

Changes to the Sales Ratio Study and How they Affect Estimated Market Value

In 2012, the Department of Revenue (DOR) made changes to the Sales Ratio Study that recently had a significant impact on market values. The DOR uses Sales Ratio Studies as a quality and compliance check of each county's assessment from year to year. It requires the assessor's office to calculate a sales ratio for each open market sale within the given study period and analyze the results. The sales ratio is calculated by dividing the assessors estimated market value (EMV) by the sales price and multiplying by 100. For example; if a house has an EMV of \$195,000 and sold for \$200,000 the sales ratio would be 97.5. State Statute dictates that the median sales ratio; or the midpoint of all the sales ratios in a given study period fall between 90 and 105.

To ensure that differences in market conditions aren't affecting final adjustments to the assessment, each sale price gets time adjusted to January 2nd of a given year before the sales ratio is calculated and analyzed. The change made by DOR in 2012 changed the year in which all sales prices get adjusted to.

Prior to 2012 all of the sale prices were adjusted to the prior year's assessment date before calculating the sales ratio. For example; if the assessor is working on the 2014 assessment all of the sales prices would be adjusted on a monthly basis to January 2nd of 2013. After 2012, assessors were required to time adjust sales to the current assessment date prior to calculating the sales ratio. For example if the assessor is working on the 2014 assessment, all of the sales in the study period would be time adjusted on a monthly basis to January 2nd of 2014.

As a result of this change, the assessor's EMV will no longer lag behind the market by a year. Instead it will be as current as possible given the existing data. This also means that in an inclining market all of the sales will receive another year of inflation or deflation in a declining market.

The example below and continued on the next page shows how changing the adjustment year affects the median sales ratio assessors use to determine whether values need to go up or down;

Sales Ratio Analysis - Old Method					
Assuming 5% Yearly Inflation (Adjusted .42% Monthly)					
		Sale Price	Sale Price as of 01/02/2013	Assessed Value	Sales Ratio
Sale 1	10/15/2012	76000	\$ 76,801	70000	91.15
Sale 2	11/30/2012	117000	\$ 117,491	100000	85.11
Sale 3	02/15/2013	160000	\$ 158,997	135000	84.91
Sale 4	06/01/2013	225000	\$ 219,412	200000	91.15
Sale 5	09/23/2013	350000	\$ 337,044	320000	94.94
				Median Ratio	91.15

Sales Ratio Analysis - New Method					
Assuming 5% Yearly Inflation (Adjusted .42% Monthly)					
		Sale Price	Sale Price as of 01/02/2014	Assessed Value	Sales Ratio
Sale 1	10/15/2012	76000	\$ 80,762	70000	86.67
Sale 2	11/30/2012	117000	\$ 123,552	100000	80.94
Sale 3	02/15/2013	160000	\$ 167,198	135000	80.74
Sale 4	06/01/2013	225000	\$ 230,730	200000	86.68
Sale 5	09/23/2013	350000	\$ 354,429	320000	90.29
				Median Ratio	86.67

As one can see, by changing the time adjustment year, the median ratio falls out of compliance which will require an even larger increase to achieve the desired ratio.

Historically, Anoka County has targeted a median ratio of 95 regardless of the time adjustment year, meaning both scenarios would require an adjustment. The tables below show the percentage the Assessed Values would have to increase to attain a 95 Ratio.

Sales Ratio Analysis - Old Method					
Assuming 5% Yearly Inflation (Adjusted .42% Monthly)					
		Sale Price	Sale Price as of 01/02/2013	Assessed Value	Sales Ratio
Sale 1	10/15/2012	76000	\$ 76,801	72940	94.97
Sale 2	11/30/2012	117000	\$ 117,491	104200	88.69
Sale 3	02/15/2013	160000	\$ 158,997	140670	88.47
Sale 4	06/01/2013	225000	\$ 219,412	208400	94.98
Sale 5	09/23/2013	350000	\$ 337,044	333440	98.93
Increase Needed			4.20%	Median Ratio	94.97

Sales Ratio Analysis - New Method					
Assuming 5% Yearly Inflation (Adjusted .42% Monthly)					
		Sale Price	Sale Price as of 01/02/2014	Assessed Value	Sales Ratio
Sale 1	10/15/2012	76000	\$ 80,762	76720	95.00
Sale 2	11/30/2012	117000	\$ 123,552	109600	88.71
Sale 3	02/15/2013	160000	\$ 167,198	147960	88.49
Sale 4	06/01/2013	225000	\$ 230,730	219200	95.00
Sale 5	09/23/2013	350000	\$ 354,429	350720	98.95
Increase Needed			9.60%	Median Ratio	95.00

By changing the time adjustment year, the percentage increase needed to attain the 95 ratio once the time adjustments are applied is over double the increase under the old method.