

PHOENIX MSA | MULTIFAMILY | Q3 2022 REPORT

PHOENIX MSA OVERVIEW	01
PHOENIX MSA - PER CITY ANALYSIS	02
MULTIFAMILY PROPERTY ANALYSIS: 100+ & 10-99 UNITS	03
COMPLETED CONSTRUCTION & PLANNED PROJECTS	04
ABI GEONEWS: PHOENIX MSA - SELECT NEWS	05
ABInsight。 A Tale of two stories	06-08
ABI COMPARATIVE MARKET REVIEW: Q3 2022	9

10+ UNIT PROPERTIES	Q3 2022	INCREASE/DECREASE	Q3 2021
Total Sales Volume	\$3.1B	-32.0%	\$4.60B
□ Price/Unit	\$312,107	+12.1%	\$278,307
< ≃ Price/SF	\$378.80	+14.8%	\$330.07
> < Year Built	1987	+3 Yrs	1984
Average Rent	\$1,704	+10.7%	\$1,539
Occupancy Rate	94.5%	-1.8%	96.3%
Units Delivered	2,752	-13.0%	3,165

ABI GEONEWS: PHOENIX MSA - SELECT NEWS

CONTINUED ON PAGE 05



Industrial boom in Deer Valley: Suppliers drive growth in Phoenix



Semiconductor supplier plant announced for growing industrial city in Arizona



Queen Creek looks to rezone another 1,600 acres for industrial growth near LGES battery plant

4,946,145 †

POPULATION

021 ACS 1-YEAR ESTIMATE



4.1%

Q-O-Q AS OF SEPT 2022 - BLS

Y-O-Y AS OF SEPT 2022 - BLS

\$75,731

\$38,713



MEDIAN HH INCOME 2021 ACS 1-YEAR ESTIMATE PER CAPITA INCOME 2021 ACS 1-YEAR ESTIMATE

38,839



389,310



UNDER CONSTRUCTION
ABI RESEARCH, COSTAR; YARDI

TOTAL INVENTORY ABI RESEARCH, COSTAR; YARDI

PHOENIX MSA - PER CITY ANALYSIS

PHO	OFNIX MSA	QUICK STATS UNE	MPLOYMEN	IT RATE MEDIAN HH	INCOME PER CAP	ITA INCOME T	OTAL INVENTORY	UNDER CONSTRUCTION
	Milio	Phoenix MSA	3.5%			8,713	357,288	38,839
		Phoenix	3.6%			5,073	150,590	12,601
		Mesa	3.5%	\$69,2	366 \$3	5,439	41,667	3,138
		Scottsdale	3.0%	\$99,0	97 \$7	4,952	29,750	4,751
		Tempe	3.3%	\$68,6	62 \$3	9,225	38,384	3,663
		Glendale	3.7%	\$62,9	10 \$2	8,898	26,183	3,138
	PHOENIX	MSA - PER CITY AN <i>i</i>	ALYSIS	Phoenix	Mesa	Scottsdale	Tempe	Glendale
ATS	_	Average Rent (Q	3 2022)	\$1,579	\$1,563	\$2,093	\$1,914	\$1,522
RENT & OCCUPANCY STATS		% Change	(y-o-y)	+12.0%	+11.7%	+7.6%	+9.9%	+13.6%
Occupancy Rate (Q3 2022)		3 2022)	94.2%	94.4%	94.1%	94.7%	94.0%	
% 0C		% Change	(y-o-y)	-1.9%	-2.5%	-2.1%	-1.7%	-2.0%
RENT	Un	its Delivered (Q3 202	2, 50+)	834	0	282	318	0
	Total Sa	ales Volume (Q3 2022	2, 100+)	\$960,860,000	\$196,650,000	\$103,250,000	\$599,600,000	\$278,925,212
+	Total Sa	ales Volume (Q3 2021	, 100+)	\$1,082,664,000	\$293,425,000	\$817,100,000	\$702,700,000	\$305,975,000
A (100+)		% Change	(y-o-y)	-11.3%	-33.0%	-87.4%	-14.7%	-8.8%
SALES DATA		Avg P/U (Q3 2022	, 100+)	\$285,122	\$244,590	\$473,624	\$347,393	\$302,194
SALE		Avg P/U (Q3 2021	, 100+)	\$248,488	\$218,648	\$412,052	\$345,817	\$212,483
	_	% Change	(y-o-y)	+14.7%	+11.9%	+14.9%	+0.5%	+42.2%
	Total Sal	les Volume (Q3 2022,	10-99)	\$145,550,000	\$77,951,778	\$5,500,000	\$38,650,000	\$35,430,000
(61	Total Sal	les Volume (Q3 2021,	10-99)	\$301,781,988	\$88,147,500	\$40,050,000	\$19,200,000	\$21,435,000
SALES DATA (10-99)		% Change	(y-o-y)	-51.8%	-11.6%	-86.3%	+101.3%	+65.3%
DATA		Avg P/U (Q3 2022,	10-99)	\$274,623	\$288,710	\$458,333	\$415,591	\$224,241
SALES		Avg P/U (Q3 2021,	10-99)	\$209,862	\$223,158	\$370,833	\$200,000	\$132,315
	_	% Change	(y-o-y)	+30.9%	+29.4%	+23.6%	+107.8%	+69.5%

100+ UNIT MULTIFAMILY PROPERTY ANALYSIS

Q3 2022	INCREASE/DECREASE	Q3 2021
\$2.80B	-31.8%	\$4.11B
\$316,021	+8.9%	\$290,327
\$389.47	+13.8%	\$342.29
1993	-1 Yr	1994
	\$2.80B \$316,021 \$389.47	\$2.80B -31.8% \$316,021 +8.9% \$389.47 +13.8%

TOP 3 TRANSACTIONS BY PRICE/UNIT (100+)



Skywater at Town Lake

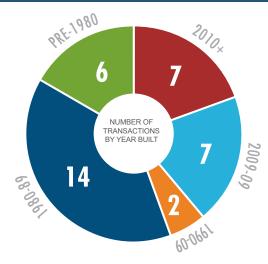
Tempe, 328 Units | \$160,000,000 \$487,805/Unit | \$496.46/SF | Built 2015

Luxe Scottsdale

Scottsdale, 218 Units | \$130,250,000 \$473,624/Unit | \$545.49/SF | Built 2015

Bethany Glen

Glendale, 150 Units | \$68,325,212 \$455,501/Unit | \$604.01/SF | Built 1971



Q3 2022 Transactions by Year Built

	# of Transactions	Avg Price/Unit	Avg Price/SF
2010+	7	\$404K	\$444
2000-09	7	\$350K	\$384
1990-99	2	\$396K	\$415
1980-89	14	\$260K	\$369
Pre-1980	6	\$269K	\$355

10 - 99 UNIT MULTIFAMILY PROPERTY ANALYSIS

		Q3 2022	INCREASE/DECREASE	Q3 2021
Total Sa	les Volume	\$324M	-33.9%	\$490M
Ш	Price/Unit	\$281,925	+32.0%	\$213,536
E R A	Price/SF	\$306.31	+20.6%	\$254.05
> <	Year Built	1981	+7 Yrs	1974

TOP 3 TRANSACTIONS BY PRICE/UNIT (10-99)



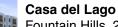
The Hera

Phoenix, 20 Units | \$13,700,000 \$658,000/Unit | \$394.99/SF | Built 2022

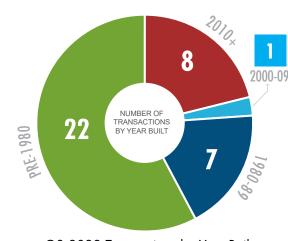


Dolce Villagio

Tempe, 37 Units | \$21,250,000 \$574,324/Unit | \$407.42/SF | Built 2007



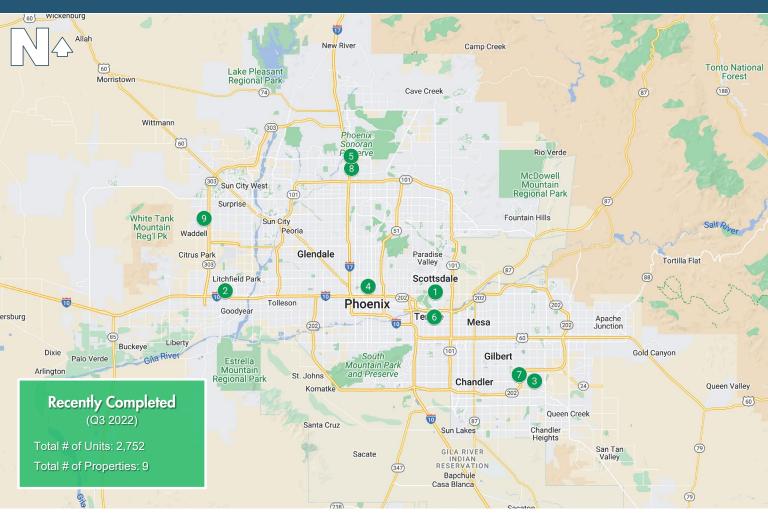
Fountain Hills, 23 Units | \$11,350,000 \$493,478/Unit | \$355.35/SF | Built 2022



Q3 2022 Transactions by Year Built

	# of Transactions	Avg Price/Unit	Avg Price/SF
2010+	8	\$398K	\$304
2000-09	1	\$574K	\$407
1990-99			
1980-89	7	\$236K	\$301
Pre-1980	22	\$238K	\$299

COMPLETED CONSTRUCTION



PHOENIX MULTIFAMILY CONSTRUCTION PIPELINE Q3 2022

12,000 11,000 10,000 9,315 9.246 8,940 9,022 9.000 8,118 7,912 7,785 8,000 6,902 7.000 6,000 5.431 5,003 5.000 4.527 3,683 4,000 3.569 3 281 2,751 3.000 2,593 2,000 1,668 1,000 615 0 . 2022 100 2000 2008 202

* Project Units Delivered. Project units delivered is based on when the total project is completed, not as individual buildings/units are delivered

TOTAL UNIT INVENTORY

10+ UNIT PROPERTIES: **389,968** 50+ UNIT PROPERTIES: **357,288**



TOTAL # OF PROPERTIES: 110

PRE-LEASE ABSORPTION RATE

ABI GEONEWS: PHOENIX MSA - SELECT NEWS





City of Phoenix

GPEC: Valley could add 5,400 manufacturing jobs in next four



BNSF Railway Co.

New documents reveal freight giant BNSF Railway Co.'s plans for regional industrial rail hub



Northrop Grumman

Hundreds of jobs expected as Northrop Grumman expands its Arizona satellite-manufacturing plant



8

City of Phoenix

Solvay Corp. Inc.

LG Energy Solution

city in Arizona

Queen Creek looks to rezone another 1,600 acres for industrial growth near LGES battery plant

Semiconductor supplier plant announced for growing industrial



Williams-Sonoma Inc.

Global home goods company signs major industrial lease in Glendale, could hire 3,000 workers



City of Phoenix

Industrial boom in Deer Valley: Suppliers drive growth in Phoenix



City of Phoenix

Phoenix looks to redevelop downtown parking lot into potential high-rise



Lucid Motors

Casa Grande moves forward with Lucid Group development agreement

\$1.4B LG battery plant that could become

Queen Creek's largest employer gets go-ahead



Wilshire Capital / TLG Investment Partners

\$750 million redevelopment of Metrocenter in Phoenix planned to start next year



KORE Power

First look: KORE Power unveils renderings of giant West Valley battery facility



A TALE OF TWO STORIES: STRONG EMPLOYMENT AND MULTIFAMILY FUNDAMENTALS VS. INFLATION AND THE FED

he US economy remains resilient, despite economic uncertainty and geopolitical risk weighing heavily on investment activity. While we foresee continued short-term economic headwinds, our long-term outlook for the multifamily industry remains strong. Lackluster construction after the previous economic crisis coupled with favorable demographic growth, still provides an exceptional landscape for multifamily investment opportunities.

In this note, we examine how global economic events and uncertainty have impacted the multifamily market, and how these events will define both economic policy and investment activity. Global geopolitical risks have soared since Russia's invasion of Ukraine. Investors, market participants, and policymakers expect that the war will exert a drag on the economy, while driving inflation higher,

as uncertainty, and risk, increases the probability of a protracted decline in economic output.

Central bank officials highlight geopolitical uncertainties as a salient risk to the US economy; while a report by the International Monetary Fund (IMF), and the European Central Bank (ECB) ranks geopolitical risk ahead of both political and economic uncertainty. Contrary to this, the Federal Reserve (Fed) suggests that the rise in geopolitical risks seen since the Russian invasion of Ukraine will have non-negligible macroeconomic effects in 2023. The Fed highlights pre-existing inflationary pressures as the main drag on the economy in 2022 and the key determinant for monetary policy.

There's been a seismic shift in federal macroeconomic policy over

$ABInsight_{\circ}$ a tale of two stories:

the previous 12-month period, which has substantial ramifications for the multifamily industry. Although the Fed manages all aspects of macroeconomic policy, the Fed acts independently when determining monetary policy, which addresses interest rates and the supply of money; while fiscal policy is policy enacted by the legislative branch of government (Congress), which addresses both taxation and government spending. The goal of macroeconomic policy is to provide a stable economic environment that is conducive to fostering strong and sustainable economic growth, on which the creation of jobs, wealth and improved living standards depend.

The importance of these distinct branches of the federal government cannot be understated. Although the two federal branches act independently, the management of both fiscal and monetary policy is integral to the operation of the economy.

Historically low interest rates, subdued construction, and easy money (Quantitative Easing) over the previous 15-year period, spurred investment activity across all asset classes and markets throughout the commercial real estate (CRE) industry. In the wake of the Great Recession (08-10) the Fed implemented these loose monetary policies, to combat negative inflation, which fostered a decade-long "risk-on" investment appetite that came to a head in 2020/2021.

Inflation is surging at the fastest rate in more than four decades, with the Consumer Price Index (CPI) up 8.2% over the past year, while the Personal Consumption Expenditure (PCE) price index up 6.2% at the end of Q3 2022. The headline inflation rate broke the congressionally-mandated two-percent threshold in April 2021, and has remained above that threshold since. To combat inflation, the Fed began unwinding its balance sheet, and increasing interest rates in March 2022; while Congress passed the Infrastructure Investment and Jobs Act Bill (Infrastructure Bill), in November 2021. The bill outlines a plan to invest \$1.2 trillion over the next 5 years into key infrastructure projects across the nation. It is estimated that the Bill will create 1.2 million jobs per year.

In March 2022, the Fed began unwinding its \$8.9 trillion balance sheet after years of "easy money", while increasing interest rates to combat inflation. At the end of Q3 2022 the Fed has reduced its balance sheet by roughly \$140 billion since Q1 2022. During this period, the Fed also increased the 'effective' Federal Funds Rate (EFFR) 300-basis points, from 0.0% - 0.25% to 3.0% - 3.25%. This represents the fastest rate of interest rate hikes in the history of the Fed. Interest rate hikes are a key tool of monetary policy as the increase in rates suppresses demand by increasing borrowing costs. A wave of refinances in 2020 and 2021 should help minimize the damage these interest rate hikes have on the broader economy.

ECONOMIC OUTLOOK

The Federal Reserve (Fed) will continue to increase interest rates until the headline inflation rate is subdued. Inflation reached a 40-year high at the end of Q3 2022 despite rates increasing at the fastest pace on record. Although inflation is the key determinant of monetary policy, it is only one aspect of the economy that the Fed reviews when making decisions about rates. The Fed looks at a broad array of economic indicators to see how the market responds to rate hikes. So far, the market has been able to absorb rate hikes, but the question remains; at what point does the Fed stop rate hikes and let the market adjust?

As is the case with inflation at large, trends are moving in a favorable direction, but the pace of change is likely too slow for the Fed to take its foot off the brake. The Fed Funds Rate was 3.0% - 3.25% at the end of Q3 2022. Based upon current market conditions, we expect rates to peak at approximately 4.5% - 5.0% by Q1 2023. A rate not seen since early 2008. The Fed funds rate matters because it has a ripple effect on every aspect of consumers' financial lives, from how much they're charged to borrow, to how much they'll earn in interest. Rising interest rates are meant to suppress economic growth, which while tepid, remains buoyant. Although the economy contracted in the first half of this year, it increased at an annual rate of 3.2% in Q3 2022 (BEA). Additionally, the unemployment rate also reached a 50-year low at the end of Q3, an encouraging sign for both investors, and policy makers. Investment opportunities still exist, despite a glut of new builds over the previous 12-month period. Investors need to review the long-term trajectory of markets when making investment decisions. Although interest rates may be of concern, the long-term benefit of rate hikes to subdue inflation far outweighs the short-term ramifications.

TRAJECTORY OF NATIONAL ECONOMICS AND THE FUNDAMENTALS OF THE PHOENIX MSA:

Inflation remained a leading concern across the nation; however, the impact of inflation varies across the nation. Nationwide, inflation increased at an annual rate of 8.2% at the end of Q3 2022. The Phoenix Metropolitan area recorded a 13% increase in prices compared to the same period last year. According to the Federal Bureau of Labor Statistics (BLS), the Phoenix-Mesa-Scottsdale MSA had the highest inflation rate in the nation, with prices increasing 0.7% over the previous quarter alone. The metro with the second highest inflation rate – Atlanta, reported an 11.3% increase in prices over the previous 12-month period, or 1.3% less than the Phoenix area. The other metropolitan areas that recorded high inflation; includes, Tampa, Miami, and Baltimore.

The Phoenix MSA remains entrenched as the nation's inflationary hot spot, though consumer prices eased both locally and nationally last month. Inflationary pressure has been broad but rising housing costs have been the primary cause of price increases. Relaxed COVID-19 policies, high living standards, and comparatively low housing costs led to a surge in both demand and population over

$ABInsight_{\circ}$ a tale of two stories:

the previous 24-month period. The Phoenix MSA led the nation in net migration as high-paid workers from the coastal states of California, Oregon, and Washington were drawn to the city.

To combat persistent, and wide-spread inflation, the Fed increased the Federal Funds Rate by 300-basis points over the previous two quarters. The aim of increasing rates from an historical low of 0.0% - 0.25% to 3.0% - 3.25% was to cool housing costs which had increased by over 20% on an annual basis in some areas of the metro. As single-family prices skyrocketed, pricing and demand for apartments simultaneously increase too, leading to extensive year-over-year price increases. The Phoenix MSA witnessed a 12.1% increase in the sales price per unit, compared to 2021; however, the rise in pricing, in addition to rising rates, resulted in a 32% decrease in total transaction volume. The average mortgage payment in the Phoenix metro increased over 30% in the past year, surpassed \$2,600 a month, while rental rates also increased 10.7% over the same period, to \$1,704-per month (Yardi Matrix).

This rapid increase in standard monthly mortgages has begun pushing a higher proportion of the population towards renting, with 33% of properties in the metro area reported as renter occupied. This compares to a national average of 28%. While demand remained elevated, population growth provided additional upwards pressure on pricing, as net migration soared to +100,000 people over the previous 12-month period. This ranks Arizona as the third fastest growing state in the nation based upon nationwide net migration figures. This population growth is driven primarily by California, which led the nation in out migration reporting a loss of 400,000 residents between June 2021 - July 2022. Although construction has been strong, demand far outweighs supply across all housing assets. Year-todate developers have completed 9,246 units (CoStar), with almost 390k in existing inventory for properties with 10+ units. Despite extensive demand, soaring prices have outpriced many would-be owners/renters.

The Phoenix MSA has reported strong wage growth over the past three years, consistently outpacing nationwide wages. Over the past year, wages have increased 5.5% at the end of Q3 2022. Although this remains strong, real wages were down over this period, leading to a loss of purchasing power, while rental rates surged. This has caused compression, which has arisen as the leading headwind across the multifamily industry. Potential renters are choosing to stay at home longer, with many college graduates moving home, or with friends. This bodes well for long-term real estate fundamentals but is leading to near-term declines in occupancy across the metropolitan area. The increase in interest rates has led to many potential renters choosing to save, rather than spend on housing. This has caused short-term headwinds, but the pent-up demand will sustain new developments well into the future.

ATTRACTIVENESS OF THE PHOENIX MSA:

The State of Arizona created more than 200,000 new jobs over the past two years. This year alone through Q3 the state of Arizona has welcomed roughly 110,000 new jobs, 87,000 of which reside within the Phoenix MSA, accounting for 1.8% of the total job growth in the United States. Before that, the state was also ranked as the number one state in the nation for percentage increase in job creation pre-covid.

Another key factor that coincides with job growth is the wage growth that Phoenix has witnessed over the past 12 months. On a national scale, wages grew 5.2%, compared to an increase of 5.5% reported across the Phoenix MSA. While inflation remains above wage growth, real wages are on a decline. This decline will cause a drag on housing, which has steadily increased for the past decade. The employment market remains strong, which should help put further pressure on employers to increase wages. The nationwide participation rate remains down compared to pre-COVID levels, which has helped depict a stronger than reality employment market. The Fed will continue to increase interest rates until the employment market begins to show signs of weakness. As is, the strength of the employment market provides ample latitude for the Fed to continue increasing interest rates at its current pace of 75bps.

Considering these increases over the past year, the median household income in the Phoenix MSA has grown to \$75,732, with a per capita income at \$38,713. These figures are in comparison to a national median household income of \$69,717, and a national per capita income of \$38,332. This puts the Phoenix Metro at 8.6% higher than the national average in terms of median household income (U.S. Census Reporter).

To accompany that, the state "rainy day fund" grew to \$1.4 billion, meeting a benchmark set to be achieved by the year 2024. Due to the rapid growth of this fund, the office of the Governor will kickstart the implementation of a 2.5% flat tax to take place in tax year 2023, a year earlier than anticipated. With the addition of this flat tax, Governor Ducey claims that this will reduce income taxes by roughly 13%, while simultaneously protecting small businesses from the threat of a potential 77% tax increase. This also has the ability to increase employment by an additional 8,033 jobs (The Office of the Governor).

With the affordability of housing in Phoenix on a steady decline, (the median single-family home hit \$328,000 as of Sep 2022, a 12.6% year-over-year change), it is clear that the metropolitan area is making a conscious effort towards growth and opportunity for its residents. By instituting substantial wage growth, while also instituting personal income tax savings and advanced growth in the job market, there is no reason why Arizona residents wouldn't be primed and ready to settle back into standard market activity once the economy finds its footing once more.

ABI COMPARATIVE MARKET REVIEW: Q3 2022

		PHOENIX	TUCSON	LAS VEGAS	SAN DIEGO A
	Total Population	4,946,145	1,052,030	2,292,476	3,286,069
HICS -	Unemployment Rate (Q3 2022)	3.5%	4.1%	5.3%	3.1%
DEMOGRAPHICS	Employment Growth (y-o-y)	4.1%	1.9%	5.0%	4.2%
- DEN	Median HH Income	\$75,731	\$60,667	\$63,677	\$91,003
	Per Capita Income	\$38,713	\$34,323	\$33,387	\$44,377
	Rent (Q3 2022)	\$1,704	\$1,263	\$1,525	\$2,416
	y-o-y % Increase/Decrease	+10.7%	+11.6%	+10.6%	+8.5%
T (50+)	Occupancy (Q3 2022)	94.5%	94.8%	94.5%	96.9%
RENT/OCC/CONST (50+)	y-o-y % Increase/Decrease	-1.8%	-1.6%	-2.0%	-0.7%
RENT/OC	Total Inventory (50+)	356,658	74,560	185,870	206,044
	Total Under Construction (50+)	38,515	839	8,772	7,456
	Units Delivered (50+, YTD)	9,246	592	1,173	4,353
	Total Sales Volume (Q3 2022)	\$3.01B	\$435M	\$574M	\$93M
(+05	y-o-y % Increase/Decrease	-29.6%	+27.2%	-28.5%	-94.3%
SALES (50+)	Average P/U (Q3 2022)	\$311,358	\$193,016	\$309,644	\$298,548
	y-o-y % Increase/Decrease	+8.7%	+6.7%	+56.8%	+12.6%



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200+ YEARS OF COMBINED MULTIFAMILY BROKERAGE EXPERIENCE SEASONED ADVISORS WITH REGIONAL INSIGHT COLLABORATION & COOPERATION

NOTABLE RECENT ABI MULTIFAMILY TRANSACTIONS

100+ UNIT PROPERTIES











ASCENT 1829

1829 East Morten Avenue Phoenix. AZ 85020

Price: \$48,000,000 Units: 180 Year Built: 1980

DOBSON 2222

2222 South Dobson Road Chandler, AZ 85224

Price: \$95,000,000 Units: 258 Year Built: 2007

RISE MELROSE

930 West Indian School Road Phoenix. AZ 85013

Price: \$25,550,000 Units: 96 Year Built: 1957

VILLAGE 28

4750 North 28th Street Phoenix, AZ 85016

Price: \$9,025,000

Units: 25

Year Built: 1969/2018



APARTMENT BROKERAGE & ADVISORY FIRM

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ABI Multifamily incorporates a global approach with regional real estate expertise to successfully complete any multifamily transaction, regardless of size and complexity.

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