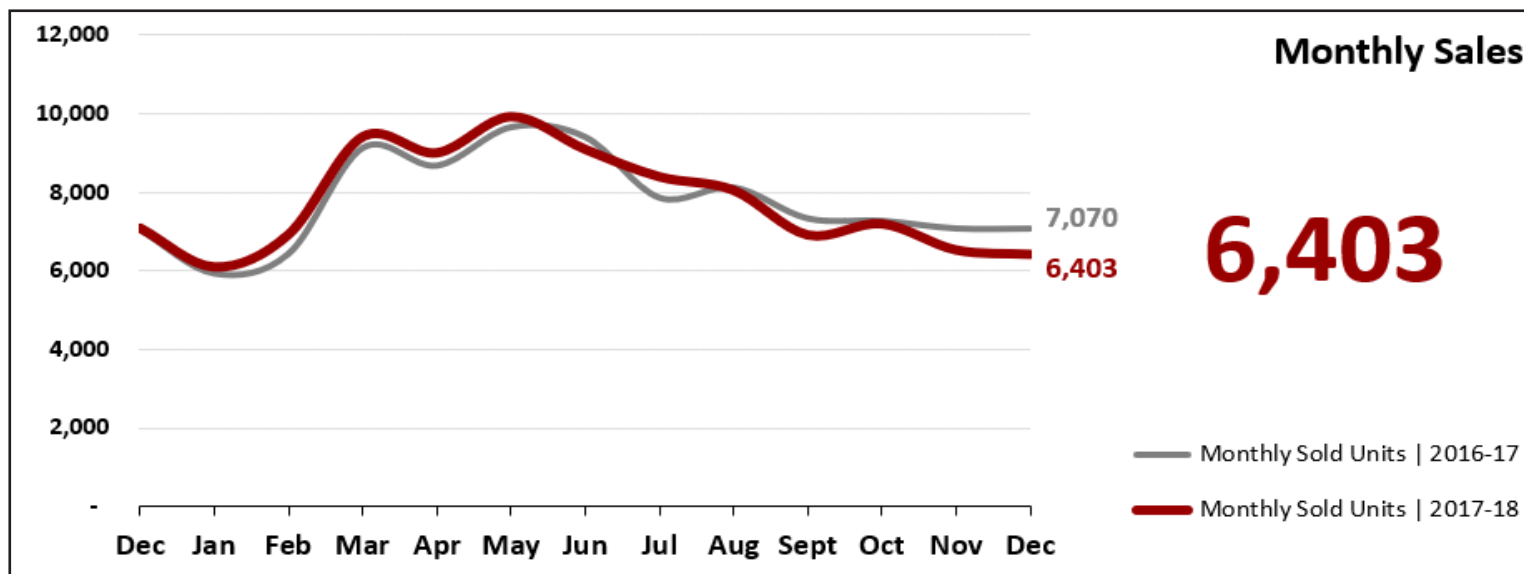


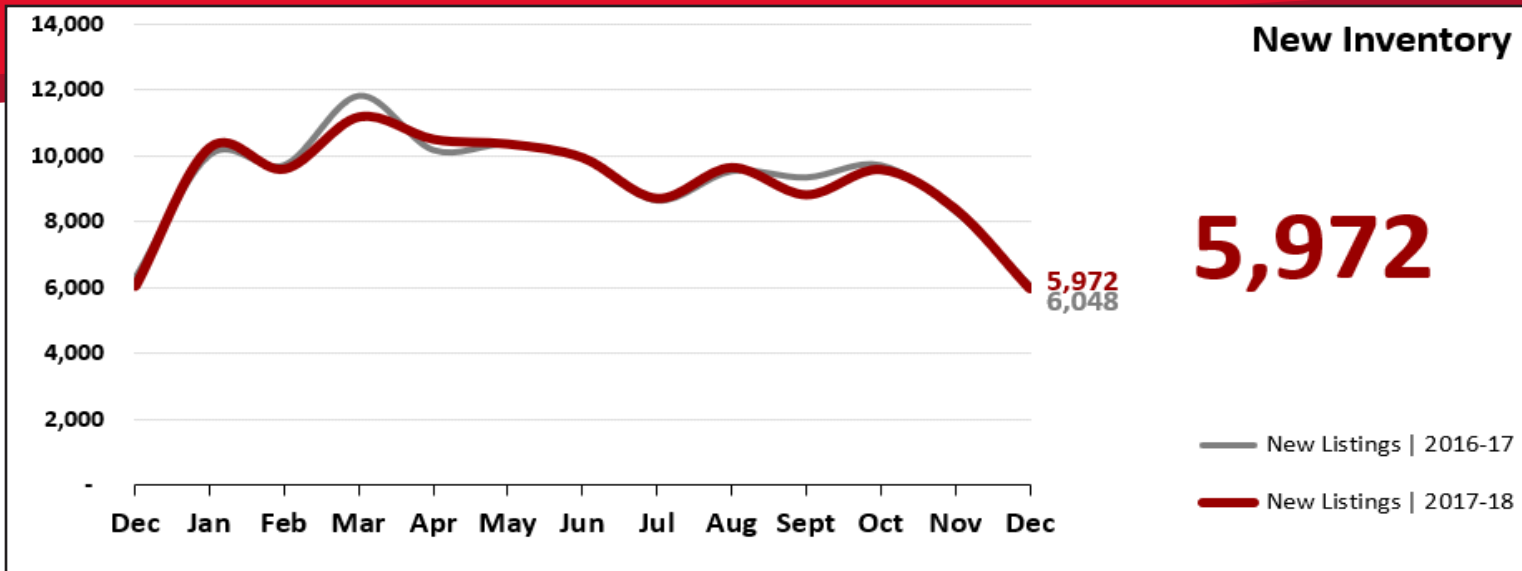


**DATA FOR DECEMBER 2018** - Published January 18, 2018



Sales are down -1.7% month-over-month. The year-over-year comparison is down -9.4%.

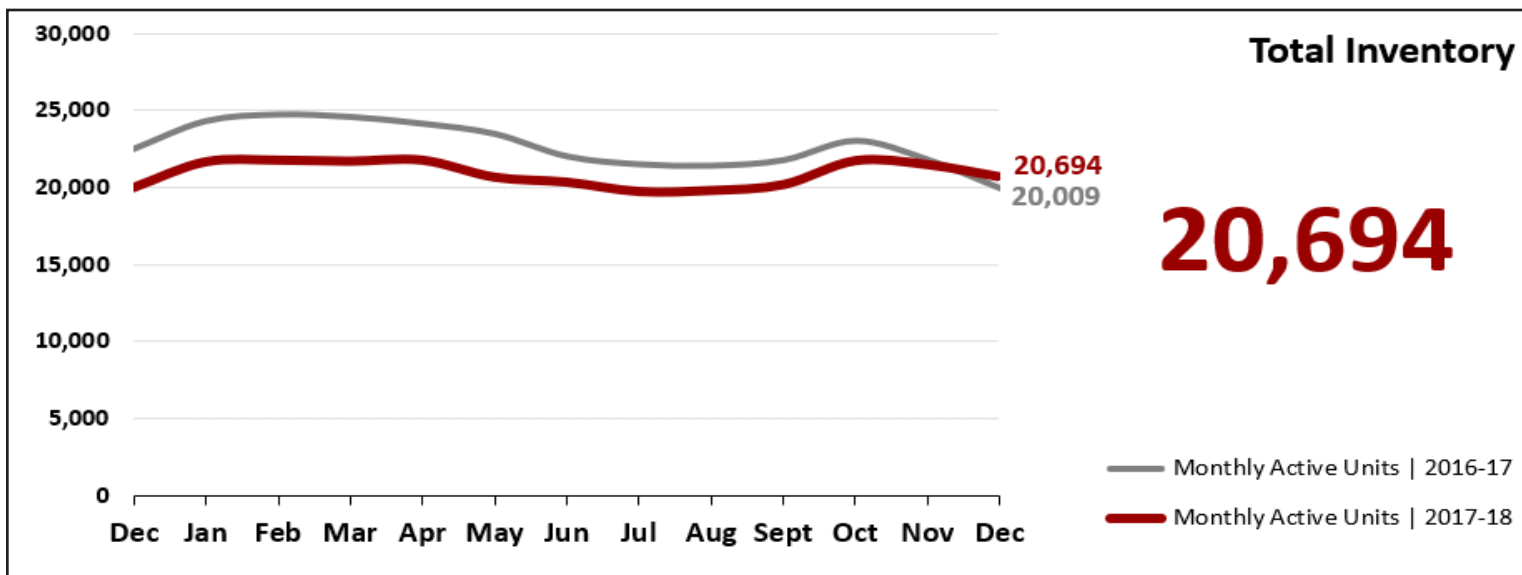
Closed MLS sales with a close of escrow date from 12/1/2018 to 12/31/2018, 0 day DOM sales removed



New inventory is down -28.8% month-over-month while the year-over-year comparison decreased by -1.3%.

**5,972**

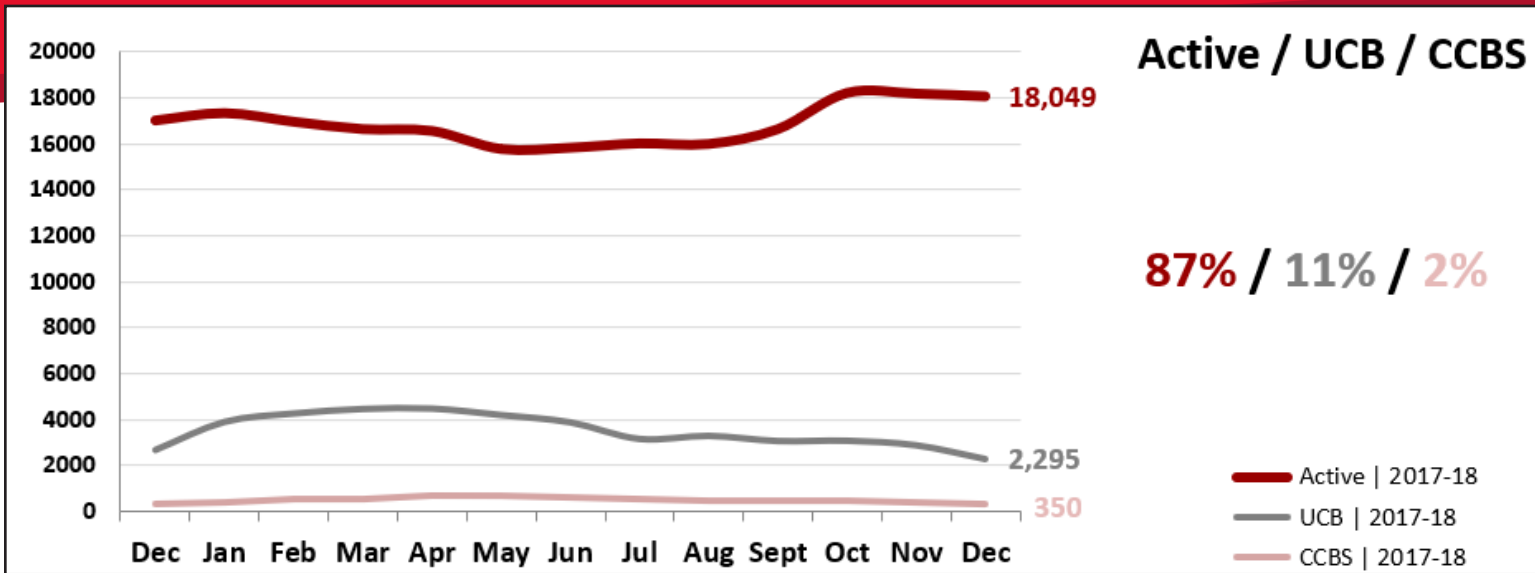
New MLS listings that were active for at least one day from 12/1/2018 to 12/31/2018, 0 day DOM sales removed



Total inventory has a month-over-month decrease of -3.6% while year-over-year reflects an increase of +3.4%.

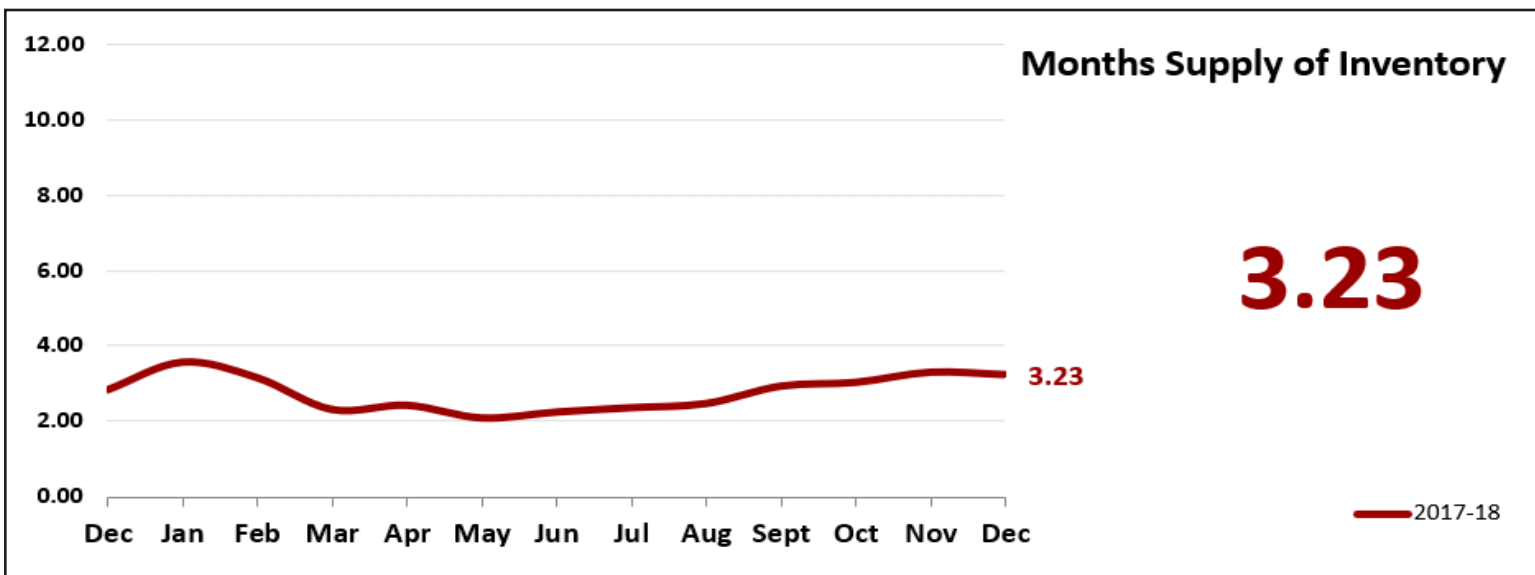
**20,694**

Snapshot of statuses on 12/31/2018



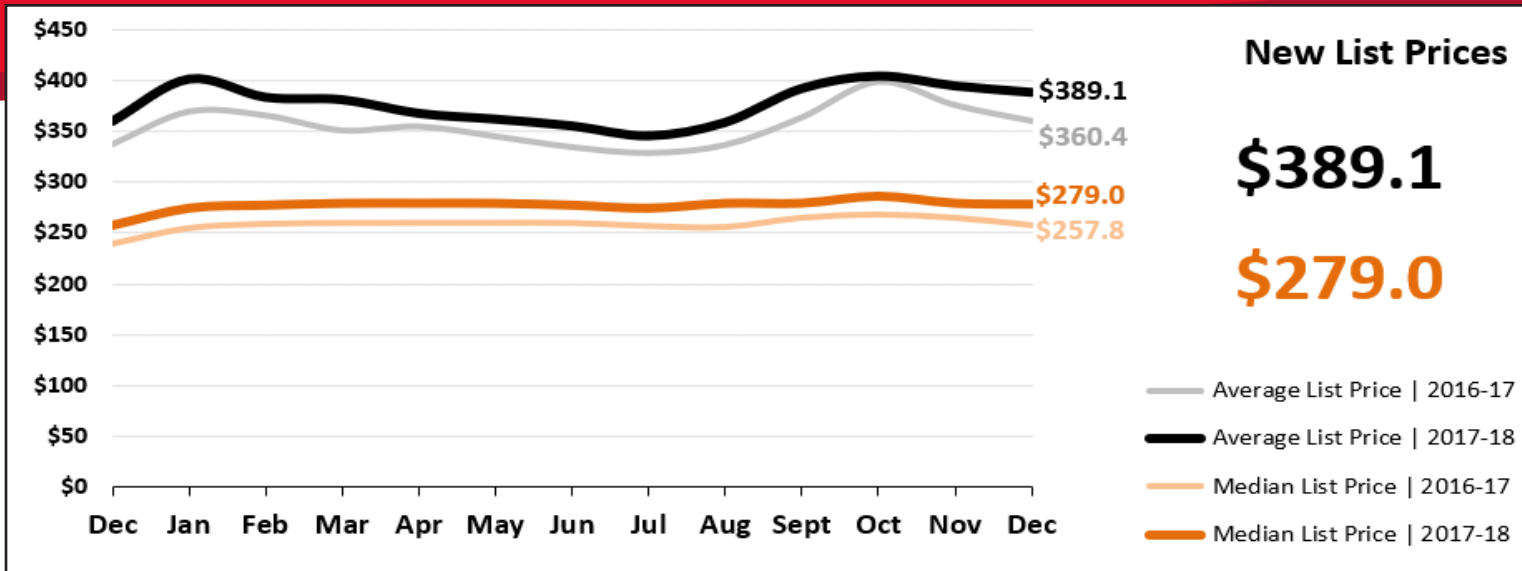
December UCB listings percent of total inventory was 11.1% with December CCBS listings at 1.7% of total inventory.

Snapshot of statuses on 12/31/2018

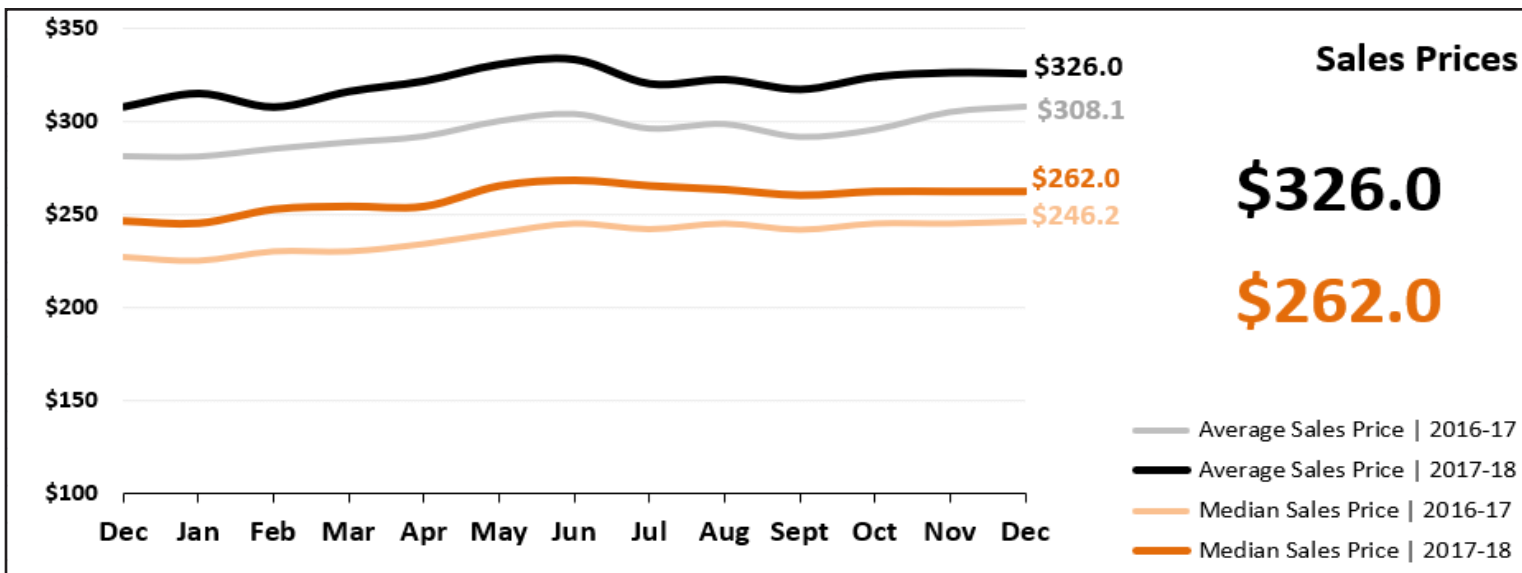


Months supply of inventory for November was 3.30 with December at 3.23.

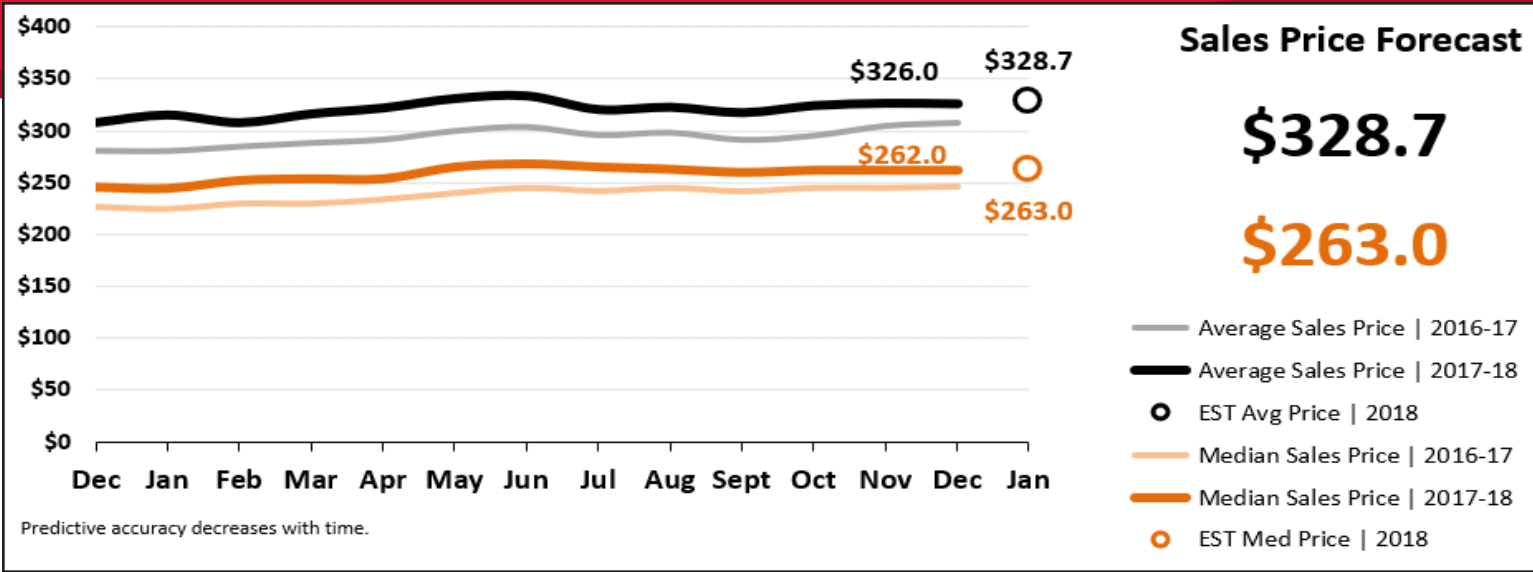
Current inventory of Active/UCB/CCBS divided by the monthly sales volume of DECEMBER 2018, 0 day DOM sales removed



List prices of new listings with list dates from 12/1/2018 to 12/31/2018, 0 day DOM sales removed

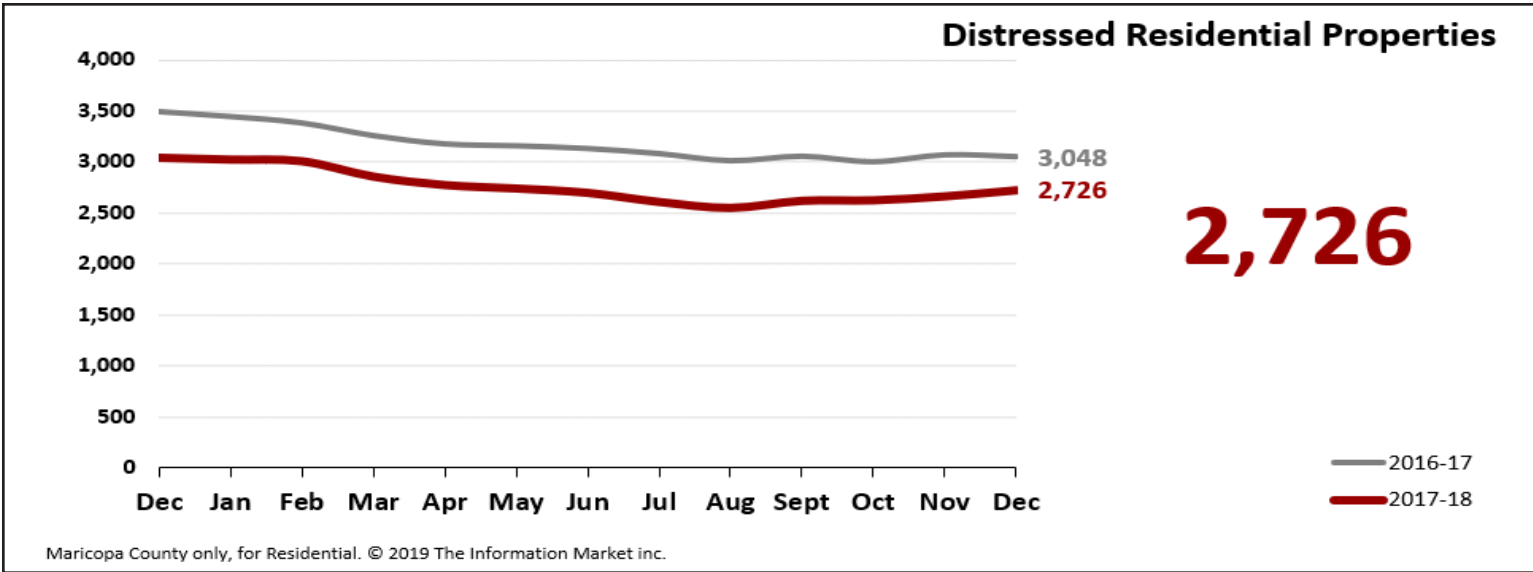


MLS sales prices for closed listings with a close of escrow date from 12/1/2018 to 12/31/2018, 0 day DOM sales removed



A slight increase is forecasted in January for both average and median sales prices.

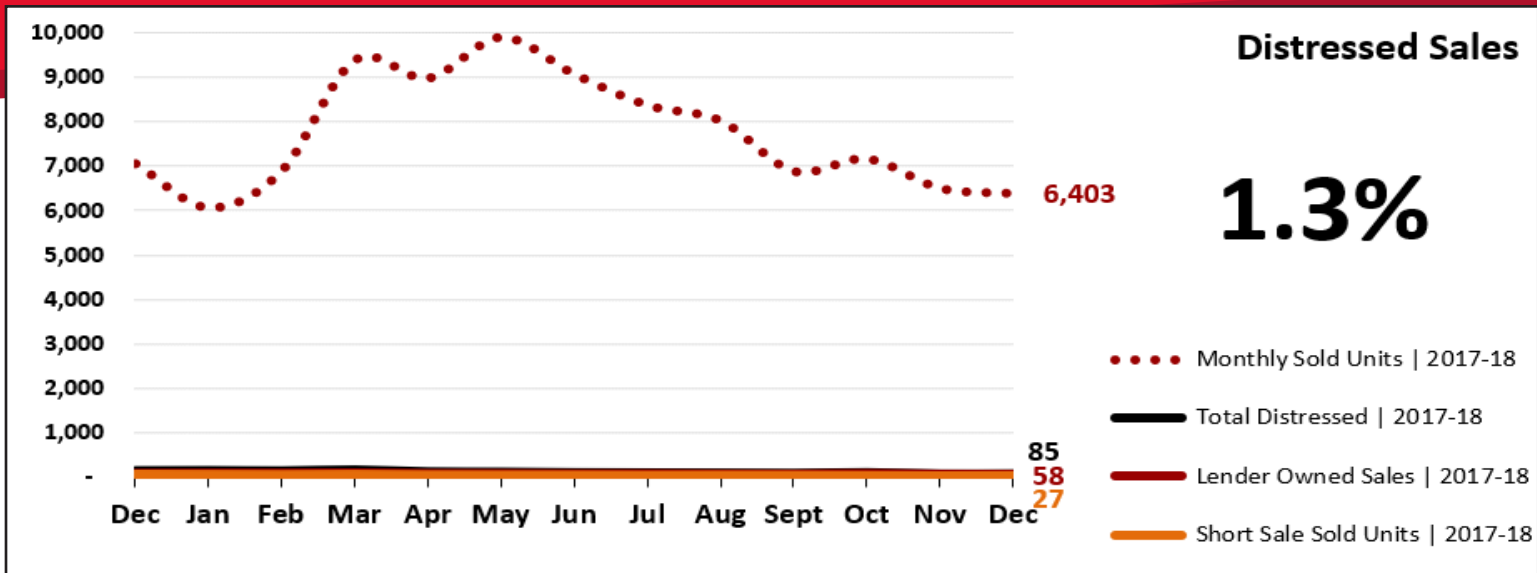
ARMLS proprietary predictive model forecast, 0 day DOM sales removed



Foreclosures pending month-over-month showed an increase of +2.3% while the year-over-year figure was down -10.6%.

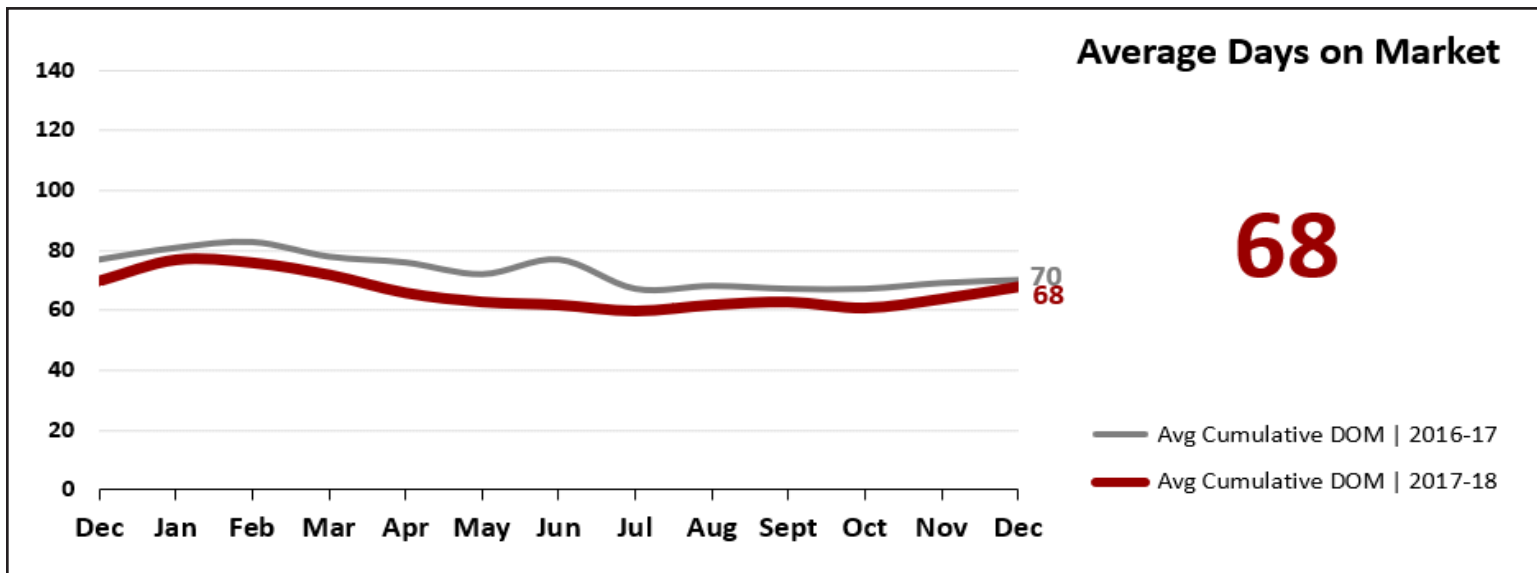
Maricopa County only, for Residential. © 2019 The Information Market inc.

Snapshot of public records data on 12/31/2018 active residential notices and residential REO properties. Note: this graph was adjusted as total foreclosure counts were under reported for the last 5 months.



Distressed sales accounted for 1.3% of total sales, up from the previous month of 1.2%. Short sales dropped -56.5% year-over-year. Lender owned sales dropped -37.0% year-over-year.

New MLS listings that were active for at least one day from 12/1/2018 to 12/31/2018, 0 day DOM sales removed



Days on market were down -2 days year-over-year while month-over-month increased by +4 days.

MLS sales prices for closed listings with a close of escrow date from 12/1/2018 to 12/31/2018, 0 day DOM sales removed

## 2018 In Review

When we began 2018, there were two prevalent notions for sales volume for that year, one being that low inventory numbers would lead to higher prices and those higher prices, coupled with rising interest rates, would restrict demand. This would leave 2018 sales volume comparable or lower than 2017. The second line of thinking centered around millennials being one year older and an improving economy, in which case the single-family housing market would make further gains in 2018.

For the first six months of 2018, it appeared the second line of thinking would prevail, however, when the median sales price reached a historical high in June and interest rates moved up quickly in the fall, the sales volume in 2018 ended the year with 97 fewer sales as reported by ARMLS. Affordability matters, and the buyers started pushing back.

## Sold Listings by Month by ARMLS

Year	SOLD Listings												Total	Total
	January	February	March	April	May	June	July	August	September	October	November	December		
2001	3,700	4,609	5,704	5,833	6,244	6,164	5,638	5,728	4,801	4,766	4,761	4,466		62,414
2002	4,016	4,403	5,732	6,131	6,783	6,404	6,114	5,797	5,542	5,723	5,365	5,940		67,950
2003	4,760	5,493	6,545	7,464	7,468	7,495	7,680	7,688	6,868	6,541	5,693	6,357		80,052
2004	5,118	6,196	8,744	8,971	9,019	10,019	9,040	8,992	8,677	8,173	8,071	7,902		98,922
2005	6,632	7,781	9,987	9,600	9,890	10,252	9,394	10,031	9,213	8,046	7,350	6,549		104,725
2006	5,266	5,918	7,497	6,798	7,573	7,214	6,102	6,163	5,608	5,599	5,337	5,411		74,486
2007	4,389	4,958	5,990	5,535	5,795	5,438	4,730	4,358	3,435	3,457	3,318	3,420		54,823
2008	2,912	3,448	4,293	4,879	5,656	5,748	5,966	5,725	6,166	5,389	4,412	5,514		60,108
2009	4,742	5,477	7,636	8,564	9,284	9,327	9,095	8,007	7,906	8,119	7,494	7,657		93,308
2010	5,789	6,594	8,969	9,261	9,077	9,280	7,100	7,358	6,764	6,593	6,786	8,401		91,972
2011	6,541	7,157	9,933	9,331	9,809	11,125	8,387	8,712	7,892	7,563	7,146	7,840		101,436
2012	6,455	7,249	8,867	8,435	8,442	9,129	7,180	7,562	6,460	7,044	6,804	7,016		90,643
2013	5,828	6,630	8,136	8,754	9,436	8,228	8,216	7,055	6,314	6,041	5,206	5,969		85,813
2014	4,797	5,474	6,710	7,659	7,445	7,219	6,775	6,428	6,252	6,154	4,989	6,495		76,397
2015	4,784	5,990	7,900	8,367	8,319	8,674	7,914	7,010	6,935	6,304	5,311	6,741		84,249
2016	5,131	5,718	8,412	8,293	8,676	8,861	7,630	7,843	7,328	6,981	6,804	7,036		88,713
2017	5,932	6,435	9,116	8,666	9,641	9,391	7,853	8,113	7,328	7,268	7,074	7,070		93,887
2018	6,082	6,911	9,402	8,990	9,913	9,079	8,380	8,036	6,897	7,182	6,515	6,403		93,790

In all the years I've been compiling and analyzing data on our housing market, I don't believe I've ever seen a bigger disconnect between the national housing reports and what our internal reports were telling us. To put it simply, in an industry where income is often calculated as a percentage of the sales price, to the agent on the street, there is no more important number than their annual income. With regards to total sales volume by dollar amount, 2018 was the second-best year in the 18 years ARMLS has been reporting data, trailing only 2005 when the party was raging and lamp shades were the predominant fashion statement. In 2018, we saw a nearly 9% increase over 2017 with over 30 billion dollars in sales.

### ARMLS Average Sales Price Multiplied by Sales Volume

Year	January	February	March	April	May	June	July
2001	636,030,000	782,147,300	1,003,333,600	1,005,025,900	1,081,460,800	1,110,752,800	999,053,600
2002	739,345,600	749,390,600	1,015,710,400	1,103,580,000	1,242,645,600	1,205,232,800	1,145,152,200
2003	876,792,000	1,020,050,100	1,235,041,500	1,397,260,800	1,485,385,200	1,513,990,000	1,520,640,000
2004	1,054,819,800	1,263,984,000	1,858,100,000	1,873,144,800	1,939,085,000	2,323,406,100	1,992,416,000
2005	1,694,476,000	1,938,247,100	2,709,473,100	2,692,800,000	2,967,989,000	3,244,758,000	2,925,291,600
2006	1,774,115,400	1,976,612,000	2,478,508,200	2,237,221,800	2,614,199,600	2,511,193,400	2,027,694,600
2007	1,502,793,600	1,650,518,200	2,071,941,000	1,847,583,000	2,030,568,000	1,900,037,200	1,622,390,000
2008	912,620,800	1,010,608,800	1,259,136,900	1,354,410,400	1,523,726,400	1,520,346,000	1,486,894,248
2009	855,115,376	944,032,151	1,214,734,880	1,367,508,084	1,517,804,024	1,600,326,660	1,594,762,775
2010	1,017,185,190	1,146,498,780	1,598,150,234	1,586,418,561	1,607,827,164	1,670,000,960	1,250,601,100
2011	1,026,793,098	1,113,664,985	1,567,407,534	1,505,062,307	1,557,473,020	1,779,310,250	1,299,976,613
2012	1,081,057,580	1,207,871,874	1,674,524,083	1,596,003,220	1,728,195,588	1,774,020,312	1,440,408,520
2013	1,214,561,028	1,438,378,500	1,819,022,472	1,994,450,082	2,243,909,108	1,949,657,512	1,962,375,168
2014	1,164,366,216	1,326,881,178	1,691,980,180	1,919,077,335	1,842,019,565	1,849,681,056	1,691,886,875
2015	1,219,848,240	1,501,082,020	2,026,318,400	2,221,187,490	2,235,257,067	2,350,480,520	2,086,913,886
2016	1,386,160,174	1,554,632,712	2,252,287,764	2,252,727,106	2,447,013,744	2,504,331,264	2,081,151,170
2017	1,668,131,788	1,836,735,615	2,633,156,600	2,531,633,244	2,895,066,967	2,857,014,539	2,326,859,606
2018	1,917,861,388	2,128,816,063	2,974,463,730	2,894,348,480	3,281,341,782	3,029,099,402	2,686,116,820



<b>Aug</b>	<b>Sept</b>	<b>Oct</b>	<b>Nov</b>	<b>Dec</b>	<b>Total:</b>	<b>Rank:</b>
984,643,200	819,530,700	814,032,800	814,131,000	784,229,600	10,834,371,300	18
1,053,314,900	978,717,200	1,045,019,800	993,598,000	1,095,930,000	12,367,637,100	17
1,539,137,600	1,341,320,400	1,292,501,600	1,134,614,900	1,324,163,100	15,680,897,200	14
1,996,224,000	1,949,721,900	1,888,780,300	1,877,314,600	1,872,774,000	21,889,770,500	7
3,192,867,300	2,909,465,400	2,585,984,400	2,355,675,000	2,155,275,900	31,372,302,800	1
2,041,801,900	1,819,796,000	1,848,789,800	1,804,973,400	1,809,438,400	24,944,344,500	4
1,496,101,400	1,050,423,000	1,120,068,000	1,058,442,000	1,070,460,000	18,421,325,400	10
1,361,656,900	1,350,286,174	1,144,219,425	902,584,900	1,063,694,712	14,890,185,659	16
1,364,400,807	1,382,972,862	1,380,928,234	1,307,882,856	1,359,668,804	15,890,137,513	13
1,207,131,406	1,081,049,536	1,076,656,679	1,079,177,580	1,347,797,633	15,668,494,823	15
1,318,718,016	1,224,230,716	1,160,353,275	1,147,568,994	1,271,334,400	15,971,893,208	12
1,443,820,222	1,282,439,200	1,434,750,096	1,393,146,216	1,485,287,200	17,541,524,111	11
1,663,886,475	1,494,586,940	1,461,384,351	1,232,458,028	1,474,348,969	19,949,018,633	8
1,600,456,296	1,556,710,488	1,525,484,290	1,252,338,780	1,675,073,490	19,095,955,749	9
1,827,990,690	1,800,332,935	1,686,011,104	1,405,471,174	1,804,033,161	22,164,926,687	6
2,163,813,113	2,053,144,384	1,979,169,348	1,908,290,664	1,979,761,536	24,562,482,979	5
2,423,263,857	2,138,530,240	2,149,910,740	2,158,772,580	2,178,401,330	27,797,477,106	3
2,593,763,648	2,189,521,620	2,329,201,602	2,127,427,645	2,087,525,269	30,239,487,449	2

## 2018 Highlights or Lowlights - It's All Perspective

### MAY

In May of 2018, Zillow (whose CEO once said, “We sell ads, not houses”) began buying houses in Maricopa County. At a recent event, a member of one of the most successful real estate teams in the Valley asked me, “If iBuyers only account for 4% of all purchase transactions, why do they garner so much attention?” As usual, I didn’t have a good answer but probably mumbled something like they are an emerging trend, easy to track, and we’re asked about them all the time. Anyway, here’s a composite of the iBuyers purchases in 2018, and the percentage of their purchases as they relate to overall sales volume.

### 2018 MLS iBuyer Purchases

MONTH	OFFER	OPEN	ZILLOW	I-TOTALS	OFFER	OPEN	ZILLOW	I-BUYER	SALES
201801	54	214		268	0.007	0.028	0.000	0.035	7,665
201802	59	219		278	0.007	0.026	0.000	0.033	8,487
201803	61	237		298	0.005	0.021	0.000	0.026	11,411
201804	64	258		322	0.006	0.024	0.000	0.030	10,772
201805	98	253	3	354	0.008	0.021	0.000	0.030	11,775
201806	86	281	16	383	0.008	0.025	0.001	0.035	11,035
201807	75	275	27	377	0.007	0.027	0.003	0.037	10,158
201808	94	260	43	397	0.009	0.026	0.004	0.040	10,020
201809	95	173	62	330	0.011	0.020	0.007	0.038	8,610
201810	105	190	89	384	0.012	0.021	0.010	0.042	9,096
201811	73	224	75	372	0.009	0.027	0.009	0.045	8,280
201812	80	266	84	430	0.010	0.032	0.010	0.052	8,261

## JUNE


In our 2018 forecast, STAT stated, “In June of 2006 our median sales price peaked at \$264,800.” This is what had been referred to as our all-time peak median sales price. In reference to a new peak I penned, “I personally hope this doesn’t happen, as a 2019 return to peak pricing would make for a much healthier market. But if it does occur, June is the most likely month.” In June we established a new all time high, as reported by ARMLS, with a median sales price of \$268,000. The bubble talk began.

### Median Sale Price

Median Sale Price												
Year	January	February	March	April	May	June	July	August	September	October	November	December
2001	122,000	124,900	127,500	128,500	129,900	133,900	133,000	129,000	128,000	126,900	128,000	129,000
2002	138,000	134,000	129,900	135,000	139,500	141,000	140,000	140,000	139,000	142,000	141,000	145,000
2003	143,100	140,000	145,000	145,000	149,900	151,500	153,000	153,900	150,000	149,900	149,500	151,000
2004	150,500	150,000	155,000	155,000	160,500	169,000	168,000	168,000	170,000	174,900	176,000	181,900
2005	188,000	190,000	206,000	220,000	235,000	249,900	252,000	255,500	260,000	256,900	255,000	255,000
2006	254,900	252,000	255,000	255,000	259,900	264,800	257,000	254,900	249,900	250,000	250,000	250,000
2007	250,000	247,900	252,500	250,000	255,000	255,000	250,000	245,000	234,900	235,000	232,500	229,000
2008	220,000	213,800	210,000	210,000	204,900	198,900	190,000	185,000	170,000	164,000	150,000	143,000
2009	130,000	125,000	119,900	115,500	119,900	125,000	125,000	126,000	130,000	128,000	130,000	126,500
2010	124,900	125,000	128,000	128,000	130,000	127,419	125,000	119,000	119,500	120,000	115,000	110,250
2011	110,000	109,900	110,000	111,000	108,300	110,500	109,000	109,900	114,900	112,000	115,000	117,000
2012	120,000	122,000	130,900	138,000	145,000	141,000	147,900	146,000	150,000	150,000	155,000	154,000
2013	154,700	160,000	167,500	172,000	175,000	180,000	185,000	180,242	185,000	185,000	184,000	185,000
2014	182,500	180,000	187,000	189,000	192,000	195,000	197,000	196,700	194,000	192,500	192,000	197,000
2015	194,700	195,000	200,000	202,745	211,000	214,900	212,000	208,000	211,000	213,000	209,000	215,000
2016	210,000	214,000	222,000	222,000	225,700	230,000	225,000	230,000	230,000	229,900	226,000	227,000
2017	225,000	230,000	230,000	234,000	240,000	245,000	242,000	245,000	241,700	254,000	245,000	246,225
2018	245,000	252,500	254,000	254,011	265,000	268,000	265,000	263,000	260,000	262,000	262,000	262,000

## OCTOBER

In October, interest rates began to rise at an accelerated clip. With higher interest rates and higher prices, demand slowed. The result was that ARMLS year-over-year sales volume declined for the first time in four years.

		<b>PRIMARY MORTGAGE MARKET SURVEY®</b> Summary page with all rate types - U.S. averages						
Week	U.S. 30 yr FRM	30 yr fees & points	U.S. 15 yr FRM	15 yr fees & points	U.S. 5/1 ARM	5/1 ARM fees & points	U.S. 30 yr FRM/ 5/1 ARM margin	5/1 ARM spread
10/11/2018	4.90	0.5	4.29	0.5	4.07	0.3	2.77	0.83
10/18/2018	4.85	0.5	4.26	0.4	4.10	0.3	2.77	0.75
10/25/2018	4.86	0.5	4.29	0.4	4.14	0.3	2.77	0.72
11/1/2018	4.83	0.5	4.23	0.5	4.04	0.3	2.77	0.79
11/8/2018	4.94	0.5	4.33	0.5	4.14	0.3	2.77	0.80
11/15/2018	4.94	0.5	4.36	0.4	4.14	0.3	2.77	0.80
11/21/2018	4.81	0.4	4.24	0.5	4.09	0.3	2.76	0.72
11/29/2018	4.81	0.5	4.25	0.4	4.12	0.3	2.77	0.69
12/6/2018	4.75	0.5	4.21	0.4	4.07	0.3	2.78	0.68
12/13/2018	4.63	0.5	4.07	0.5	4.04	0.3	2.77	0.59
12/20/2018	4.62	0.4	4.07	0.4	3.98	0.3	2.76	0.64
12/27/2018	4.55	0.5	4.01	0.4	4.00	0.3	2.76	0.55

## 2018 In Summation

Whenever I write our year in review, I always try to point out all the things I got right. It makes me feel better about myself. For instance, last month I guessed (I mean projected) there would be 6,500 sales in December. There were 6,403, which I knew but had simply rounded up. Which brings me to a conversation I had with Tina Tamboer in June. In my introduction I stated there were two opinions we had when entering 2018, one being low inventory numbers would lead to higher prices, and the higher prices coupled with rising interest rates would restrict demand leaving 2018's sales volume comparable or lower than 2017's. The second line of thinking centered around millennials being one year older and an improving economy in which case the single-family housing market would make further gains this year. The first opinion was Tina's. Me being a glass half-full guy, favored the second opinion. I believed in the millennials and if we had been discussing avocado toast sales, I'd have crushed her. But we weren't. We were talking home sales. In early January as ARMLS numbers reported, I received a phone call from Tina stating she'd won our bet. A good analyst will admit when they're wrong. Great analysts are never wrong.

## Looking Ahead to 2019

As we head into 2019, we see tailwinds as well as headwinds for our housing market. We hear reports of population gains, a strong job market and increasing wages. I heard a local real estate expert with decades of knowledge and experience ask why volume isn't increasing with such a strong backdrop. He's right. We should be crushing it. Rising interest rates and rising prices have clearly softened demand and sale prices teeter on the top end of affordability. Several housing reports call the emerging trend for real estate in 2019 to be "unpredictable".

For example, Lennar homes has said [it can't give a 2019 forecast](#) because the market is so uncertain. "We continued to experience slower sales due to higher home prices and rising mortgage rates," Lennar's executive chairman said. And despite reporting strong fourth-quarter earnings, the home builder declined to offer guidance

for 2019 “until the markets further define themselves.”

Maybe just a bit of the uncertainty has to do with the elephant and donkey in the room, a house divided against itself so to speak. This is where STAT separates itself from the others. We have no fear. We can cut through political rhetoric. We can take two halves of a house and make it one. STAT deals with fractional houses all the time.

So, what do we see for 2019? Let me begin by regressing. Below we’ve displayed the total median sales price spreadsheet from December, based on public record filings in Maricopa County. The chart will also show the quarters as well as the year-over-year percentage changes for each quarter. The median may confuse you a little bit at \$274,000. Don’t let it. This is a report of all publicly reported sales, including new construction. It tends to be higher than the ARMLS reported median.

## Total Median Sales Price Spreadsheet For Maricopa County

All Date	Total Median						
	Total Count	Low Qtr	Low Qtr Prev YearΔ	Middle	Middle Prev YearΔ	High Qtr	High Qtr Prev YearΔ
199912	7,346	\$ 99,500	0.00%	\$ 130,983	0.00%	\$ 182,500	0.00%
200012	7,699	\$ 104,000	4.52%	\$ 138,000	5.36%	\$ 193,000	5.75%
200112	8,266	\$ 113,448	9.08%	\$ 143,790	4.20%	\$ 199,000	3.11%
200212	10,062	\$ 120,000	5.78%	\$ 152,491	6.05%	\$ 212,566	6.82%
200312	10,880	\$ 127,000	5.83%	\$ 162,000	6.24%	\$ 234,900	10.51%
200412	14,075	\$ 148,173	16.67%	\$ 190,000	17.28%	\$ 272,000	15.79%
200512	12,885	\$ 200,000	34.98%	\$ 259,900	36.79%	\$ 356,563	31.09%
200612	9,996	\$ 215,000	7.50%	\$ 265,000	1.96%	\$ 371,000	4.05%
200712	5,883	\$ 193,030	-10.22%	\$ 247,405	-6.64%	\$ 350,000	-5.66%
200812	6,080	\$ 104,000	-46.12%	\$ 160,000	-35.33%	\$ 250,000	-28.57%
200912	7,820	\$ 85,604	-17.69%	\$ 140,000	-12.50%	\$ 220,000	-12.00%
201012	6,979	\$ 70,000	-18.23%	\$ 122,000	-12.86%	\$ 202,760	-7.84%
201112	7,802	\$ 79,000	12.86%	\$ 129,027	5.76%	\$ 210,118	3.63%
201212	7,531	\$ 111,500	41.14%	\$ 168,903	30.91%	\$ 269,000	28.02%
201312	6,685	\$ 139,000	24.66%	\$ 203,000	20.19%	\$ 319,000	18.59%
201412	7,187	\$ 146,000	5.04%	\$ 210,000	3.45%	\$ 310,000	-2.82%
201512	8,246	\$ 164,000	12.33%	\$ 230,000	9.52%	\$ 321,510	3.71%
201612	8,685	\$ 178,000	8.54%	\$ 243,500	5.87%	\$ 340,000	5.75%
201712	8,817	\$ 194,000	8.99%	\$ 256,000	5.13%	\$ 356,000	4.71%
201812	8,168	\$ 214,600	10.62%	\$ 274,000	7.03%	\$ 379,000	6.46%

The reason I show this chart is because I wanted to reference 2013. In August 2013, we saw a similar downturn to the one we are currently experiencing. The circumstances are completely different, but they feel similar. In August 2013 the large REIT's (Blackstone, Colony, American Homes, etc. pulled out of our market and left a considerable void. We had a lot of demand, almost pent up demand with all the former homeowners having been sent to the penalty box via short sales and foreclosures. From August 2013, our market transitioned from an investor's market to a market dominated by the traditional buyer. The market paused for about a year, but then regained traction.

So, what's this have to do with 2019? I think our market is going to experience a similar pause, not a downturn, a pause. Like Whitney, I believe the children are our future, it's time to let them lead the way. I may be one of the few, but I believe in the millennials. Unlike [the swallows of San Juan Capistrano](#), they have their own time table. Their sheer numbers are undeniable, and they're about to make their presence felt. There are some very knowledgeable housing experts that have their doubts, but I believe it's just a matter of time. This could be a major miscalculation on my part, but I'm sticking to it. In 2019 I believe our market will pause and we'll see a decline in year-over-year sales volume as the millennials figuratively and literally transcend their basements and begin buying property.

So, how do I see 2019 unfolding? I would not be surprised if sales volume was 6-8% lower next year with a modest increase in prices. The 2% to 3% range, zero would be great. Why? Homebuilding analyst Ivy Zelman explains it best.

*“At this point it feels like we're beyond the ninth inning in home price appreciation. We're cautious on the ability for home prices to continue to incrementally increase beyond low single digits. What we really need is for incomes to grow faster than home price appreciation.”*

Next month in STAT we'll take our stethoscope and check the overall health of our market.



## The Pending Price Index

Last month the STAT mathematical model projected a median sales price for December of \$261,800. Our mathematical model for the first 11 months of 2018 had been underestimating the actual median sales price. The December median sales price followed our yearly pattern, reporting a median sales price of \$262,000. ARMLS saw 6,403 sales this year compared to 7,070 last year. Our estimate of 6,500 sales overshoot the actual sales volume by 97. Looking ahead to January, the ARMLS Pending Price Index anticipates the median sales price will hold steady, projecting a median sales price of \$263,000.

Sales volume in 2018 was comparable to 2017, with 93,790 sales in 2018 compared to 93,887 in 2017. We begin January with 3,796 pending contracts, 2,295 UCB listings and 350 CCBS giving us a total of 6,441 residential listings practically under contract. This compares to 7,773 of the same type of listings one year ago. The pending contracts of this year are 17% lower than last year. There were 21 business days in January of 2018 as well as this year. ARMLS reported 6,082 sales in January of 2018. Sales volume will be lower this year, I'm guessing 5,450.