Standards for Measurement and Analysis of Classes and Subclasses of Real Property

Purpose

The purpose of this policy is to establish a process to be used by the Department of Revenue, Property Assessment Division (Division) to determine the level of value and quality of assessment for all classes of real property in the state of Nebraska.

Analysis

Each class of real property has a statutorily defined acceptable range for the level of value. The acceptable ranges are: (a) for agricultural land and horticultural land, 69% to 75% of actual value; (b) for agricultural and horticultural land receiving special valuation, 69% to 75% of special valuation; (c) for agricultural and horticultural land on school district taxes levied to pay principal and interest on school bonds approved by a vote of the people on or after January 1, 2022, 44% to 50% and (d) for all other real property, 92% to 100% of actual value.

Ratio studies developed to aid in the determination of the level of value generally consist of arm's-length sales from the class or subclass for which the level of value is being determined. The sales included in the ratio study are commonly referred to as a sample of sales. Analysis of the sample of sales selected is essential to determine its validity as an estimator of the level of value for the population of parcels.

Statistically Sufficient

A statistically sufficient sample of sales is a sample whose features contain information necessary to compute an estimate of the population. To determine whether the sample of sales is sufficient in size to evaluate the class of real property, measures of reliability are considered, such as the coefficient of dispersion or the width of the confidence interval. Since a sufficient number of sales depends on additional factors such as homogeneity of the population to be measured, a numerical threshold for all samples, such as a percentage of sales or as an absolute number of sales, is not used as an indicator of sufficiency.

Samples of sales found to be insufficient in size or proportionality should not be used exclusively to determine the level of value. If possible, the sample should be enlarged by re-stratification to a broader area of similar parcels, or by validating and adjusting sales previously rejected or determined to be substantially changed after the sale.

Representativeness of the Sample

A representative sample is a group of sales from a larger population of parcels, such that statistical indicators calculated from the sample can be expected to reflect the characteristics of the population being studied. The accuracy of statistics as estimators of the population depends on the degree to which the sample represents the population.

Representativeness is additionally dependent upon the premise that sold and unsold parcels are appraised in a similar manner. Appraisal efforts concentrated on the sold parcels will produce misleading inferences and will not represent the population of unsold parcels. These actions will also cause dis-equalization between similar parcels. Samples of sales in which selective reappraisal of sold parcels has occurred will not be considered reliable and will initiate further investigation of the assessment practices in the county by the Property Tax Administrator (PTA).

While sales produce a sample of convenience rather than a truly random set of observations, the larger a sample becomes in size the greater the probability the sample will produce an accurate reflection of the population. However, to ensure the sample represents the population, it is necessary to determine the characteristics of the parcels that affect value in the marketplace. Property groups such as neighborhoods, property type, agricultural land use, age, and size ranges are examples of possible strata. When sufficient data is available, stratification by the identified characteristics in both the sale sample and in the population of parcels creates a distribution comparison from which the degree of representativeness can be determined.

The distribution of sales over the study period will also be analyzed to determine if the statistics are an accurate and proportionate indicator of the level of value. Annual fluctuations in the market can create disparity in statistics when comparing sales samples concentrated in a particular portion of the defined study period particularly with smaller samples. In the case of agricultural land, determining annual market changes by land use for each county is difficult to calculate mathematically due to the relatively small samples and mixed-use sales. When value has changed significantly over time, samples that are heavily weighted to a specific year of the study period may bias the statistical measures. If this occurs, an effort will be made to normalize the effect of sharp variations in sale prices by ensuring the sales in each sample are evenly distributed through the study period.

Samples determined not to be representative may be made representative by supplementing the sample with underrepresented comparable sales, or by randomly eliminating sales from the overrepresented strata. After all information has been analyzed, and a determination has been made that the sample is adequate and representative, further analysis will be necessary to determine the level of value.

Determine Level of Value (LOV)

The three measures of central tendency for the class of real property are evaluated to begin the determination of the level of value. The following studies may be conducted to test the validity of the statistical indicators, or to assist in supporting an alternate level of value:

A. Investigate outlier ratios effect on the measures of central tendency and the qualitative statistics. Outlier ratios that tend to be concentrated in certain areas or other subsets of the sample can point directly to systematic errors in the appraisal process and should be stratified and reanalyzed if they are sufficiently representative. If ratios of low-dollar sales strongly influence the sales sample, the low-dollar sales shall be analyzed and possibly excluded from the sample.

B. Review the current and previous years reported assessment actions of the county for the class of real property in question. Also review the level of value for the subject class of real property for previous years to compare the relationship between the reported assessment actions and the historical level of value to identify possible trends in assessment or to assist in the identification of a point estimate of the level of value.

Classes of property in which a level of value cannot be determined to a reasonable degree of certainty through this analysis shall be certified in the Reports and Opinions of the Property Tax Administrator as having achieved a LOV equal to the statutory requirement provided the assessment practices are acceptable. If a determination is made that the County is not using professionally accepted assessment practices, the County will be reported as Not Enough Information (NEI). Counties with assessment practices in conflict with professionally accepted mass appraisal standards may be further examined using tests such as a trended ratio analysis of the subject class, and will be subject to potential action by the PTA.

Determination of Adjustment Factor

If the results from the comprehensive analysis as well as a review of the assessment practices indicate the sample is representative of the population and the determined level of value is not within the statutorily acceptable range, the PTA may make a non-binding recommendation for adjustment to the Tax Equalization and Review Commission.

The factor recommended for adjustment shall be based on all information available and shall target the midpoint of the acceptable range of the class of property. The county assessor will be notified of any non-binding recommendations for adjustment being made to the Tax Equalization and Review Commission.

APPROVED:

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