

# Quality of Reappraisal Highlights

Dylan Cole – Tax, Policy and Research

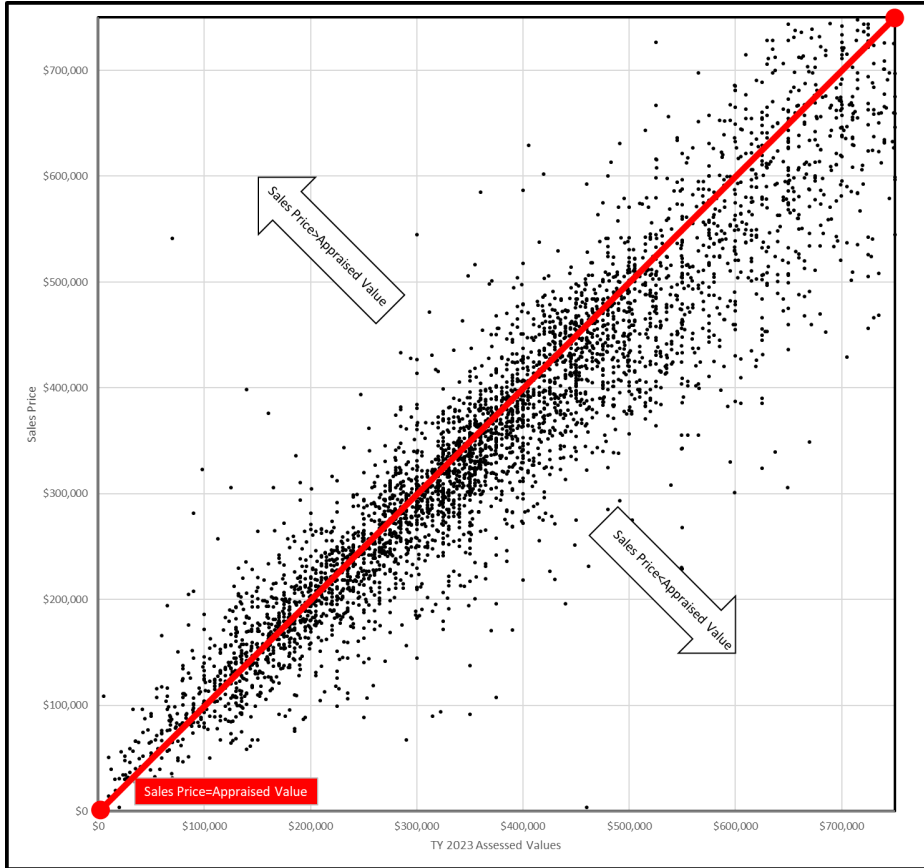


# What is a Sales Ratio?

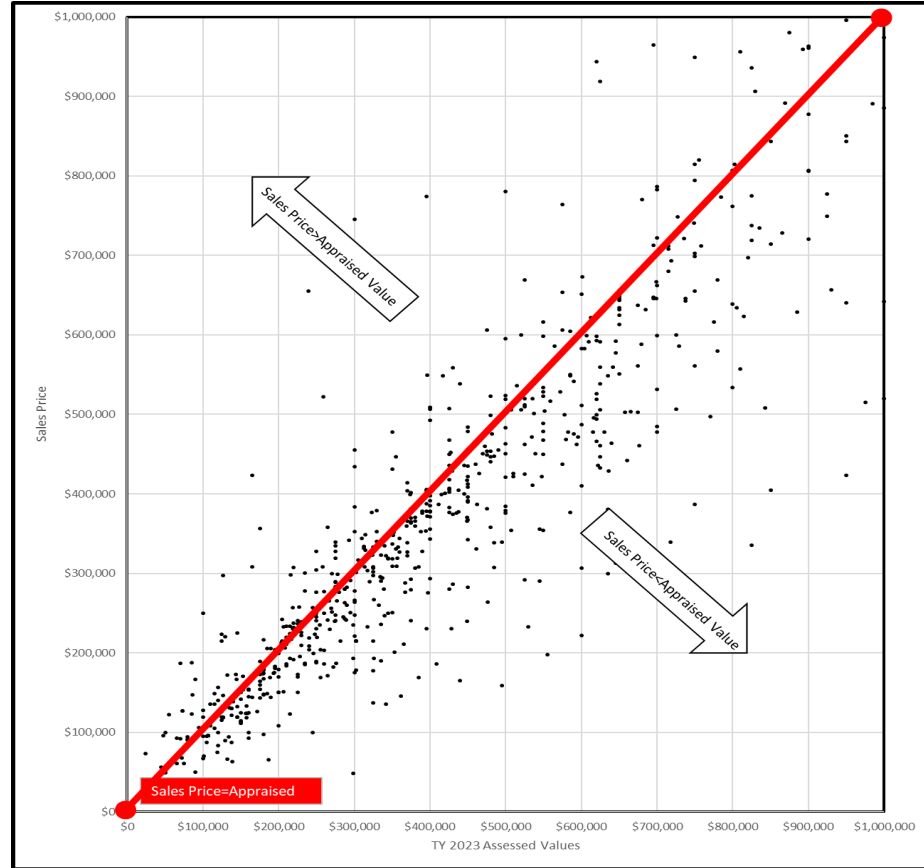
$$\text{Sales Ratio} = \frac{\textit{Assessed Value}}{\textit{Sales Price}}$$

$$\frac{\$80,000}{\$100,000} = 0.8 = 80\%$$

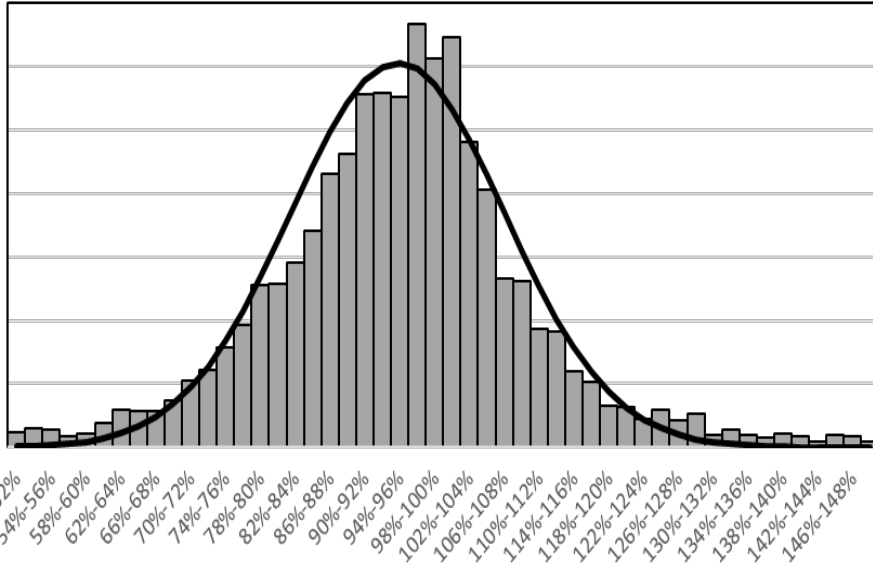
# Residential Properties Sold 12/1/21 – 3/31/22



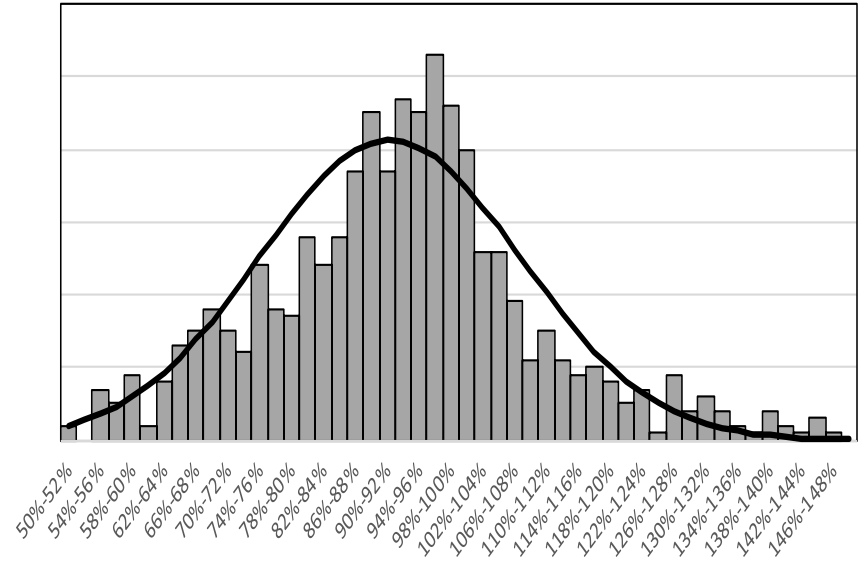
# Commercial Properties Sold 12/1/21 – 3/31/22



Statewide Residential Properties Sales Ratio Frequency Distribution



Statewide Commercial Sales Ratios Frequency



# Measuring Reappraisal Quality

- Is the **level** of appraisal satisfactory  
median, mean, weighted mean
- Is the **spread** of appraisal satisfactory  
coefficient of dispersion, standard deviation

Residential Ratio Statistics	
CY 2022 <sup>1</sup> Sales Relative to TY 2023 Values	
<b>Number of Sales</b>	<b>Values</b>
Total Observations	4,683
Used Observations	4,375
<b>Measurement of Appraisal Levels</b>	
<i>Upper Bound Confidence Interval</i>	95.89%
<b>Median Ratio</b>	<b>95.42%</b>
<i>Lower Bound Confidence Interval</i>	94.89%
<i>Upper Bound Confidence Interval</i>	95.12%
<b>Mean Ratio</b>	<b>94.76%</b>
<i>Lower Bound Confidence Interval</i>	94.39%
<i>Upper Bound Confidence Interval</i>	93.28%
<b>Weighted Mean</b>	<b>92.01%</b>
<i>Lower Bound Confidence Interval</i>	90.74%
<b>Measurement of Appraisal Uniformity</b>	
<b>Coefficient of Dispersion</b>	<b>10.149</b>
<b>Coefficient of Variation</b>	<b>13.009</b>
<b>Standard Deviation</b>	<b>0.123</b>
<b>Price Related Differentials</b>	<b>1.030</b>
<b>Range (1.5x Inter Quartile Range)</b>	
<b>Maximum Ratio in the Sample</b>	<b>128.5%</b>
<b>Minimum Ratio in the Sample</b>	<b>61.6%</b>

Between  
90%-  
110%

Between  
5.0-15.0

Between  
0.98-1.03

Commercial Ratio Statistics	
Sales <sup>1</sup> Relative to TY 2023 Values	
<b>Number of Sales</b>	<b>Values</b>
Total Observations	850
Used Observations	776
<b>Measurement of Appraisal Levels</b>	
<i>Upper Bound Confidence Interval</i>	93.75%
<b>Median Ratio</b>	<b>92.58%</b>
<i>Lower Bound Confidence Interval</i>	91.36%
<i>Upper Bound Confidence Interval</i>	92.52%
<b>Mean Ratio</b>	<b>91.37%</b>
<i>Lower Bound Confidence Interval</i>	90.21%
<i>Upper Bound Confidence Interval</i>	90.63%
<b>Weighted Mean</b>	<b>87.80%</b>
<i>Lower Bound Confidence Interval</i>	84.97%
<b>Measurement of Appraisal Uniformity</b>	
<b>Coefficient of Dispersion</b>	<b>13.686</b>
<b>Coefficient of Variation</b>	<b>17.972</b>
<b>Standard Deviation</b>	<b>0.164</b>
<b>Price Related Differentials</b>	<b>1.041</b>
<b>Range (1.5x Inter Quartile Range)</b>	
<b>Maximum Ratio in the Sample</b>	<b>134.80%</b>
<b>Minimum Ratio in the Sample</b>	<b>47.88%</b>

Between  
90%-  
110%

Slightly  
less than  
90%

Between  
5.0-20.0

Slightly  
greater  
than 1.03

<sup>1</sup>Sales from 12/1/2021 to 3/31/2022

<sup>1</sup>Sales from 12/1/2021 to 6/30/2022