0.55%
16	San Miguel	7,356	934	1.20%	34	Alamosa	15,474	749	0.47%
17	Lake	7,282	813	1.06%	35	Lincoln	5,474	243	0.44%
18	Boulder	295,605	32,401	1.05%	36	Montrose	41,188	1,811	0.43%
19	Ouray	4,446	485	1.04%	37	Crowley	5,838	211	0.36%
20	Summit	28,073	3,050	1.04%	38	Montezuma	25,532	762	0.29%
21	Saguache	6,144	662	1.03%	39	Pitkin	17,156	435	0.25%
22	La Plata	51,441	5,529	1.03%	40	Morgan	28,196	704	0.25%
23	Routt	23,439	2,490	1.01%	41	Huerfano	6,655	121	0.18%
24	Jefferson	535,651	49,074	0.88%	42	San Juan	709	12	0.17%
25	Costilla	3,532	315	0.86%	43	Fremont	46,854	559	0.12%
26	Teller	23,441	2,016	0.83%	44	Yuma	10,032	72	0.07%
27	Mineral	705	59	0.81%	45	Delta	30,889	219	0.07%
28	Garfield	56,150	4,645	0.80%	Source: S	SDO and cber.co			
29	Clear Creek	9,155	595	0.63%	Thirty.	four counties had	nositive CAGRs the	at were less than th	e state

Source: SDO and cber.co

Thirty-four counties had positive CAGRs that were less than the state rate. The 2020 population in these counties was 2,496,076. It increased by 222,773 or a CAGR of 0.94%. About 42.9% of the population and 29.2% of the population growth were in these counties.

## Change in Colorado Population 2010 vs. 2020 No Growth Counties (19), CAGR < 0.0%

The estimated state population for 2020 was 5,813,209. It increased by 762,877 compared to 2010, for a CAGR of 1.42%.

Nineteen counties had CAGRs less than 0.0%. The population in these counties decreased by 7,494, a CAGR of -0.52%.

The 2020 population in these 19 counties was 140,019, or 2.41% of the total 2020 population. These counties were responsible for - 0.98% of the change in the state's population between 2010 and 2020.

#### Counties with CAGR Less Than 0.0%

Rank	Counties	2020 Population	2020 minus 2010	CAGR
46	Kiowa	1,399	-9	-0.06%
47	Cheyenne	1,834	-15	-0.08%
48	Logan	22,293	-232	-0.10%
49	Jackson	1,387	-20	-0.15%
50	Conejos	8,282	-146	-0.18%
51	Hinsdale	843	-16	-0.19%
52	Washington	4,815	-94	-0.20%
53	Dolores	2,060	-43	-0.21%
54	Prowers	12,531	-447	-0.36%
55	Otero	18,838	-687	-0.37%
56	Moffat	13,806	-625	-0.46%
57	Phillips	4,465	-217	-0.50%
58	Rio Blanco	6,617	-357	-0.55%
59	Sedgwick	2,367	-150	-0.65%
60	Las Animas	15,407	-1,021	-0.68%
61	Rio Grande	12,001	-863	-0.74%
62	Baca	3,795	-278	-0.76%
63	Kit Carson	8,267	-1,136	-1.47%
64	Bent	6,506	-1,138	-1.90%

Source: SDO and cber.co

## Colorado Employment

Change in Total Employment and Wage Categories

#### **Key Points**

The March 2021 seasonally adjusted employment data for Colorado was 146,200 less than February 2020. The February 2021 value was 94.8 % of February 2020. The 2021 employment in only a handful of sectors is greater than in 2020.

The most significant shortfalls are in leisure and hospitality and government employment.

Colorado Springs is the best performing MSA in Colorado.

## Change in Employment Colorado



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

## Labor Force Participation Rate Colorado



Labor Force Participation Rate

#### Source: FRED, BLS, cber.co.

## Summary of Employment Recovery Colorado

Employment through March 2021 was 146,200 below the value for February 2020. Most of the short fall is in the leisure and hospitality sectors and state and local government.

<ul> <li>Recovered +8,700</li> <li>Transportation, warehousing, and utilities</li> <li>Management of companies</li> <li>Federal government</li> <li>Retail trade</li> </ul>	<ul> <li>Short-Term Recovery -15,000</li> <li>Financial activities</li> <li>Wholesale trade</li> <li>Healthcare</li> <li>Professional, scientific, and technical services</li> </ul>	Mid-Term Recovery -27,800 <ul> <li>Manufacturing</li> <li>Construction</li> <li>Administrative services</li> <li>Information</li> <li>Educational Services</li> </ul>	Long-Term Recovery -112,100 <ul> <li>Other services</li> <li>State government</li> <li>Local government</li> <li>Leisure and hospitality</li> <li>Extractive industries</li> </ul>
TWU increased because of stronger warehousing employment. Transportation employment will continue to struggle.	Wholesale trade showed steady growth during Q1.	Construction did not recover despite a "housing boom."	Other services will recover as restrictions are relaxed.
Federal government employment is an anomaly because it includes part- time Census 2020 employees. The increase in retail is not uniform across all retail subsectors.	Financial and PST employment were volatile in Q1. There were steady gains in healthcare employment in February and March.	Ironically, employment in the information sector decreased while the sector GDP increased Administrative services employment increased because pandemic restrictions were eased.	State and local governments, including education, are expected to receive significant federal assistance. Transportation and hospitality will recover in 2023 or 2024.

Source: BLS,, cber.co. Note: Categories are based on Feb. 2000 employment. Recovered is 100+%, Short-term is 97+%, Mid-Term is 94% to 96.9%, and Long-term is <94%.

## Change in Employment by Area MSAs and non-MSAs

Change in Employment by MSA/Non – MSA March 2021 vs. February 2020										
	Employment (000s)	March 2021 vs.	March 2021/February							
Area	February 2020	Feb. 2020 (000s)	2020							
<b>Colorado Springs</b>	304.6	-10.7	96.5%							
Fort Collins	176.4	-7.8	95.6%							
Grand Junction	65.0	-3.2	95.1%							
Denver	1557.5	-76.7	95.1%							
Pueblo	65.1	-3.3	94.9%							
Non-MSA	335.8	-22.6	93.3%							
Boulder	201.1	-13.6	93.2%							
Greeley	113.5	-8.3	92.7%							
Colorado	2819.0	-146.2	94.8%							
Source: BLS, cber.co										

In 2021, the pattern of MSA employment recovery is different than in 2020. The state will recover at a faster rate as the larger MSAs begin to add jobs more quickly.

The table on the left is sorted by the last column (March 2021 divided by February 2020). In recent months, Fort Collins and Denver have recovered at a faster rate than in 2020.

The counties outside the MSAs are now recovering at a slower rate than the state. They have a different mix of industries than the metro areas. Many have a higher concentration of government and tourism-related businesses.

Overall, Colorado employment for March 2021 is 94.8% of the rate for February 2020.

# **Business Applications**

Colorado

#### **Key Points**

Compared to 2019, Colorado business applications and high propensity applications increased at a faster rate in 2020. That trend has continued into 2021.

U.S. applications increased at a greater rate than Colorado applications in 2020 and the first 15 weeks of 2021.

## Colorado Weekly Business Applications Total and High Propensity 2019 vs 2020



#### Weekly Business Applications

#### **Business Applications**

There were 91,790 business applications (burgundy) in 2020, a 6.2% increase over 2019. The number of applications through the first 15 weeks of 2021 is 39.2% greater than the same period in 2020.

#### High Propensity Business Applications

There were 31,050 million high propensity applications (green) in 2020, a 4.3% increase over 2019. The number of applications through the first 15 weeks of 2021 is 34.3% greater than the same period in 2020.

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

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## Select Industry Data

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

#### **Key Points**

Retail sales have had a sluggish start to 2021.

The total number of permits issued for single-family and multifamily housing in 2020 was greater than in 2019.

In 2019, there were about twice as many passengers at DIA as in 2020.

The production of oil in Colorado has declined because of state regulations and reduced global demand.

## Colorado Retail Sales Monthly

Millions					Colorad	do Retail S	ales					
\$30,000								٨٥	ual Datail C	oloo (Dilli		
¢00 000	Color	ada ratail ar	loc in 2000	(groop) word	etropaar th			Anr			ons)	1
<b>⊅</b> 20,000 −	COIOI		tel retelled	(green) were		idii		201	7 \$19	4.6 5.4	1%	
<b>MOC 000</b>	expe		ital retall sal		turquoise) v			201	8 \$20	6.2 5.9	9%	
\$26,000 -	less t	han 2020. F	ent-up dem	and and stim	ulus efforts	will drive		201	9 \$22	4.6 9.0	)%	
¢24.000	stron	ger growth i	n 2021.					202	20 \$22	8.8 3.9	9%	
\$24,000												
\$22,000									~			
\$20,000			$\wedge$								/	//
\$18,000 -	_					$\langle \rangle$			$\frown$			2017
\$16,000			//									
φ10,000		//										<u> </u>
\$14,000		/										2020
, , ,												
\$12,000 +				1		1	1			1	1	
	January	February	March	April	May	June	July	August	September	October	November	December

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

Passengers				DI	A Passeng	ers							
9,600,000	Year	Passengers	% Change	There was	a 51 3% dec	ling in the n	umber of nas	sonaors (rod	) in 2020 T	he number c	of monthly		
9,000,000	2020	33,741,129	-51.3%	nassengers showed gradual improvement after April 2020. After two months of 2021, the									
8,400,000	2019	69,015,703	7.0%	passenger	passengers showed gradual improvement after April 2020. After two months of 2021, the								
7,800,000	2018	64,494,613	5.1%	number of	number of passengers is 44.3% lower than the same period in 2020.								
7,200,000	2017	61,379,396	5.3%										
6 600 000	2016	58,266,515	7.9%										
6,000,000	2015	54,014,502	1.0%										
5,000,000	2014	53,472,514	1.7%										
5,400,000													
4,800,000		$\rightarrow$	The number	er of passengers	will not retur	n to 2019 lev	vels until Am	ericans feel r	nore comfoi	table			
4,200,000	traveling on plance. The number of demostic passengers will return to 2010 levels in 2022. The												
3,600,000			number of	international nas		roturn to pro	nandemic l	avals in $2024$		J. 1116			
3.000.000				international pas	serigers will			evels III 2024					
2 400 000													
1 800 000								20	19 —	2020 —	2021		
1,000,000								20					
1,200,000													
600,000													
0 +	1	1	1	1	1	1	1	1			T1		
	January	February M	arch Api	ril May	June	July	August	September	October	November	December		

Source: Fly-Denver.com, cber.co.

# Colorado Residential Building Permits



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

## Colorado Field Production of Crude Oil 2011 to 2020 (Thousand Barrels)

Thousand Barrels				Colorado	Crude Oil Pro	oduction				
18,000         17,000         16,000         15,000         14,000         13,000         12,000         11,000	Colorado's pro- record levels in price of oil. In 2 Production rem lower level than	duction of crude 2015, despite 2016, the rig cou ained solid, alb 2015.	e oil reached the drop in the unt was down. eit at a slightly	10,285	15,809 14,280 11,371					
10,000 9,000 8,000 7,000	—— Monthly Pro —— Average Mo	duction nthly Production	7,970		After three y	vears of increas	sing production	(2017-2019) <b>†</b>	he trend revers	ed in
7,000 6,000 5,000 4,000	3,292	5,525 4,138			2020. The c demand. Th and recipier	lownward trend ne slowdown in nts of tax reven	is the result of production will ues. In addition	state regulation negatively implay negatively implay	ne trend revers ns and reduced act in-state sup is create the	global pliers
3,000 2,000 201	1 2012	2013	2014	2015	2016	2017	a not a triendly 2018	place to conduc	2020	2021

#### Source: EIA, cber.co.

## Transition to Post Pandemic Era

Stimulus and Funding, Consumers and Workforce, and Industry and Education

#### **Key Points**

The tone and contents in Colorado newspaper articles in 2021 have changed during the first three months of 2020. They reflect the hope that we are approaching the post-pandemic era.

There is enthusiasm and deep concern about the level of funding and the content of the recovery and infrastructure plans.

## Transitioning to the Post Pandemic Era Stimulus and Funding

#### **Stimulus and Funding**

The following headlines provide a sampling of the hopes and concerns that leaders and citizens have about the cost and content of the stimulus programs.

"Colorado braced for a long-lasting budget catastrophe from COVID. It hasn't happened. The official quarterly outlook is due next week, but the head budget writer says there'll be more money than bills to pay," (Burness, Denver Post, 3/9/2021).

"Federal money flows into Denver suburbs and now they have to figure out how to spend it. Broadband and budget fill-ins among likely uses; critics say the amount of money is excessive," (Aguilar, Denver Post, 3/22/2021). "Treasury Secretary Yellen sees room for U.S. to borrow, opens door to tax hike," (Rugaber, Denver Post, 3/24/2021).

"Colorado's share of federal pandemic aid tops \$37 billion, and more is coming. Passage of the CARES Act a year ago ushered in an unprecedented wave of government assistance," (Svaldi, Denver Post, 4/1/2021).

"Over the next 13 months, nearly \$2 billion will move from the federal treasury to the bank accounts of Colorado's counties, cities and towns," (Winegertner, Denver Post, 4/5/2021).

## Transitioning to the Post Pandemic Era Consumers and Workforce

#### **Consumers and Workforce**

The following headlines provide a sampling of the challenges and opportunities facing consumers and workers.

"Nearly a fourth of Colorado households are behind on their power bills, study estimates," (Svaldi, Denver Post, 3/4/21).

"As job, housing and pay inequalities worsen, Coloradans say mantra to "build back stronger" rings hollow. Lawmakers are passing temporary fixes, like food aid and state-funded diapers. Addressing the root causes of poverty and inequality is another, much tougher matter," (Burness, Denver Post, 3/4/2021).

"Colorado homeowners accumulated an average of \$32,000 in home equity last year. Pandemic boosted demand for homes and drove down interest rates," (Svaldi, Denver Post, 3/13/2021).

"Colorado faces a mismatch between willingness to work and availability of work," (Svaldi, Denver Post, 3/27/2021).

"The prevalence of remote work because of the pandemic\* varies significantly across US states. Workers in their prime (aged 25 to 54) in professional and office jobs on the West coast and in the Northeast were much more likely to work from home," (Steemers, The Conference Board, March 2021).

"Denver's urban residents didn't rush for the exits during the pandemic, rather fewer newcomers moved in. The Cleveland Fed found less populous and more affordable locations were favored," (Svaldi, Denver Post, 4/1/2021).

"Colorado mothers aren't returning to the workforce as quickly as everyone else. One report estimates pandemic kept 27,000 Colorado women out of the labor market — those who lost jobs and those who couldn't get them," (Hindi, Denver Post, 4/4/2021 and Common Sense Institute).

## Transitioning to the Post Pandemic Era Industry and Education

#### **Industry and Education**

The following newspaper headlines provide a sampling of the challenges and opportunities facing industry and education.

"Vestas to cut 450 jobs in Brighton, Pueblo, centralize wind turbine production in Windsor," (Mika, Biz West, 3/17/2021).

"Southwest has high hopes and big plans for Colorado Springs," (Heilman, Gazette, 3/5/2021).

"Vail Resorts revenue down 26% as company fights back from COVID-19 restrictions," (High, Biz West, 3/11/2021).

"Pandemic puts nonprofits in peril," (Deboskey, Denver Post, 3/14/2021).

"Novartis closing Longmont drug facility in July, to lay off 400," (Mika, Biz West, 3/24/2021).

"Fidelity Investments on a hiring spree with 375 new jobs slated for Colorado. Mutual fund and brokerage group adding 4,000 jobs nationally, (Svaldi, Denver Post, 4/7,2021).

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"Students didn't just learn nothing during school closures — they actually regressed, study says," (Rozsa, Salon, 4/11/2021).

"Alfalfa's Market to shutter Louisville store, marking end to almost 40 years in business," (Biz West, 4/14/2021).

"DIA lands direct flight to Paris via Air France," (Biz West, 4/16/2021).

"Quantum technology: Can the Denver, Boulder area be an epicenter for the next great tech boom? Boulder has been the scene of Nobel Prizewinning breakthroughs in quantum technology, but commercialization presents a new challenge," (Rubino, Denver Post 4/16/2021).

"Colorado's courts grapple with COVID-19 trial backlog that could take years to clear," (Bradbury, Denver Post, 4/18/2021).

"Skiers, snowboarders, dress up at Eldora Mountain Resort for last day of ski season," (Richardson, Denver Post, 4/18/2021).



## Summary of Colorado Forecast

Colorado's real GDP growth rate for 2021 will be slightly higher than the U.S. rate. It will return to its pre-pandemic value in early 2021.

Employment will return to its 2019 level in 2022 or 2023.

Retail sales will rebound in 2021 as a result of pent-up demand.

In 2021 and 2022, inflation will be higher than the U.S. rate.

Colorado Economic Forecast										
	2019	2020	2021	2022						
Real GDP Value (billions)	\$356.28	\$351.07	\$373.54	\$389.23						
% Change Real GDP	3.9%	-1.5%	6.4%	4.2%						
CES Employment (thousands)	2,790.1	2,644.6	2,728.6	2,794.6						
Annual Change (thousands)	62.8	(145.5)	84.0	66.0						
% Change	2.3%	-5.2%	3.2%	2.4%						
Unemployment Rate	2.7%	7.3%	5.8%	4.9%						
Retail Sales (billions)	\$224.6	\$227.0	\$243.0	\$252.0						
% Change	9.0%	1.1%	7.0%	3.7%						
Consumer Price Index	1.9%	2.0%	2.8%	2.4%						
DIA Passengers (millions)	69.0	33.0	52.0	61.0						
Single Family Permits	24,756	26,489	26,900	27,350						
Multi-family Permits	13,877	13,738	13,950	14,200						
Oil Production (thousands) barrels	189,707	172,000	170,000	175,000						

The number of passengers through DIA in 2020 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 will be more permits issued in 2021 as demand remains high. Also, there is a need for affordable housing in the metro areas.

State regulations and reduced demand caused a decline in oil production in 2020. The production of oil will be flat in 2021 and 2022. cber.co Review of Colorado Economy Through March 2021

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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.