



Economic Forum

COLLEGE OF BUSINESS

UNIVERSITY OF COLORADO
COLORADO SPRINGS

The National, State & Local Economies

September 1, 2022

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Gratitude

- ❖ Founders of the Forum who gave me this community opportunity (Tom Zwirlein and Ron Chernak – thank you!)
- ❖ Forum community partners – overwhelmed by your support and positivity! Thank you, Rebecca!
- ❖ University of Colorado system, State of Colorado government offices, Governor’s office, media

Next Chapter

- ❖ Focus on what Rebecca (K-12) and I are both passionate about – workforce development
 - Build upon collaborations with community colleges in the state (PPSC, CCA, PCC..)
 - Collaborations with our local K-12 – educating kids about high demand occupations, skills, etc..
- ❖ Scale what we do to other communities across the country
 - Tracking of economic metrics – enables good decision making and “what gets measured gets done”
 - Key labor market information to inform post-secondary training and HS career & technical training (CTE)
- ❖ New nonprofit *supporting* the good work of others
- ❖ We need an *all-of-the above* mentality given today’s challenges. Reap the benefits of collaborations and synergies.

Platinum Level Partners:



Gold Partners:



Media Partners:



Silver Level Partners:



Sustaining Level Partners:

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Apartment Association of Southern Colorado

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Downtown Partnership of Colorado Springs

dpiX, LLC

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Integrity Wealth Advisors

Kimberley Sherwood

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Olive Real Estate Group, Inc.

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Salzman Real Estate Services, Ltd.

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START Real Estate

TBK Bank

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Visit Colorado Springs

THANK YOU!

The Overarching Context

We have three transitions happening simultaneously:

- **Food** - due to still increasing population, but climate impacts our ability to produce sufficient food and at attainable costs
- **Energy** – due to the move towards alternative/green energy sources but without enough attention on to *how* to globally coordinate bridge sources of energy (e.g., natural gas)
- **Demographic** – due to stagnant or declining population in developed countries causing labor shortages alongside increasing population in poorest regions

Transitions of this magnitude impact both short-term and long-term economic growth.

In the Short Term: U.S. Recession??

Labor Shortages

Too few workers & low labor participation (the **demographics** are a short & long-term reality)

Seismic demographic transition due to aging, lower birth rates, lower immigration

Skills gap

Consumer and Business Confidence

High **food** and **energy** prices (both a short and long-term challenge) – inflation

Supply Shortages/Disruptions – inflation and Federal Reserve decisions

Will restrictive monetary policy (increased interest rates) sufficiently quell inflation?

Residential and Commercial Real Estate

Final Thoughts



Recession?

- 2022 Q1: **-1.5%** annualized GDP (contraction)
- 2022 Q2: **-0.6%** annualized GDP (contraction)
- Two consecutive quarters of negative GDP growth = “Recession”
- Atlanta Fed GDPNow showing +1.6% GDP growth for Q3.

With These Mostly Structural Headwinds

Big Problems Call for Big (and Bold) Solutions

- Thinking *longer-term* enables us to define our solutions and environment as opposed to the problems defining us.
- **Innovate** our way to the other side
- Seek out (real) **data**, look at data objectively, and build solutions with a data-driven mindset

<https://www.fox21news.com/news/economic-update/economic-update-innovation-and-the-energy-sector/> - **EDUCATE!**

https://gazette.com/business/major-headwinds-point-to-long-term-economic-challenges/article_ba10fb72-f7b3-11ec-946f-471b534df74e.html



Big and Bold Solutions

Energy and Food (they are correlated..)

- Food is transported so higher energy costs = food inflation
- Reducing climate disasters increases food production and stability
- Focus on clean energy, which employs 3X the workers that fossil fuel extraction and generation does (4m U.S. workers); and rapidly growing
- Median hrly. wages for clean energy jobs 25% higher than U.S. median wage
- 52% of world's new vehicle sales will be all electric by 2030.
- (Govt) provide incentives to pivot more quickly – reduces emissions, mitigates volatile world supply of gas, creates jobs, reduces inflation
- Use fiscal stimulus to lead global energy transition and train people

Big and Bold Solutions

Demographics

- Study and raise public awareness on top-growing occupations
- Provide subsidized training on highest demand occupations

Great use of tax dollars since workers become taxpayers, we reduce welfare programs and increase global competitiveness

- Provide incentives to higher ed to audit labor demand to programs they offer with more emphasis on high demand certifications/skill sets
- Reform immigration

More ability to impact change at the local level

Current State of the Labor Market



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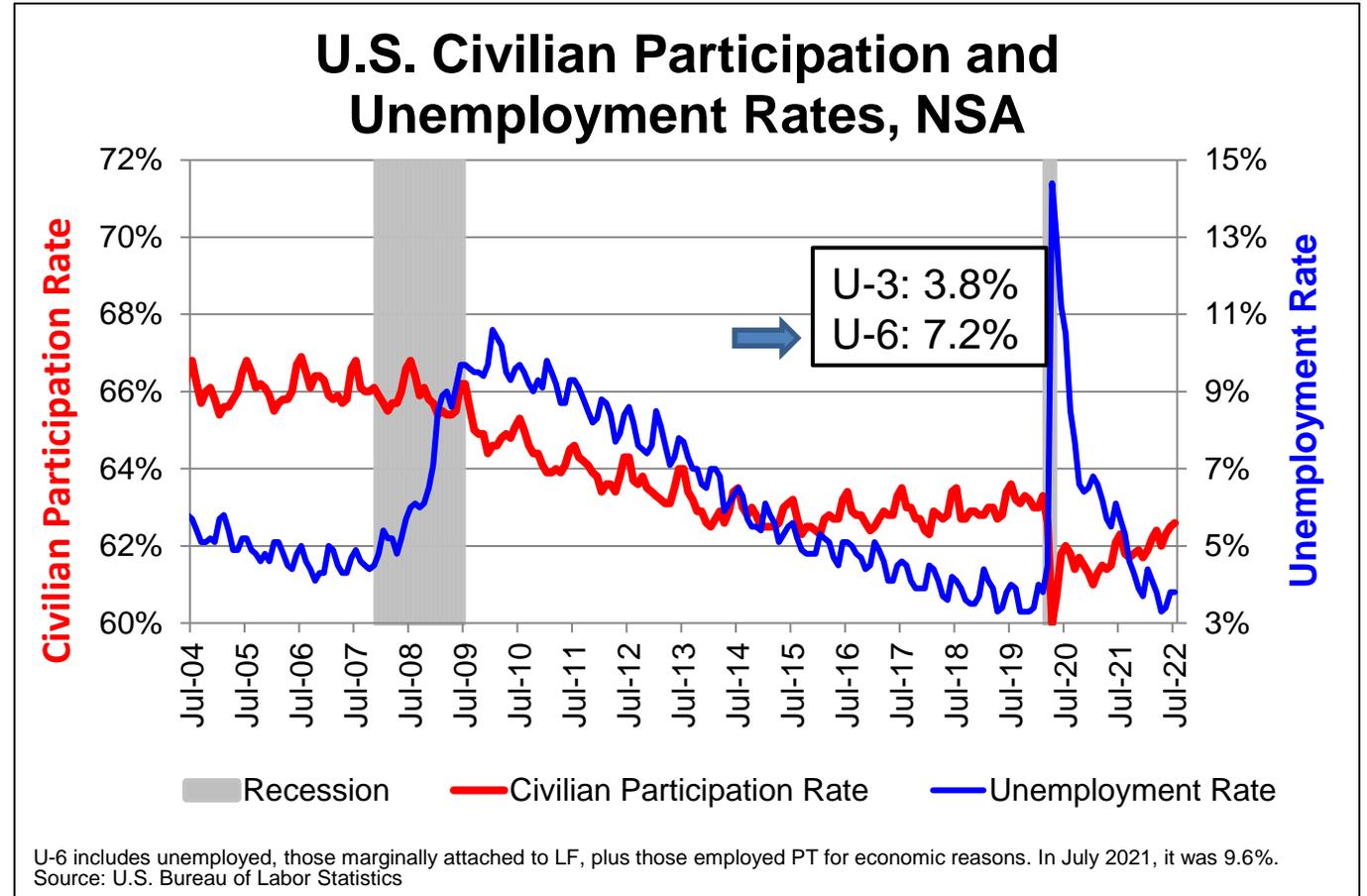


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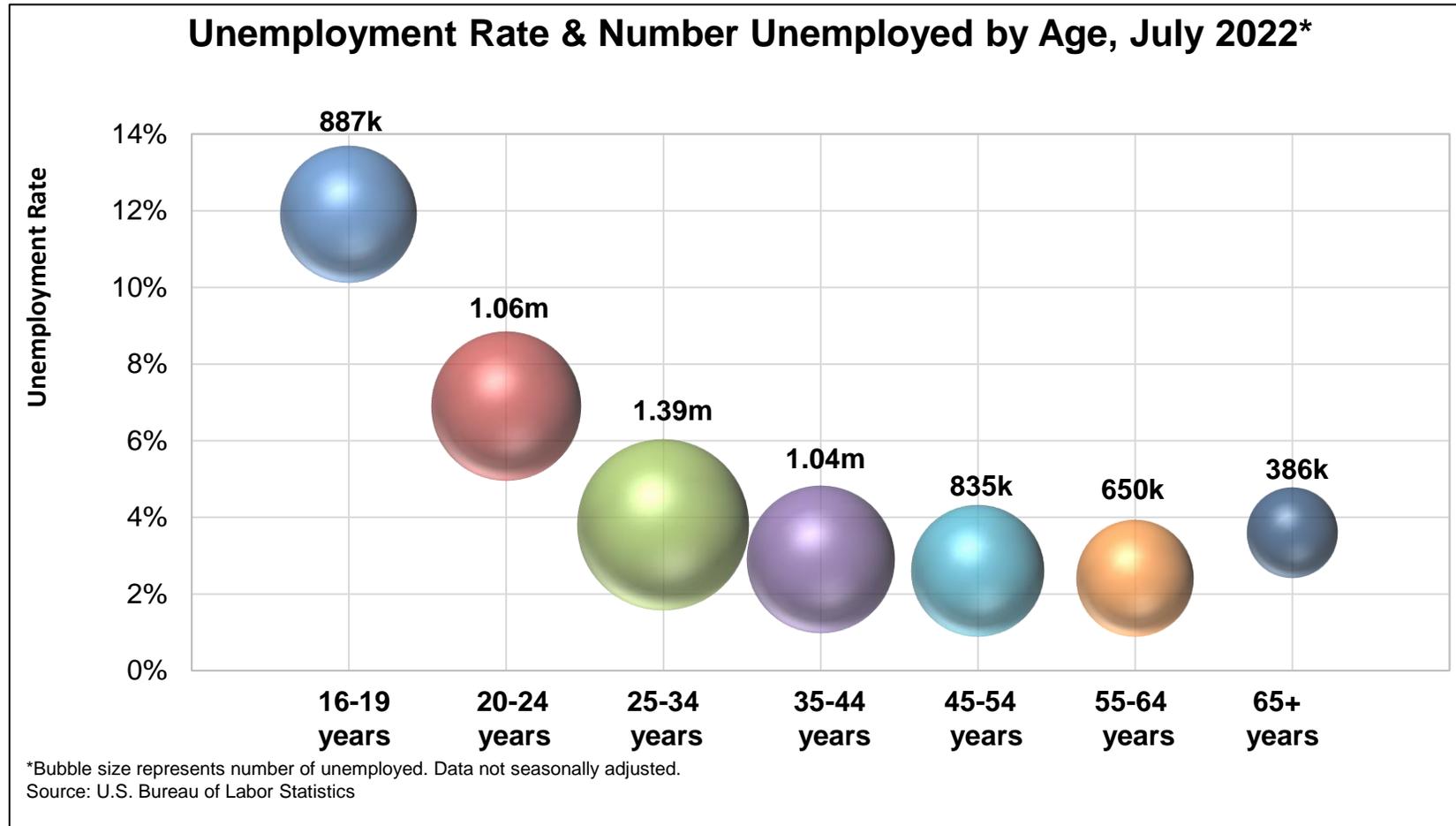
Jobs at the Center of Everything - Labor Shortages Persist

- Very low unemployment rate of 3.8%
- Strong July jobs report (+528,000).
- Unemployment rate low because of all the people who are not participating in the labor force (not counted in U-3)
- Still have **5.7m** unemployed people AND **5.9m** not actively in the LF, but who want a job.
- Total unemployed plus PT who want FT, marginally attached to LF: U-6 = 7.2% or **11.1m** people in July
- A LOT of un-utilized labor



*Labor participation never recovered after Great Recession.
U.S. has 0.5 workers for every open job!*

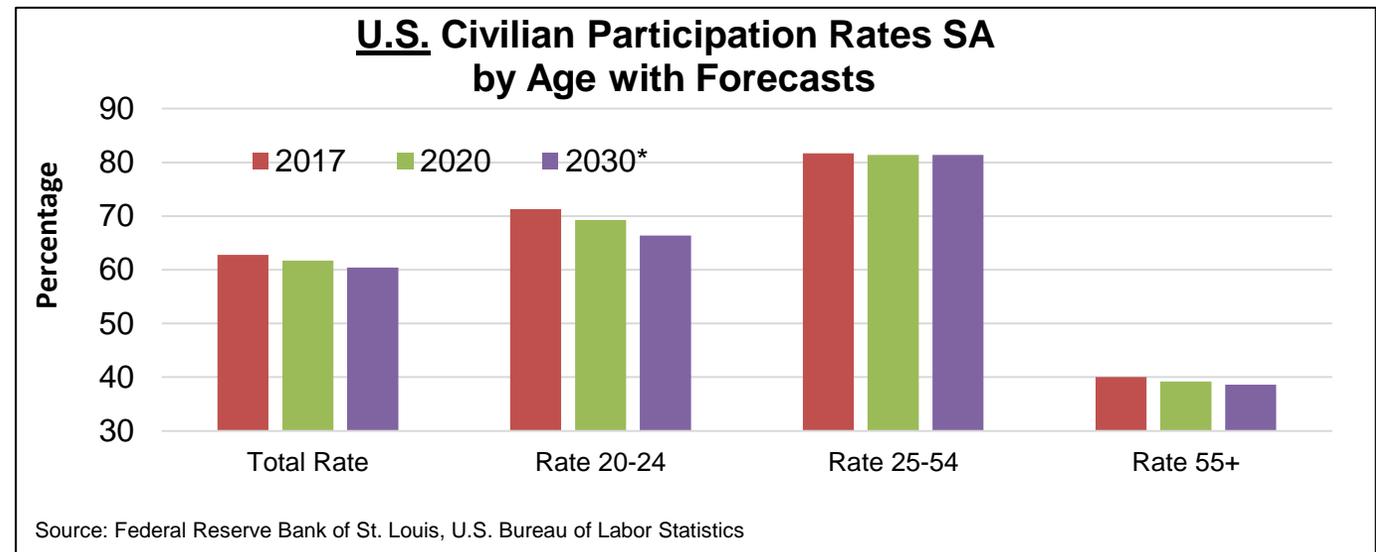
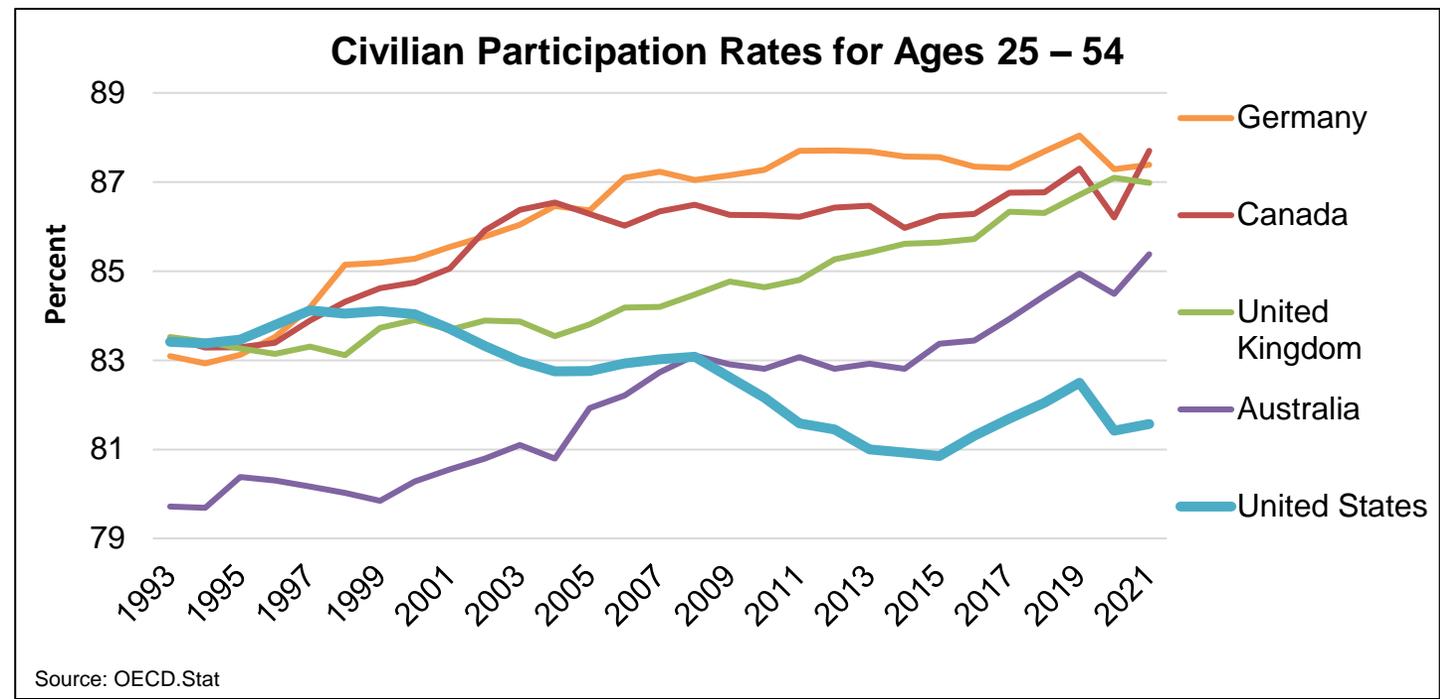
Most of the Unemployed are Young...



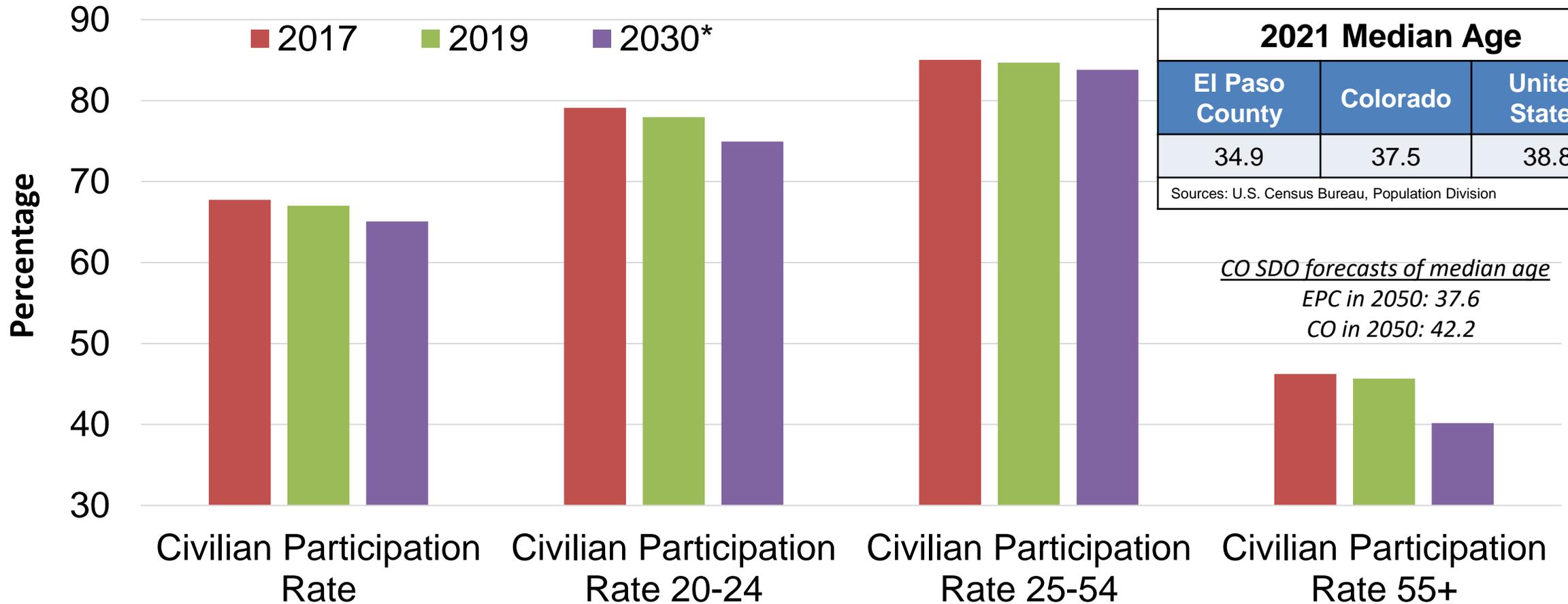
But they are the ones who are more actively looking for work...

How Does This Compare to Other Nations and What Are Future Prospects??

- Peer nations have aging demographics like U.S. (or worse).
- Most peer nations have as generous or more generous unemployment benefits.
- Even before pandemic, LF participation forecasted to decline more by 2030 – and it's not all about aging (look at ages 25-54)...



Also True for Our Region: EPC Civilian Participation Rates SA by Age with Forecasts



2021 Median Age		
El Paso County	Colorado	United States
34.9	37.5	38.8

Sources: U.S. Census Bureau, Population Division

CO SDO forecasts of median age
EPC in 2050: 37.6
CO in 2050: 42.2

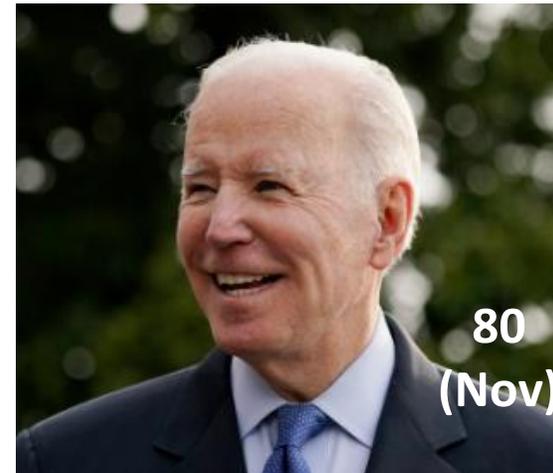
*Forecast
 Source: Colorado State Demography Office

Why Do We Have a Shortage of Bodies?

Mostly Demographics

- Need to remember that the labor participation rate is calculated with all people ages 16 and up.
- This includes senior citizens!
- U.S. has 1 in 7 people ages 65+ (1 in 5 by 2030)
- So, the main reason our LPR is falling so much is the aging of our demographic especially as Boomers get older.
- If we look at “true” working aged people (ages 16-64), LP is the same now as 2019: 76.3%

Labor challenges we are experiencing are not all due to the young and the restless (or the lazy).



Who Are the Unemployed and the Non-participating?

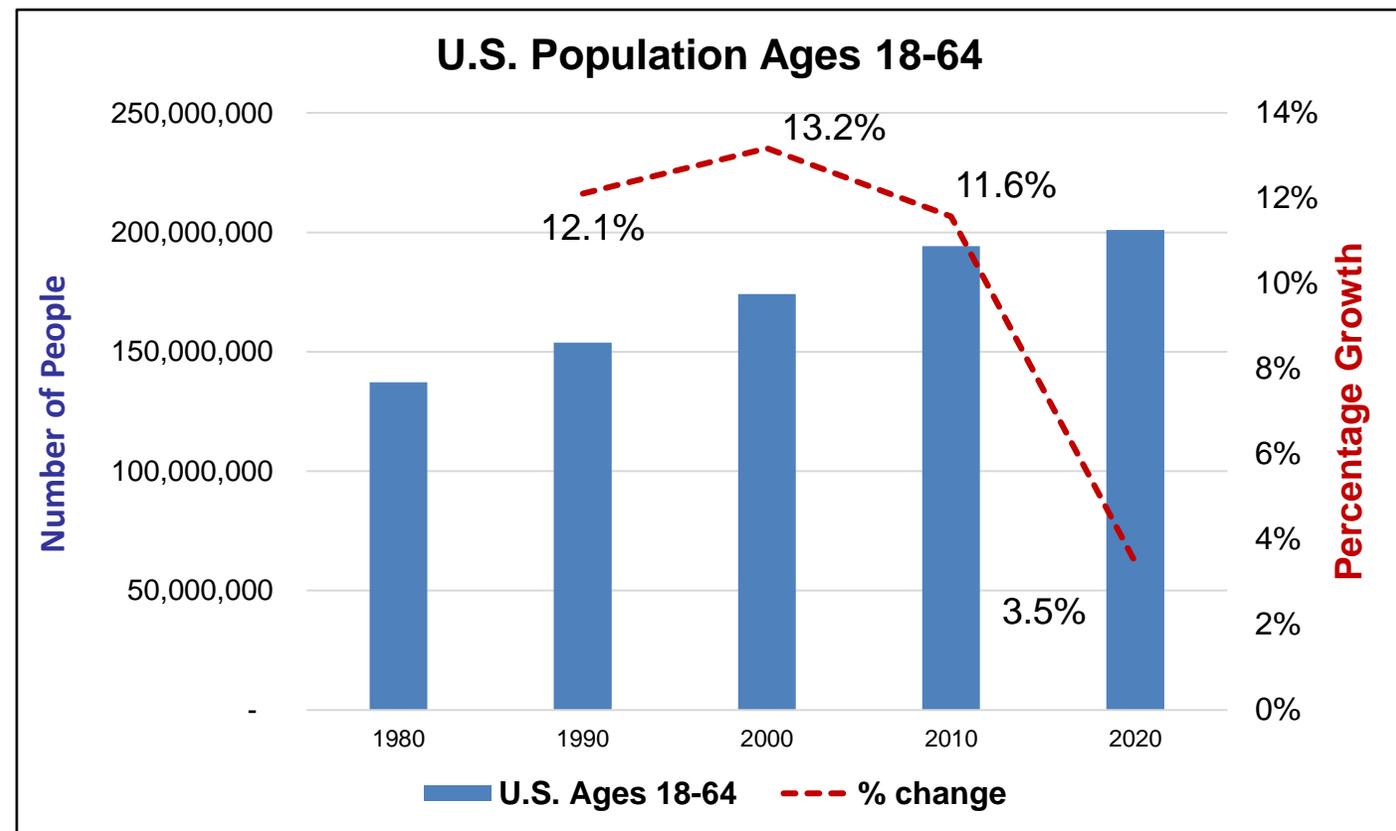
- And more women than men (even in Colorado)...
- Childcare clearly an issue (even before pandemic).
- Local study showed ROI of 19% for subsidized ECE program.

<u>COLORADO DATA</u>	Labor Force 2019	Labor Force 2021	Change from 2019
Men	1,696,000	1,712,000	0.94%
Women	1,439,000	1,448,000	0.63%
Ages 20-24	314,000	288,000	-8.28%
Ages 25-34	773,000	759,000	-1.81%

Source: U.S. Bureau of Labor Statistics, Local Area Unemployment Statistics. 2021 CO women at 4.8% unemployment rate & men 5.3%, but that is due to nonparticipating women.

More on Demographics..

- Shouldn't ignore declining absolute number of working-age people.
- This will only get worse in coming years:
 - In 2010, we had 74.2m under 18
 - In 2020, 73.1m under 18 (a 1.4% decrease)
- Decline in fertility started in 2007.
- Another argument for legal immigration reform.*



“Population Under Age 18 Declined Last Decade”

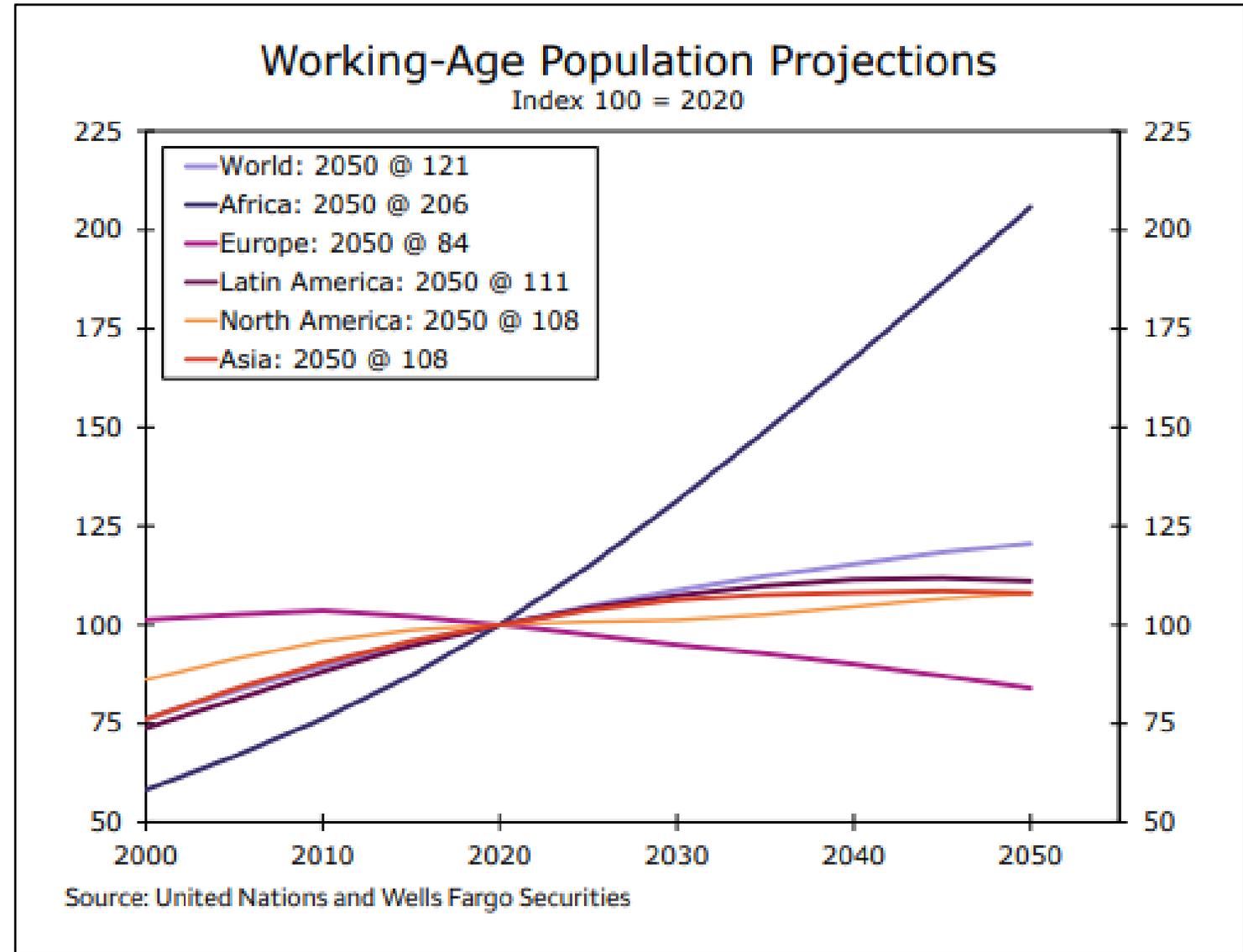


Source: U.S. Census Bureau

* Immigration restrictions started in 2017. Prior to that we had ~1.5 to 2.0 m immigrants per year and in past two years have ~250,000 per year. Pandemic didn't help.

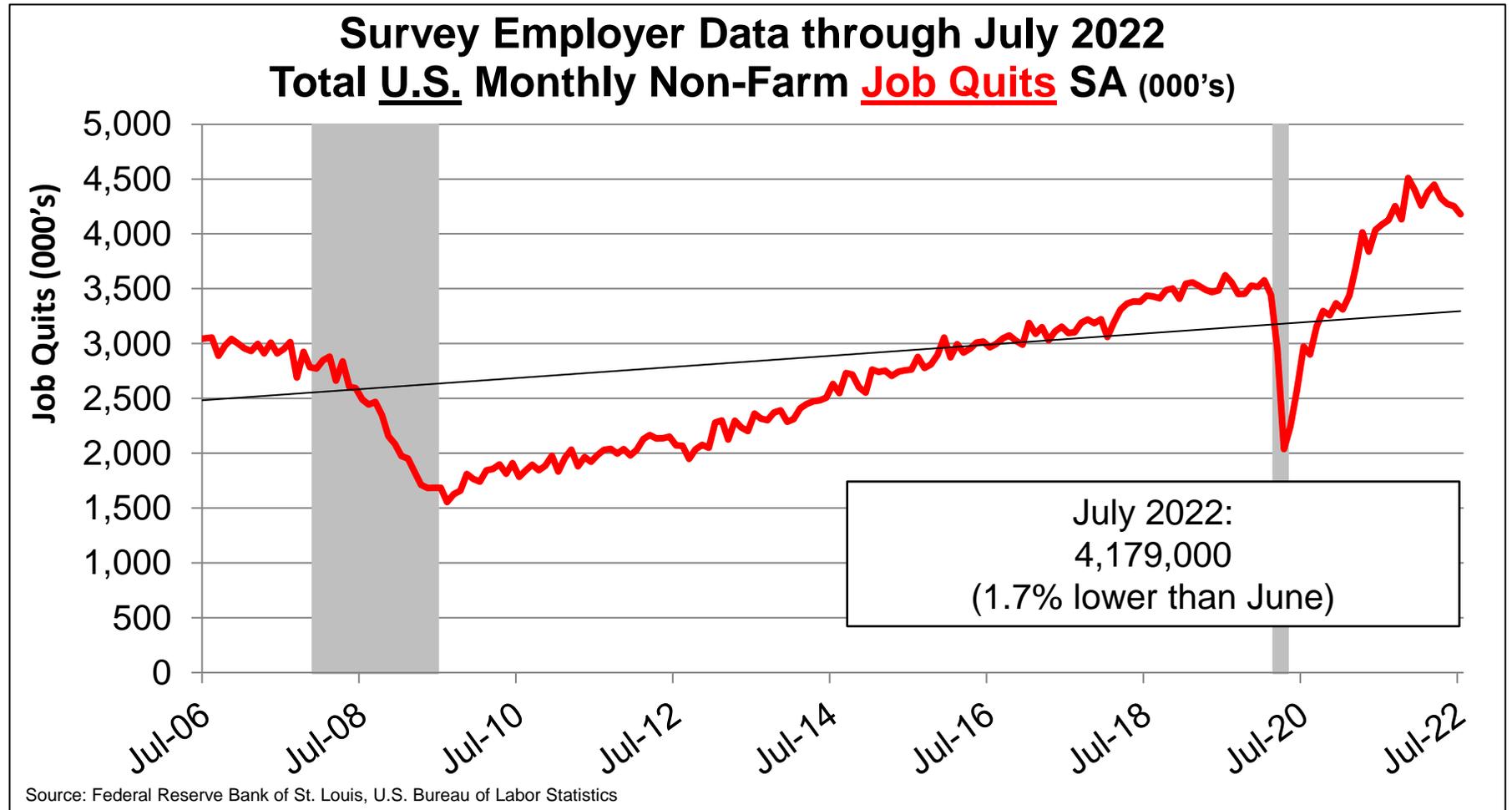
Demographic Realities and the Case for Increasing Legal Immigration

- WA population has been contracting in Europe for over a decade and UN projects it will decline by 20% more by 2050.
- WA population in Africa will more than double over the same time period.
- Latin America not growing as fast but has many willing (and closer) in-migrants.



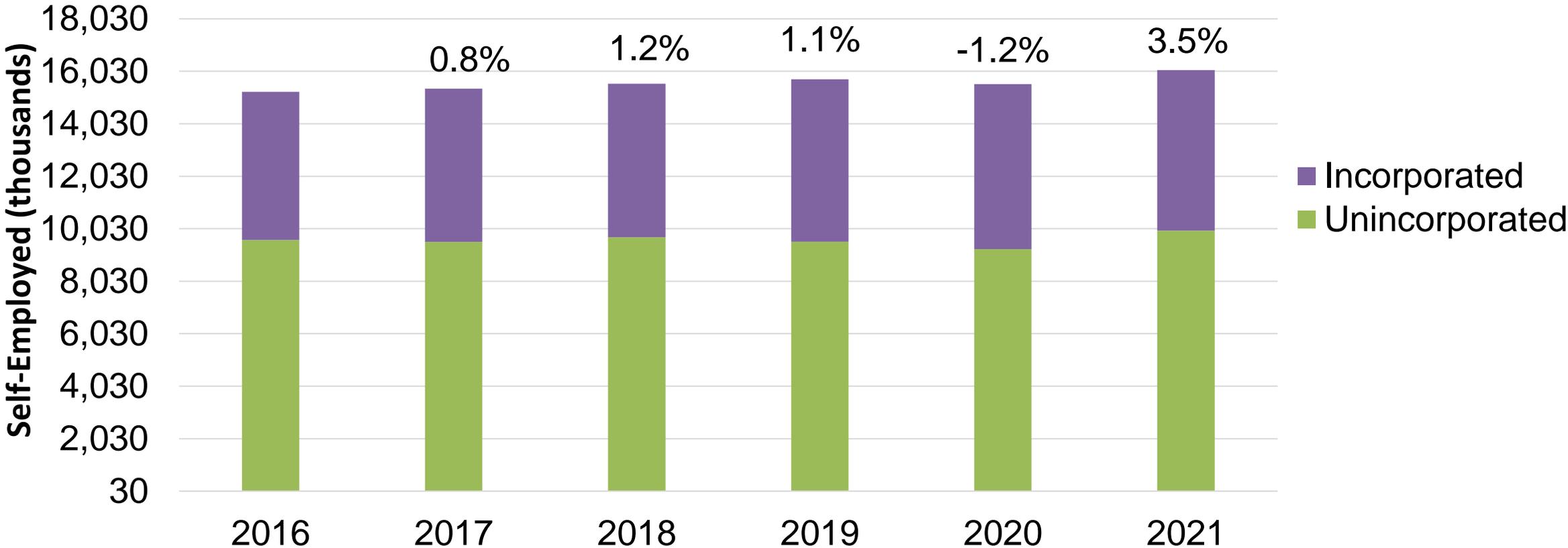
Shortages Made Worse...

- Quits are at an all-time high (~4.2m in July).
- This doesn't usually happen during recessions/early recoveries.



Turnover is costly and our labor bucket is leaky...

U.S. Self-Employed



Almost a million more people reporting that they are self-employed/have their own business (2016 to 2021).

Note: The unincorporated are officially the self-employed. Incorporated are employees of their own business.

Source: U.S. Bureau of Labor Statistics

What About Our Demographics? State of Colorado and El Paso County



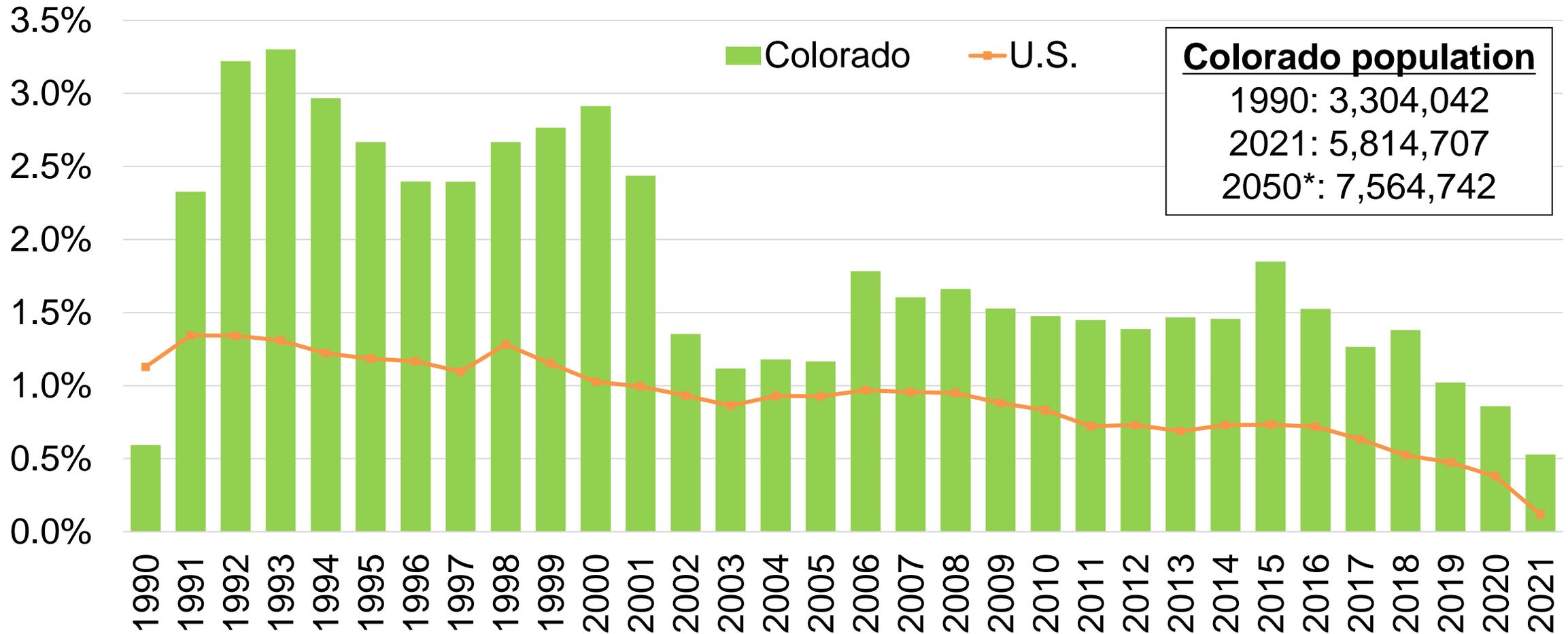
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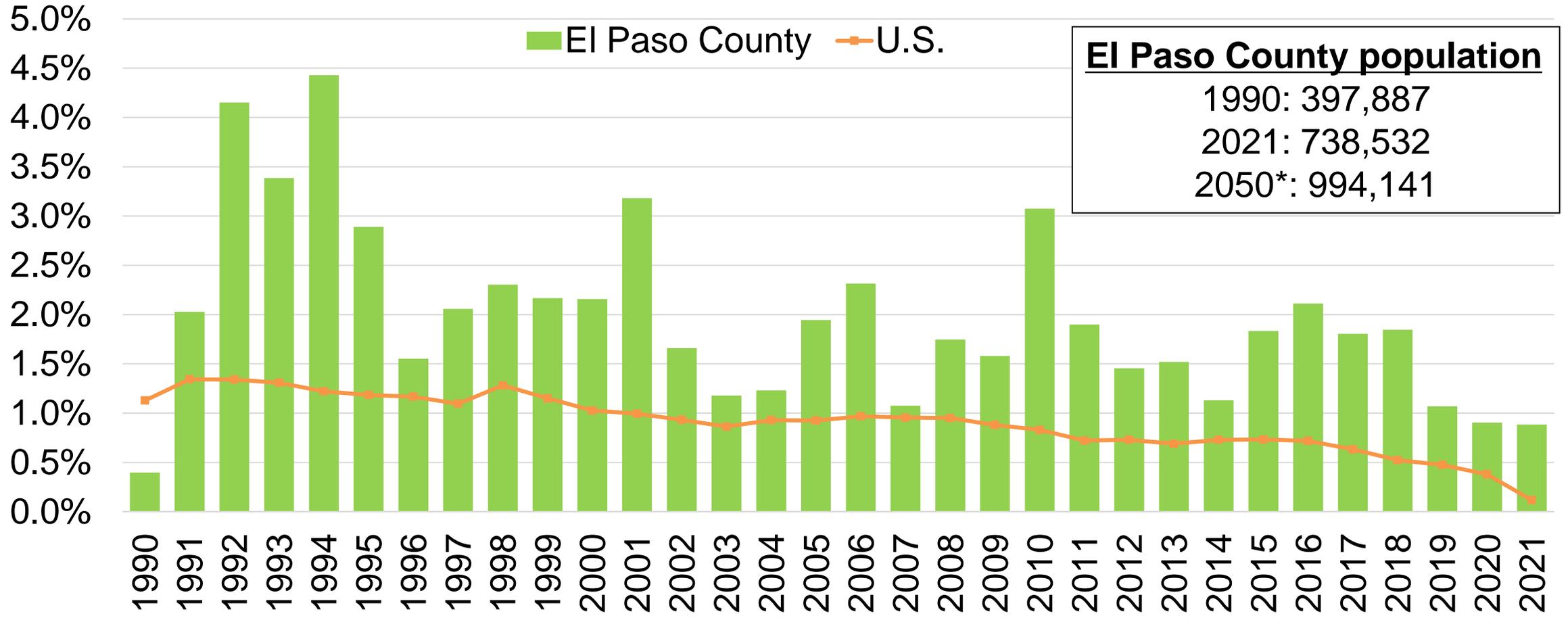
Slowing Population Increase in CO



*Forecast from Colorado State Demography Office in November 2021 (most recent available)

Sources: Colorado State Demography Office; U.S. Census Bureau, Population Division

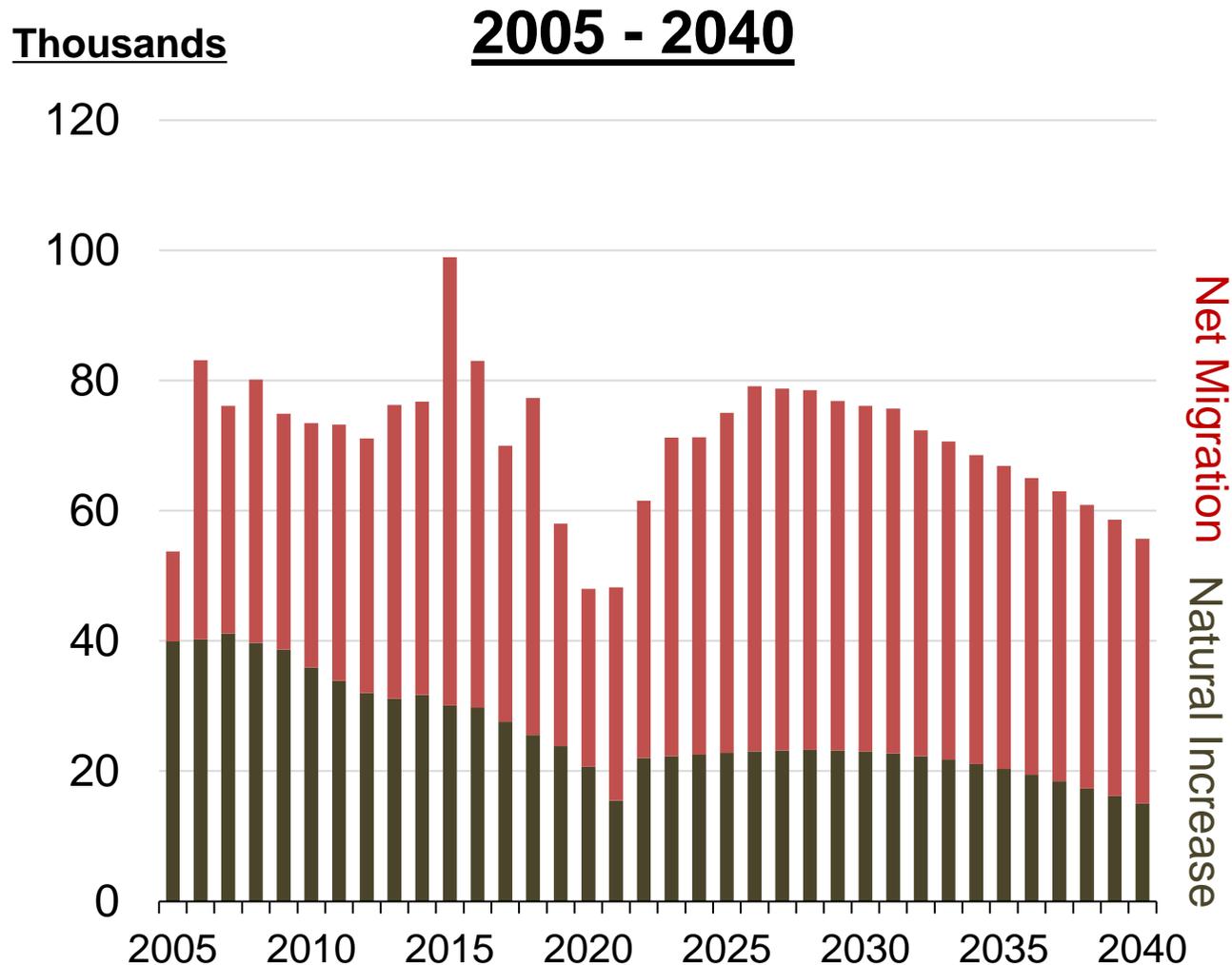
Declining Rate of EPC Population Increase



El Paso County population
 1990: 397,887
 2021: 738,532
 2050*: 994,141

*Forecast from Colorado State Demography Office in November 2021 (most recent available)
 Sources: Colorado State Demography Office; U.S. Census Bureau, Population Division

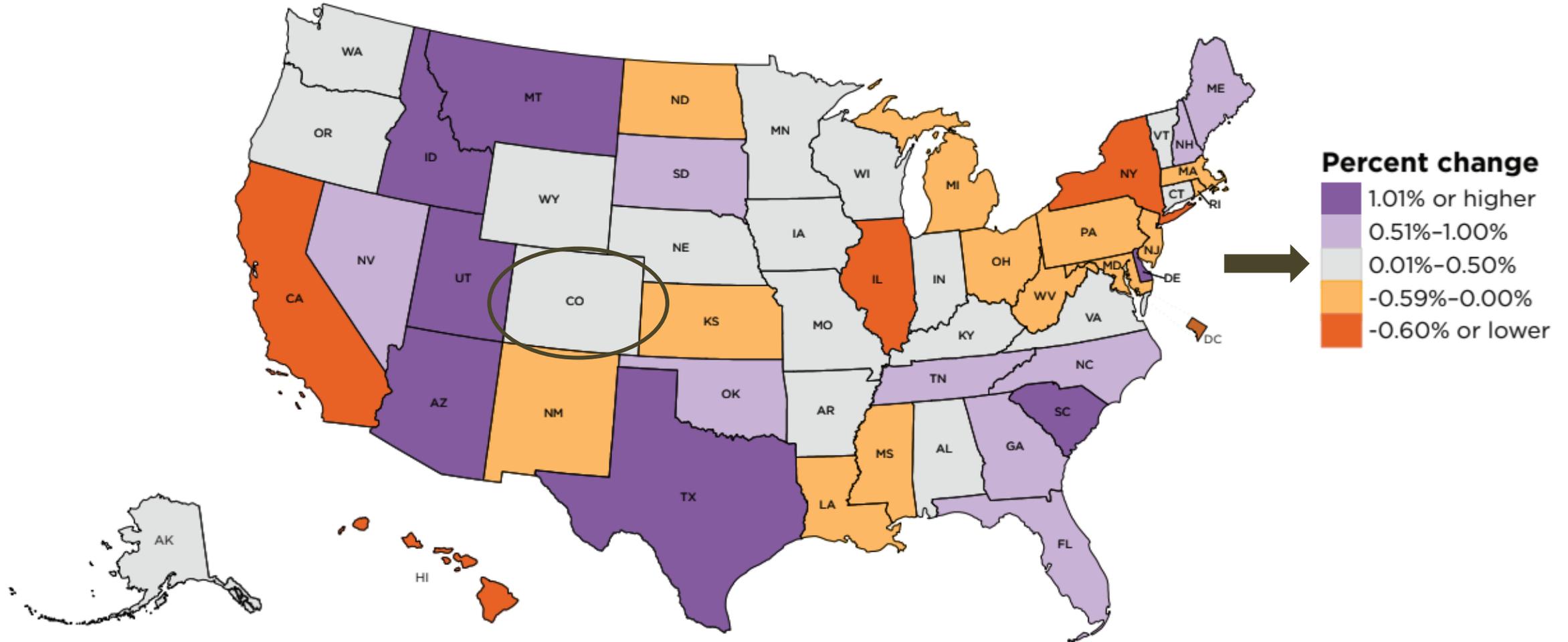
Colorado Change in Population



- 87% of growth from 2020-30 is projected to be along the Front Range (95% from 2010 to 2020)
- **El Paso County decidedly larger than Denver County now..**
 - ***Denver County: 717,632***
 - ***El Paso County: 731,641***

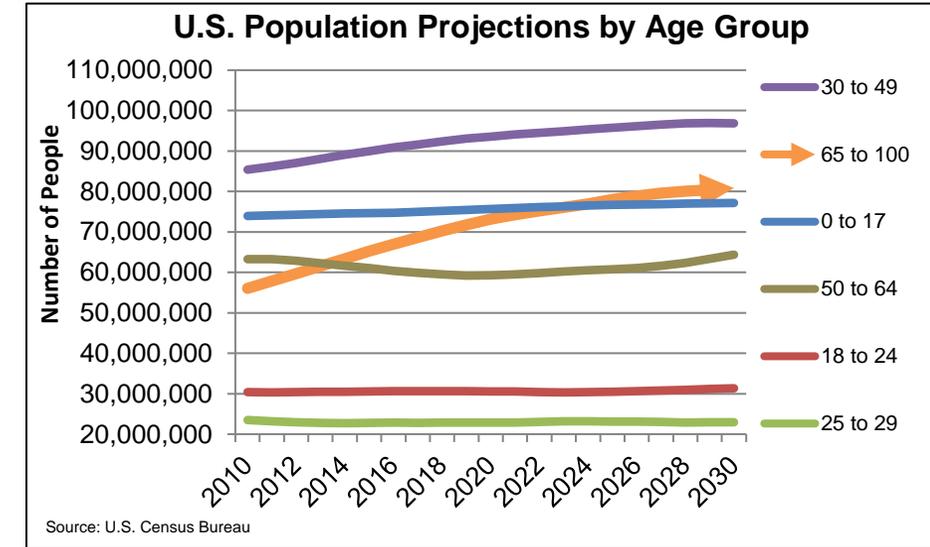
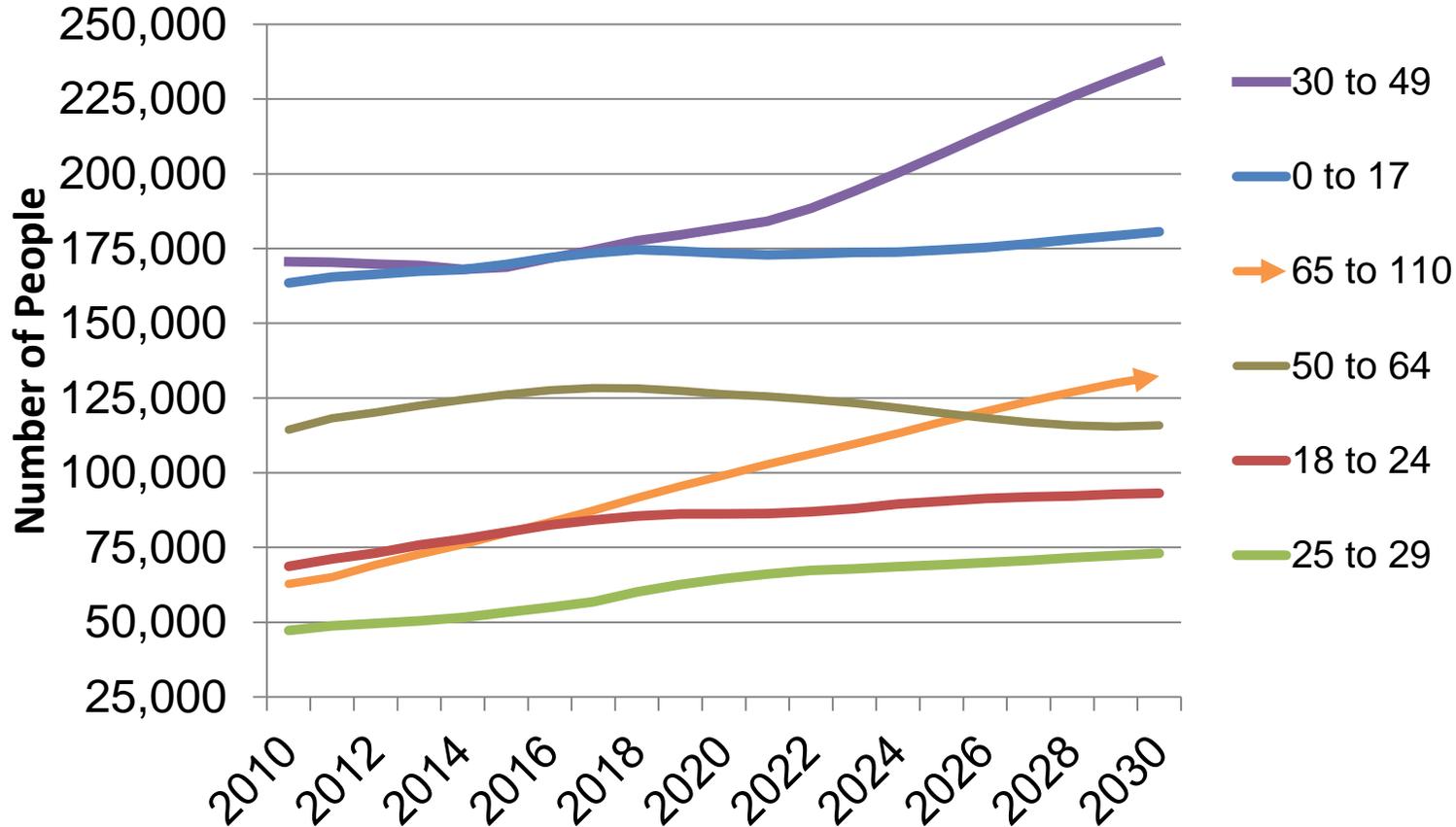
Sources: Colorado State Demography Office; CU Boulder Leeds School of Business

Population Change for States July 2020 to July 2021



Source: U.S. Census Bureau, Vintage 2021 Population Estimates

El Paso County Population Projections by Age Group

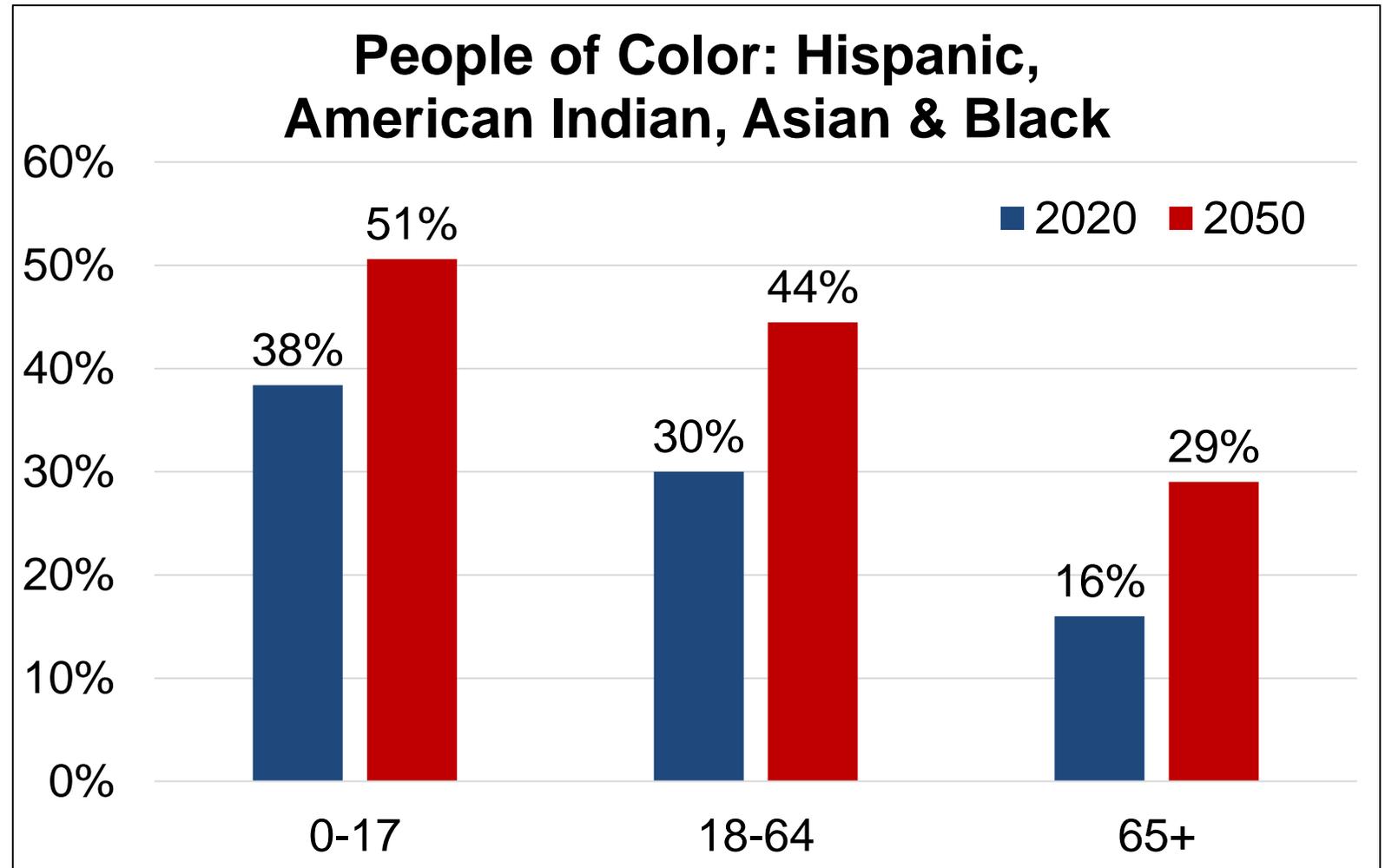


*Our young population today and tomorrow give us a **HUGE** competitive advantage IF we train workers appropriately.*

Note: From 2010 to 2015, Colorado Springs had a 14.7% increase in its millennial population. (Brookings)
Source: Colorado Department of Local Affairs, State Demography Office

Colorado: Projected Diversity by Age

- Accessibility to good K-12 and post-secondary education
- People of color are CO's future workforce – make sure they have access to educ/training.



Source: Colorado State Demography Office

Skills Gap as a Barrier to Labor Force Participation

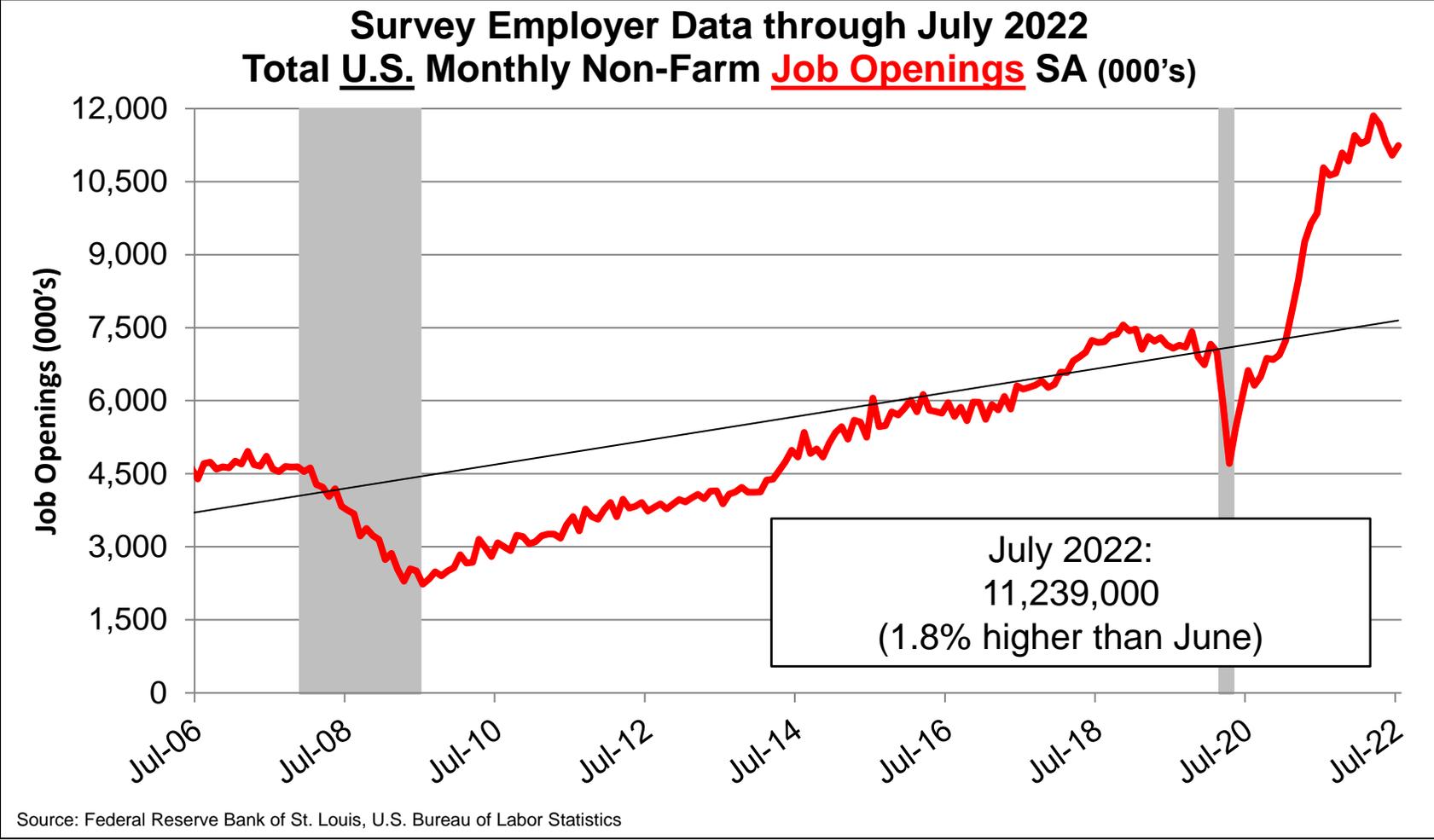
We need every worker we can get.

Let's train them with relevant skills.



Skills Gap Keeping Workers on the Sidelines...

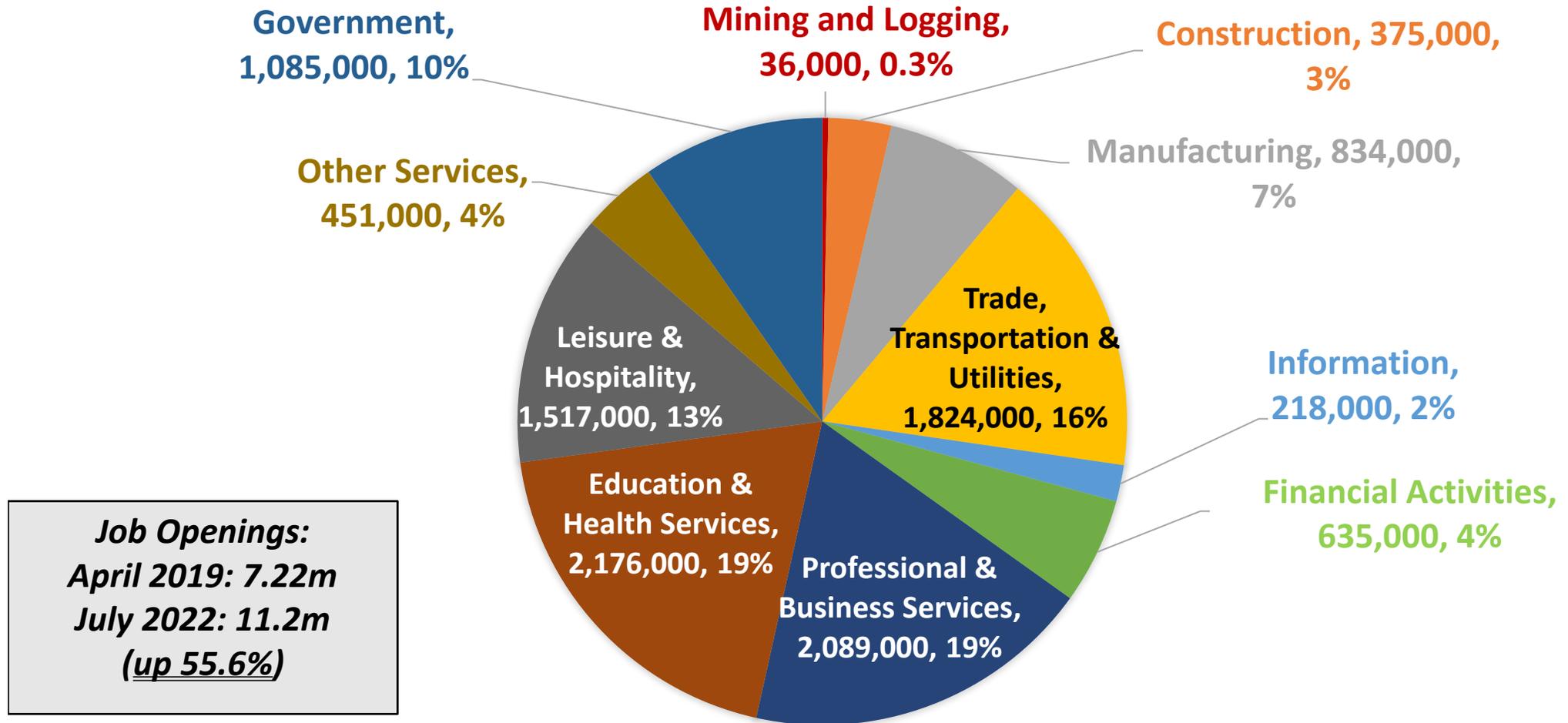
- Plenty of job openings! (11.2m in July)
- If we have this many job openings, we need to fully utilize every worker who wants to work.
- Many nonparticipants say they don't have the requisite skill set.
- Big argument to be made for reskilling/upskilling people



U.S. has roughly 0.5 available workers for each open job.

Sources: U.S. Bureau of Labor Statistics; UCCS Economic Forum

Job Openings Across Many Industries U.S. in July 2022



Source: U.S. Bureau of Labor Statistics. Data is seasonally adjusted.

(Local) Skills Gap as a Barrier to Growth



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Job Openings and Labor Supply

July 2022	Colorado	Colorado Springs MSA
Job Openings	267,943	26,675
Total Unemployed	106,350	13,291
Workers Available per Job Opening	0.40	0.50

Locally, based on total unemployed (13,291) divided by total job openings (26,675) = 0.50

Sources: The Conference Board® Lightcast.io via Pikes Peak Workforce Center; CO Department of Labor and Employment; U.S. Bureau of Labor Statistics; UCCS Economic Forum

Colorado Springs MSA

July 2022

Top Job Titles (Risk of Automation)	# of Job Postings	Market Salary
Software Developers, Applications (L)	989	\$97,334
Registered Nurses (L)	885	\$60,440
Computer Systems Engineers/Architects (L)	657	\$98,408
Managers (L)	605	\$66,568
Retail Salespersons (H)	571	\$26,785
Sales Reps, Wholesale & Mfg (M)	522	\$44,027
Customer Service Reps (M)	447	\$28,503
Maintenance & Repair Workers (M)	426	\$33,665
First-Line Supervisors of Retail Sales (L)	400	\$34,862
Information Security Analysts (L)	378	\$89,262

TOTAL JOB OPENINGS: 26,675

Source: The Conference Board® Lightcast.io via Pikes Peak Workforce Center and CO Dept. of Labor & Employment

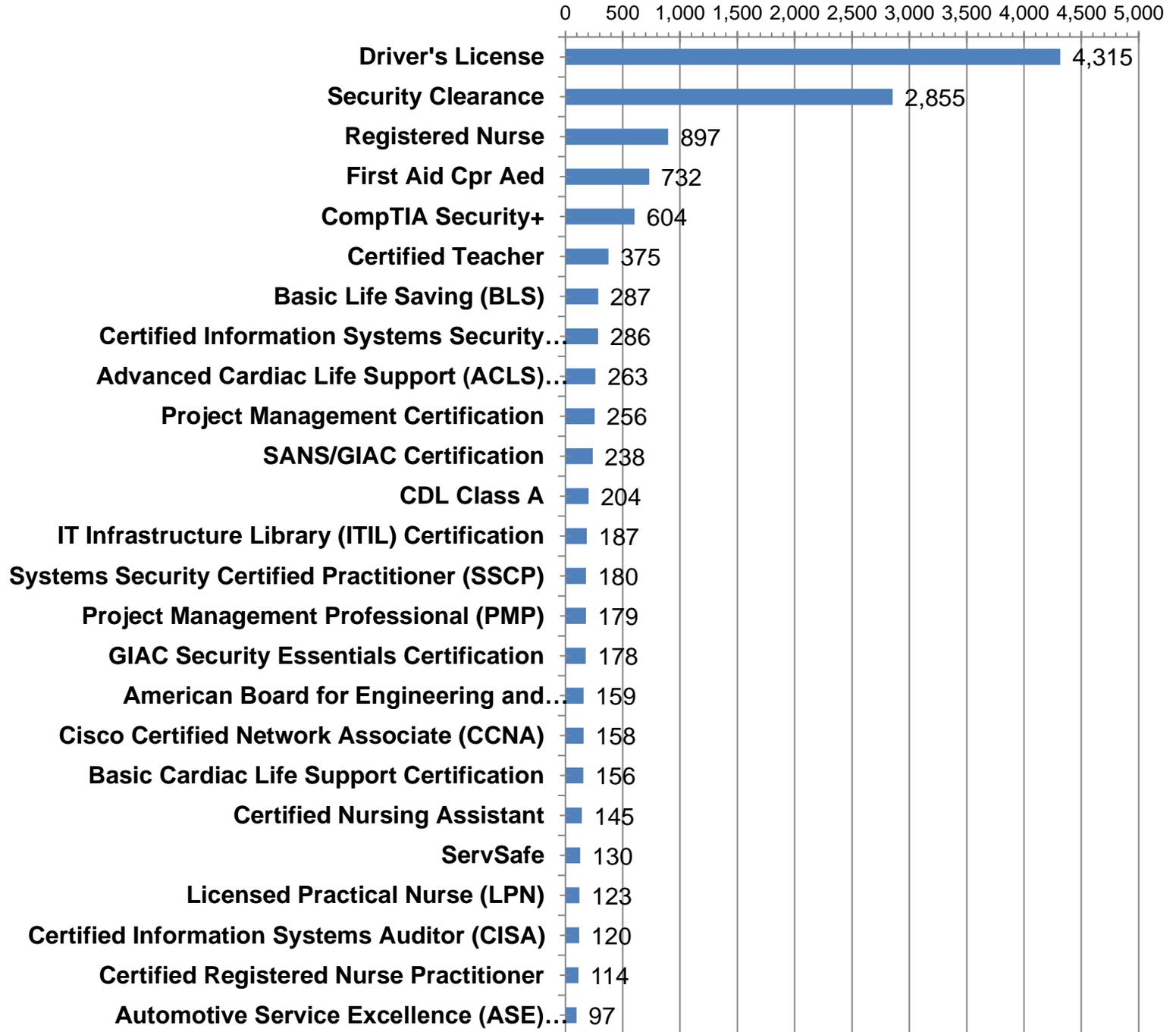
Back to the “Big and Bold Solutions”

- Closely examine the labor market data for our region.
- This includes top occupations, number of openings by occupation, market salaries, most demanded skills and certifications, etc..
- Juxtapose those employer needs to the training/education programs in our region (*longer timeline, but essential..*).
- Ensure that programs offered match to employer needs.

***That’s how you actively build a pipeline of qualified workers.
Most of the highly demanded occupations & skills have livable wages.
Relevant training & livable wages increase labor participation.***

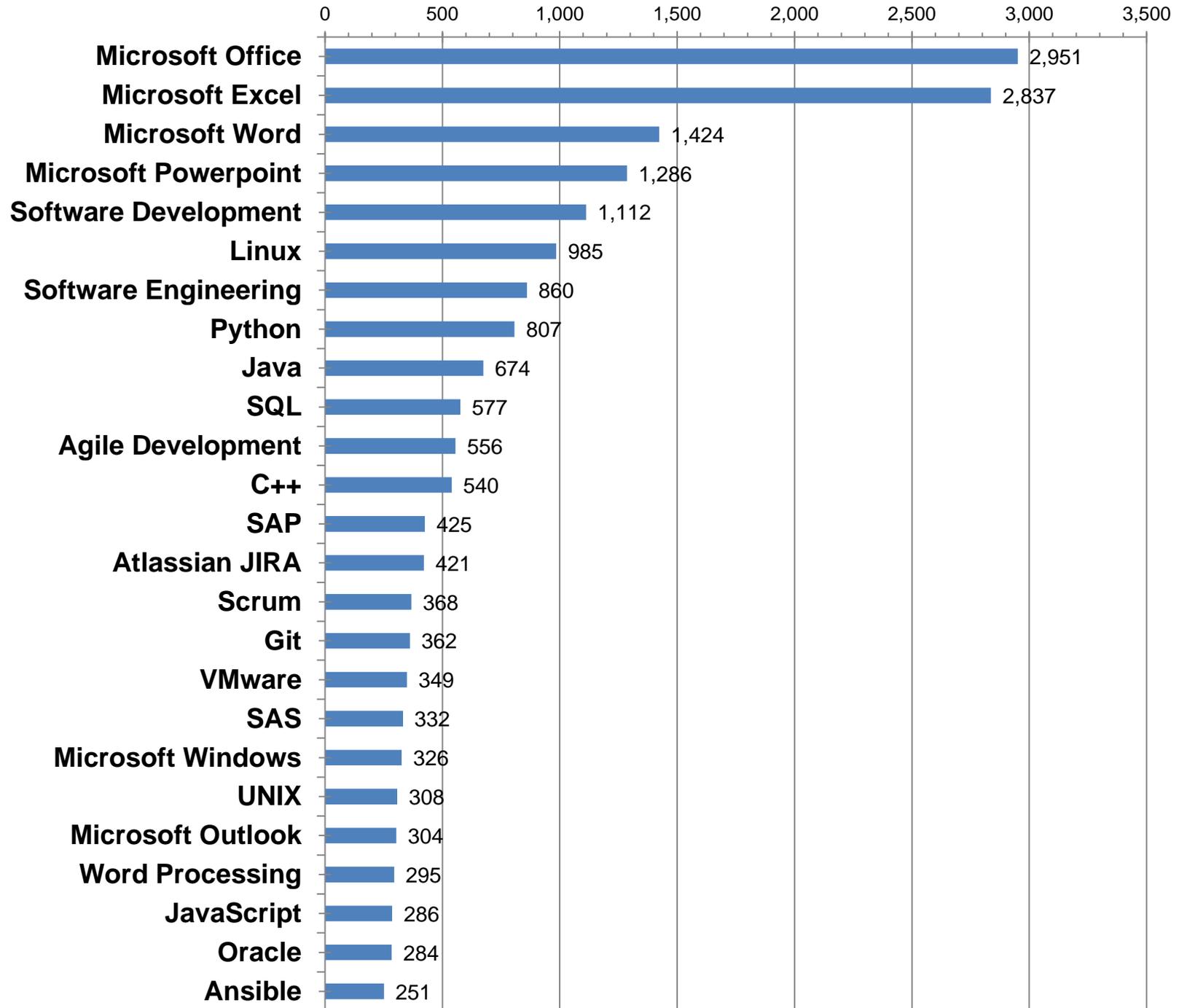
Certifications in Greatest Demand Colorado Springs July 2022

- *IT incl cyber certs*
- *Truck drivers*
- *Network admin*
- *CNAs*
- *Phlebotomists/Med tech..*



Source: The Conference Board®
Lightcast.io via Pikes Peak Workforce Center

Software & Programming Skills in Greatest Demand Colorado Springs July 2022



Source: The Conference Board®
Lightcast.io via Pikes Peak Workforce Center

Common Sense Solutions

- Juxtapose high demand job postings/skills/certs against local, available training programs
- Not always easy to create or scale certain (costly) programs..
- But can focus on the few that are both high demand AND scalable.

Health Care Audit Preliminary Results

Job Category	2017 Job Postings Junior Level (0-2 Years)	Job Postings Total All Levels	2017 Labor Supply (Number of Local Graduates)**	Total Unmet Need (Demand – Supply)
Registered Nurse (#1)*	1,615	5,394	190	5,204
Medical Assistant (#6)	259	1,063	214	849
Nursing Assistant (#9)	486	1,463	95	1,368
LPN (Licensed Practical Nurse)	238	480	3	480
Phlebotomist	53	134	18	116

*Rankings are for job titles in Talent Neuron's May 2018 data, which is characteristic of 2017 postings.
 ** Graduates from PPCC, UCCS, Pima Medical Institute, National American University, and IntelliTec for calendar year 2017.
 Note: Job postings are for Colorado Springs MSA.

Occupation	Pikes Peak State College Offers....
Registered Nurses	Yes
Software Developers, Applications	Yes
Managers, All Other	
Retail Salespersons	
Computer Systems Engineers/Architects	Yes
Sales Representatives, Wholesale and Manufacturing, Except Technical and Scientific Products	
Customer Service Representatives	
First-Line Supervisors of Retail Sales Workers	
Maintenance and Repair Workers, General	Yes
Information Security Analysts	Yes
Heavy and Tractor-Trailer Truck Drivers	
Combined Food Preparation and Serving Workers, Including Fast Food	Yes
Medical and Health Services Managers	Yes
Janitors and Cleaners, Except Maids and Housekeeping Cleaners	
Laborers and Freight, Stock, and Material Movers, Hand	
Secretaries and Administrative Assistants, Except Legal, Medical, and Executive	
Security Guards	Yes
Network and Computer Systems Administrators	Yes
General and Operations Managers	Yes
Nursing Assistants	Yes
Computer User Support Specialists	Yes
Maids and Housekeeping Cleaners	
Food Service Managers	Yes
Waiters and Waitresses	
Management Analysts	Yes
Computer Systems Analysts	Yes
Driver/Sales Workers	
Automotive Specialty Technicians	Yes
Construction Laborers	Yes
Personal Care Aides	
Medical Secretaries	Yes
Real Estate Sales Agents	
Hotel, Motel, and Resort Desk Clerks	Yes
Marketing Managers	Yes
First-Line Supervisors of Food Preparation and Serving Workers	Yes



Some Promising Moves by Our State

“Care Forward Colorado” Program

- Will invest \$26m from federal COVID stimulus guaranteeing free schooling for certain high-demand health care occupations (CNAs, EMTs, pharmacy technicians, phlebotomy technicians, MAs and dental assistants)
- Program effective for two years
- Bi-partisan support
- Will reach about 4,000 students
- By 2026, Colorado will have a deficit of ~54,000 entry-level health care workers
- STILL – it’s a start (using data!) & there are career pathways for these positions

One Example of Data-Driven Decision Making



Dr. Mordecai Brownlee

President, Community College of Aurora

<https://f.io/m0nxNkCL>



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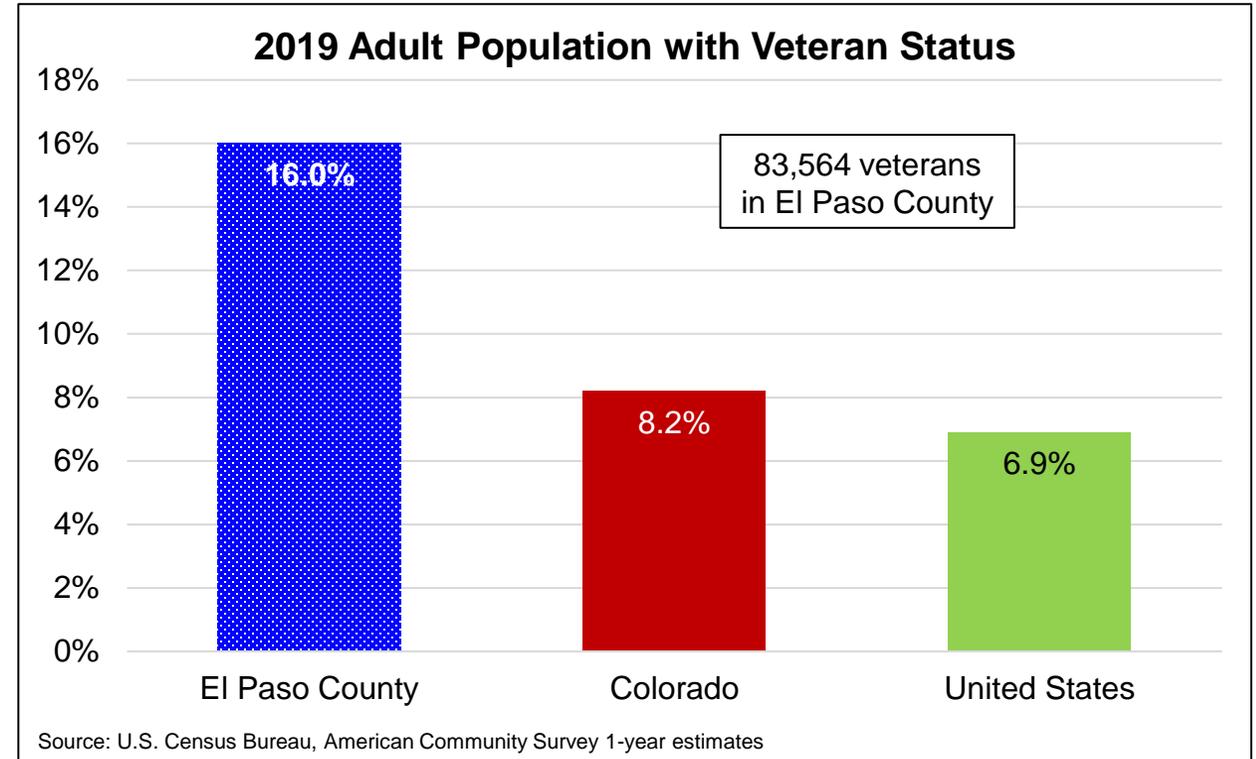


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Big and Bold Solutions

- Subsidized or free community college (only) for Pell grant recipients?
- Fully utilize public universities which have higher level training at lowest cost.
- Build upon efforts to transition “retired” military into high-demand jobs (use data to bolster)



Big & Bold Solutions: Workforce Development as a Golden Opportunity

- But nobody argues workforce development and livable wages aren't a good thing.
- Especially if you offer livable wages, all political affiliations are behind workforce development.
- And most of the highest demand occupations DO offer livable wages.
- **What if** we choose (as a community, state or nation) to provide *paid* training for the highest demand occupations to raise labor participation, the tax base, and homeownership?
 - ...all while boosting business growth and global competitiveness?
- Positive ripple effects of decreasing poverty levels, transfer payments, substance abuse and crime rates..
 - ..while providing more opportunities for at-risk communities and chipping away at generational poverty.

State and Local Labor Market Stats Including Wages

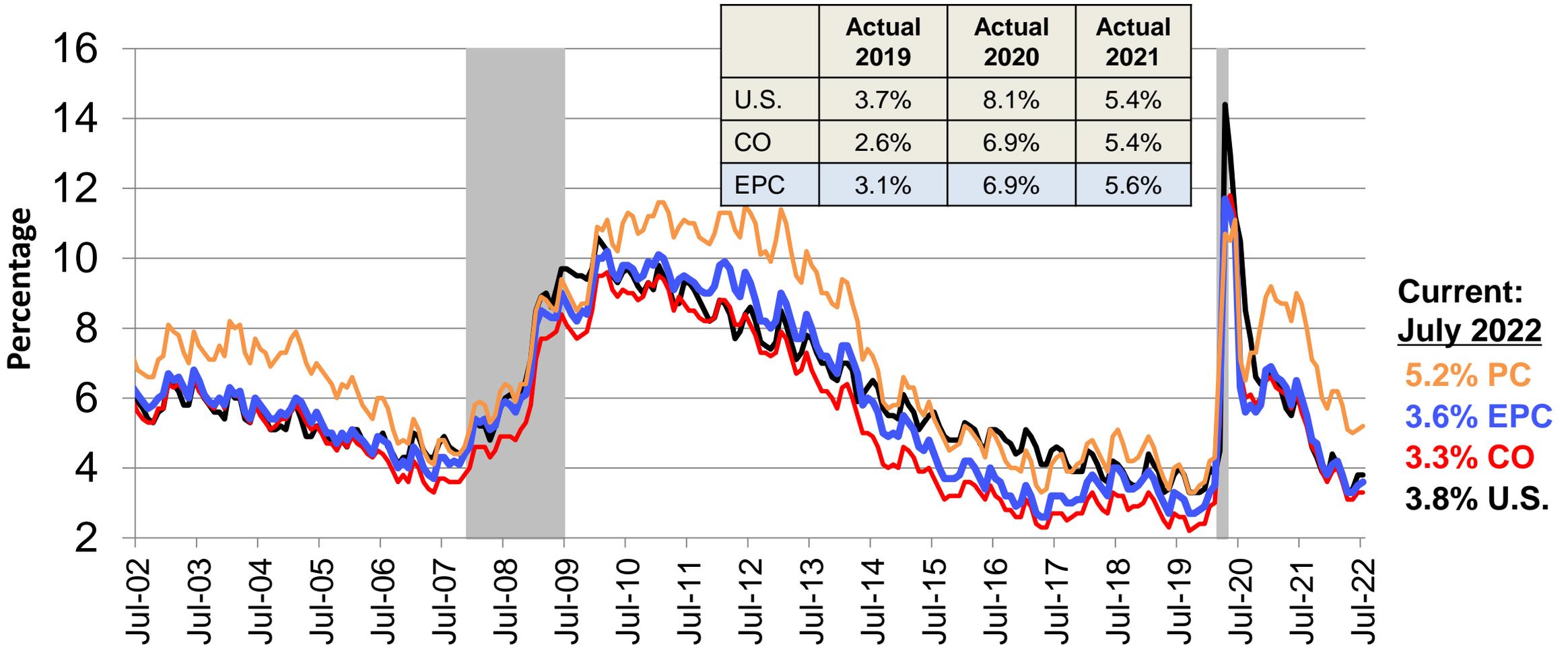


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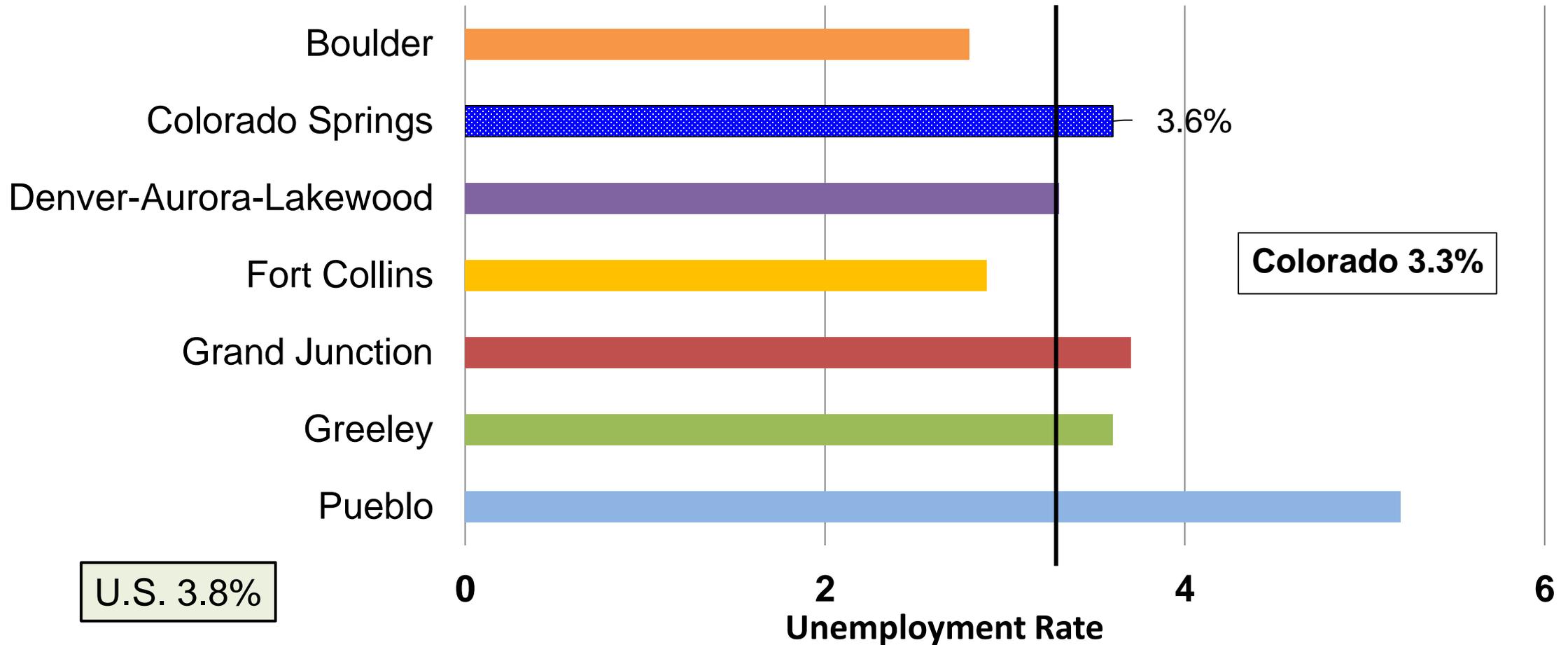
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Monthly Unemployment Rate – NSA



Unemployment rate is from the CPS and includes self employed. Last time EPC rate was higher than U.S. was April 2014. Forecasts for the U.S. and CO by the Colorado Office of State Planning and Budgeting, June 2022. EPC forecasts by UCCS Econ Forum.
 Sources: U.S. Bureau of Labor Statistics; Colorado Department of Labor and Employment

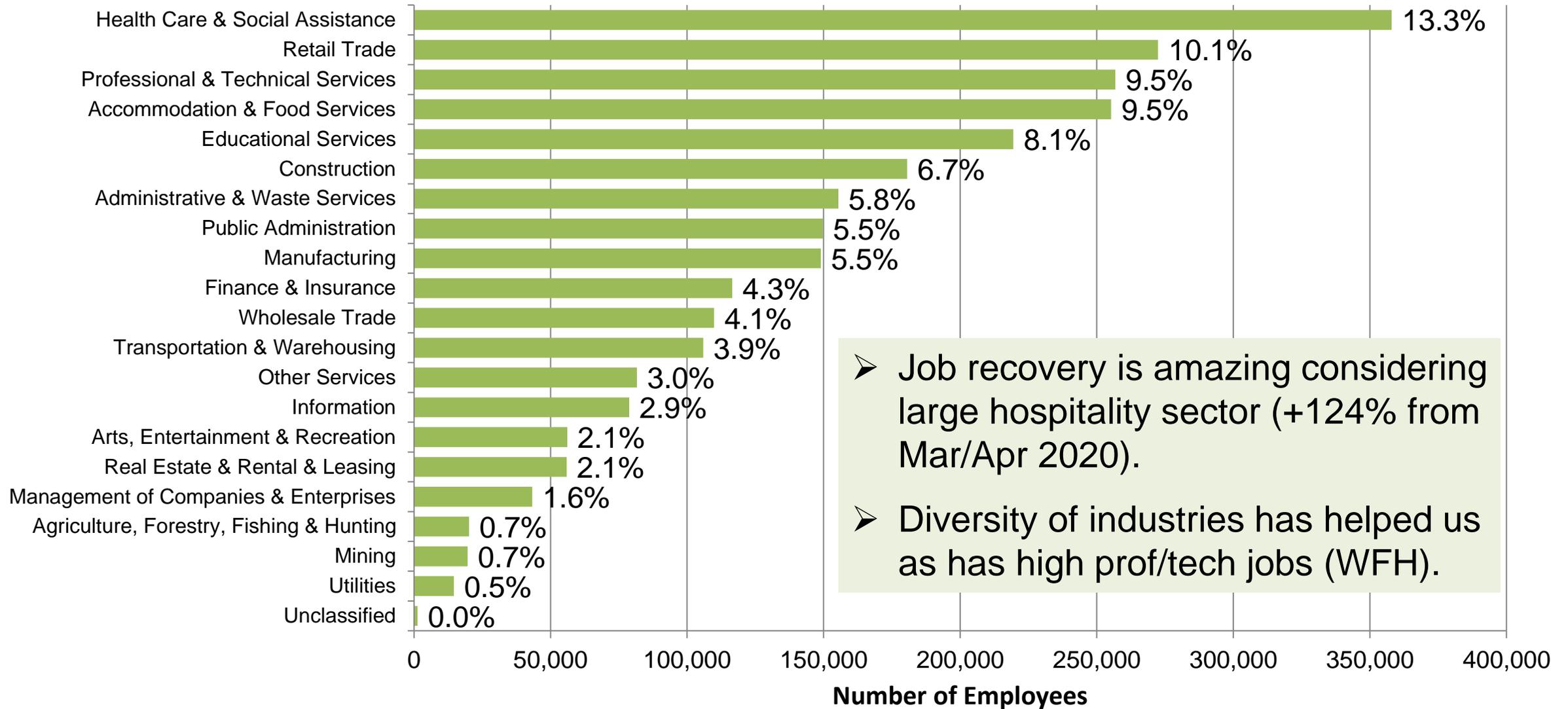
Regional Unemployment Rates, July 2022



Note: All data is not seasonally adjusted.

Sources: Colorado Department of Labor and Employment, Office of Labor Market Information; U.S. Bureau of Labor Statistics

Employment by Sector in Colorado, 2021

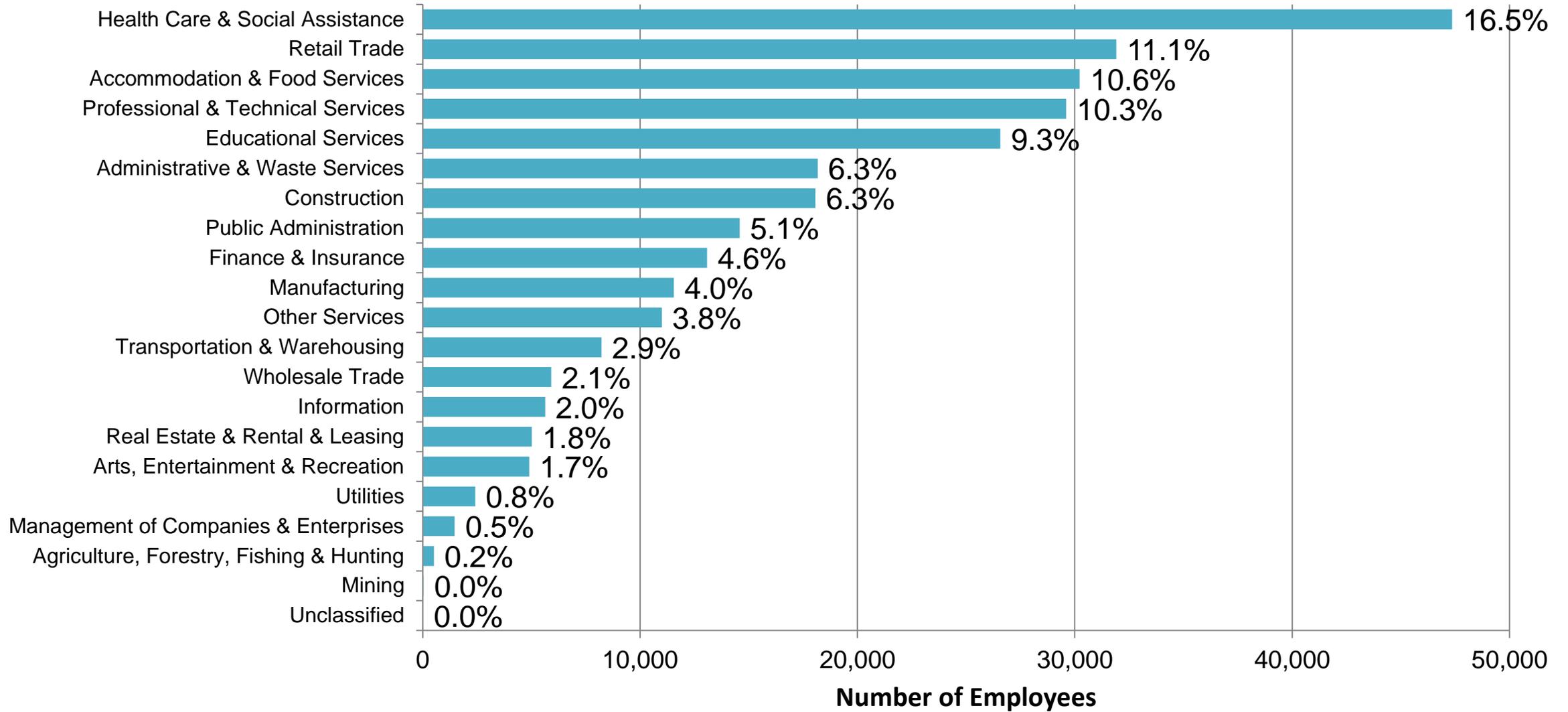


➤ Job recovery is amazing considering large hospitality sector (+124% from Mar/Apr 2020).

➤ Diversity of industries has helped us as has high prof/tech jobs (WFH).

Source: Colorado Department of Labor and Employment, Quarterly Census of Employment and Wages (QCEW)

Private Employment by Sector in El Paso County, 2021



Sources: Colorado Department of Labor and Employment, Quarterly Census of Employment and Wages (QCEW)

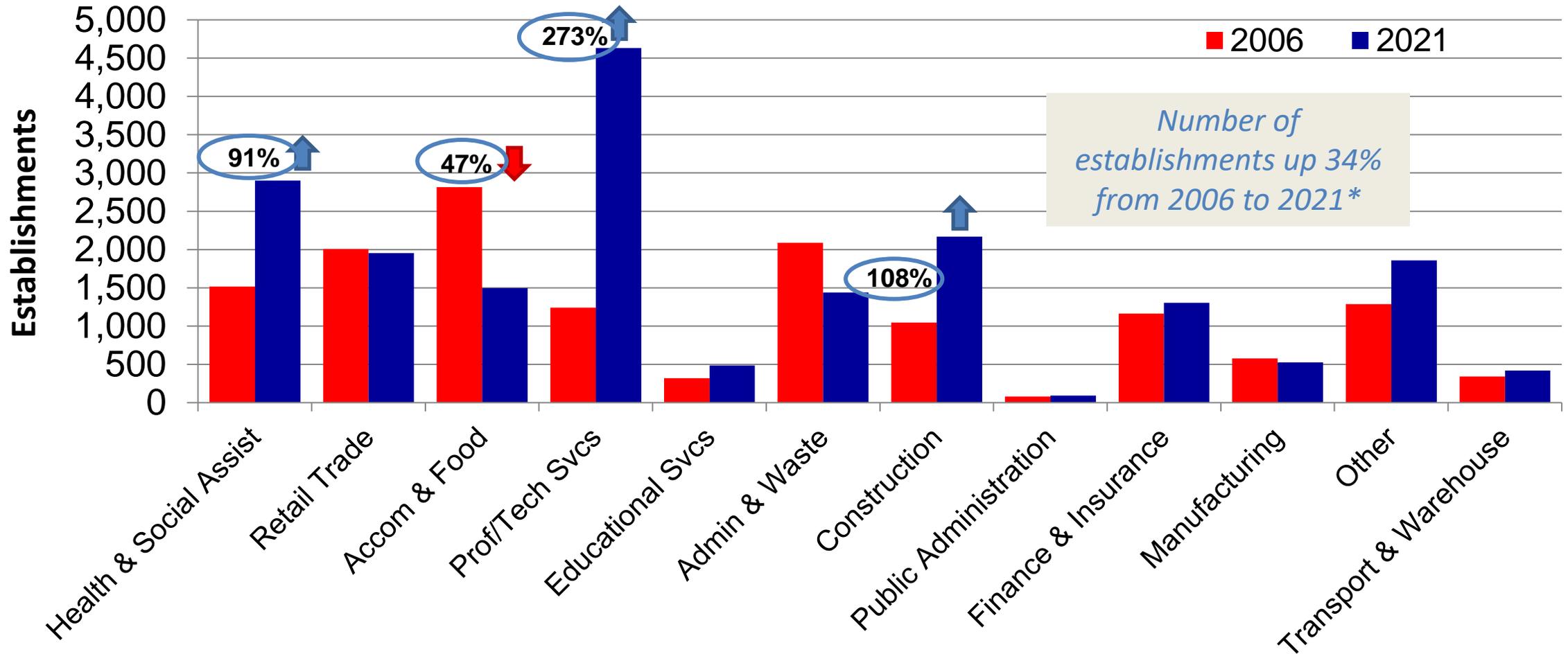
Top 7 Industries for Employee Growth in Colorado Springs MSA between 2020 and 2030

	Employment Change	Annual Average Percent Increase
Health & Social Assistance	14,933	3.0%
Pro, Sci & Tech Services	12,529	3.7%
Accom & Food Services	8,529	2.7%
Transportation & Warehousing	4,933	6.9%
Construction	4,139	2.1%
Educational Services	3,778	1.3%
Other Services	3,702	1.9%
Source: Colorado Department of Labor and Employment: QCEW		

Total Growth Projection: 66,758 employees gained, 2.0% annual average increase

We know what our training needs are!

El Paso County Average Number of Establishments in Selected Sectors for 2006 and 2021

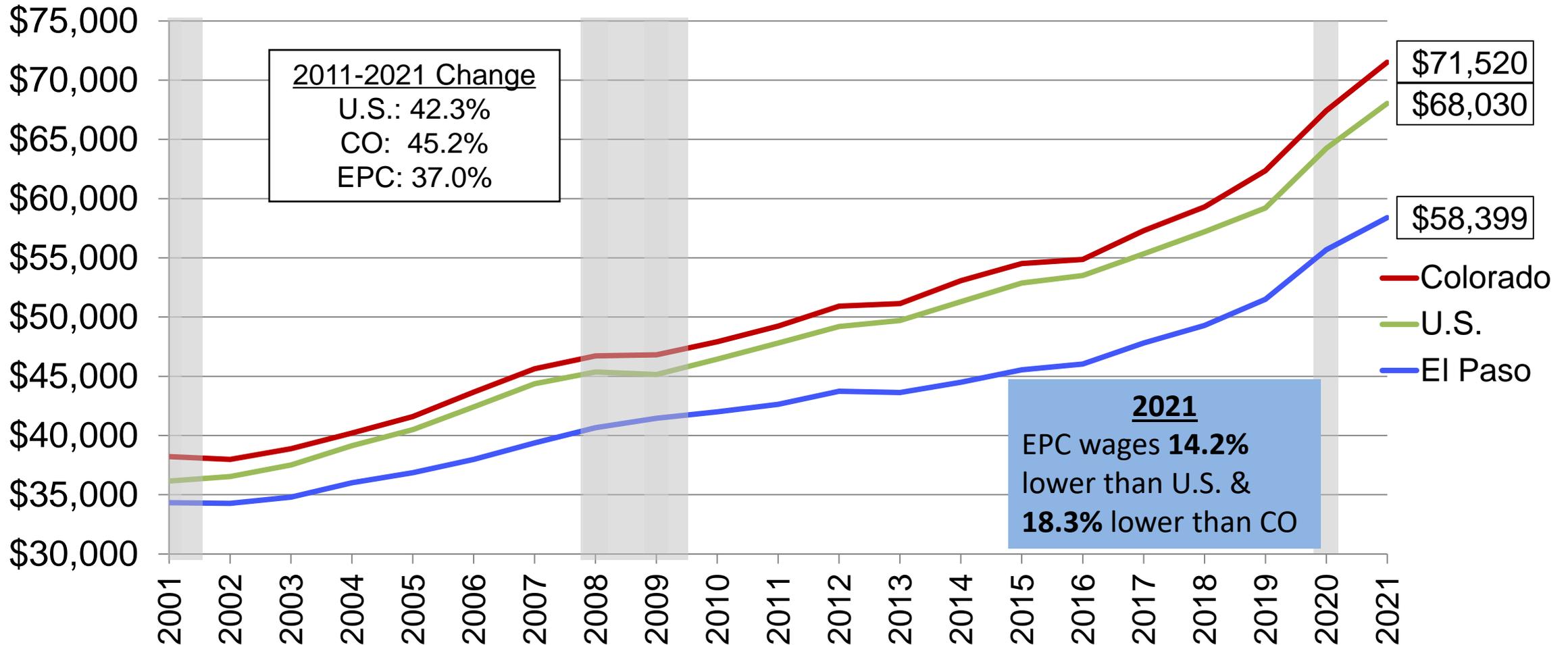


*Includes all industries.

Note: Sectors are in order based on the number of employees in 2021. Starting July 2022, the state has a start-your-own business for \$1.00 and they have had 17,000 business applications saving businesses \$8.4m in fees in this FY.

Source: Colorado Department of Labor and Employment, Quarterly Census of Employment and Wages (QCEW).

Private Annual Wages (Nominal)



Source: U.S. Bureau of Labor Statistics, Quarterly Census of Employment and Wages (QCEW)

Poverty and Wages

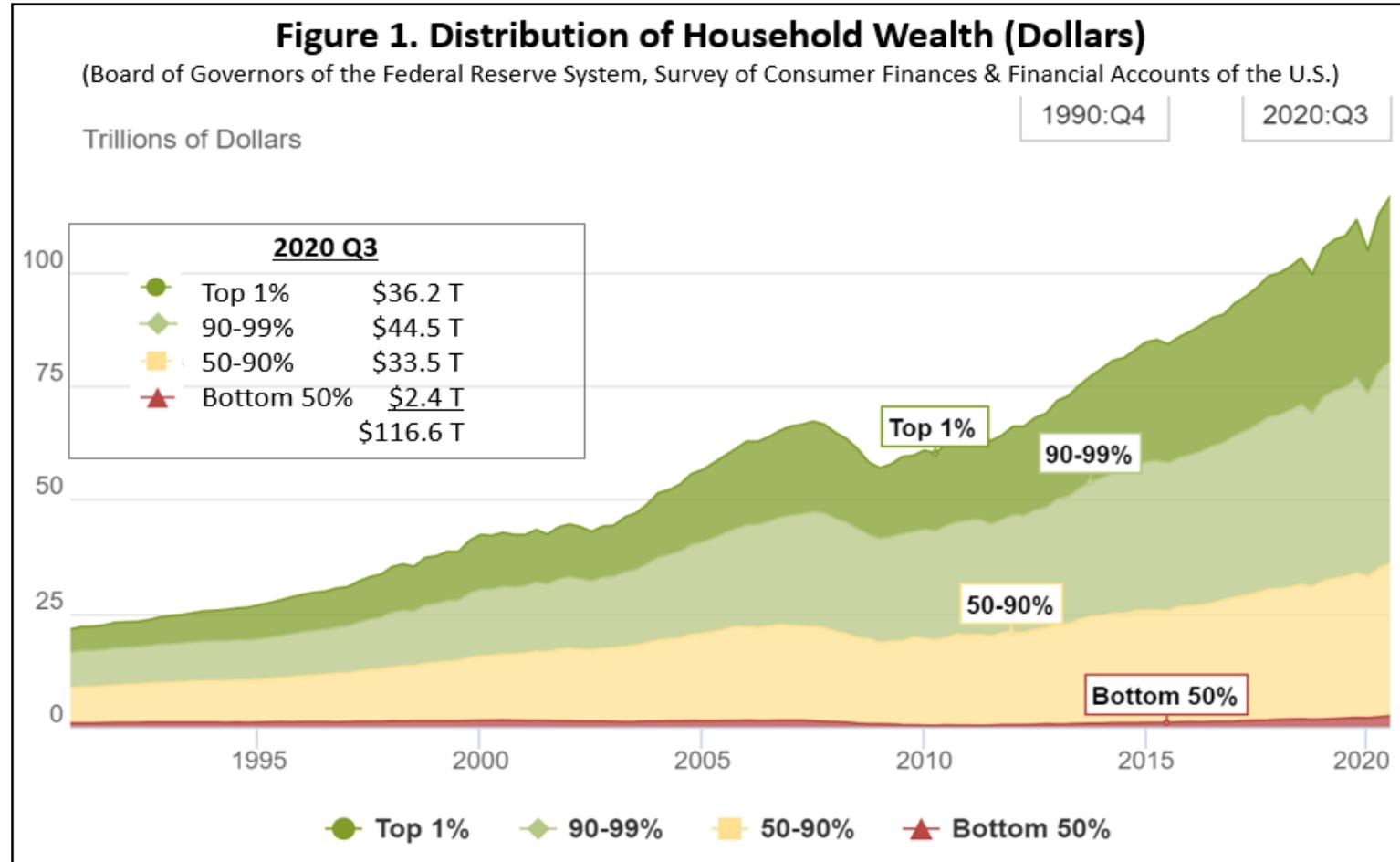
2020 Federal Poverty Level (FPL)		
	<u>El Paso County</u>	<u>U.S.</u>
% people at FPL or below	9.1%	11.9%
Note: FPL in 2020 was \$12,760 for an individual and \$26,200 for a family of four.		

2022 Minimum Wage & Living Wage, El Paso County		
	<u>Wage/Hr</u>	<u>Annualized</u>
Minimum wage salary for full-time worker	\$12.56	\$26,125
Living wage: HHs with 1 adult, 2 children	\$44.08	\$91,686
Living wage: HHs with 2 adults (1 working), 2 children	\$38.45	\$79,976
Living wage: HHs with 2 adults* (2 working), 2 children	\$24.93	\$51,854
*Living wage is for each working adult. For specifics, go to livingwage.mit.edu .		

Sources: U.S. Census Bureau, Small Area Income and Poverty Estimates; U.S. Department of Health & Human Services; MIT Living Wage Calculator

Wealth Inequality

- The Fed tracks U.S. wealth:
 - **Top 1% had 31.7% of the total wealth (\$36.2t)**
 - 90-99% had 37.5% of total wealth (\$44.5t),
 - 50-90% had 28.4% of total wealth (\$33.5t)
 - **Bottom 50% had 2.4% of total wealth (\$2.4t) in the U.S.**
- **Polarization - 60% of Americans think the opposing political party is the “enemy.”**



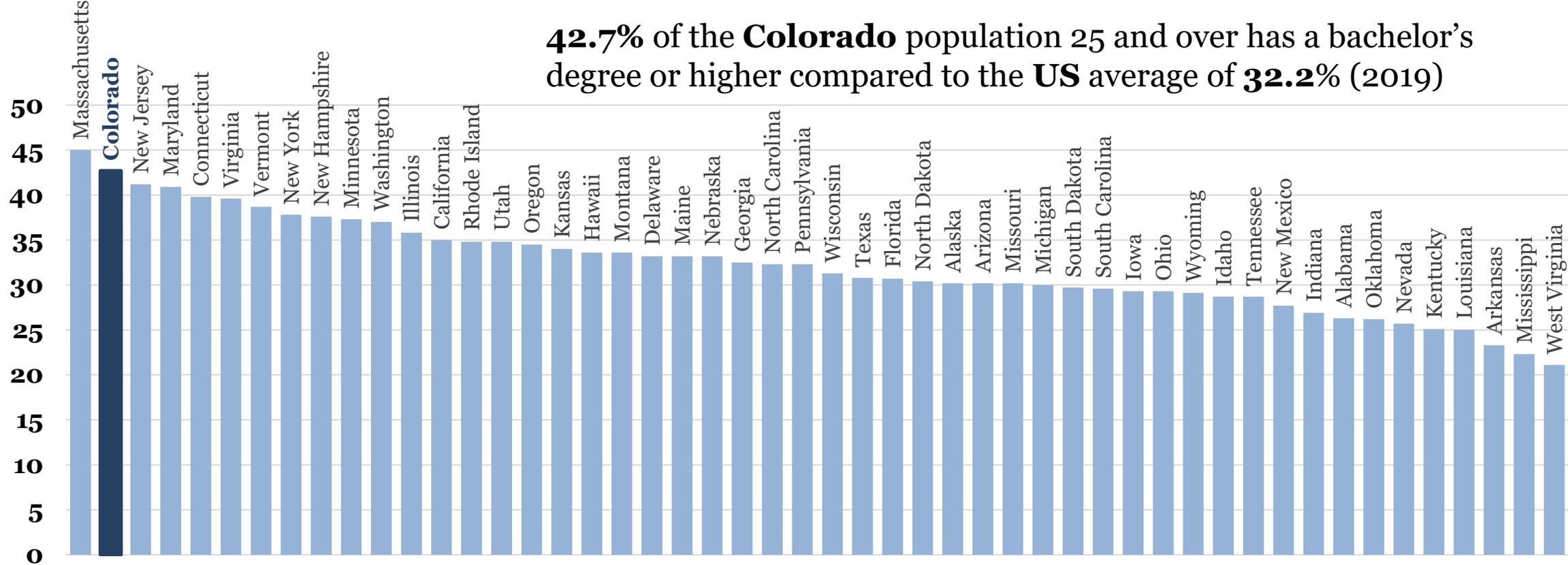
Source: FEDS Notes, “Wealth Inequality and COVID-19: Evidence from the Distributional Financial Accounts,” August 30, 2021. Professor Scott Galloway “Our greatest ally will always be other Americans.”

https://gazette.com/business/investments-in-long-term-sustainable-economic-growth-are-also-investments-in-americans-tatiana-bailey/article_82bd2a1a-4c65-11eb-94bf-

High Post-Secondary Education Costs in Colorado (exacerbating qualified labor shortages)

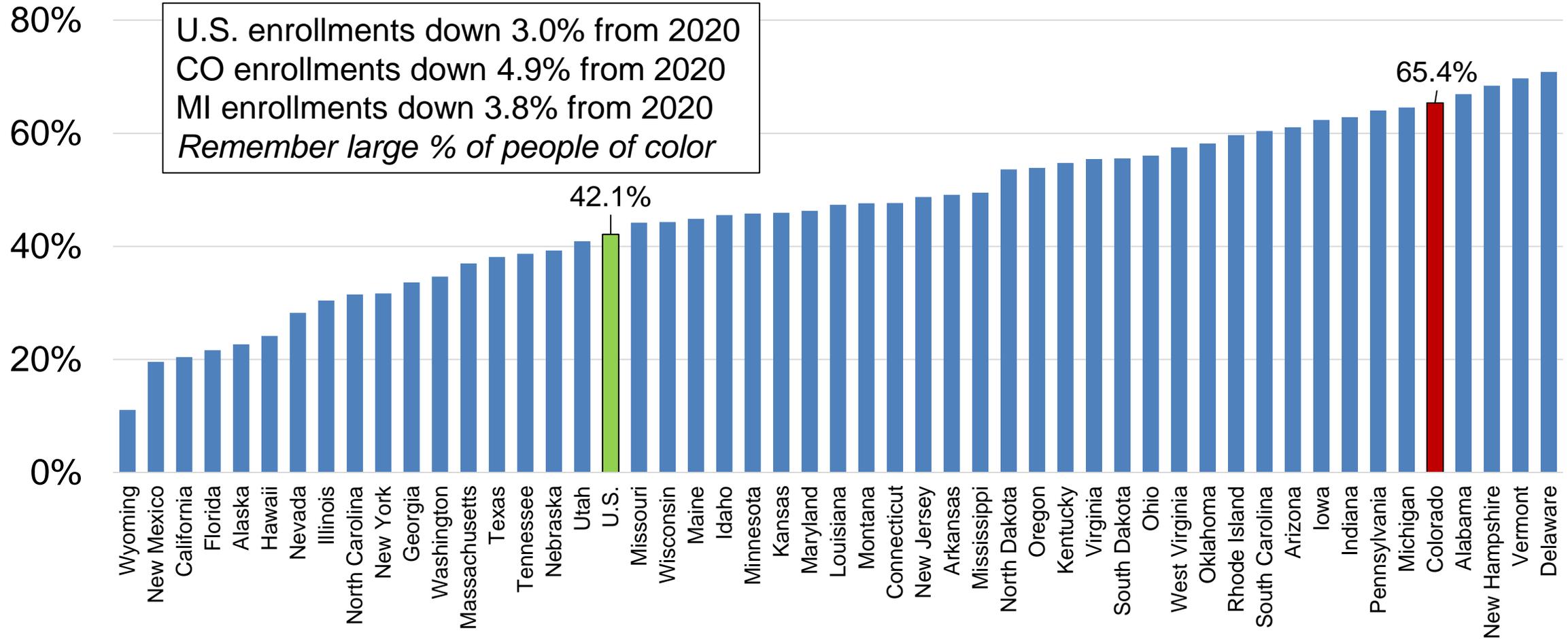
Educational Attainment

Percent of Population 25 and Over With a Bachelor's Degree or Higher, 2019



Source: U.S. Census Bureau, American Community Survey (2019 1-year estimates).

Student-Paid Portion of Higher Education Tuition at Public Institutions in 2021



Source: 2021 SHEF Report, State Higher Education Executive Officers. From 2019 to 2021 enrollments down in U.S. (-3.6%), CO (-2.2%) and MI (-6.2%).

Student Loans Are a Problem

- **Student debt now amounts to \$1.75t with 43m borrowers, more than credit card debt (\$860b); has doubled since 2007**
- **Average federal student loan debt is \$37,113 for all borrowers (\$30,520 for White borrowers; ~\$55,000 for Black borrowers)**
- **20 years after entering school, half of student borrowers still owe \$20,000 (*homeownership..*)**
- **Average of 15% of student loans are in default**
- **Ubiquitous – 70% of college grads have student loans**

Source: Educationdata.org

Completion is a Problem

- **About 50% (weighted average) of university-level students who enroll, do not graduate by the end of their 6th year (and after 6th year it's unlikely).**
- Percentage that graduate within 6 years by institution type
 - 64% for all four-year institutions combined
 - 63% for public institutions
 - 68% for private nonprofits
 - 29% for private for-profits!
- **How much is attributable to costs?? To academic readiness?? To income inequality??**
- **Big and Bold solutions** (Pell grant recipients get free training/educ; address wealth gap)

Sources: Janet Yellen; National Center for Education Statistics

Other Important Economic Metrics



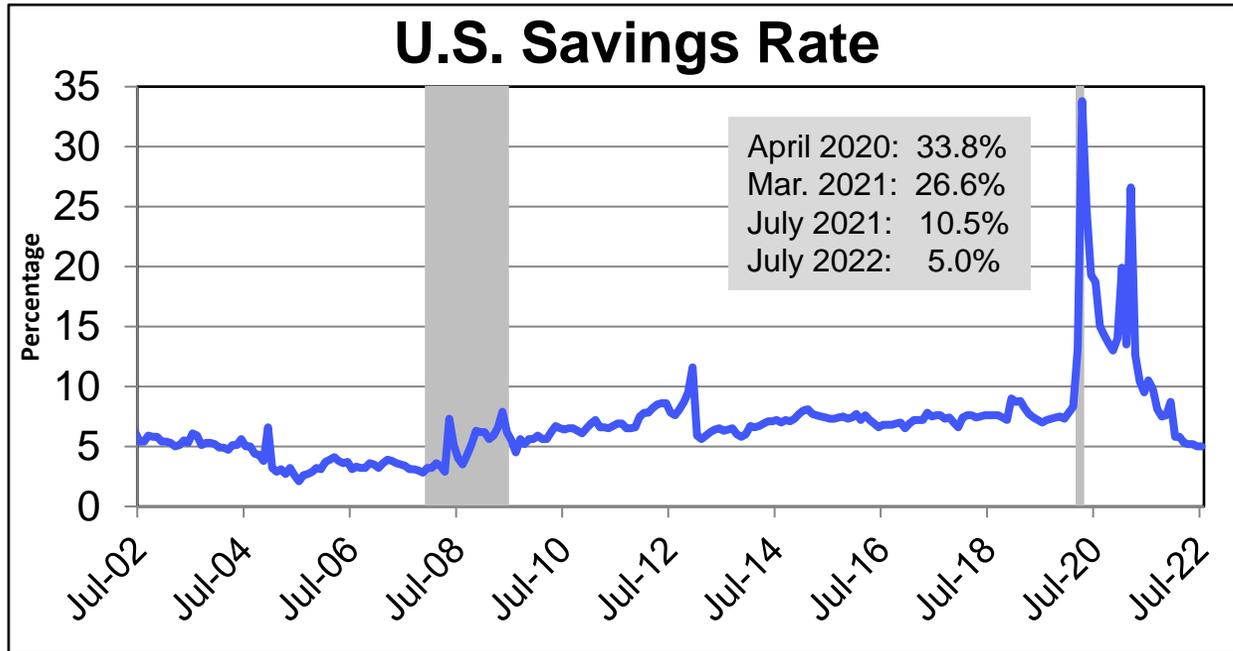
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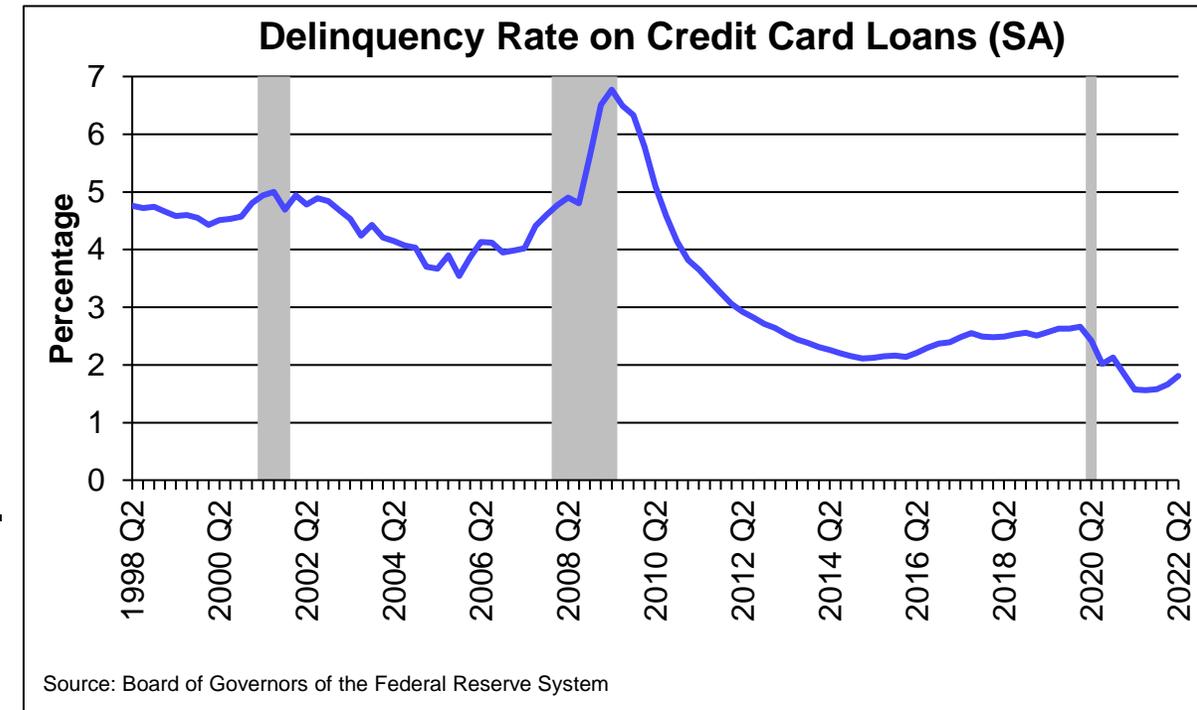
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Savings Now Low Again...

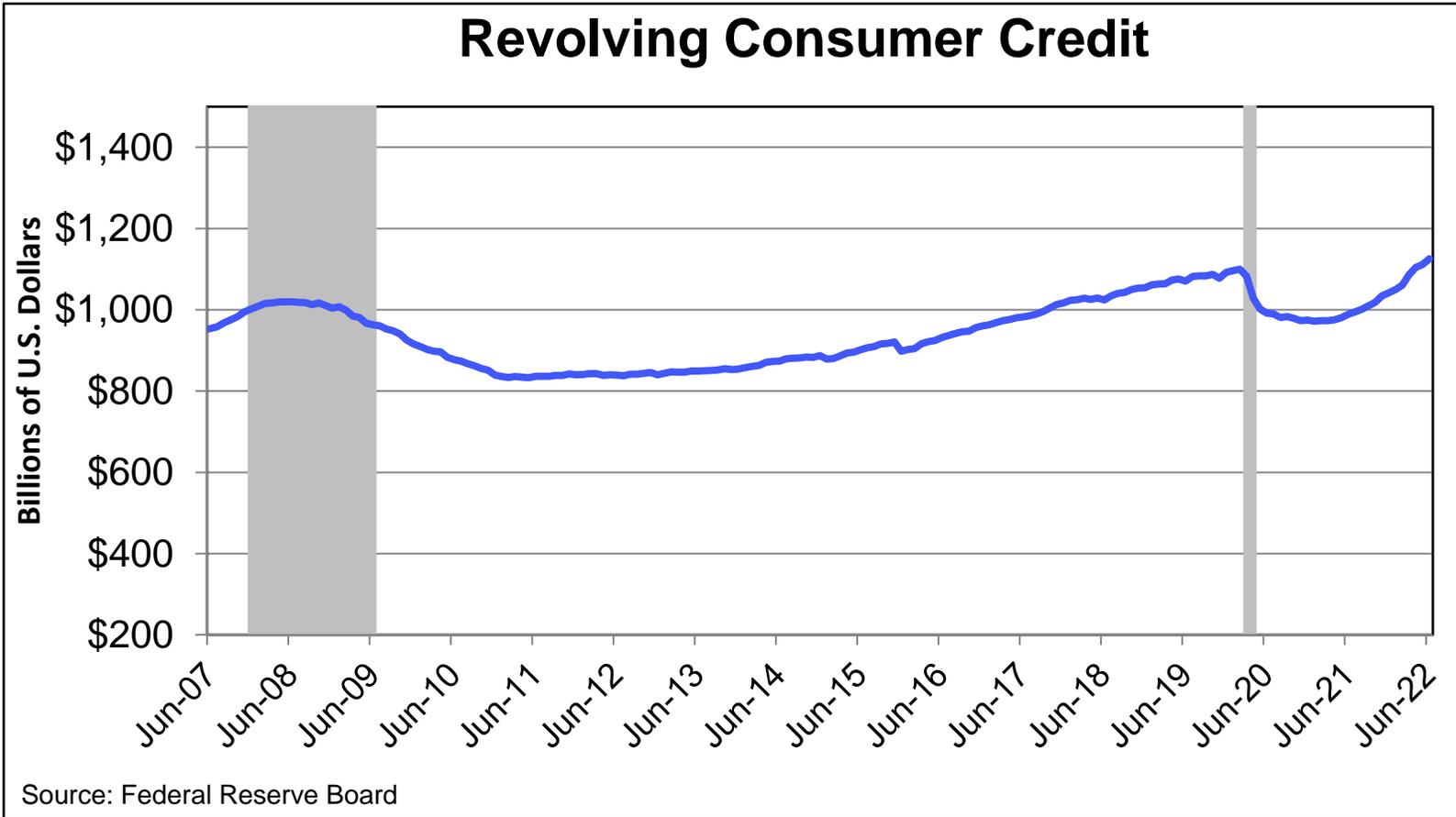


- Quick to rise and quick to fall.
- Shutdowns & stimulus used to pay down debt.
- Not everyone has access to credit.

January 2020 savings rate was 7.8% (and has been around that rate). *Saving is income minus spending on consumer goods, services and interest payments (excl. stock market purchases, housing purchases). Source: U.S. Bureau of Economic Analysis



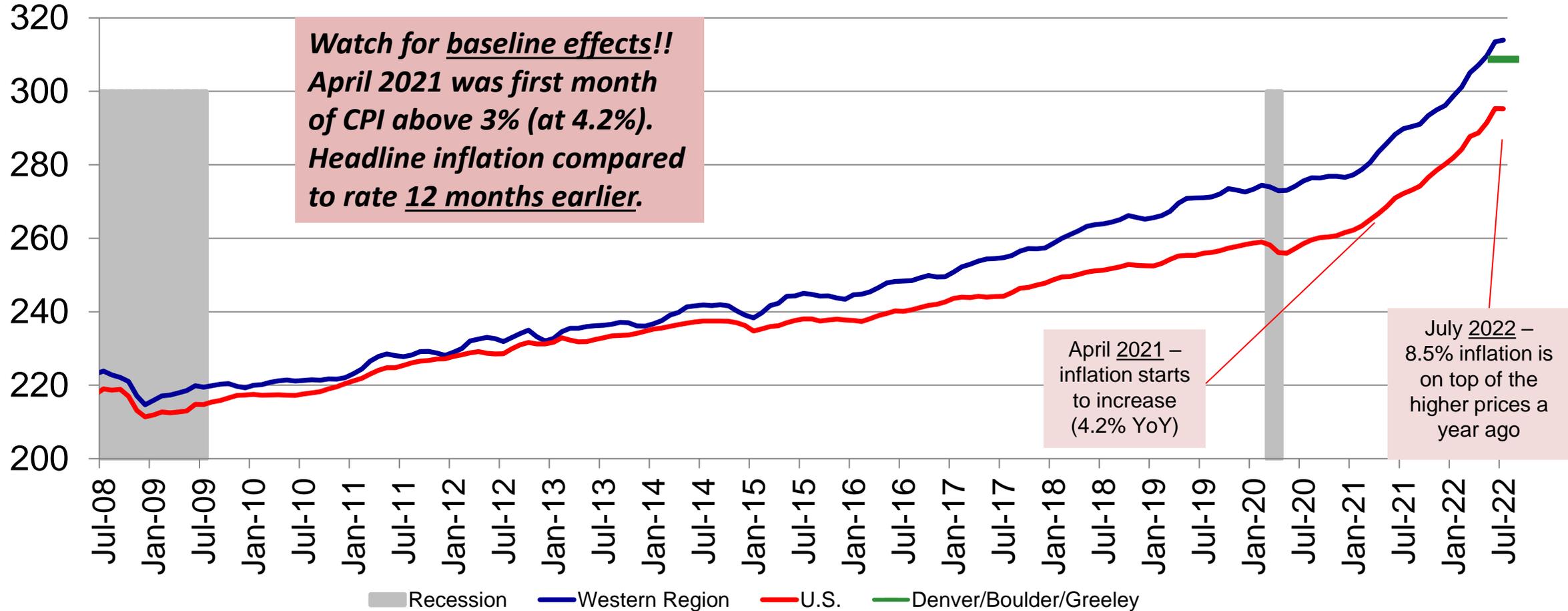
But More Reliance on Credit Overall...



With higher debt servicing (interest rate hikes)

Prime loan rate at 5.50% today versus 3.25% in April

Consumer Price Index (1982-1984 = 100)



NOTE: From the year ending July 2021 to July 2022, the CPI increased **8.5%**; all items less food and energy increased 5.9%. **14% increase in CPI from 1/20 to 7/22.**

**A value of 100 represents the average U.S. cost of living. Denver's index was 111.0% in 2022 Q2.

Sources: U.S. Bureau of Labor Statistics; Council for Community and Economic Research

2022 Q2 Cost of Living Index for Colorado Springs: 104.1% of U.S.**



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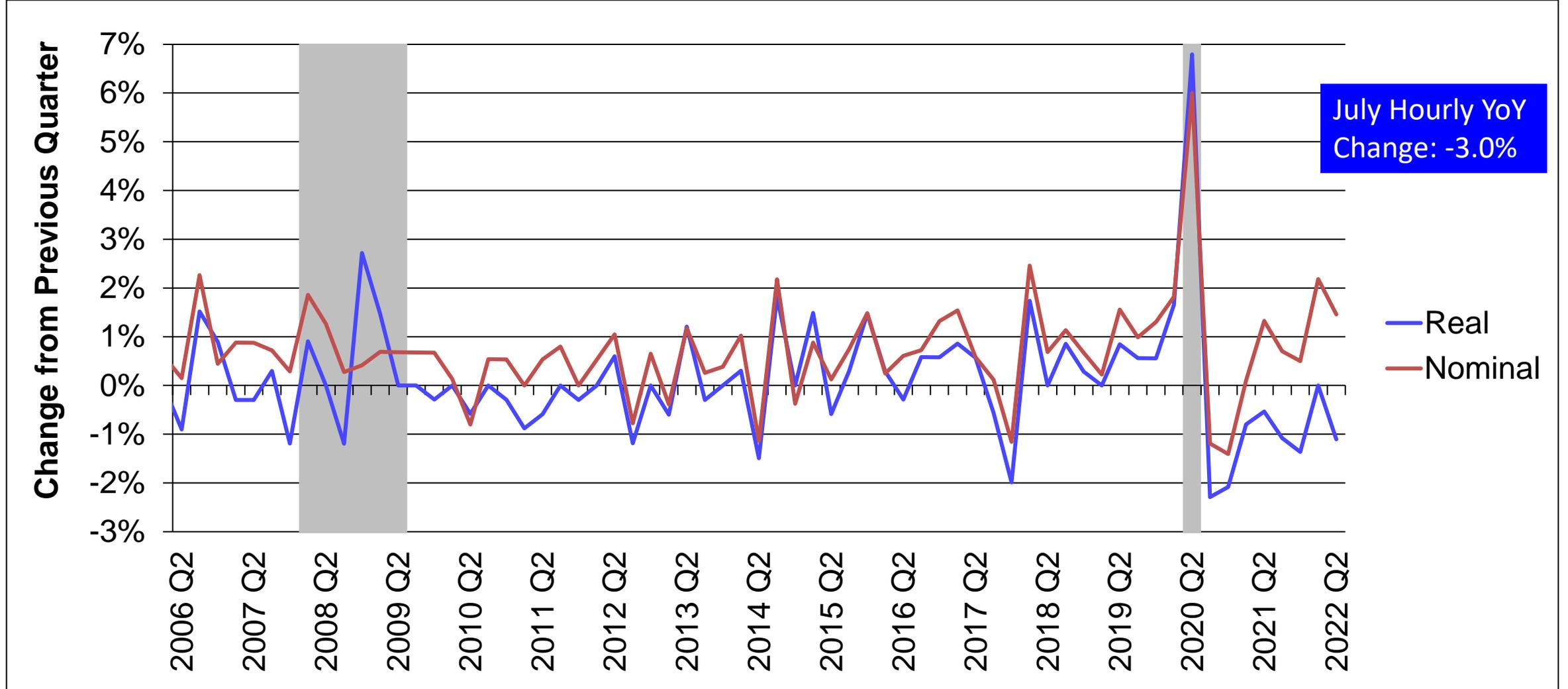
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Inflation in the Last 12 Months...

- 8.5% increase July 2021 to July 2022.
- Largest 12-month increases are largest components of typical HH budgets:
 - Gasoline +44.0%
 - Natural gas +30.5%
 - Electricity +15.2%
 - Food at home +13.1%
 - Food away from home +7.6%
 - Shelter +5.7% but this metric lags. Home prices up 14.2% nationwide in Q2.
 - Used cars and trucks +6.6%

Sources: U.S. Bureau of Labor Statistics; National Association of REALTORS®

U.S. Real & Nominal Weekly Wage Changes, SA



Source: U.S. Bureau of Labor Statistics



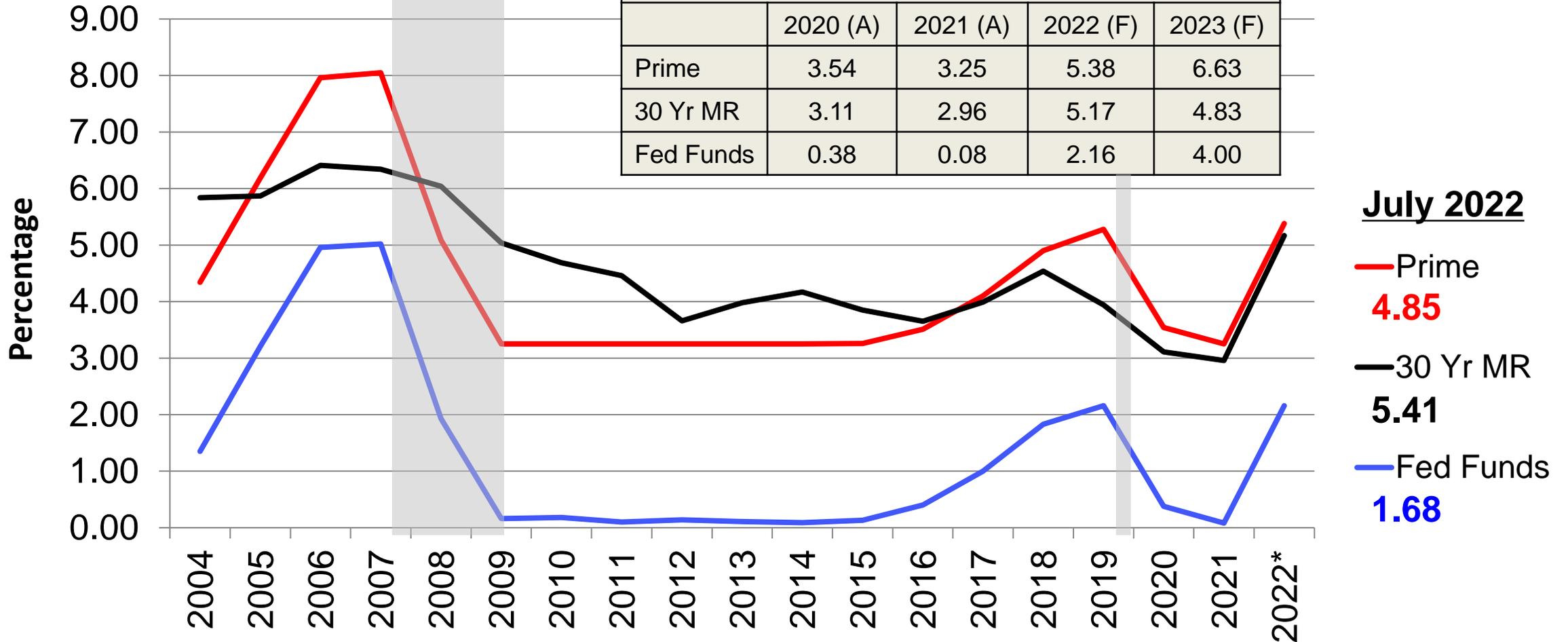
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Fed Is Between a Rock and a Hard Place*: Interest Rates

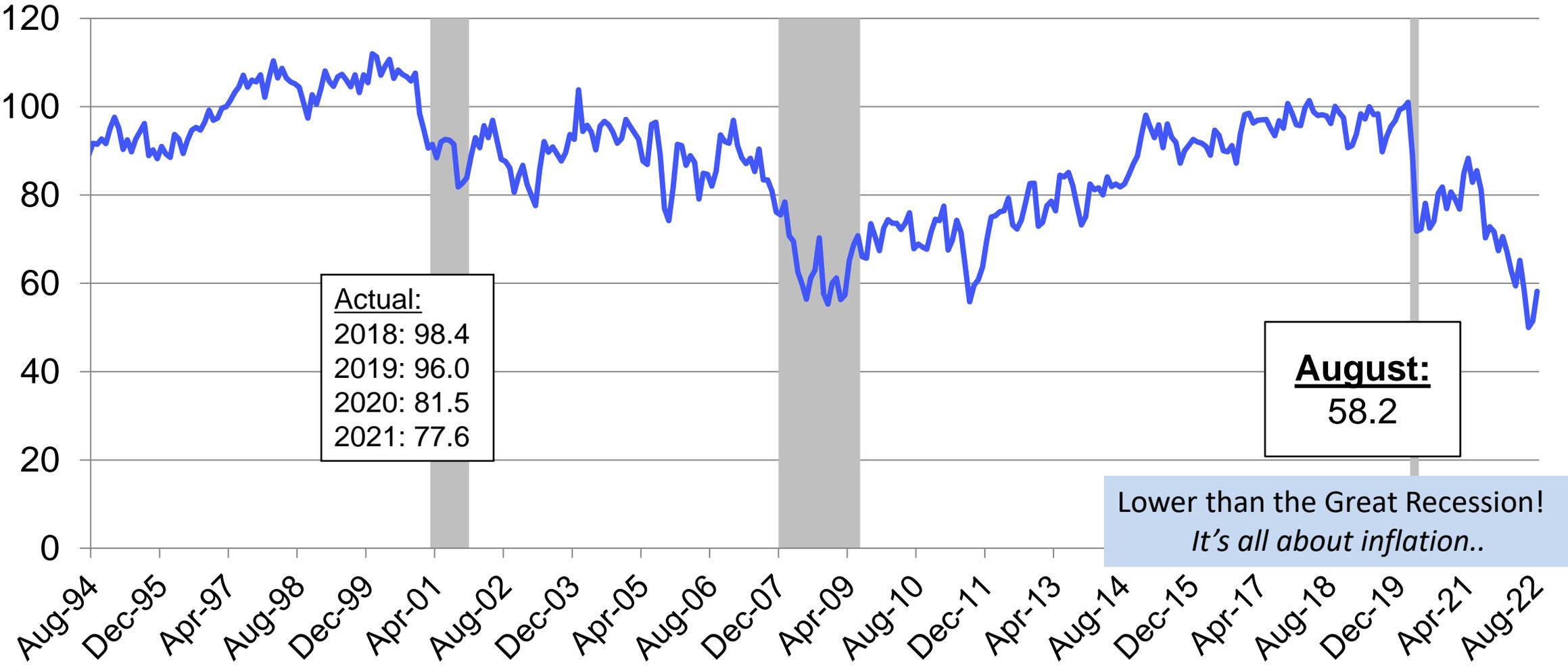
Actual & Forecasts (%)				
	2020 (A)	2021 (A)	2022 (F)	2023 (F)
Prime	3.54	3.25	5.38	6.63
30 Yr MR	3.11	2.96	5.17	4.83
Fed Funds	0.38	0.08	2.16	4.00



*Forecasts by Wells Fargo, updated August 2022. *Labor markets still tight, which fuels wage inflation; Changes in R impacts demand, not supply
 Source: Board of Governors of the Federal Reserve System (US)

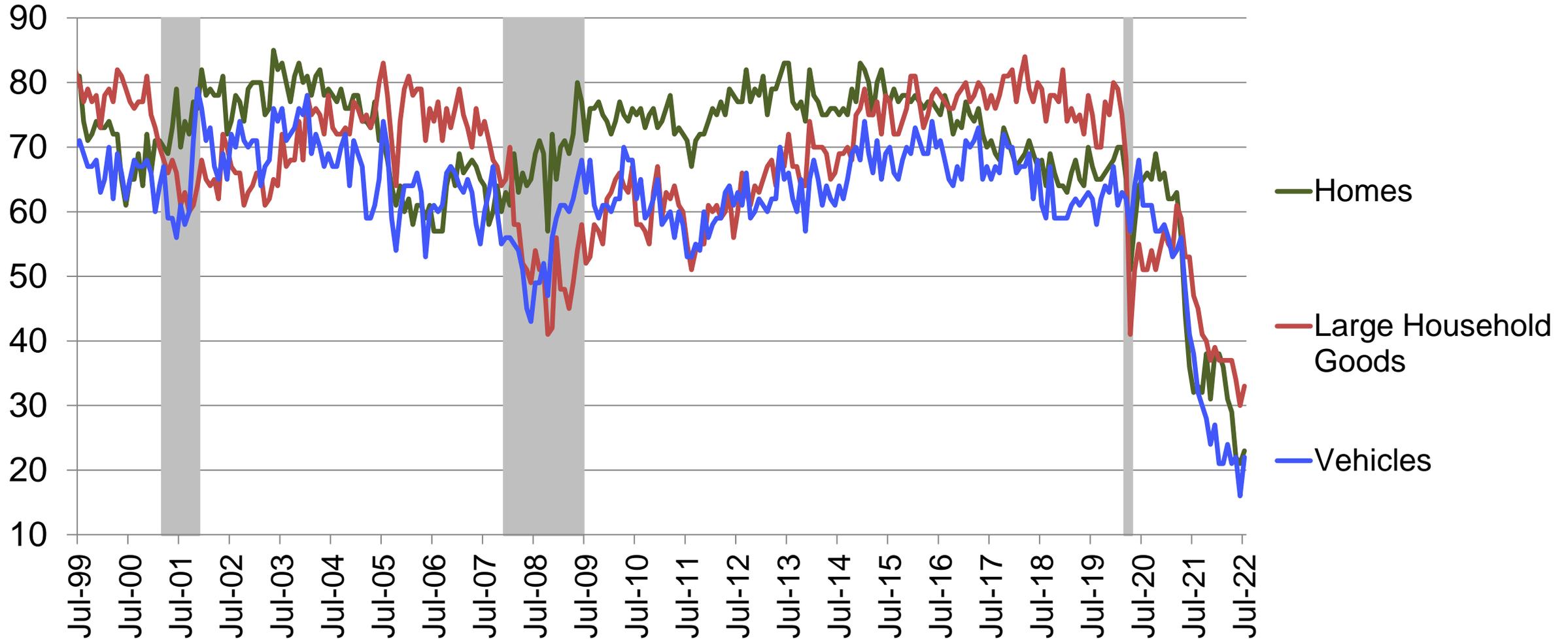
Waning National Consumer Confidence (not so much in Colorado Springs though)

University of Michigan Consumer Sentiment



Source: University of Michigan, Survey of Consumers

Good Time to Buy – Percentage Saying “Yes”



Source: University of Michigan, Surveys of Consumers

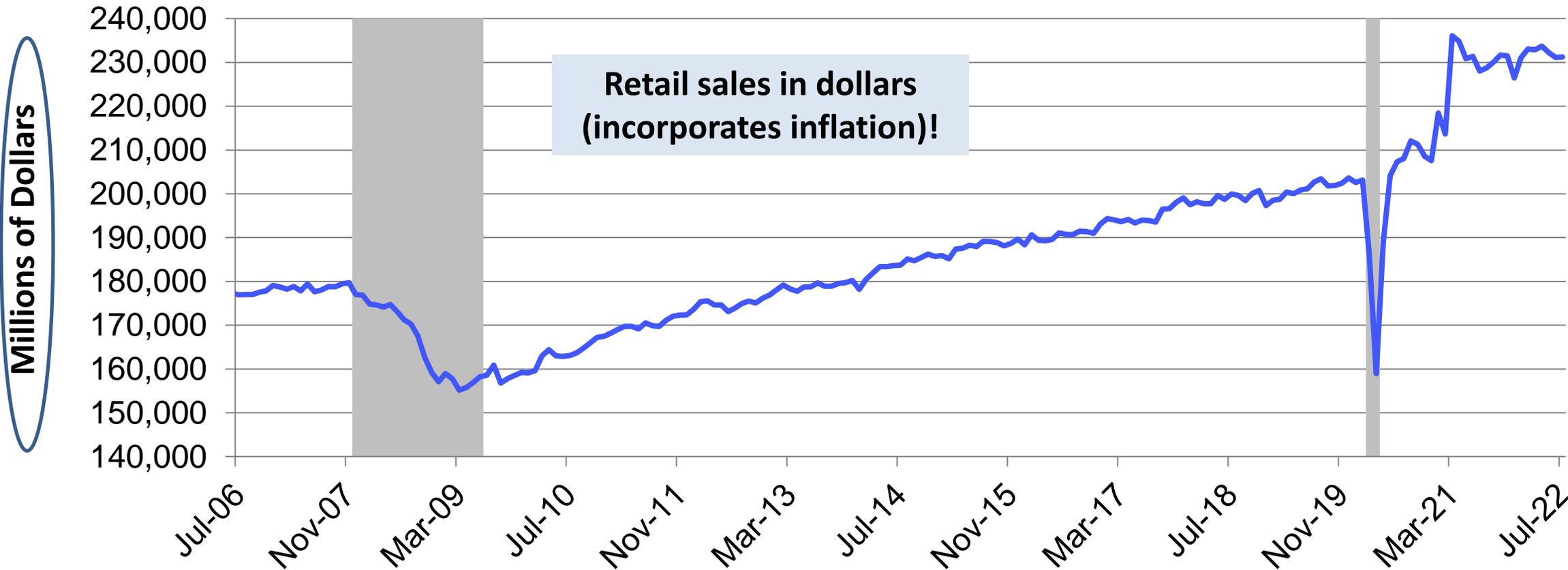


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Total Retail and Food Service Sales



Nine year's worth of sales in 21 months (Feb 2020 – Nov 2021)

Source: Federal Reserve Bank of St. Louis

Includes motor vehicle and parts dealers, furniture and home furnishing stores, electronic and appliance stores, building material and garden dealers, food and beverage stores, health and personal care stores, gasoline stations, clothing, sporting good, hobby, musical and bookstores, general merchandise and miscellaneous (e.g., floral shops). Includes online sales. Retail sales make up about 40% of total personal spending. PCE incorporates retail, which is mostly goods consumption, and services. Comment above from Wells Fargo year-end 2021 report.

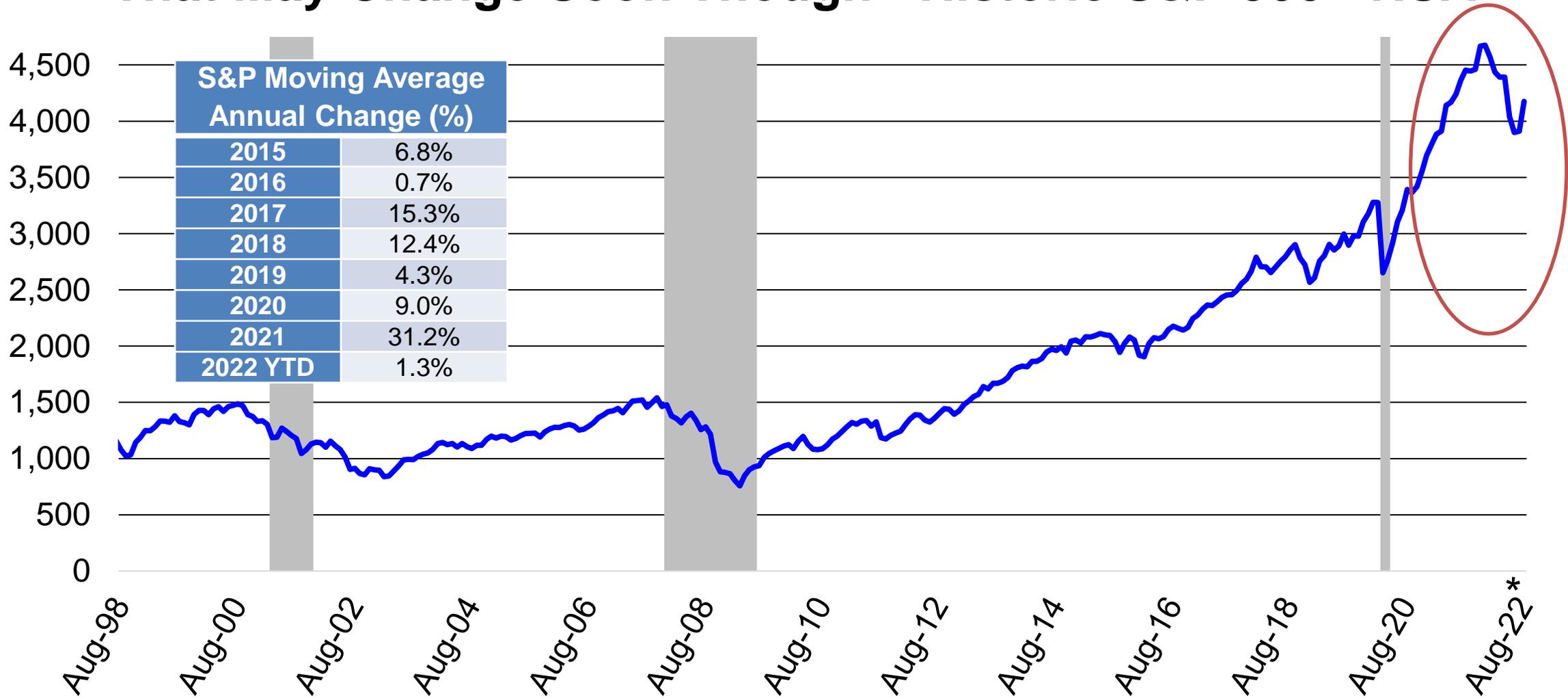


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Higher Income Groups Are Confident & Spending That May Change Soon Though - Historic S&P 500 - NSA



Note: Data is monthly averages. *Aug-22 is through August 29.

Source: Yahoo! Finance, S&P Dow Jones Indices LLC



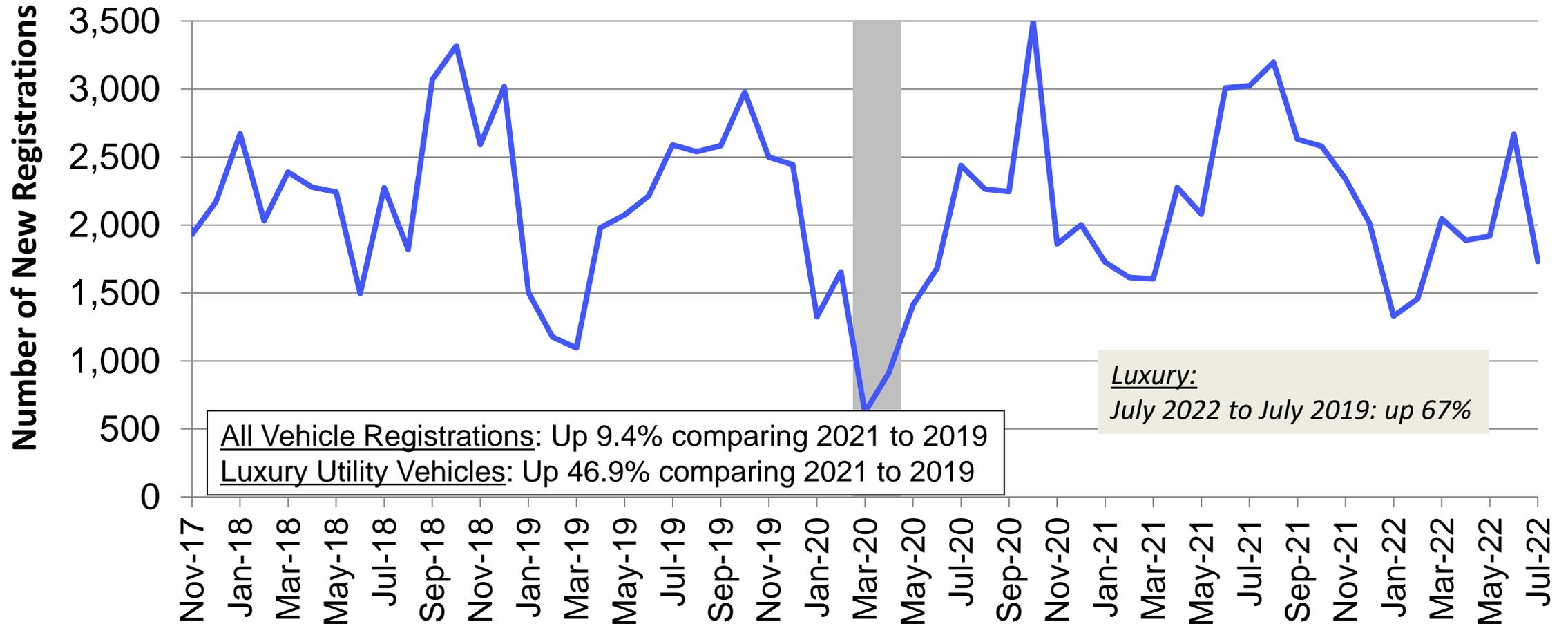
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Local Consumer Confidence: El Paso County New Vehicle Registrations (without luxury utility)

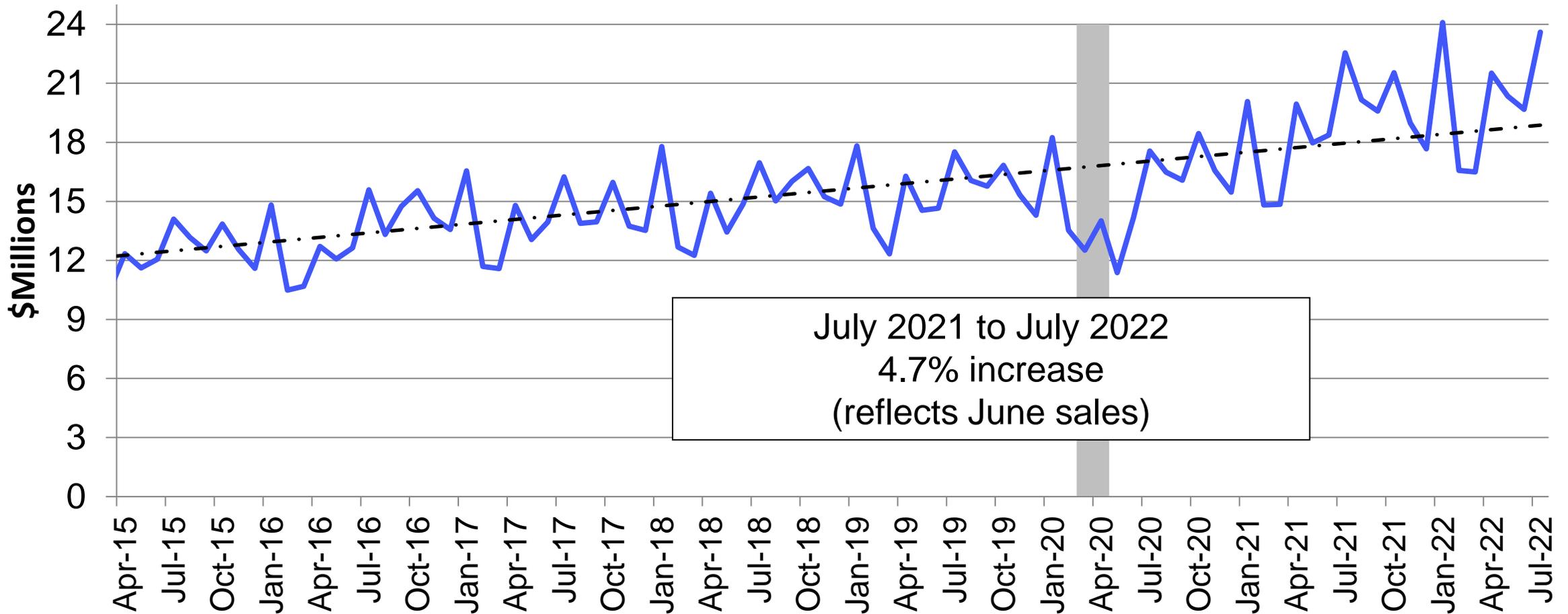


Luxury utility categories (all terrain, camper trailer, trailer coach and trailer utility) are not included in the graph line above, but % change in this category is noted in the text box.

Sources: El Paso County Clerk and Recorder; Colorado Interactive LLC

Consumer Confidence In Colorado Springs Is Strong

2% Monthly Sales & Use Tax Collections



July 2021 to July 2022
4.7% increase
(reflects June sales)

Source: City of Colorado Springs

Business Confidence



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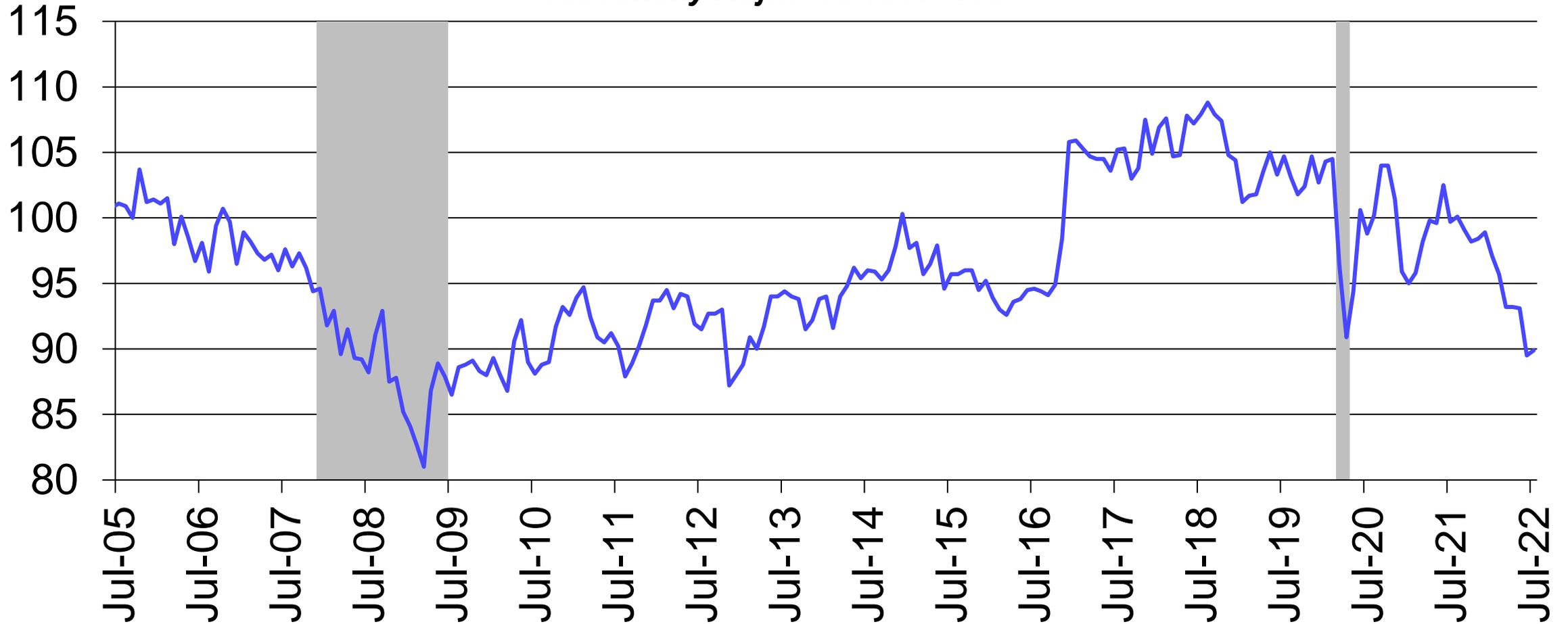


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Business Confidence Not Great Small Business Optimism Index

Seasonally Adjusted 1986=100



Source: ©NFIB Research Center, Small Business Economic Trends Report



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Small Business Confidence – July 2022

- The July reading rose 0.4 points to 89.9.
 - Six of the ten components declined, and 4 improved.
- **37% say inflation** is their #1 problem, highest level since 1979
- **20% of businesses plan to create new jobs (SA).**
- **48% of respondents say they have increased compensation (SA) – wage inflation!**
- **49% of owners (SA) could not fill job openings**
 - **91% of those hiring reported few or no “qualified” applicants for open positions***

Source: ©NFIB Research Center, Small Business Economic Trends Report. *42% have openings for skilled workers and 21% have openings for unskilled workers

Housing and Housing Affordability



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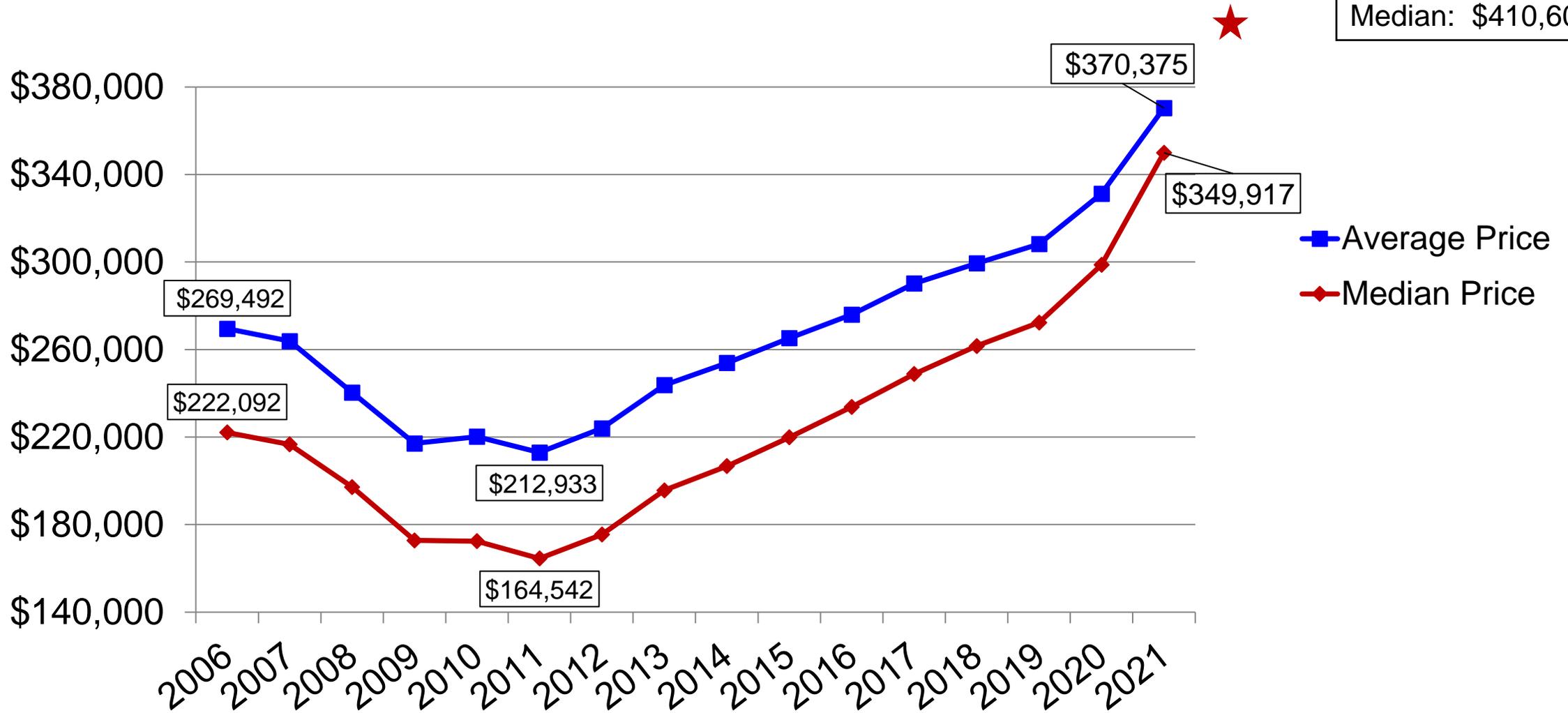
Housing is a Big Player...

*Real estate makes up 12-15% of GDP
(if you include resale, new construction, SF, MF, and rental markets)*

*Expenditures on homes are usually highest household expense and
home ownership is primary mechanism for **wealth accumulation***

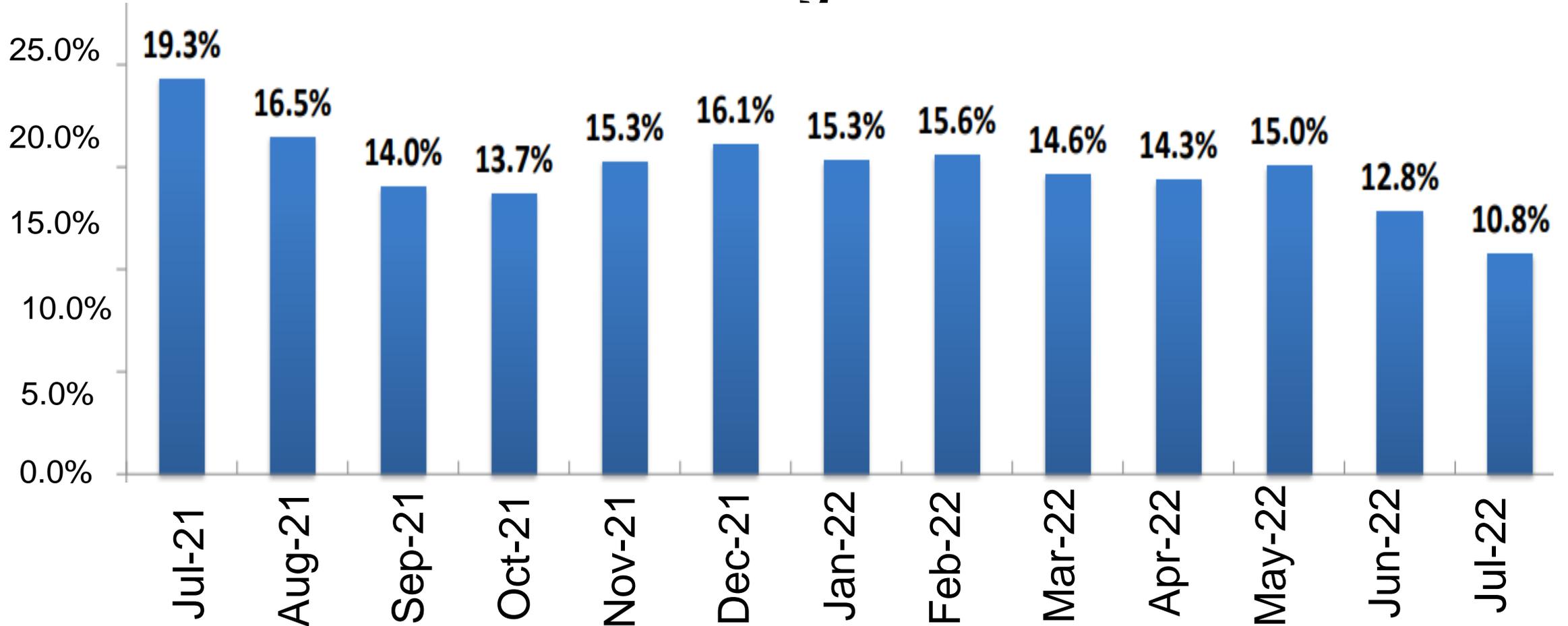
U.S. Annual Average & Median Existing Single-Family Home Prices

July 2022 (NSA):
Median: \$410,600



Source: National Association of REALTORS®

U.S. Existing Home Sales Median Price Percent Change Year-Over-Year



Source: National Association of REALTORS®

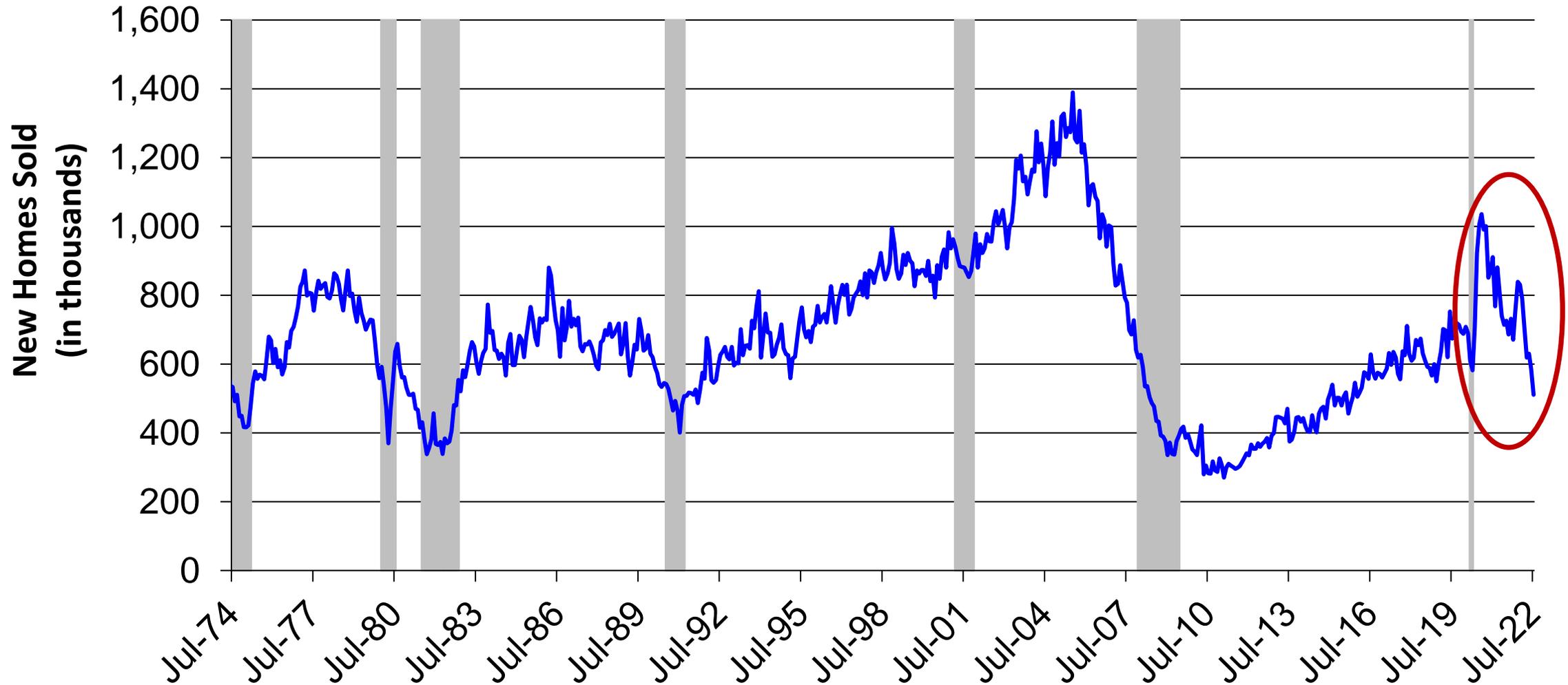


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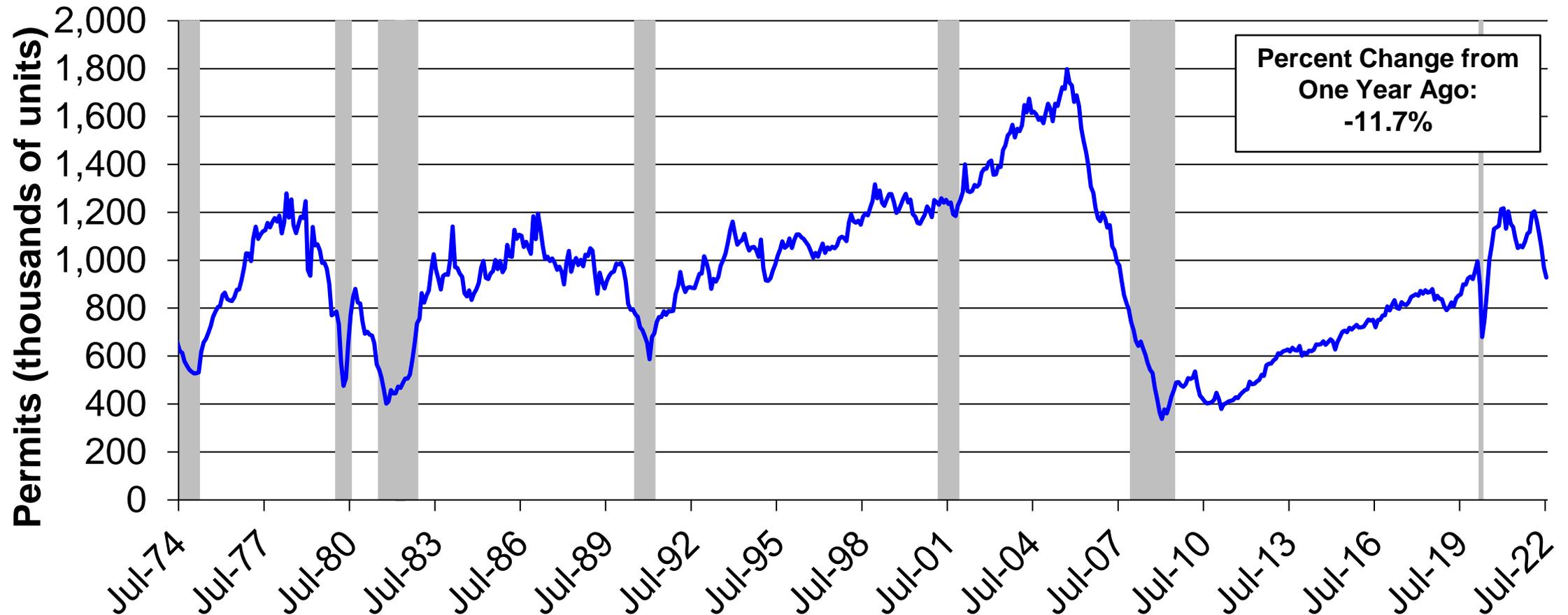
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U.S. New Single-Family Home Sales - SA



Source: U.S. Census Bureau; Existing data trends closely mirror new home sales.

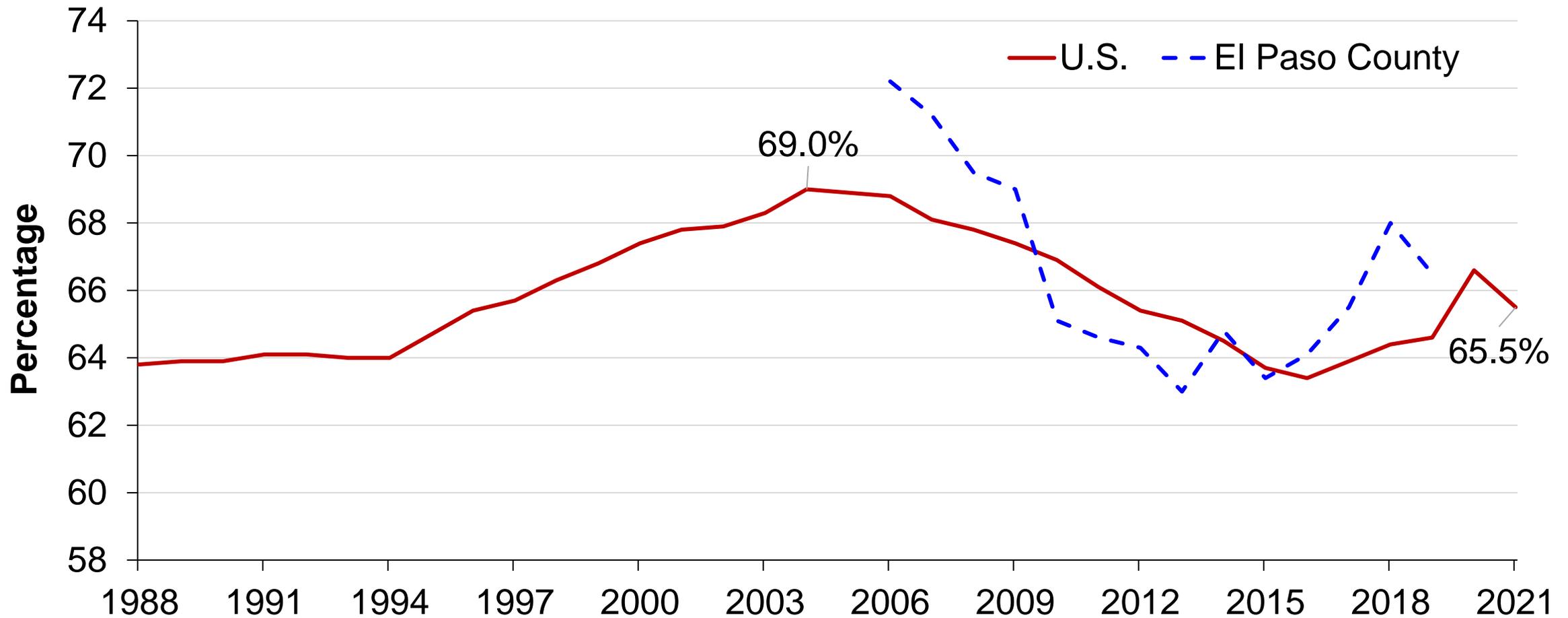
U.S. New Private Building Permits for Single Unit Structures, SA



Note: Existing home data trends very closely mirror new permit trends.

Source: U.S. Census Bureau

U.S. & EPC Home Ownership Rates, Annual



Source: U.S. Census Bureau

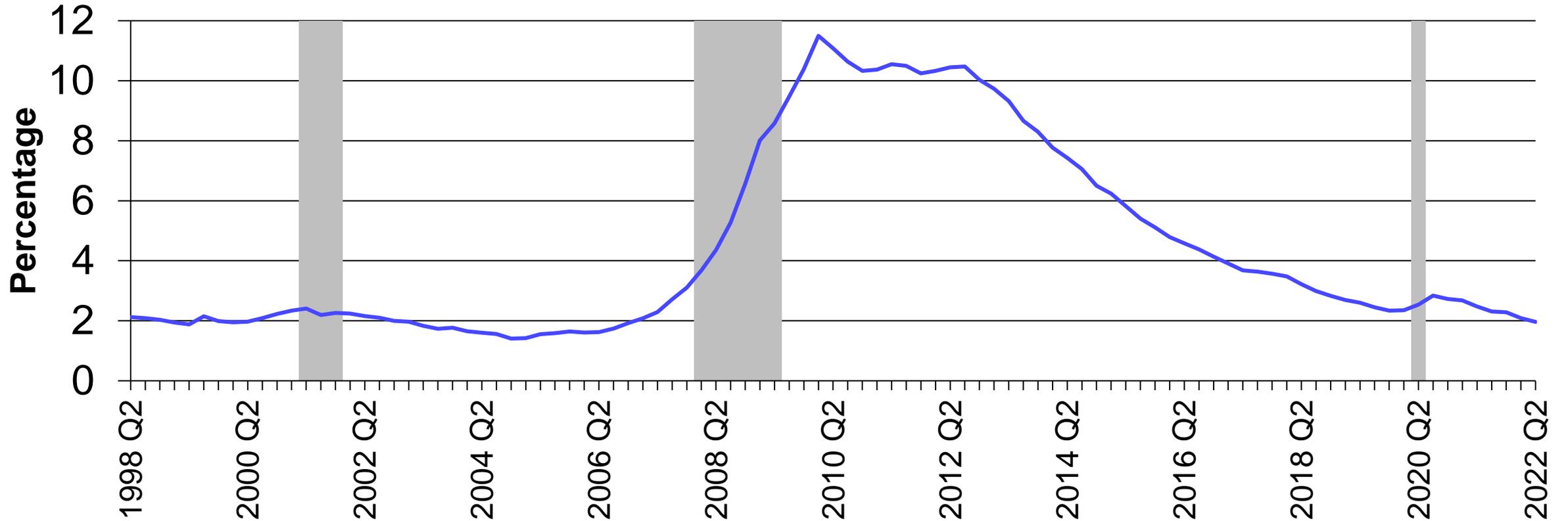
National Picture 2022 Q2 – Housing Prices

- **All but 1 of measured MSAs (185) showed gains in single-family home prices**
- **80% had double-digit growth from one year ago**
- **100% of MSAs (63) showed gains in median condo prices.**
 - U.S. median existing SF home price in Q2 was \$413,500 (**up 14.2%** 2022 Q2 from 2021 Q2).
 - Median condo price in the U.S. was \$351,200 (up **12.7%**).

	<u>2020 Appreciation</u>	<u>2021</u>	<u>2022 (F)</u>	<u>2023 (F)</u>
Existing Homes	9.1% (\$296,700)	18.2% (\$350,700)	11.5% (\$390,900)	2.1% (\$399,300)
New Homes	4.8% (\$336,900)	17.9% (\$397,100)	8.7% (\$431,500)	-0.3% (\$430,000)

Source: National Association of REALTORS® Forecasts updated August 2022. Zillow forecast for 2022 is similar. (11.0%)

Delinquency Rates on Single-Family Residential Mortgages* (SA)



*Booked in Domestic Offices, All Commercial Banks.

Source: Board of Governors of the Federal Reserve System

National Real Estate - Month of July 2022

- Existing-home sales **decreased** in July for sixth straight month* (down 5.9%, SA).
- All four regions that had declining sales in July.
- YoY overall sales decreased **20.2%**.
- **32%** overall price growth in past 2 years (Moody's)
- Housing market **24.7% overvalued** (higher than 23.8% during GR) – Moody's
- 84% of U.S. markets overvalued; some markets much worse (Boise 71.7% overvalued)
- Moody's expects depreciation of 5-10% in 2023 (if recession, 10-20%).

Source: National Association of REALTORS, Lawrence Yun®; Moody's Analytics. *Includes SF, townhomes, condominiums & co-ops

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Colorado Real Estate



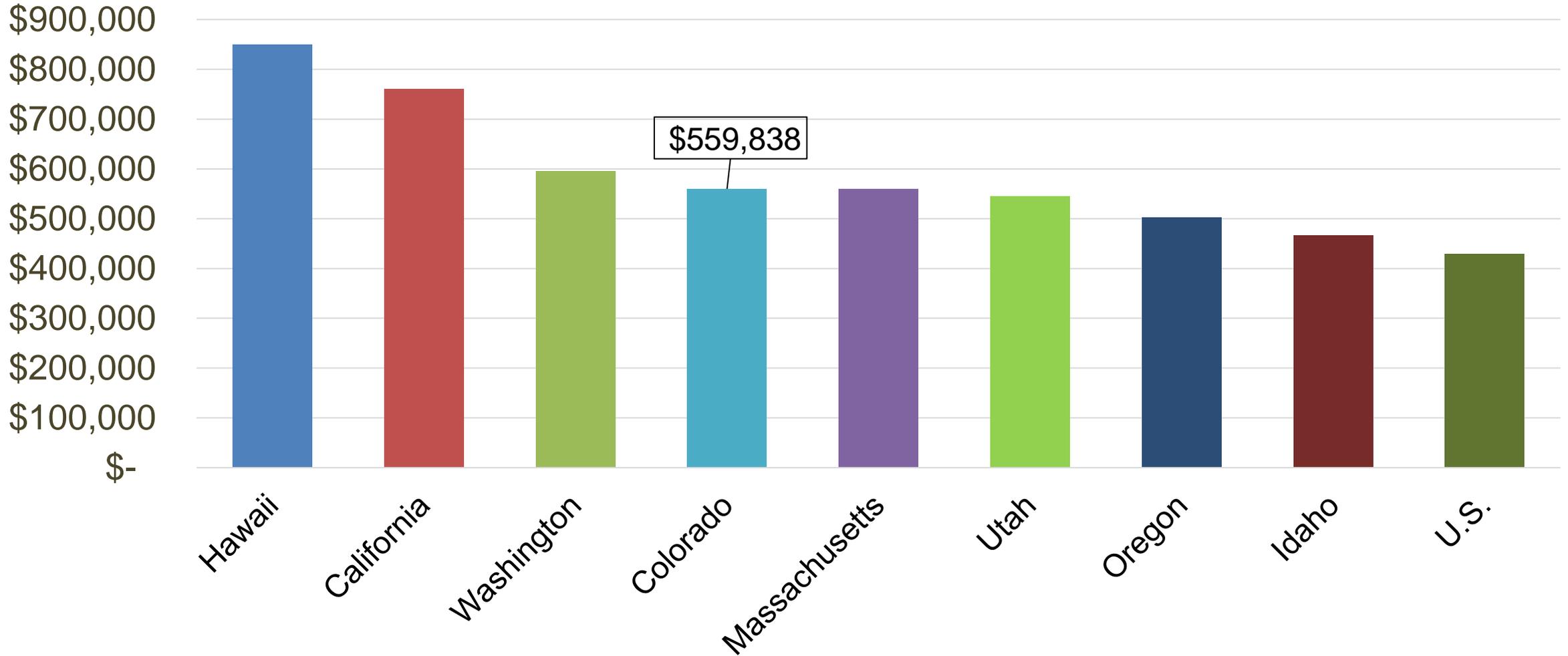
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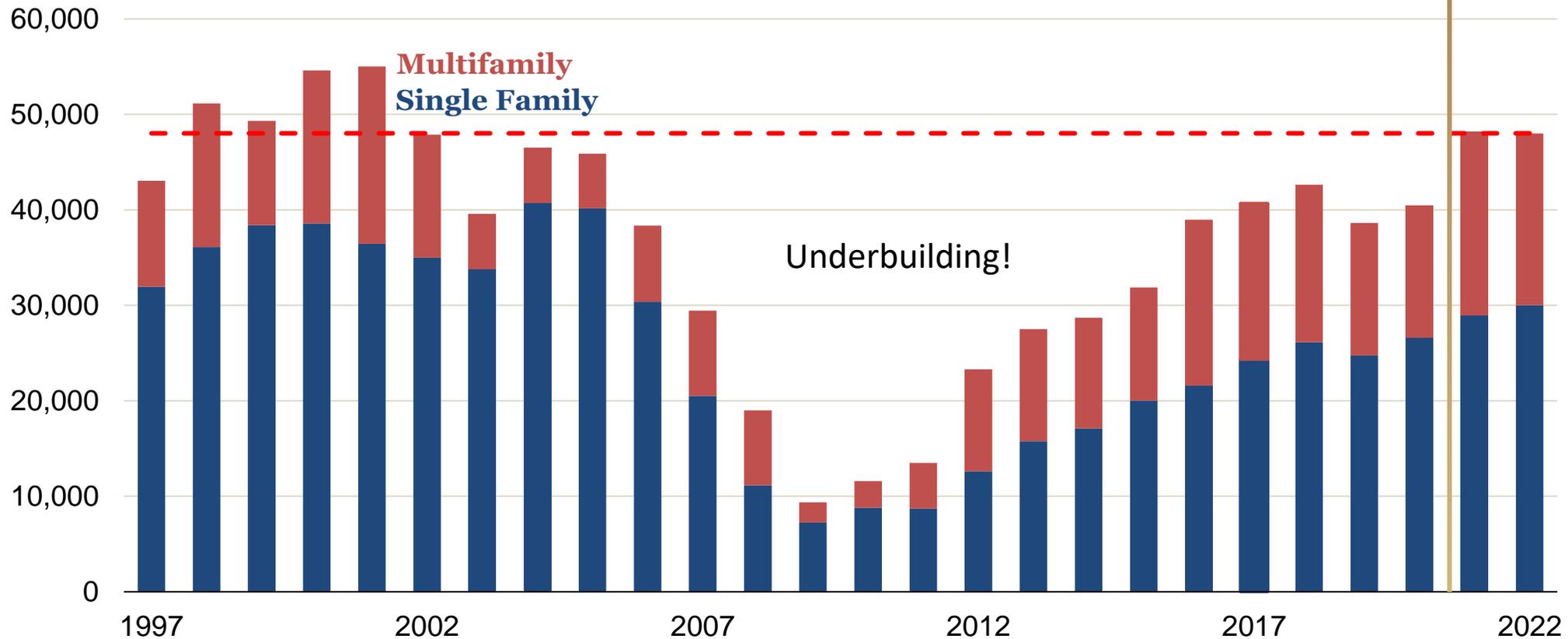
Median Home Sale Prices – 8 Most Expensive States May 2022



Source: Zillow® Research through World Population Review

Colorado Residential Building Permits

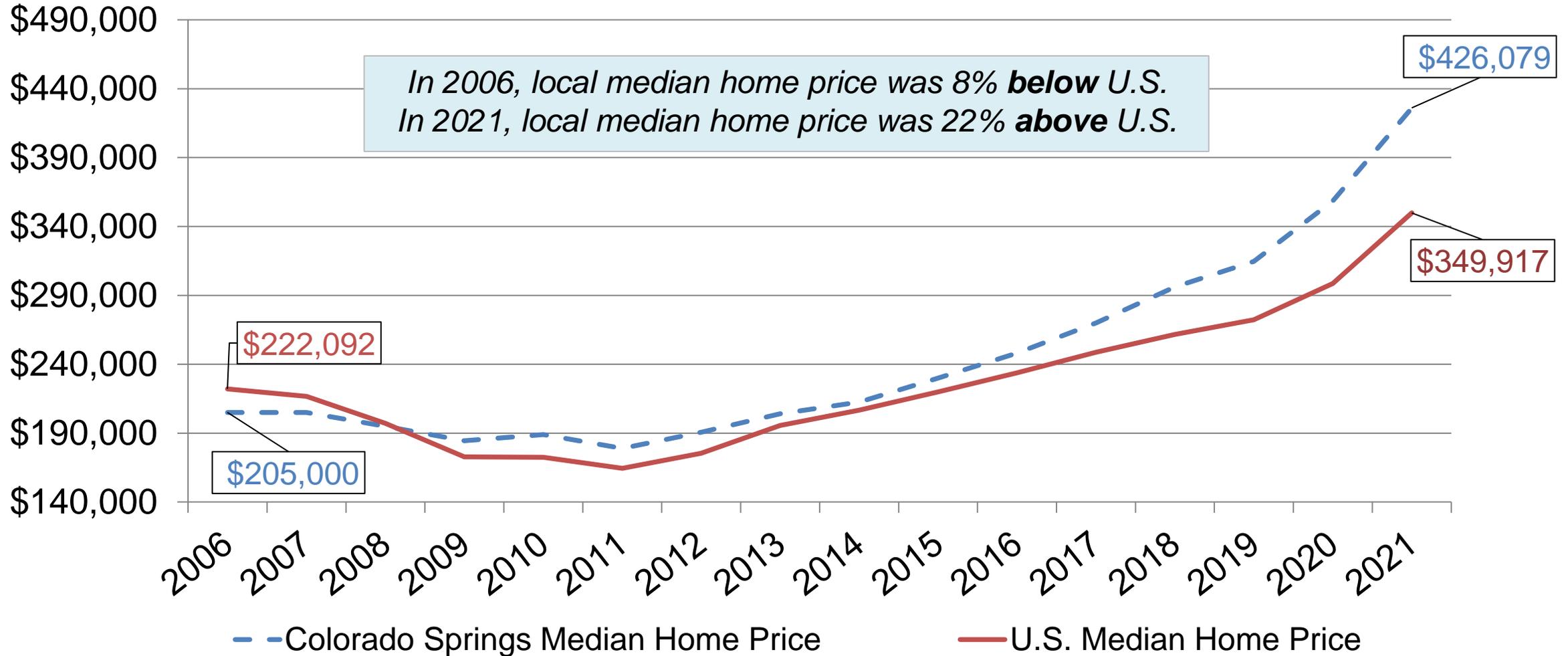
Permits, 1997-2022



Sources: U.S. Census Bureau and the Colorado Business Economic Outlook Committee.

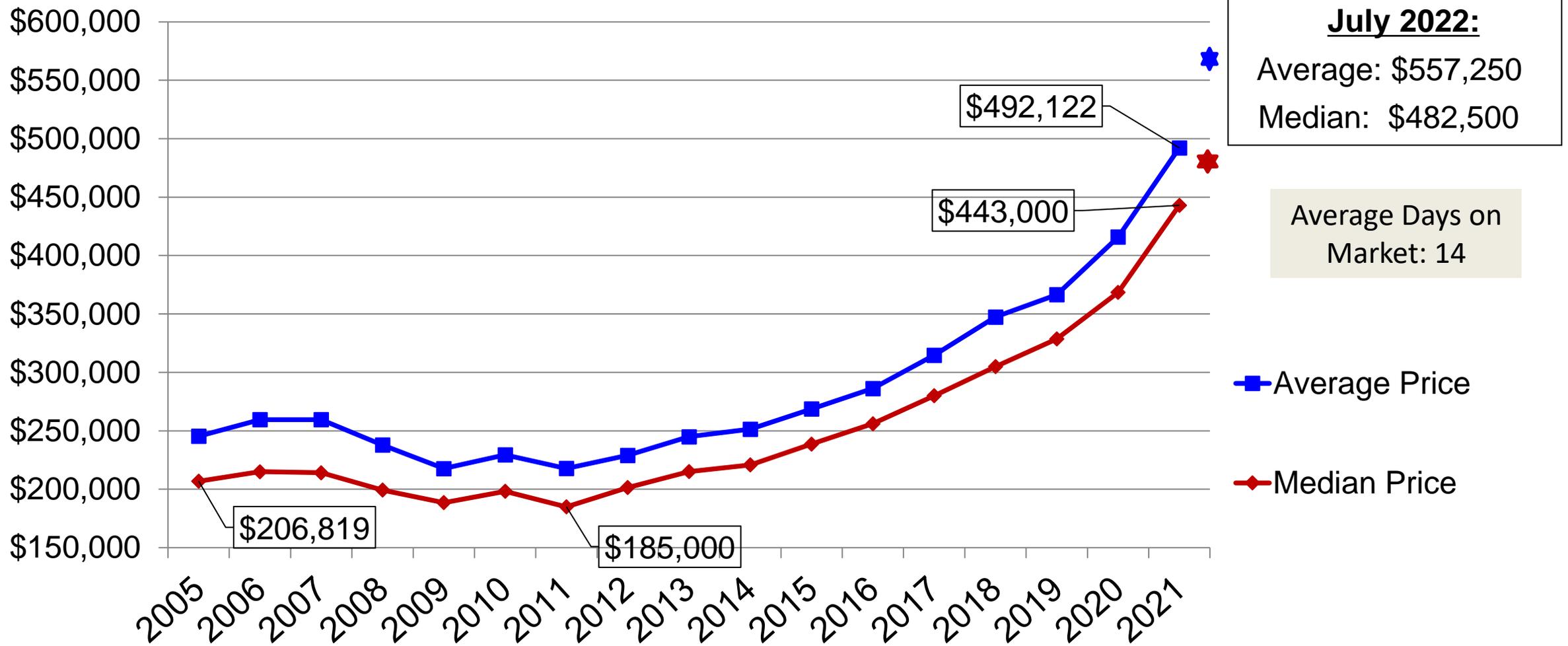
Local Real Estate

Median (Existing) Home Prices, U.S. & Colorado Springs



Source: National Association of REALTORS®; Pikes Peak REALTOR® Services Corp. (RSC)

Pikes Peak Region Annual Average & Median* (Single-Family) New & Existing Home Prices



Source: Pikes Peak REALTOR® Services Corp. (RSC) *Includes all homes: new and existing. 2021 appreciation was 18.4% for average HP, and 20.2% for median HP.

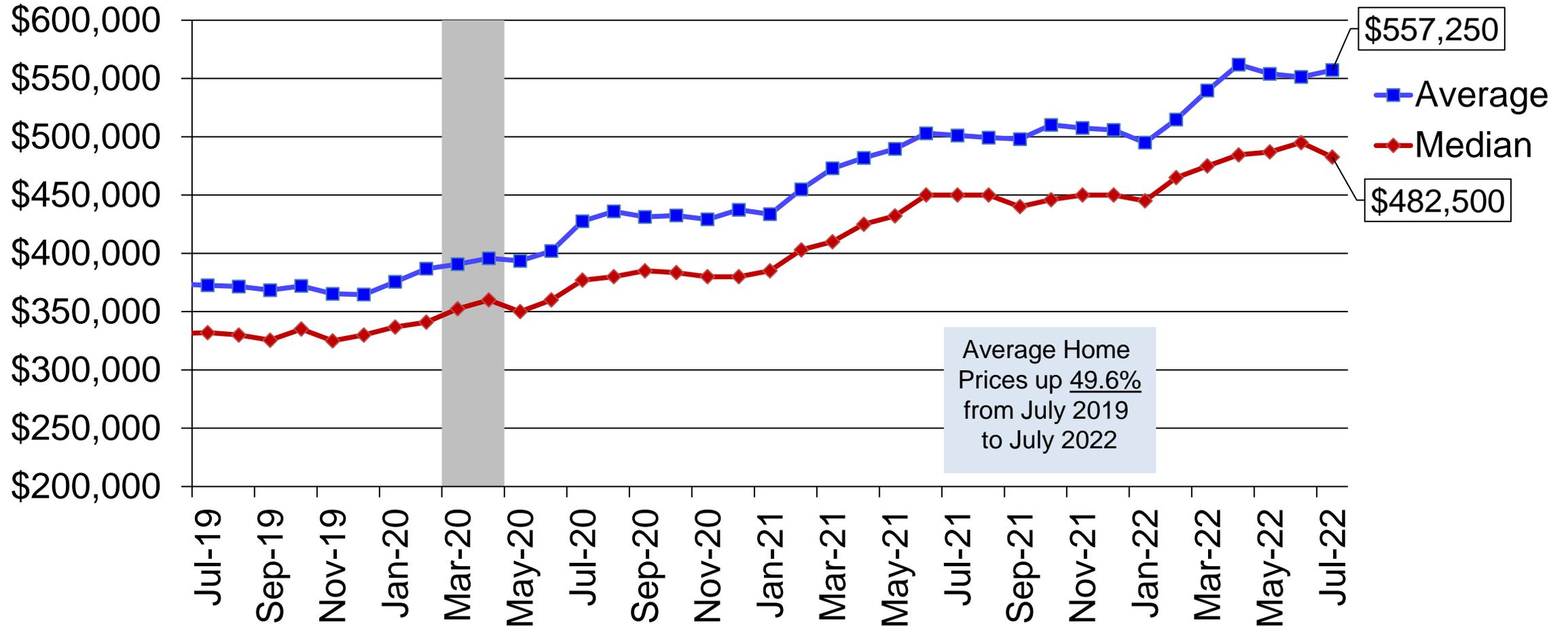


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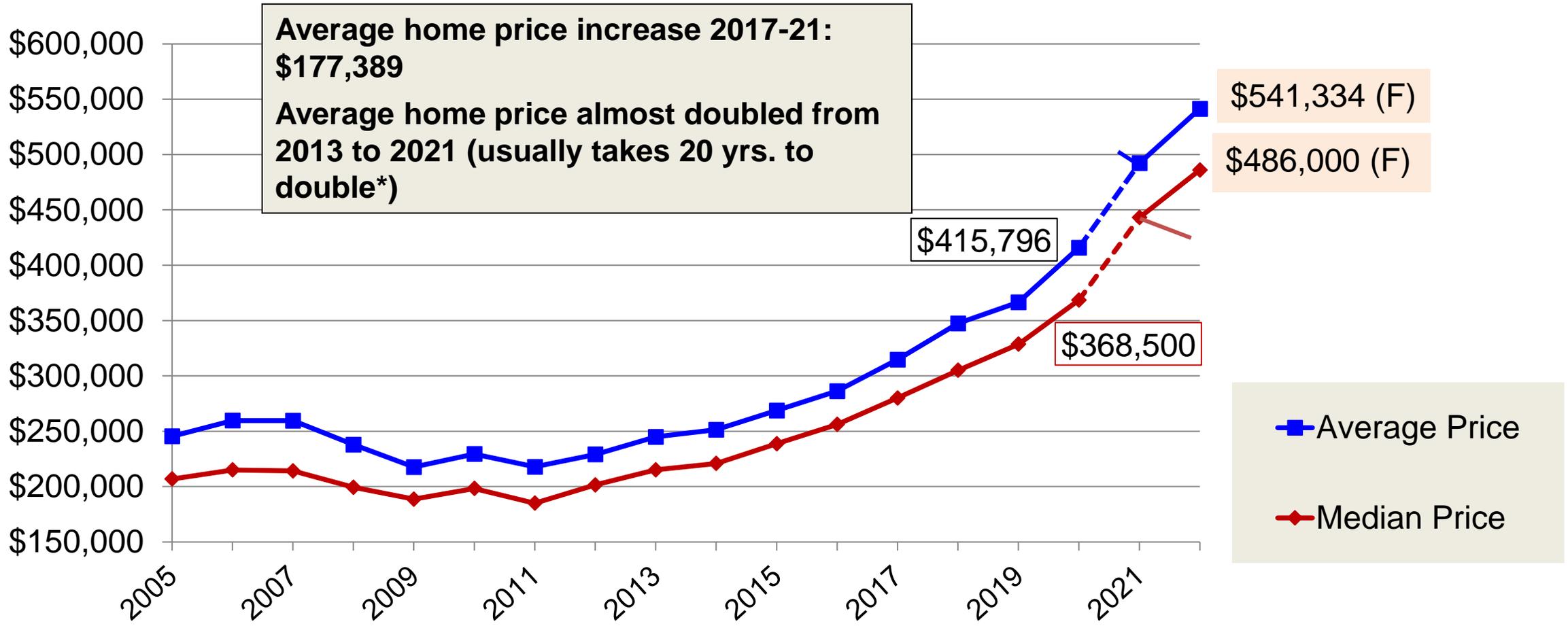
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New & Existing Single-Family Home Prices Pikes Peak Region – Past Three Years



Source: Pikes Peak REALTOR® Services Corp.

Pikes Peak Region Annual Average & Median (Single-Family) New & Existing Home Prices



Median home price moderating more than average home price

* Doubling comment by Bruce Betts.

Source: UCCS Economic Forum; Pikes Peak REALTOR® Services Corp. (RSC).

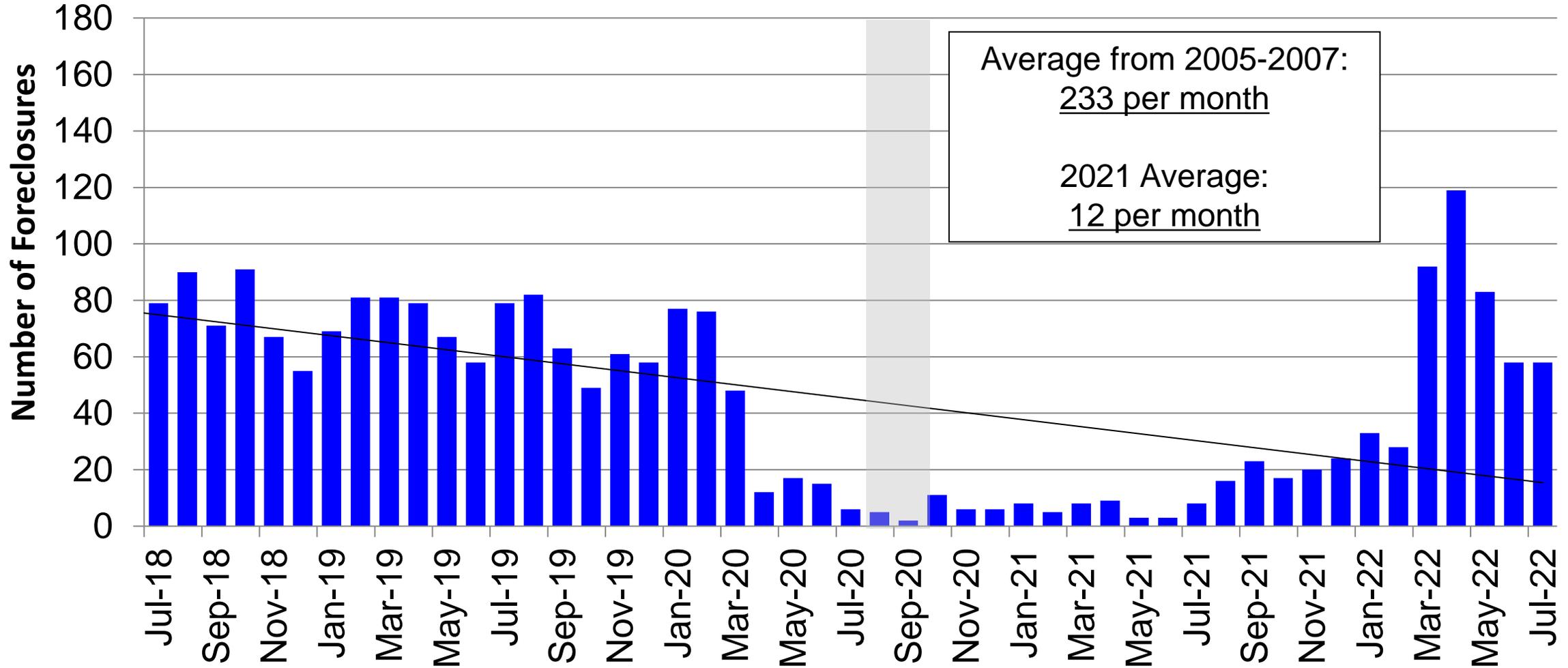
Pikes Peak Single-Family Home Prices Forecast (New & Existing)

	Actual 2019	Actual 2020	Actual 2021	Forecast 2022
Average	\$366,522 (up <u>5.5%</u>)	\$415,796 (up <u>13.4%</u>)	\$492,122 (up <u>18.4%</u>)	\$541,334 (up <u>10.0%</u>)
Median	\$328,625 (up <u>7.7%</u>)	\$368,500 (up <u>12.1%</u>)	\$443,000 (up <u>20.2%</u>)	\$486,000 (up <u>9.7%</u>)

Note: Zillow forecasts an average increase in home value (July 2022 to July 2023) of **2.7% in the U.S. and 4.5% in the Colorado Springs MSA.**

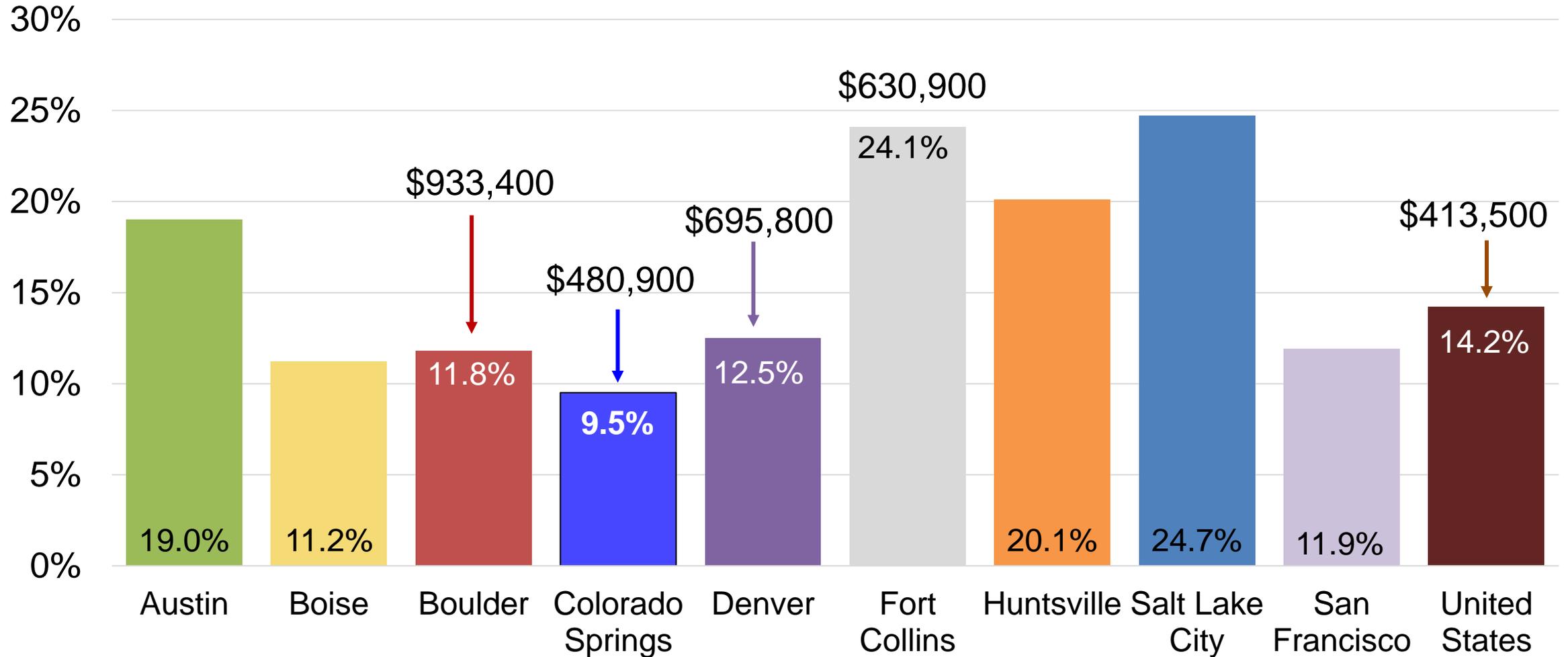
Source: Pikes Peak REALTOR® Services Corp. (RSC); Forecasts by UCCS Economic Forum.

Number of Foreclosures, El Paso County



Source: El Paso County Public Trustee

Annual Median Home Price Appreciation 2021 Q2 to 2022 Q2



Note: This data is *seasonally adjusted*. PPAR data is not seasonally adjusted. Year over year.

Sources: National Association of REALTORS®

U.S. Existing Sales Distribution, July 2022

\$0- <u>100K</u>	\$ <u>100-</u> 250K	\$250- 500K	\$500- <u>750K</u>	\$ <u>750K-</u> 1M	\$1M+
4%	21%	43%	18%	7%	7%

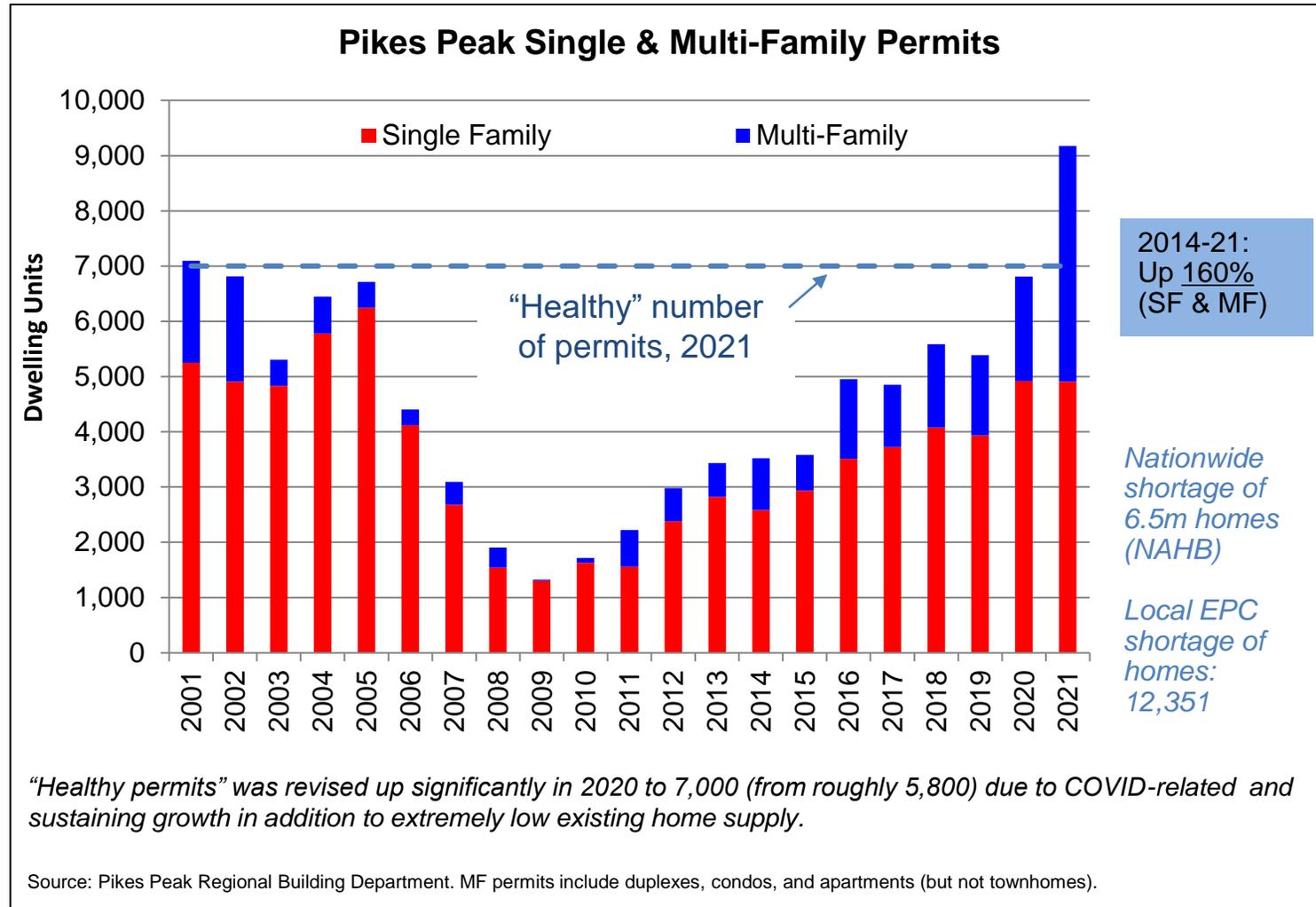
Colorado Springs MSA Sales Distribution, July 2022

\$0- <u>200K</u>	\$ <u>200-</u> <u>300K</u>	\$ <u>300-</u> 500K	\$500- <u>800K</u>	\$800K- 1M	\$1M+
0.2%	2%	51%	35%	6%	5%

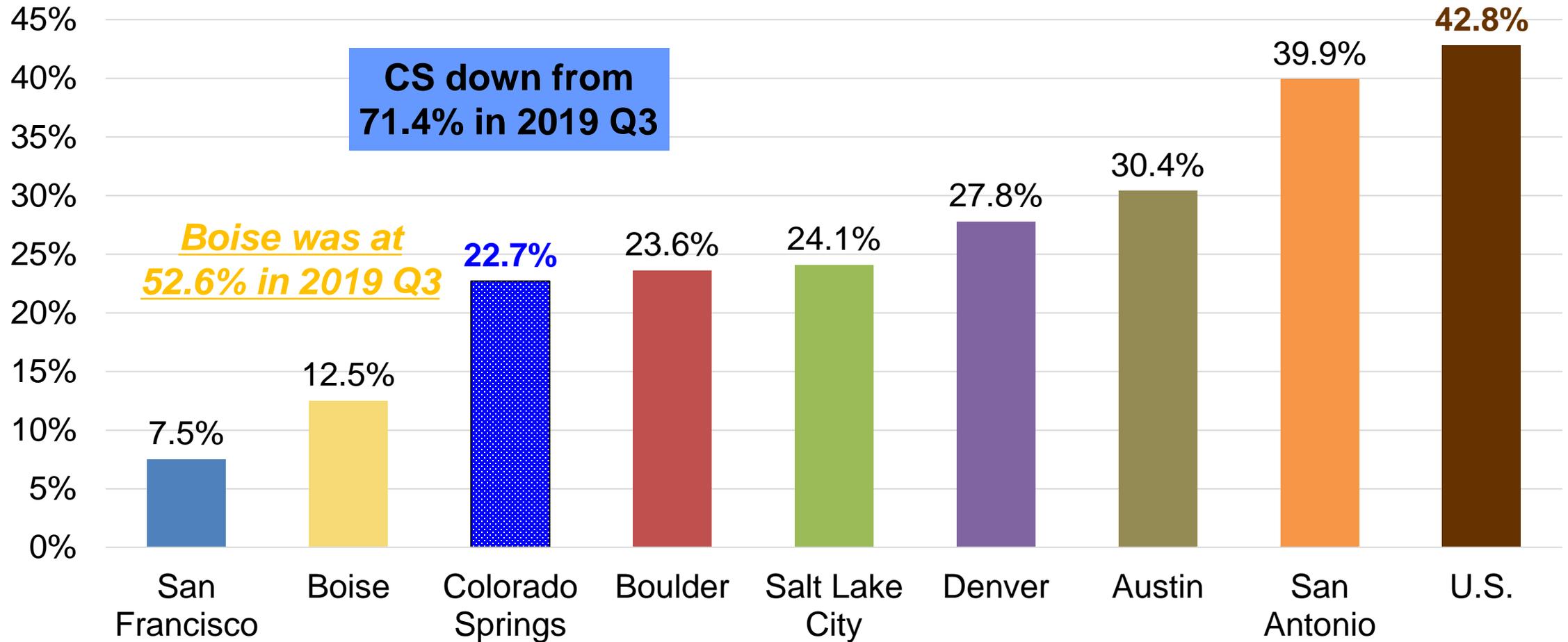
Note: U.S. sales are existing only; Colorado Springs MSA sales are for all single-family homes. Notice price categories are slightly different.
Sources: National Association of REALTORS®; Pikes Peak REALTOR® Services Corp. (RSC)

Home Building

- Home building has been increasing and meeting the estimated construction needed to match population growth (and then some for MF)...
- NAR says U.S. home shortage is ~6.5m dwelling
- Forum estimates shortage of roughly ~12,000 dwellings in EPC.



Housing Opportunity Index – 2022 Q2



Notes: HOI is defined as the share of homes sold in that area that are affordable to a family earning the local median income, based on standard mortgage underwriting criteria. Includes new and existing homes.

Sources: National Association of Home Builders and Wells Fargo

What Might 2022 Look Like?

- Upward pressure on interest rates, slowing in-migration, and stock market volatility will moderate home prices.
- Number of listings should continue to increase, which will bolster supply.
- Instead of ~19% appreciation, probably closer to 10% appreciation – but particularly hard to call given current international/domestic environment.

Apartment Rental Market



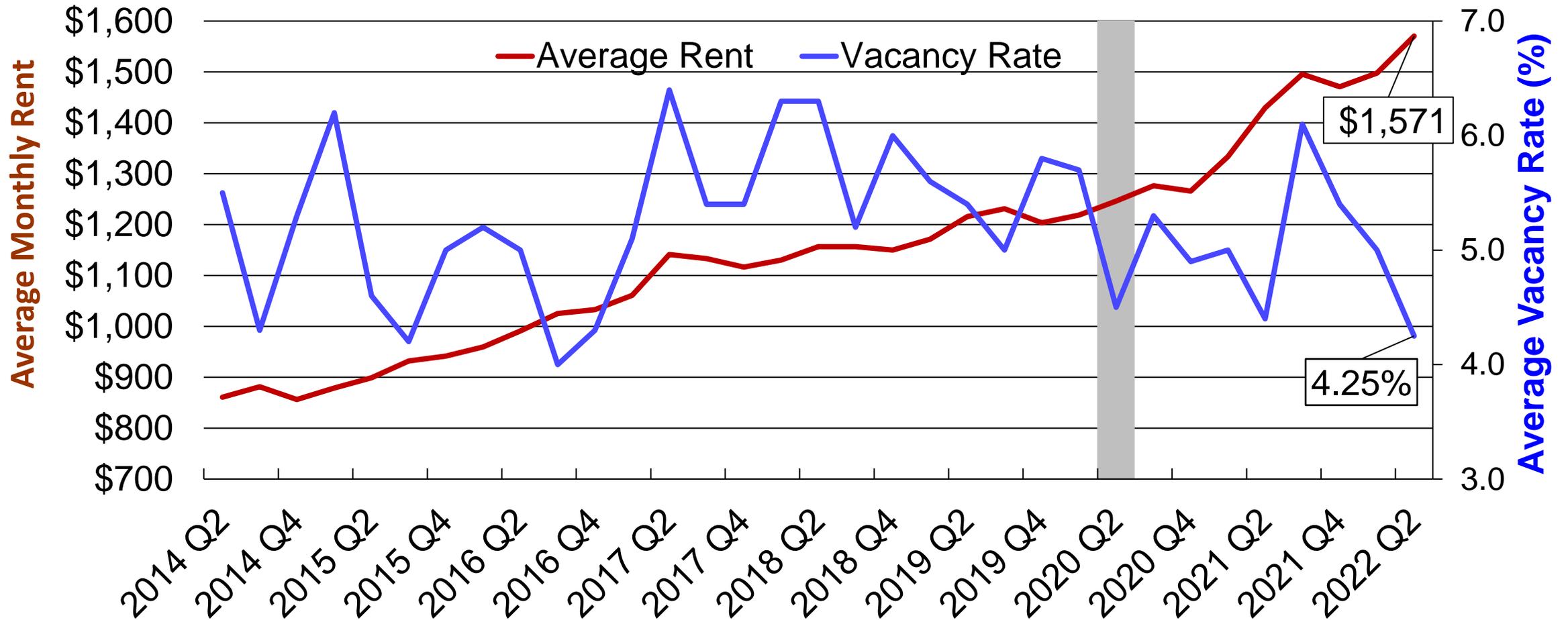
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Multi-Family Rental & Vacancy Rates in Colorado Spring MSA



Source: Colorado Springs Metropolitan Area Apartment Vacancy and Rent Survey provided by Laura Nelson (AASC).

Economic vacancy rate was 10.9% in 2022 Q2. This is physical vacancy plus concessions & discounts as a % of gross potential rent.

HUD Report, Region 8

Metropolitan areas throughout the Rocky Mountain region had strong rent increases during the past year.

	Market Condition	Vacancy Rate			Average Monthly Rent		
		1Q 2021 (%)	1Q 2022 (%)	Percentage Point Change	1Q 2021 (\$)	1Q 2022 (\$)	Percent Change
Billings	Tight	2.3	2.4	0.12	1,068	1,168	9
Casper	Balanced	6.5	6.2	-0.27	903	979	8
Colorado Springs	Slightly Tight	5.1	5.5	0.41	1,260	1,408	12
Denver	Tight	5.7	4.9	-0.75	1,552	1,756	13
Fargo	Slightly Tight	4.6	3.7	-0.95	854	883	3
Greeley	Balanced	5.1	6.8	1.71	1,253	1,397	12
Ogden	Slightly Tight	2.5	4.8	2.32	1,211	1,375	14
Rapid City	Tight	1.2	1.4	0.18	1,007	1,113	10
Salt Lake City	Tight	4.4	3.4	-0.99	1,296	1,514	17

1Q = first quarter.

Sources: Market condition—Economic and Market Analysis Division; vacancy rate and average monthly rent—CoStar Group

2019 percentage of renter occupied housing units:

El Paso County: 35.9%

Colorado: 34.1%

United States: 35.9%

Source: U.S. Census Bureau, American Community Survey 1-year estimates

El Paso County Apartment Rental Data in 2022

- The Fair Market Rent (FMR) for a two-bedroom apartment was \$1,302.
- At a 40-hour work week, 52 weeks per year, this level of income translates into a wage of \$25.04 per hour (or \$52,080/yr.)
- But the average renter wage: \$19.29/hour.
- So, we are squeezing out low-earning workers from the local rental (and labor) market.

Source: National Low-Income Housing Coalition. "Fair market rent is what HUD considers "fair" or typically 40th percentile rents including utilities. FMR is used to help calculation housing assistance programs and amounts for quality housing.

Denver and Colorado Springs, 2022 Q2

	Denver	Colorado Springs
Average Monthly Rent	\$1,860*	\$1,571
Vacancy Rate	4.7%	4.25%

**U.S. average of \$1,724 per month (Moody's Analytics REIS report)*

Absorption is the net change in the # of apartment units rented in the current time period (quarter/year) compared to the same time period last year.

Sources: CS and Denver Metro Area Apartment Vacancy & Rent Surveys provided by Laura Nelson (AASC)

Brief Comments on Commercial Real Estate



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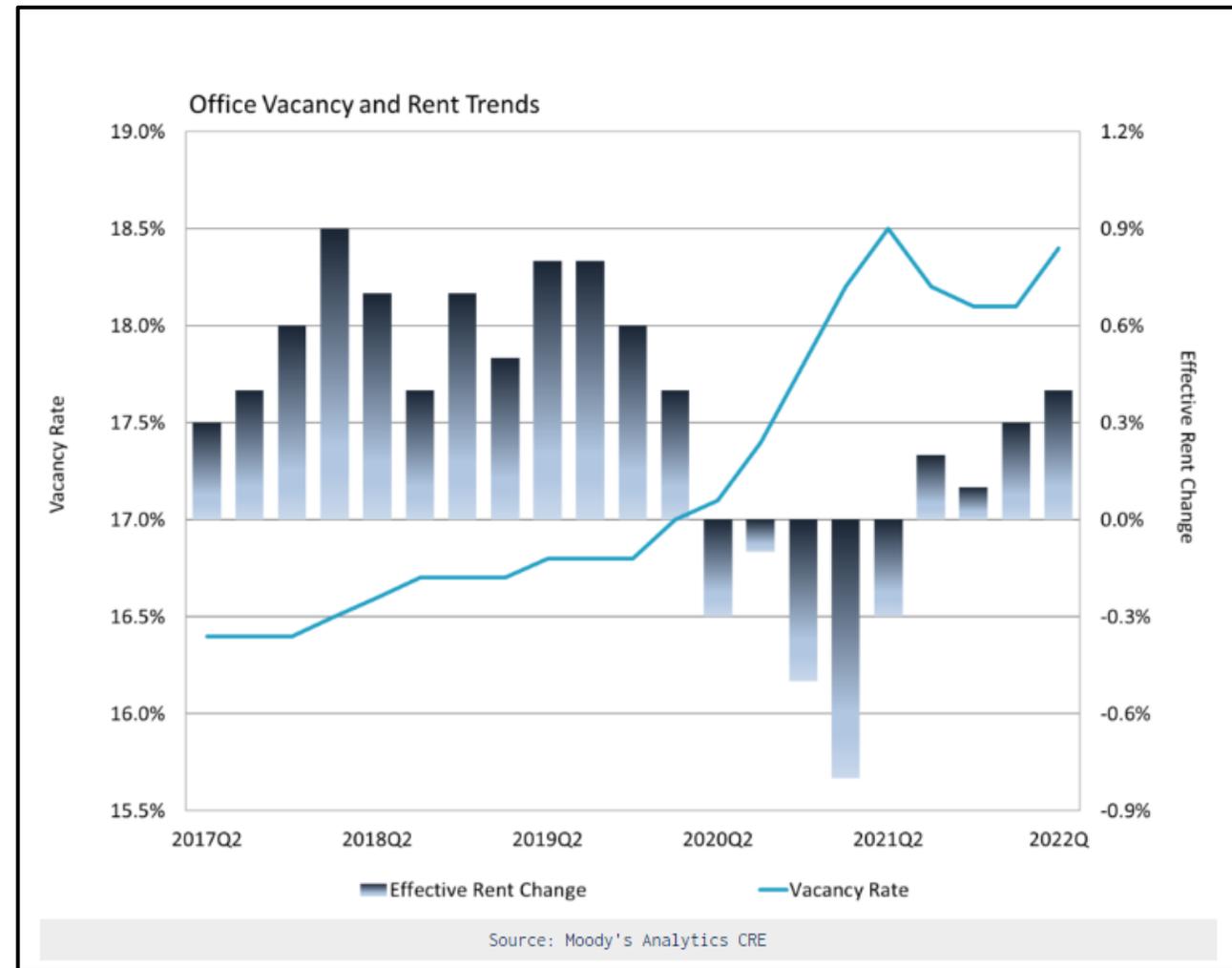
U.S. Commercial Real Estate Construction

- **Record low construction in 2021** for all three major property types (retail, MF, & office). Low supply has likely helped keep the market **stable**.
 - Retail construction completions down 80% over the year.
 - MF completions down 30%.
 - Office completions down 40%.
 - Industrial the star of the past two years

Source: Moody's Analytics, 2021 Q4 CRE report

Office – 2022 Q2

- U.S. vacancy at 18.4% (2021 = 18.0%)
- Not as true locally due to existing shortage of product (9.4% VR*)
- Physical occupancy in U.S. at 40%.
- Negative absorption (-8.4%).
- Survey (n=25,000) in spring showed 58% of American workers have at least one remote day/week; 35% fully remote. Third most common reason for quitting is no WFH options. *WFH here to stay.*



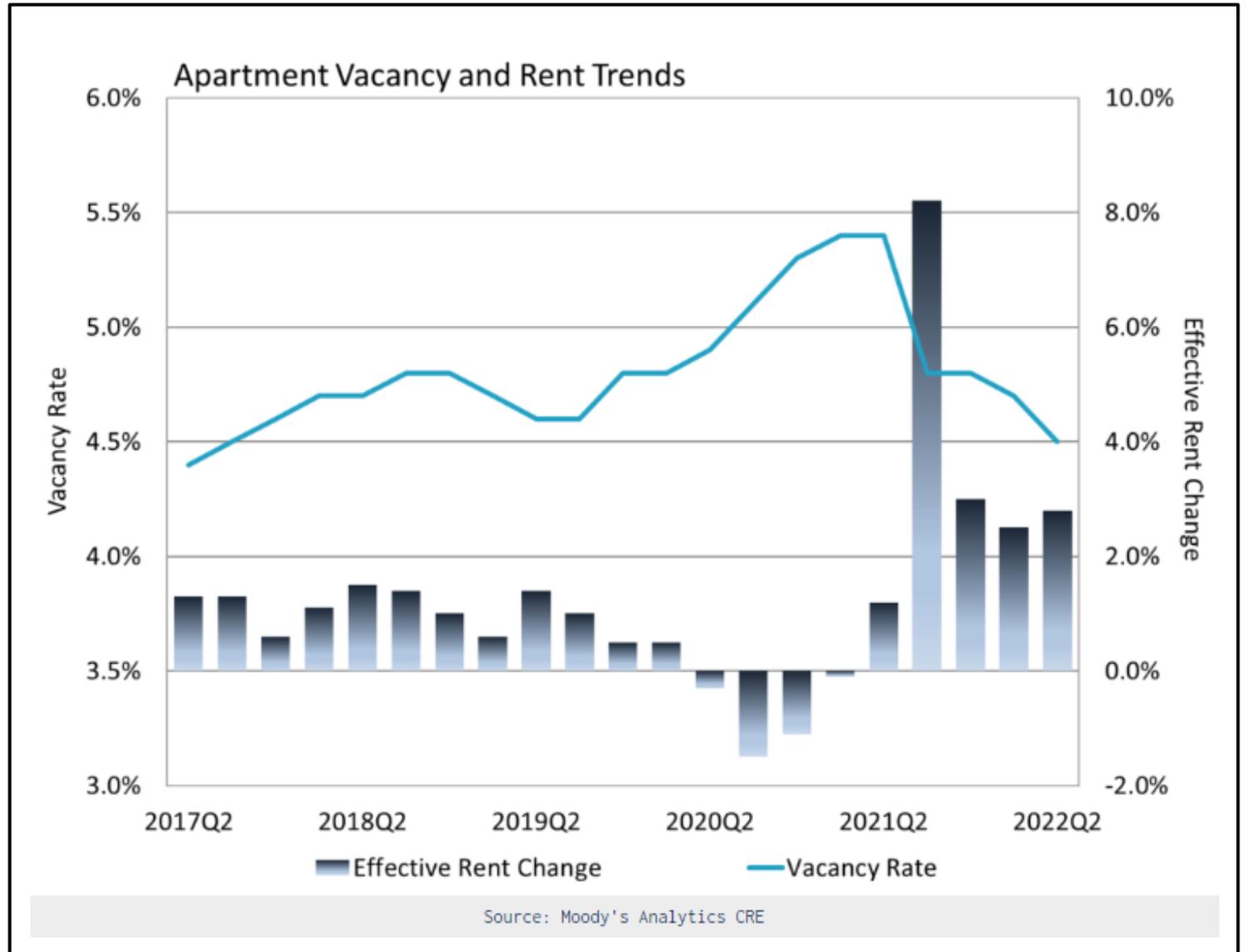
Source: Moody's Analytics. McKinsey (WFH). Also stated if company offers WFH, 87% of Americans would take it regardless of demographics, occupation or geography. Medical office space VR = 8.9%

Apartments

- MF sector ended 2021 with highest YoY asking/effective rent growth on record (since 1980).
- Asking & effective rent growth of ~17% over past 12 months.
- National vacancy rate at **4.5%** in 2022 Q2 – high demand* & not enough construction.
- Local VR bit lower (**4.25%**)
- High absorption

Source: Moody's Analytics

*Gen Z and 1st time buyers who are priced out now of ownership



Retail & Industrial

Retail (2022 Q2)

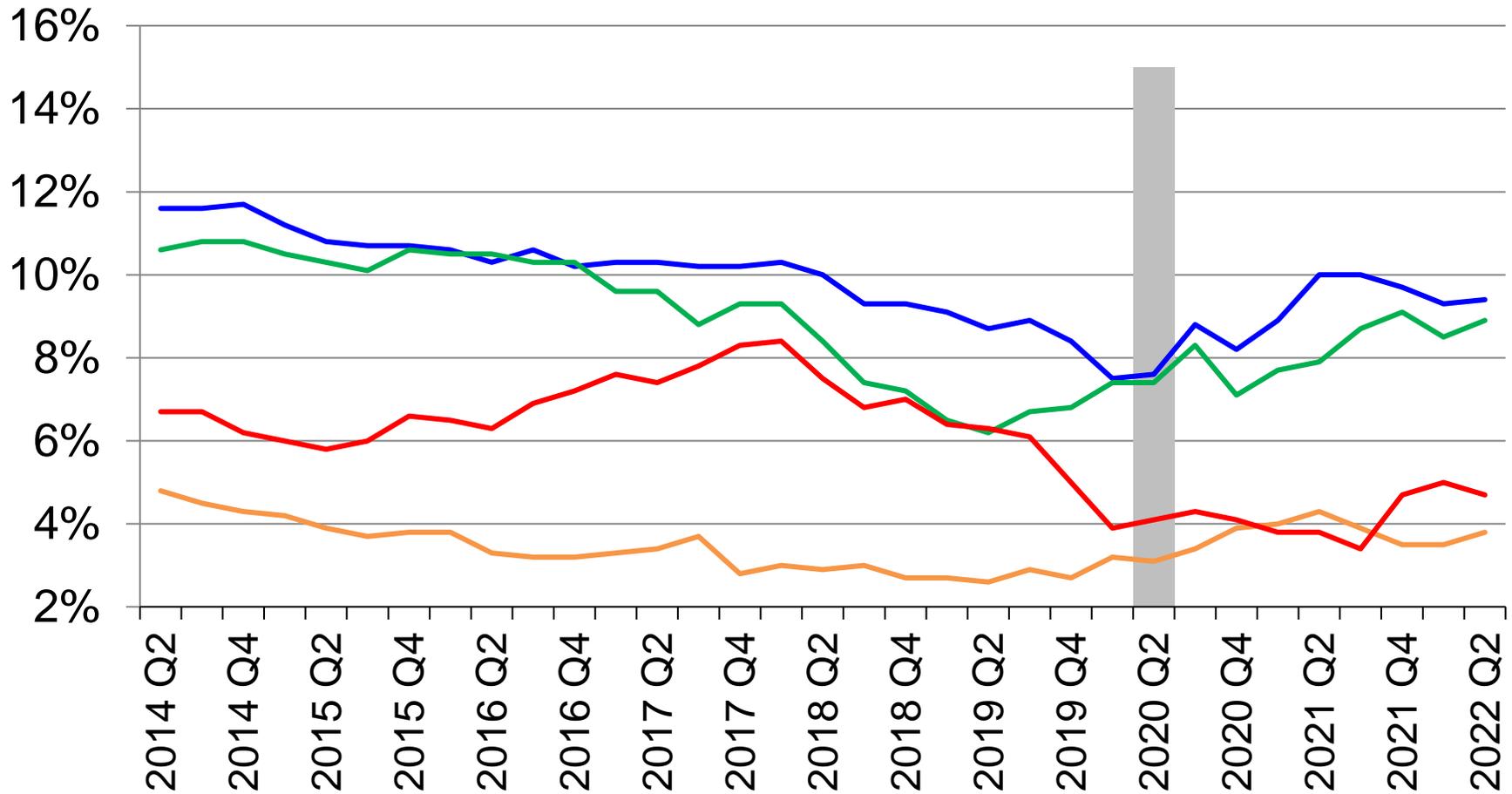
- Retail subsector has been adjusting for many years; currently flat VR & ER
- E-commerce retail almost 15% of total retail now
- Little to no construction – e-commerce and “m-commerce”
- 2022 Q2 VR at 10.3% for smaller retail & 11.0% for malls; Moody’s expects elevated vacancies for next 5 years. Local VR at 3.8%!

Industrial (2022 Q2)

- Vacancy rate of 5.0%; ER up 1.9% in Q2; Local VR similar at 4.7%
- Construction still not keeping up with demand for new space
- Asking rents up 11.8% YoY

Source: Moody’s Analytics and CBRE; VR=vacancy rates and ER=effective rents

Colorado Springs Commercial Vacancy Rates and Rents



2022 Q2 Rents

- Office
\$24.60 per sq. ft.
- Medical Office
\$27.01 per sq. ft.
- Retail
\$16.28 per sq. ft.
- Industrial
\$10.28 per sq. ft.

Sources: CoStar Group™; Olive Real Estate Group, Inc. Local office vacancy rates up mostly due to WFH for larger employers like Comcast and Verizon (call centers).

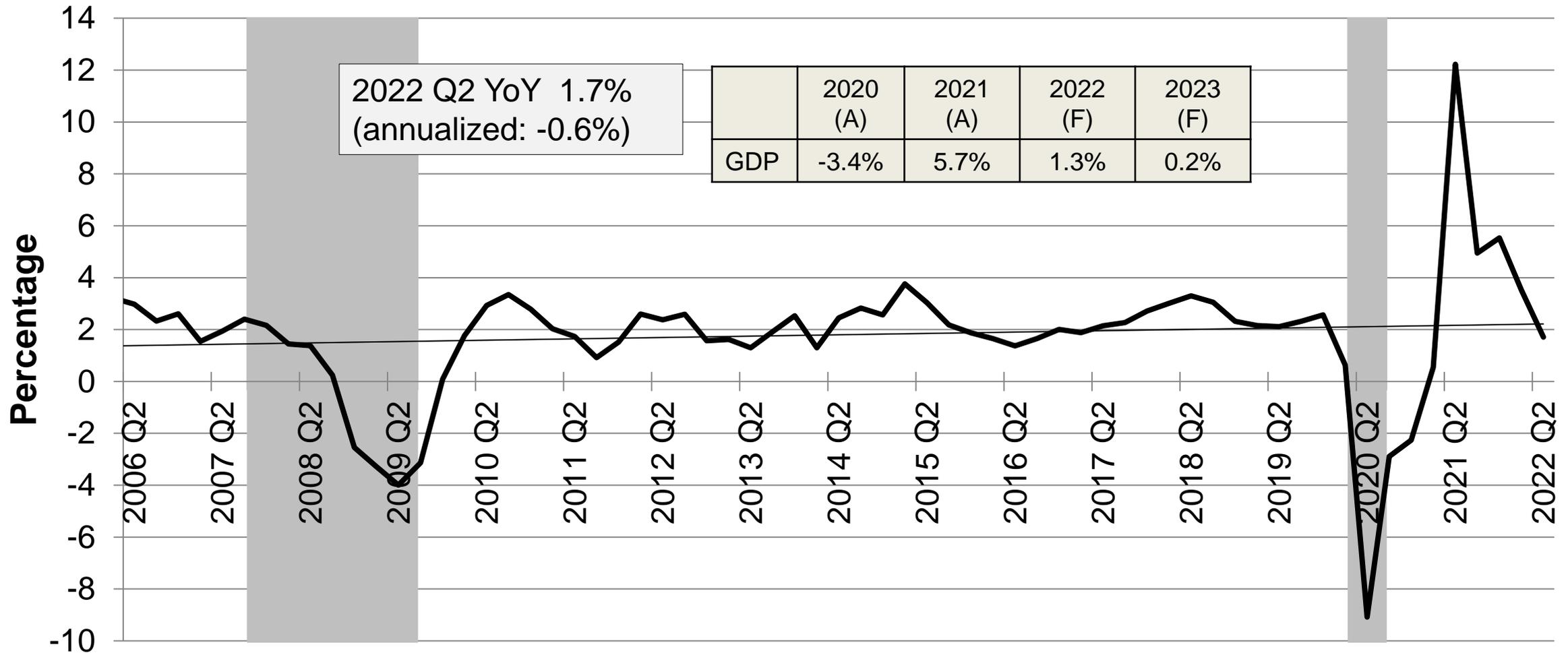
Lastly, Growth Forecasts

(Better Known as “**Guessenomics**”)*

**Young perspective!*



Real Growth in GDP vs. Year Ago (SA)



GDP forecast UCCS Economic Forum with input from the **Conference Board (August 2022 report)**. Graph shows **seasonally adjusted data**. WF says 1.7% for 2022 and -0.4% for 2023. Source: U.S. Bureau of Economic Analysis.

Conference Board GDP Forecasts

- Base Case 2022 GDP increase 1.3% YoY* and 0.2% growth in 2023.
- Forecasting **stagflation** (inflation with low/no GDP growth)
- Due to high inflation and increased interest rates.
- Continued supply chain issues due to (mostly China) COVID shutdowns and labor issues
- Ukrainian crisis causing global commodity prices to be elevated
- Certain recession in Europe (+20% inflation)
- Inflation Reduction Act* in U.S. will help, but not until late 2023 or 2024

Incorporates unemployment gap, Fed fund rate vs. natural rate, yield curve inversion, LEI, hrs. worked, & retail sales

Source: The Conference Board. August 10, 2022. * \$400b

Conference Board GDP (Other) Forecasts

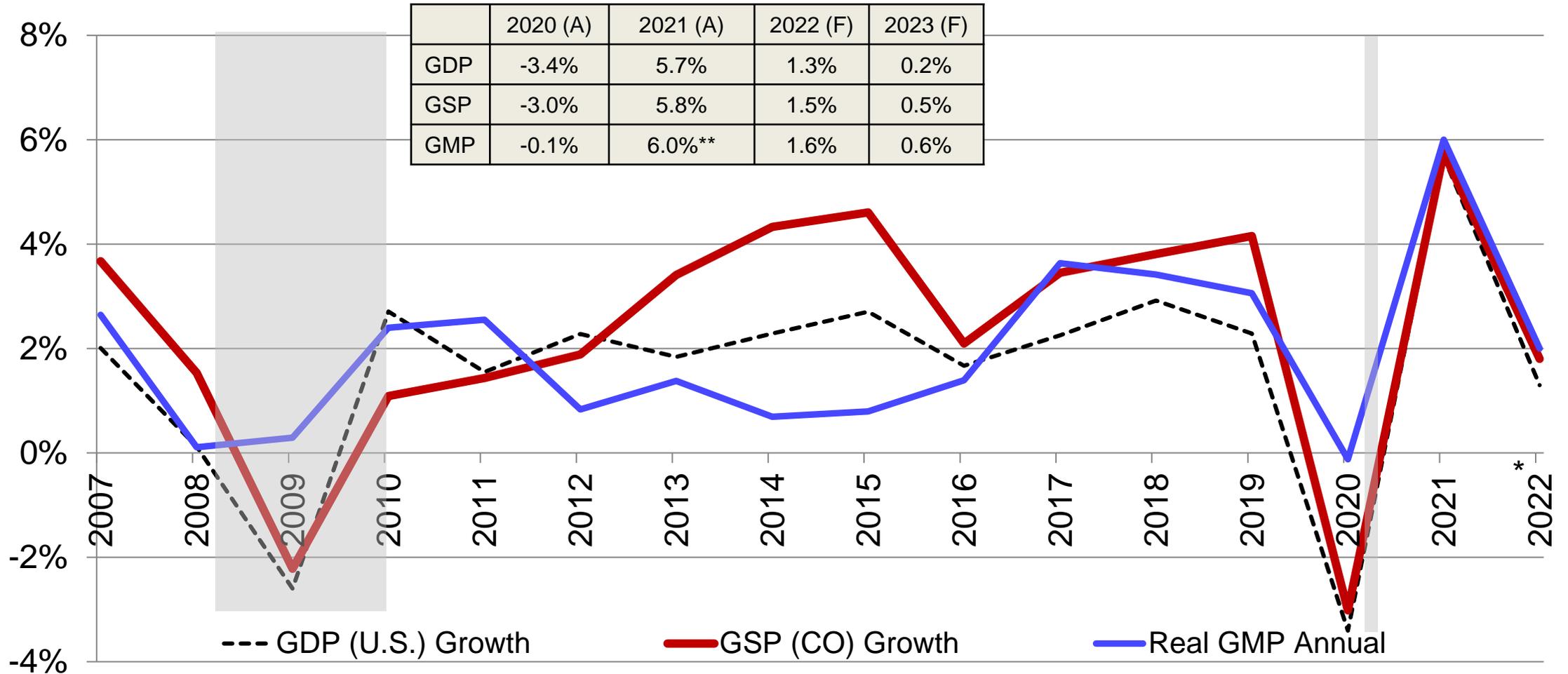
- Inflation at 8.0% for 2022 and 3.5% for 2023.*
- Real consumer spending up only 2.1% increase in 2022 (vs. 7.9% in 2021). Flat real consumer spending in 2023 (0.0%)
- Residential investment *down* 5.5% in 2022 (vs. up 9.2% in 2021). Down 4.7% in 2022.
- Unemployment rate holding steady around 3.6% in 2022 and 3.7% in 2023 – *Tatiana agrees with this!*
- Volatility in imports and exports (strong dollar!)

*This source is Wells Fargo. OECD forecasts 7.0% inflation for 2022 for U.S.

Incorporates unemployment gap, Fed fund rate vs. natural rate, yield curve inversion, LEI, hrs. worked, & retail sales

Source: The Conference Board. August 10, 2022 report;

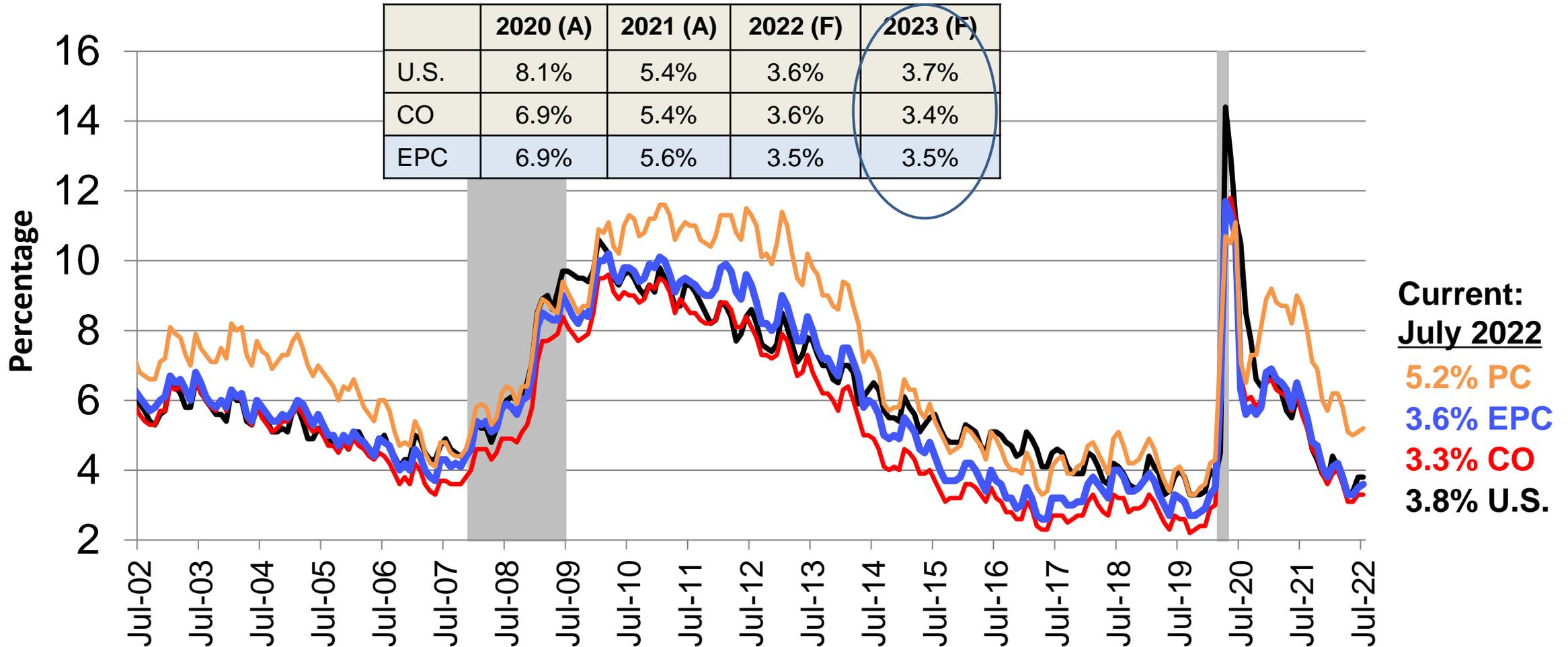
Real Growth in Annual GDP, GSP & GMP vs. Year Ago



*GDP forecast by the UCCS Economic Forum with input from the Conference Board (August 2022 report) and Wells Fargo. GSP & GMP forecasts by the UCCS Economic Forum with input from CO Office of State Planning & Budgeting. **GMP for 2021 is still a forecast.

Source: U.S. Bureau of Economic Analysis

Monthly Unemployment Rate – NSA



Unemployment rate is from the CPS and includes self employed. Last time EPC rate was higher than U.S. was April 2014. Forecasts for the U.S. and CO by the Colorado Office of State Planning and Budgeting, June 2022. EPC forecasts by UCCS Econ Forum.
 Sources: U.S. Bureau of Labor Statistics; Colorado Department of Labor and Employment

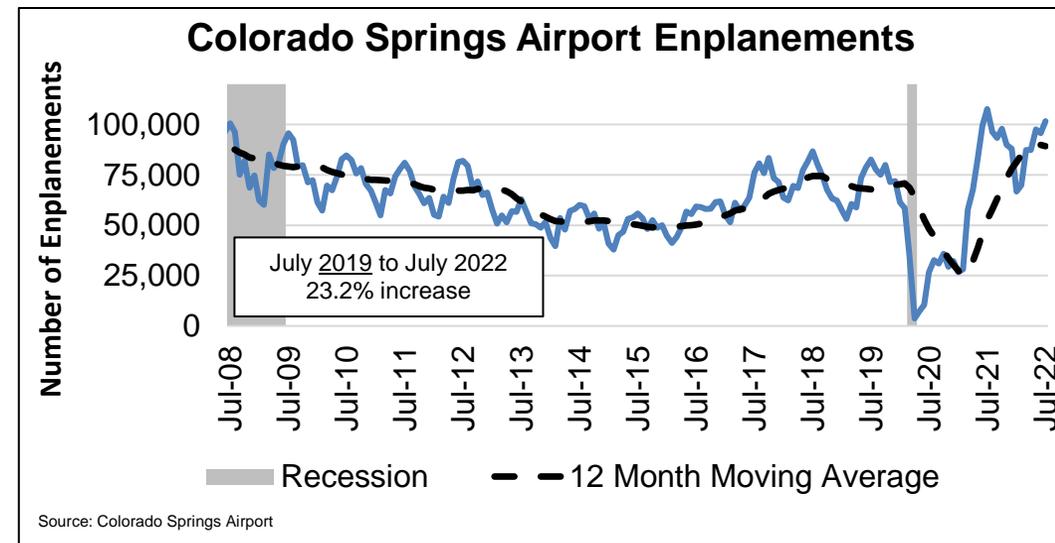
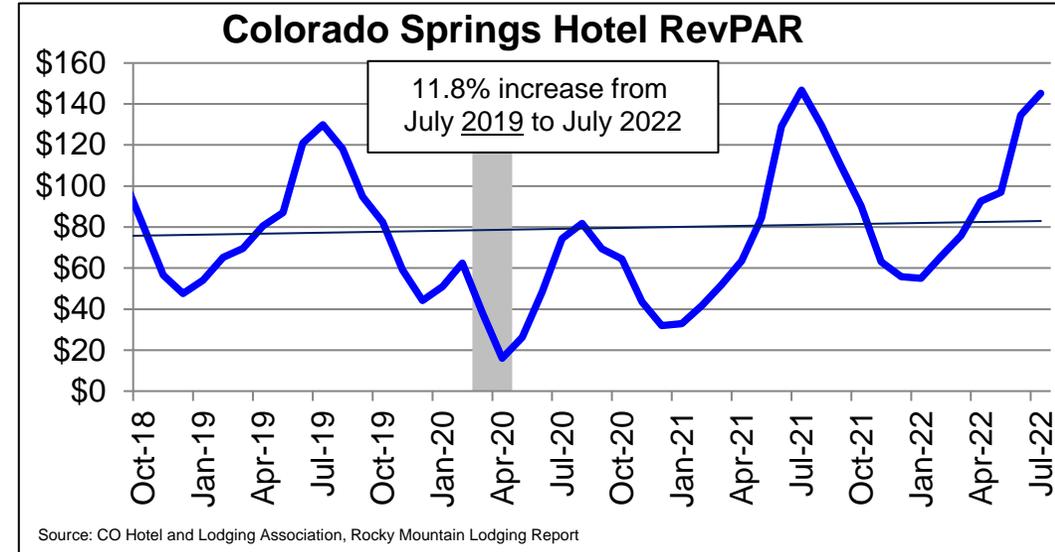
Overall Bullish for Colorado and Colorado Springs

- Population growth continues (primarily educated and young)
- Become a destination for knowledge workers (some of that due to WFH)
 - Benefitting from migration away from MW, portions of NE and South
- Diversity of sectors with a lot of innovation and business startups
- Local tourism sector very robust with continued growth in professional/technical (including DoD contracting), finance/insurance and health care.
- City of Colorado Springs is bucking trends with high LF participation and continued growth downtown (indicative of overall growth)

A Couple More Growth Indicators

- Tourism strong
- Enplanements strong
- Downtown MF construction strong with high absorption

Hotel Occupancy Rate July 2022		
Colorado Springs	Denver	Colorado
82.4%	78.4%	76.9%



*Typically see about 1 to 1.2 million visitors monthly. Visitors are people who are DT for 15 minutes or more to shop, dine, etc. Filters out people who are DT 8+ hours (workforce & residents).

Source: Susan Edmondson, CEO Downtown Partnership.

Start & End with Gratitude!

Gratitude!





Tatiana and Ian September 1988



August 2022

