

Ratio Study Statistical Summary Terminology

Measures of Central Tendency – Measure the Overall “Level” at Which Properties are Appraised

*Median – Middle Ratio when the appraisal-to-sale (A/S) ratios are ranked in an ascending array. (This is the best statistical measure of overall appraisal level because it is unbiased. It gives no legitimate weight to outlier sale ratios.) This is the legal standard to be used in determining appraisal equity.

Mean - Mathematical average of the appraisal-to-sale ratios

Weighted Mean – The ratio of the total appraised values to the total sales prices

Measures of Dispersion-Measure of overall ‘Uniformity’ of the Appraisals – the tighter the distribution, the more uniform and equitable are the appraisals.

Average Absolute Deviation – The average distance without regard to direction that the ratios lie from the median ratio. (The smaller the AAD, the more tightly clustered the ratios are around the median ratio)

*COD - Coefficient of Dispersion – The average percentage deviation from the median. IAAO standards indicate CODs of 15% or less are considered acceptable for larger, urban jurisdictions. Vacant Land COD’s should be 20% or less to denote acceptable uniformity of appraisals.

Standard Deviation – The average absolute deviation calculated using the mean. (expressed as points.)

COV - Coefficient of Variation – Standard Deviation divided by the mean times 100. (expressed as %)

PRD – Price Related Differential – The ratio of the mean to the weighted mean. A PRD near 1 indicates no assessment regressivity/progressivity, meaning there is no bias in the appraisal of higher valued properties vs. lower valued properties.

95% Confidence - Measure of confidence in the sample size. For improved properties the .03 or 3% indicates that our sample size gives us 95% confidence that the true level of appraisals will lie within 3% of the calculated level.