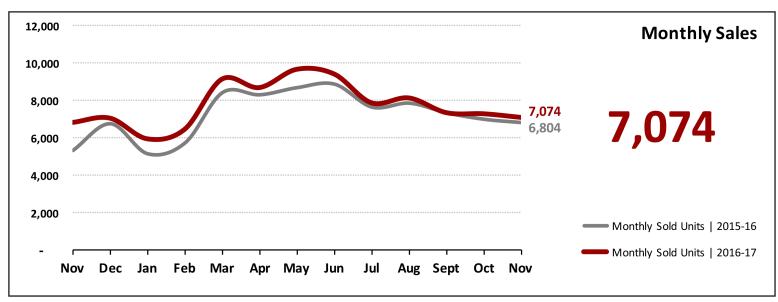
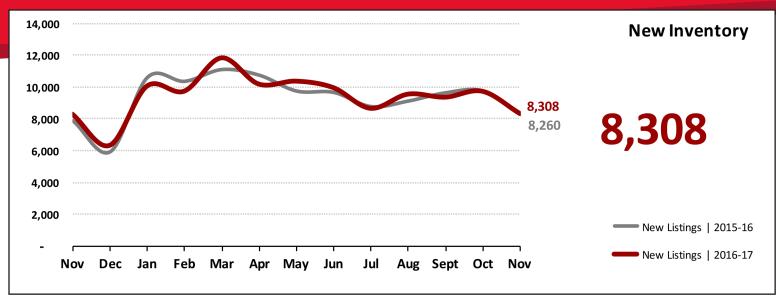


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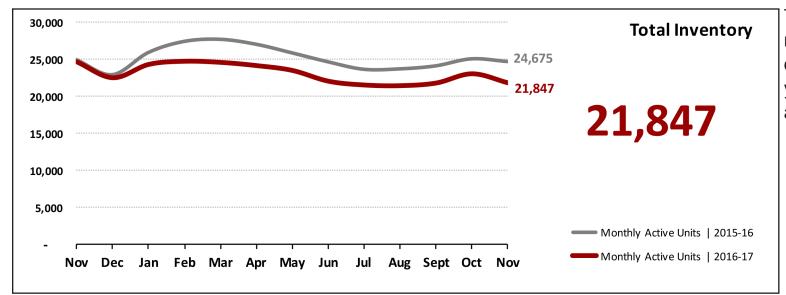
Sales are down -2.7% month-over-month. The year-over-year comparison is at 4.0%.

Closed MLS sales with a close of escrow date from 11/1/2017 to 11/30/2017, 0 day DOM sales removed



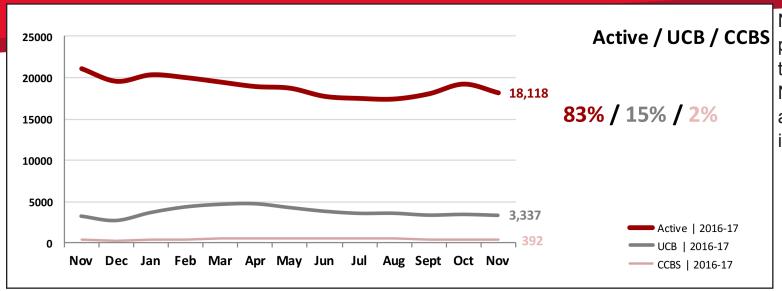
New inventory is down -14.4% month-over-month while the year-over-year comparison shows an increase of 0.6%.

New MLS listings that were active for at least one day from 11/1/2017 to 11/30/2017, 0 day DOM sales removed



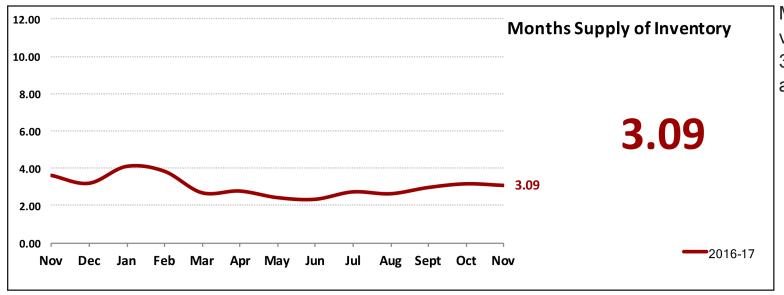
Total inventory has a month-over-month decrease of -5.3% while year-over-year reflects an increase of +3.0%.

Snapshot of statuses on 11/30/2017



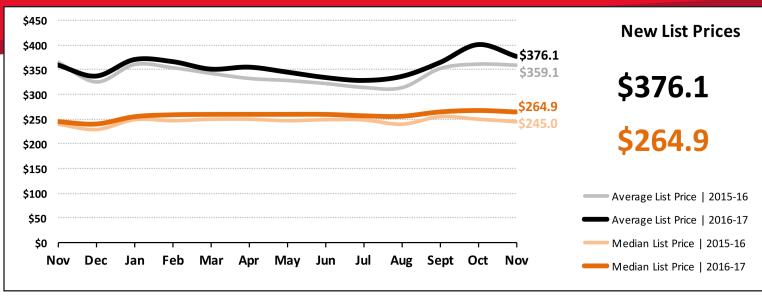
November UCB listings percent of total inventory was +15.3% with November CCBS listings at +1.8% of total inventory.

Snapshot of statuses on 11/30/2017



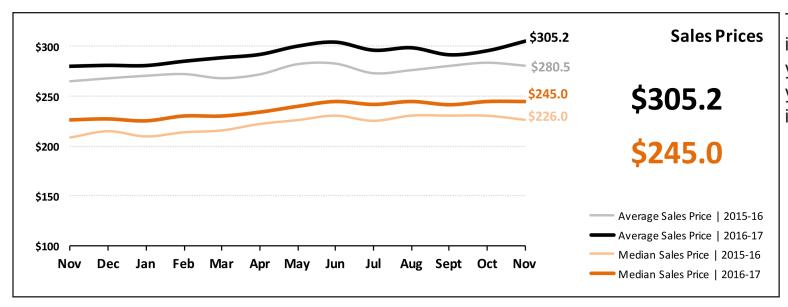
Months supply of inventory for October was 3.17 with November at 3.09.

Current inventory of Active/UCB/CCBS divided by the monthly sales volume of NOVEMBER 2017, 0 day DOM sales removed



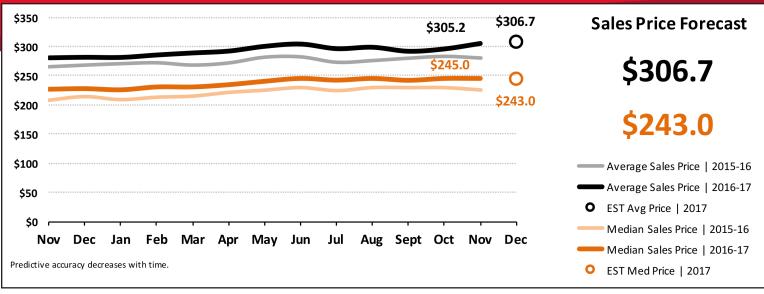
Average new list prices are up +4.7% year-over-year. The year-over-year median is up +8.1%.

List prices of new listings with list dates from 11/1/2017 to 11/30/2017, 0 day DOM sales removed



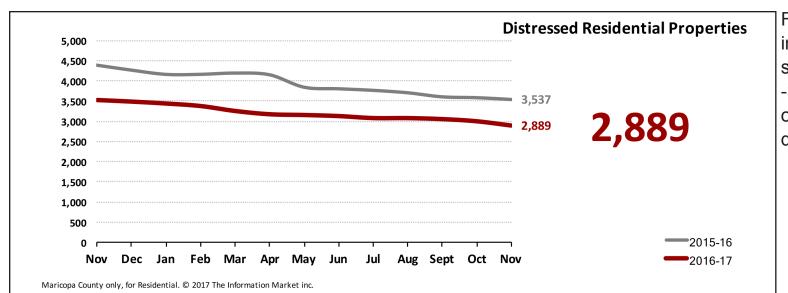
The average sales price is up +8.8% year-over-year while the year-over-year median sales price is also up +8.4%.

MLS sales prices for closed listings with a close of escrow date from 11/1/2017 to 11/30/2017, 0 day DOM sales removed



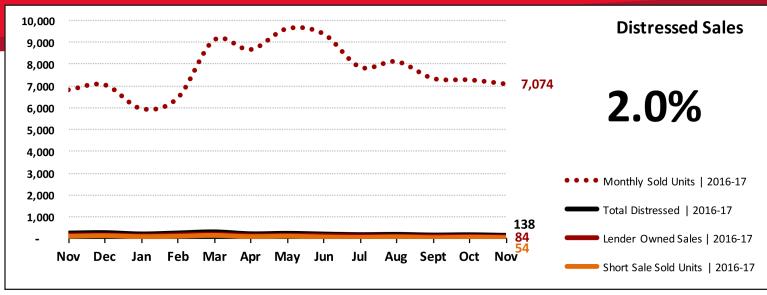
A slight increase is forecasted for average sales price while November had a decrease in median sales price.

ARMLS proprietary predictive model forecast, 0 day DOM sales removed



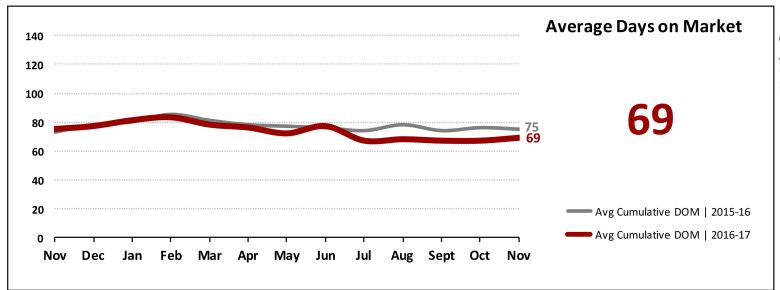
Foreclosures pending month-over-month showed a decrease of -3.6% while the year-over-year figure was down -18.3%.

Snapshot of public records data on 11/30/2017 active residential notices and residential REO properties. Note: this graph was adjusted as total foreclosure counts were under reported for the last 16 months.



Distressed sales accounted for 2.0% of total sales, down from the previous month of 2.3%. Short sales dropped -46.5% year-over-year. Lender owned sales dropped -43.2% year-over-year.

New MLS listings that were active for at least one day from 11/1/2017 to 11/30/2017, 0 day DOM sales removed



Days on market were down -6 days year-overyear while month-overmonth increased by +2.

MLS sales prices for closed listings with a close of escrow date from 11/1/2017 to 11/30/2017, 0 day DOM sales removed

COMMENTARY by Tom Ruff



As each new month of housing stats enter the books, I feel like the character Charlie Kaufman in the movie "Adaptation" as I look for any means to describe a market whose primary metrics have followed similar trend lines for 3 years running. Next month we'll delve into our annual housing numbers review, but on this day, I'm struggling to complete the December STAT.

The hot housing topics of the day are the top predictions for 2018, low inventory levels, affordability concerns, bubble talk and decade low foreclosure numbers. As for the top predictions for 2018, I have a friend who's a time traveler, but I refuse to ask him what the future holds, as it goes against my conscience.

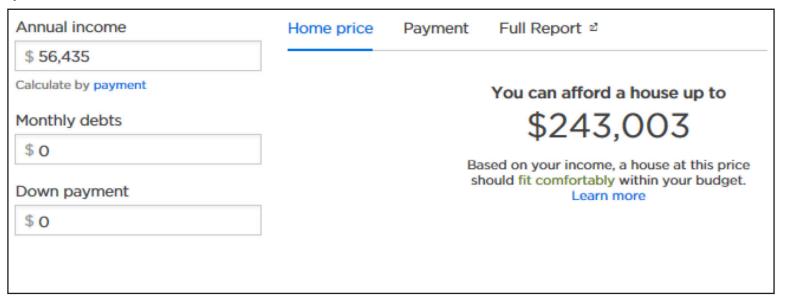
I did allow him to give me one piece of insight about the 2018 housing market. He said "Housing economists are only good at predicting the past." With the top predictions for 2018 spoiled and all talk about low inventory numbers already in previous editions of STAT, any further conversation in this arena would be like riding a dead horse. So this month, we're going to run with the third topic on the menu: affordability.

Home Affordability

The main reason I like the reporting of the median home sales price is the relationship it has to affordability-half of the buyers pay less, half of the buyers pay more. Taking the next step in logic, affordable housing is housing that is deemed affordable by those with a median household income.

Our current monthly median sales price for all resale homes in Maricopa County, as reported by The Information Market, is \$243,000. This brings us to our next question: what does the median household income have to be to afford this home? Here are two different calculators to help figure that out, one from Realtor.com and one from Zillow.

For simplicity sake, we've displayed the Zillow model and assumed an unrealistic \$0 monthly debts and a \$0 down payment.



Based on these inputs, the annual household income in Maricopa County needed to afford the current median priced home is \$56,435. Finding current median household income numbers in Maricopa County is not as easy as finding home sales data, but according to Census.gov, the median household income is \$55,676. It's remarkable how close the reported census number is to our calculated income needed to buy the median priced home.

Looking Back

The chart below shows November median sale prices for all resale homes in Maricopa County for the last 19 years. The price points are broken down by quarters. We also show the year-over-year appreciation rate for each of the quarters. Using the data for November of 2017, we can see there were 7,401 sales of previously owned homes. Of these sales, 25% were for less than \$184,500, which was 9.82% higher than the 2016 corresponding price of \$168,000. Our median priced resale home sold for \$243,000. That's 8.0% higher than the 2016 median price of \$225,000.

All	Resale Median										
Date	Resale Count	Lo	ow Qtr	Low Qtr Prev Year∆		Middle	Middle Prev Year∆		High Qtr	High Qtr Prev Year∆	
199911	4,700	\$	86,500	0.00%	\$	117,000	0.00%	\$	165,000	0.00%	
200011	5,069	\$	93,500	8.09%	\$	124,900	6.75%	\$	173,900	5.39%	
200111	5,179	\$ 1	03,000	10.16%	\$	131,000	4.88%	\$	176,000	1.21%	
200211	5,778	\$ 1	09,000	5.83%	\$	140,000	6.87%	\$	198,500	12.78%	
200311	6,274	\$ 1	15,950	6.38%	\$	149,396	6.71%	\$	214,000	7.81%	
200411	9,034	\$ 1	35,000	16.43%	\$	177,000	18.48%	\$	255,000	19.16%	
200511	9,125	\$ 1	85,000	37.04%	\$	250,000	41.24%	\$	345,000	35.29%	
200611	5,920	\$ 2	00,000	8.11%	\$	248,000	-0.80%	\$	350,000	1.45%	
200711	3,315	\$ 1	80,000	-10.00%	\$	236,500	-4.64%	\$	339,000	-3.14%	
200811	3,888	\$ 1	07,000	-40.56%	\$	160,000	-32.35%	\$	242,000	-28.61%	
200911	6,500	\$	85,000	-20.56%	\$	135,000	-15.63%	\$	210,000	-13.22%	
201011	5,839	\$	72,900	-14.24%	\$	121,595	-9.93%	\$	200,000	-4.76%	
201111	6,326	\$	72,000	-1.23%	\$	119,775	-1.50%	\$	189,000	-5.50%	
201211	6,488	\$ 1	05,000	45.83%	\$	157,000	31.08%	\$	245,000	29.63%	
201311	5,180	\$ 1	28,000	21.90%	\$	184,000	17.20%	\$	280,000	14.29%	
201411	4,913	\$ 1	35,000	5.47%	\$	189,500	2.99%	\$	277,000	-1.07%	
201511	5,370	\$ 1	50,000	11.11%	\$	207,700	9.60%	\$	299,250	8.03%	
201611	6,953	\$ 1	68,000	12.00%	\$	225,000	8.33%	\$	310,000	3.59%	
201711	7,401	\$ 1	84,500	9.82%	\$	243,000	8.00%	\$	335,000	8.06%	
				4.30%			4.14%			4.01%	

I have yet to find a single chart that can accurately show the insanity and resiliency of the metro Phoenix housing market. A 41.24% year-over-year gain and a 32.35% year-over-year loss within 4 years of each other is fascinating.

If you look at the last row of the chart, you'll see three other percentages listed. These are the long-term averages and these numbers, in my opinion, are the reasons why you buy a home. The reasons not to: you can't afford it or you're only going to be living in the same place for a short period of time.

Start Value	\$117,000.00						
Total Appreciation (107.693%)	\$126,000.37						
Final Value	\$243,000.37						
For a final value of \$243000, the yearly appreciation should be 4.14406%							

Anytime there is a large deviation between the long-term appreciation and annual appreciation, take note. The market is offering you an opportunity or a warning. By monitoring the balance between supply and demand as well as affordability, you should have all the tools you need to make the best decision.

Looking Ahead

"A central theme for the 2018 housing market will be the continuing erosion of housing affordability", according to Frank Nothaft, Chief Economist of Core Logic. Nothaft is basing his concerns on three economic factors he believes will further weaken affordability in the coming year: rising interest rates, rising home prices and the low inventory of starter homes for sale.

Nothaft does not give his opinion on the other side of the affordability equation: household income. If the economy grows jobs and increases wages, this of course would have a positive impact on home affordability. What happens to interest rates, home prices, job creation and wages in 2018 are all speculation at this point and my time traveler friend is not talking.

The one thing I do know is the 8% to 9% price growth we've seen in the median sales price over the last three Novembers is not sustainable. To put this in perspective we'll employ the rule of 70. The rule of 70 is a way to estimate the number of years it takes for a certain variable to double by taking the number 70 and dividing it by the appreciation rate. At the 8.5% annual appreciation we've seen over the last three years in median price growth in November (70/8.5), prices would double in less than 8 years and three months.

Conclusion: Our current market is in balance and our median sales price is in line with our reported median household incomes. Our current appreciation rates will need to fall back in-line with our long-term appreciation rate.

PPI

Last month STAT projected a median sales price for November of \$239,900. The actual median sales price was \$245,000. Our algorithm in October was spot on. November... not so good. Our November projection missed the mark by \$5,100 (or 2.1% lower than the actual median), by far the worst forecast in modern history. We've sent the November algorithm to stand in the corner and think about what it did.

We projected that home closings would be comparable to the 2016 total of 6,804. The final sales volume was 7,074. There were 270 more sales this year than last year. Looking ahead to December, we anticipate the median sales price will be \$243,000. In other words, expect the December median sales price to see little to no movement. A repeat of last month's \$245,000 would not be out of the realm of possibility.

Sales volume for the first 11 months of 2017 was 6.30% higher than 2016, with 86,817 sales in 2017 compared to 81,677 in 2016. Following the pattern of the previous 6 months, we enter December with fewer residential listings practically under contract this year. We begin December with 5,645 pending contracts (3,337 UCB listings and 392 CCBS) giving us a total of 9,374 residential listings practically under contract. This compares to 9,395 of the same type of listings one year ago. Even with fewer "pending" listings this year compared to last and with one less business day this year compared to last, I still expect sales in December to exceed the 2016 volume. ARMLS reported 7,036 sales in December of 2016. Our bold December 2017 forecast of 7,350 sales may be joining the November algorithm in the corner.