



# *Demographic & Economic Outlook*

Prepared for: CGFOA Budget 101  
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Colorado Demography Office  
May 4, 2022



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# *Primary Trends*

- Population growing at a slowing rate - births down, deaths up
- Migration and mobility slowing
  - Harder to attract and retaining the best and brightest.
  - Labor tight - very competitive in US
- Concentrated growth
- Aging - impacts everything... including the economy, labor force, housing, and public finance.
  - Largest share of growth next decade will continue to be the 65+
- Increase racial and ethnic diversity.



# *2020 Census - Population*

US - 331,449,281, increased 22.7 million or 7.4% since 2010

- Slowest growing decade since 1930's

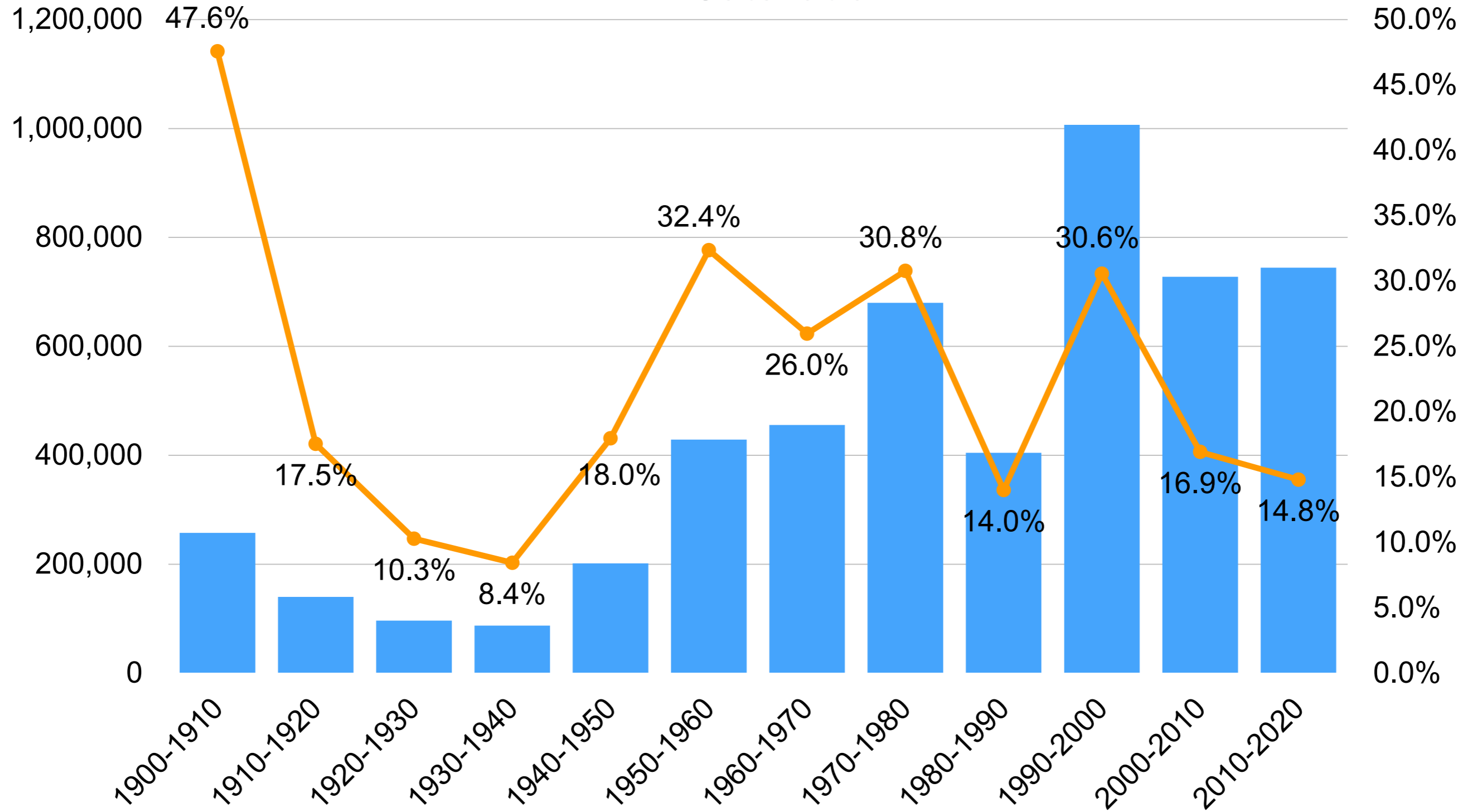
Colorado - 5,773,714, increase of 744,518 or 14.8% since 2010

- Ranked 6<sup>th</sup> fastest percent change, behind UT, ID, TX, ND, NV
- Ranked 9<sup>th</sup> in growth, behind TX, FL, CA, GA, WA, NC, NY, AZ
- Slowest growing decade since 1980's

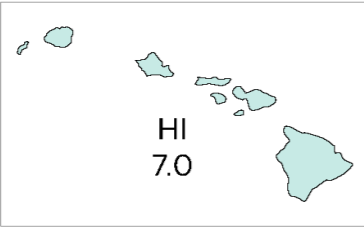
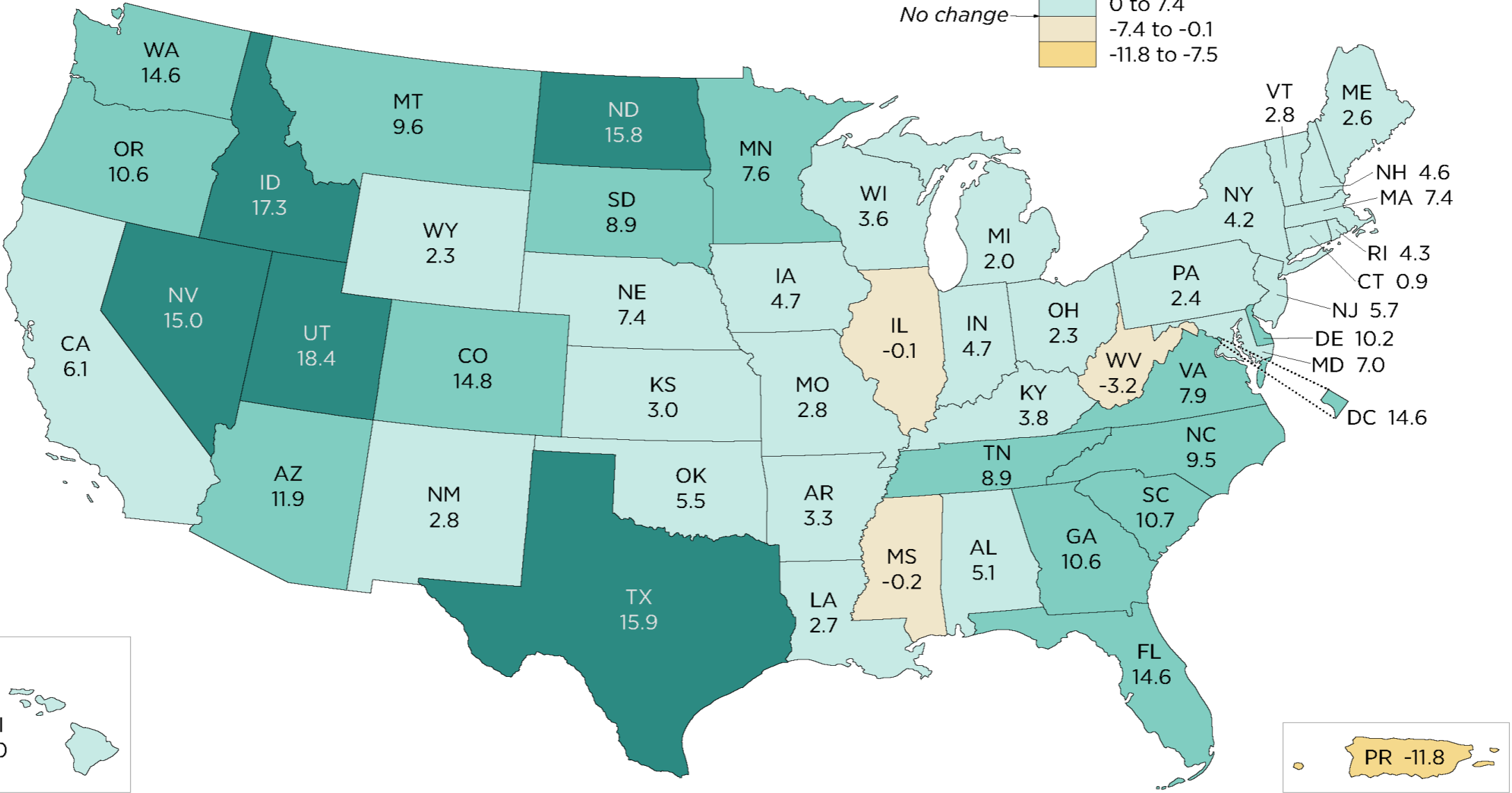
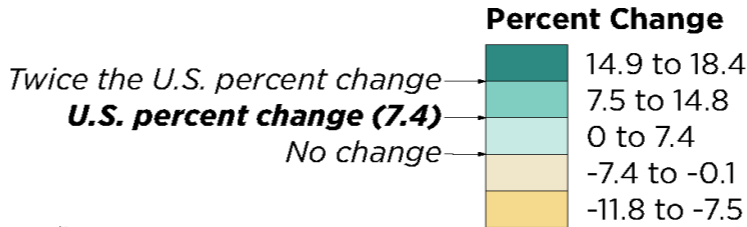


# Population Change by Decade

## Colorado



# Percent Change in Resident Population for the 50 States, the District of Columbia, and Puerto Rico: 2010 to 2020



United States<sup>®</sup>  
**Census**  
Bureau

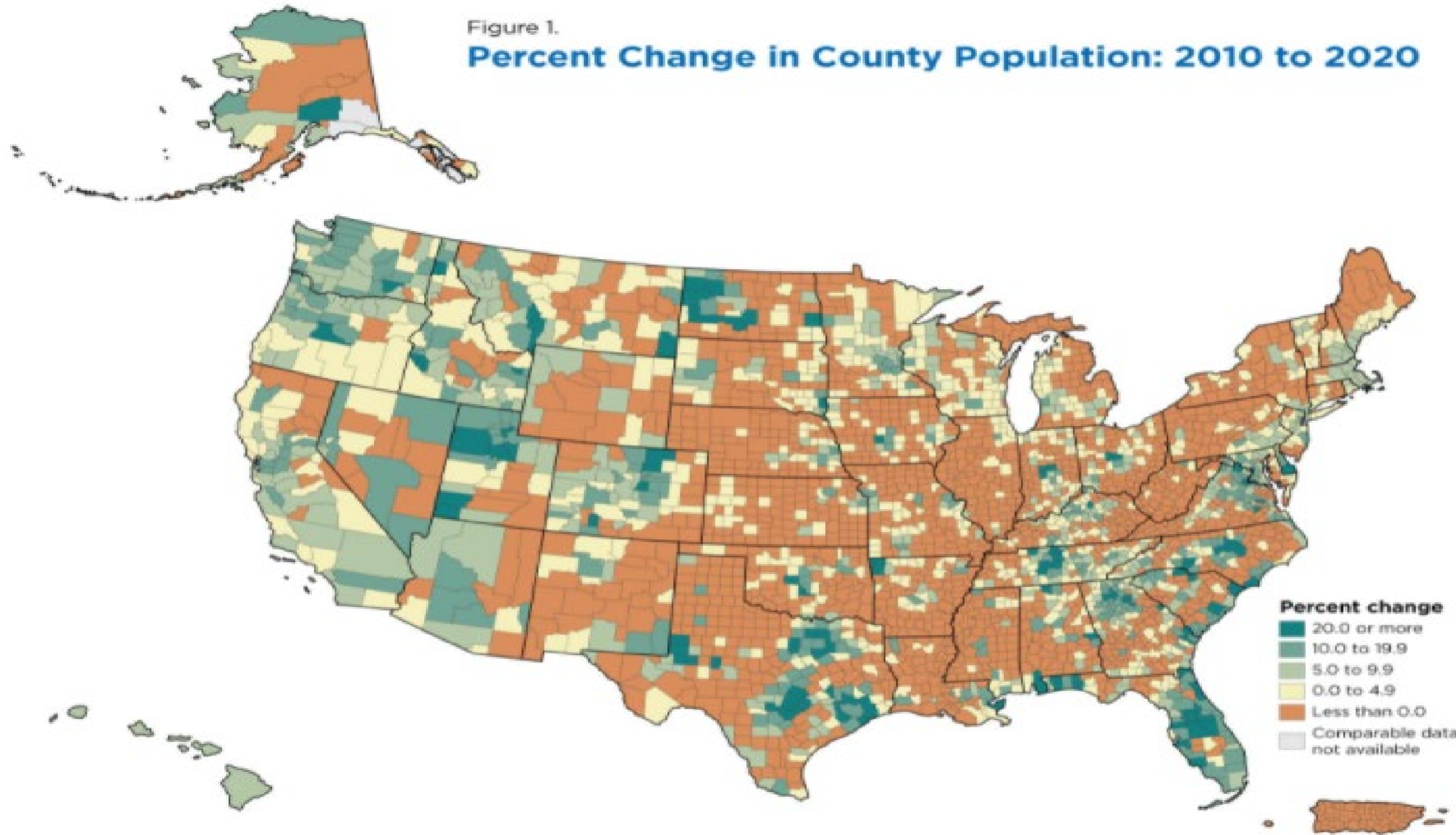
U.S. Department of Commerce  
U.S. CENSUS BUREAU  
census.gov

United States<sup>®</sup>  
**Census**  
2020



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Figure 1.  
**Percent Change in County Population: 2010 to 2020**



Over 50% of  
the counties  
in the US  
declined

86% of the  
population  
lived in a  
Metro area  
up from 85%

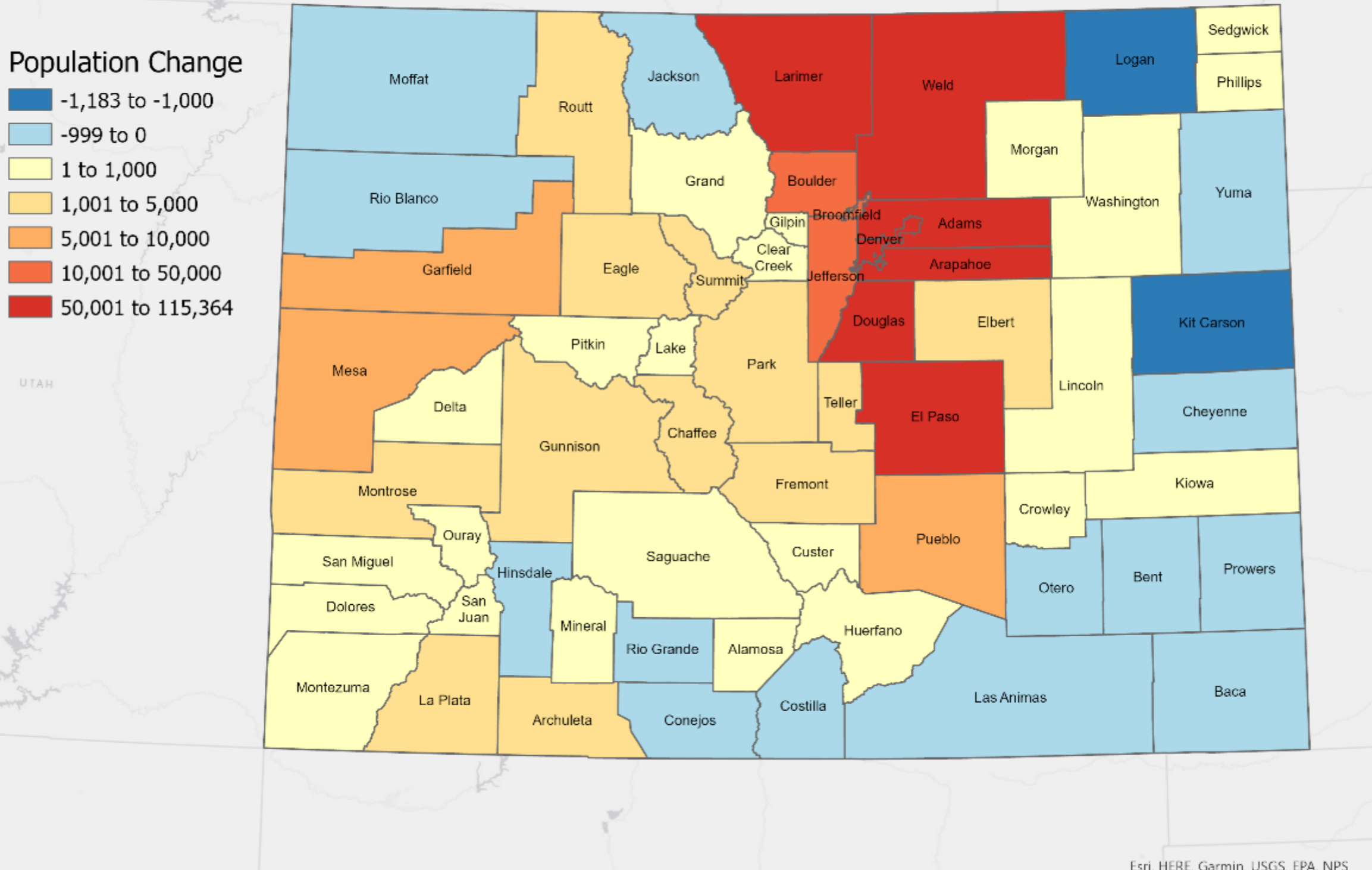
Note: Bedford city, VA, was changed to town status and added to Bedford County, VA, effective July 1, 2013. For purposes of presenting data, Bedford County is treated as if Bedford city were included in it at the time of the 2010 census.

Information on confidentiality protection, nonsampling error, and definitions is available at <https://www2.census.gov/programs-surveys/decennial/2020/technical-documentation/complete-tech-docs/summary-file/>.

Source: U.S. Census Bureau, 2010 Census Redistricting Data (Public Law 94-171) Summary File; 2020 Census Redistricting Data (Public Law 94-171) Summary File.



# Population Change by County 2010 to 2020



Source: 2020 US Census

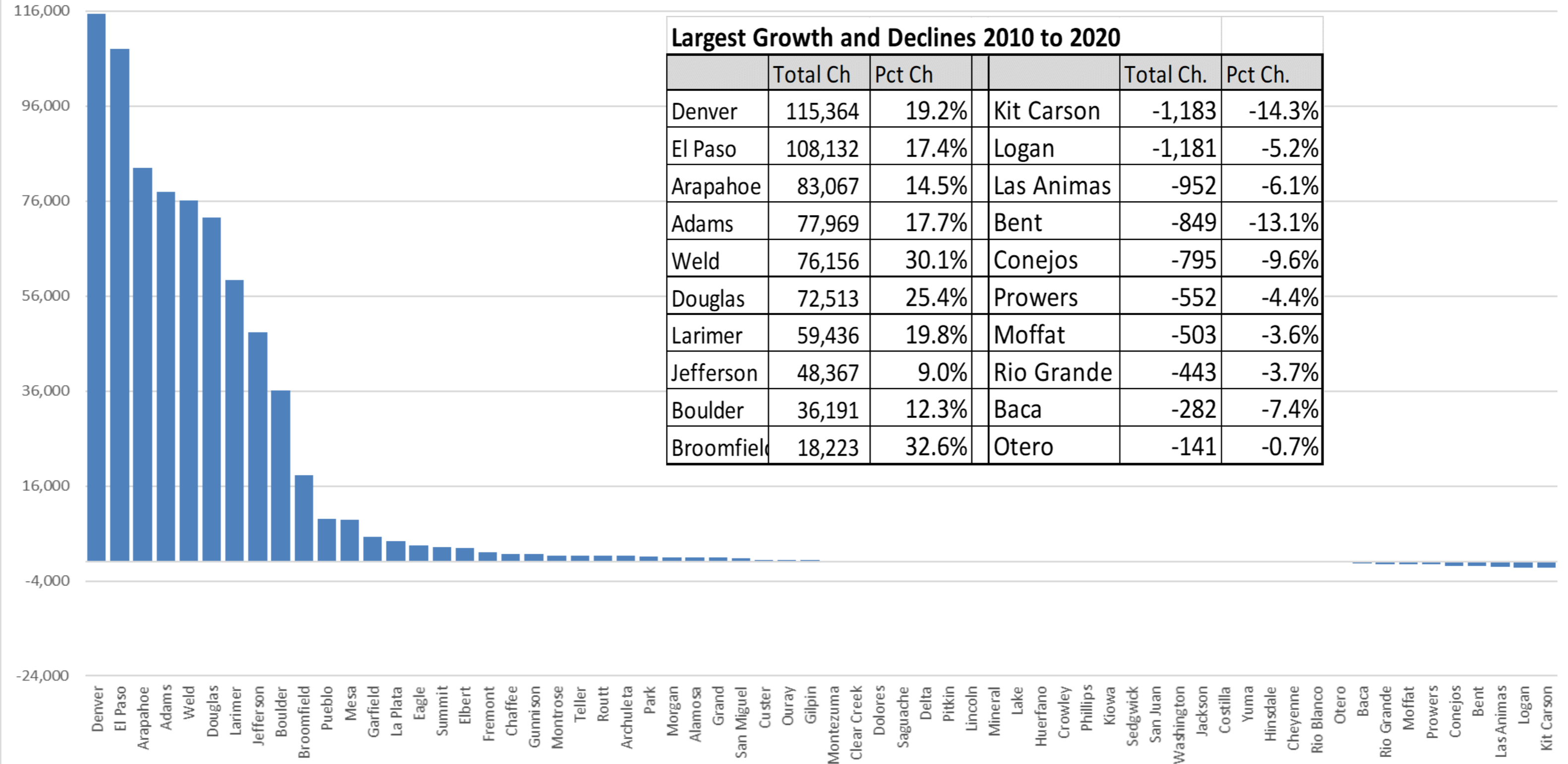
Esri, HERE, Garmin, USGS, EPA, NPS



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# Colorado 2020 Census Changes

Total Population Growth by County



Largest Growth and Declines 2010 to 2020

	Total Ch	Pct Ch		Total Ch.	Pct Ch.
Denver	115,364	19.2%	Kit Carson	-1,183	-14.3%
El Paso	108,132	17.4%	Logan	-1,181	-5.2%
Arapahoe	83,067	14.5%	Las Animas	-952	-6.1%
Adams	77,969	17.7%	Bent	-849	-13.1%
Weld	76,156	30.1%	Conejos	-795	-9.6%
Douglas	72,513	25.4%	Prowers	-552	-4.4%
Larimer	59,436	19.8%	Moffat	-503	-3.6%
Jefferson	48,367	9.0%	Rio Grande	-443	-3.7%
Boulder	36,191	12.3%	Baca	-282	-7.4%
Broomfield	18,223	32.6%	Otero	-141	-0.7%



# Colorado 2020-2021 Pop Change

**United States** -Slowest growth rate on record of .1% (393K)

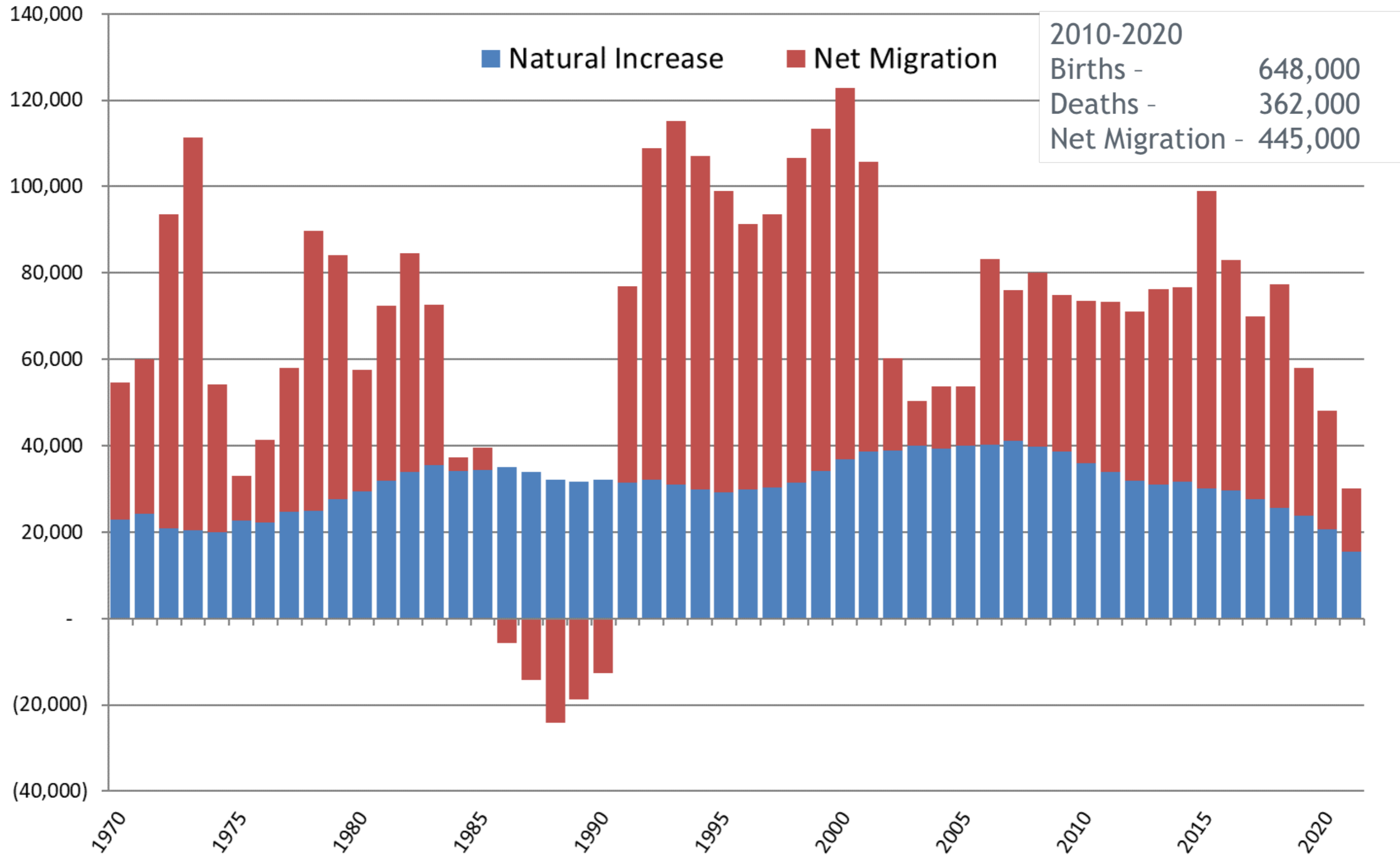
- 17 states lost population
- 73% of Counties (2,297) Had Natural Decrease

**Colorado +27,700, 0.5% growth rate**

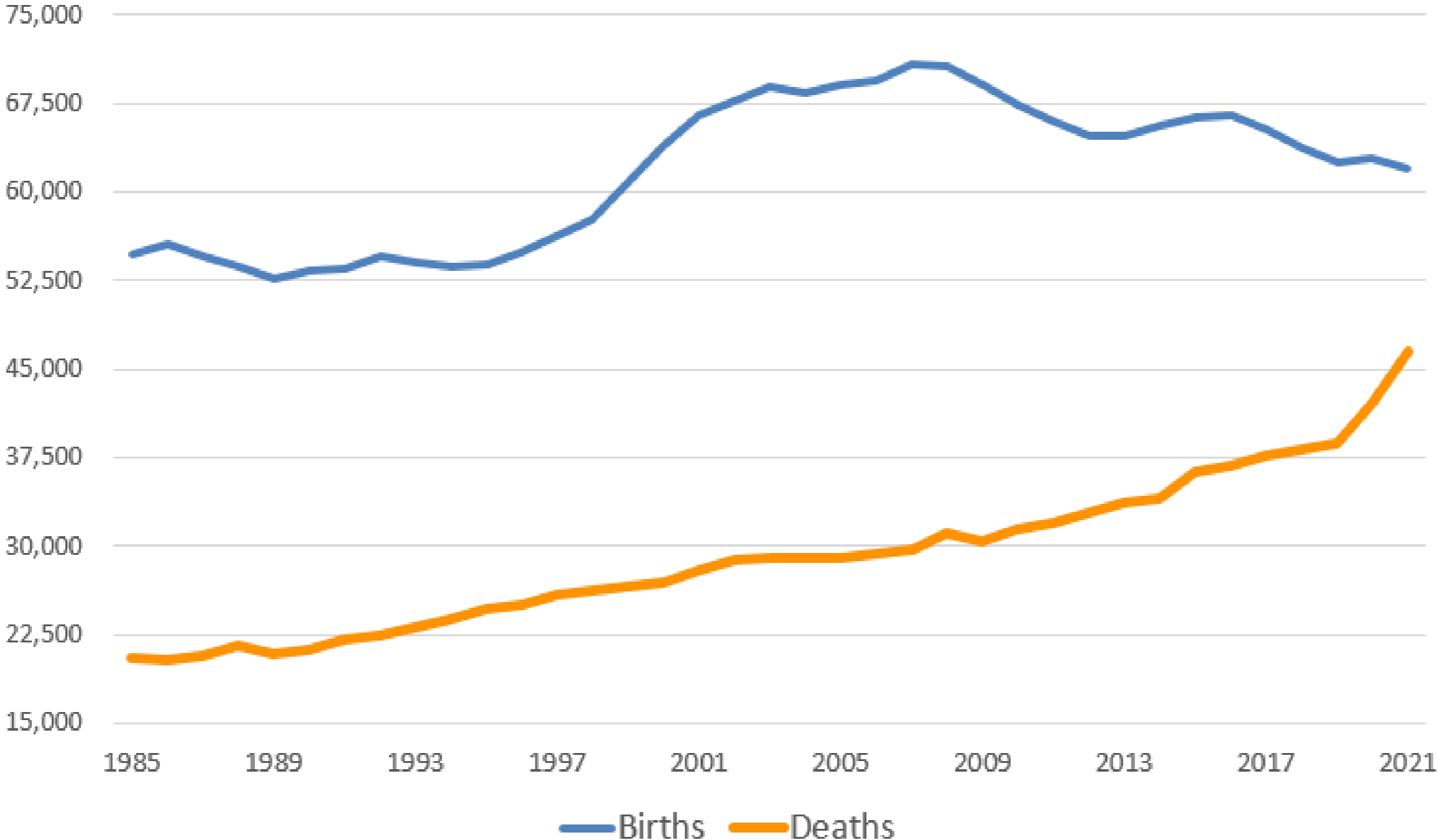
- Net Migration 14,700
- Ranked 17<sup>th</sup> in percent growth and 11<sup>th</sup> in total growth
- Half of Counties posted Natural Decrease (more deaths than births)



# Components of Population Change 1970-2021



# Colorado Births and Deaths



Just under 62,000 Live Births in CO in 2021  
Deaths rose nearly 3,500 in 2020 and another 4,400 in 2021 to 46,500  
Natural Increase in Colorado fell under 20,000 for first time since 1974



# Colorado 2020-2021 Pop Change

## Largest Gains in Colorado by county (% Ch. 2020-21)

- |                            |                              |
|----------------------------|------------------------------|
| 1. +9,167 (2.5%) - Douglas | 7. +1,007 (0.6%) - Pueblo    |
| 2. +8,852 (2.7%) - Weld    | 8. + 912 (3.5%) - Elbert     |
| 3. +6,470 (0.9%) - El Paso | 9. + 898 (1.2%) - Broomfield |
| 4. +2,954 (0.8%) - Larimer | 10.+ 663 (3.5%) - Arapahoe   |
| 5. +2,324 (0.4%) - Adams   | 11.+ 623 (1.3%) - Fremont    |
| 6. +1,373 (0.9%) - Mesa    | 12.+ 620 (1.1%) - La Plata   |

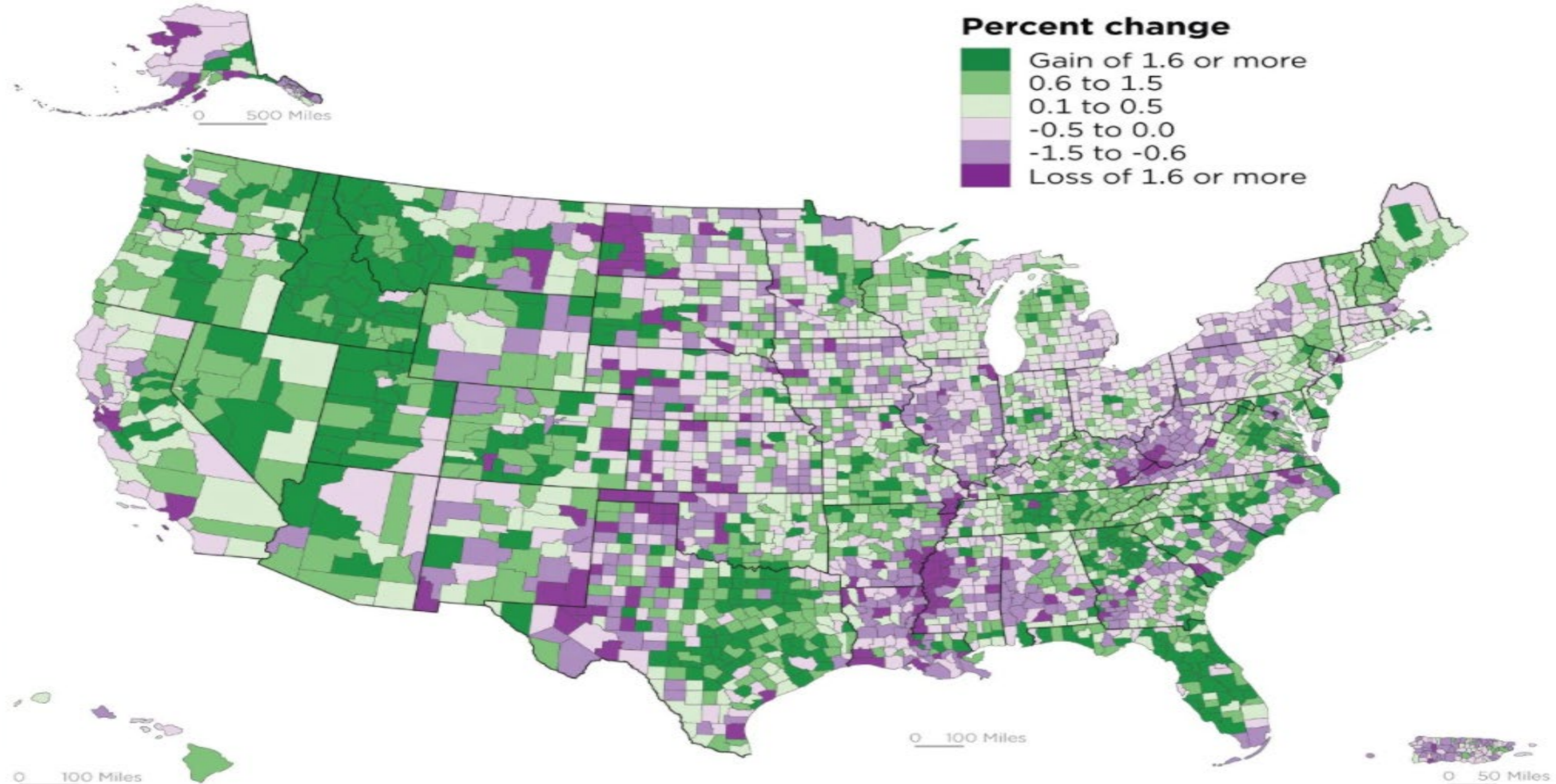
## Three Metro Counties saw large population declines:

- |   |
|---|
| 62. -1,268 (-0.4%) - Boulder                          |
| 63. -3,323 (-0.6%) - Jefferson                        |
| 64. -5,524 (-0.8%) - Denver (largest population loss) |



# Where Counties are Growing

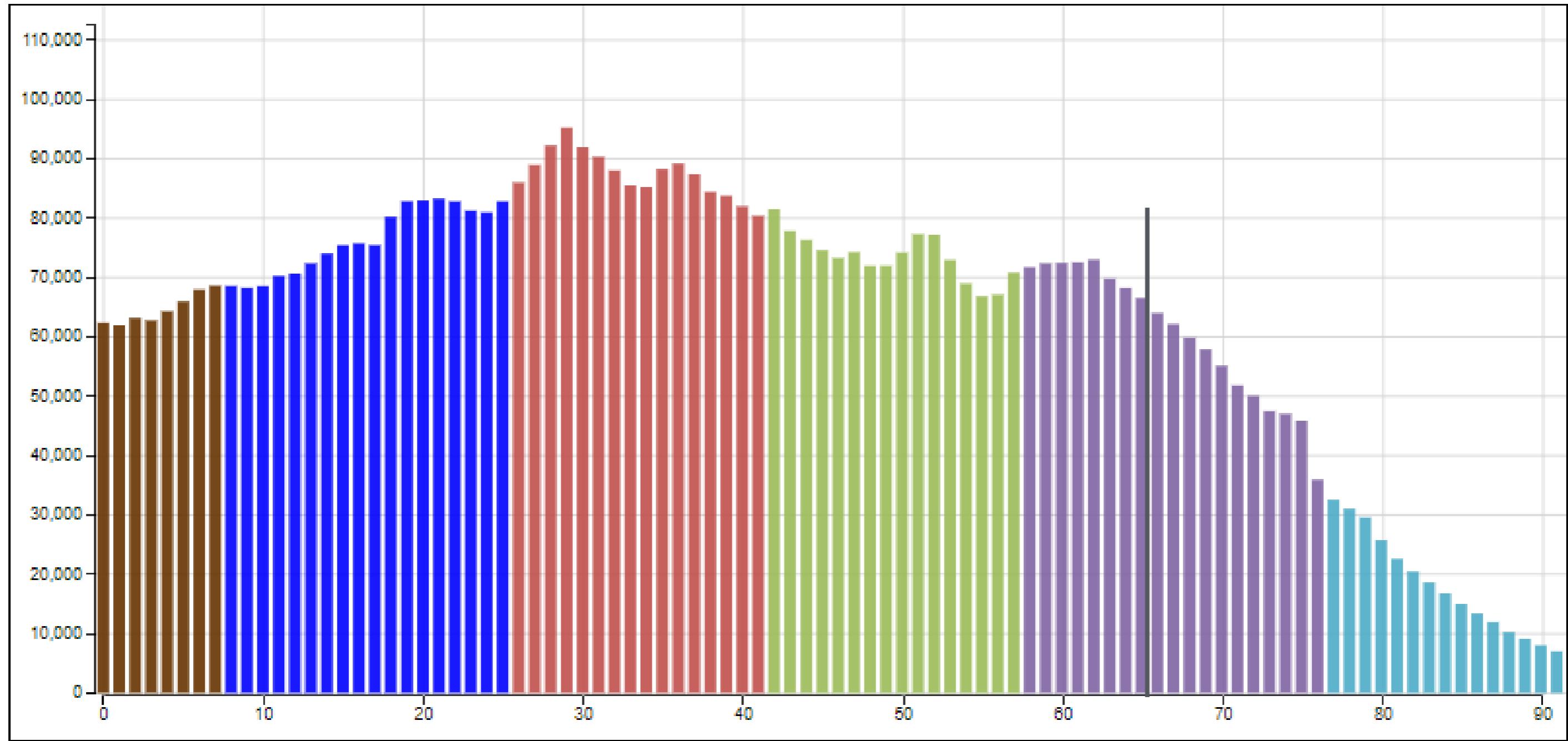
Percent Change in Population by County: 2020 to 2021



Colorado  
Download

# Colorado

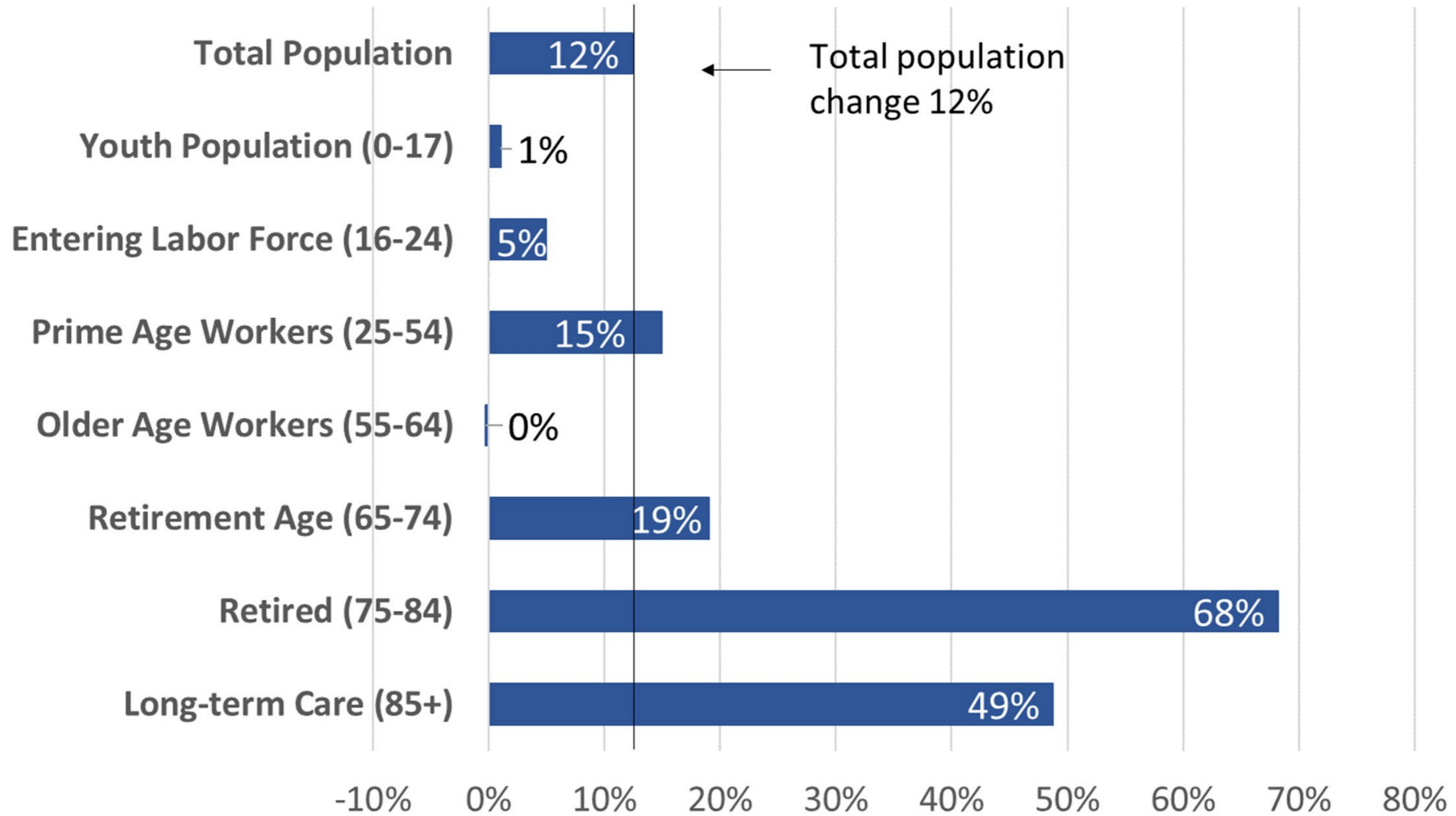
# 2022



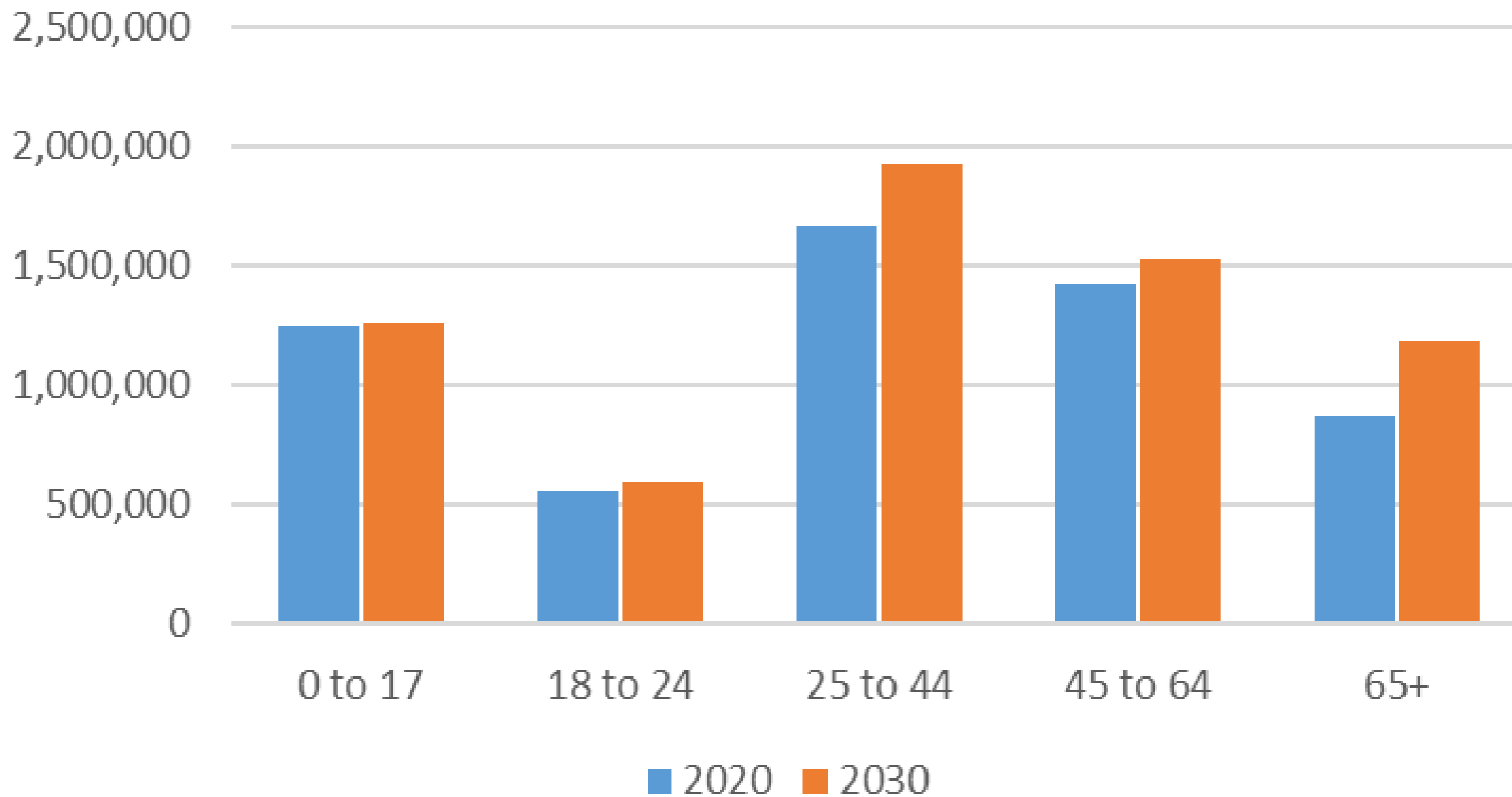
■ Generation Alpha (2015 - 2029)   ■ Generation Z (1997 - 2014)   ■ Millennials (1981 - 1996)   ■ Generation X (1965 - 1980)   ■ Baby Boomers (1946 - 1964)   ■ Silent Generation (1928 - 1945)



# Colorado Percent Change by Age Group , 2020 to 2030



## Colorado Population Forecast by Age



0 to 17	18 to 24	25 to 44	45 to 64	65+	Total
8,931	37,741	254,635	100,703	314,708	716,718
0.7%	6.7%	15.2%	7.0%	36.1%	12.4%



# *Recession of 2020*

- Shortest in History - March & April
- And Steepest U.S. -22.2 million jobs Jan - Apr '20
- Colorado -376,000 jobs Jan - Apr 2020
- Strong recovery's from May - Oct, but faltered in Q4.
- **2020 Annual Changes:**
- Unemployment Rt. U.S. = 8.1% Colorado = 7.3%
- Employment: U.S. -8.8 mm (5.8%) CO -145K (5.2%)



# *U.S. Conditions in 2021*

- 3.94 million jobs added (2.8%)
- 87% recovered, just 3.3 million from peak
- U.S. Unemployment Rate 5.4%
  - 8.6 million unemployed (down 4.32 mm from '20)
- Federal Funds rate at 0 - 0.25%

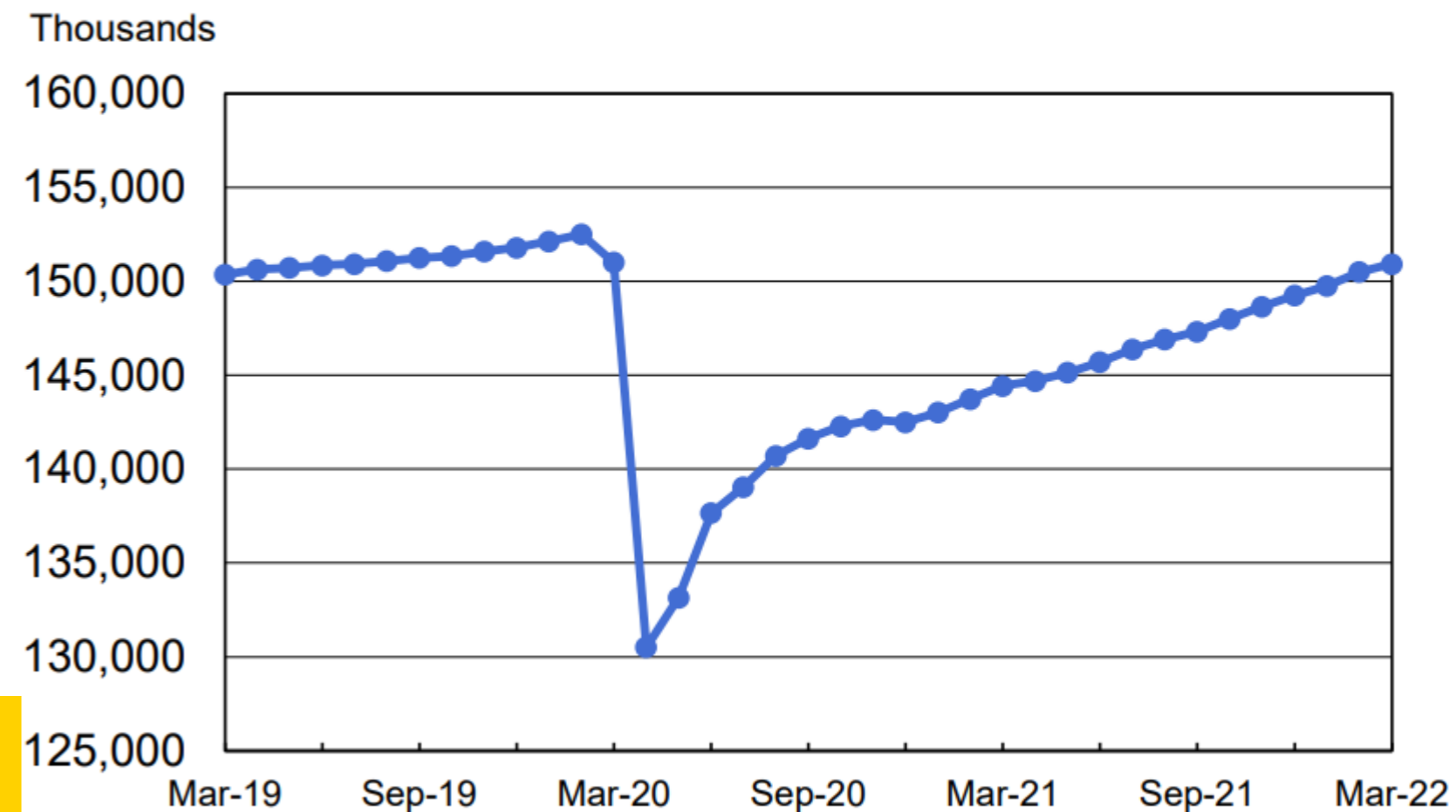
Inflation at 4.7 - and rising into 2022



# U.S March 2022 Conditions

- 3.6% Unemployment Rate
  - up just 0.1% from pre-recession low
- 5.95 mm unemployed (+235K from 2/20)
- 431K jobs added
- +6.5 mm (4.5%) OTY
- 150.9 mm jobs - only 1 mm below 2/20

**Chart 2. Nonfarm payroll employment, seasonally adjusted, March 2019 – March 2022**



# *CO Conditions in 2021*

- 94,000 jobs added (3.5%)
  - Dec 2021 SA employment of 2.8 mm = 3/20
  - 96% recovered, just 13,500 from peak
  - Unemployment Rate 5.4% (169.4K unemployed)
    - 32<sup>nd</sup> lowest - down from 6.9% in 2020
    - Employment: Population Ratio 64.6 - 7<sup>th</sup> highest
- Inflation at 3.8% - and rising into 2022



# CO March 2022 Conditions

- 5,800 jobs added +131,200 (5.8%) OTY
- 104% recovered
  - 11<sup>th</sup> most recovered (UT, ID, MT, AR, TX top 5)
- Unemployment Rate 4.1% (132.2K unemployed)
  - 26th lowest - down from 6.2% in Jan 2021
  - Employment: Population Ratio 65.7 - 5<sup>th</sup> highest

Inflation rose to 9.2% in March and could go higher in May before peaking.

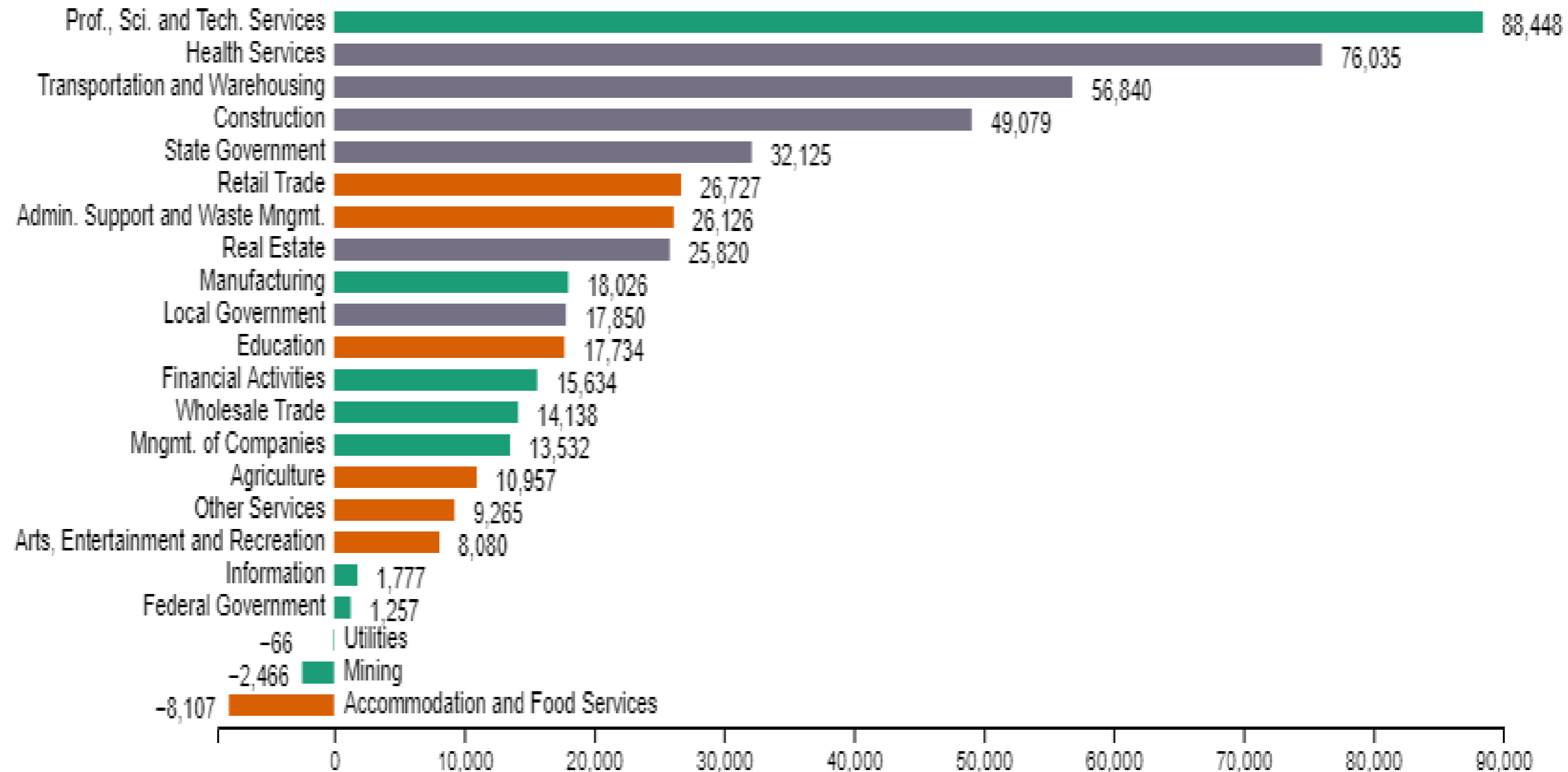


# *U.S. Oct 21 vs. Mar 22 Changes*

- **Summary:** Ukraine replaces COVID as #1 threat, slower GDP, much higher inflation -> earlier & more aggressive Fed hikes, continued decline in Unemployed
- Fiscal policy contractionary as pandemic support unwinds. \$1.9 trillion in 2021 down to \$800MM in 22
  - 4.6% GDP vs. 3.5% due to inflation & supply disruptions
  - 3.8% inflation vs. 5.7% inflation in 2022
  - Modest growth from Infrastructure Bill in 23-25
- Zero Fed Rate hikes vs. 7 Fed Hikes starting 3/22



# Employment Change by Sector. Colorado 2009 to 2020



Job sector data is suppressed according to Bureau of Labor Statistics standards.

Data Source: Bureau of Labor Statistics Source Date: November, 2020.

Programming by the State Demography Office, Print Date: 08/16/2021

502,643 Total Employment Change

- Less than 80% of Average Weekly Wage
- Between 81% to 120% of Average Weekly Wage
- Greater than 120% of Average Weekly Wage



# *U.S. Oct 21 vs. Mar 22 Changes*

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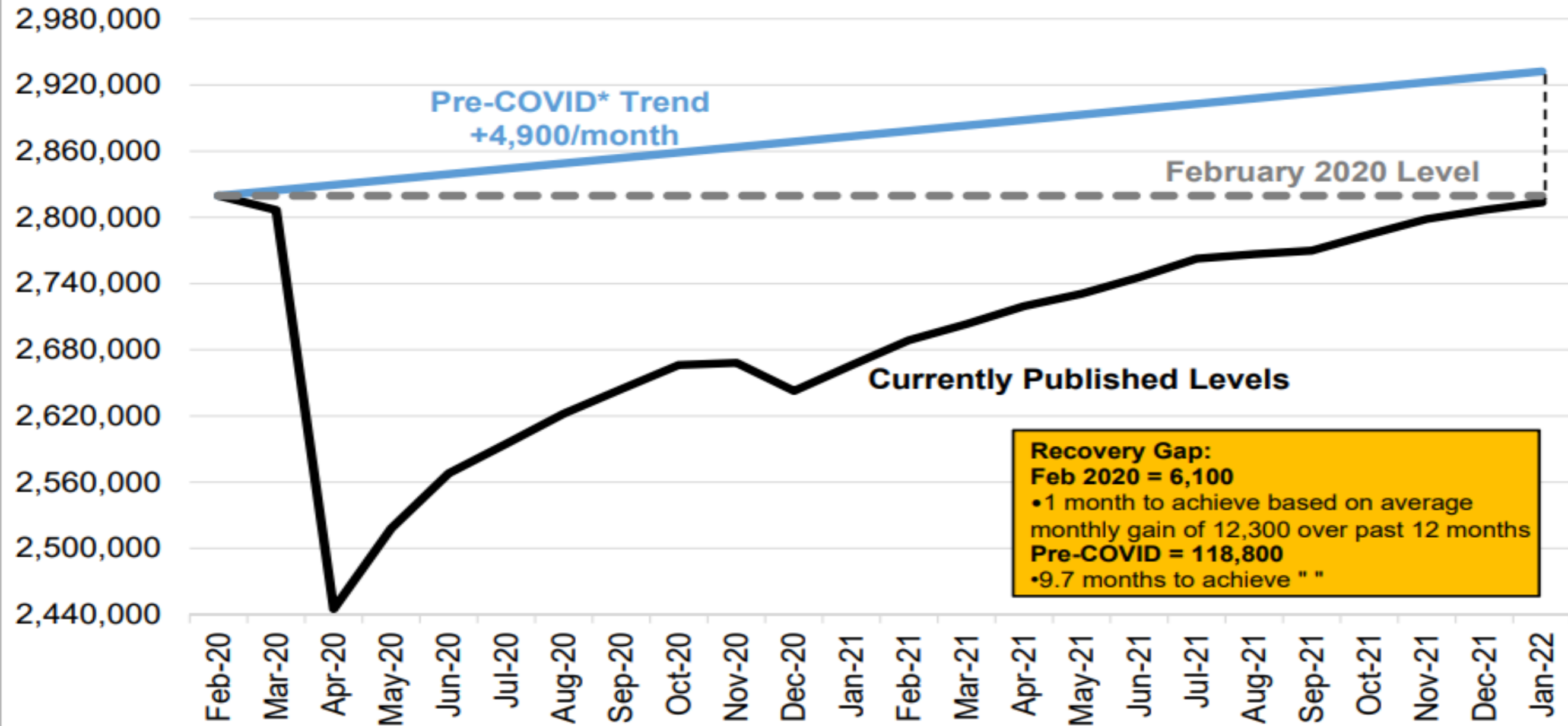


# *Moving pieces*

- War in Ukraine
- Globally may be moving toward weaker growth and higher inflation
- Wage growth + supply chain + supply and demand
  - Inflation will be higher for longer
  - Elevated input prices (oil & nat. gas) and shortages continue
  - Recession risk rising



## Colorado Total Nonfarm Employment and the Gap Between Different Measures of Recovery Baselines



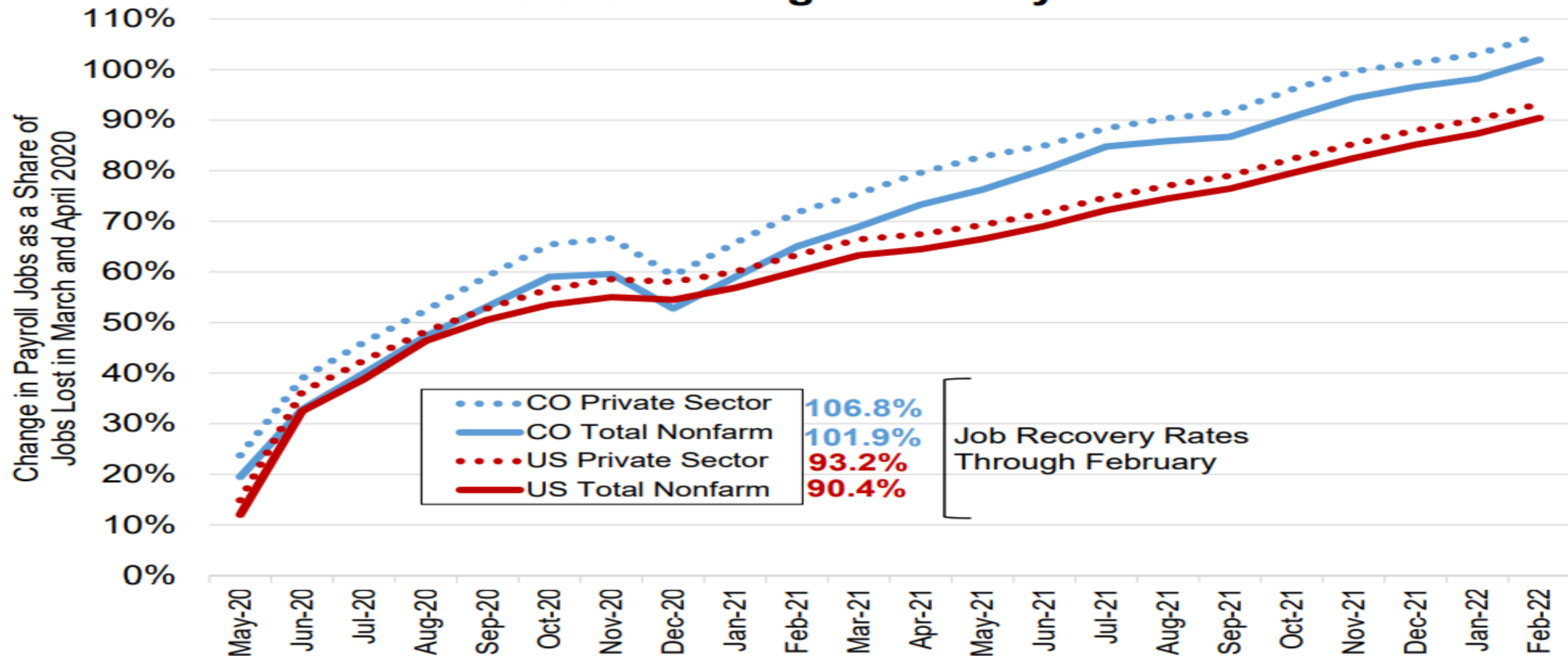
Source: Colorado Department of Labor and Employment; Bureau of Labor Statistics  
 Data seasonally adjusted

\*Note: the **blue line** represents the trendline in the level of total nonfarm employment if the 2019 average monthly gain of 4,900 payroll jobs had held constant. This can be used as a baseline if no pandemic-related recession had occurred and job growth had continued at an uninterrupted pace.



# CO vs. US Recovery Rates

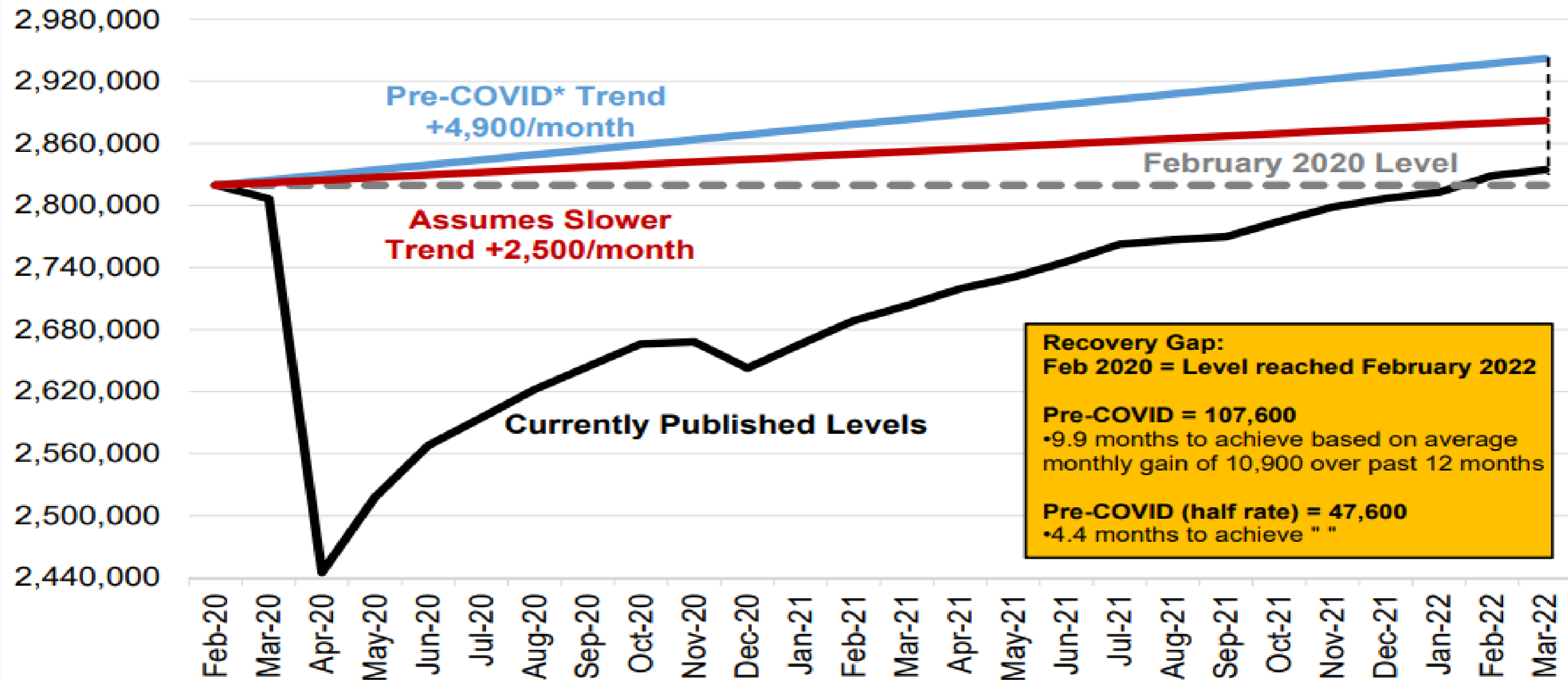
**Colorado's Rate of Job Recovery Notably Outpacing the U.S. Through February 2022**



Source: Colorado Department of Labor and Employment; Bureau of Labor Statistics  
Data seasonally adjusted



## Colorado Total Nonfarm Employment and the Gap Between Different Measures of Recovery Baselines



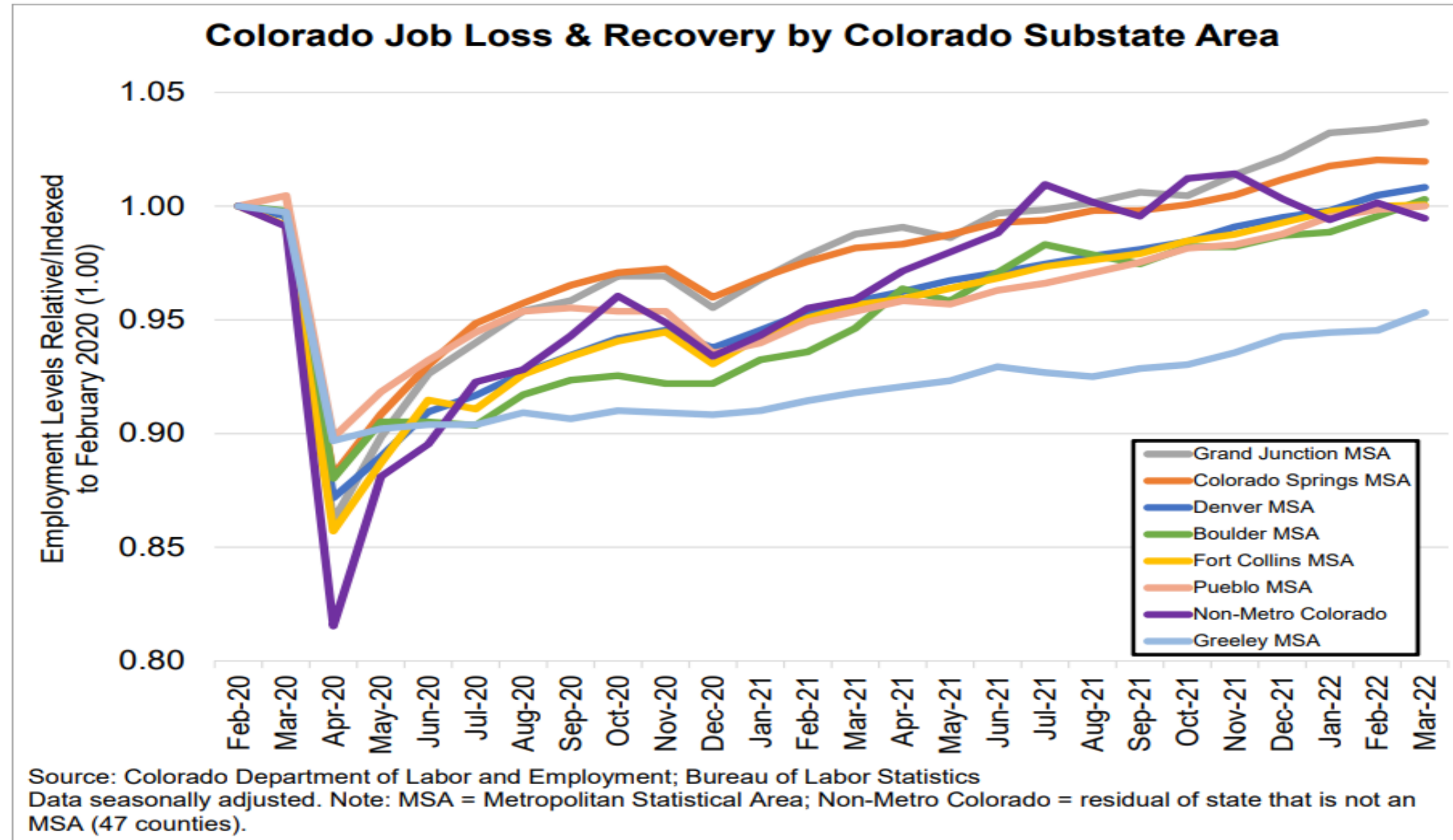
Source: Colorado Department of Labor and Employment; Bureau of Labor Statistics

Data seasonally adjusted

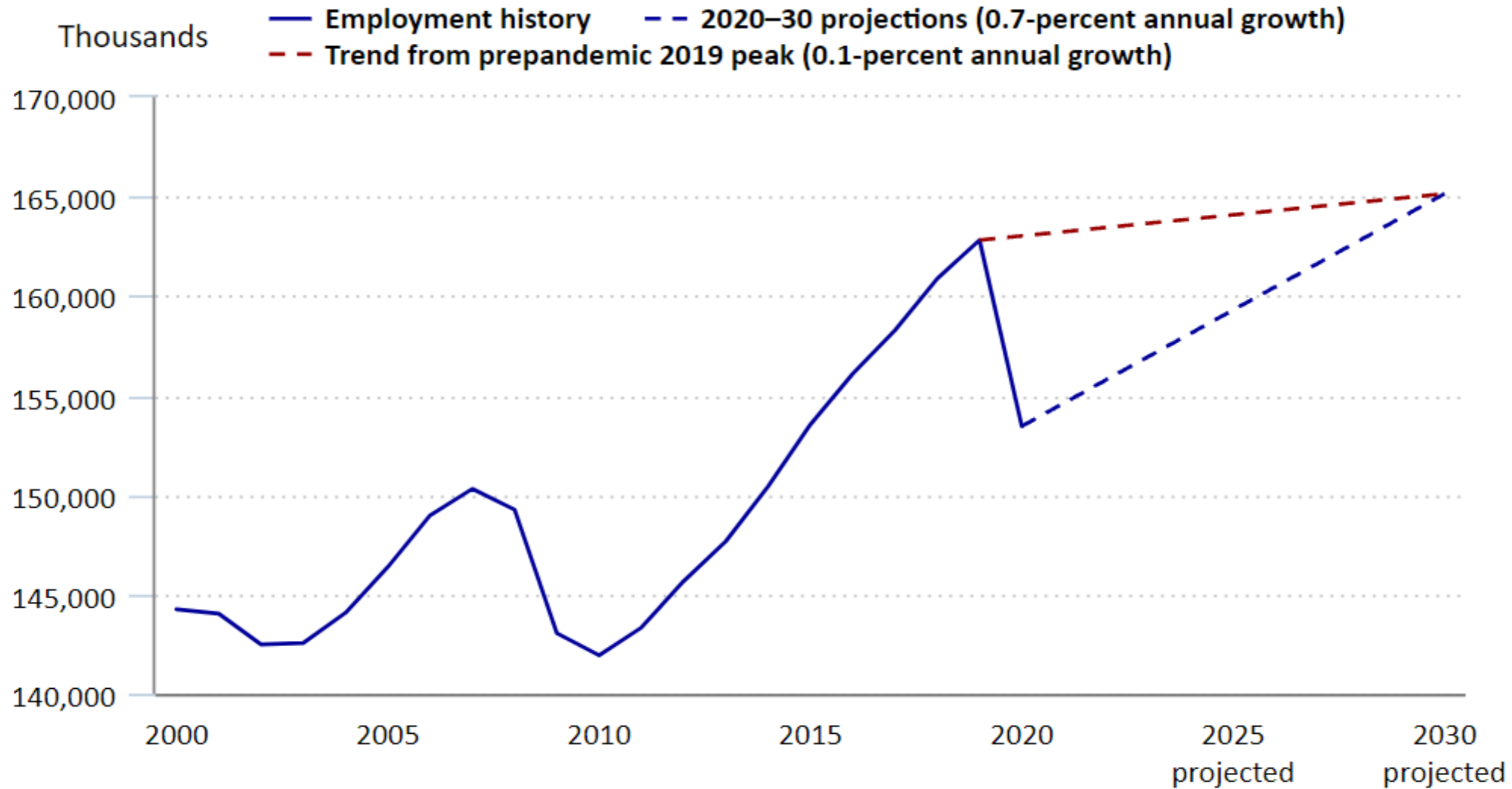
\*Note: the **blue line** represents the trendline in the level of total nonfarm employment if the 2019 average monthly gain of 4,900 payroll jobs had held constant. This can be used as a baseline if no pandemic-related recession had occurred and job growth had continued at an uninterrupted pace. **Red line** assumes a slower counterfactual trendline.



# Colorado March 22 MSA Conditions



**Chart 8. Industry employment, all jobs, 2000–20 and 2020–30 projected (in thousands)**



Click legend items to change data display. Hover over chart to view data.

Note: Industry employment is the sum of the employment figures for nonagricultural wage and salary workers; agricultural, forestry, fishing, and hunting workers; and self-employed workers. Dashed lines represent a flat growth rate between a starting point and a 2030 projected value, not actual projections. The U.S. Bureau of Labor Statistics does not publish inter-year



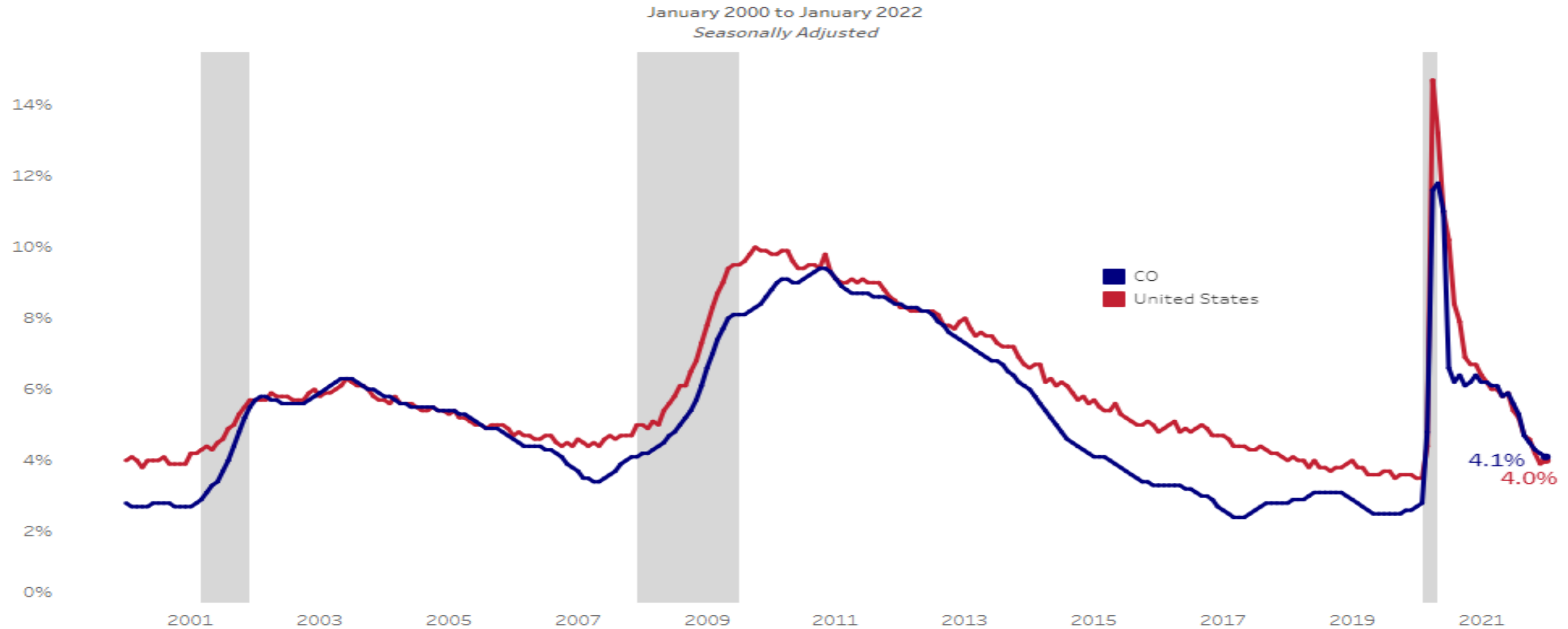
# Annual Job Growth Rate in U.S.

Years	Average Annual Job Change (#)	Max Change (Year)	Average Annual Growth Rate (%)
1990 - 1991	-367K	-1.1 Million (1990)	-0.3%
1992 - 1999	2.6 Million	3.2 million (1997)	2.4%
2000 - 2002	-875 K	-1.4 Million (2001)	-0.4 %
2003 - 2006	1.9 Million	2.4 Million (2005)	1.4%
2007 - 2009	-2.5 Million	-5.9 Million (2008)	-1.9%
2010 - 2019	2.3 Million	2.9 Million (2014)	1.6%
2019 - 2020	-8.7 Million	-8.7 Million (2020)	-5.8%
2020 - 2025	2.7 Million	5.7 Million (2022)	1.9%
2025 - 2050	600K	810,000 (2029)	0.4%



# CO and US Unemployment Rates since 2000

## Unemployment Rates for Colorado & the United States (%)

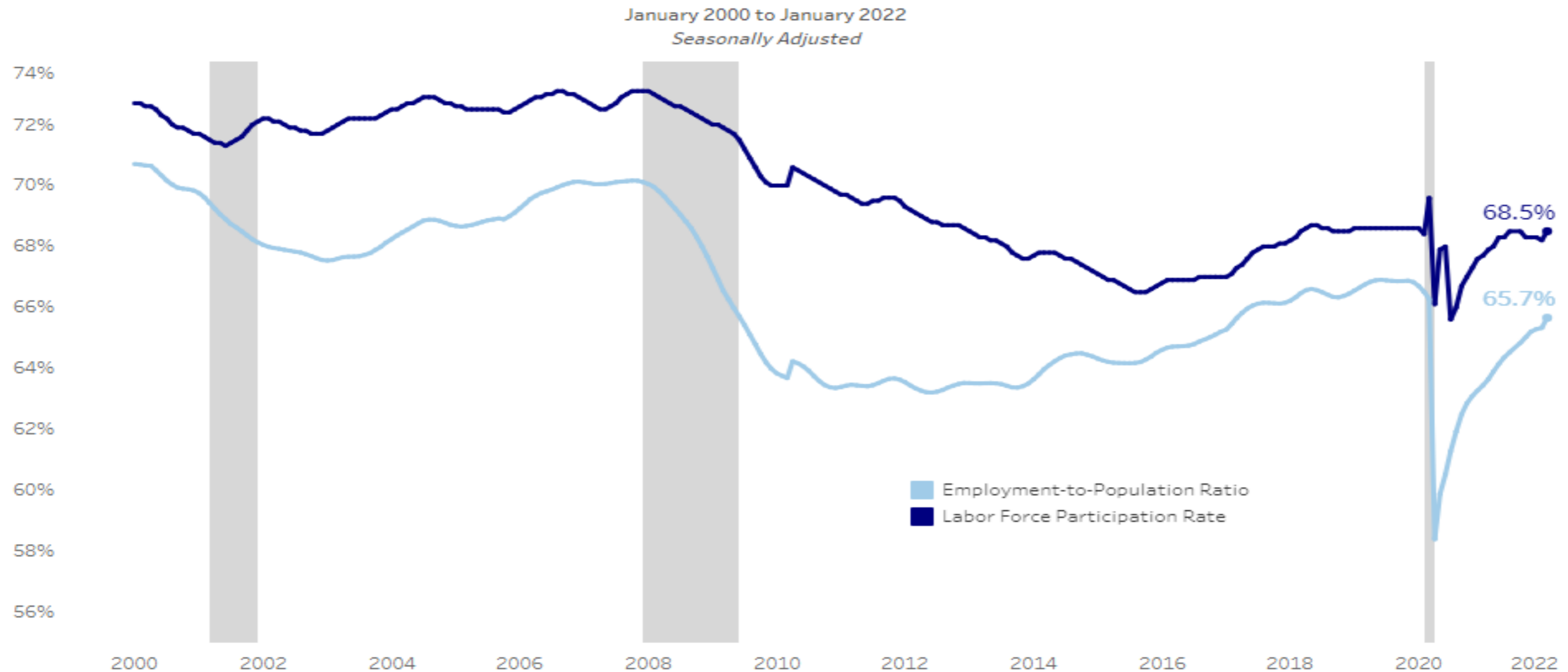


Source: Local Area Unemployment Statistics (LAUS)



# Colorado Emp-Pop Ratio and LFPR since 2000

## Employment-to-Population Ratio & Labor Force Participation Rate



Source: Local Area Unemployment Statistics (LAUS)

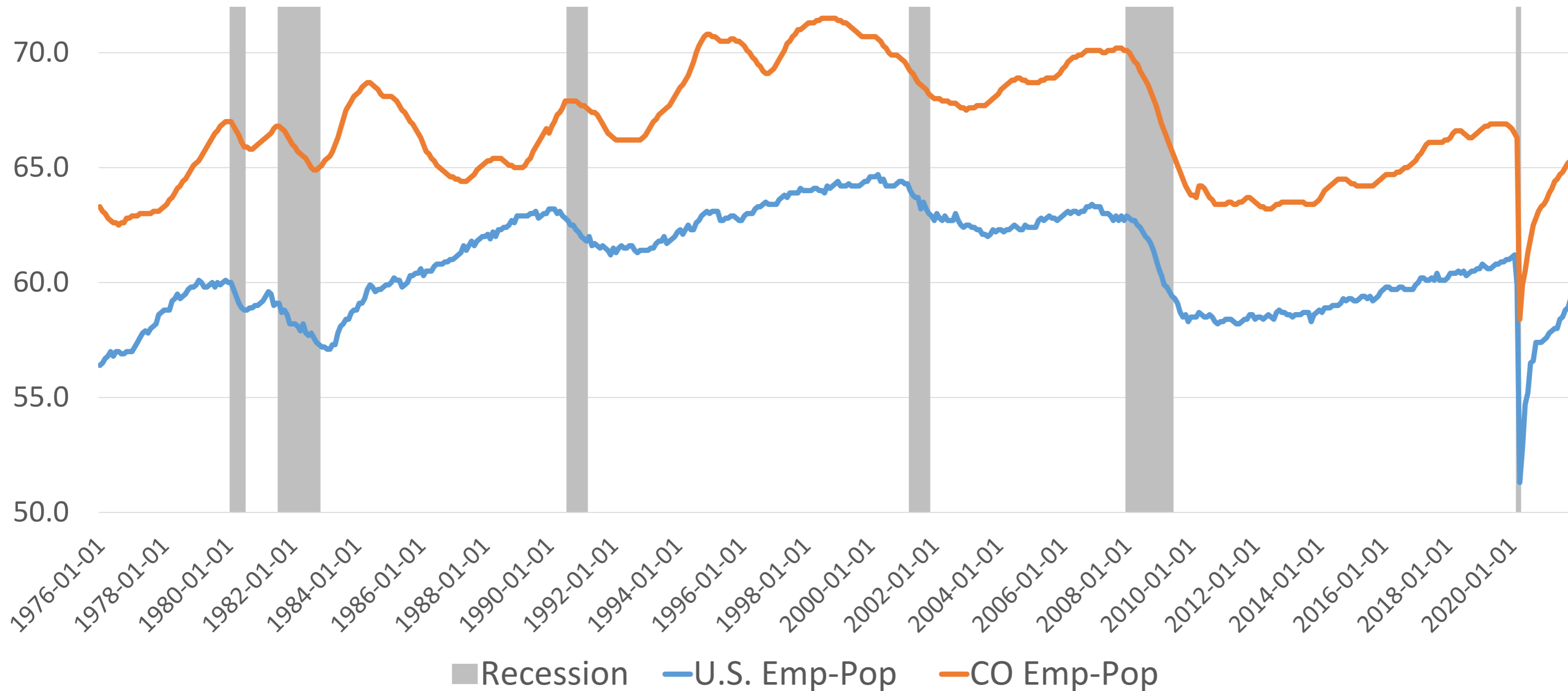
Note: Employment-to-Population Ratio: The number of employed people as a percentage of the civilian noninstitutional population. In other words, it is the percentage of the population that is currently working.

Labor Force Participation Rate: The percentage of the civilian noninstitutional population 16 years and older that is working or actively looking for work.



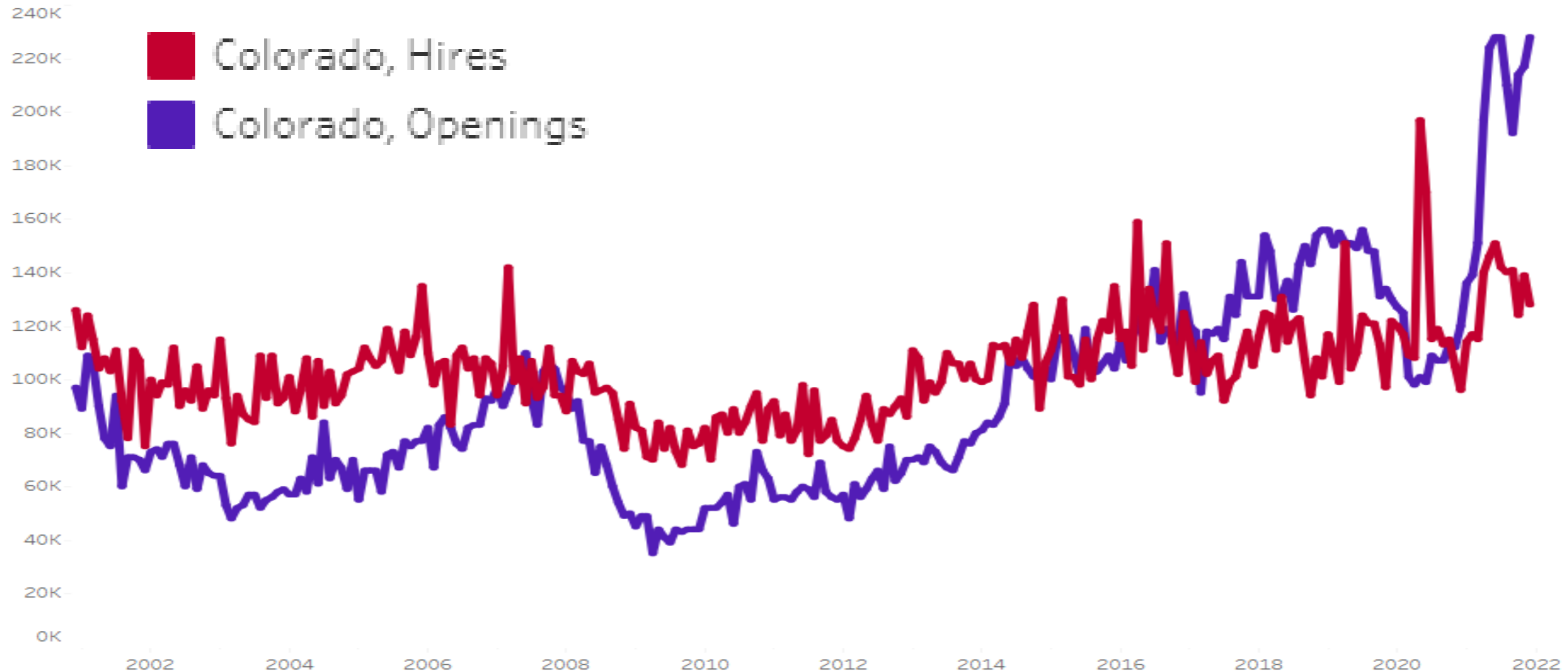
# Emp-Pop Ratio 1976 to 2021

US and Colorado Employment-Population Ratios (16+ Employed / Labor Force 16+)



# Job Openings far exceed Hires

## Hires vs. Openings, Colorado



Source: Bureau of Labor Statistics, Job Openings and Labor Turnover Survey (JOLTS)

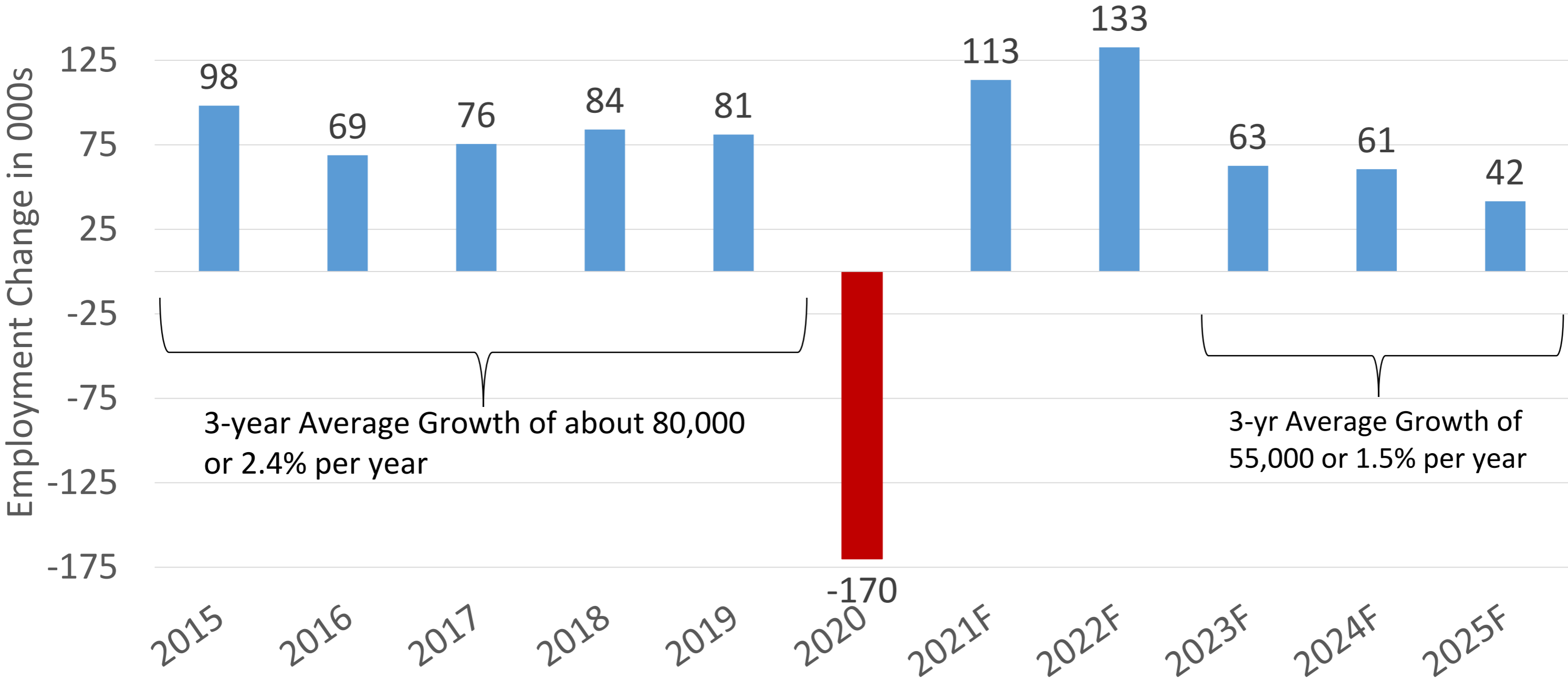
Note - JOLTS defines Hires as all additions to the payroll during the month and defines Job Openings as all positions that are open (not filled) on the last business day of the month.

For a schedule of JOLTS data releases, please visit <https://www.bls.gov/schedule/2022/home.htm>



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# Colorado Annual Change in Total Estimated Jobs (000s)



# Looking ahead at minimum Wages

- One of the factors that could influence Colorado's Competitiveness is our minimum wage.

Year	Colorado	Denver	U.S.	H1_Inflation
2020	\$12.00	\$12.85	\$7.25	2.7%
2021	\$12.32	\$14.77	\$7.25	1.9%
2022	\$12.52	\$15.87	\$7.25	8.5%
2023P	\$13.58	\$17.22	\$7.25	4.0%
2024P	\$14.13	\$17.91	\$7.25	2.7%
2025P	\$14.51	\$18.39	\$7.25	2.2%
2026P	\$14.83	\$18.80	??	1.5%
2030P	\$15.75	\$19.95	??	1.5%

- When we voted to raise the state minimum wage, it was slated to move from \$9.30/hr in 2017 to \$12.00 in 2020 and then be indexed to inflation. Denver's minimum reached \$15.87/hr in 2022 and is also indexed to the annual inflation rate in the first half of the year in Denver MSA.
- Higher inflation seen recently and expected to continue into 2022 means we could be seeing increases of \$1.06 to \$1.35/hr both statewide and in Denver beginning in January 2023

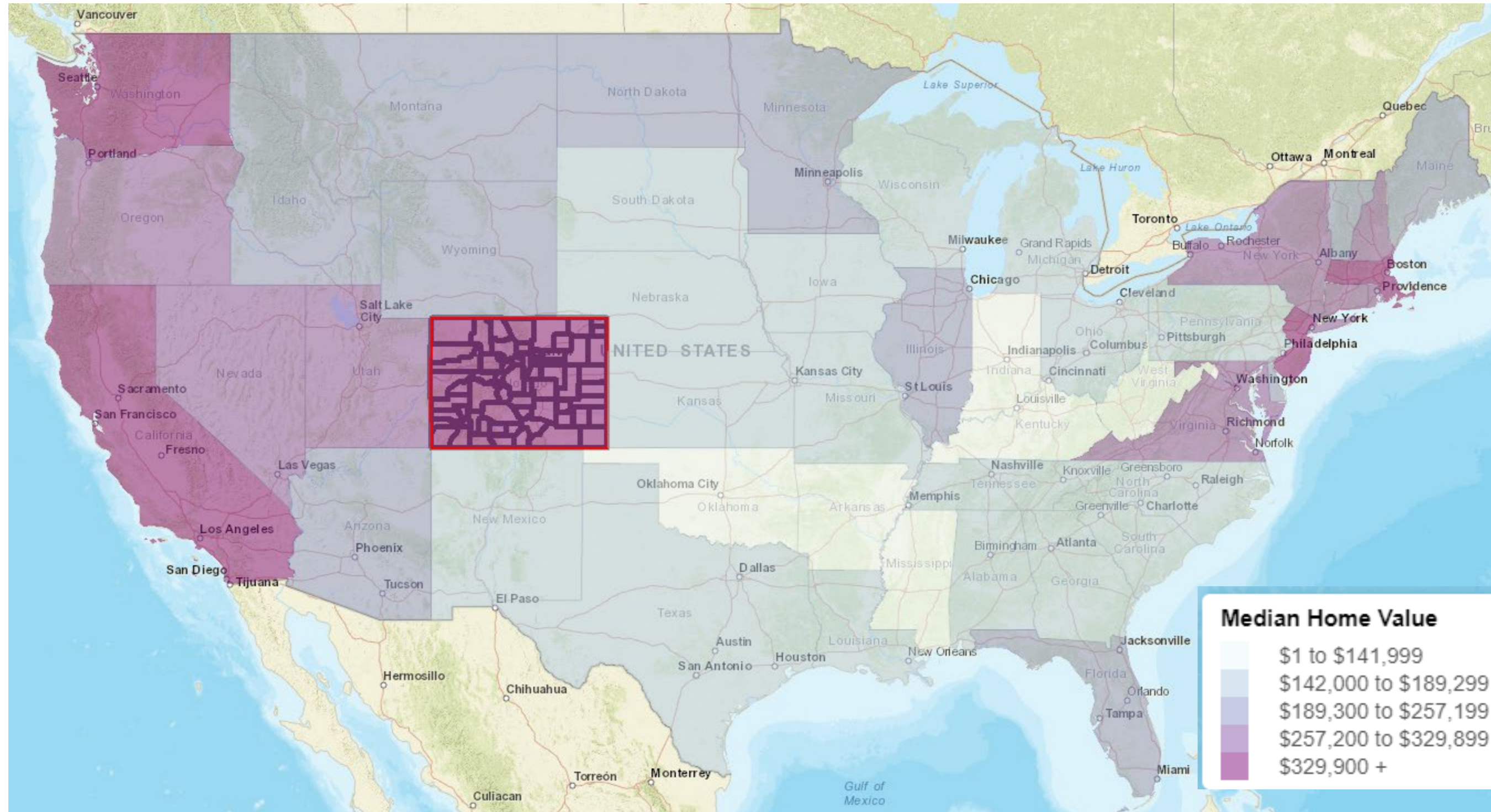


# *Summary - Impact on Labor Force*

- Labor Force - slowing
- Aging - growth in retirees 400K this decade, COVID retirements
- Slowing births - soon fewer workers, peak births are 14-15yr
- Migration slowing, International down
- Hispanic and multi-race growth
- Work from anywhere - not everyone, not all the time, but....
- Employee centered vs. firm centered
  - Life / Work Balance vs. Work / Life Balance
- Cost of Living



# Median Home Value



Colorado - 5<sup>th</sup> Highest Median Home Value

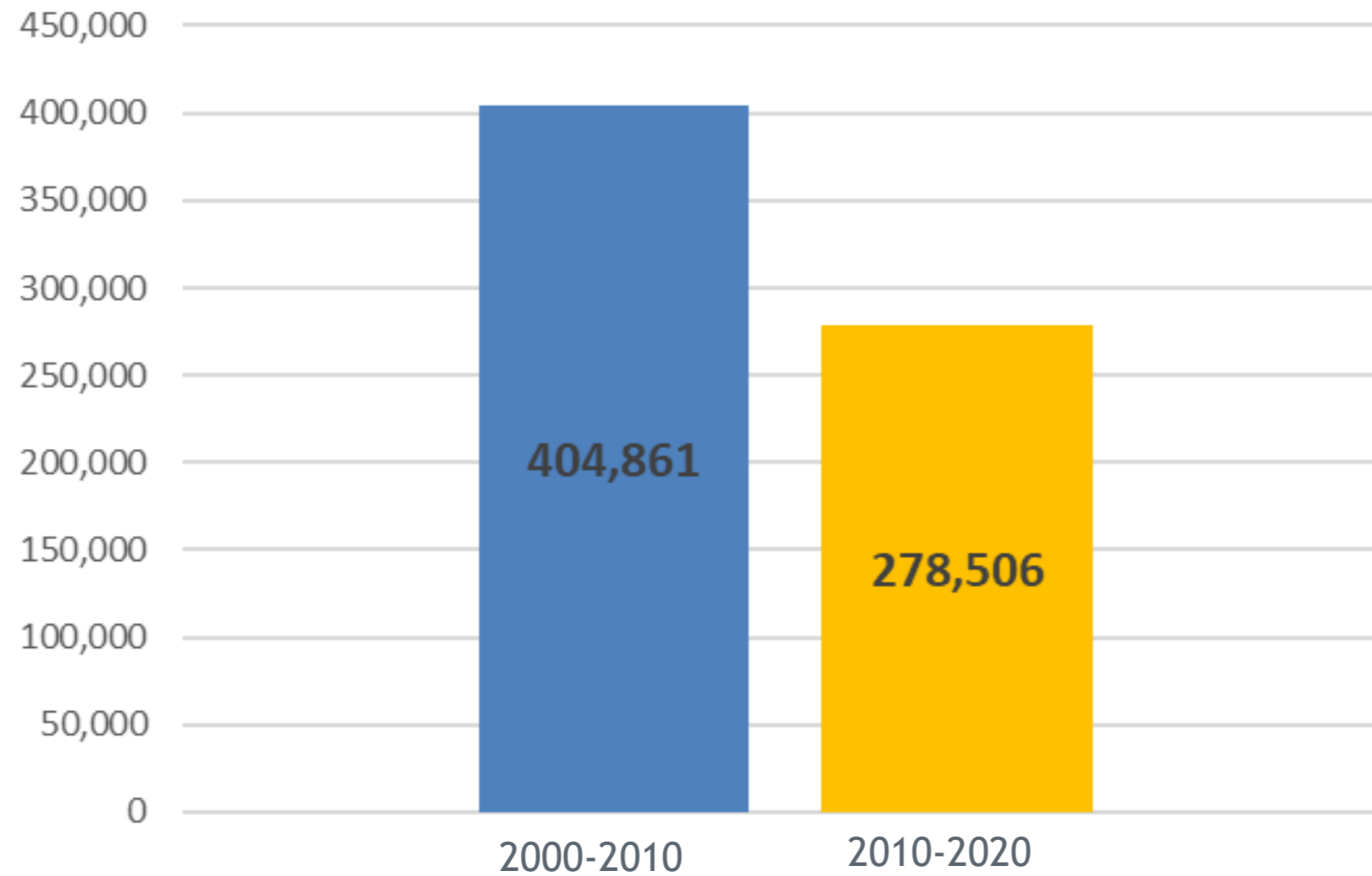
Colorado 10<sup>th</sup> Highest Median Household Income & 8<sup>th</sup> Median Family



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American Community Survey, 2020 5 yr.

## Colorado Growth in Housing Units by Decade



- 126,000 fewer housing units built this decade
- Population growth almost the same.

6 counties built more housing units this decade than last.

- Denver +24,800
- Boulder + 6,600
- Jefferson +983
- Cheyenne +80
- Alamosa +44
- Bent +18

Largest slow down in housing construction between decades was in:

- Arapahoe, -17,200
- El Paso, -15,800
- Douglas, -14,700
- Mesa, -9,400
- Pueblo, -8,145



# U.S. Census Bureau Building Permits Survey New Privately Owned Housing Unit Authorizations

Measure (time series only)

Total units

Year

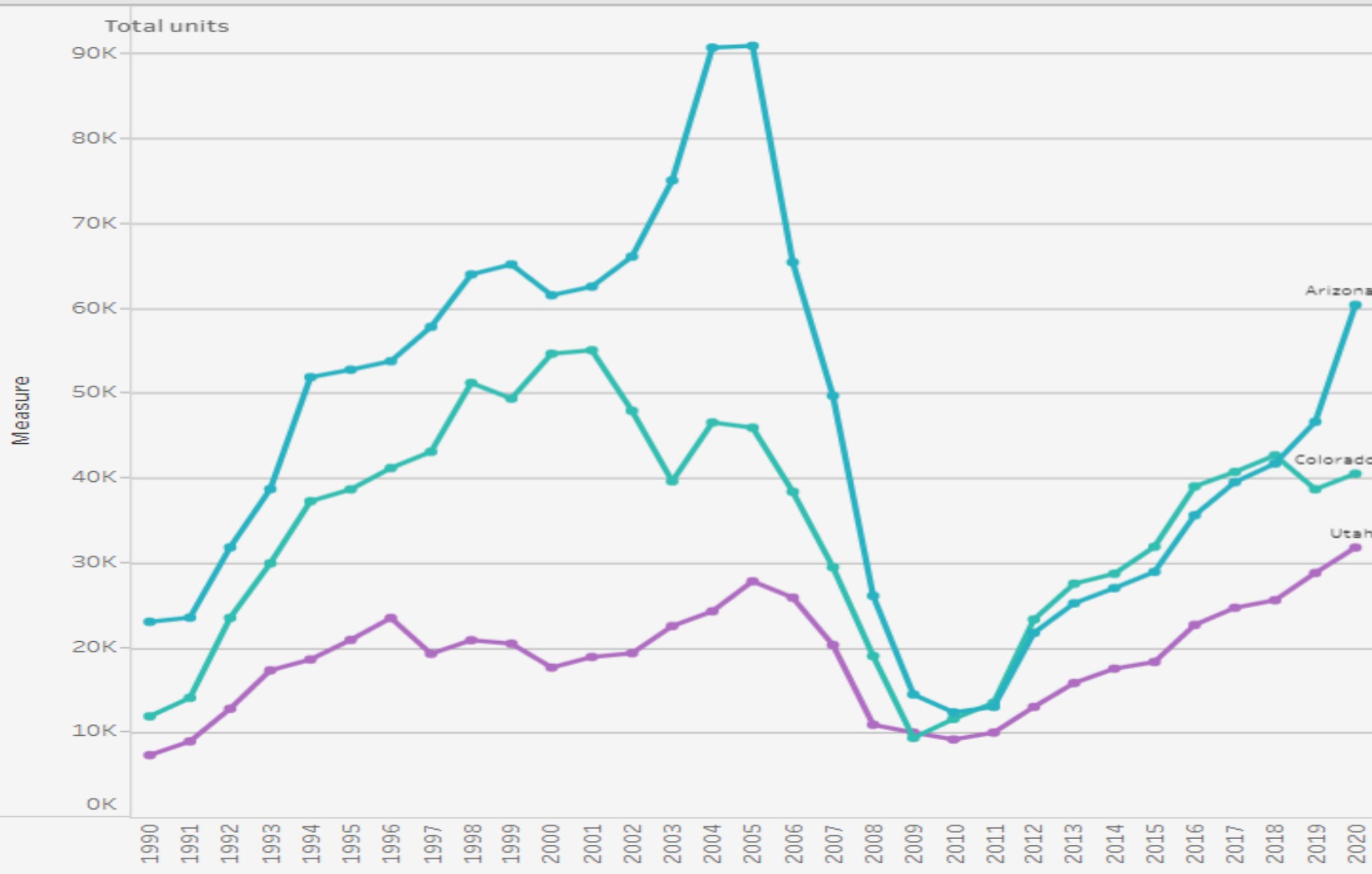
(All)

Period

Annual

Geographic Type

State



State: (Multiple valu...)

County: Null

Place: Null

Location Name

- Arizona
- Colorado
- Utah

Instructions

Download

- 2021 Populations:
- Arizona 7.276 Million
- Colorado 5.812 Million
- Utah 3.338 Million
- Compared to Colorado,
- Arizona has a population 25% larger than
- CO and has more 2<sup>nd</sup> homes
- Utah has 2.5 million fewer people than
- CO.

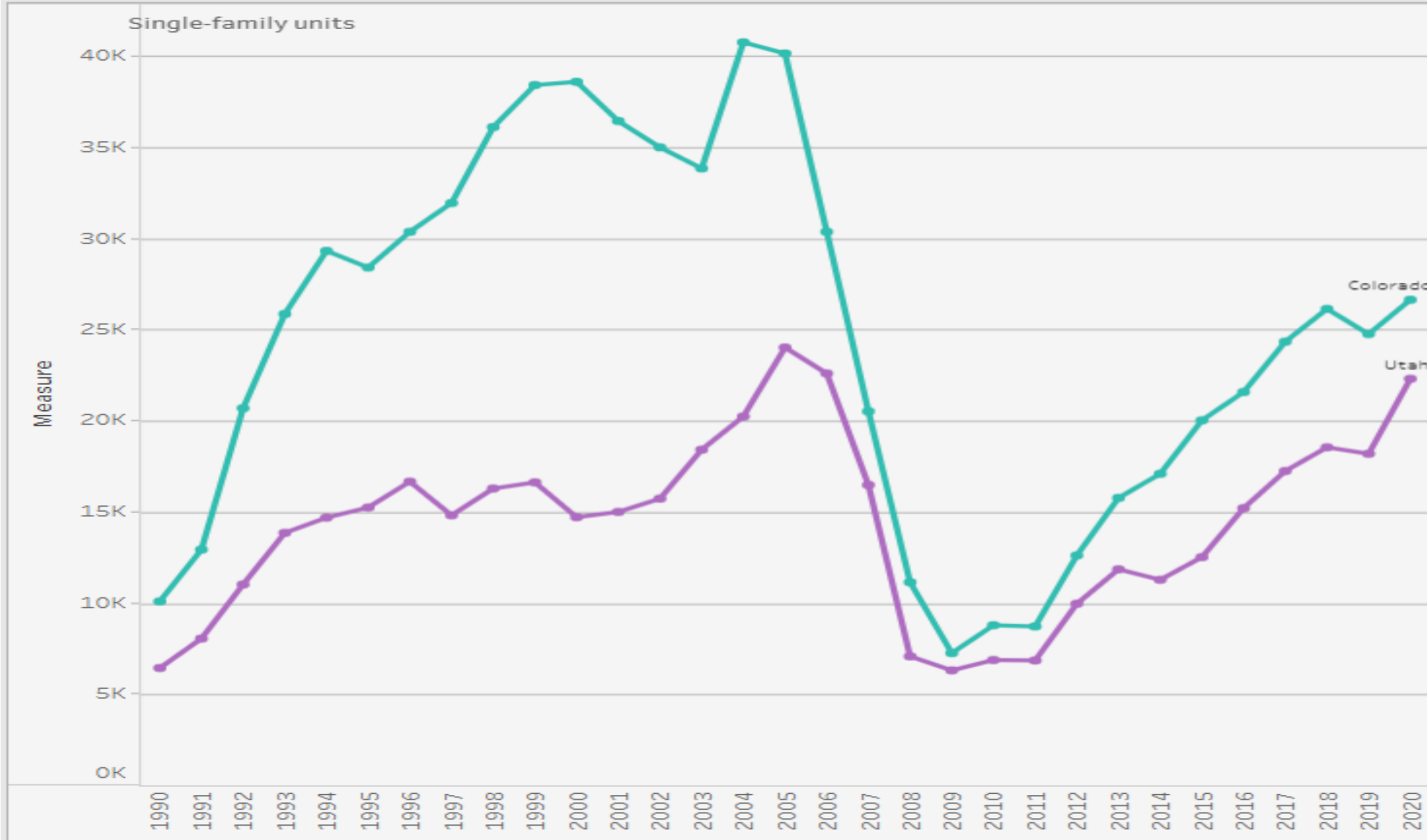


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<https://www.census.gov/library/visualizations/interactive/bps-new-privately-owned-housing-unit-authorizations.html>

# U.S. Census Bureau Building Permits Survey New Privately Owned Housing Unit Authorizations

Measure (time series only): 
 Year: 
 Period: 
 Geographic Type:



State: 
 County: 
 Place:

Location Name:  
 Colorado  
 Utah

Instructions

- Single Family Home permitting in Utah has been tracking Colorado's trends and total numbers closely.
- 2020 showed convergence, with CO outpacing UT by 4,300 units or 20% more.

# *Summary - Housing*

## Supply

fewer units built last decade

Age - older adults move less often, less churn

Residential Construction - Slow to start and stop

Supply chain and tight labor

## Demand

Job driven

Aging - type and persons per household

Millennials and Gen Z - first and **second homes**

STRs, Institutional Investors, Cannabis - vacant



# *Uncertainty in the Forecast +/-*

War in Ukraine and Pandemic

Intl' immigration

Housing - supply, price, type, location - 5<sup>th</sup> highest  
MHV

Water

Aging - labor force, prepared labor force

Infrastructure/Transportation

Natural disasters - nationally

State Budget





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<https://demography.dola.colorado.gov>

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# *Why Does the Demography Office Study the Economy?*

- Job creation is a large driver of migration
- Different economic drivers throughout the state
  - Base Industry Analysis looks at industries selling outside area
  - Local Resident Services - Supported by local population
- Labor force is driven by both type of job and characteristics of the population

