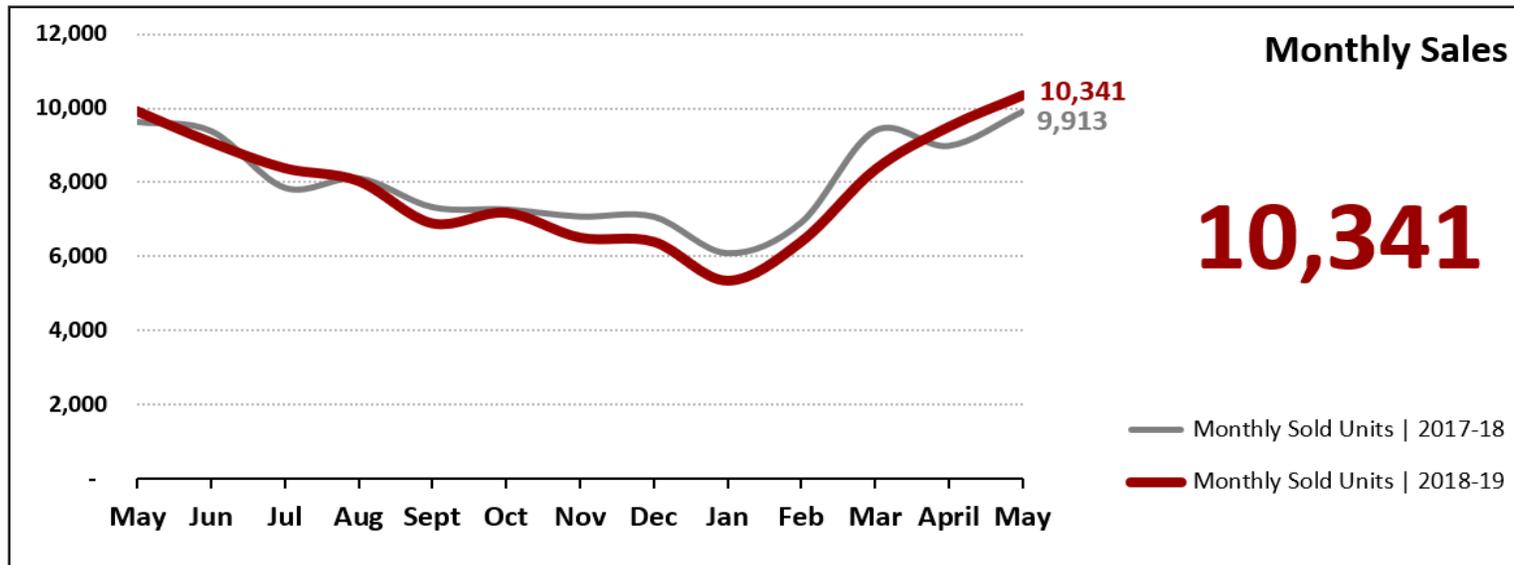


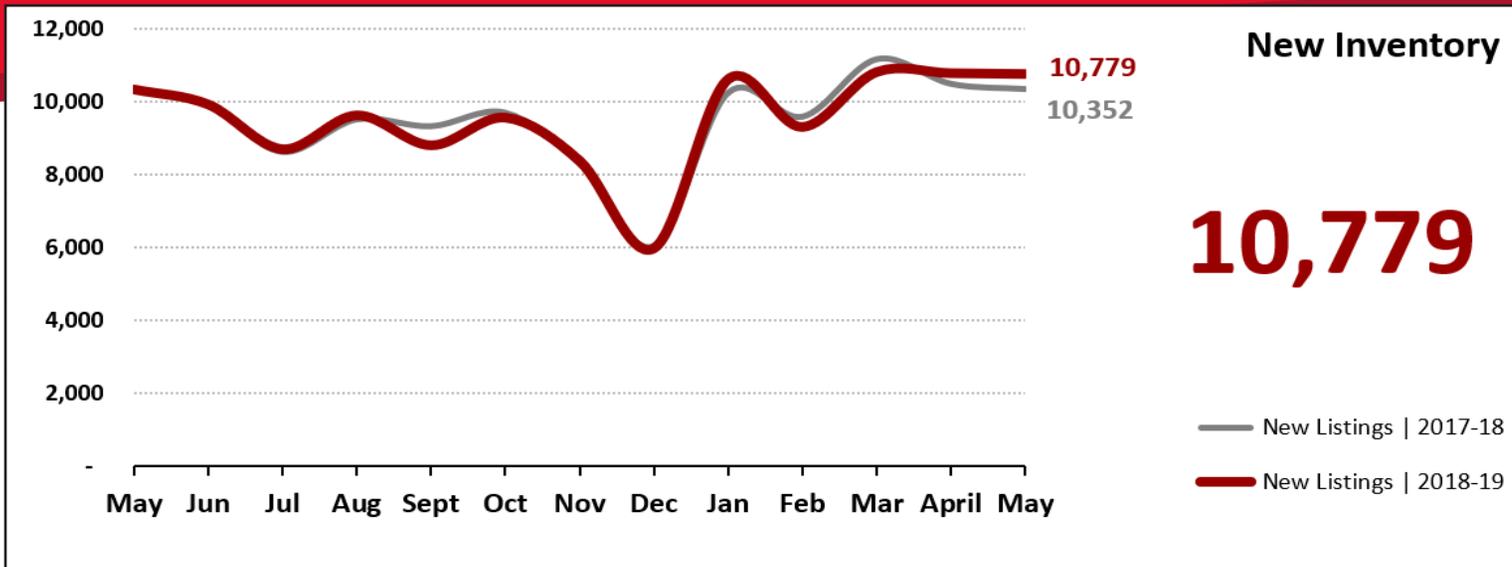


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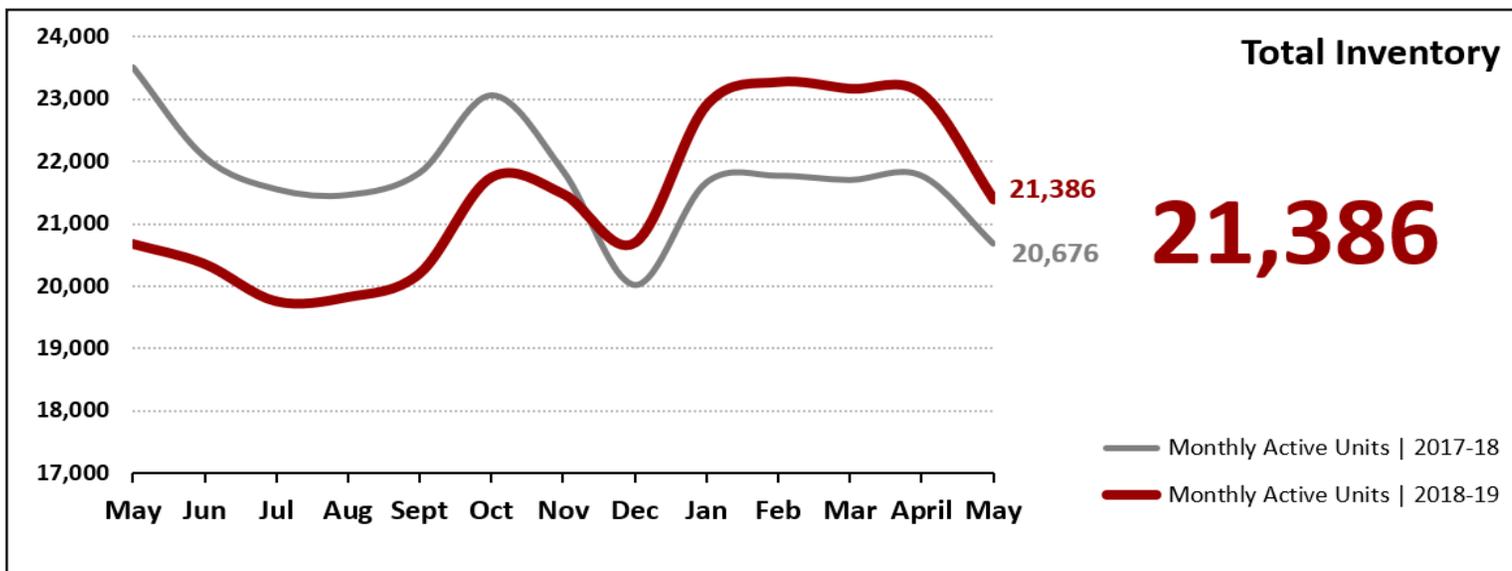
Sales are up +8.9% month-over-month. The year-over-year comparison is also up +4.3%.

Closed MLS sales with a close of escrow date from 5/1/2019 to 5/31/2019, 0 day DOM sales removed



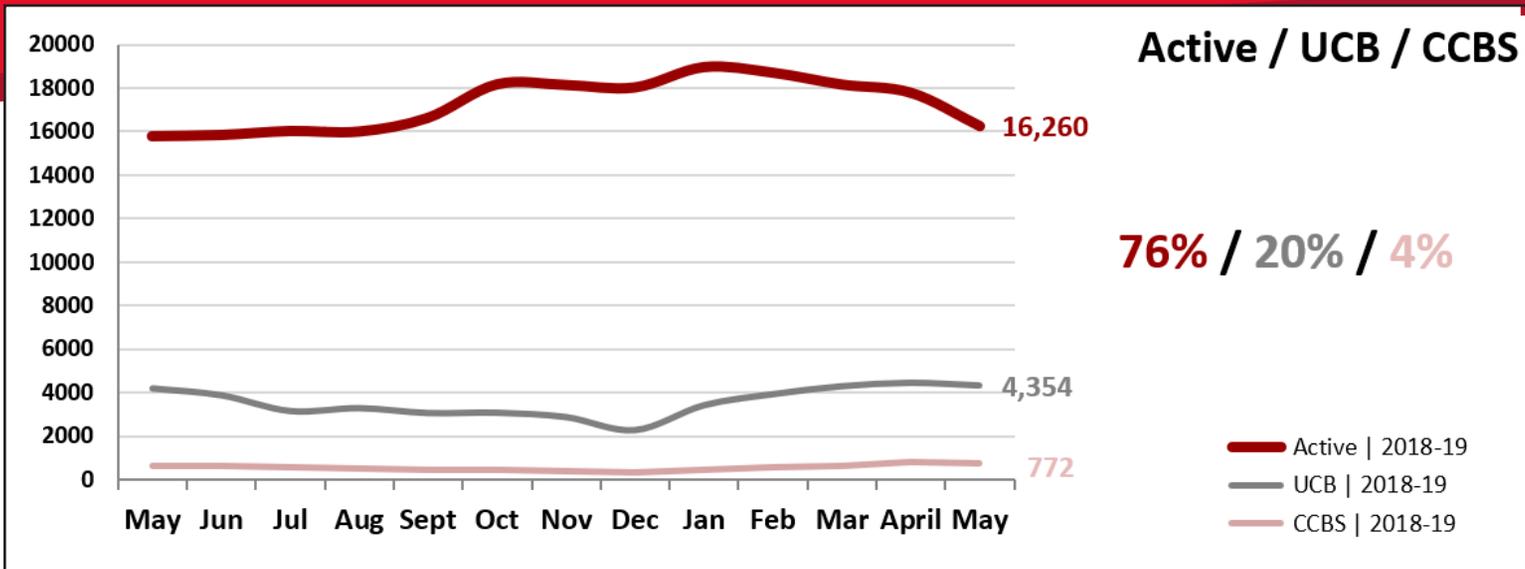
New inventory is down -0.2% month-over-month while the year-over-year comparison increased by +4.1%.

New MLS listings that were active for at least one day from 5/1/2019 to 5/31/2019, 0 day DOM sales removed



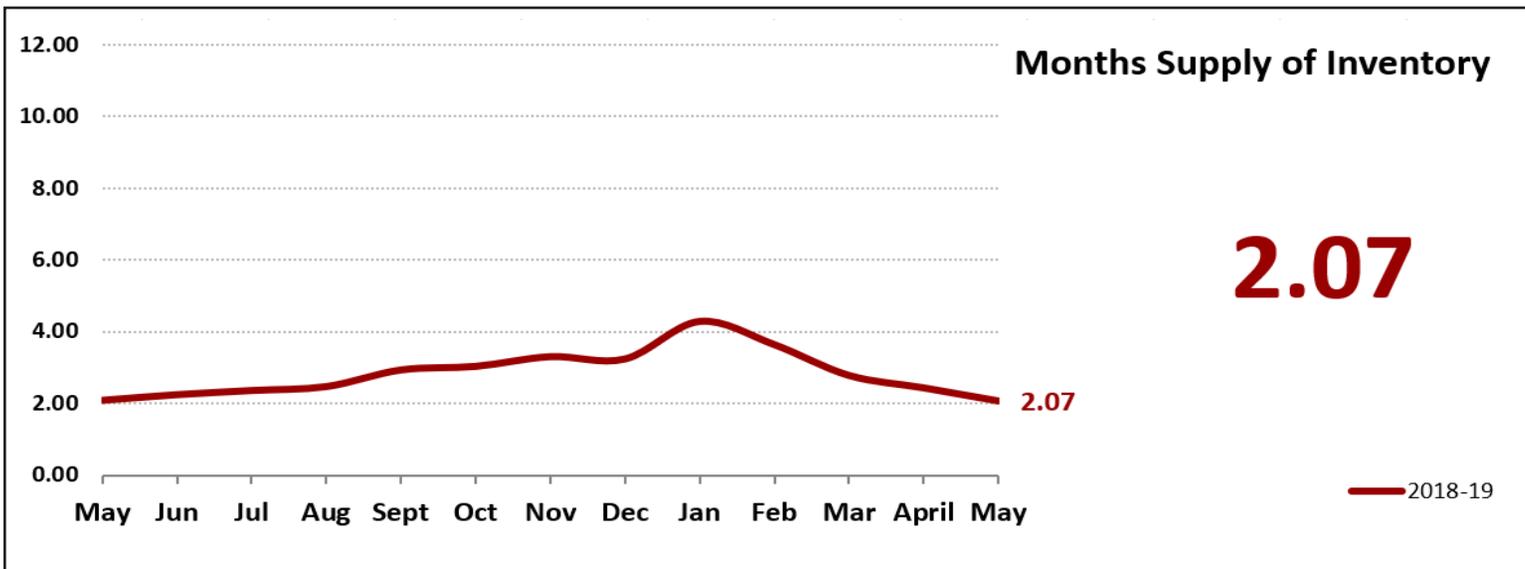
Total inventory has a month-over-month decrease of -7.4% while year-over-year reflects an increase of +3.4%.

Snapshot of statuses on 5/31/2019



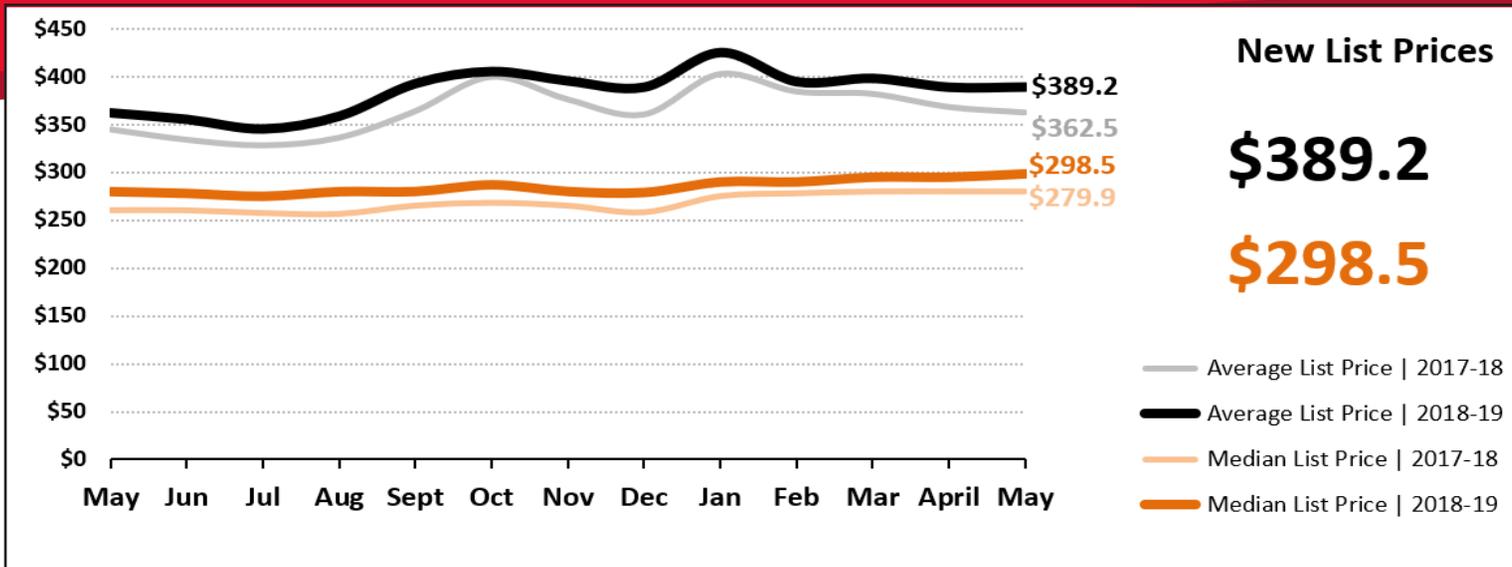
May UCB listings percent of total inventory was 20.4% with May CCBS listings at 3.6% of total inventory.

Snapshot of statuses on 5/31/2019



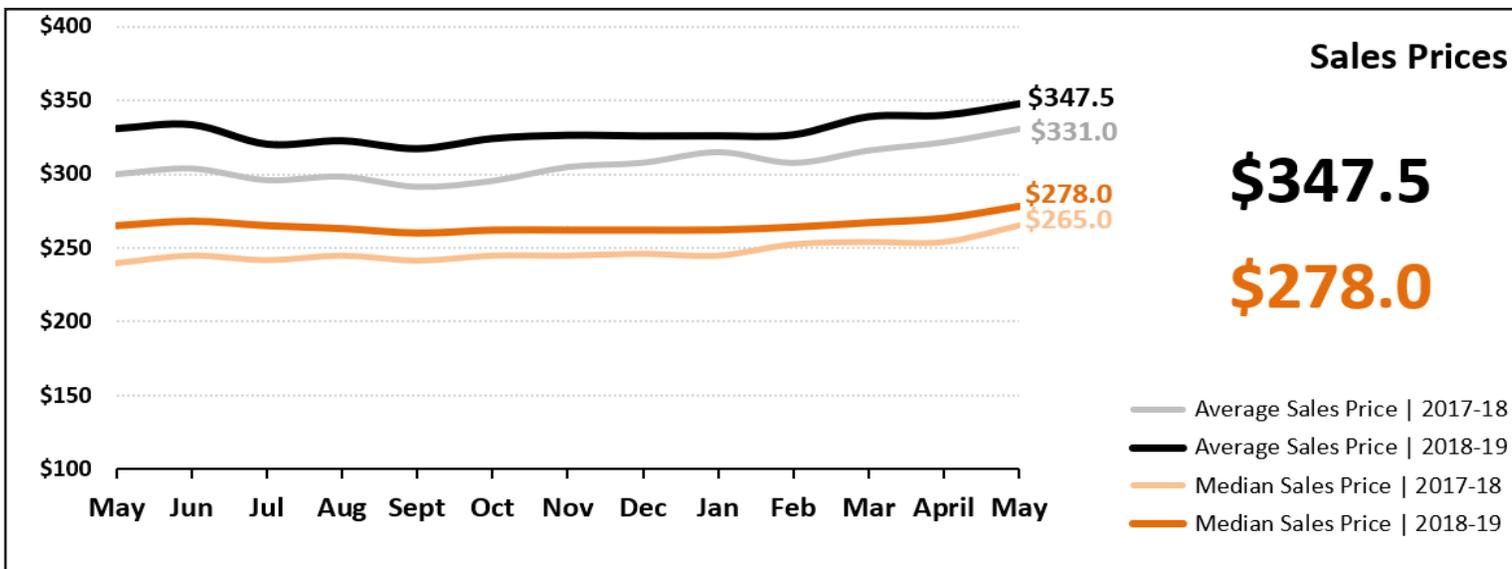
Months supply of inventory for April was 2.43 with May at 2.07.

Current inventory of Active/UCB/CCBS divided by the monthly sales volume of MAY 2019, 0 day DOM sales removed



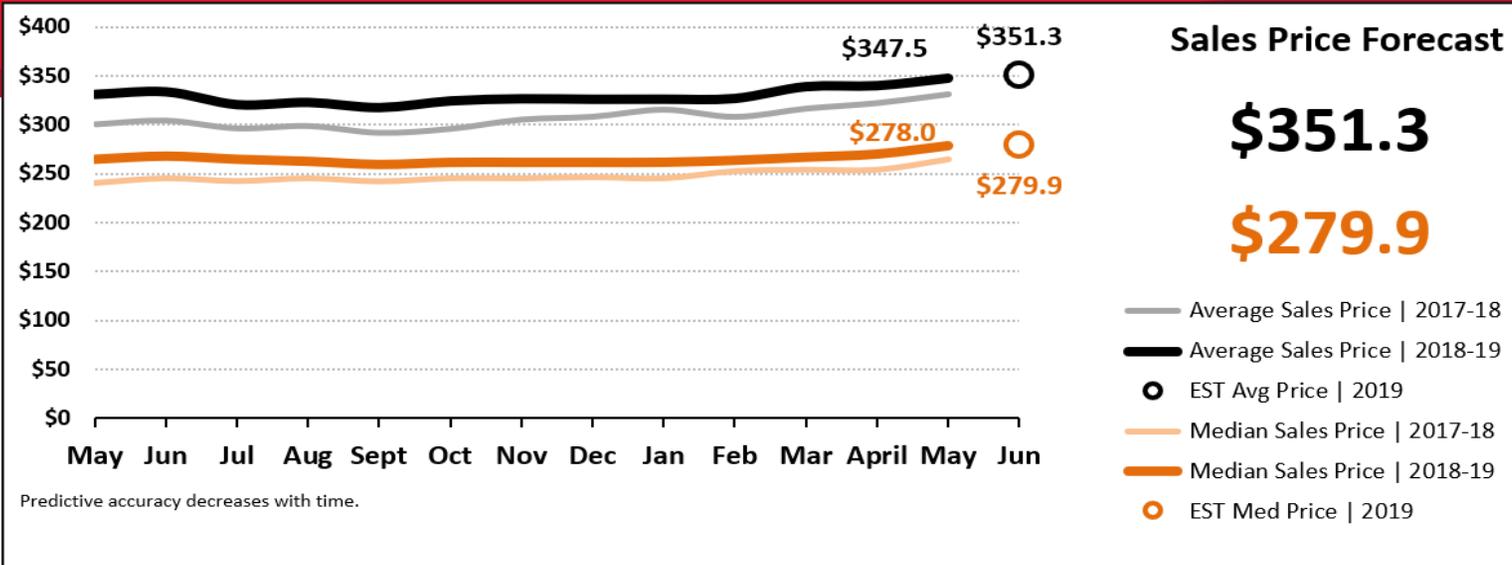
Average new list prices are up +7.4% year-over-year. The year-over-year median is up +6.6%.

List prices of new listings with list dates from 5/1/2019 to 5/31/2019, 0 day DOM sales removed



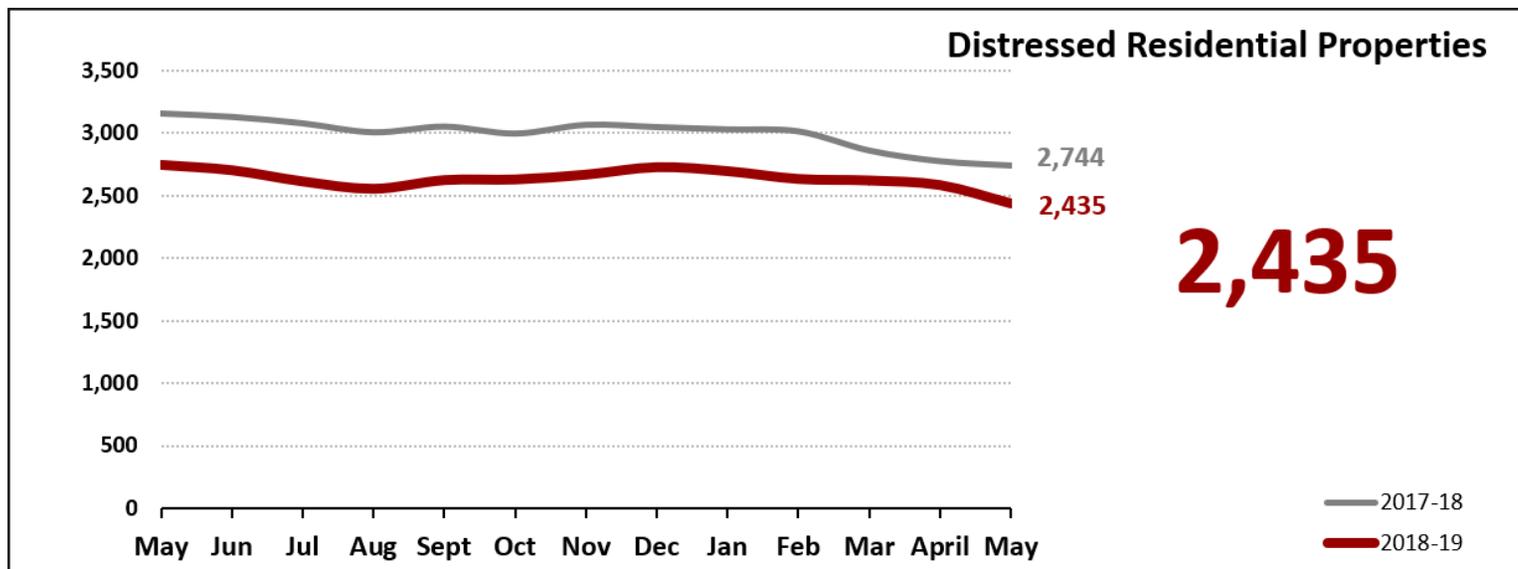
The average sales price is up +5.0% year-over-year while the year-over-year median sales price is also up +4.9%.

MLS sales prices for closed listings with a close of escrow date from 5/1/2019 to 5/31/2019, 0 day DOM sales removed



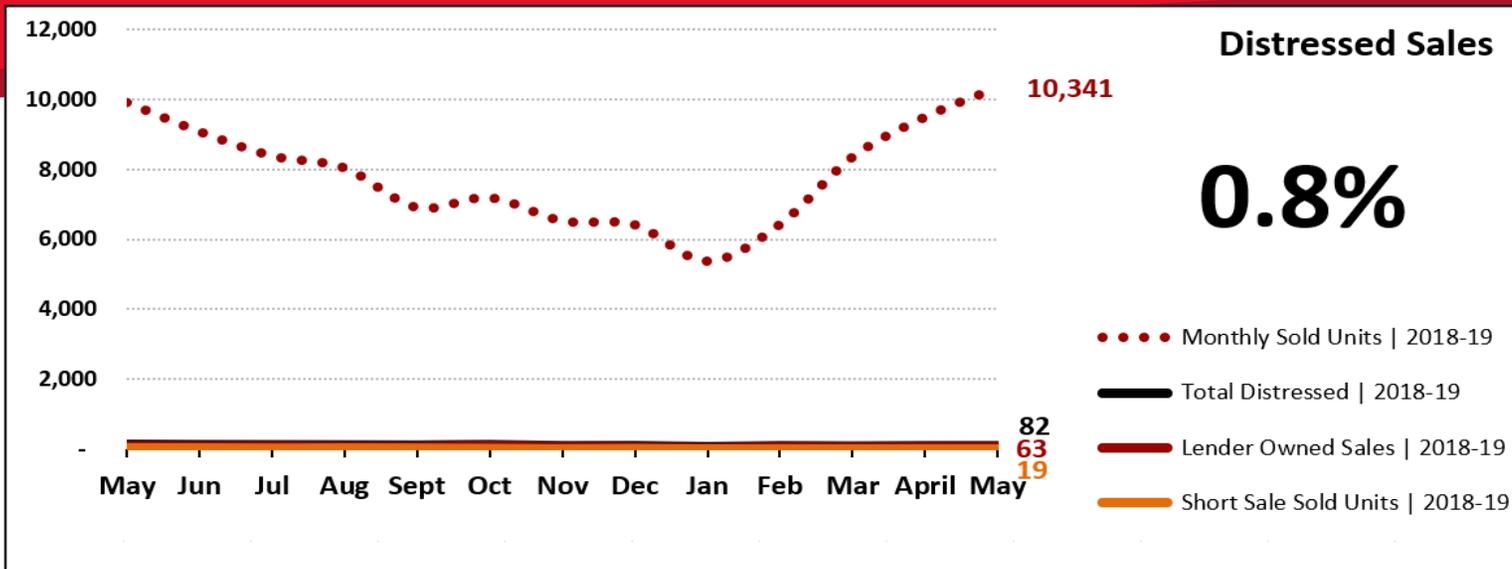
A slight increase is forecasted in June for both average and median sales prices.

ARMLS proprietary predictive model forecast, 0 day DOM sales removed



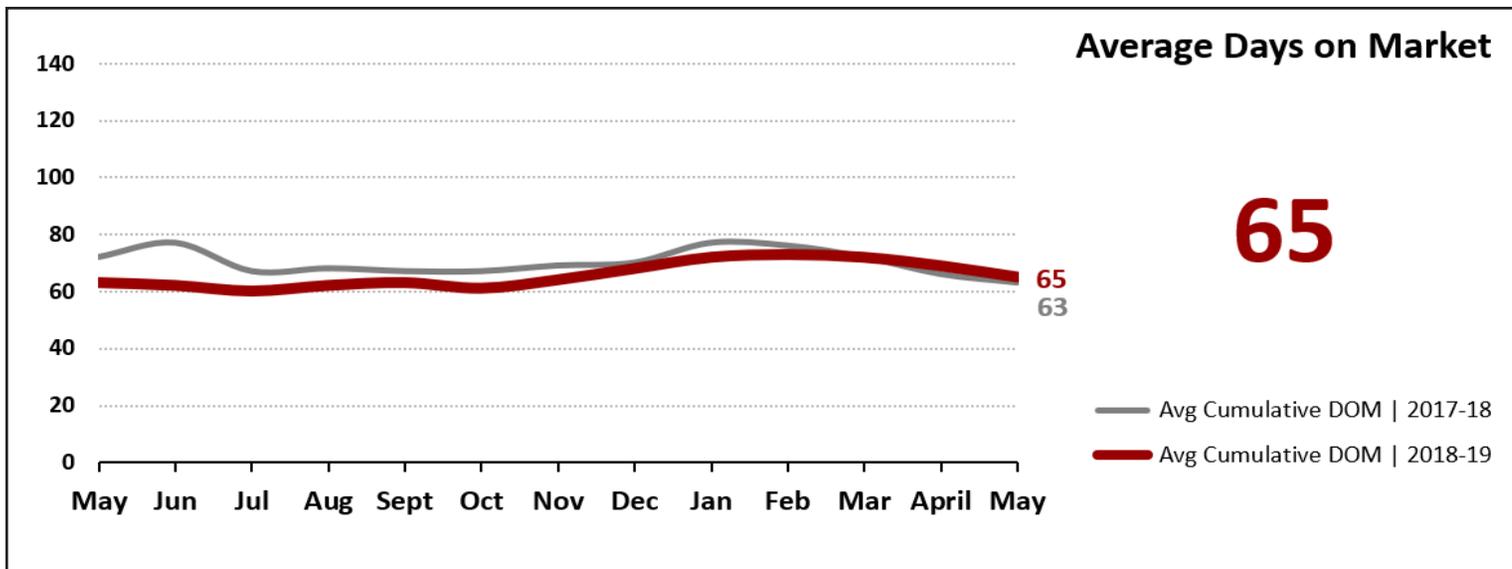
Foreclosures pending month-over-month showed a decrease of -5.7% while the year-over-year figure was down -11.3%.

Snapshot of public records data on 5/31/2019 active residential notices and residential REO properties. Note: this graph was adjusted as total foreclosure counts were under reported for the last 1 month.



Distressed sales accounted for 0.8% of total sales, down from the previous month of 0.9%. Short sales dropped -53.7% year-over-year. Lender owned sales dropped -24.1% year-over-year.

New MLS listings that were active for at least one day from 5/1/2019 to 5/31/2019, 0 day DOM sales removed



Days on market were up +2 days year-over-year while month-over-month decreased by -4 days.

MLS sales prices for closed listings with a close of escrow date from 5/1/2019 to 5/31/2019, 0 day DOM sales removed

So, what can we say about May? It was disappointing to hear Ben Carson's response while appearing before the House Financial Services Committee for an oversight hearing. When asked to define REO by Democratic Representative Katie Porter, he should not have referenced OREO cookies but instead queried back, "You mean Speedwagon?" In terms of home sales, May was really, really big. It was huge.

After a close fact-check of homes reported sold by ARMLS, May was a record-setting month. New all-time records were established for both sales volume and total dollar volumes, as well as the most homes sold and for the most money. Total dollar volume was \$3,593,145,906. The monthly median sales price also set a record high reaching \$278,000. After a slow start, 2019 is purring.

ARMLS Average Sales Data Month by Month

Avg x Total								
Year	January	February	March	April	May	Total:	Rank:	
2001	636,030,000	782,147,300	1,003,333,600	1,005,025,900	1,081,460,800	4,507,997,600	19	
2002	739,345,600	749,390,600	1,015,710,400	1,103,580,000	1,242,645,600	4,850,672,200	18	
2003	876,792,000	1,020,050,100	1,235,041,500	1,397,260,800	1,485,385,200	6,014,529,600	16	
2004	1,054,819,800	1,263,984,000	1,858,100,000	1,873,144,800	1,939,085,000	7,989,133,600	10	
2005	1,694,476,000	1,938,247,100	2,709,473,100	2,692,800,000	2,967,989,000	12,002,985,200	3	
2006	1,774,115,400	1,976,612,000	2,478,508,200	2,237,221,800	2,614,199,600	11,080,657,000	5	
2007	1,502,793,600	1,650,518,200	2,071,941,000	1,847,583,000	2,030,568,000	9,103,403,800	8	
2008	912,620,800	1,010,608,800	1,259,136,900	1,354,410,400	1,523,726,400	6,060,503,300	15	
2009	855,115,376	944,032,151	1,214,734,880	1,367,508,084	1,517,804,024	5,899,194,515	17	
2010	1,017,185,190	1,146,498,780	1,598,150,234	1,586,418,561	1,607,827,164	6,956,079,929	13	
2011	1,026,793,098	1,113,664,985	1,567,407,534	1,505,062,307	1,557,473,020	6,770,400,944	14	
2012	1,081,057,580	1,207,871,874	1,674,524,083	1,596,003,220	1,728,195,588	7,287,652,345	12	
2013	1,214,561,028	1,438,378,500	1,819,022,472	1,994,450,082	2,243,909,108	8,710,321,190	9	
2014	1,164,366,216	1,326,881,178	1,691,980,180	1,919,077,335	1,842,019,565	7,944,324,474	11	
2015	1,219,848,240	1,501,082,020	2,026,318,400	2,221,187,490	2,235,257,067	9,203,693,217	7	
2016	1,386,160,174	1,554,632,712	2,252,287,764	2,252,727,106	2,447,013,744	9,892,821,500	6	
2017	1,668,131,788	1,836,735,615	2,633,156,600	2,531,633,244	2,895,066,967	11,564,724,214	4	
2018	1,917,861,388	2,128,816,063	2,974,463,730	2,894,348,480	3,281,341,782	13,196,831,443	2	
2019	1,746,890,915	2,094,275,339	2,827,447,840	3,226,528,305	3,593,145,906	13,488,288,305	1	

Sales volume as reported by ARMLS even surpassed 2005. The prior record was in June of 2011 when REOs dominated the landscape and nearly every home sold was listed on the MLS. I don't want to insinuate that May of this year accounted for more sales than during the peak bubble years, as a very large number of transactions then were conducted outside the MLS. In June of 2005 Maricopa County recorded 17,991 total home sales, the largest home sales volume month in history. Through public records, The Information Market reported 12,041 total home sales in Maricopa County this May, the highest reported total since March of 2006. During the bubble years it was not uncommon to see newly built home sales approach and even surpass 4,000 units per month. This month, TIM reported 1,535 newly constructed home sales. It is our estimate that about 25% of new builds are listed on the MLS. May will undoubtedly be the high-water mark for sales activity in 2019. June sales will be strong, but they will be no match for May. The median sales price is expected to rise slightly in June. Over the last five years we have seen the median home price peak in June, then wobble through the remainder of the year, with the December median just above or below the June metric. I could foresee the median sales price hover around \$280,000 throughout the remainder of 2019.

The term housing bubble will be forever engrained in our vocabulary, and with high sales volume and record median prices, it can be expected that housing bubble chatter will resurface. I received a text from a dear friend last week who overheard a woman tell her friend that the housing market is crashing, and prices are going to drop more than in the last crash. Where do these "insights" originate? One source is Arizona's own [housing bubble blog](#). While I don't subscribe to the theory that Arizona is amid a new housing bubble, I also don't totally discount the author's research. I think he makes valid points about other markets that merit monitoring, plus, differing opinions are a good thing.

In the [January STAT](#) we shared two charts from different sources showing our current home prices teetering on the outer edge of affordability. I've made it clear on multiple occasions that lower appreciation rates more in line with inflation would be welcome. We've seen slight moderation this year. One of the known causes of an economic bubble is excessive monetary liquidity. This month in STAT I'm going to take a little different look at our current mortgage underwriting standards as well as look back at 2006. Current underwriting standards and the elimination of crazy money are two of the main reasons I subscribe to the "were not in a bubble" theory. The differences between then and now are significant. Let's start with 2019 data.

Real estate data is messy, and in analytics the first thing you want is for the data to be reliable. The second thing you want is meaningful results. When we key data from public records, yes even in 2019 data is still keyed, we retrieve information on home sales from the conveyance instrument, the deed of trust and the affidavit of value. These three separately recorded documents are keyed into one transaction. The deed of trust gives us the amount of the mortgage, and the affidavit of value states the sales price and down payment. Ideally, the mortgage amount plus the down payment will equal the sales price. In analyzing March sales data in Maricopa County, we see this axiom holds for just under 91% of all sales for both 2018 and 2019. This is a very good indication that the down payment stated on the affidavit of value is reliable, although not completely accurate. Further, when we break down the down payment as a percentage of the sales price, the break down for 2018 and 2019 are nearly identical, which tells us that the underwriting standards have been quite consistent over the past year. This conclusion is also supported by the [Ellie Mae Origination Insight Report](#). Currently in Maricopa County 28% of home purchases put down 3% or less, 29% have a 20% or greater down payment and 17% are cash sales. We removed all institutional buyers and iBuyers from this analysis as they overstate cash buyers.

When I take the same look at sales from 2006, my feelings can best be described as nauseous. This was probably one of the more difficult sets I've ever reviewed. In March of 2006 50% of home purchases put down 3% or less, 22% had a 20% or greater down payment and 8% were cash sales. As for the reliability of this data, it too must be questioned. As mentioned previously, the 91% accuracy match in 2018 and 2019 hit the low 60 percentile in 2006. A "liar loan" is a category of mortgage that refers to low-documentation or no-documentation mortgages. If lies were taking place on the loan applications, it's not a great leap to believe these lies carried over to the publicly reported affidavits as well.

The table on the following page shows the down payment percentages taken from the affidavit of value for all homes purchased in March of 2006. It also shows the percentage of these homes that ended in foreclosure. When 11.6% of the homes purchased with a stated down payment of 100% are eventually foreclosed on, something is amiss in the data. When over 60% of all loans with no money down in a single month ended in foreclosure, something is outrageously amiss with our underwriting standards.

Public Records Down Payment Data

Downpayment	Total_sales_by_down	Percentage_of_all_sales	Ended_in_foreclosure	Per_cent_foreclosed
zero down	3899	0.32	2346	0.602
1 percent	1526	0.12	760	0.498
2 percent	454	0.04	201	0.443
3 percent	222	0.02	96	0.432
4 percent	107	0.01	56	0.523
5 percent	671	0.05	347	0.517
6 percent	96	0.01	42	0.438
7 percent	74	0.01	32	0.432
8 percent	47	0.00	24	0.511
9 percent	66	0.01	18	0.273
10 percent	870	0.07	397	0.456
11 percent	98	0.01	39	0.398
12 percent	71	0.01	35	0.493
13 percent	43	0.00	17	0.395
14 percent	40	0.00	16	0.400
15 percent	103	0.01	47	0.456
16 percent	33	0.00	10	0.303
17 percent	29	0.00	9	0.310
18 percent	37	0.00	16	0.432
19 percent	69	0.01	21	0.304
20 percent or greater	2736	0.22	653	0.239
All Cash	1022	0.08	119	0.116

As we move forward, we'll keep a cautionary eye on underwriting standards, delinquency rates and appreciation rates. What we'd like to see is consistently strong standards and a continued moderation in appreciation rates. Both will ensure continued health in our housing market. And as for Ben Carson's response, the premise of representative Porter's question was that loans backed by the FHA go into foreclosure and become REOs at a higher rate than loans issued by Fannie Mae or Freddie Mac, meaning homeowners with FHA loans are more likely to lose their homes to foreclosure.

Mr. Carson should have pointed out that foreclosures rates are historically low (0.6 percent nationally and 0.2 percent in Arizona) and that while any foreclosure is unfortunate, a certain number of foreclosures are inevitable, again putting the current number of homes foreclosures in an historical perspective. He should have also explained that since the average down payment for an FHA loan is 3% and the average down payment for a GSE loan is 20%, the greater risk assumed by the FHA logically translates to a higher foreclosure rate.

The Pending Price Index

Last month the STAT mathematical model projected a median sales price for April of \$277,000. The May reported median was \$278,000. Looking ahead to June, the ARMLS Pending Price Index anticipates the median sales price will increase, projecting a median sales price of \$279,900.

We begin May with 7,163 pending contracts; 4,354 UCB listings and 772 CCBS giving us a total of 12,289 residential listings practically under contract. This compares to 11,630 of the same type of listings one year ago. At the beginning of June, the 2019 pending contracts are 5.7% higher than last year. There were 21 business days in June of 2018 and 20 this year. ARMLS reported 9,079 sales in June of 2018. We expect similar sales volume this year, our guess is 9,200 sales.