
Economic and Housing Conditions in Arizona and Across the Nation

August 2022

ROUNDS CONSULTING GROUP



Items to cover...

- How did we get here; what's the story?
- Are we in a recession?
- What does the future look like for AZ?
- How will housing issues shape the state's future?

The Story

What is the story?

- Covid hit the economy and the US government overreacted.
- The recession was short lived and primarily impacted lower income people, but the stimulus spending was more broad.
- The Federal Reserve made money very cheap and easy to get...*for too long.*
- Covid issues impacted the supply chain, both goods and labor.

What is the story?

- Inflation heated up.
- Russia/Ukraine further drove up fuel prices.
- The Fed's delay in raising interest rates is now being countered with aggressive increases in rates and money being pulled out of the economy.

What is the story?

- A “Volcker” recession by 2023.
- The next recession will not see the same scale of job losses, but it will impact white collar workers more than last time.
- Reset button pushed and the next cycle begins.

Why does this matter?

- The story explains why incomes/spending have been so high and resulted in very large government revenue surpluses.
- It also explains why a recession is right around the corner and that a portion of the current revenue surplus is temporary.
- For context, to get through a typical recession, the state of AZ will need an extra \$2.5B in reserves if services are to be maintained, borrowing is to be limited, and tax increases are to be avoided.

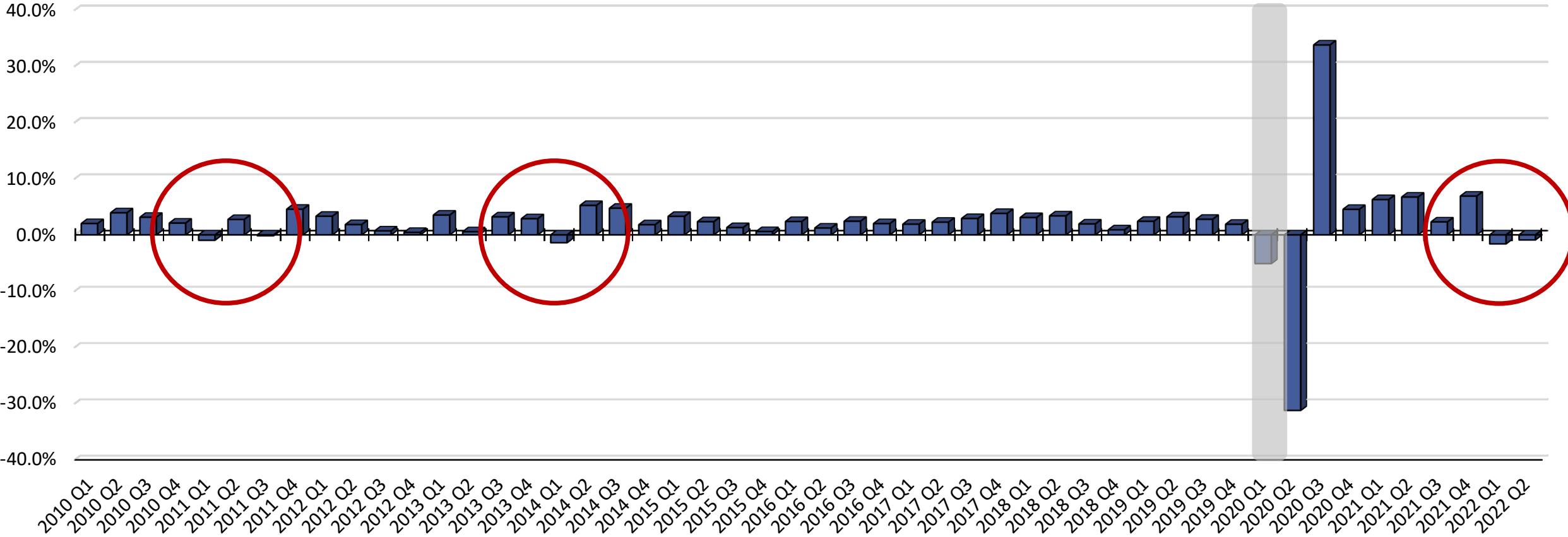
U.S. Economic Conditions

U.S. Real GDP

Annualized Percent Change; Quarterly, 2010 - 2022*

Source: Bureau of Economic Analysis

Recession Period

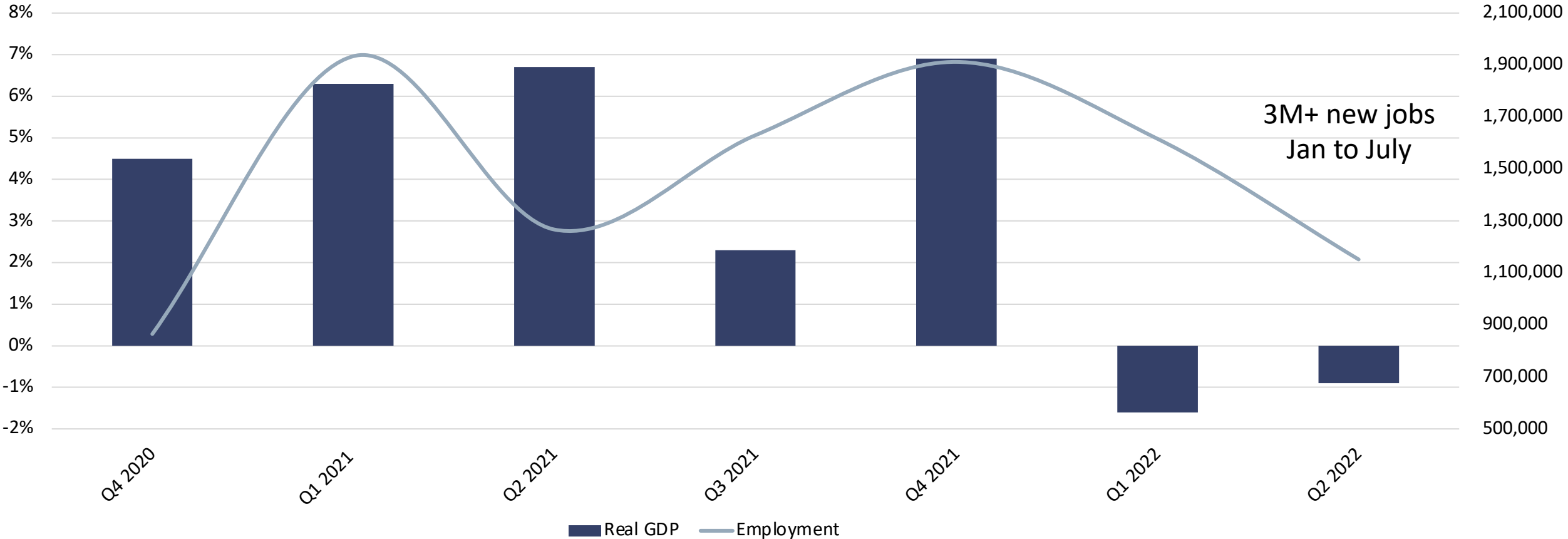


*Data through Q2 2022

U.S. Real GDP vs. Employment Change

Annualized and Quarter-over-Quarter Percent Change; Quarterly, Q4 2020 – Q2 2022

Source: Bureau of Economic Analysis; Bureau of Labor Statistics



3M+ new jobs
Jan to July

Consumer Price Index vs. Producer Price Index

All Items CPI, All Commodity PPI, Non-Seasonally Adjusted; Year-over-Year Percent Growth, 2010 - 2022*

Source: Bureau of Labor Statistics

Recession Period



*Through July (CPI)/June (PPI) 2022

Federal Funds Effective Rate

Average Monthly, Not-Seasonally Adjusted, 1985 - 2022*

Source: Board of Governors of the Federal Reserve System

Recession Period



*Through July 2022

What does this mean?

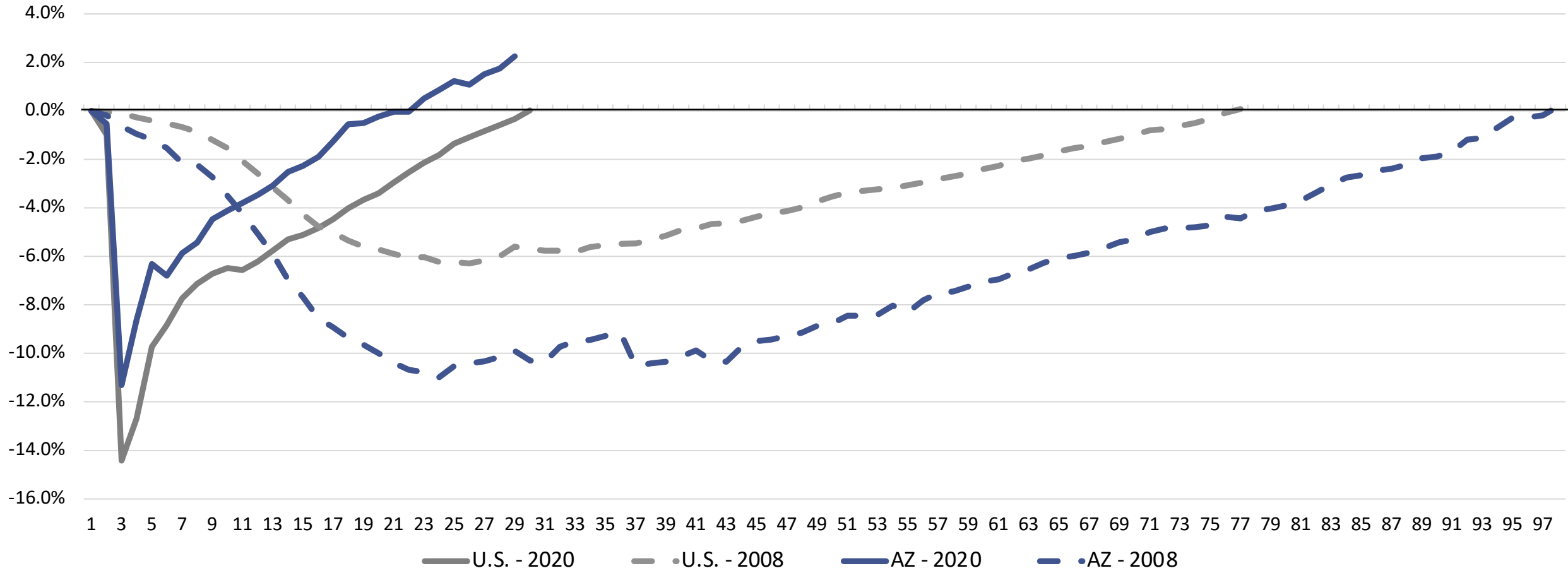
- Inflation growth is dampening, but the Fed will need to hike interest rates further.
- We are not in a recession, but we will be in one by 2023.

AZ Economic Conditions

U.S. vs Arizona Job Recovery

Seasonally Adjusted; Monthly Employment Percent Change Since Peak Levels (Jan 08'/Feb 20')

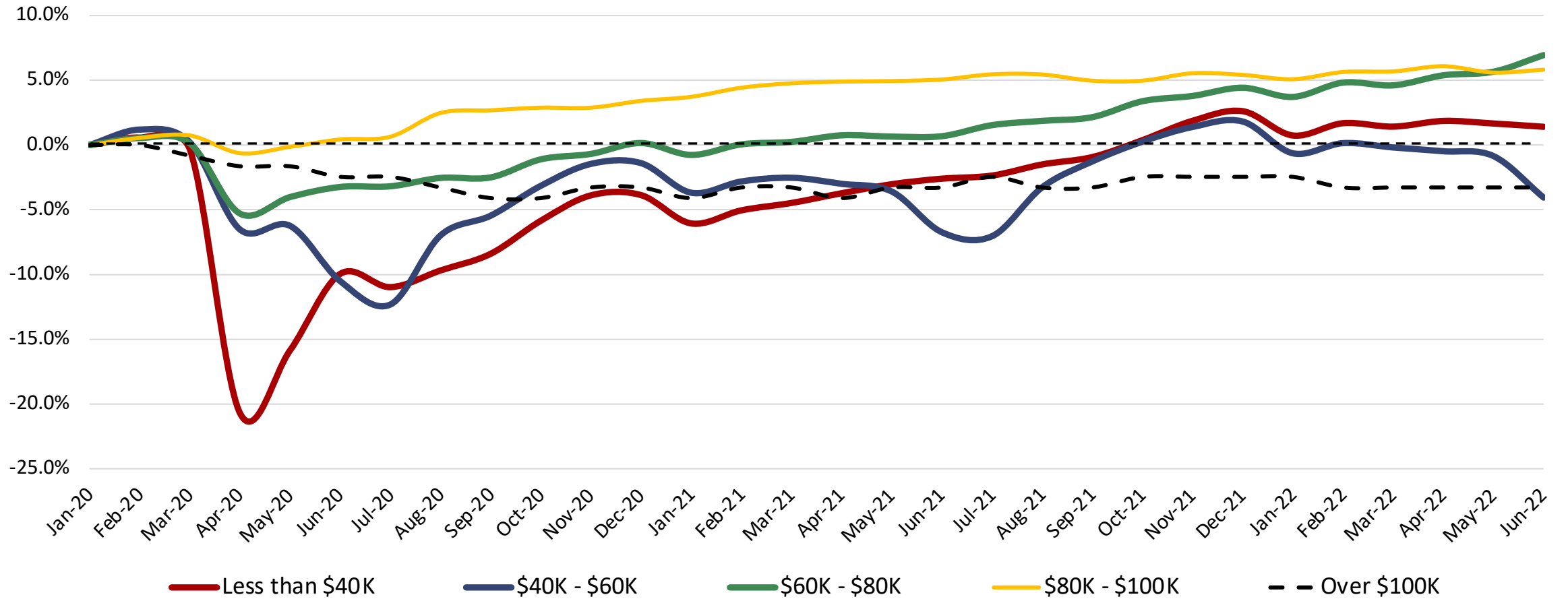
Source: Bureau of Labor Statistics



Arizona Employment – Percent Change by Wage Group

Non-Seasonally Adjusted; Change from January 2020

Source: Bureau of Labor Statistics



U.S. Job Growth 2020

State Ranking

Source: Bureau of Labor Statistics

Rank	%	State	Rank	%	State
1	-0.66%	Idaho	11	-4.31%	Mississippi
2	-1.63%	Utah	12	-4.34%	North Carolina
3	-3.00%	Arkansas	13	-4.59%	Kansas
4	-3.10%	Montana	14	-4.62%	Georgia
5	-3.14%	Arizona	15	-4.82%	Missouri
6	-3.43%	South Dakota	16	-4.91%	Oklahoma
7	-3.66%	Nebraska	17	-4.99%	Virginia
8	-3.98%	Tennessee	18	-5.04%	South Carolina
9	-4.27%	Alabama	19	-5.10%	Iowa
10	-4.28%	Texas	20	-5.22%	Colorado

U.S. Job Growth 2022

State Ranking; Year-To-Date 2022*

Source: Bureau of Labor Statistics

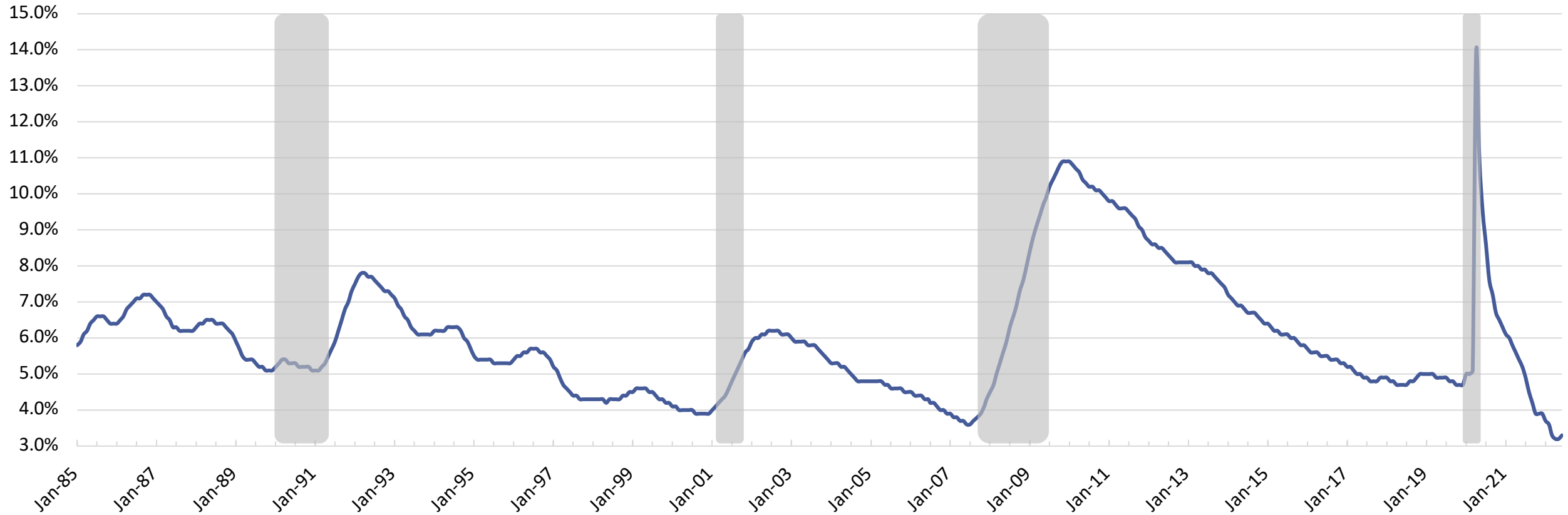
Rank	%	State	Rank	%	State
1	8.85%	Nevada	11	5.05%	Massachusetts
2	6.13%	California	12	4.97%	Colorado
3	6.12%	Texas	13	4.93%	Oregon
4	5.77%	New Mexico	14	4.32%	Tennessee
5	5.73%	Florida	15	4.31%	Illinois
6	5.62%	Hawaii	16	4.27%	Michigan
7	5.39%	Georgia	17	3.91%	North Carolina
8	5.28%	New York	18	3.87%	Arizona
9	5.24%	New Jersey	19	3.81%	Utah
10	5.13%	Washington	20	3.74%	Pennsylvania

*Through June 2022

Arizona Unemployment Rate

Seasonally Adjusted; Monthly, 1985 - 2022*
Source: Bureau of Labor Statistics

Recession Period



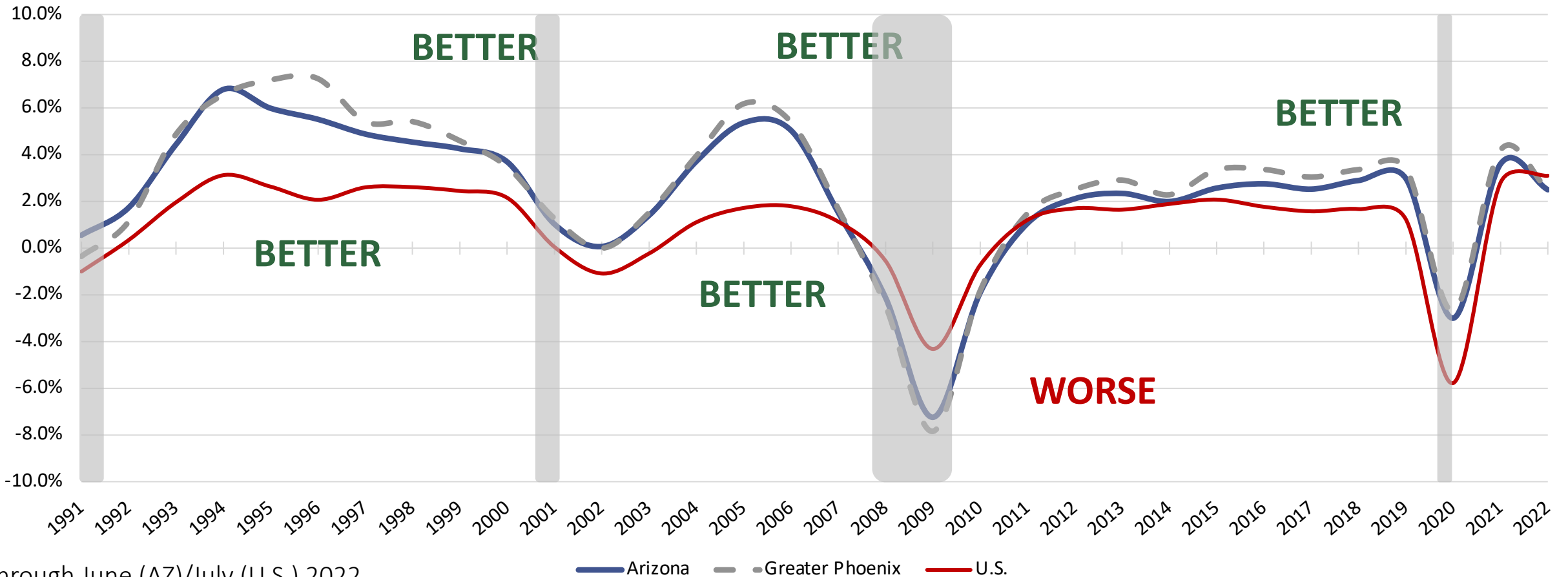
*Through June 2022

Arizona, Greater Phoenix, and U.S. Job Growth

Annual Percent Growth 1985 - 2022*

Source: U.S. Bureau of Labor Statistics; AZ Office of Economic Opportunity

Recession Period



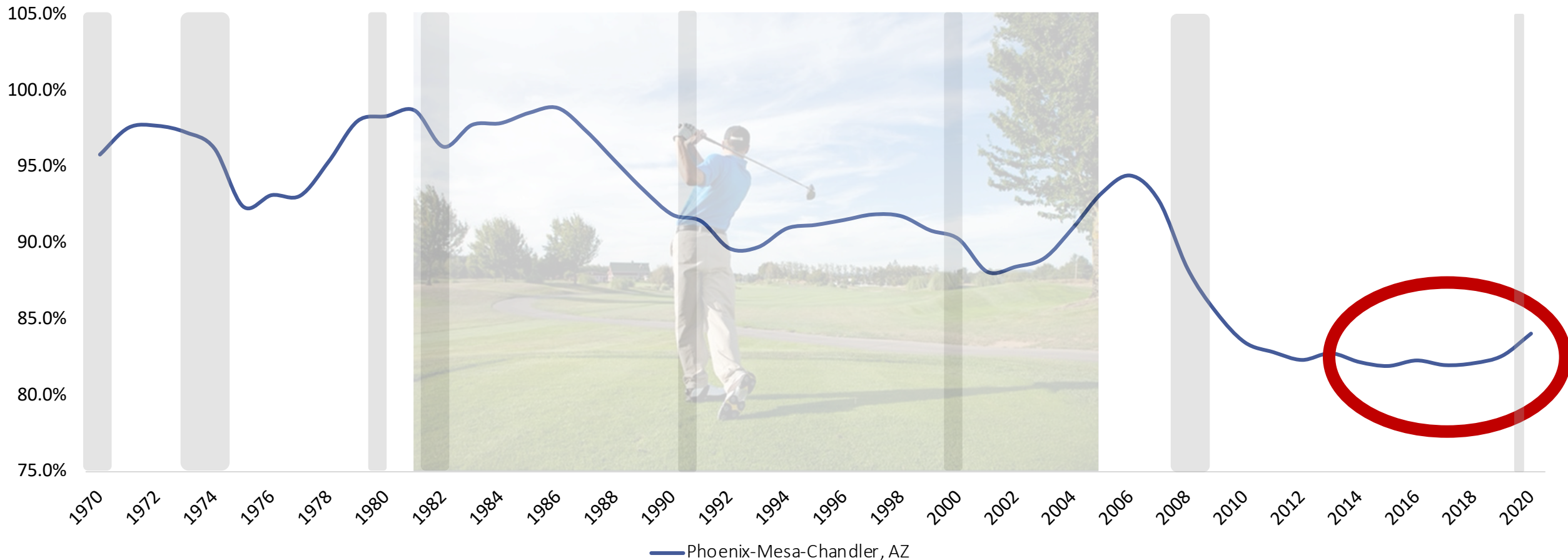
*Through June (AZ)/July (U.S.) 2022

— Arizona — Greater Phoenix — U.S.

Example: Per Capita Personal Income in PHX MSA

Phoenix MSA as a Percent of U.S.; Annual 1970 - 2020
Source: U.S. Bureau of Economic Analysis

Recession Period



What does this mean?

- The employment ranking won't tell the whole story for a while.
- AZ incomes are starting to turn up.
- We won't see as many low-wage job losses during the next recession because of current labor shortages.
- AZ will again do better than the U.S. as-a-whole.

AZ Housing Conditions

Influences on Housing Affordability (Pt. 1)

- Housing Issues related to the Great Recession
 - Construction activity sharply declined post recession and there was a delay to ramp up construction again.
- Investor/Second Home Purchases
 - The share of investor and second home purchases increased significantly (both long- and short-term rentals/vacation homes).
- Heightened Focus on Higher-End Homes and Apartments
 - Developers as well as cities/towns focused on higher-end products for a prolonged period of time.
- Post COVID Federal Government Actions/Low Mortgage Interest Rates
 - The COVID recession disproportionately impacted lower-income individuals.
 - The FED kept interest rates too low for too long, making access to money easy and cheap for higher income individuals.

Influences on Housing Affordability (Pt. 2)

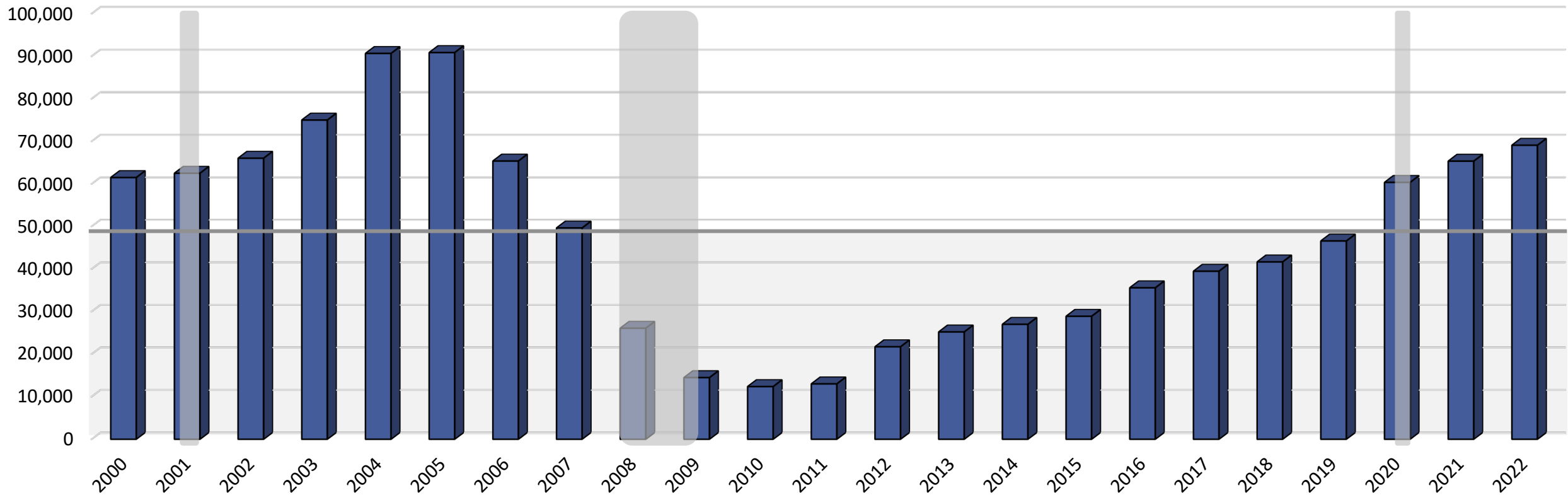
- Supply Chain Issues
 - Labor shortages, inflation, supply chain disruptions, etc.
- Local Government Influences
 - Inconsistent policies related to government entity approvals of projects.
 - City budget constraints.
- Others..

Arizona Building Permits

Annually, 2000-2022*

Source: U.S. Census Bureau

Recession Period



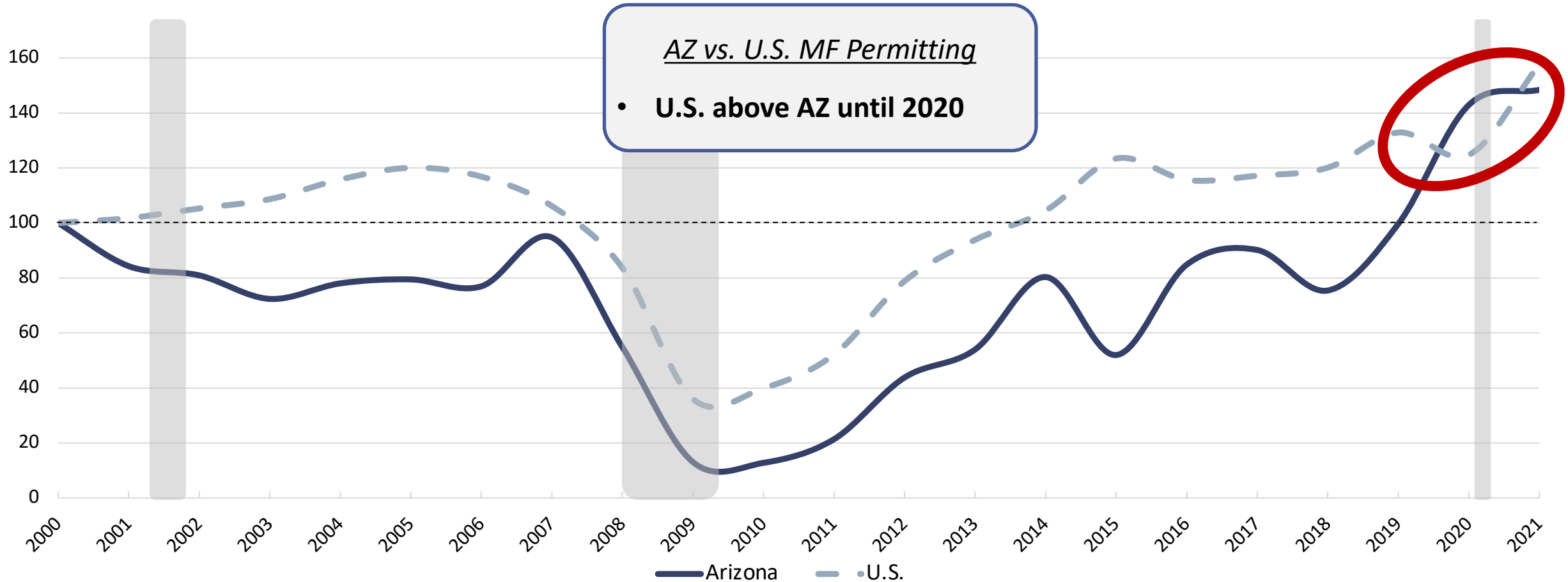
*2022 Annualized Through June Note: Shaded area represents 2000-2021 long-run average.

Arizona vs. U.S. Multi-Family Home Permits

Growth Index 100 = 2000, Annually, 2000 - 2021

Source: U.S. Census Bureau

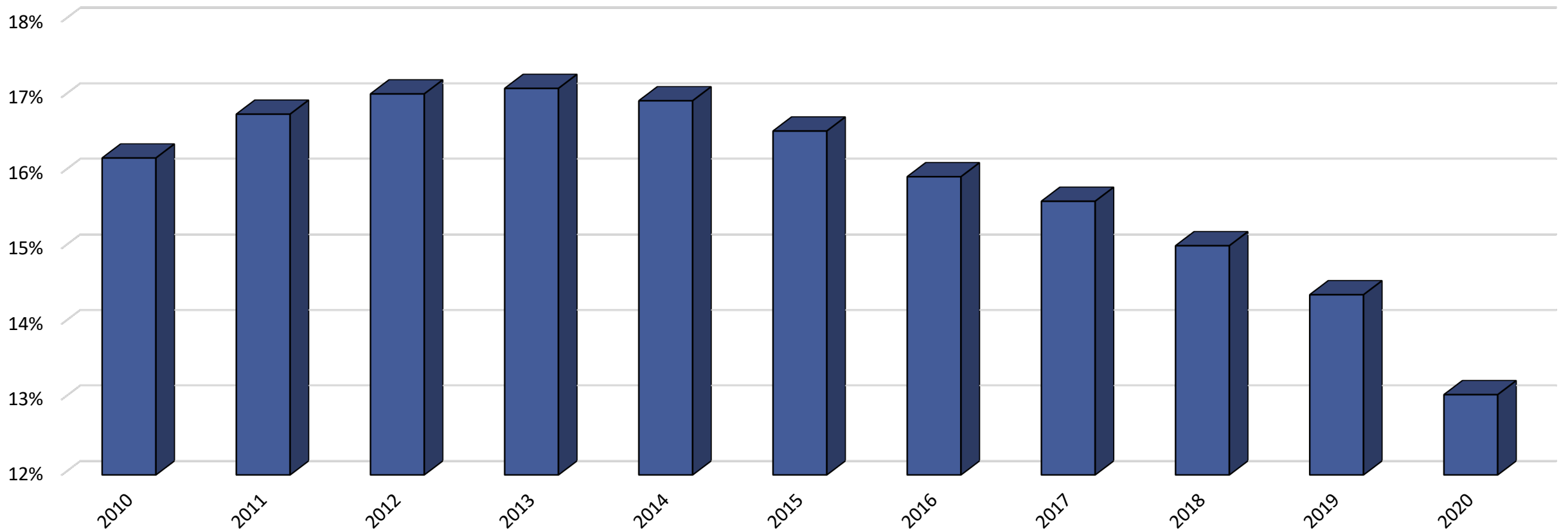
Recession Period



Arizona Housing Vacancy Rates

Annually, 2010-2020

Source: U.S. Census Bureau



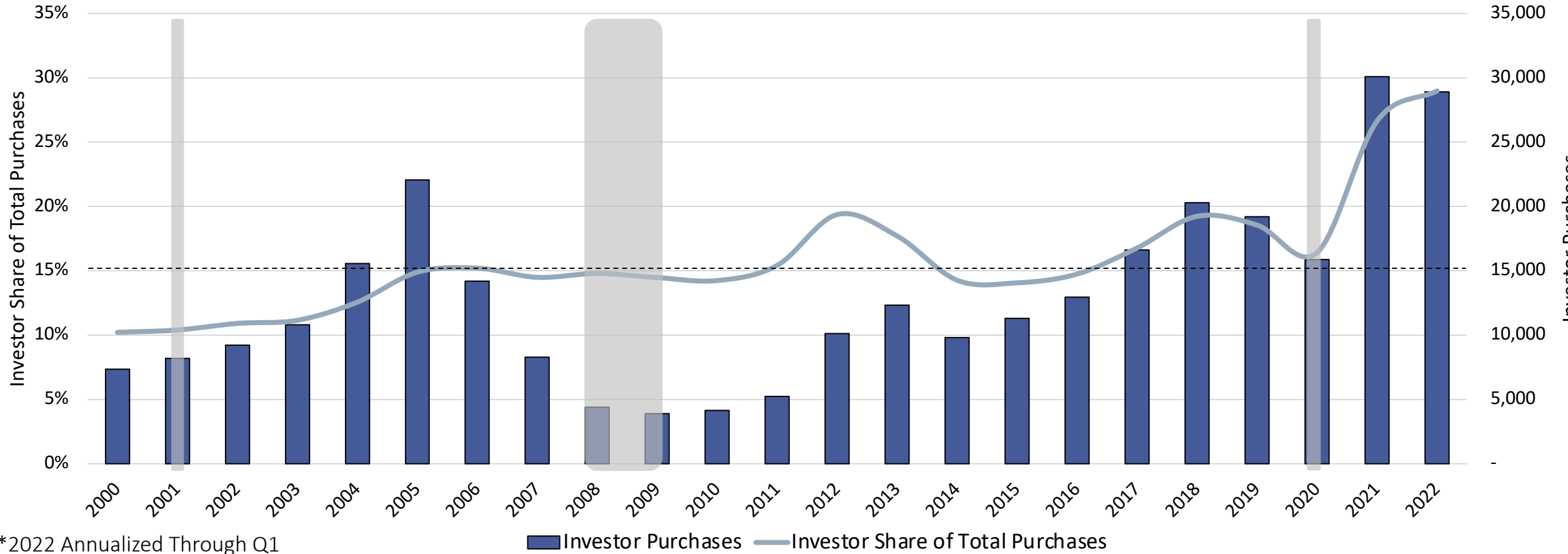
Investor Home Purchase Activity

Phoenix MSA, Annually, 2000-2022*
Source: Redfin

■ Recession Period

Investor Home Purchase Activity

- The long-term average share of homes bought by investors was approx. **15% (2000-2021) vs. the current 30% (2022).**
- From 2000-2021 the number of investor purchased homes over a 15% annual share totaled **28,900.**



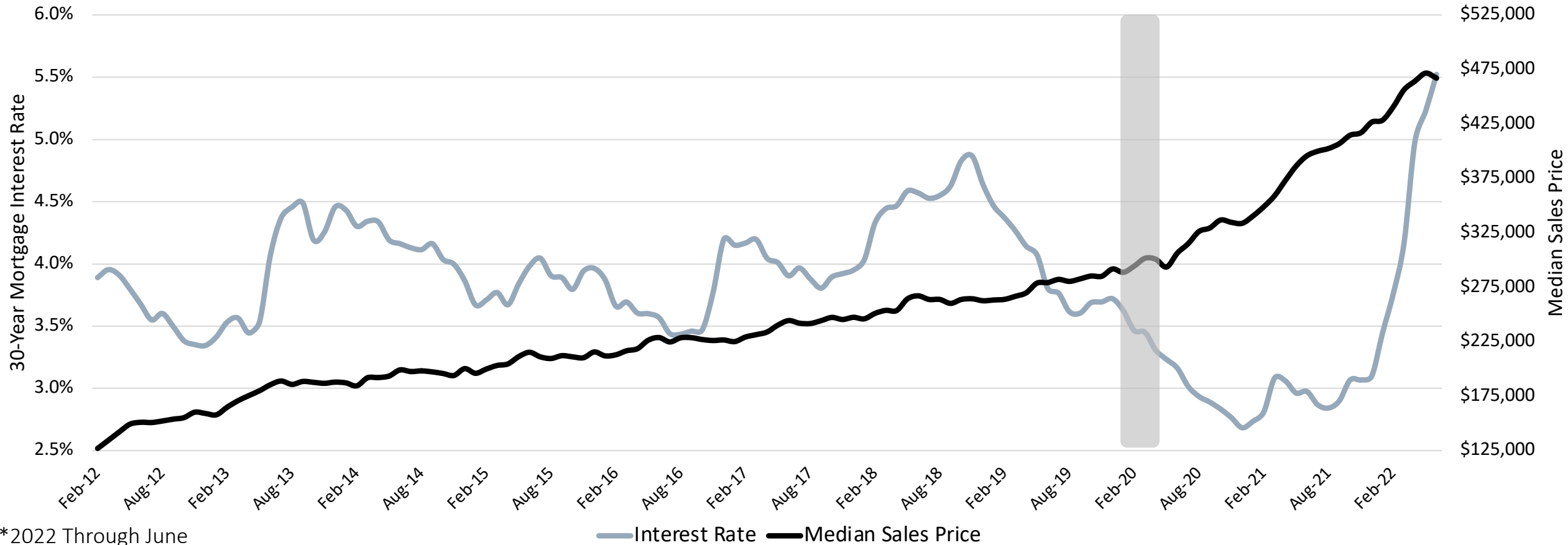
*2022 Annualized Through Q1

Median Sales Price & 30-Year Mortgage Interest Rate

Monthly, February 2012-2022*

Source: Redfin; Freddie Mac

Recession Period



*2022 Through June

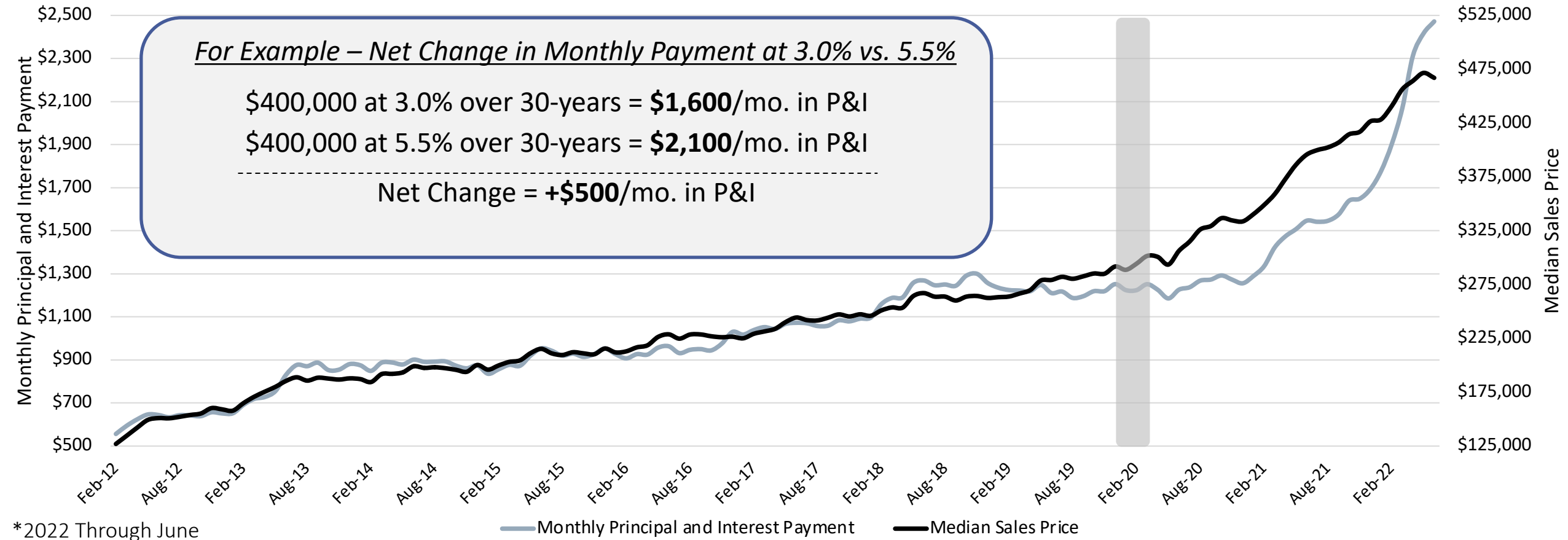
Interest Rate Median Sales Price

Median Sales Price vs. Principal and Interest Payment (P&I)

Principal and Interest on Median Sales Price, Monthly, February 2012-2022*

Source: Redfin; Freddie Mac

Recession Period



*2022 Through June

— Monthly Principal and Interest Payment — Median Sales Price

Increases in Arizona Median Home Values

10-Year Growth Rate – 2012-2022*

Source: Zillow

County	% Change	June 2022
Pinal	231.1%	\$427,500
Maricopa	202.5%	\$492,300
Arizona	187.1%	\$450,600
Greenlee	186.8%	\$134,400
Gila	177.4%	\$401,800
Yavapai	174.3%	\$510,900
Mohave	164.0%	\$379,200
Navajo	162.5%	\$388,100
Graham	160.5%	\$264,900
Coconino	145.5%	\$642,700
La Paz	144.8%	\$279,200
Apache	144.4%	\$263,600
Santa Cruz	140.0%	\$245,500
Cochise	126.5%	\$237,200
Pima	126.4%	\$347,200
Yuma	116.2%	\$268,100

*Through June 2022

Annual Household Expenditures

For the Phoenix MSA

Source: U.S. Bureau of Labor Statistics

Category	2005 % of Annual Expenditures	2010 % of Annual Expenditures	2022 % of Annual Expenditures
Housing	30.0%	33.6%	34.3%
Transportation	21.5%	16.3%	23.0%
Food	13.1%	13.4%	10.5%
Healthcare	5.9%	6.1%	7.7%
Entertainment	4.8%	6.3%	3.8%
Apparel	3.8%	4.9%	2.4%
Education	1.5%	0.6%	1.4%
Other	19.4%	18.8%	16.9%

Home Purchasing Power of a Household Earning \$100,000 by Interest Rate

30-Year Mortgage, Payment Includes P&I, Taxes, and Insurance
Source: Rounds Consulting Group



The Big Picture...

What Matters in Growing the Economy?

- **Housing Affordability**
- Tax Rates
- Econ Development Programs
- Workforce (quality/avail/cost)
- Transportation Infrastructure
- Marketing
- Responsible Regulations
- Balanced Budget
- Water
- Many Others...



Connect with us:

www.roundsconsulting.com



@roundsconsult



@roundsconsulting