



## STANDARDS FOR MEASUREMENT AND ANALYSIS OF CLASSES AND SUBCLASSES OF REAL PROPERTY

### **PURPOSE**

This policy provides standard procedures to be used in determining the level of value and the quality of assessment for all classes of real property in each county. For purposes of this policy, class shall mean class or subclass of real property.

### **ANALYSIS**

Each of the classes 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, sixty-nine to seventy-five percent of actual value; (b) for agricultural and horticultural land receiving special valuation, sixty-nine to seventy-five percent of special valuation; and (c) for all other real property, ninety-two to one hundred percent of actual value.

#### **I. Adequacy and Representativeness**

All classes of real property shall be analyzed for all relevant information which, at a minimum, includes the following, in no particular order:

##### **A. Adequacy of the Sample Size**

A sample is the set of qualified sales within a particular class of real property. To determine whether the sample size is sufficient to evaluate the class of real property, measures of reliability may be used, such as the coefficient of dispersion or the width of the confidence interval, to determine the confidence that can be placed on the sample size. If the confidence interval is sufficiently narrow, and the sample has been determined to be proportionate, the sample is considered to be adequate. If, however, the confidence interval is too wide, the assessor must either accept less precision or enlarge the sample, if possible<sup>1</sup>.

Expanding an insufficient sample in agricultural land can be accomplished by including previously rejected sales, agricultural land sales that are minimally improved, or comparable sales from surrounding areas. In order to make an accurate level of value determination, every attempt must be made to add comparable agricultural land sales in areas that are determined to be insufficient.

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<sup>1</sup> Standard on Ratio Studies, International Association of Assessing Officers, July 2010 Section 6.2

In determining which agricultural sales are minimally improved, the analysis will include:

1. Determining whether the assessed value of the non productive land and improvements of the sale are less than 5% or less of the total selling price; and
2. Determine whether these sales contain evidence that the improvements added no contributory value to the selling price;

If the agricultural record indicates that less than 5% of the total selling price is in a non-production category (farm site, home site value, home and farm buildings), and the sale was considered to be uninfluenced by non-production value, the ratio will be calculated from the assessed value of the production land divided by the total selling price.

Sales in which the contributory value of the non-production land and improvements is determined through verification with parties familiar with the sale will be adjusted by subtracting the contributory value from the selling price or the sale will be excluded.

## **B. Representativeness of the Sample**

A representative sample is a group of sales from a larger population of parcels, such that statistics calculated from the sample can be expected to reflect the characteristics of the population being studied. Since accuracy of statistics as estimators of the population depends on the representativeness of the sample, the following analysis will be done to determine representativeness:

1. Interview the assessor to determine if, in the assessor's opinion:
  - a. the sales are representative of the population; and
  - b. that the state sales file information is an accurate reflection of the data on the property record card.

Then gather all other necessary data and facts the assessor provides related to the strata;

2. Determine if the class of real property represents a valuation grouping, which is a group of parcels with similar characteristics that affect value.

Then analyze the characteristics of the sales and the population to determine if the characteristics are similar and proportionate; and

3. Determine representativeness of the agricultural class of property, by comparing population information to the sale information contained in the state sales file. A standard means of comparing the sales file to the entire county is based on land use

and time of sale. The sales within the study period must be taken into account to ensure the ratio study statistics create an equalized level of value.

If, 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.

If, after all information has been analyzed, and a determination has been made that the sample is not adequate or representative, then the statutory level (75% for agricultural or horticultural land, and 100% for all other real property) will be considered to have been met for that class of real property.

## **II. Determine Level of Value**

The three measures of central tendency for the class of real property shall be evaluated to begin the determination of the level of value.

Along with evaluating the calculated median ratio, the following studies may also be conducted to test the validity of the calculated median ratio, 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. If outlier ratios tend to be concentrated in certain areas or other subsets of the sample, they can point directly to systematic errors in the appraisal process and should be stratified and reanalyzed if they are sufficiently representative.<sup>2</sup> If ratios of low-dollar sales strongly influence the sales sample, the low-dollar sales shall be analyzed.
- 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.

Existing classes of property in which a level of value cannot be determined to a reasonable degree of certainty through this analysis shall be presumed to be in compliance with the statutorily required level of value (75% for agricultural or horticultural land, and 100% for all other real property) when generally accepted mass appraisal techniques are employed by the county. Counties with assessment practices in

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<sup>2</sup> Standard on Ratio Studies, International Association of Assessing Officers, 2010 Section B.5

conflict with professionally accepted mass appraisal techniques shall be further examined using tests such as a trended ratio analysis of the subject class. Such occurrences may also initiate an examination by the Property Tax Administrator.

### **III. Determine and Test Adjustment Factor**

If the results from the comprehensive analysis indicate, to a reasonable degree of certainty, that the sample is representative of the population and that the determined level of value is not within the statutorily acceptable range, then the Property Tax Administrator may recommend an appropriate non-binding adjustment.

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.

Once the outcome of the analysis is determined, the county assessor will be notified of any non-binding recommendations for adjustment that are being made to the Tax Equalization and Review Commission.

APPROVED:



Dennis W. Donner  
Measurement Manager  
Property Assessment Division