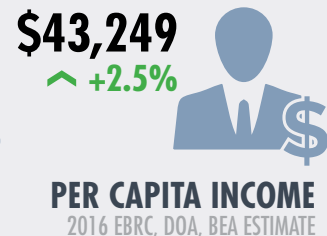
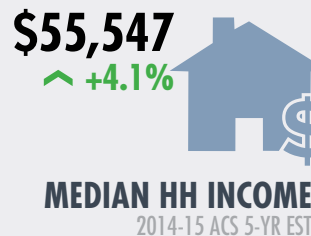
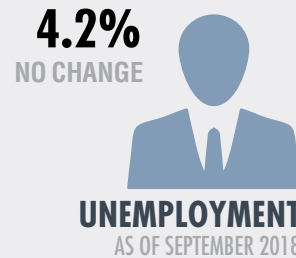




PHOENIX MSA | MULTIFAMILY | 3Q 2018 REPORT

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10+ UNIT PROPERTIES	3Q 2018	INCREASE/DECREASE	3Q 2017
Total Sales Volume	\$1.91B	+32%	\$1.45B
AVERAGE	Price/Unit	\$138,819 +15%	\$121,120
	Price/SF	\$164.19 +13%	\$145.80
	Year Built	1979 -2 yrs	1981
Average Rent	\$1,083 +6.7%	\$1,015	
Occupancy Rate	95.2% +0.4%	94.8%	
Units Delivered	2,758 +6%	2,598	



ABI GEONEWS - PHOENIX MSA 3Q 2018 SELECT NEWS

CONTINUED ON PAGE 06







Infosys to open tech and innovation hub in Phoenix, to hire 1,000

Nikola to build hybrid semi-truck manufacturing plant in Coolidge, as a result of Anheuser-Busch pre-order, to employ up to 2,000

Creighton University to build \$150M medical school in midtown Phoenix



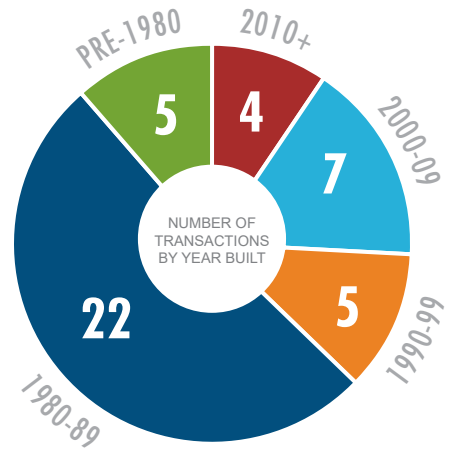
PHOENIX MSA - PER CITY ANALYSIS

PHOENIX MSA QUICK STATS	UNEMPLOYMENT RATE	MEDIAN HH INCOME	PER CAPITA INCOME	50+	
				TOTAL INVENTORY	UNDER CONSTRUCTION
 Phoenix MSA	4.2%	\$55,547	\$43,249	303,404	16,766
 Phoenix	3.5%	\$49,328	\$25,213	132,672	6,431
 Mesa	3.4%	\$50,615	\$25,669	37,047	568
 Scottsdale	2.8%	\$76,543	\$54,060	26,098	1,515
 Tempe	3.1%	\$50,474	\$27,705	33,365	2,233
 Glendale	3.5%	\$46,817	\$22,452	22,783	340

PHOENIX MSA - PER CITY ANALYSIS		Phoenix	Mesa	Scottsdale	Tempe	Glendale
RENT & OCCUPANCY STATS	Average Rent (3Q 2018)	\$984	\$955	\$1,390	\$1,307	\$915
	% Change (y-o-y)	+5.8%	+5.8%	+6.3%	+7.4%	+6.3%
	Occupancy Rate (3Q 2018)	95.3%	95.7%	94.6%	94.8%	95.4%
	% Change (y-o-y)	+0.6%	+0.2%	+0.4%	+0.3%	+0.2%
	Units Delivered (3Q 2018, 50+)	210	523	365	667	0
SALES DATA (100+)	Total Sales Volume (3Q 2018, 100+)	\$432,943,242	\$308,160,000	\$0	\$452,326,149	\$208,174,119
	Total Sales Volume (3Q 2017, 100+)	\$561,281,856	\$143,600,000	\$68,950,000	\$176,450,000	\$96,816,500
	% Change (y-o-y)	-23%	+115%	N/A	+156%	+115%
	Avg P/U (3Q 2018, 100+)	\$134,705	\$133,692	\$0	\$156,082	\$130,681
	Avg P/U (3Q 2017, 100+)	\$116,934	\$90,031	\$205,208	\$148,277	\$104,216
	% Change (y-o-y)	+15%	+48%	N/A	+5%	+25%
SALES DATA (10-99)	Total Sales Volume (3Q 2018, 10-99)	\$125,822,912	\$23,425,000	\$13,945,000	\$6,594,000	\$15,500,000
	Total Sales Volume (3Q 2017, 10-99)	\$69,787,000	\$8,796,000	\$0	\$16,890,000	\$7,945,000
	% Change (y-o-y)	+80%	+166%	N/A	-61%	+95%
	Avg P/U (3Q 2018, 10-99)	\$90,002	\$97,199	\$138,069	\$124,415	\$215,278
	Avg P/U (3Q 2017, 10-99)	\$80,493	\$78,536	\$0	\$167,228	\$63,560
	% Change (y-o-y)	+12%	+24%	N/A	-26%	+239%

100+ UNIT PROPERTY ANALYSIS

	3Q 2018	INCREASE/DECREASE	3Q 2017
Total Sales Volume	\$1.71B	+28%	\$1.34B
AVERAGE Price/Unit	\$145,631	+16%	\$125,546
AVERAGE Price/SF	\$169.58	+13%	\$150.31
AVERAGE Year Built	1991	-1 yrs	1992



TOP 3 TRANSACTIONS BY PRICE/UNIT (100+)



Broadstone Arts District

Phoenix, 280 Units | \$76,150,000
\$271,964/Unit | \$314.91/SF | Built 2017



Avilla Grace

Chandler, 194 Units | \$45,000,000
\$231,959/Unit | \$239.68/SF | Built 2017



Velaire at Aspera

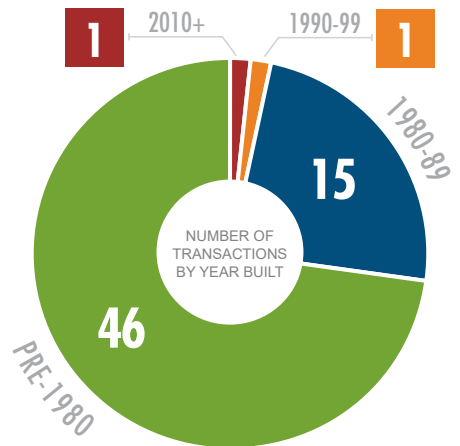
Glendale, 286 Units | \$64,350,000
\$225,000/Unit | \$235.96/SF | Built 2016

3Q 2018 Transactions by Year Built

	# of Transactions	Avg Price/Unit	Avg Price/SF
2010+	4	\$222K	\$230
2000-09	7	\$168K	\$174
1990-99	5	\$163K	\$174
1980-89	22	\$121K	\$153
Pre-1980	5	\$117K	\$158

10 - 99 UNIT PROPERTY ANALYSIS

	3Q 2018	INCREASE/DECREASE	3Q 2017
Total Sales Volume	\$197M	+85%	\$106M
AVERAGE Price/Unit	\$98,638	+18%	\$83,781
AVERAGE Price/SF	\$128.62	+22%	\$105.72
AVERAGE Year Built	1970	-1 yrs	1971



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



The Place on 51st

Glendale, 72 Units | \$15,500,000
\$215,278/Unit | \$155.32/SF | Built 2017



The Wells

Phoenix, 11 Units | \$2,150,000
\$195,455/Unit | \$241.55/SF | Built 1961/63



Estilo

Phoenix, 15 Units | \$2,675,000
\$178,333/Unit | \$206.56/SF | Built 1971

3Q 2018 Transactions by Year Built

	# of Transactions	Avg Price/Unit	Avg Price/SF
2010+	1	\$215K	\$155
2000-09	0	N/A	N/A
1990-99	1	\$79K	\$96
1980-89	15	\$94K	\$116
Pre-1980	46	\$95K	\$133

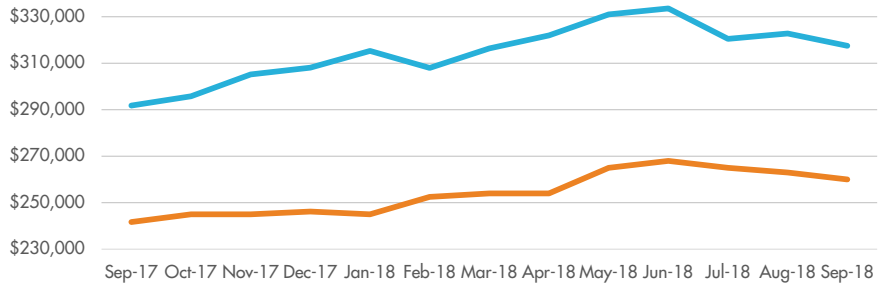
SINGLE FAMILY RESIDENTIAL - FOR SALE/LEASE

AVG SALES PRICE \$317,500

+8.8%, YEAR-OVER-YEAR AVERAGE

MEDIAN SALES PRICE \$268,000

+7.6%, YEAR-OVER-YEAR MEDIAN



SFR SALES TRENDS *

MONTHLY SALES 6,897

-5.9%, YEAR-OVER-YEAR

-14.2%, MONTH-OVER-MONTH

AVG DAYS ON MARKET 63

-14 DAYS, YEAR-OVER-YEAR

+1 DAYS, MONTH-OVER-MONTH

FORECLOSURES PENDING 2,622

-14.1%, YEAR-OVER-YEAR

+2.7%, MONTH-OVER-MONTH

* As of September 2018

SFR - FOR LEASE

3Q 2018

Median Lease: \$1,480
Average Lease: \$1,662
Avg. Days on Market: 26
Rent Check Quotient™: 3 : 10

3Q 2017

Median Lease: \$1,397
Average Lease: \$1,567
Avg. Days on Market: 29
Rent Check Quotient™: 3 : 10

RENT Check Quotient (RCQ) is the ratio of closed rentals to closed sales. For example, 1:2 (one to two) would mean for every 1 rental, there are 2 closed sales. 1:1 (one to one) would mean that the number of closed rentals and closed sales are the same.

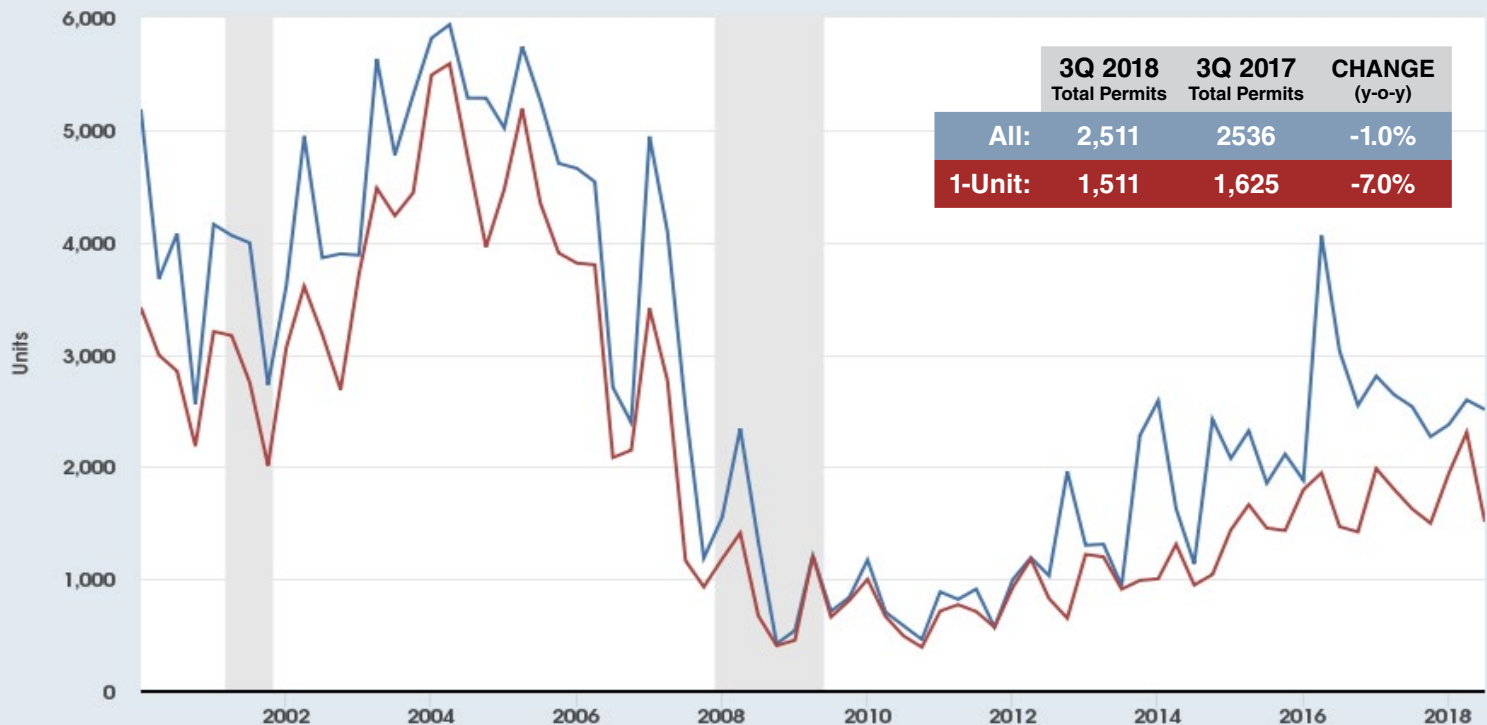
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HOUSING PERMIT DATA - SFR/MF *

FRED

— New Private Housing Units Authorized by Building Permits for Phoenix-Mesa-Scottsdale, AZ (MSA)

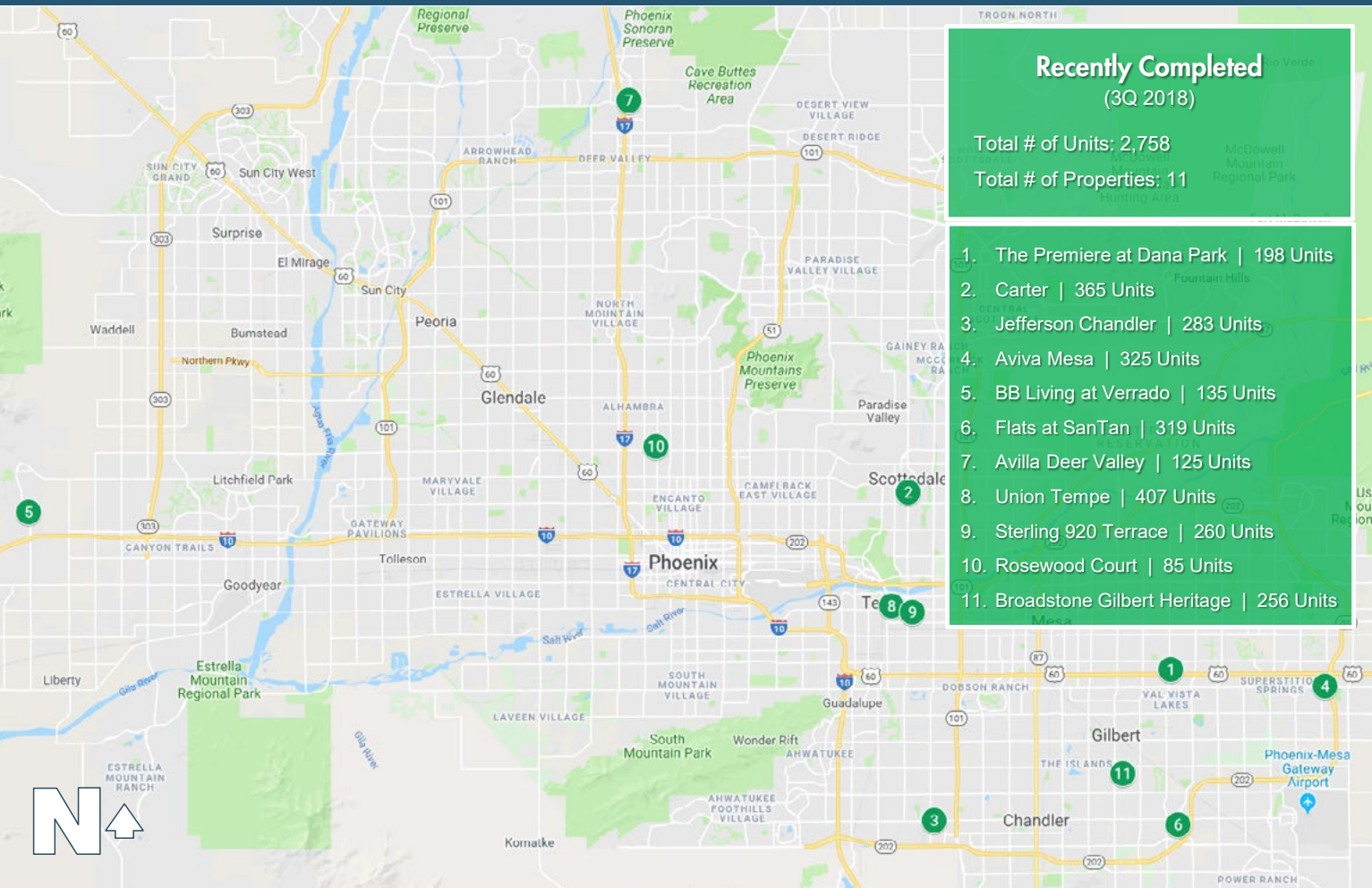
— New Private Housing Units Authorized by Building Permits: 1-Unit Structures for Phoenix-Mesa-Scottsdale, AZ (MSA)



* Quarterly Average permitted units from 2000 to YTD (FRED)

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COMPLETED CONSTRUCTION

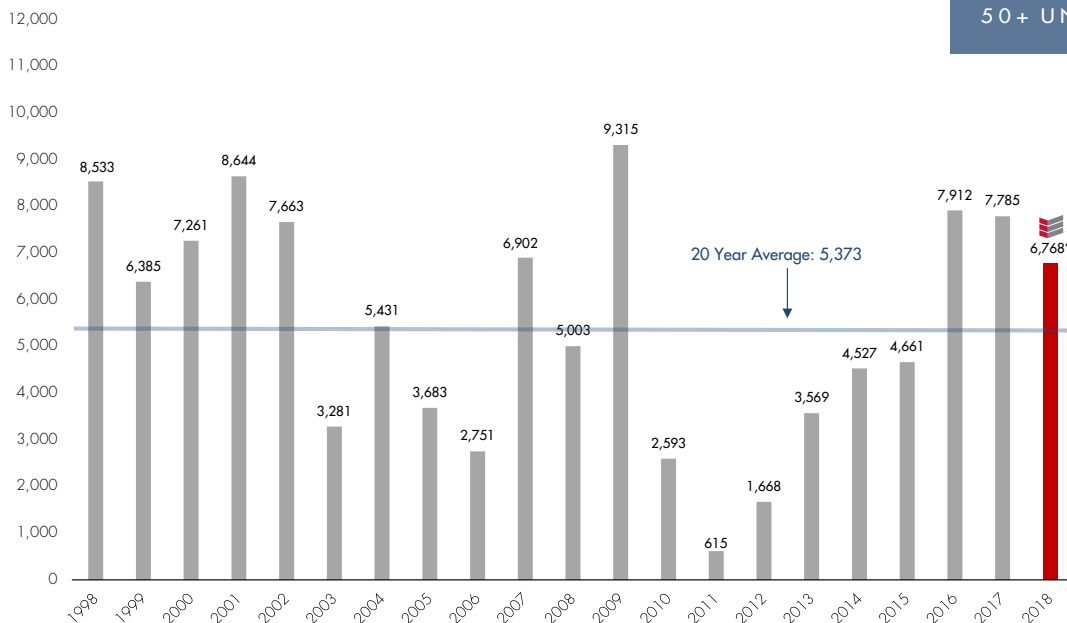


Recently Completed (3Q 2018)

Total # of Units: 2,758
Total # of Properties: 11

1. The Premiere at Dana Park | 198 Units
2. Carter | 365 Units
3. Jefferson Chandler | 283 Units
4. Aviva Mesa | 325 Units
5. BB Living at Verrado | 135 Units
6. Flats at SanTan | 319 Units
7. Avilla Deer Valley | 125 Units
8. Union Tempe | 407 Units
9. Sterling 920 Terrace | 260 Units
10. Rosewood Court | 85 Units
11. Broadstone Gilbert Heritage | 256 Units

PHOENIX MULTIFAMILY CONSTRUCTION PIPELINE 3Q 2018



TOTAL UNIT INVENTORY

10+ UNIT PROPERTIES: **363,120**

50+ UNIT PROPERTIES: **306,162**

PRE-LEASE ABSORPTION RATE

16

Units/Property/Month
(3Q Avg)

Under Construction

Total # of Units: 15,737

Total # of Properties: 63

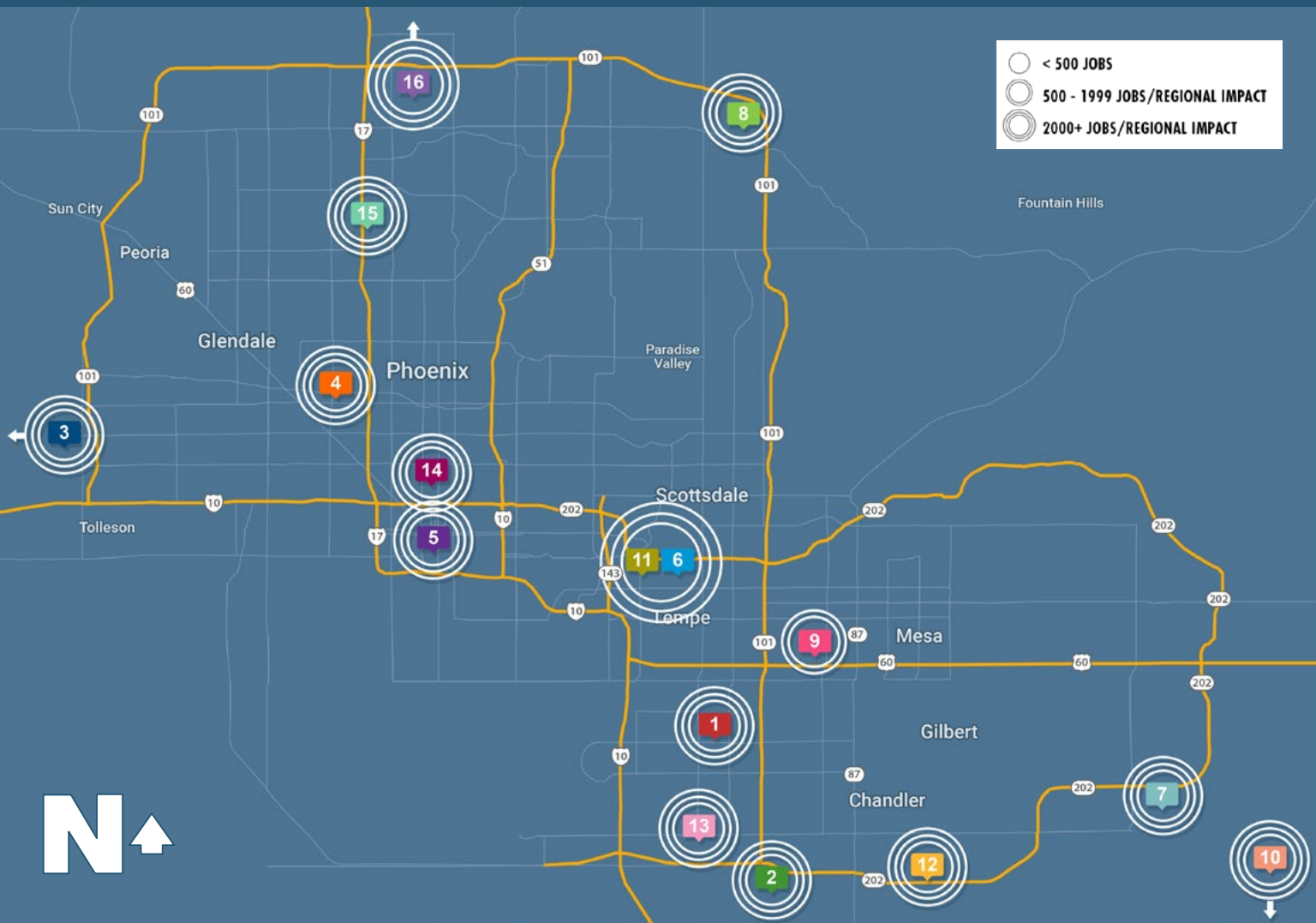
Planned

Total # of Units: 18,251

Total # of Properties: 85

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

3Q 2018 SELECT NEWS



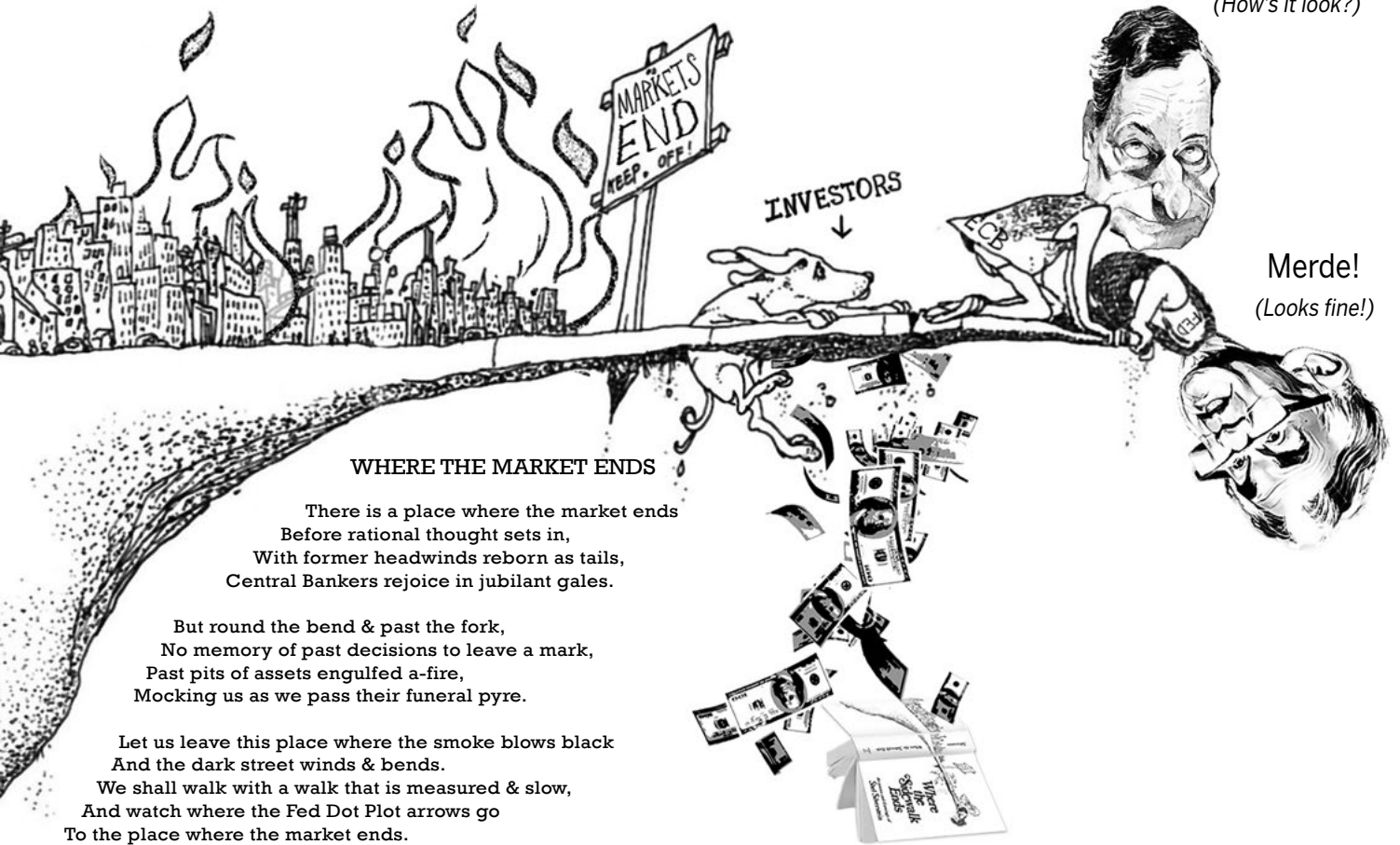
- 1** Northern Trust | Opening \$95M regional operations center in Tempe | Hiring 1,000
- 2** Wells Fargo opening new regional office in Price Corridor to bring 1,200 jobs, Liberty Mutual opening new office to bring 750 jobs
- 3** New UPS Hub to add processing capacity for e-commerce, add 1,500 jobs at Goodyear PV303
- 4** GCU continues massive campus expansion | 3,000+ employees and 14,000+ students expected by 2020
- 5** Quicken Loans finalizes deal to move 1,100-plus jobs to Downtown Phoenix
- 6** State Farm Regional Headquarters: Brings total State Farm Phoenix area employment to 3,000+
- 7** SkyBridge Arizona, nation's first international air cargo hub to house both Mexican and United States customs, expected to create 17,000 new jobs
- 8** Nationwide Insurance development opens 1,000 acres of desert to growth including 5,500 new jobs
- 9** Santander Consumer USA to hire 1,000+ workers for new regional operations center in Mesa's Fiesta District with avg salary of \$51,000
- 10** Nikola to build hybrid semi-truck manufacturing plant in Coolidge, as a result of Anheuser-Busch pre-order, to employ up to 2,000
- 11** New ADP office to bring 1,500 jobs to Tempe, AZ
- 12** Deloitte planning big operations center, 2,500 jobs in Gilbert, office to open by end of 2018
- 13** Intel to invest \$7 billion in new factory in Chandler, employ 3,000 workers
- 14** Creighton University to build \$150M medical school in midtown Phoenix
- 15** Infosys to open tech and innovation hub in Phoenix, to hire 1,000
- 16** USAA adding 1,000 tech jobs in Phoenix in next 3 years

BY: THOMAS M. BROPHY, DIRECTOR OF RESEARCH

WHERE THE MARKET ENDS

Phoenix MSA 3Q 2018

Qu'est ce tu vois?
(How's it look?)



WHERE THE MARKET ENDS

There is a place where the market ends
Before rational thought sets in,
With former headwinds reborn as tails,
Central Bankers rejoice in jubilant gales.

But round the bend & past the fork,
No memory of past decisions to leave a mark,
Past pits of assets engulfed a-fire,
Mocking us as we pass their funeral pyre.

Let us leave this place where the smoke blows black
And the dark street winds & bends.
We shall walk with a walk that is measured & slow,
And watch where the Fed Dot Plot arrows go
To the place where the market ends.

I'd like to begin with a few sage words from economist, Elliott D. Pollack, whose commentary I find timely and his depth of experience in economic reporting vastly exceeds mine. In his October 29th *Monday Morning Quarterback* newsletter Pollack states, "On the surface, it was a best of times, worst of times type week. Stock market volatility dominated many economic headlines. But, that's unfortunate since most of the economic news was quite good."

Pollack continues, "Take it from someone who has been trying to predict the economy for nearly a half century, projecting the exact timing and depth of a cycle well in advance is tough to do. Yet, we do know this. The economy is likely to continue to do well at least through 2019. There is a great deal of stimulus

right now between tax cuts, government spending and consumer spending. It is late in the cycle but there are no signs of it ending at the moment even given the 50-year low in the unemployment rate and the age of this expansion."

Phoenix Market Metrics: *By the Numbers*

The MSA's total sales volume (10+ unit properties) increased 32% y-o-y, to \$1.91B, easily beating 3Q 2017's \$1.45B record, across 106 transactions representing 13,764 total units sold. California-based investors continue to be the dominant buyer of multifamily properties in the Valley accounting for 42% of total units transacted, or 5,733 units. Arizona-based investors came in 2nd with 2,474 units purchased, New York-based investors

came in 3rd with 2,037 units purchased and rounding out the top five: (#4) Florida-based investors with 1,117 units purchased and (#5) Illinois-based investors with 823 units.

Sales of 100+ unit properties witnessed a 28% y-o-y increase to \$1.71B setting a new quarterly record and breaking 2Q 2016's peak of \$1.69B. Average Price-Per-Unit (PPU) amount increased as well rising 16% to \$145,631. The Blackstone Group continues to be the dominant force in Investment Grade (IG) properties 100+ units in size, purchasing DRA-Milestone's six (6) property, 1,751-unit portfolio for a little over \$311M and PB Bell's recently delivered 286 unit-Velaire at Aspera for \$64.35M. The other notable portfolio transaction was Priderock Capital's purchase of IMT Capital's three (3) property, 1,117-unit portfolio for

BY: THOMAS M. BROPHY, DIRECTOR OF RESEARCH

\$153.5M. 10 to 99 unit properties saw sales volume increase a whopping 85% y-o-y to \$197M with an 18% increase in average PPU amount to \$98,638. Of the 67 buyer entities/persons, a little over 40% were first time Arizona multifamily buyers.

In regards to new construction, developers delivered 2,758 units in the 3Q, a 6% y-o-y increase. For 2018, developers are on track to deliver 9,000+ new units, the most since 2009's 9,315 unit delivery high. Planned unit construction increased 56% y-o-y, or 9% q-o-q, to 18,251. Pre-lease absorption rates continue to remain elevated for the region at 16 units/property/month. Based on the average number of units for projects currently under construction, delivery-to-stabilization is pegged at ~13 months, well below developers usual 18-to-24 month stabilization period.

The MSA's occupancy rate ended 3Q up at 95.2%, a 0.4% y-o-y increase with average rent increasing 6.7% y-o-y to \$1,083. Tempe claimed the top spot in the MSA for rent growth at 7.4%, to \$1,307, Scottsdale (\$1,390) and Glendale (\$915) tied for 2nd at 6.3% y-o-y rent growth, followed by Mesa and Phoenix both of which increased 5.8%, to \$955 and \$984 respectively. Scottsdale still claims the top spot in actual average rent which at \$1,390 is the highest in the region.

Where's the Bogeyman?

October's stock market has been on the Disney-equivalent of Mr. Toad's Wild Ride. As of October 29th, the Dow, S&P 500 and Nasdaq were all down 7.7%, 9.4% and 12% respectively. Whether or not this becomes the long awaited market correction is anybody's guess and could certainly be explained by general anxiousness regarding the outcome of the November 6th election. The main result of the stock market's turbulence, as far as I can tell, has been to dint analyst expectations thereby changing, in varying degrees, the economic recovery/expansion narrative. The essence of

narrative, according to famed director Guy Ritchie, is only about the dynamic of the struggle between internal vs external perceptions/realities.

As this is neither the time, nor place, to begin to discuss the infinitude of potential internal perceptions, we are left to discuss possible external probabilities. For that, I turn to John Mauldin (Mauldin Economics) in his [Debt Alarm Ringing](#) article where he lays out three 'trigger points' which he believes have the potential to start an economic crisis, or in the least, sufficiently disrupt national/global growth, namely Corporate Credit Crisis, expansion of a Trade War and slowdown in European growth. Mauldin's main arguments, which I've condensed, are as follows:

Corporate Credit Crisis: As a whole, US companies are significantly more leveraged [due to share buybacks via debt issuance] now than they were ahead of the 2008 crisis. This dynamic has fundamentally changed now that we have a central bank in full Quantitative Tightening (QT) mode.

Trade War: One reason the US economy seems to be booming right now is a surge in imports. Companies are rushing to build inventory ahead of the 25% tariff on Chinese goods that takes effect January 1. Coming on top of usual holiday season stockpiling, it is jamming ports, highways, and warehouses—generating many jobs in the process. [What happens when this 'stockpiling' ends and, more importantly, if the trade war expands?]

European Slowdown: October PMI reports dropped to the lowest point since September 2016, with export-dependent Germany particularly weak. Meanwhile, Italy's new budget is wildly out of line with its revenue and growth prospects. This threatens to set off another euro crisis. And then there's the serious possibility of a hard Brexit in early 2019.

The Central Bank's Market

Make no mistake, after 10 years of near constant interventions (from low rates to Quantitative Easing), it's the Federal Reserve's (and, for that matter, Central Banks writ large) market now. I still believe we are closer to negative rates than we are to 4%+ Fed rates. Why do I think this? Given the length of our current recovery, second longest on record, we are probably closer to a correction than continued expansion. The *caveat emptor*, current growth has been spurred by tax cuts and deregulation which could certainly extend the bull market's rally longer than what many are predicting and beyond current market jitters. When a correction occurs, on average, the Federal Reserve has historically had to reduce rates by 5% before normalizing policy. Given the Fed's current 2.0 to 2.5% target, with more rate hikes expected this year and into next moves the target to 2.5 to 3.0% rather quickly thereby increasing the chances of a market correction, as such negative rates could certainly be on the horizon.

We're now 10 years post-GFC (Great Financial Crisis), and in the middle of what has been dubbed the 'silver tsunami' with many Boomers at or near peak retirement age. As most financial planners espouse, the closer one gets to retirement the need to diversify into safer, less volatile investments becomes more imperative. Said differently, stable, cash flowing assets are the boat to ride the tsunami. As we settle into this new investment demographic normal, and my final question/thought, suppose real estate return rates mean revert to average historical levels of 3.8%, across the board, and average rental rates soften to 2%+, contingent upon market, where else are you going to find a better return? Investors are slowly beginning to wake up to this new market reality and, my best guess without the benefit of a future indicating magical crystal ball, is that multifamily is where they will want to be.

ABI COMPARATIVE MARKET REVIEW: 3Q 2018



PHOENIX

TUCSON

SACRAMENTO

SAN DIEGO

DEMOGRAPHICS

RENT/OCC/CONST (50+)

SALES (50+)

Total Population	4,737,270	1,026,099	2,296,418	3,317,749
Unemployment Rate (as of Sep '18)	4.2%	4.5%	3.4%	3.2%
Employment Growth (y-o-y)	3.8%	2.4%	1.1%	1.9%
Median HH Income	\$55,547	\$46,764	\$62,813	\$66,529
Per Capita Income	\$43,249	\$39,541	\$51,370	\$55,168
Rent (3Q 2018)	\$1,067	\$859	\$1,480	\$1,958
% Increase / Decrease	+6.4% 	+6.2% 	+6.9% 	+6.5%
Occupancy (3Q 2018)	95.2%	94.7%	96.3%	96.7%
% Increase / Decrease	+0.4% 	+0.3% 	-0.6% 	NO CHANGE
Total Inventory (50+)	306,162	67,143	127,430	183,869
Total Under Construction (50+)	15,737	803	3,455	8,591
Units Delivered (50+, 3Q 2018)	2,758	50	142	975
Total Sales Volume (3Q 2018)	1.82B	\$279M	\$407M	\$233M
y-o-y % Increase / Decrease	+32% 	+22% 	+130% 	-52%
Average P/U (3Q 2018)	\$141,319	\$67,949	\$177,250	\$271,958
y-o-y % Increase / Decrease	+15% 	+62% 	-8% 	-39%

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

NOTABLE RECENT ABI MULTIFAMILY TRANSACTIONS

100+ UNIT PROPERTIES

10-99 UNIT PROPERTIES



AVANTE APARTMENT HOMES

Sold Price: \$51,500,000
Price/Unit: \$120,327
Price/SF: \$130.29
Units: 428
Year Built: 1999

CASA BELLISSIMA APARTMENT HOMES

Sold Price: \$22,350,000
Price/Unit: \$80,978
Price/SF: \$126.56
Units: 276
Year Built: 1983, 1984
Renovated: 2015

SILVER TREE APARTMENTS

Sold Price: \$8,150,000
Price/Unit: \$83,163
Price/SF: \$137.78
Units: 98
Year Built: 1986

LOS OLIVOS CONDOMINIUMS

Sold Price: \$5,846,020
Price/Unit: \$95,836
Price/SF: \$89.72
Units: 61
Year Built: 1968

APARTMENT BROKERAGE & ADVISORY FIRM

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