



Current State of the Greater Phoenix Housing Market

A Supply & Demand Analysis

GPEC:

Goodyear City Council

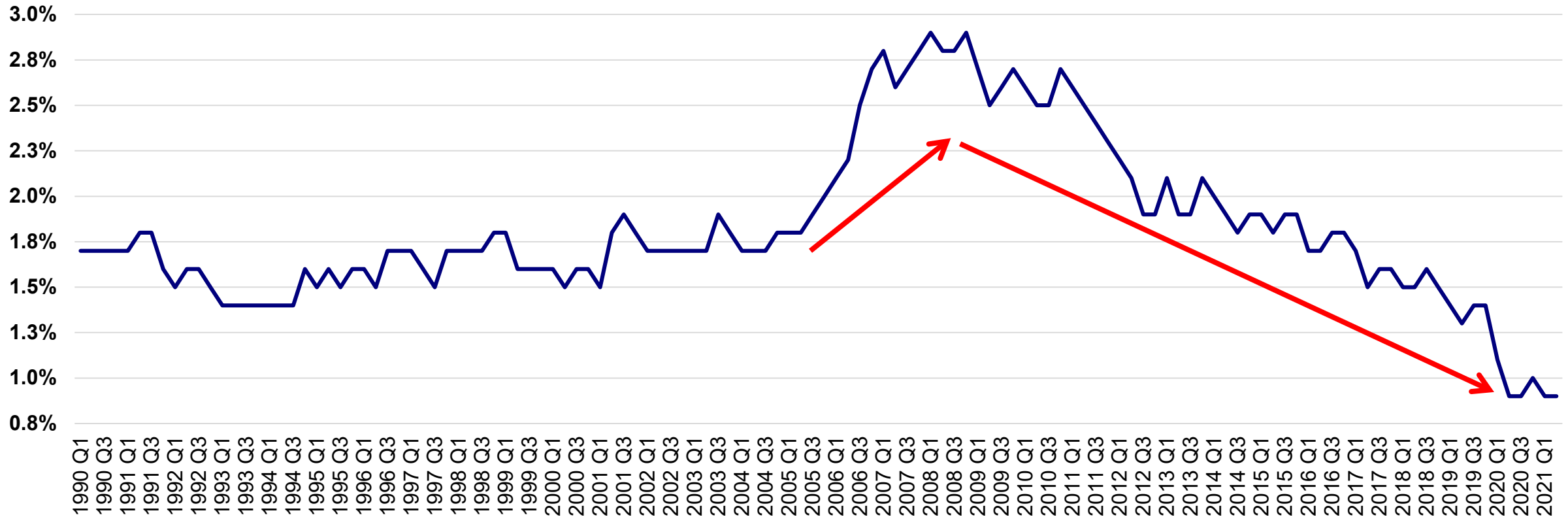
April 4th, 2022

By HomeArizona



U.S. Homeowner Vacancy Rate

Source: U.S. Census Bureau

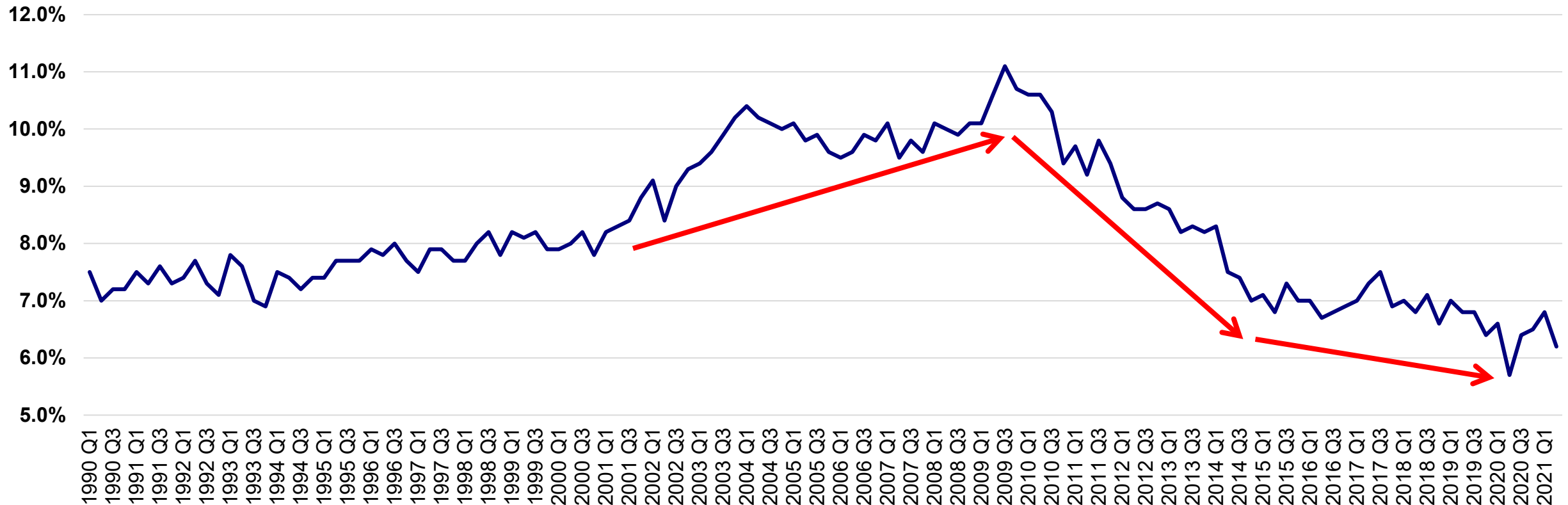


The homeowner vacancy rate is calculated as the ratio of vacant year-round units for sale to the sum of owner-occupied units, vacant year-round units sold but awaiting occupancy, and vacant year-round units for sale.



U.S. Rental Vacancy Rate

Source: U.S. Census Bureau

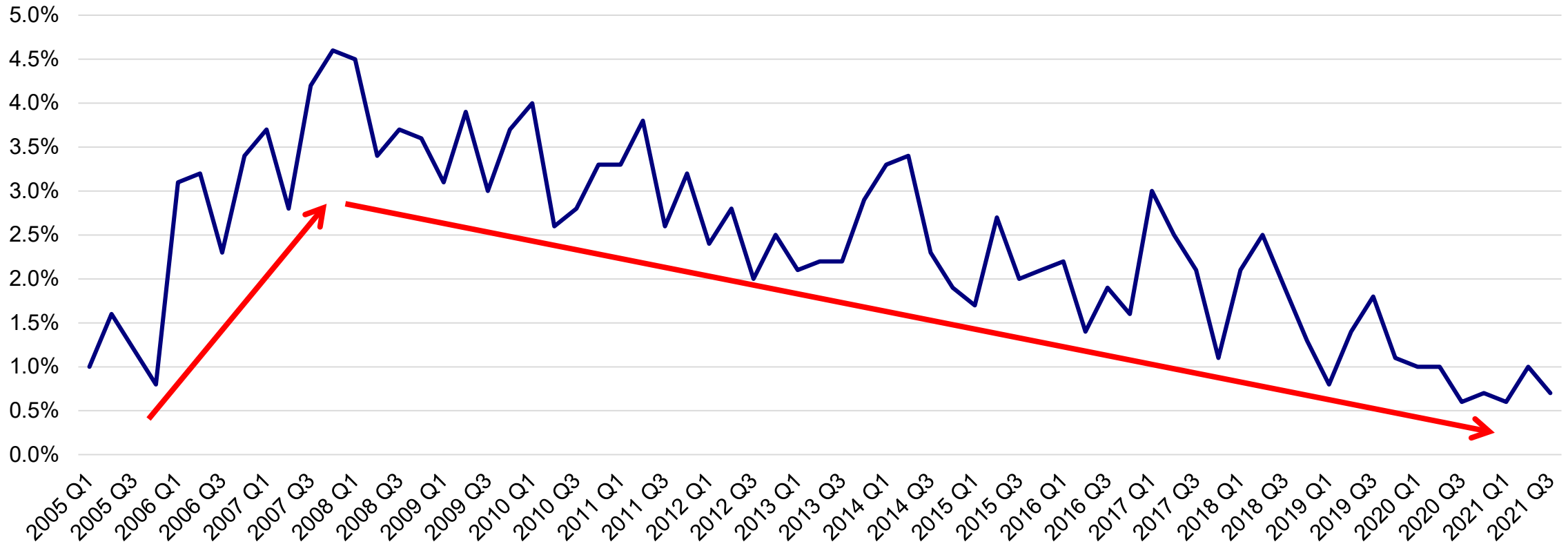


The rental vacancy rate is calculated as the ratio of vacant year-round units for rent to the sum of renter-occupied units, vacant year-round units rented but awaiting occupancy, and vacant year-round units for rent.



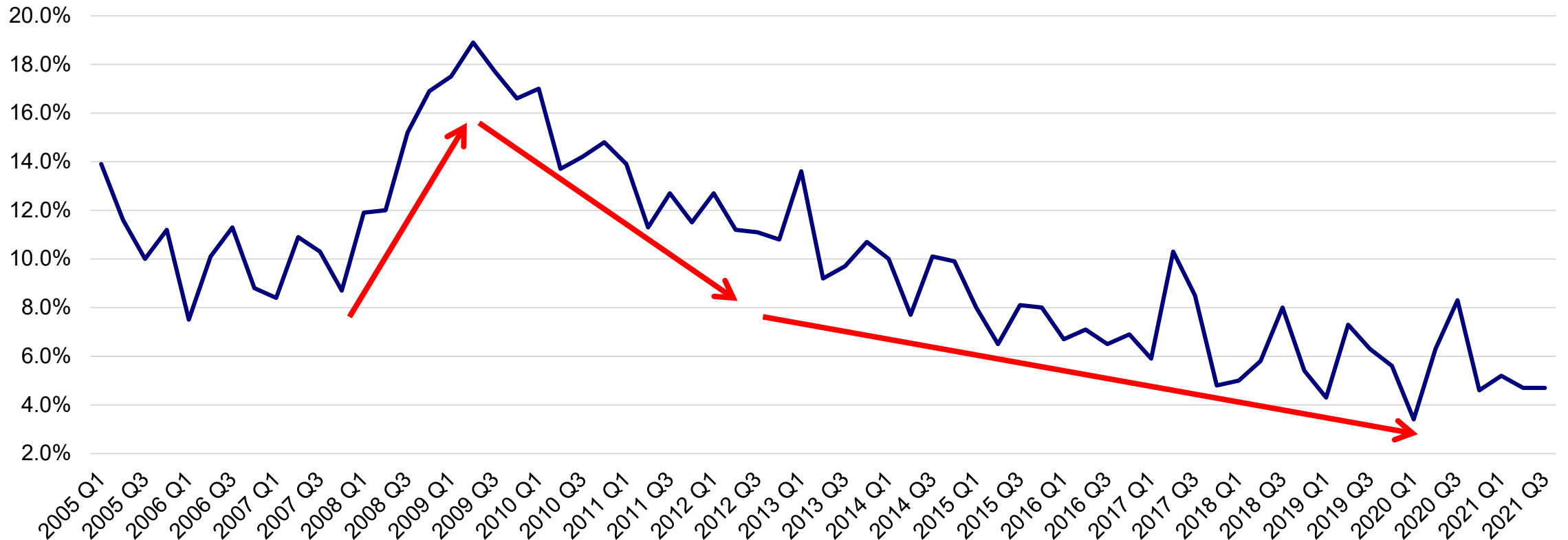
AZ Homeowner Vacancy Rate

Source: U.S. Census Bureau



AZ Rental Vacancy Rate

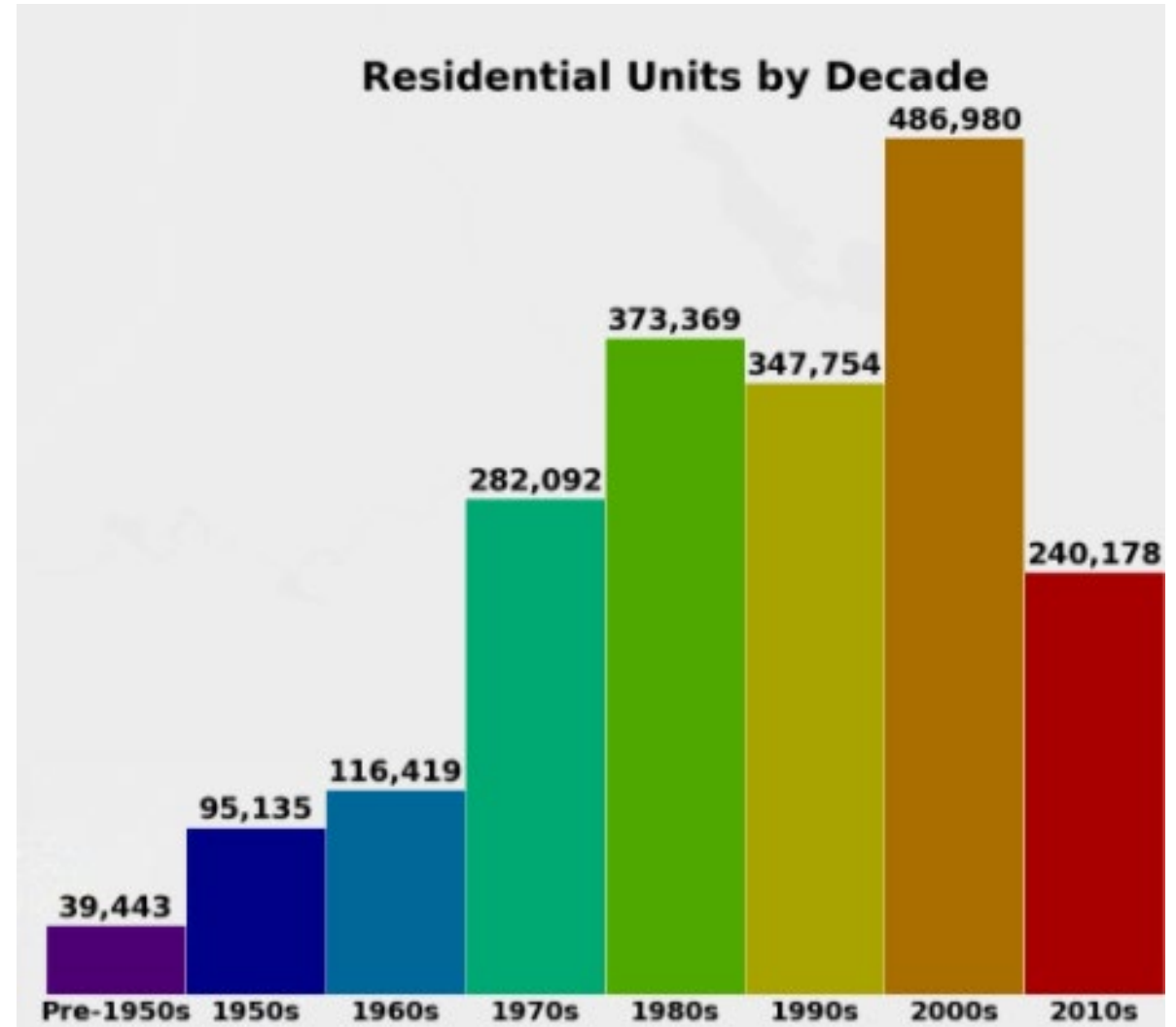
Source: U.S. Census Bureau



**The 2000's - A decade
of building excess
inventory.**

**The 2010's - A decade
of absorbing that
inventory.**

**We are now short of
inventory.**

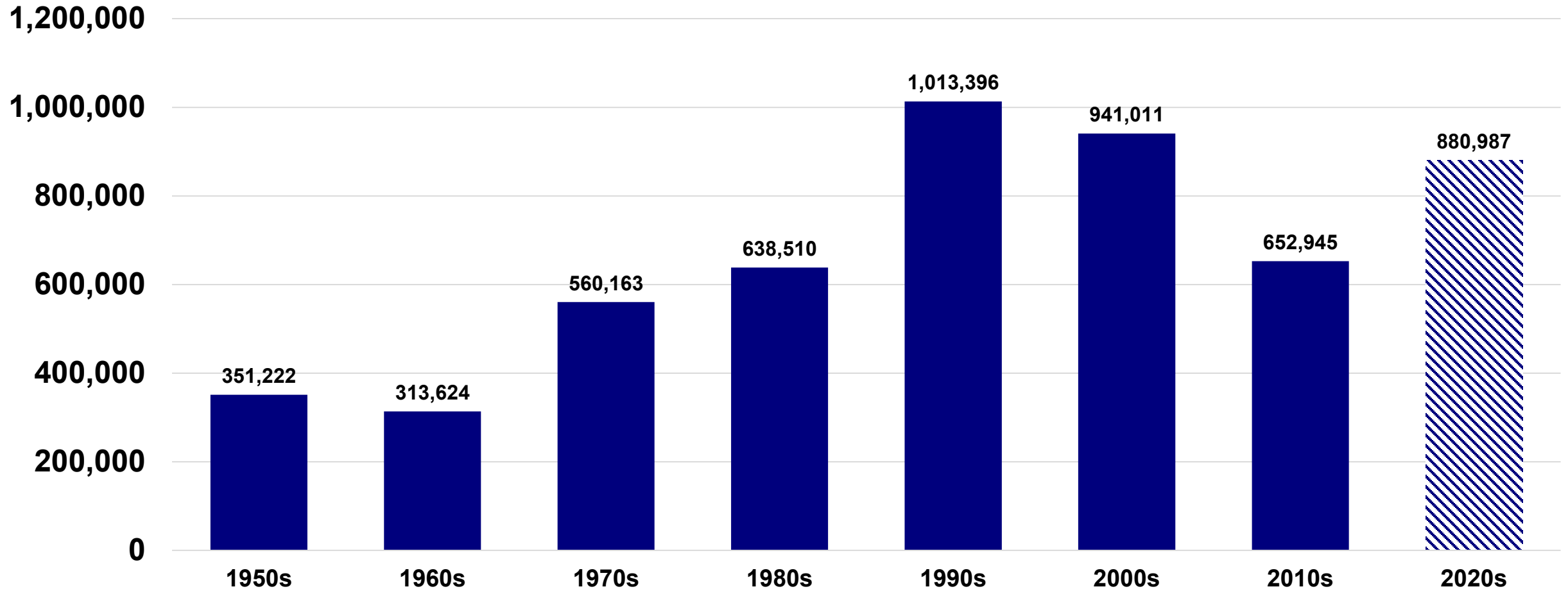


Source: Maricopa Association of Governments. Data reflects Greater Phoenix.



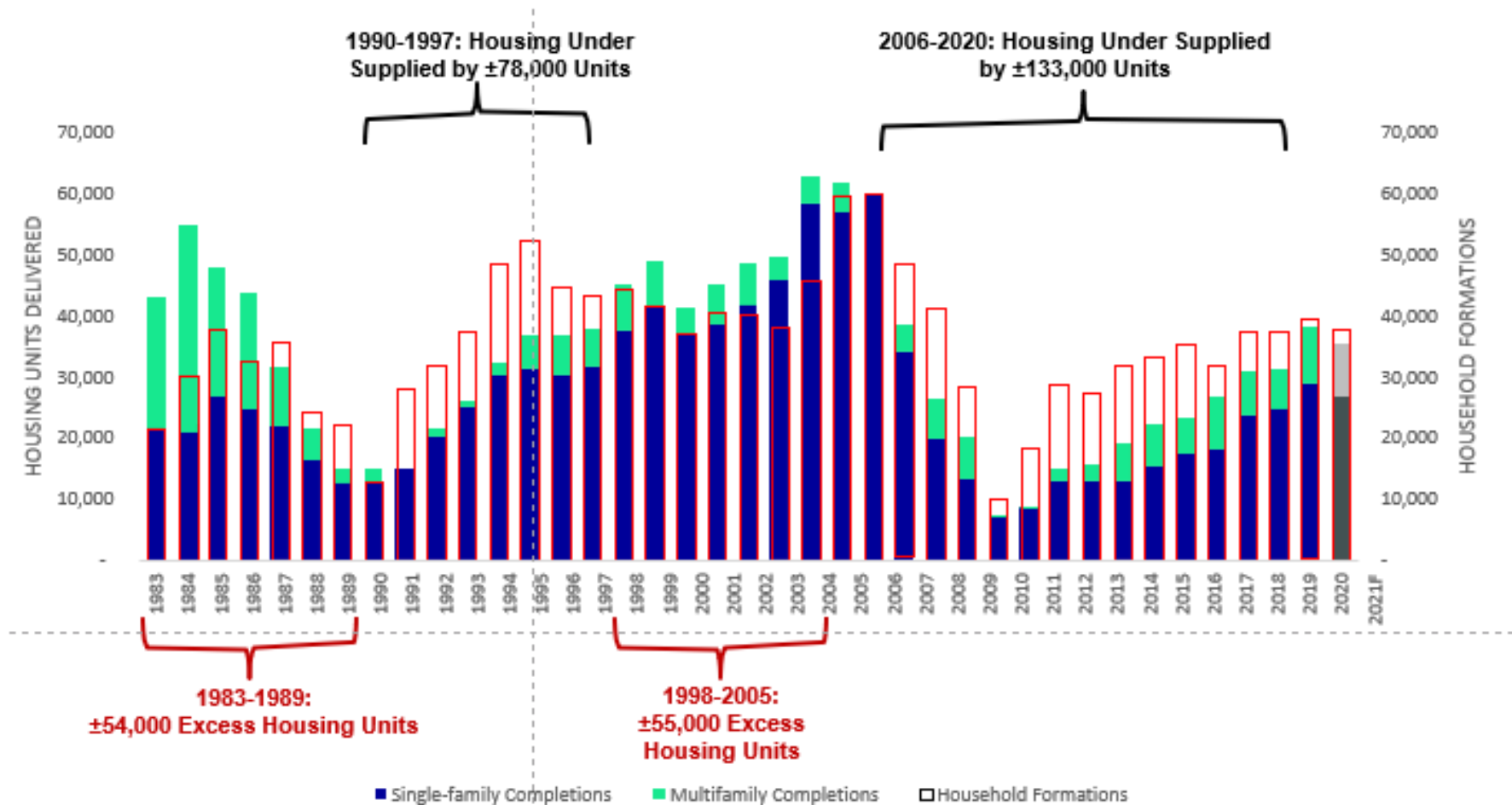
Greater Phoenix Population Growth by Decade

Source: U.S. Census; UofA Forecasting Project



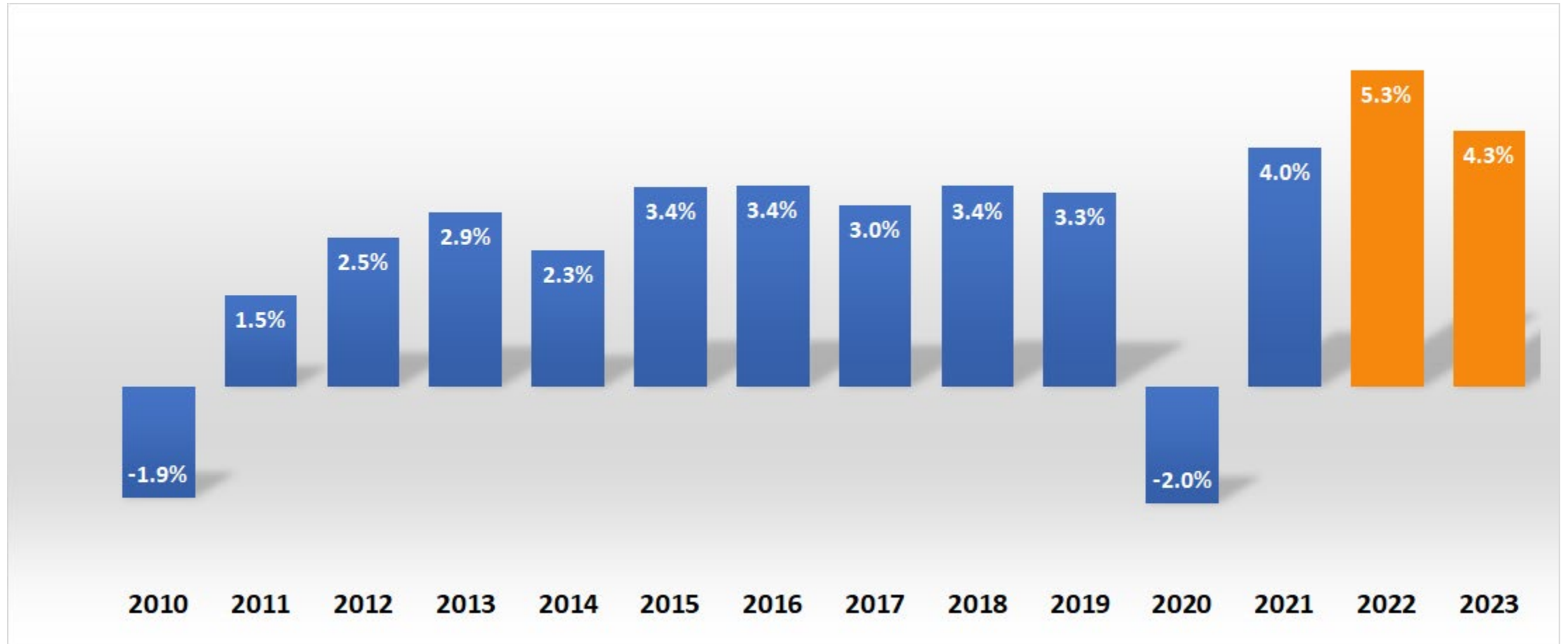
Household Formations Outpacing Single and Multifamily Additions

Sources: U.S. Census; Moody's Analytics; CBRE Research



Greater Phoenix Employment

Source: AOEO; EDPCo

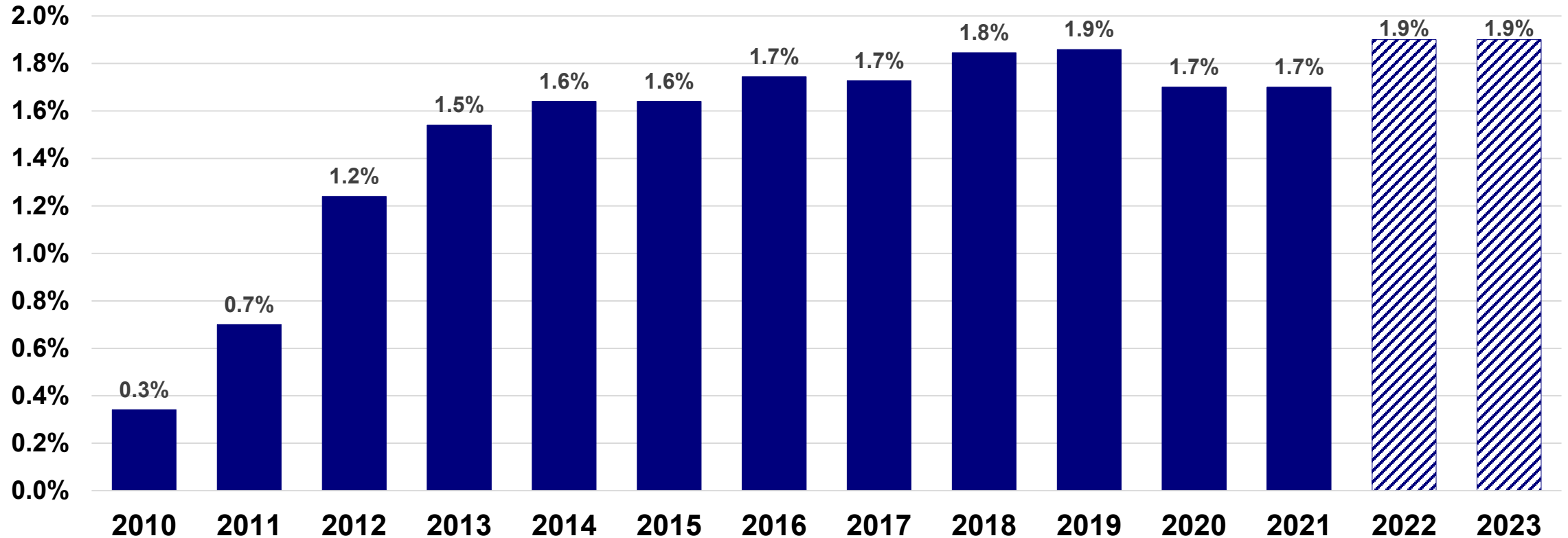


Greater Phoenix has a long history of strong employment growth



Greater Phoenix Population

Source: AOEO; EDPCo



Projected growth approximates 90,000 new residents each year

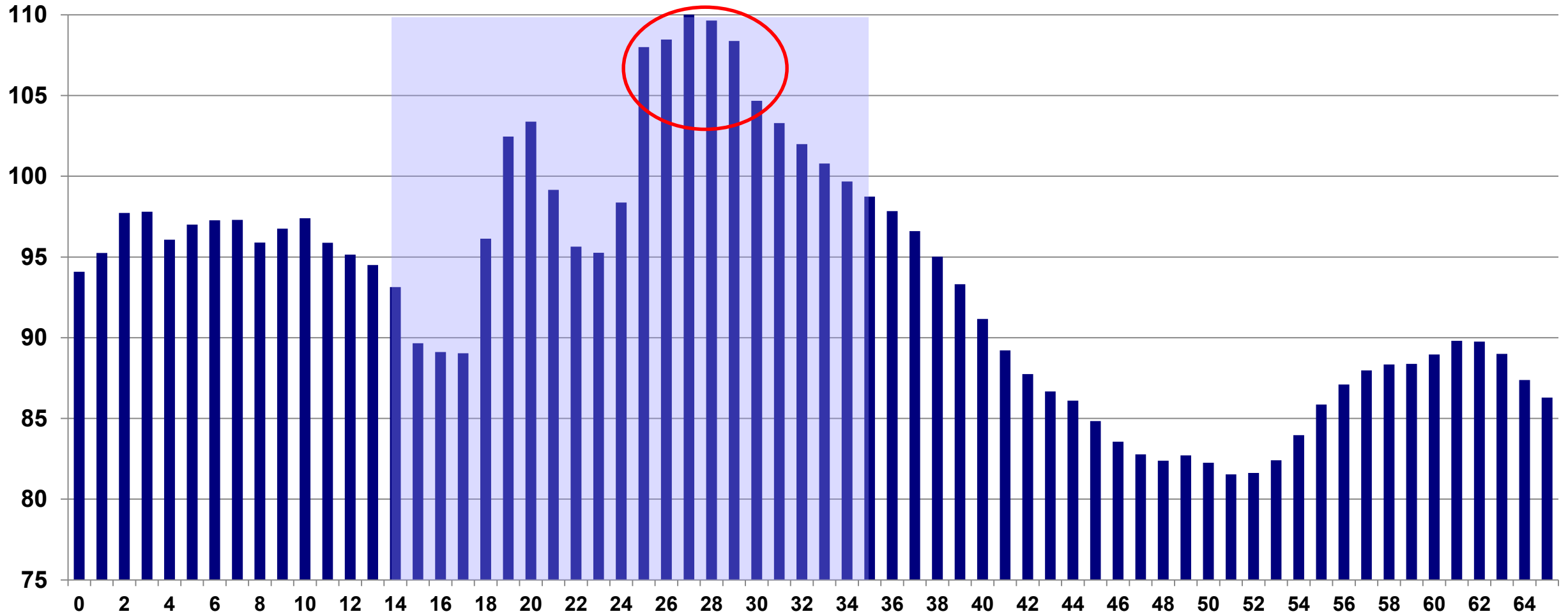


Arizona Population by Age (0-65)

2021

Source: ESRI

(1,000's)

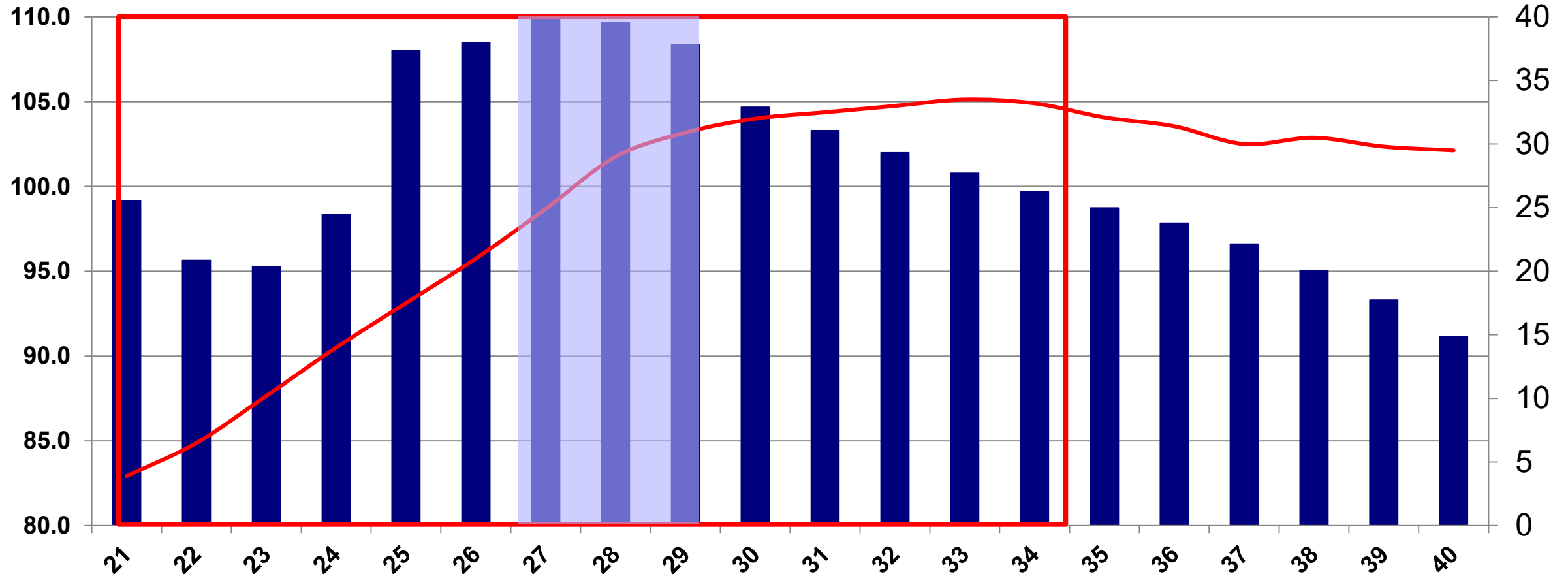


Arizona Number of Persons vs. Home-Purchase Loan Applications 2021

Source: ESRI; CoreLogic; EDPCo

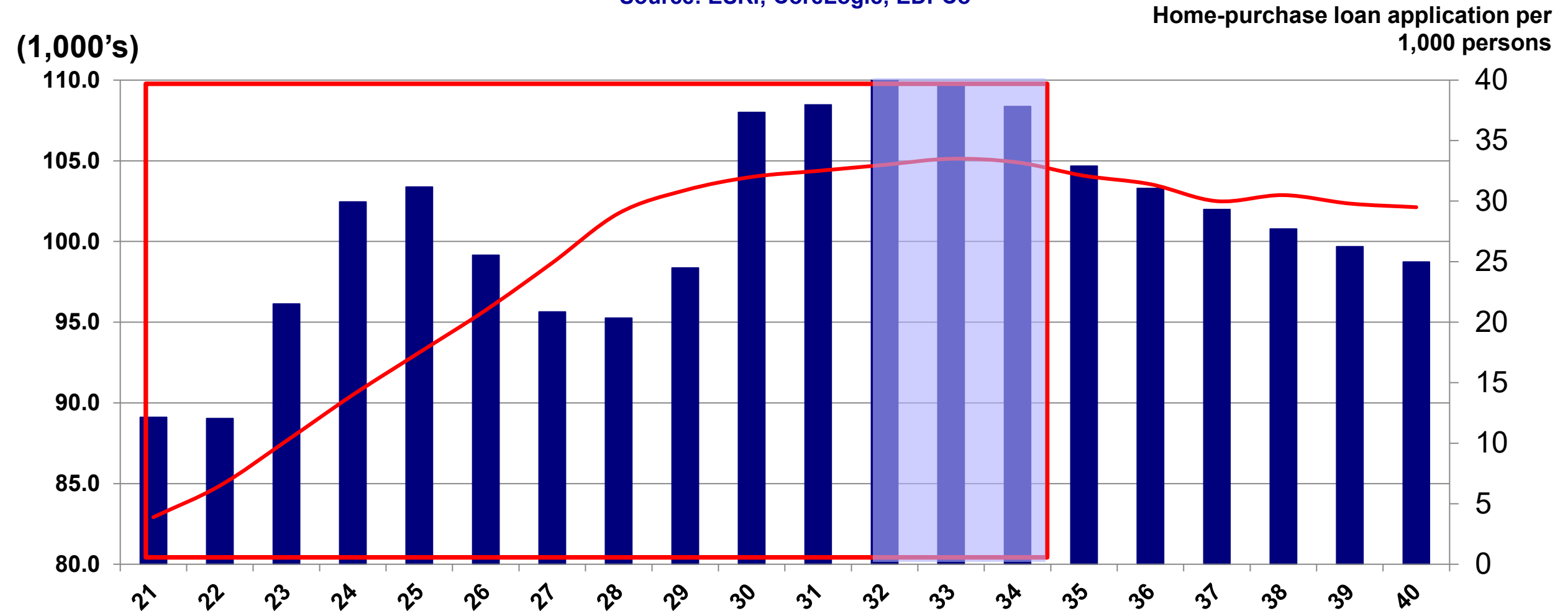
Home-purchase loan application per
1,000 persons

(1,000's)



Arizona Number of Persons vs. Home-Purchase Loan Applications 2026

Source: ESRI; CoreLogic; EDPCo



Arizona

Homeownership Rates by Age Group

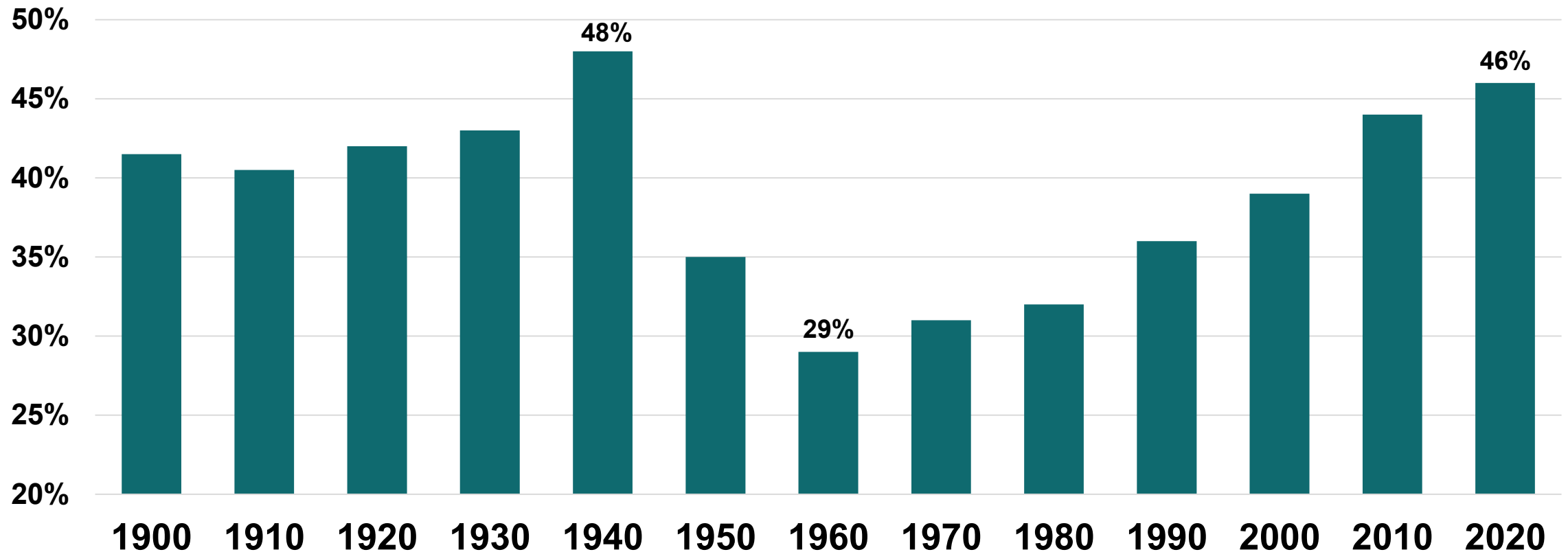
Source: 2019 American Community Survey 1-Year Estimates

Householder Age	% of Total Occupied
15 to 24 years	13.3%
25 to 34 years	<u>39.1%</u>
35 to 44 years	<u>57.5%</u>
45 to 54 years	67.4%
55 to 64 years	75.8%
65 to 74 years	82.2%
75 to 84 years	83.6%
85 years and over	72.9%
Total	65.3%



Adults Living with a Parent 18-to-29-year-olds

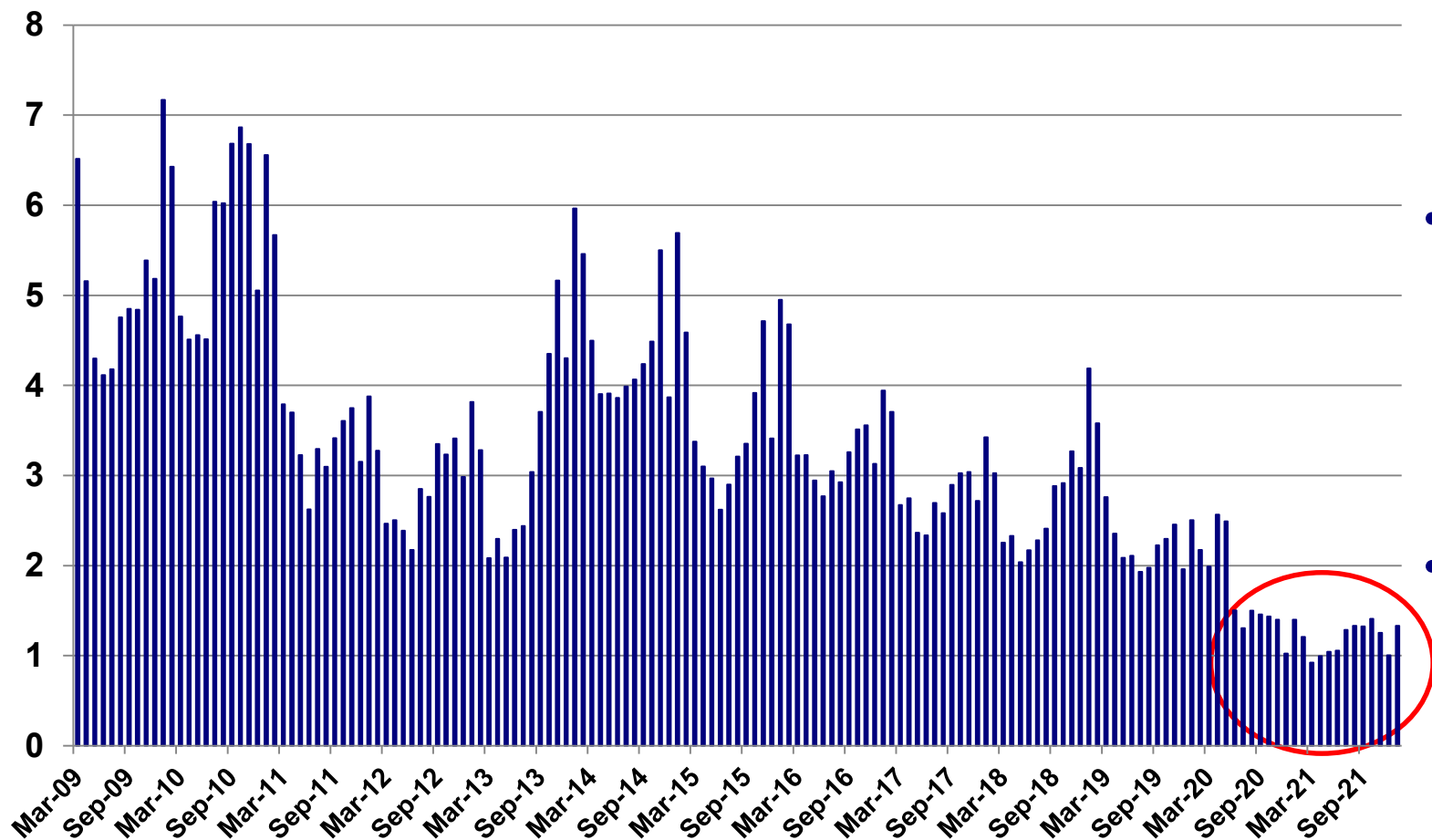
Source: U.S. Census Bureau



Greater Phoenix Months Supply

2009-2022*

Source: ARMLS; Cromford Report; Zonda

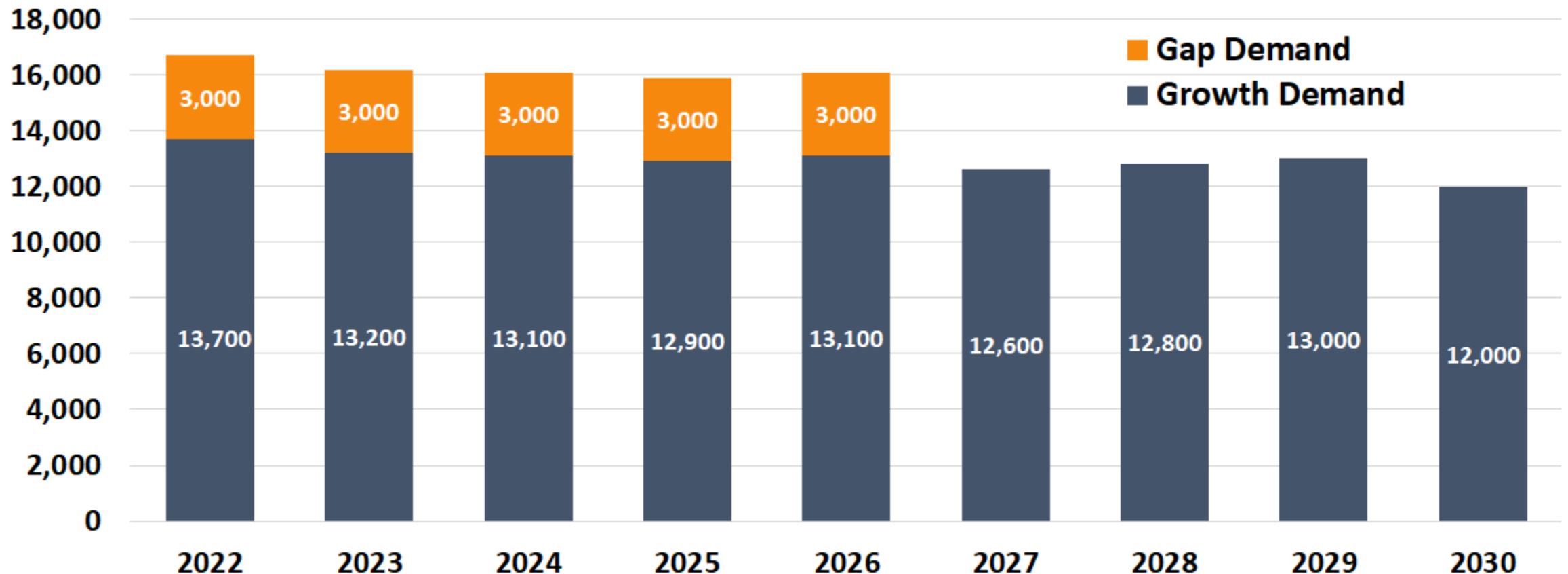


- SF Days of inventory:
 - Long run average 66.0
 - Currently at 18.0
- SF Days of Inventory for homes under \$350,000:
 - Long run average 46.1
 - Currently 5.5
- Inventory of new homes is down from 1,631 just 18 months ago to 542 in December.



Greater Phoenix Apartment Need

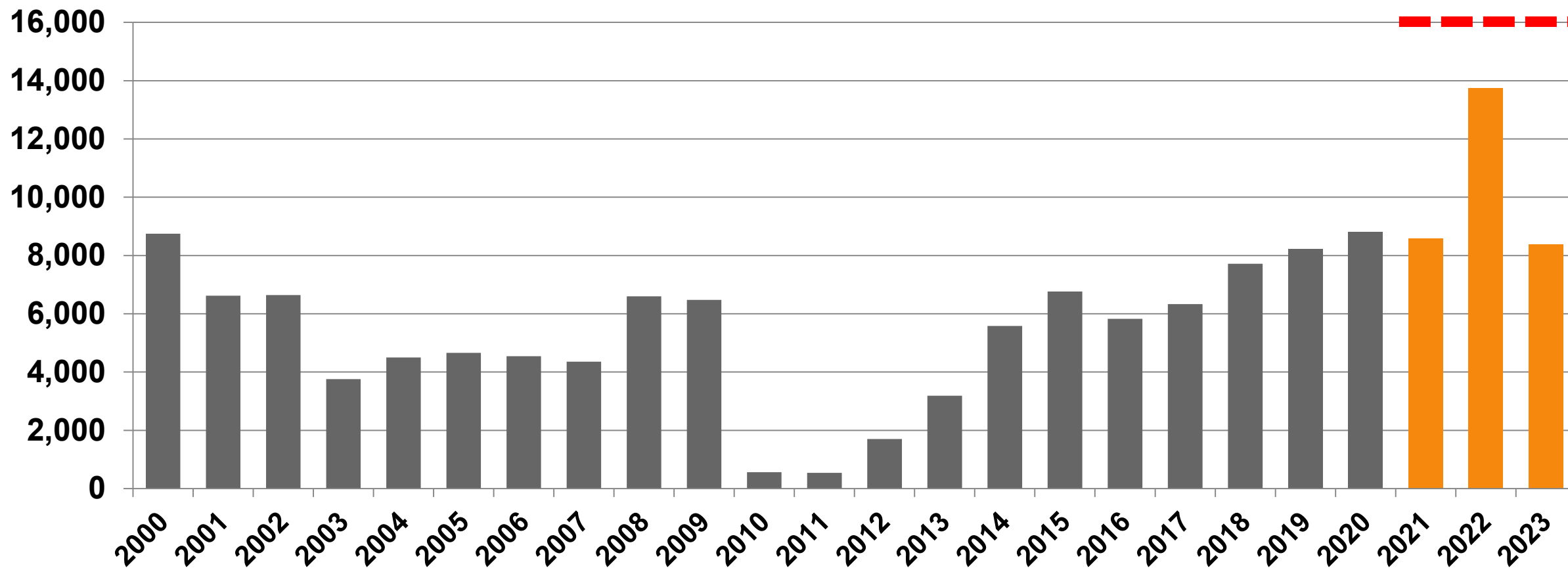
Source: AOEO; Elliott D. Pollack & Company



Apartment Deliveries - Not Keeping Pace

2000-2020; Forecast 2021-2023

Source: RealData; Commercial Brokers; Elliott D. Pollack & Company



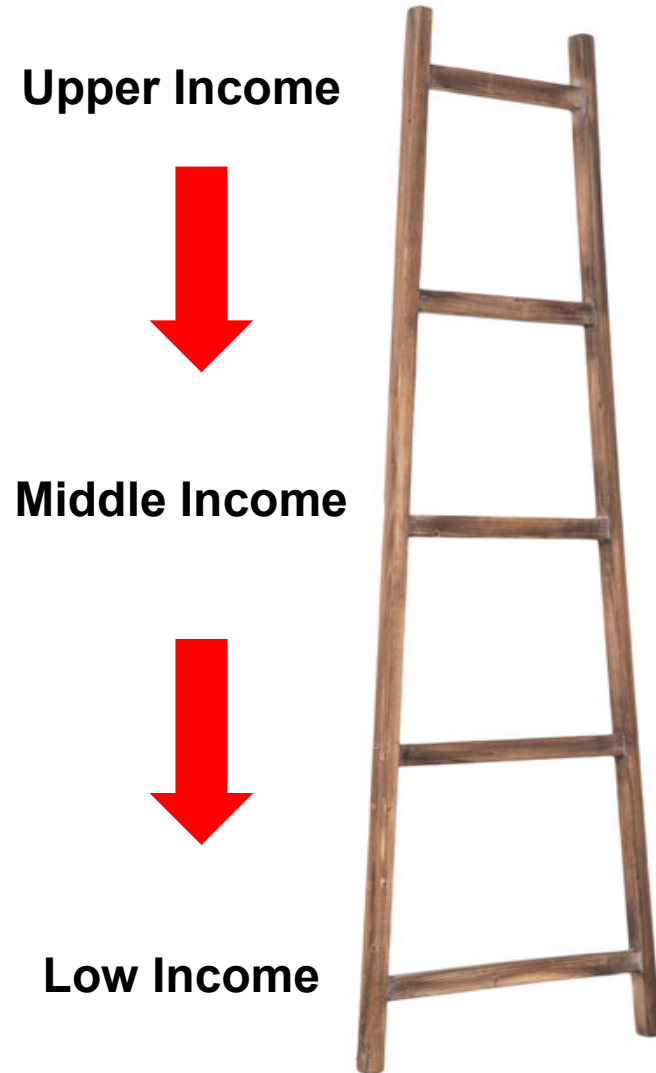
What Do We Need?

- ☑ Entry Level Ownership Housing
- ☑ Move-Up Ownership Housing
- ☑ Market Rate Rental Housing
- ☑ Workforce Level Rental Housing
- ☑ Low-Income Rental Housing
- ☑ Extremely Low-Income Rental Housing

The current shortage is in all housing types, at all price levels, and all income levels.



Housing Affordability Ladder Effect



Prices Are Increasing Rapidly

Source: RealData; The Information Market; BLS

	Latest Data	% Change Y-O-Y
Apts. Rents	\$1,531	29.5%
SF Resale	\$450,000	27.8%
Core-CPI	287.878	6.4%

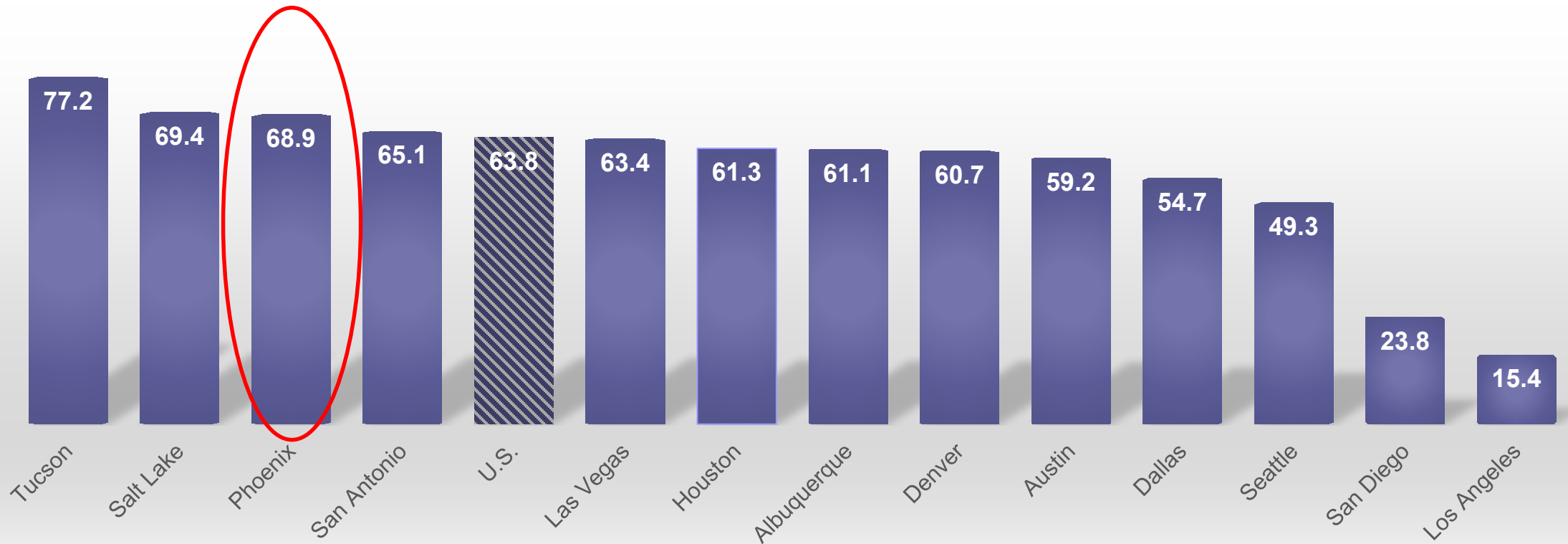
You cannot get this big of a price increase in housing without a significant supply demand imbalance.



Housing Opportunity Index

2015 Q4

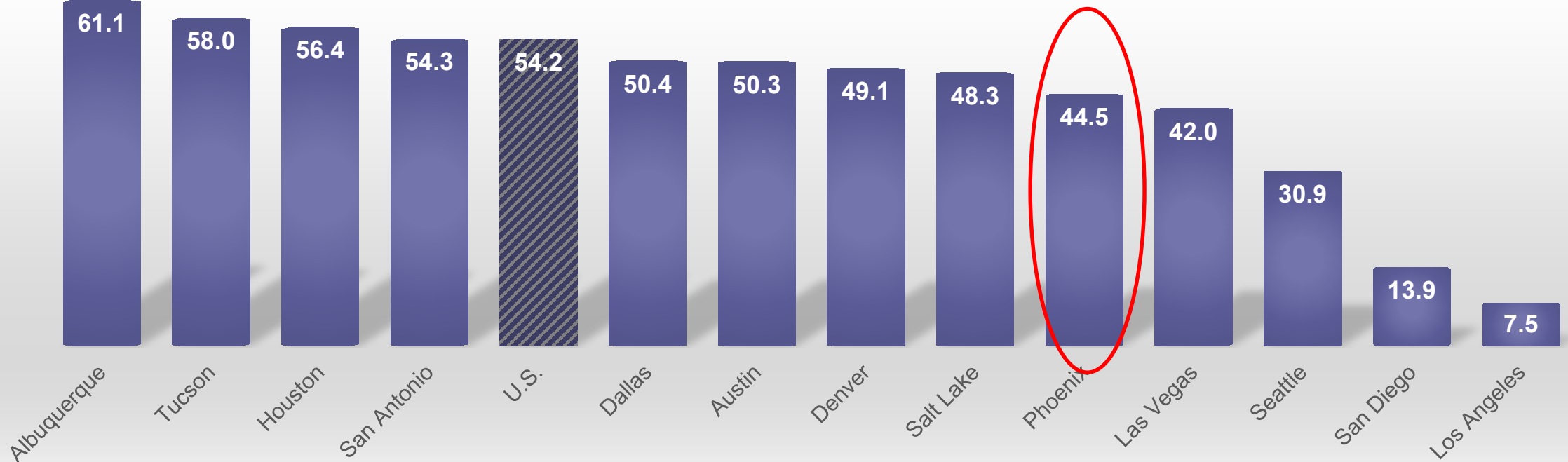
Source: NAHB/Wells Fargo



Housing Opportunity Index

2021 Q4

Source: NAHB/Wells Fargo



What Will Happen if Prices Continue to Rise?

Affordability Ratio w/ Interest Rate 3.5%

Source: Zonda

Metro	Current Affordability Ratio	5%	10%	15%	20%
Austin	63.2%	59.0%	57.0%	55.0%	53.2%
Houston	58.1%	53.9%	52.0%	50.1%	48.2%
San Antonio	58.1%	53.4%	51.3%	49.3%	47.3%
Dallas	55.6%	49.1%	46.7%	45.9%	43.9%
Phoenix	53.9%	49.1%	46.7%	44.7%	42.9%
Denver	46.8%	41.6%	39.3%	37.0%	34.7%
Tucson	31.7%	26.8%	24.5%	22.9%	21.3%



What Will Happen if Prices Continue to Rise?

Affordability Ratio w/ Interest Rate 4.0%

Source: Zonda

Metro	Current Affordability Ratio	5%	10%	15%	20%
Austin	63.2%	56.9%	54.7%	52.9%	51.1%
Houston	58.1%	51.9%	49.8%	47.8%	46.1%
San Antonio	58.1%	51.1%	49.0%	46.9%	44.8%
Dallas	55.6%	48.2%	46.3%	44.3%	42.4%
Phoenix	53.9%	46.5%	44.5%	42.5%	40.6%
Denver	46.8%	39.1%	36.7%	34.3%	31.9%
Tucson	31.7%	24.4%	22.7%	21.1%	19.4%



Interest Rates & Mortgage Rates

Source: Zonda

- A 0.5% change in interest rate translates to 6.5% in home price.
 - \$400,000 home at 3.15% principal and interest payment of \$1,719.
 - \$375,759 home at 3.65% principal and interest payment of \$1,719.
- A 1.0% Change in the Interest rate translates to 13.2% in home price.
 - \$400,000 home at 3.15% principal and interest payment of \$1,719.
 - \$353,618 home at 4.15% principal and interest payment of \$1,719.



Diminishing Housing Affordability in Greater Phoenix

Source: RL Brown, NAHB, Wells Fargo

	Q4	2022 (15%)	2023 (12%)	2024 (10%)	2025 (10%)
Income (5% Growth)	\$79,000	\$82,950	\$87,098	\$91,452	\$96,025
28% of Income	\$1,843	\$1,936	\$2,032	\$2,134	\$2,241
Taxes & Insurance	\$270	\$270	\$270	\$270	\$270
Payment (Principal & Interest)	\$1,573	\$1,666	\$1,762	\$1,864	\$1,971
Affordable Home	\$406,795	\$430,625	\$455,647	\$481,920	\$509,506
% Affordable	47.1%	35.6%	29.0%	25.2%	21.4%

This analysis uses 3.15% mortgage rate



Diminishing Housing Affordability in Greater Phoenix

Source: RL Brown, NAHB, Wells Fargo

	Q4	2022 (15%)	2023 (10%)	2024 (8%)	2025 (6%)
Income (5% Growth)	\$79,000	\$82,950	\$87,098	\$91,452	\$96,025
28% of Income	\$1,843	\$1,936	\$2,032	\$2,134	\$2,241
Taxes & Insurance	\$270	\$270	\$270	\$270	\$270
Payment (Principal & Interest)	\$1,573	\$1,666	\$1,762	\$1,864	\$1,971
Affordable Home	\$366,169	\$387,620	\$410,143	\$433,792	\$458,623
% Affordable	33.4%	24.0%	20.4%	19.0%	18.8%

This analysis uses 4.00% mortgage rate



Greater Phoenix Home Affordability

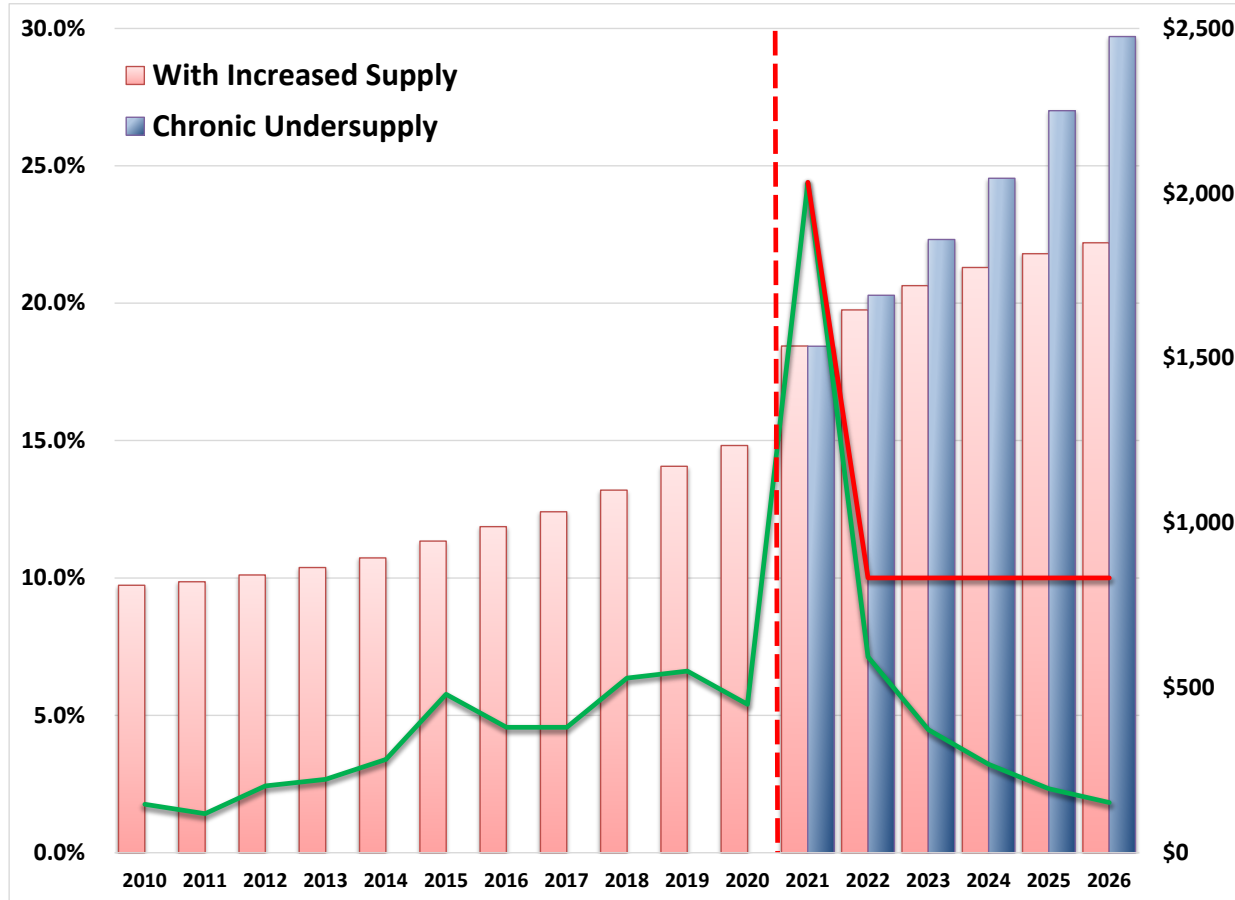
Year	Cost	Interest Rate	Total Monthly Payment	Annual Household Income Needed	Medium Income	HOI Phoenix
2000	\$140,000	8.05%	\$1,034	\$44,312	\$53,100	67.2%
2005	\$255,000	6.21%	\$1,598	\$68,501	\$58,300	33.0%
2010	\$135,000	4.59%	\$723	\$31,002	\$66,600	83.4%
2015	\$220,000	3.98%	\$1,074	\$46,034	\$64,000	68.9%
2020	\$335,000	2.85%	\$1,665	\$71,345	\$77,800	65.7%
2021	\$418,000	2.95%	\$1,932	\$82,809	\$79,000	44.5%
% Change	198.6%	-60.7%	86.9%	86.9%	48.8%	-33.8%

Total Payment: Principal, Interest, Property Tax and Insurance; LTV 90%

*Source: Freddie Mac, NAHAB



Greater Phoenix Rent Affordability



With Increased Supply				Chronic Under Supply		
Year	Avg Rent	% Chg	Income Required	Avg Rent	% Chg	Income Required
2017	\$1,034	4.6%	\$41,360			
2018	\$1,100	6.4%	\$44,000			
2019	\$1,172	6.6%	\$46,880			
2020	\$1,235	5.4%	\$49,400			
2021	\$1,537	24.4%	\$61,480	\$1,537	24.4%	\$61,480
2022	\$1,646	7.1%	\$65,840	\$1,690	10.0%	\$67,630
2023	\$1,720	4.5%	\$68,800	\$1,860	10.0%	\$74,400
2024	\$1,775	3.2%	\$71,000	\$2,045	10.0%	\$81,830
2025	\$1,817	2.3%	\$72,680	\$2,250	10.0%	\$90,010
2026	\$1,850	1.8%	\$74,000	\$2,475	10.0%	\$99,010



Affordability by Occupation

2020	Median Home Price	Annual Salary Needed	2-Bedroom Rent	Annual Salary Needed	1-Bedroom Rent	Annual Salary Needed				High School Teacher		Elementary/Middle School Teacher	Construction Worker	Waitperson	Retail Worker
							Nurse	Police Officer	Firefighter		Chef				
							\$80,609	\$73,786	\$54,900	\$54,186	\$53,071	\$47,799	\$47,034	\$34,940	\$26,843
Avondale	\$285,000	\$60,900	\$1,340	\$53,600	\$1,152	\$46,100									
Chandler	\$381,500	\$81,500	\$1,420	\$56,800	\$1,251	\$50,000									
Gilbert	\$395,000	\$84,300	\$1,395	\$55,800	\$1,201	\$48,000									
Glendale	\$297,000	\$63,400	\$1,144	\$45,800	\$905	\$36,200									
Goodyear	\$324,780	\$69,400	\$1,477	\$59,100	\$1,164	\$46,600									
Mesa	\$315,000	\$67,300	\$1,200	\$48,000	\$1,046	\$41,800									
Peoria	\$346,613	\$74,000	\$1,302	\$52,100	\$1,250	\$50,000									
Phoenix	\$310,000	\$66,200	\$1,135	\$45,400	\$929	\$37,200									
Scottsdale	\$570,901	\$121,900	\$1,465	\$58,600	\$1,235	\$49,400									
Surprise	\$303,495	\$64,800	\$1,428	\$57,100	\$1,219	\$48,800									
Tempe	\$337,000	\$72,000	\$1,313	\$52,500	\$1,099	\$44,000									
2021		Annual Salary Needed	2-Bedroom Rent	Annual Salary Needed	1-Bedroom Rent	Annual Salary Needed				High School Teacher		Elementary/Middle School Teacher	Construction Worker	Waitperson	Retail Worker
							Nurse	Police Officer	Firefighter		Chef				
							\$83,833	\$76,737	\$57,096	\$56,353	\$55,194	\$49,711	\$48,915	\$36,338	\$27,917
Avondale	\$378,500	\$80,800	\$1,724	\$69,000	\$1,482	\$59,300									
Chandler	\$465,000	\$99,300	\$1,810	\$72,400	\$1,594	\$63,800									
Gilbert	\$515,000	\$110,000	\$1,765	\$70,600	\$1,519	\$60,800									
Glendale	\$385,000	\$82,200	\$1,430	\$57,200	\$1,132	\$45,300									
Goodyear	\$438,600	\$93,700	\$1,787	\$71,500	\$1,409	\$56,400									
Mesa	\$405,000	\$86,500	\$1,496	\$59,800	\$1,304	\$52,200									
Peoria	\$440,000	\$94,000	\$1,638	\$65,500	\$1,573	\$62,900									
Phoenix	\$380,000	\$81,100	\$1,394	\$55,800	\$1,142	\$45,700									
Scottsdale	\$717,500	\$153,200	\$1,870	\$74,800	\$1,576	\$63,000									
Surprise	\$410,000	\$87,600	\$1,764	\$70,600	\$1,506	\$60,200									
Tempe	\$431,500	\$92,100	\$1,665	\$66,600	\$1,393	\$55,700									

Buy
Rent 2BD
Rent 1BD
Neither

Source:
Cromford Report; AZ
Office of Economic
Opportunity; Bureau of
Labor Statistics;
ApartmentList.com; Elliott
D. Pollack & Company

What Happens if the Affordability Situation Continues to Deteriorate?

(The Unintended Consequences of Ignoring Market Demand)

- Fewer potential buyers can afford the median price home
- Fewer people will be owners / More people will be renters
- More rental of single family units as families double up
- More Millennials and Gen Z's living with parents / More parents living with kids
- Smaller homes / More density
- Fewer workforce housing units - Where do essential workers live? (police, fire, teachers, nurses)
- C and D apartment units get less maintenance
- More homelessness
- A worsening economic development picture as the ability to draw in employees diminishes
- Upward pressure on wages and city budgets
- Slower growth for the economy as a whole and less real income growth



Top 7 Things That Can Be Done to End The Housing Shortage



Top 7 Things That Can Be Done to End The Housing Shortage

1. **Build more housing units**
2. **Build more housing units**
3. **Build more housing units**
4. **Build more housing units**
5. **Build more housing units**
6. **Build more housing units**
7. **Build more housing units**



Conclusions – Do the Math

- Net population growth is 80,000 to 90,000 new people a year.
- This creates total housing demand of about 35,000 new units (owner and renter) per year just to meet population growth.
- Over and above the amount needed for new population each year, we need additional units to fix the imbalance of supply and demand:
 - **20,000-25,000 single family for-sale units**
 - **15,000 rental units**
 - **2,000-2,500 units of new home inventory**
 - **Replacing demolished units**
 - **Pent up demand from Millennial and Gen Z adults leaving home and forming new households**
- **To get supply and demand back into balance over the next 5 years we need an elevated total of about 42,000 units (owner and renter) per year.**
- The only answer to the housing shortage is more supply.



Key Takeaways

1. Affordability has fallen and is about to plummet.
2. There is virtually no vacancy or available supply.
3. Supply is not keeping pace with demand.
4. Our success in attracting jobs and people has not been matched with a sufficient housing supply that new employees need.
5. A continued shortage of housing drives up costs and threatens economic development efforts (jobs & real income growth).

