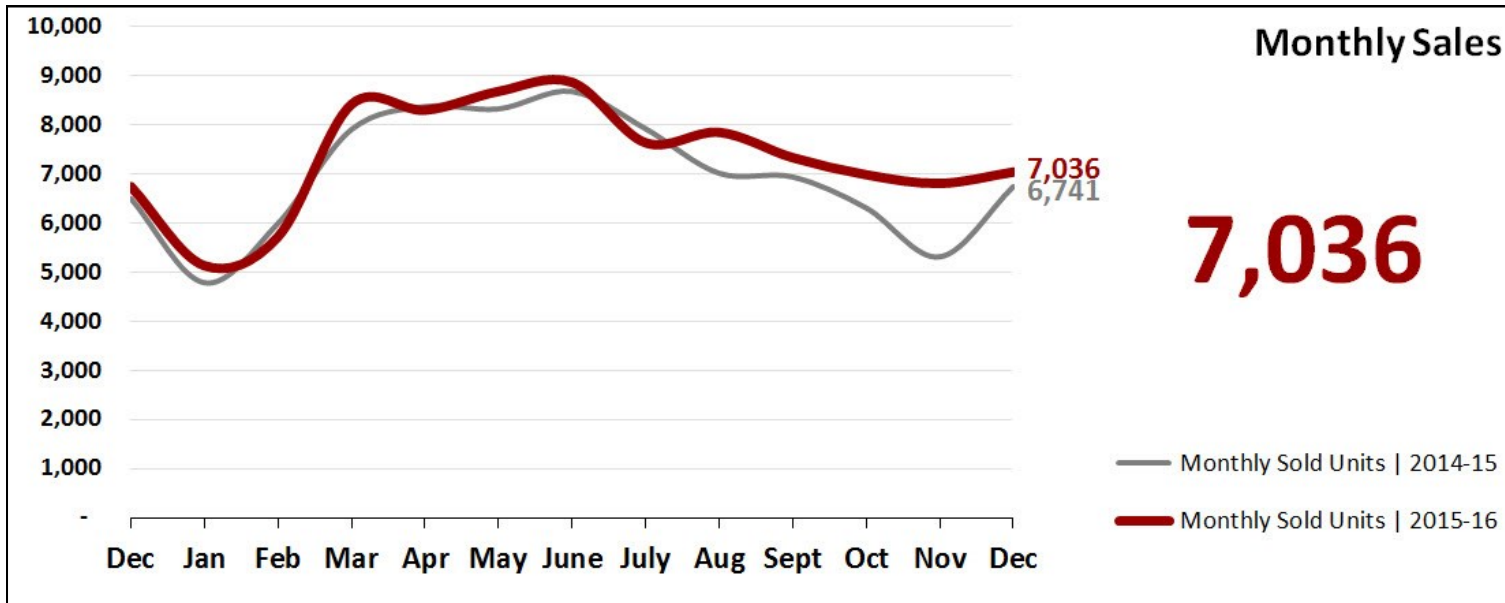


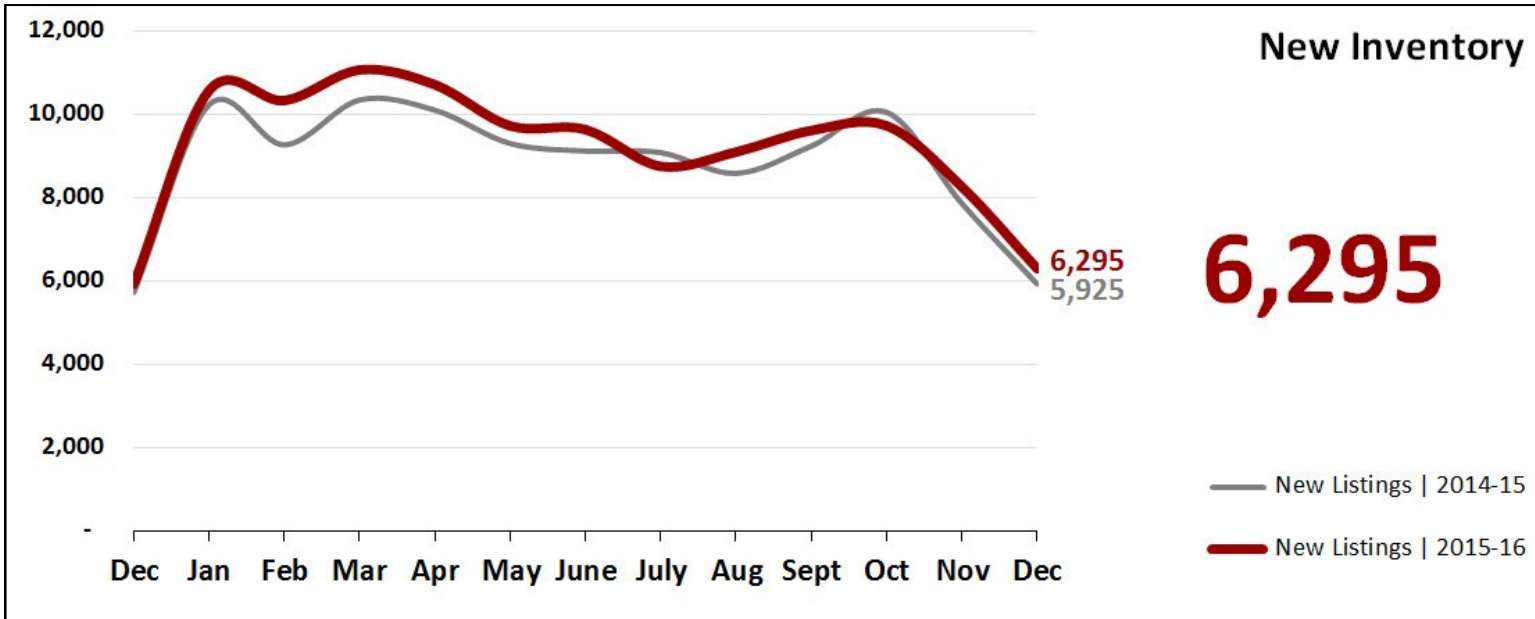


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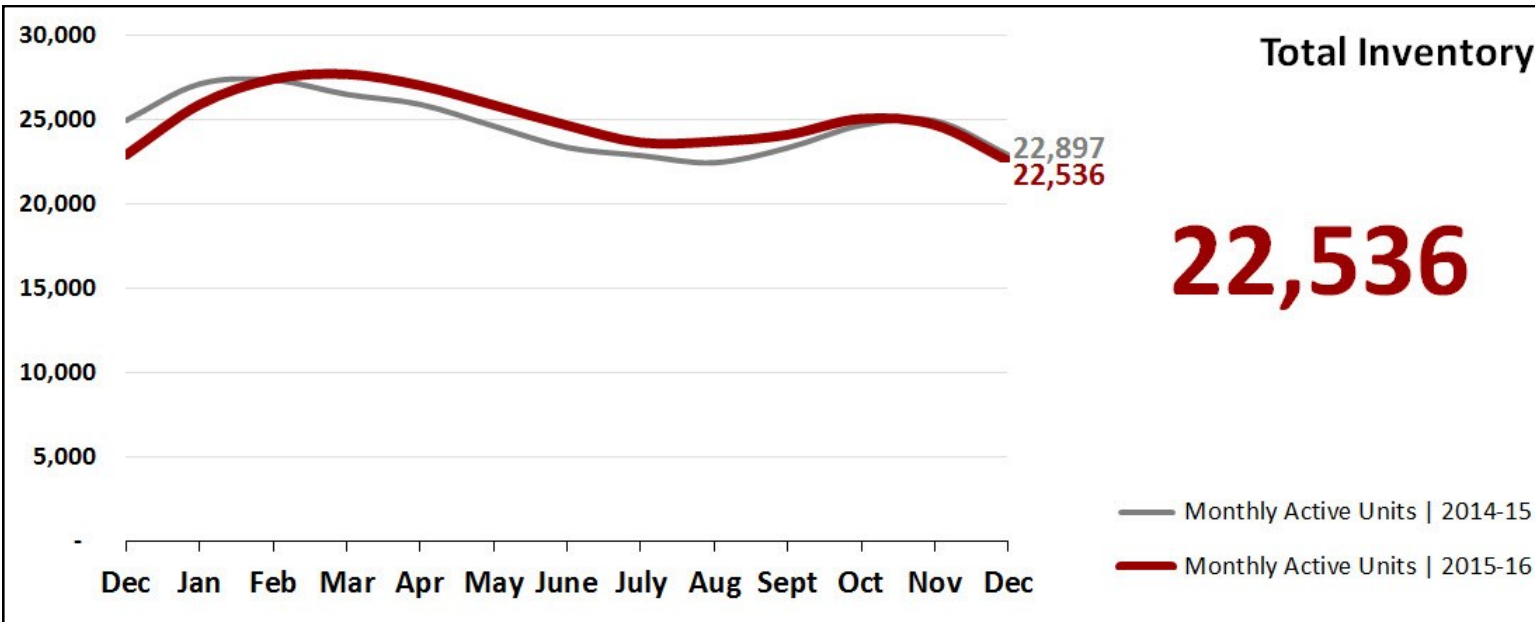
Sales are up +3.4% month-over-month. The year-over-year comparison shows an increase of +4.4%.

Closed MLS sales with a close of escrow date from 12/1/2016 to 12/31/2016, 0 day DOM sales removed



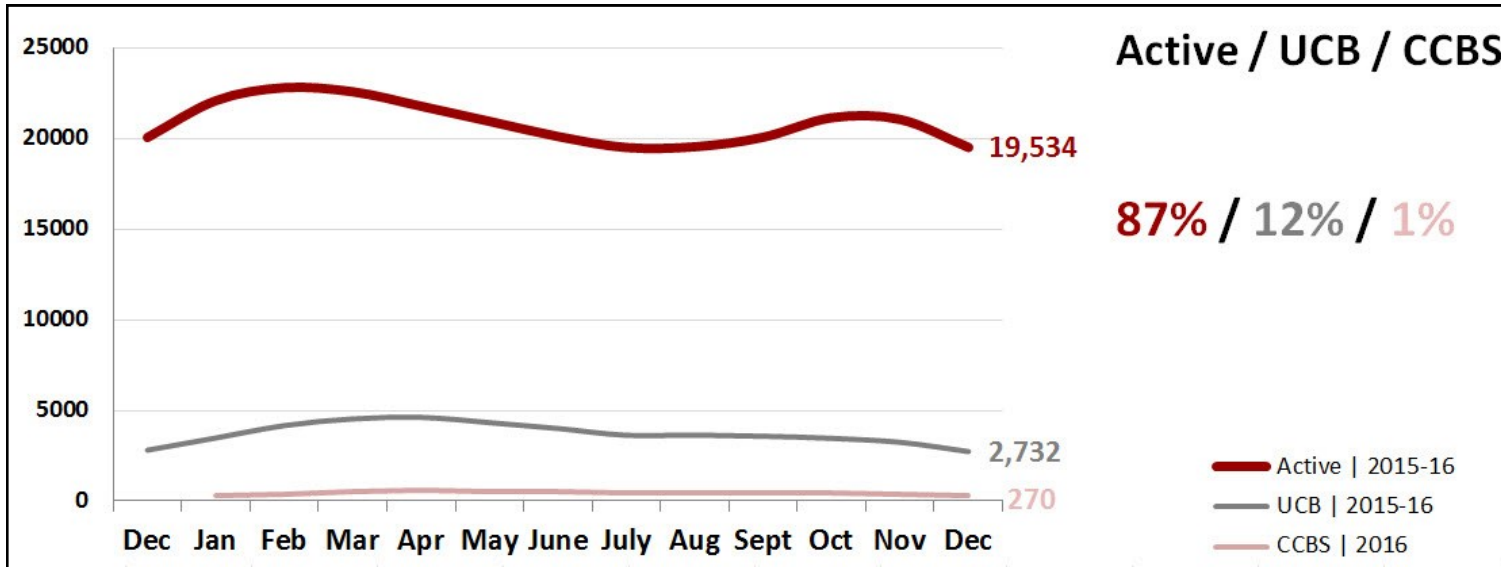
New inventory is down -23.8% month-over-month while the year-over-year comparison shows an increase of +6.2%.

New MLS listings that were active for at least one day from 12/1/2016 to 12/31/2016, 0 day DOM sales removed



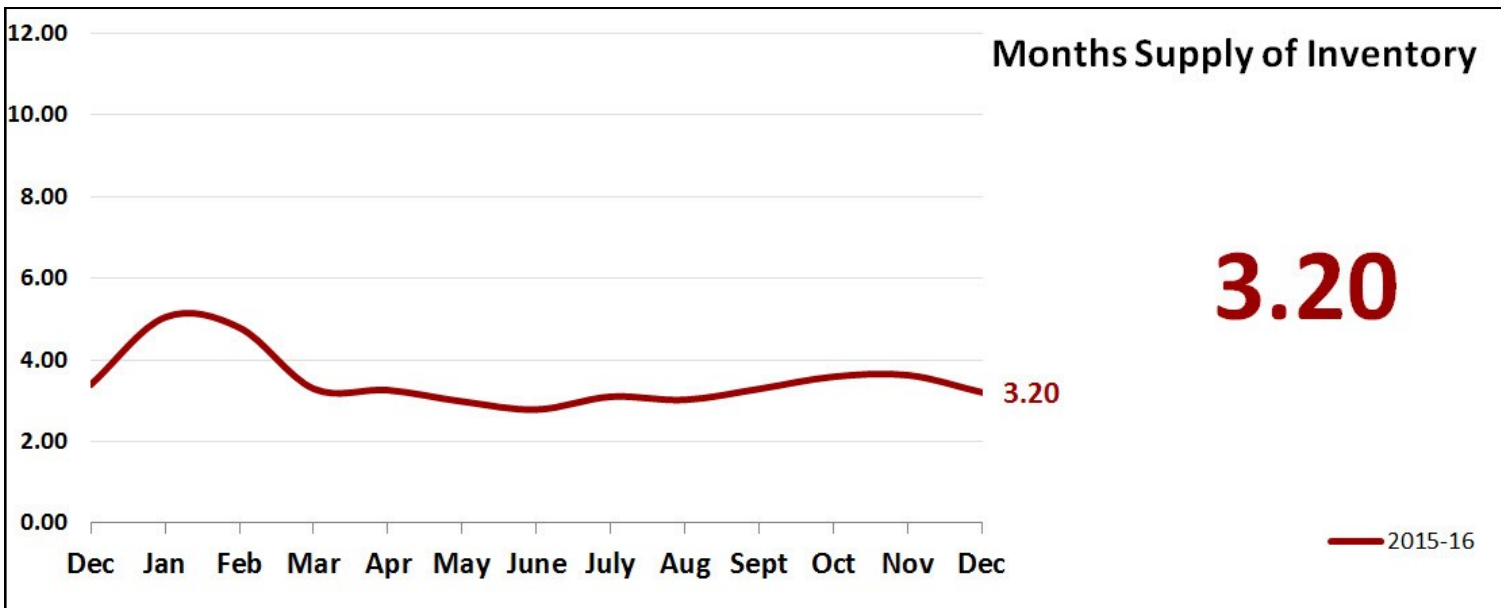
Total inventory has a month-over-month decrease of -8.7% while year-over-year reflects a decrease of -1.6%.

Snapshot of statuses on 12/31/2016



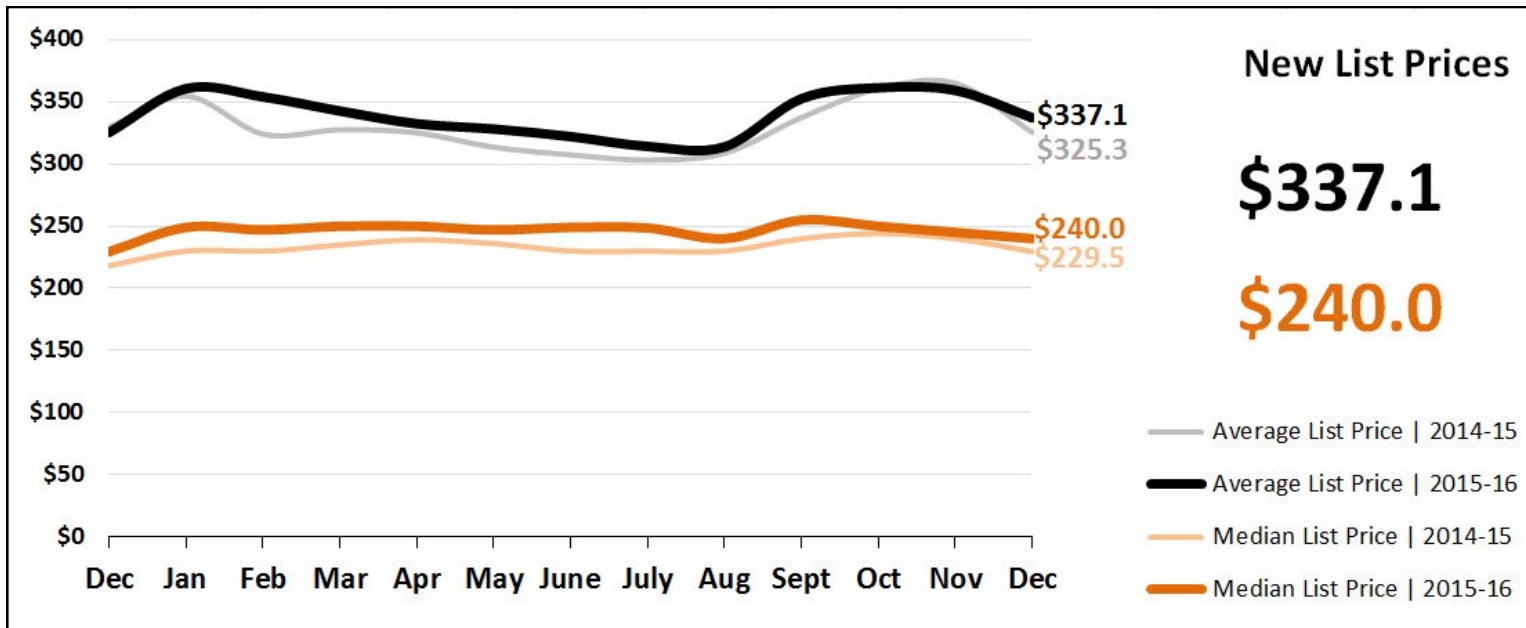
December UCB listings percent of total inventory was 12.1% with December CCBS listings at 1.2% of total inventory.

Snapshot of statuses on 12/31/2016



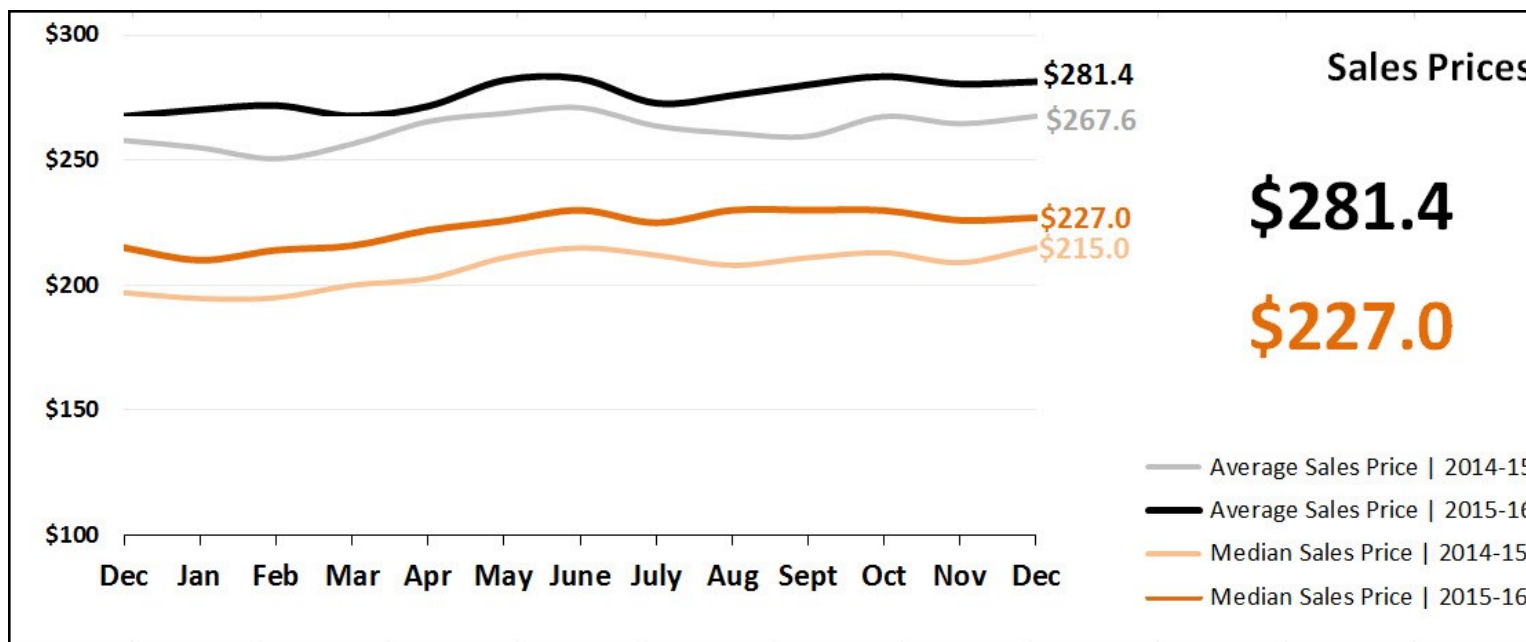
Months supply of inventory for November was 3.63 with December currently at 3.20.

Current inventory of Active/UCB/CCBS divided by the monthly sales volume of December 2016, 0 day DOM sales removed



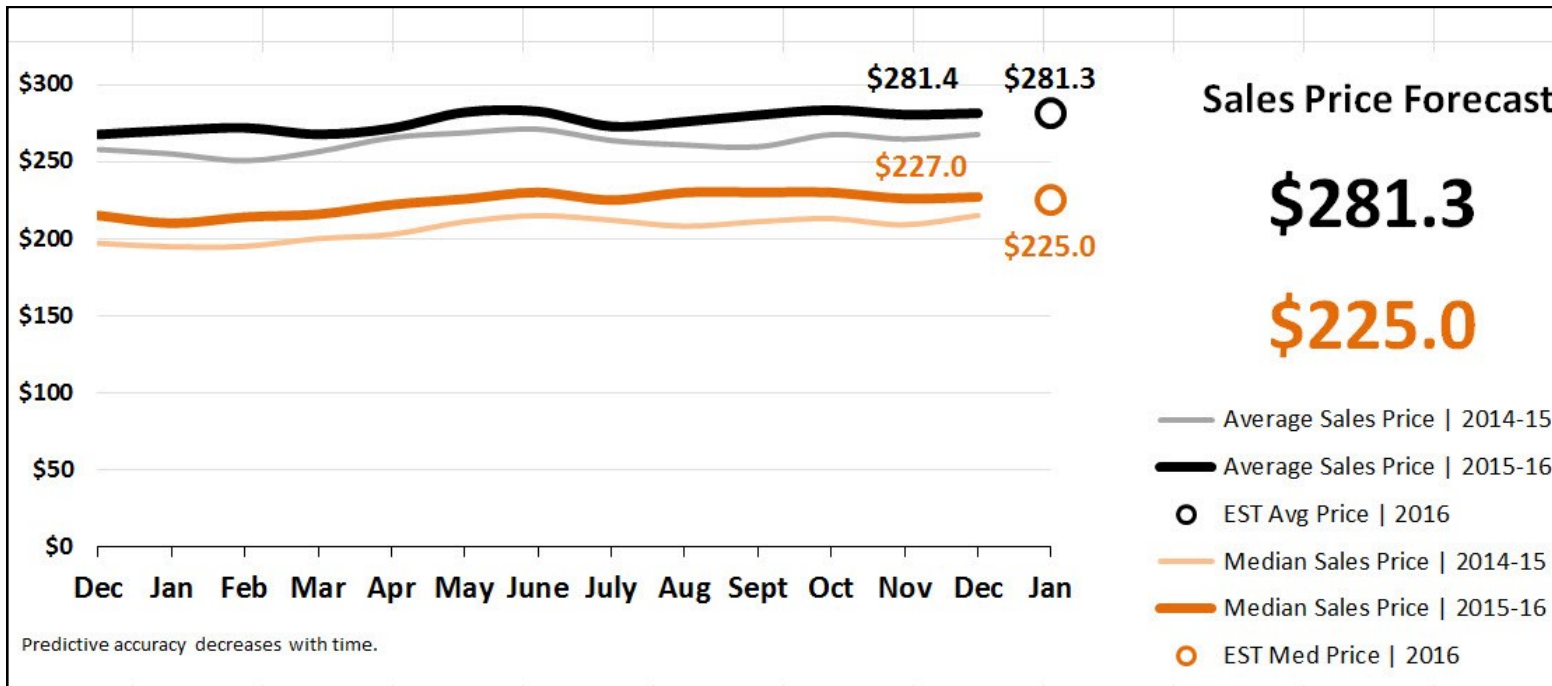
Average new list prices are up +3.6% year-over-year. The year-over-year median is up +4.6%.

List prices of new listings with list dates from 12/1/2016 to 12/31/2016, 0 day DOM sales removed



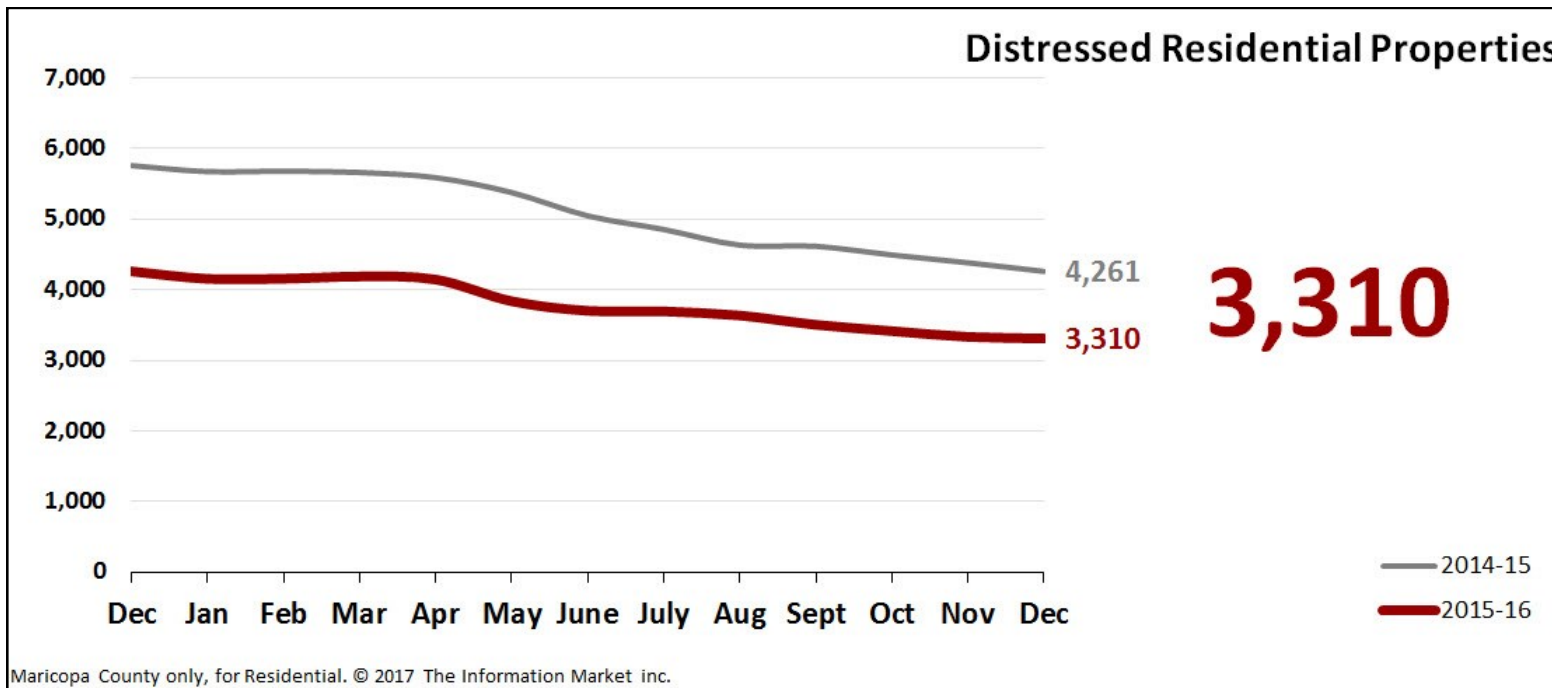
The average sales price is up +5.2% year-over-year while the year-over-year median sales price is also up +5.6%.

MLS sales prices for closed listings with a close of escrow date from 12/1/2016 to 12/31/2016, 0 day DOM sales removed



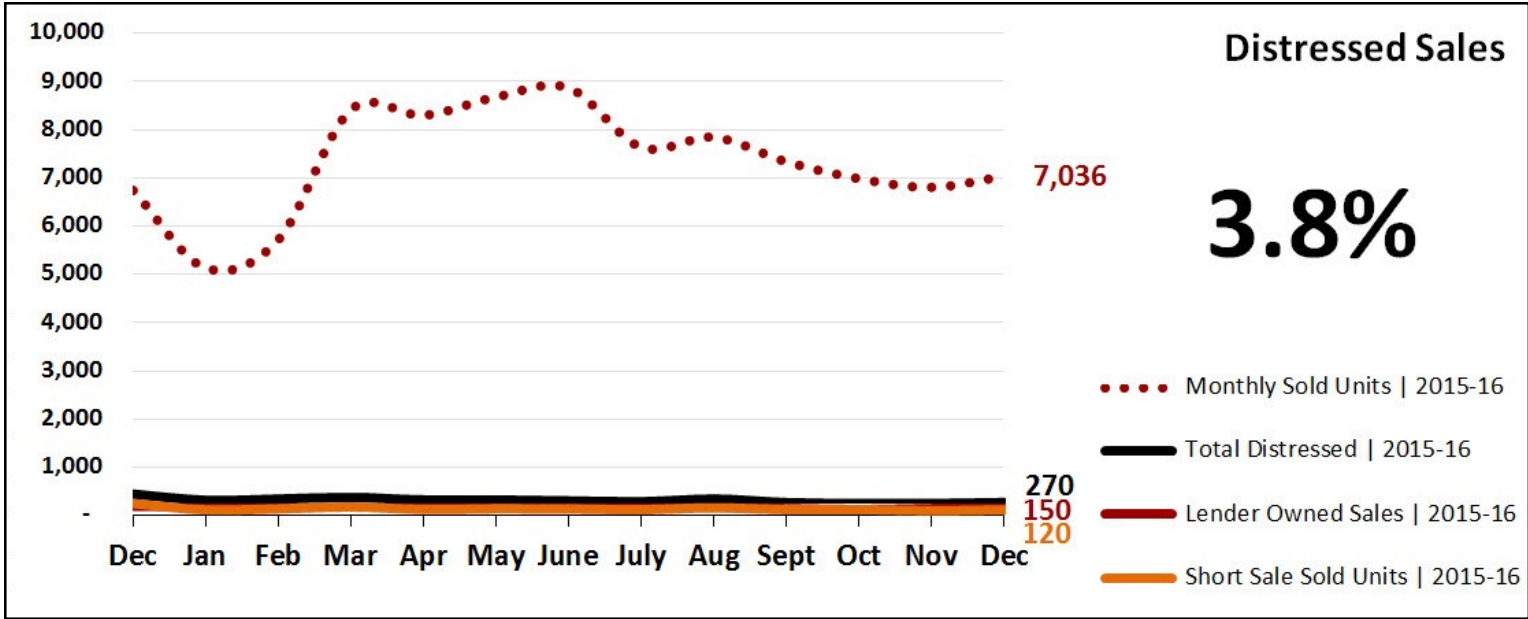
A slight decrease is forecasted for average sales price with median sales price dropping in January as well.

ARMLS proprietary predictive model forecast, 0 day DOM sales removed



Foreclosures pending month-over-month showed a decrease of -0.7% while the year-over-year figure was down -22.3%.

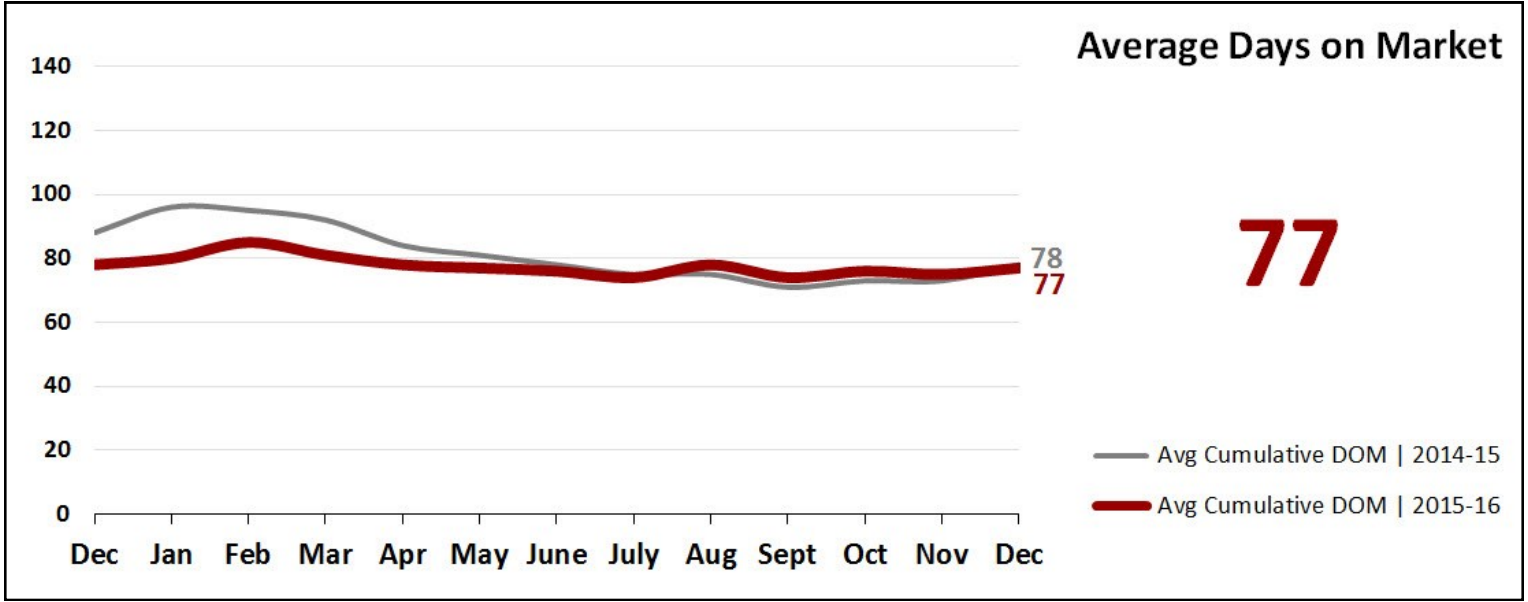
Snapshot of public records data on 12/31/2016 active residential notices and residential REO properties



Distressed sales accounted for 3.8% of total sales, up from the previous month of 3.7%.

Short sales dropped -52.2% year-over-year. Lender owned sales dropped -23.1% year-over-year.

Lender owned sales are MLS sales 12/1/2016 to 12/31/2016 where *Lender Owned/REO, HUD Owned Property* special listing conditions were selected
 Short sales are MLS sales 12/1/2016 to 12/31/2016 where *Short Sale Aprvl Req, Previously Aprved SS or Lender Approved SS* special listing conditions were selected
 0 day DOM sales removed



Days on market fell -1 day year-over-year while month-over-month increased +2 days.

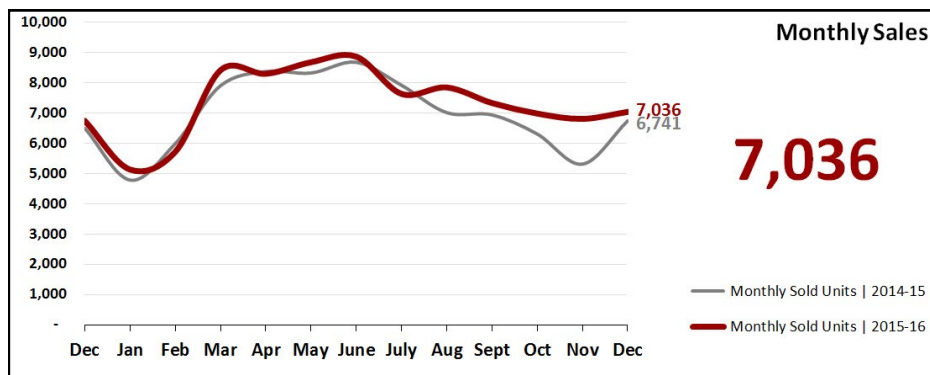
Average of all closed listings 12/1/2016 to 12/31/2016 where DOM was greater than 0

COMMENTARY

by Tom Ruff of The Information Market

It's that time of year again! With 2016 behind us this is our annual year-in-review issue. Let's start with two words: stable and improving. These two words continually came to mind as I reviewed our 2016 housing metrics. In our [2015 year-in-review](#) we concluded that 2015 was the type of year you could build a career around as it was a very average year. From the outset, 2016 sales volume numbers were eerily similar to 2015, feeling like déjà.

By July, 2016 was being labeled *2015 the Sequel* or maybe even *Groundhog Year*. Through the first seven months of 2016 ARMLS reported 52,721 sales compared to 51,948 in 2015, a 1.5% increase. In August, the gap in sales volume began to widen. In the last five months of 2016 demand was 11.43% higher than the last five months of 2015. If 2015 was an average year, 2016 was slightly above average. In terms of the 16 years ARMLS has been reporting sales data, 2016 was the 7th best.

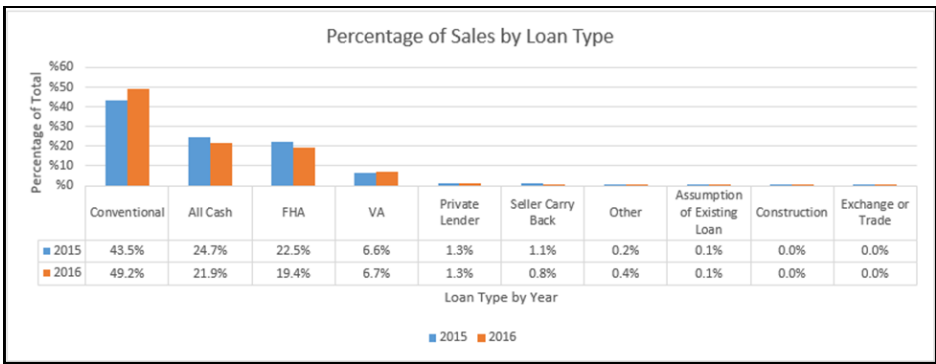


Spoiler alert: this report is lengthy by normal STAT standards. For those of you not into that sort of thing, here's the Twitter version: 2016 was better than 2015, 2017 should be even better. How, you ask?

Here are the top six factors we watched:

1. FINANCING - There were 96,390 homes sold in Maricopa County based on public records in 2015. The number of homes sold rose to 105,590 in 2016. There was a noticeable change in the number of conventional loans made. Over 10,000 more homes were purchased via conventional financing in 2016 compared to 2015. What makes this number even more compelling is when we compare our numbers to the numbers reported in the Ellie Mae Origination Insight Report for November 2016. The percentage of loan applications closed improved year-over-year across the board. In November of 2015 71.9% of all conventional loans applications were approved compared to 76.8% of all applications made in November 2016.

Not only was a higher percentage of loan applicants approved in 2016 but the average FICO score improved, the LTV ratio improved and the DTI ratio improved. The improvement in the number of conventional loans made is not a result of a lessening of credit requirements, but the contrary, more people are qualifying because their credit is improving and they are putting slightly more money down.



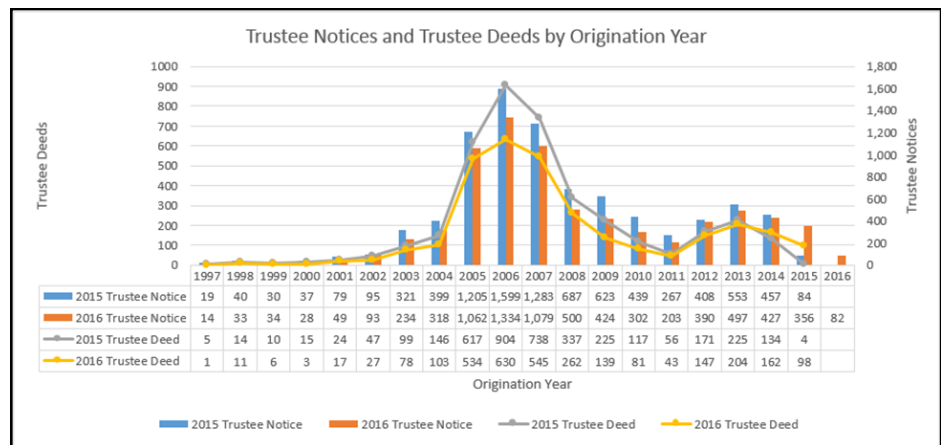
2. INTEREST RATES - Interest rates as reported by the Primary Mortgage Market Survey from Freddie Mac rose rapidly as 2016 concluded, rising nearly one full percentage point in the last quarter from 3.42% on October 6th to 4.32% on December 29th. In a Forbes article entitled *Housing Outlook 2017*, the consensus among experts was mortgage rates will be volatile. Quoting the article, “By historic standards rates are still low.” In 2017 experts expect movement, but differ on where the 30-year fixed rate will land. Estimates out there range from between 3.75% and 4.6%, not so far from where it is today. So, what happened to rates so far in 2017? The most recent survey by Freddie Mac is showing average mortgage rates moving lower for the second consecutive week.

3. FORECLOSURE - In Arizona the first publicly recorded document in the foreclosure process is the notice of trustee sale. If the noticed property goes all the way through the foreclosure process, a Trustee’s Deed will be recorded. I prefer the words *in foreclosure* to describe homes with an active notice and *foreclosure* to describe homes that were sold or reverted at auction. Even though foreclosures don’t grab the same attention they did in 2009 thru 2013, they are still an important metric to watch.

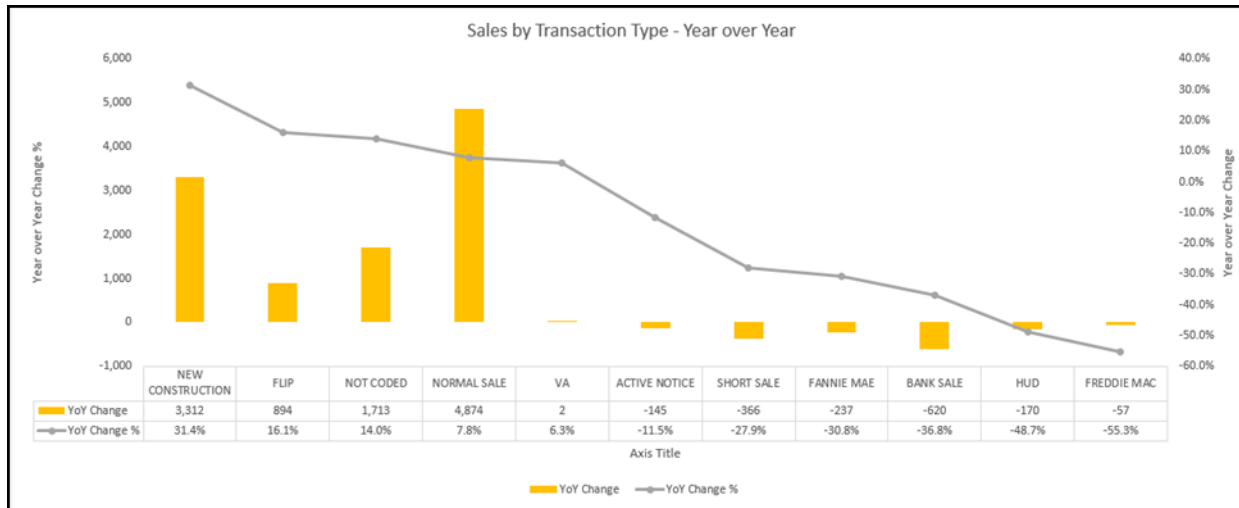
Foreclosure activity in Maricopa County has been declining seven straight years since 2009. If my analysis is correct, 2017 will become the 8th consecutive year.

There were 8,704 trustee sale notices filed on residential properties in Maricopa County in 2015 and 3,908 residential foreclosures in 2015. This compares to 7,520 notices and 3,108 recorded residential foreclosures in 2016. There were 13.7% fewer notices and 20.5% fewer foreclosures in Maricopa County in 2016 as compared to 2015. There has been some chatter about foreclosure activity picking up in 2017 but I believe it’s just noise.

I have a several reasons why I believe foreclosures will continue to decline next year and I’ve already mentioned steady price appreciation accompanied by consistent and improving loan standards. The main reason I believe foreclosure activity will decline has to do with the fact that the majority of foreclosures are still coming from the epicenter of the housing bubble and at some point this pool of distressed homes will have to evaporate. The chart below shows you the number of Notices and Trustee Deeds filed in 2015 and 2016 based on the year of trust being foreclosed on was recorded.



4. SALES VOLUME – Overall sales volume was up as we discussed in the opening. We saw declines in all distressed associated sales, properties in foreclosure, REOs and short sales while new construction had a giant percent change of over 31% increase. According to some of the top U.S. housing economists speaking at the National Association of Home Builders (NAHB) show in Orlando this week, growth was fueled by a growing economy, solid employment gains and rising household formations. Single-family housing production in the U.S. will continue on a gradual, upward trajectory in 2017. Looking at the MLS, the largest volume increase is in traditional MLS sales, which we call Normal Sales in Monsoon. This dual axis chart shows total sales change by type (yellow bars) and total percent change by type (gray line).



5. PRICING - The median sales price, average sales price and price per square foot are the three pricing metrics we track. Each of the three has it's own strengths and weaknesses and each can give varied responses at any point in time depending upon the composition of the sales being reported in a given time period. When we compare average and median metrics for December 2015 to December 2016 and when we compare the annual price per

square foot between January 1, 2016 and January 1, 2017 we come up with relatively homogeneous results:

- Price appreciation as measured by the median sales price: 5.6%
- Price appreciation as measured by the average sales price: 5.2%
- Price appreciation as measured by annual price per square foot: 5.4%

I think it safe to say that home prices appreciated approximately 5.5% as a whole in 2016. However, when we dug deeper into the numbers we saw a clear correlation between appreciation and the price point at which the home sold. What follows is a republication from our STAT report in July 2016

pointing out the percentage change in home prices based on price point and the number of properties actively listed at the time, using the following methodology.

The FCV (Full Cash Value) as determined by the County Assessor is based on mathematical models that are clearly meeting their objectives of accurate, fair and equitable. In our analysis based on recent sales by price range we determined the following multipliers “best” determine the value of a property using the FCV model. These calculations are based on the 2017 FCV’s which we received in March; with the assumption the assessor based their calculations on prior year sales. We believe the assessor’s fair and equitable “target” is 1.25. Using the 2017 FCVs we compared the actual sales price to the FCV for all public records sales with a matching MLS sale for sales taking place in June and July and we did this comparison for both 2015 and 2016 sales. The 2015 number

results were used to validate our 1.25 assumption. I believe by comparing the 2016 calculations to the 2015 calculations we can gather insight into our current market conditions. We are seeing a noticeable split in our market by price point. A restricted supply of homes and consistent demand for homes in the lower price ranges are causing strong appreciation gains, while higher priced homes are seeing limited price gains due to an increase in supply.

Price Range	June/July 2016	June/July 2015	Percentage Change	Properties Listed
Less than \$134,000	1.4358	1.2440	15.42%	1144
\$134,000 to \$163,000	1.4316	1.2658	13.10%	922
\$163,000 to \$185,000	1.3919	1.2693	9.67%	1056
\$185,000 to \$210,000	1.3719	1.2555	9.27%	1430
\$210,000 to \$235,000	1.3661	1.2661	7.90%	1523
\$235,000 to \$262,000	1.3539	1.2626	7.23%	1315
\$262,000 to \$299,000	1.3127	1.2460	5.35%	1860
\$299,000 to \$355,000	1.2846	1.2317	4.30%	2138
\$355,000 to \$465,000	1.2643	1.2253	3.18%	2869
Over \$465,000	1.2670	1.2474	1.57%	5125

AVERAGE MODELED VALUATIONS BY PRICE RANGE

Price Range	June/July 2015	June/July 2016	Percentage Change	Properties Listed
Less than \$134,000	1.2440	1.4358	15.42%	1144
\$134,000 to \$163,000	1.2658	1.4316	13.10%	922
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\$185,000 to \$210,000	1.2555	1.3719	9.27%	1430
\$210,000 to \$235,000	1.2661	1.3661	7.90%	1523
\$235,000 to \$262,000	1.2626	1.3539	7.23%	1315
\$262,000 to \$299,000	1.2460	1.3127	5.35%	1860
\$299,000 to \$355,000	1.2317	1.2846	4.30%	2138
\$355,000 to \$465,000	1.2253	1.2643	3.18%	2869
Over \$465,000	1.2474	1.2670	1.57%	5125

6. SUPPLY VS DEMAND - If I were stranded on a desert island and was allowed only one metric to assist me in determining the current tide of the market, it would be the relationship between supply and demand. Who better than Michael Orr of the Cromford Report to explain this relationship? From his January 1, 2017 daily commentary:

“January 1 - The year 2017 has started with 19,397 active listings (excluding UCB and CCBS) for all areas and types. This is down 3.4% from 20,073 on January 1, 2016. There was a sudden drop of 2.8% of all listings between December 31 and January 1, an effect which occurs in all years due to a large number of expirations at the end of the year. The effect was slightly smaller than last year when 3.5% of all listings disappeared.

So supply is starting a little weaker than it was last year, at a time when the annual sales rate is up by just over 7%. It is hard to see prices stabilizing in this environment unless demand drops. We started the year with 4,885 pending listings, barely changed from 4,865 in 2016. However we have 2,916 listings in UCB status, compared with 2,810 in January 2016. That is almost a 4% advantage to 2016.

Weaker supply and stronger demand suggest appreciation rates may be a little faster in 2017 than 2016. However the segments affected may very well be different from last year.”

Looking Ahead

Housing opinions and predications for the upcoming year are everywhere and each year seem to fall into select buckets. Consultants will project fear, lead generators will oversell opportunity, economists will extend trend lines from last year and data people like myself will fret over what we got wrong last year and what we can do to improve our data and insights next time around. As we begin 2017 our market is in a good place. Distressed sales and inventories continue to decline, new construction numbers are improving, more people are qualifying for loans and traditional sales are driving our market.

As an analyst, I’m challenged to find new metrics that track the impact of baby boomers and millennials as one market segment transitions into retirement and the other becomes a driving economic force. I don’t know how we’ll measure ...but we’ll try.

ARMLS Pending Price Index (PPI)

Last month STAT projected a median sales price for December of \$225,000, with the actual median coming in at \$227,000. The actual median was 0.9 % higher than the \$225,000 projected by our model. Looking ahead to January 2017, our model projects a drop in the median sales price. The ARMLS

Pending Price Index projects a median sales price of \$225,000. Our mathematical model projections have been trending slightly lower than the actual results. I expect little to no change in the median sales price this month.

After the 28.1% year-over-year sales volume gain measured in November 2016, we had anticipated the December 2016 year-over-year sales volume comparison would fall back to earth. Sales volume in December 2016 as reported by the MLS was 7,036 which was 4.4% higher than the 6,741 last year. Sales volume in 2016 was 5.20% higher than 2015 and we reported 88,713 sales this year compared to 84,249 sales last year.

We begin January with 4,945 pending, 2,732 UCB listings and 270 CCBS giving us a total of 7,947 residential listings practically under contract. This compares to 7,681 of the same type of listings at this time last year. There are 21 business days in December 2016 compared to 22 business days in December 2015. How many sales do you think there will be in January?