
Arizona Economic Conditions, the Construction Industry, & Public Policy Influences on the State's Forecast

October 2022

ROUNDS CONSULTING GROUP



The Bottom Line...

- There is always an economic story to tell.
- The hard part is telling it.

Always start with the US...



What is the story? Part 1:

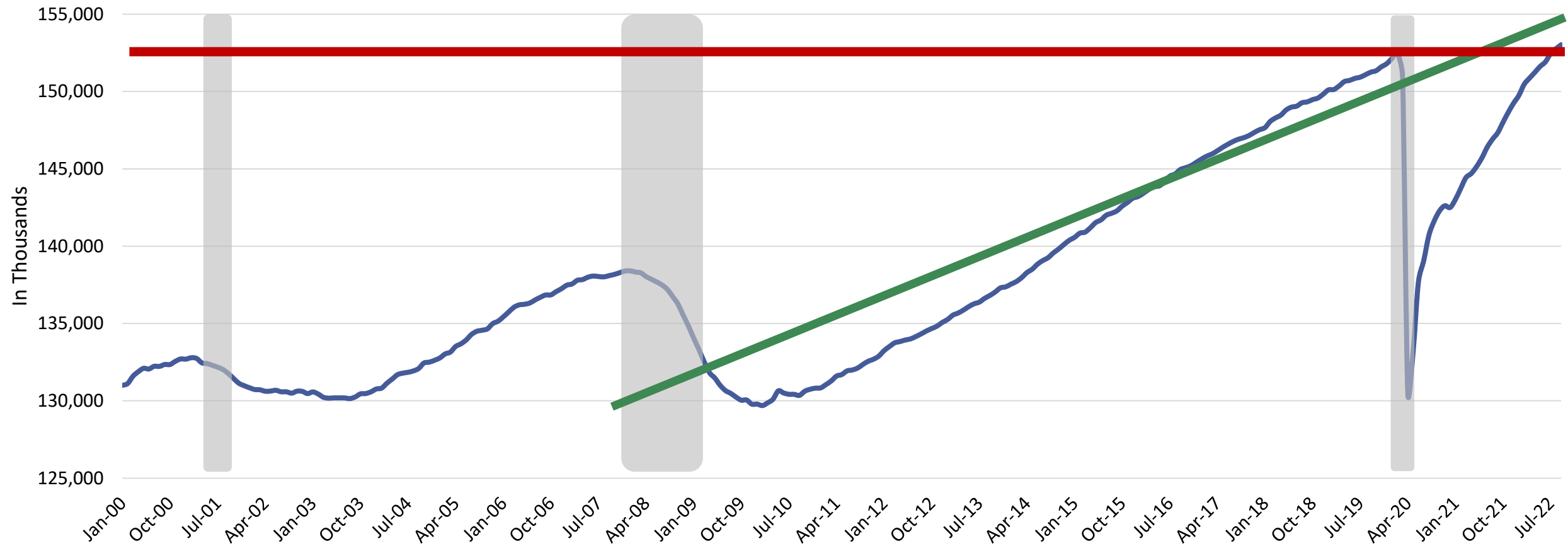
- Covid hit the economy and the US government overreacted.
- The recession was short lived and primarily impacted lower income people, but the stimulus spending was broad-based.
- The Federal Reserve made money very cheap and easy to get...for too long.
- Covid issues impacted the supply chain, both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

U.S. Employment

Seasonally Adjusted; Annually, 2000 - 2022*

Source: U.S. Bureau of Labor Statistics

Recession Period



*Through September 2022

U.S. Unemployment Rate

Seasonally Adjusted; Monthly, 1985 - 2022*

Source: U.S. Bureau of Labor Statistics

Recession Period



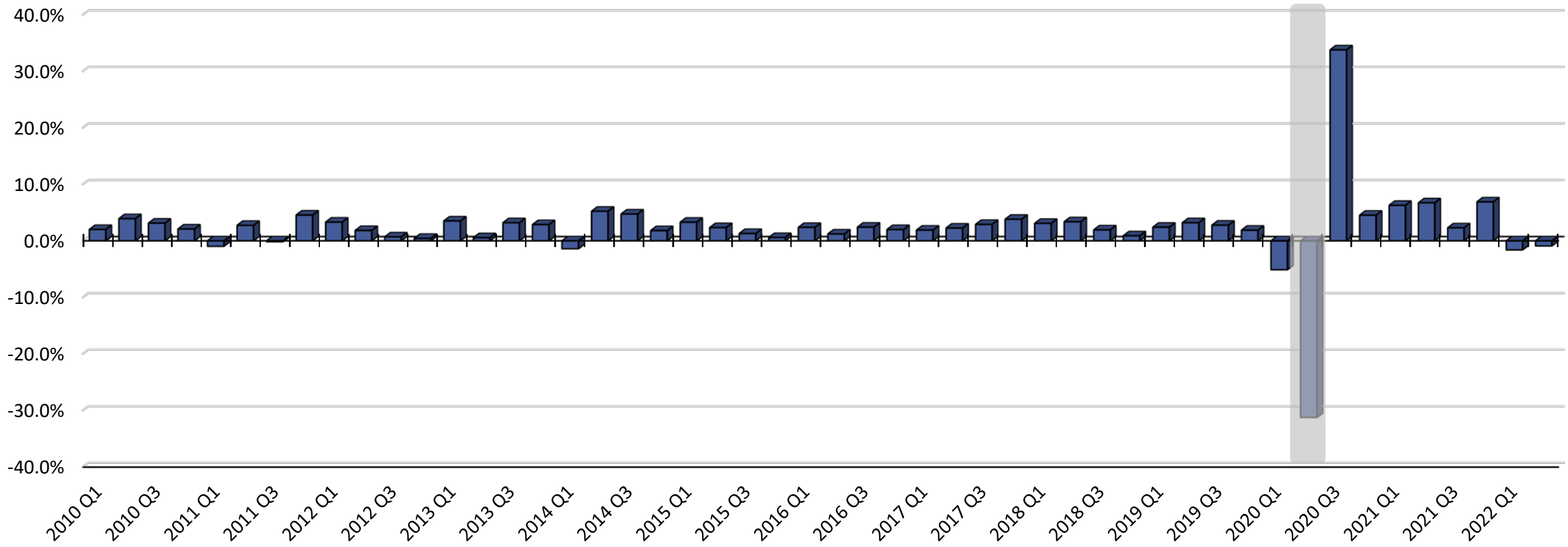
*Through September 2022

U.S. Real GDP

Annualized Percent Change; Quarterly, 2010 - 2022*

Source: U.S. Bureau of Economic Analysis

Recession Period



*Data through Q2 2022

U.S. Yield Curve

10-Year Treasury Constant Maturity Minus 2-Year Treasury Constant Maturity; Monthly, 1985 - 2022*

Source: U.S. Treasury Department

Recession Period



*Through September 2022

Federal Funds Effective Rate

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

Source: Board of Governors of the Federal Reserve System

Recession Period



*Through September 2022

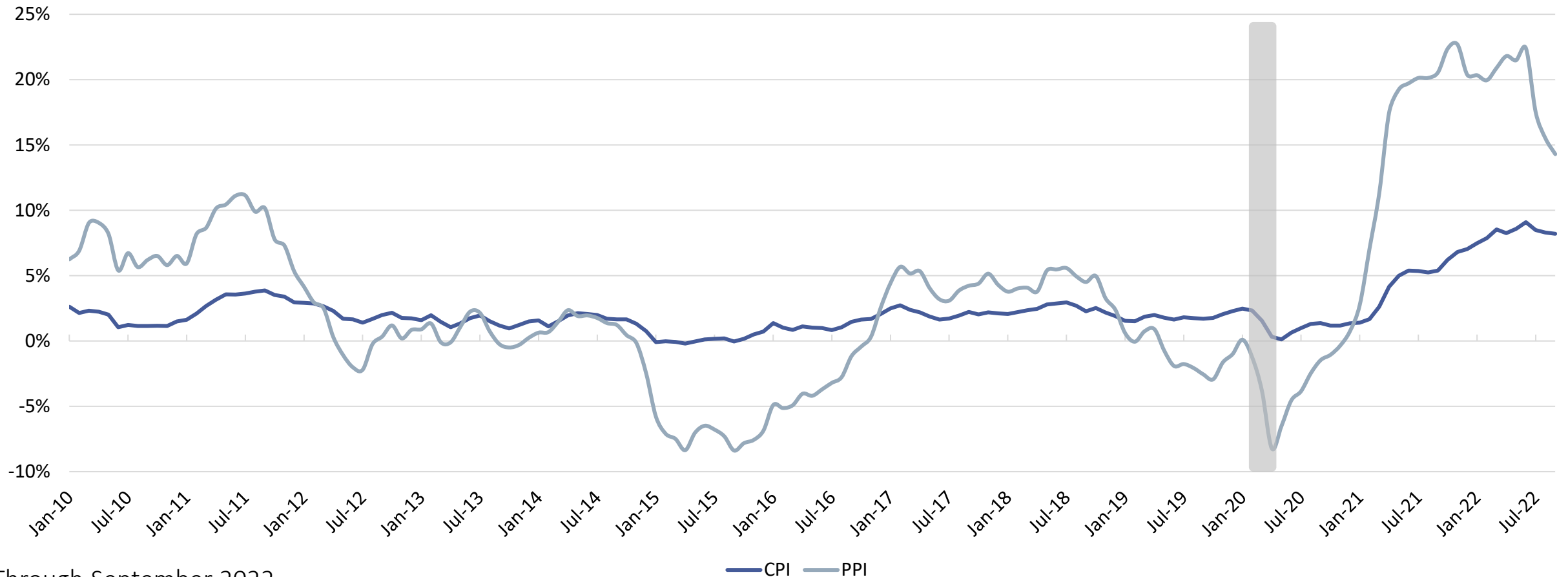
What is the story? Part 2:

- 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.

Consumer Price Index vs. Producer Price Index

All Items CPI; All Commodity PPI; Not-Seasonally Adjusted; Year-over-Year Percent Growth, 2010 - 2022*
Source: U.S. Bureau of Labor Statistics

Recession Period



*Through September 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%

What is the story? Part 3:

- A “Volcker” recession by 2023.
- Reset button pushed and the next cycle begins.



Arizona's Economic Profile

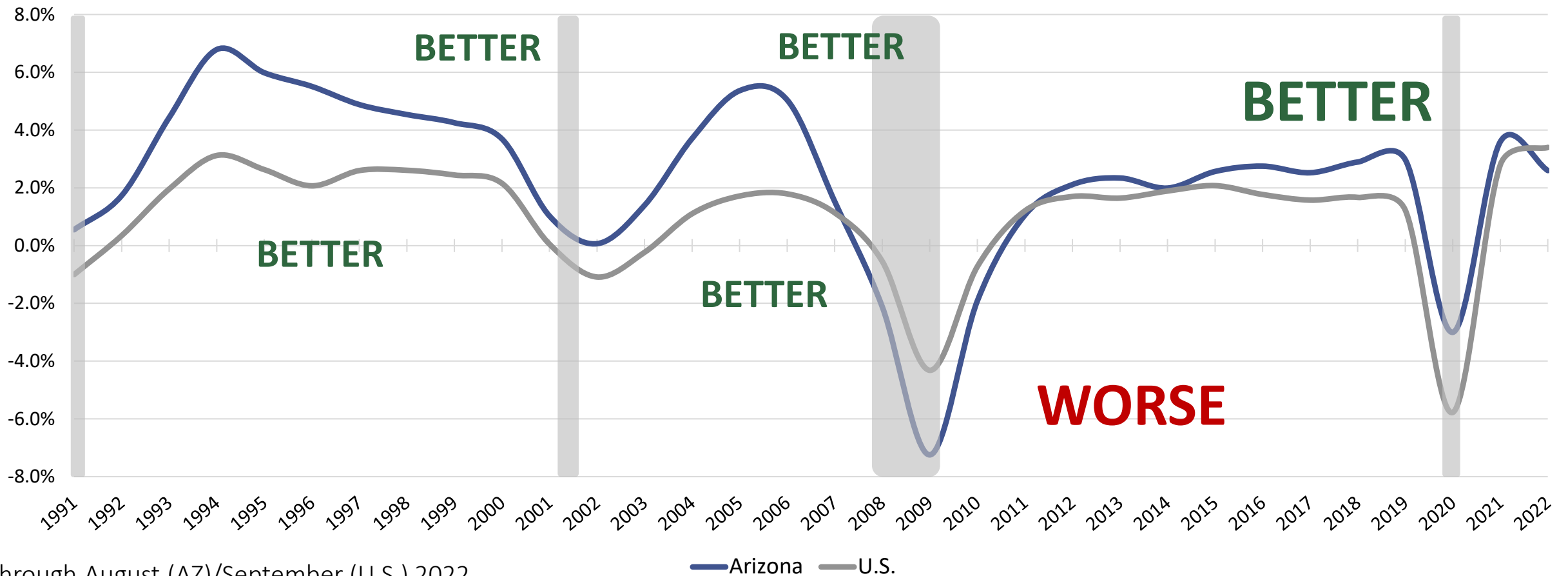


Arizona vs. U.S. Job Growth

Annual Percent Growth, 1985 - 2022*

Source: U.S. Bureau of Labor Statistics

Recession Period



*Through August (AZ)/September (U.S.) 2022

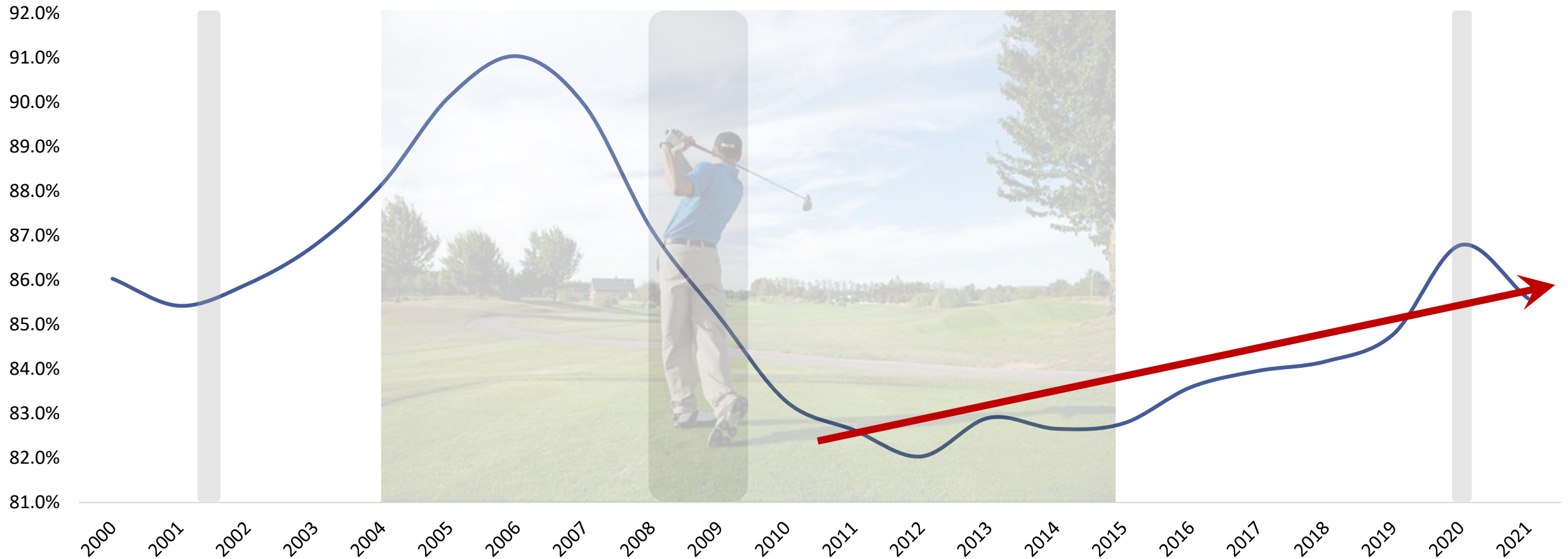
— Arizona — U.S.

Per Capita Personal Income in Arizona

Arizona as a Percent of the U.S.; Annually, 2000 - 2021

Source: U.S. Bureau of Economic Analysis

Recession Period

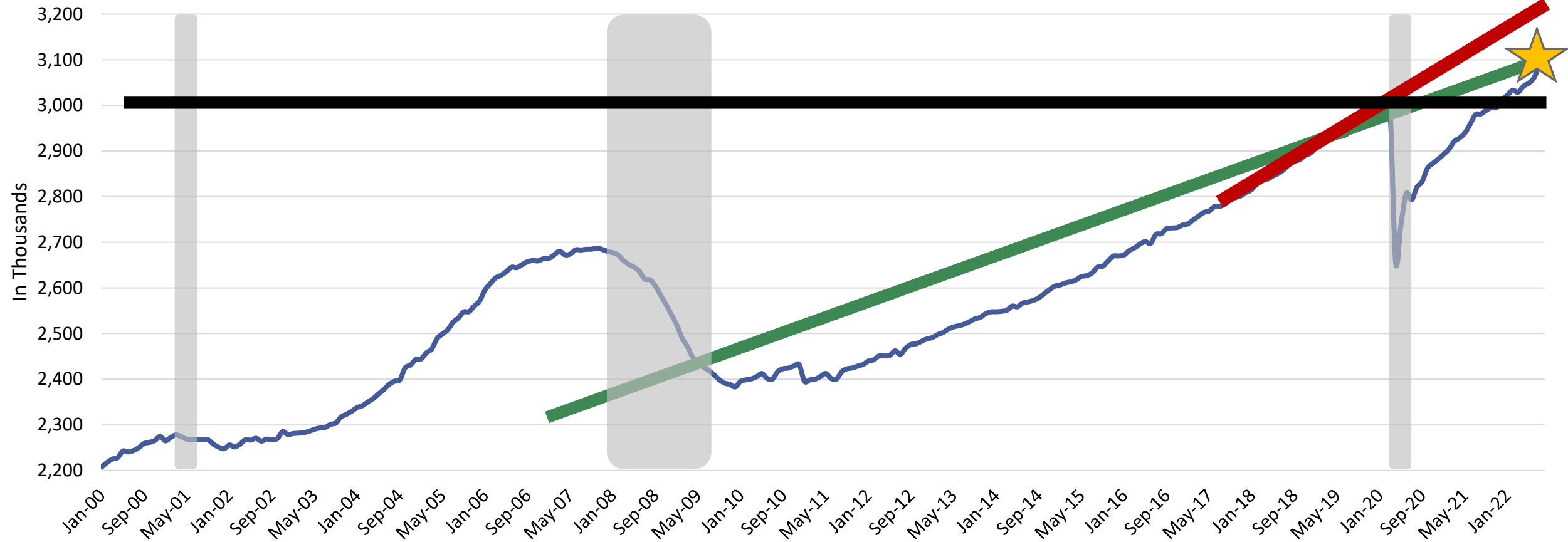


Arizona Employment

Seasonally Adjusted; Monthly, 2000 - 2022*

Source: U.S. Bureau of Labor Statistics

Recession Period

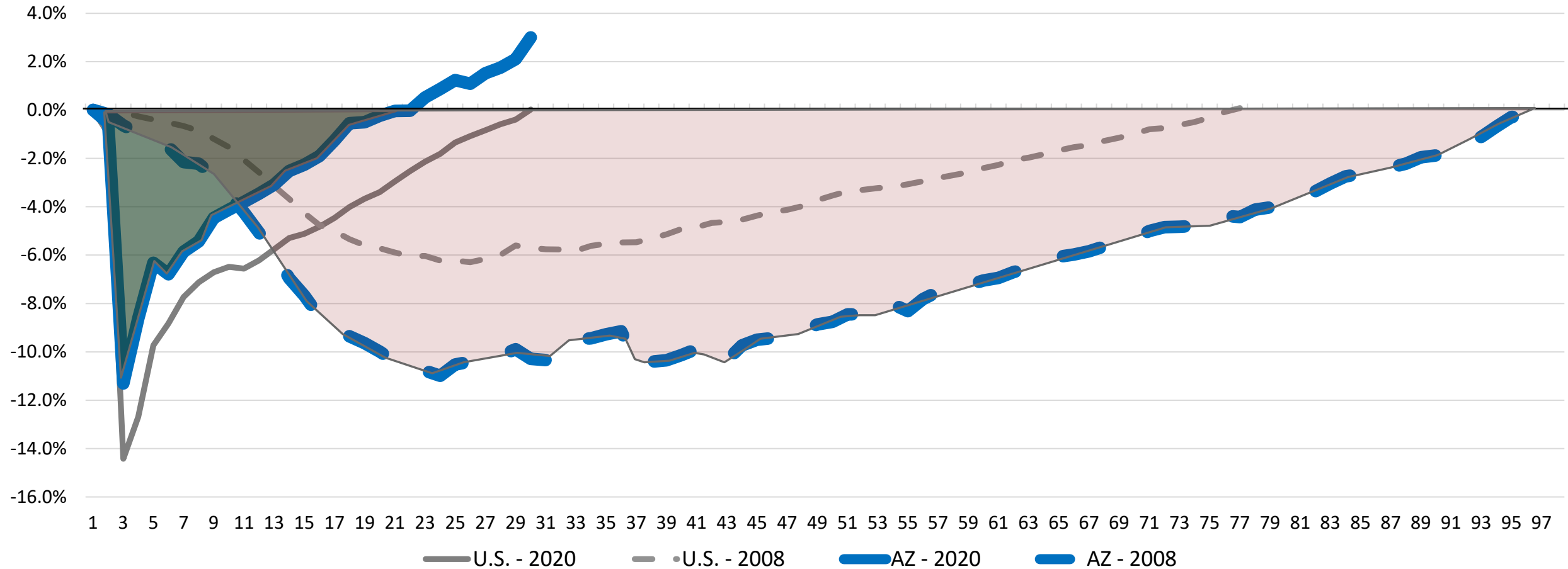


*Through September 2022

U.S. vs Arizona Job Recovery

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

Source: U.S. Bureau of Labor Statistics



Sometimes the explanation is simple math...



U.S. Job Growth by State 2020

State Ranking

Source: U.S. Bureau of Labor Statistics



Rank	%	State	Rank	%	State
1	-0.71%	Idaho	11	-4.20%	Texas
2	-1.41%	Utah	12	-4.21%	Mississippi
3	-2.75%	Arkansas	13	-4.54%	Oklahoma
4	-2.92%	Montana	14	-4.57%	Georgia
5	-3.03%	Arizona	15	-4.59%	Kansas
6	-3.23%	South Dakota	16	-4.73%	Missouri
7	-3.68%	Nebraska	17	-4.91%	Florida
8	-3.77%	Tennessee	18	-4.93%	South Carolina
9	-3.85%	North Carolina	19	-4.95%	Iowa
10	-4.01%	Alabama	20	-4.96%	Virginia

U.S. Job Growth by State 2022

State Ranking; Year-To-Date 2022*

Source: U.S. Bureau of Labor Statistics

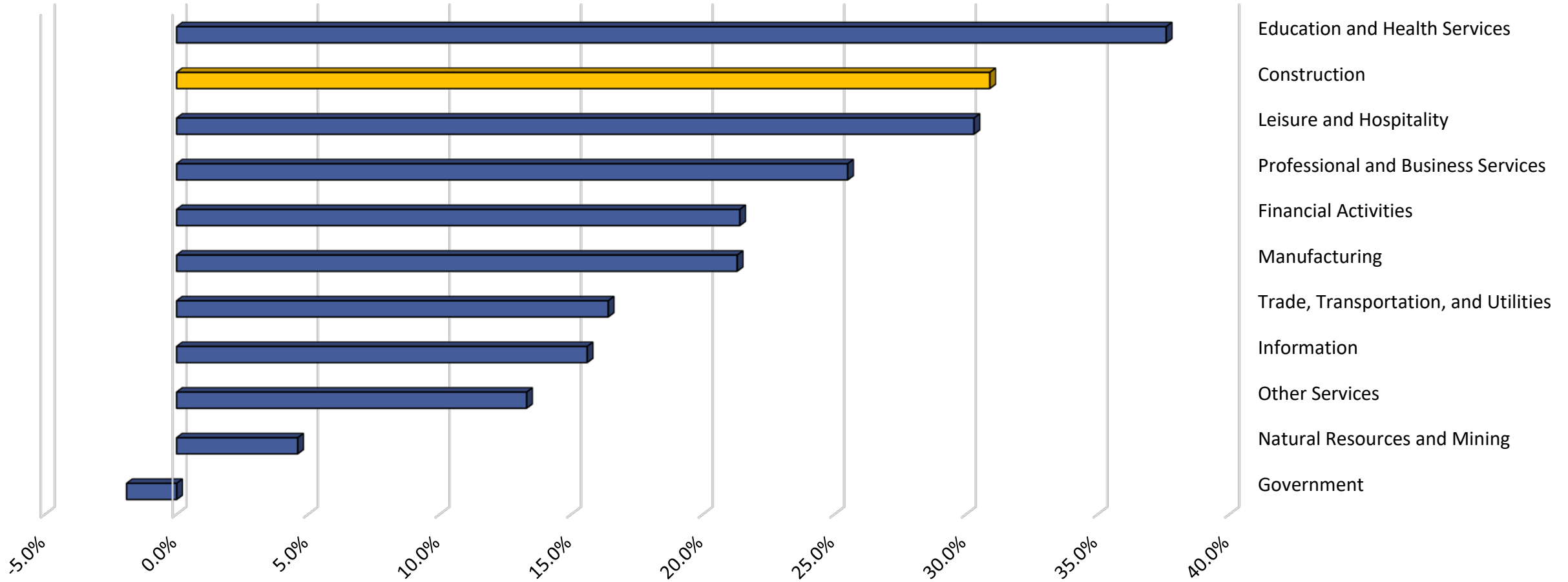
Rank	%	State	Rank	%	State
1	7.85%	Nevada	11	4.79%	Oregon
2	6.02%	Texas	12	4.69%	Hawaii
3	5.62%	California	13	4.66%	Colorado
4	5.57%	Florida	14	4.23%	Illinois
5	5.24%	New Jersey	15	4.19%	Tennessee
6	5.21%	New Mexico	16	4.05%	Michigan
7	5.20%	Georgia	17	3.88%	Arizona
8	5.16%	New York	18	3.87%	North Carolina
9	4.88%	Washington	19	3.73%	Utah
10	4.83%	Massachusetts	20	3.69%	Pennsylvania

*Through August 2022

Arizona Employment Projections by Industry

10 Year Projections, 2020 - 2030

Source: Arizona Office of Economic Opportunity



Arizona Economic Forecasts

2023 Projections

Source: Seidman Research Institute – Western Blue Chip Forecasts

	2022 Consensus	2023 Consensus
Current Dollar Personal Income	4.0%	5.5%
Retail Sales	6.3%	5.0%
Employment	3.2%	3.2%
Population Growth	1.6%	1.5%
Single Family Housing Permits	4.1%	0.6%

What does the economic data tell us?

- **AZ has a resilient economy.**
- This occurred not by accident, but was deliberate.
- Resilient economies **perform better during recessions.**
- Therefore, volatility in tax revenues is modest compared to other states.
- **Need to keep diversifying, need to build on our strengths.**

Biggest Risks?



What Matters in Growing the Economy?

- Tax Rates
- Econ Development Programs
- **Workforce (quality/avail/cost)**
- **Transportation Infrastructure**
- Marketing
- Responsible Regulations
- Balanced Budget
- Reliable/Cost Effective Energy
- Water
- **Housing Affordability**
- Economic Diversity



Arizona Residential Market Trends

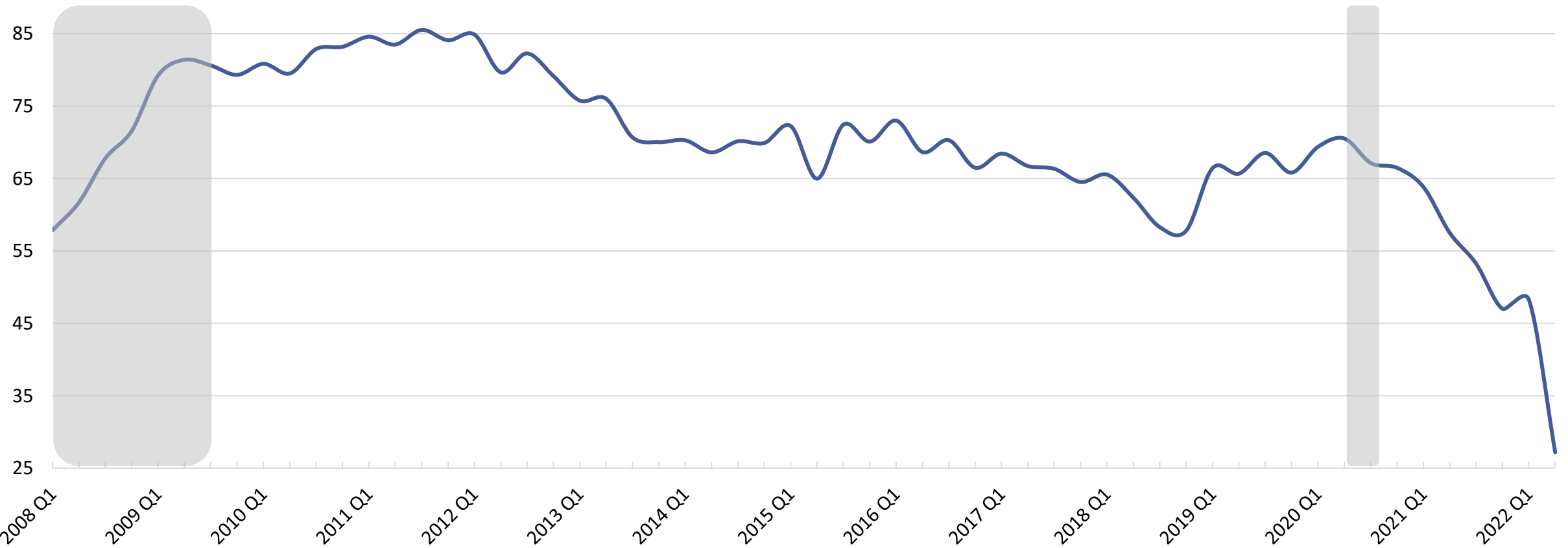


Arizona Housing Affordability Index

Quarterly, 2008 – 2022*

Source: National Association of Home Builders

 Recession Period



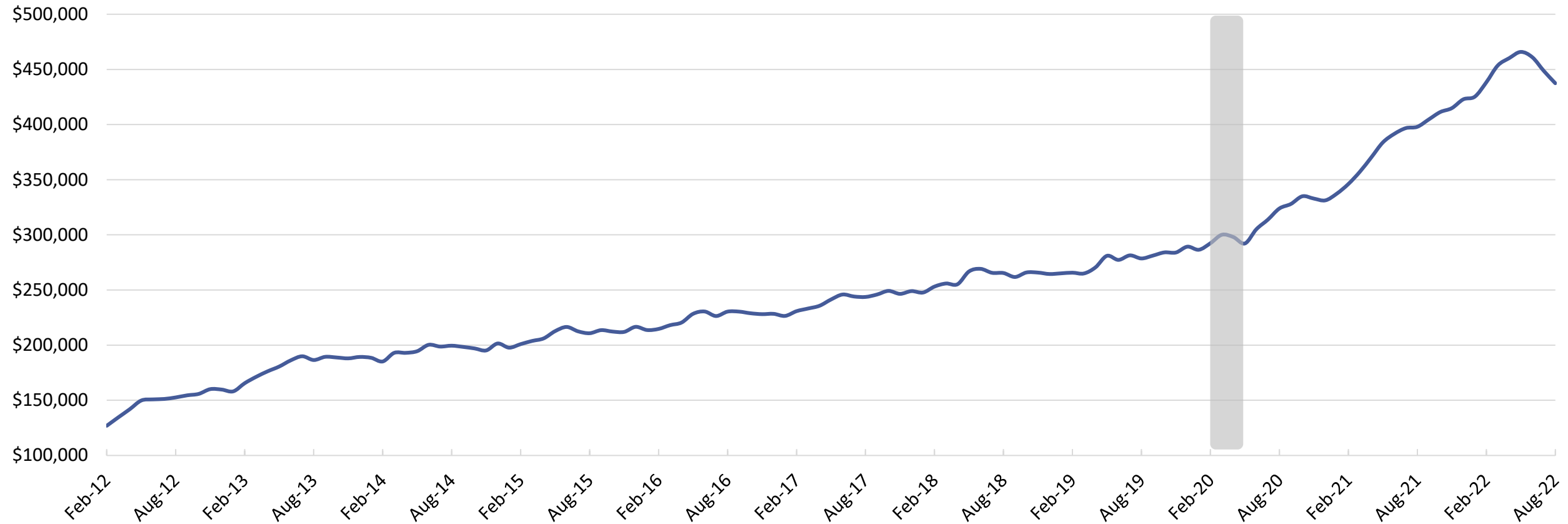
*2022 Through Q2

Arizona Median Price of Homes Sold

Monthly, February 2012-2022*

Source: Redfin

 Recession Period



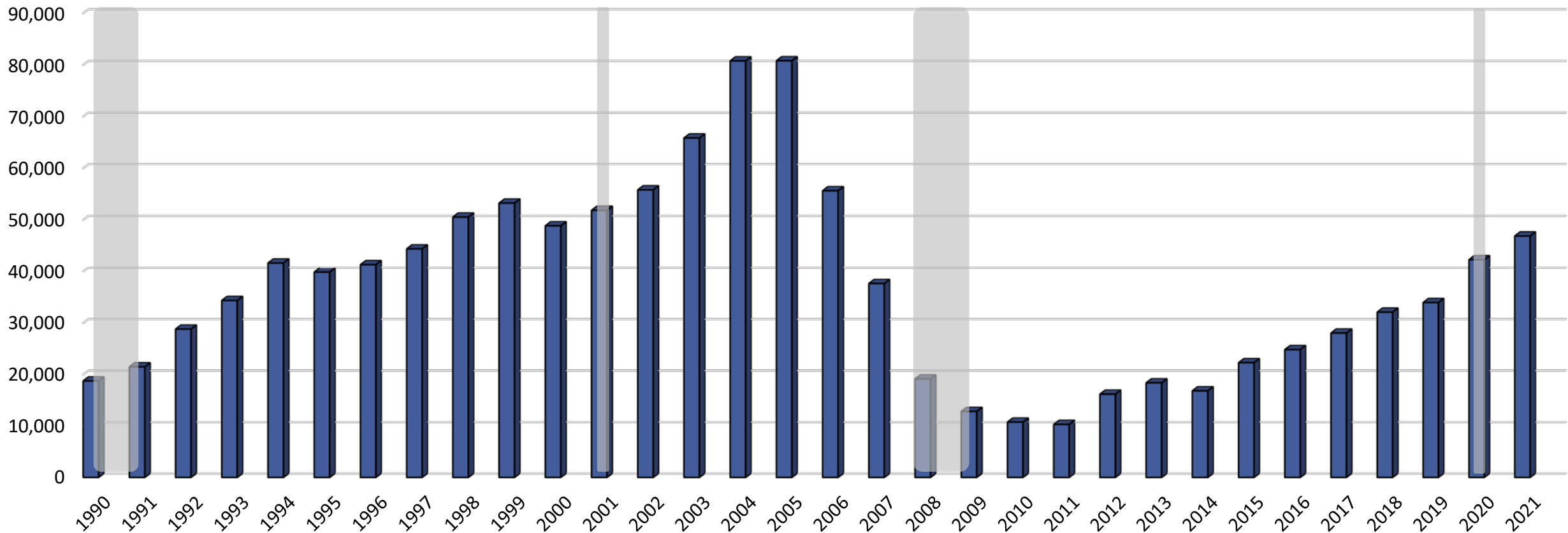
*Through August 2022

Arizona Single Family Home Permits

Annually, 1990-2021

Source: U.S. Census Bureau

 Recession Period

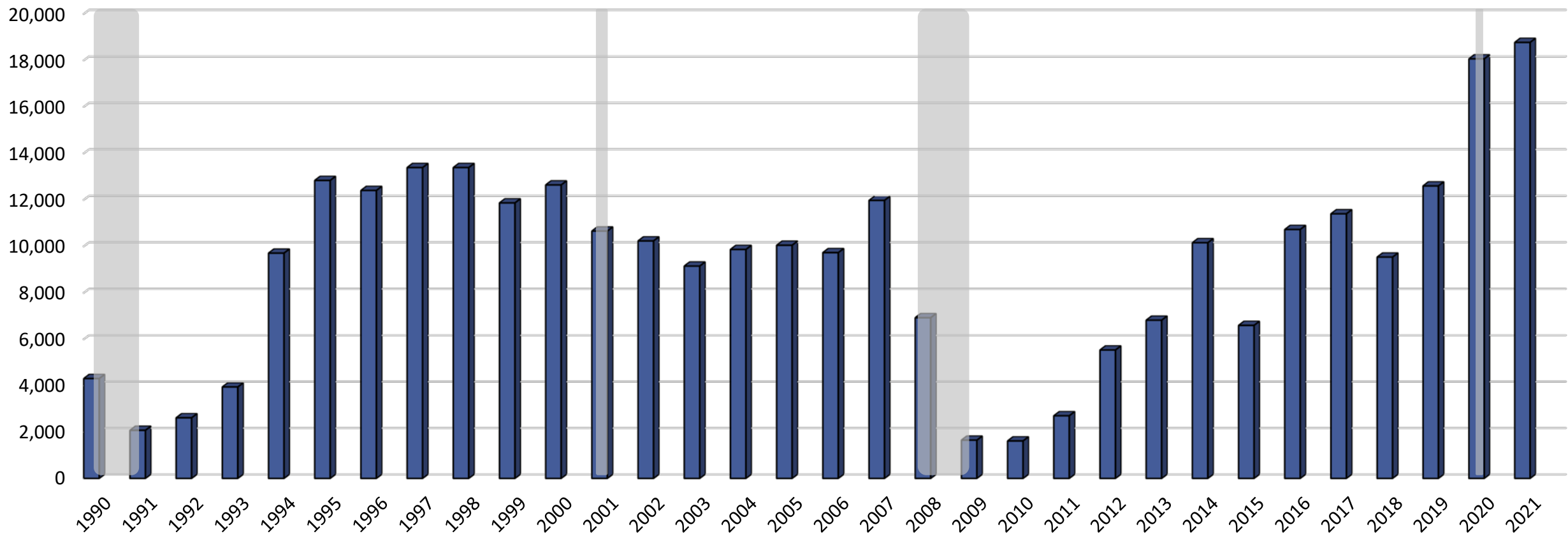


Arizona Multi-Family Home Permits

Annually, 1990-2021

Source: U.S. Census Bureau

 Recession Period

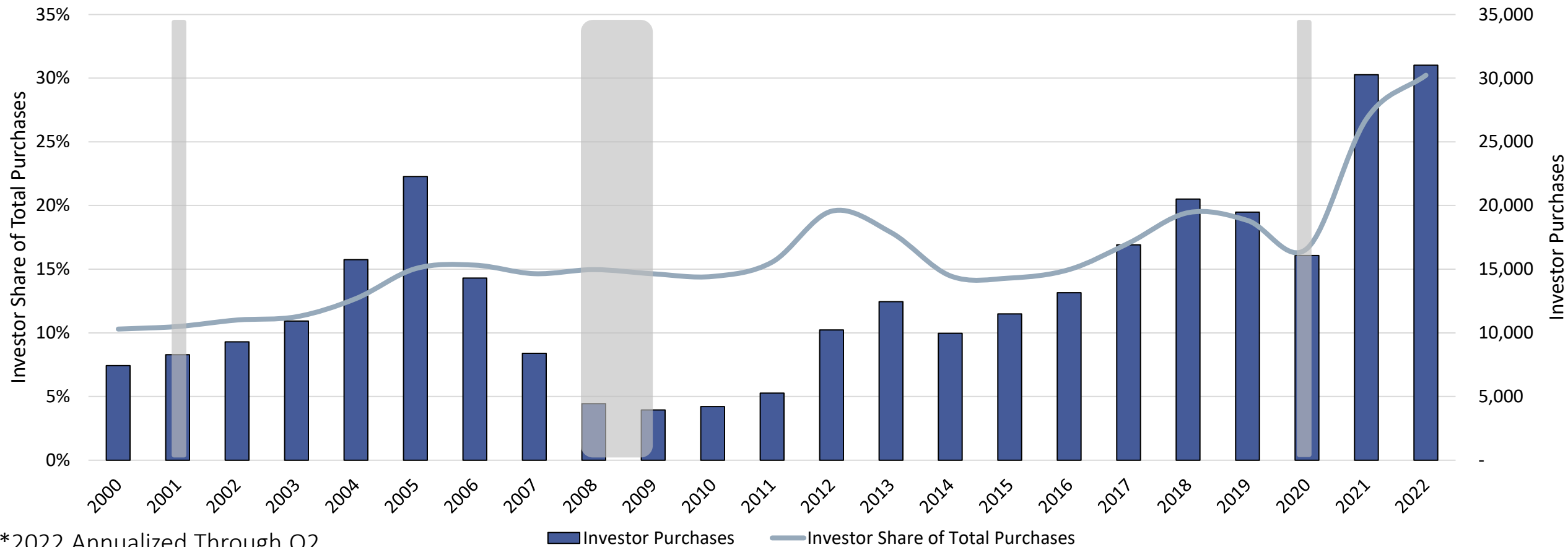


Investor Home Purchase Activity

Phoenix MSA; Annually, 2000-2022*

Source: Redfin

Recession Period



*2022 Annualized Through Q2

Housing Developer Sentiment

U.S. Level; Monthly, 2000 - 2022*

Source: NAHB – Housing Market Index

Recession Period



*2022 Through September

Arizona Housing Shortage Estimates

Source: Rounds Consulting Group; Common Sense Institute; Up For Growth

Up For Growth Study	Common Sense Institute Study	Rounds Consulting Group Study
122,700 Units	95,800 Units	40,000 – 80,000 Units

Arizona Commercial Market Trends

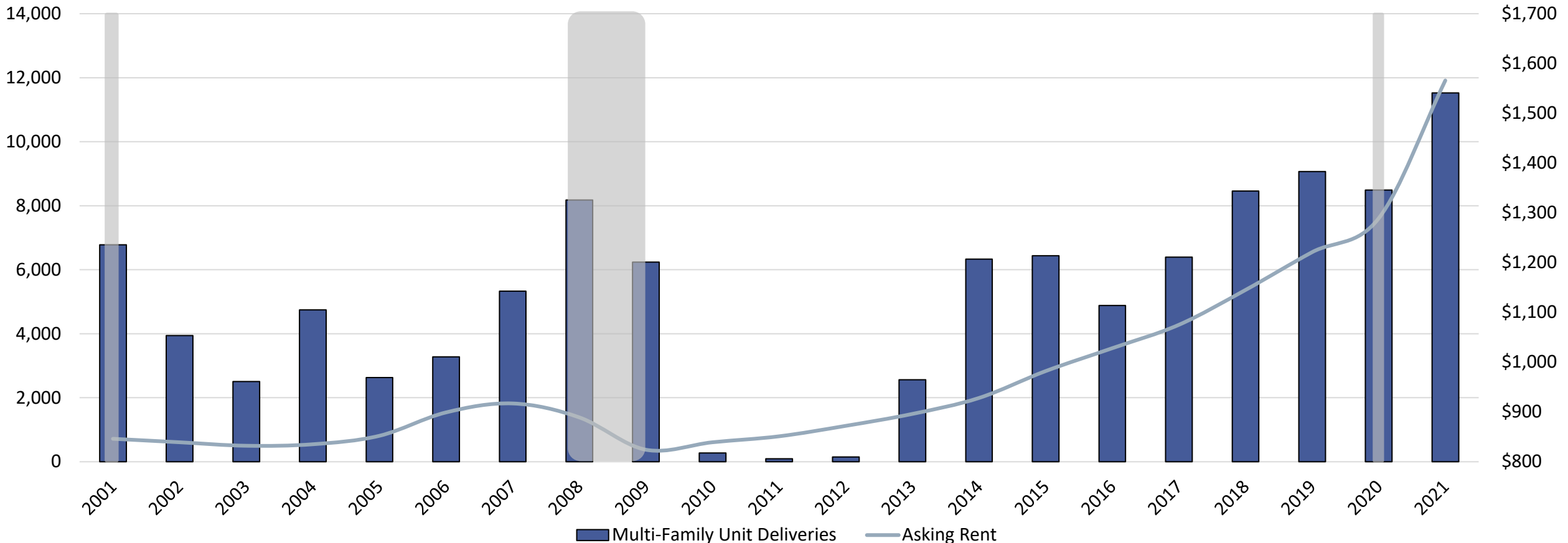


Multi-Family Unit Deliveries vs. Asking Rent

Phoenix MSA, Annually, 2001-2021

Source: CoStar

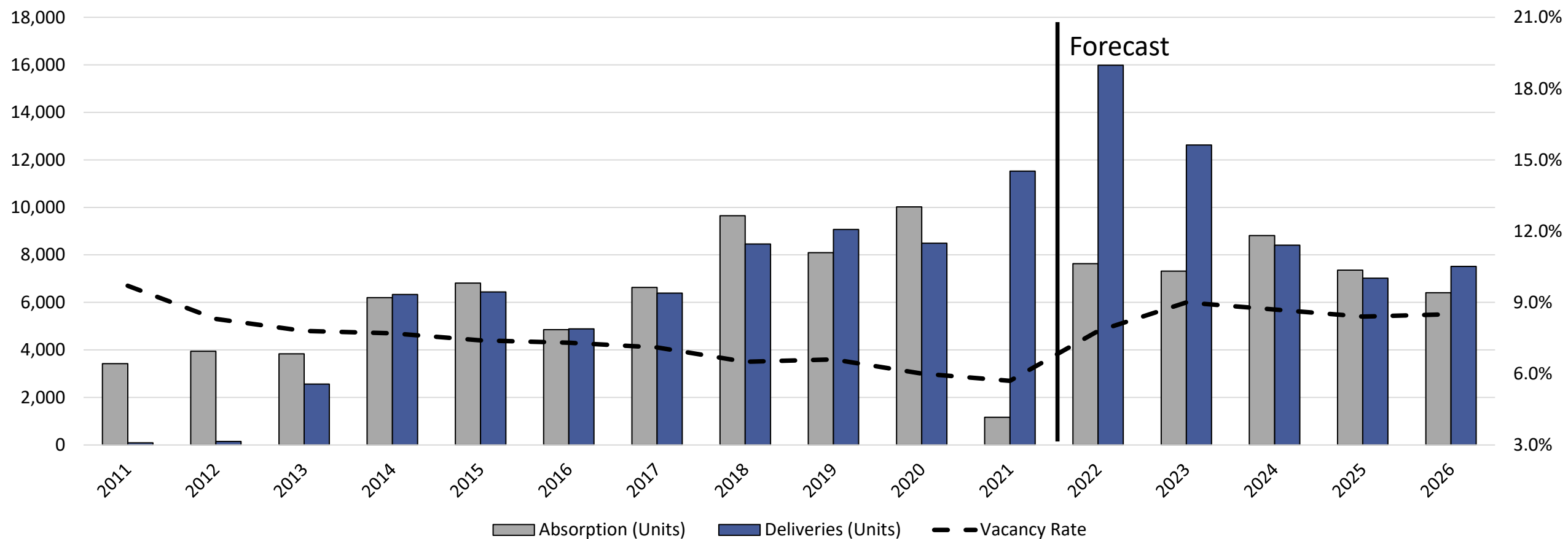
Recession Period



Greater Phoenix – Multi-Family Real Estate Market

2011-2026: Absorption, Deliveries, and Vacancy Rate

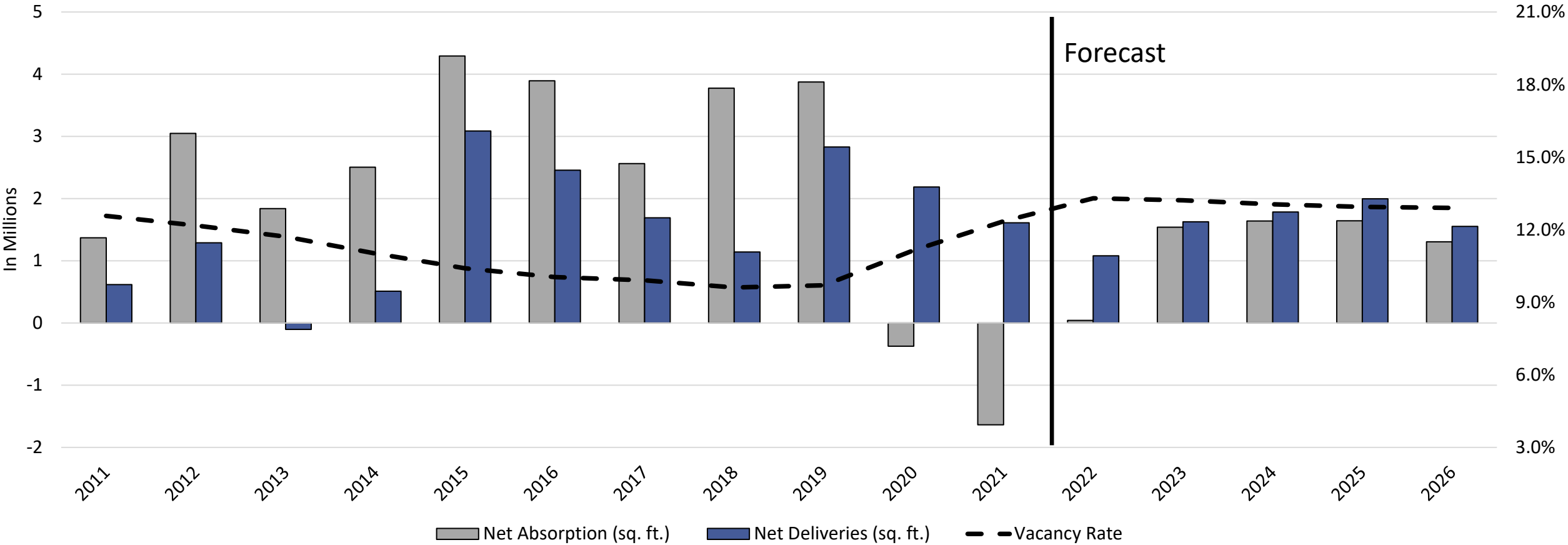
Source: CoStar



Greater Phoenix - Office Real Estate Market

2011-2026: Net Absorption, Net Deliveries, and Vacancy Rate

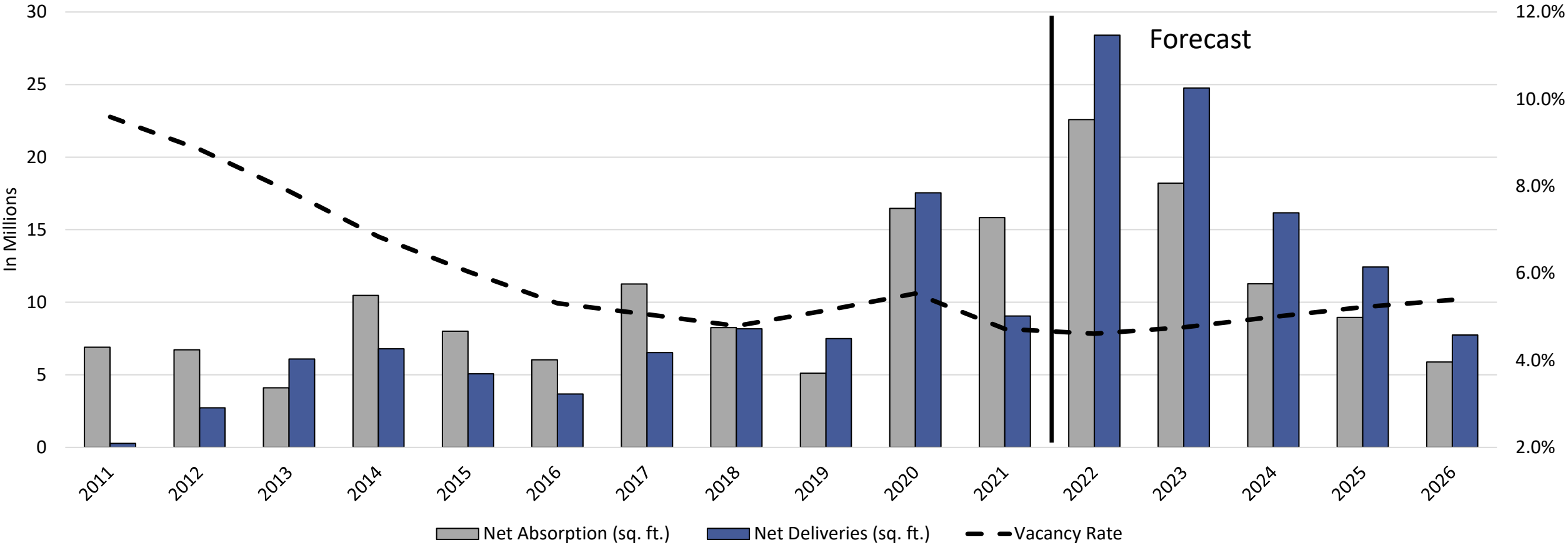
Source: CoStar



Greater Phoenix - Industrial Real Estate Market

2011-2026: Net Absorption, Net Deliveries, and Vacancy Rate

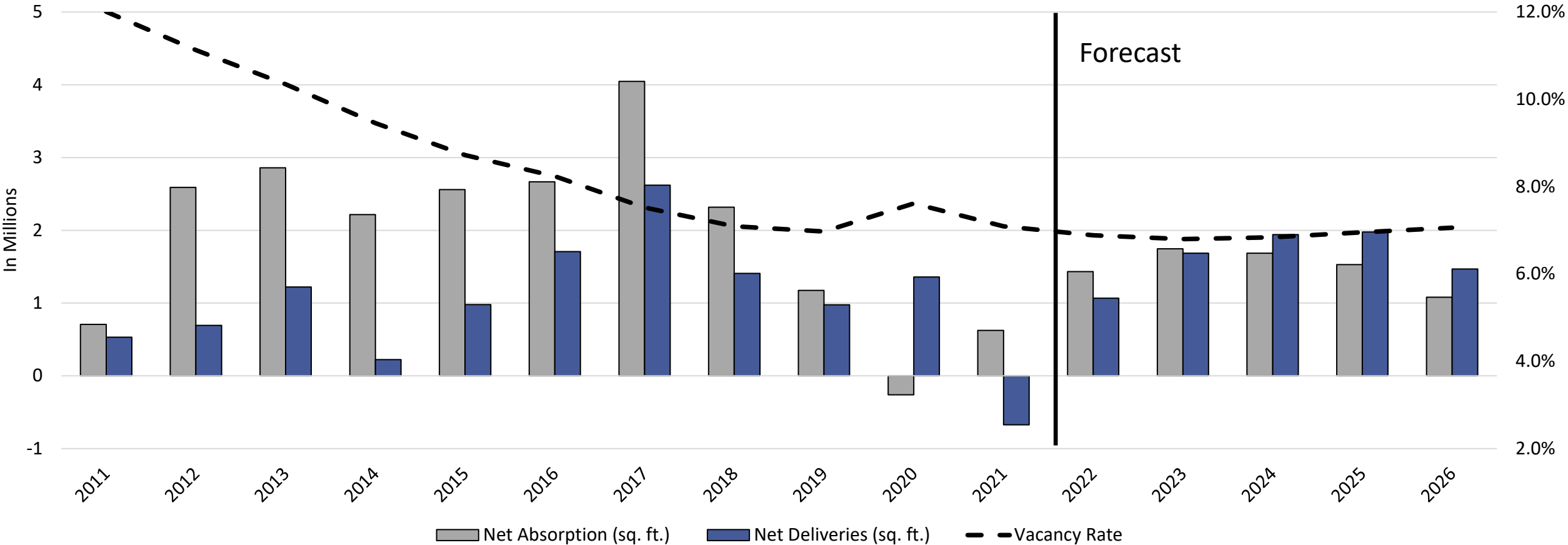
Source: CoStar



Greater Phoenix - Retail Real Estate Market

2011-2026: Net Absorption, Net Deliveries, and Vacancy Rate

Source: CoStar



Conclusion...

- Be optimistic about AZ regardless of the pending recession.
- 2025 - 2030 = Best expansion in state's history?



"Oh boy! ... It's dog food again!"

Q & A

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