

Current State of the Greater Phoenix Housing Market

A Supply & Demand Analysis

GPEC

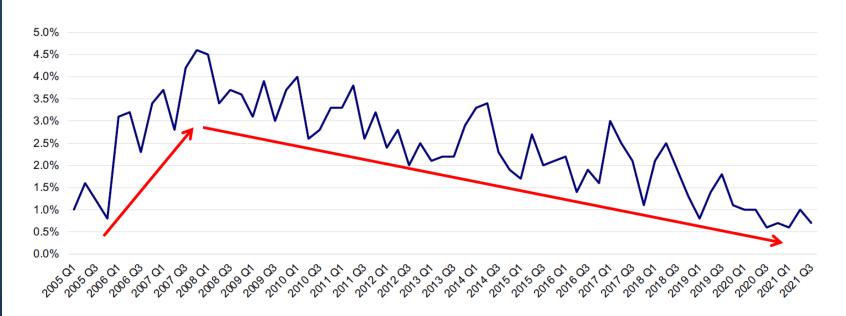
February 16th, 2022

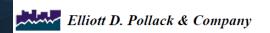
By HomeArizona



AZ Homeowner Vacancy Rate

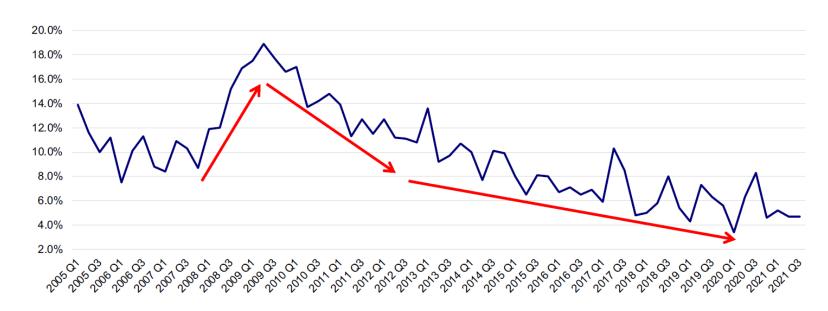
Source: U.S. Census Bureau





AZ Rental Vacancy Rate

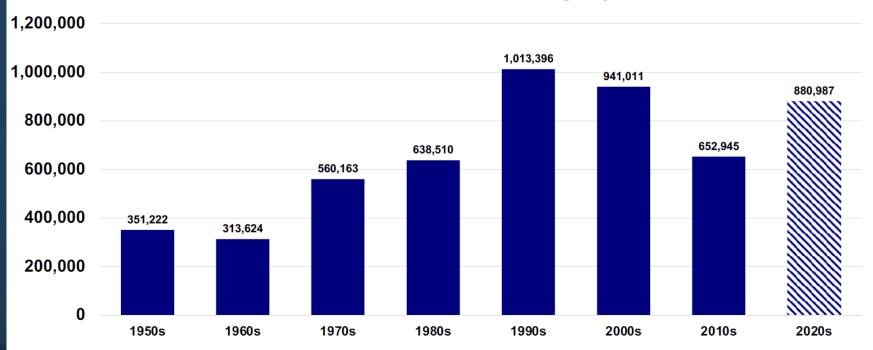
Source: U.S. Census Bureau





Greater Phoenix Population Growth by Decade

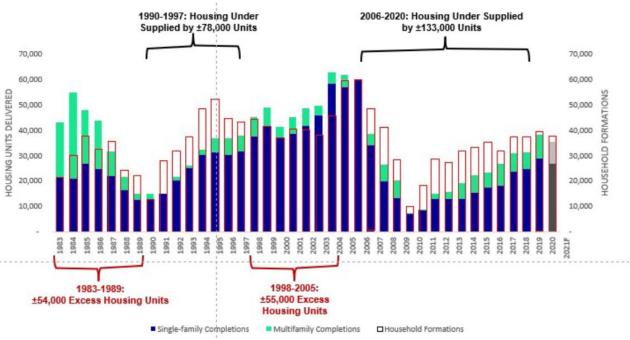
Source: U.S. Census; UofA Forecasting Project





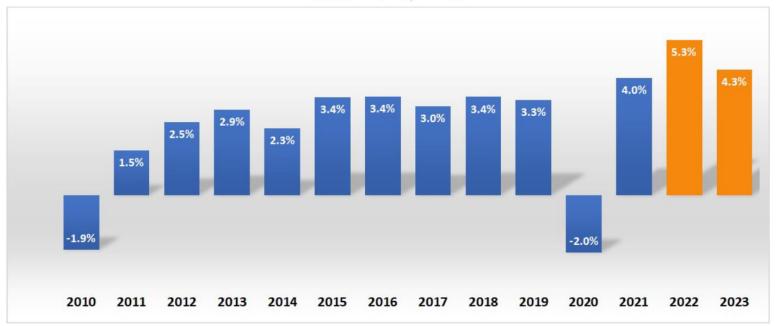
Household Formations Outpacing Single and Multifamily Additions

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

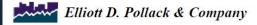


Greater Phoenix Employment

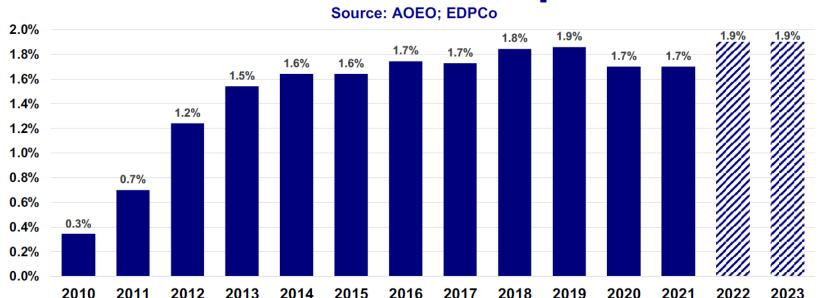
Source: AOEO; EDPCo



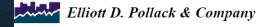
Greater Phoenix has a long history of strong employment growth



Greater Phoenix Population

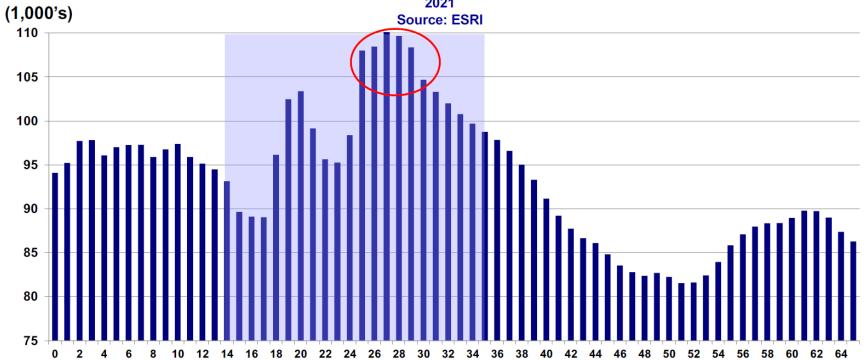


Projected growth approximates 90,000 new residents each year



Arizona Population by Age (0-65)

2021





Elliott D. Pollack & Company

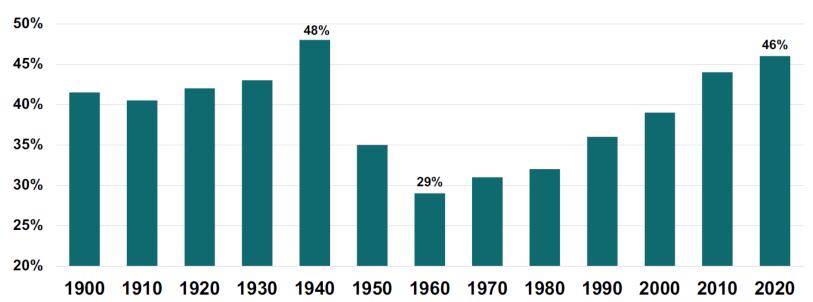
Arizona Homeownership Rates by Age Group

Source: 2019 American Community Survey 1-Year Estimates

Householder Age	% of Total Occupied
15 to 24 years	13.3%
25 to 34 years	39.1%
35 to 44 years	57.5%
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

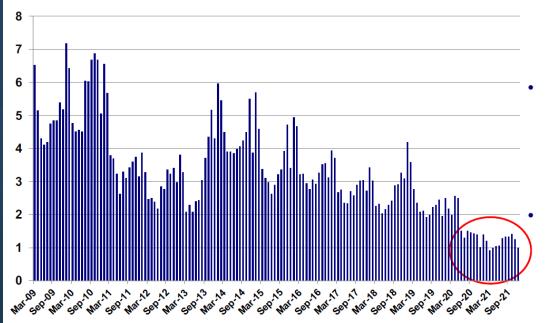




Greater Phoenix Months Supply

2009-2021

Source: ARMLS; Cromford Report; Zonda



- Days of inventory:
 - Long run average 68.8
 - Currently at 23.3
 - Days of Inventory for homes under \$350,000:
 - Long run average 50.9
 - Currently 10.3

Inventory of new homes is down from 1,631 just 18 months ago to 542 in December.

Prices Are Increasing Rapidly

Source: RealData; The Information Market; BLS

	Latest Data	% Change Y-O-Y
Apts. Rents	\$1,531	29.5%
SF Resale	\$430,000	28.4%
Core-CPI	286.431	6.0%

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



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

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

Affordability by Occupation

2020	Median Home	1.7	2- Bedroom	•	1- Bedroom	Annual Salary		Police		High School			Construction		Retail
	Price	Needed	Rent	Needed	Rent	Needed	Nurse	_	Firefighter		Chef				Worker
							\$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		- 1							
Tempe	\$337,000	\$72,000	\$1,313	\$52,500	\$1,099	\$44,000									
2021		Annual Salary	2- Bedroom	Annual	1- Bedroom	Annual Salary		Police		High School		Elementary/ Middle	Construction		Retail
		Needed	Rent	Needed	Rent	Needed	Nurse		Firefighter		Chef			Waitperson	Worker
				.,			\$83,833	\$76,737		\$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	1								
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									

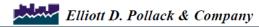
Buy
Rent 2BD
Rent 1BD
Neither

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



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

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