

## Measurement Procedure of Agricultural Land

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### Statutes:

**§77-1371. Comparable sales; use; guidelines.** Comparable sales are recent sales of properties that are similar to the property being assessed in significant physical, functional, and location characteristics and in their contribution to value. When using comparable sales in determining actual value of an individual property under the sales comparison approach provided in section 77-112, the following guidelines shall be considered in determining what constitutes a comparable sale:

(1) Whether the sale was financed by the seller and included any special financing considerations or the value of improvements;

(2) Whether zoning affected the sale price of the property;

(3) For sales of agricultural land or horticultural land as defined in section 77-1359, whether a premium was paid to acquire nearby property. Land within one mile of currently owned property shall be considered nearby property;

(4) Whether sales or transfers made in connection with foreclosure, bankruptcy, or condemnations, in lieu of foreclosure, or in consideration of other legal actions should be excluded from comparable sales analysis as not reflecting current market value;

(5) Whether sales between family members within the third degree of consanguinity include considerations that fail to reflect current market value;

(6) Whether sales to or from federal or state agencies or local political subdivisions reflect current market value;

(7) Whether sales of undivided interests in real property or parcels less than forty acres or sales conveying only a portion of the unit assessed reflect current market value;

(8) Whether sales or transfers of property in exchange for other real estate, stocks, bonds, or other personal property reflect current market value;

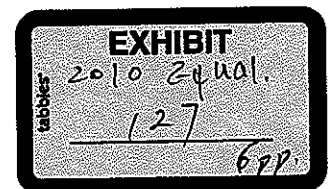
(9) Whether deeds recorded for transfers of convenience, transfers of title to cemetery lots, mineral rights, and rights of easement reflect current market value;

(10) Whether sales or transfers of property involving railroads or other public utility corporations reflect current market value;

(11) Whether sales of property substantially improved subsequent to assessment and prior to sale should be adjusted to reflect current market value or eliminated from such analysis; and

(12) For agricultural land or horticultural land as defined in section 77-1359 which is or has been receiving the special valuation pursuant to sections 77-1343 to 77-1348, whether the sale price reflects a value which the land has for purposes or uses other than as agricultural land or horticultural land and therefore does not reflect current market value of other agricultural land or horticultural land.

The Property Tax Administrator may issue guidelines for assessing officials for use in determining what constitutes a comparable sale. Guidelines shall take into account the factors listed in this section and other relevant factors as prescribed by the Property Tax Administrator.



§77-5027 (5) The Property Tax Administrator shall employ the methods specified in section 77-112, the comprehensive assessment ratio study specified in section 77-1327, other statistical studies, and an analysis of the assessment practices employed by the county assessor. If necessary to determine the level of value and quality of assessment in a county, the Property Tax Administrator may use sales of comparable real property in market areas similar to the county or area in question or from another county as indicators of the level of value and the quality of assessment in a county. The Property Tax Administrator may use any other relevant information in providing the annual reports and opinions to the commission.

**Definitions:**

*Benchmark sale* shall mean a similar property that has sold in a similar area which may be used to assist in determining the level of value in an assessment/sales ratio study for a jurisdiction with insufficient sales. *REG 12-002.06*

*Representative Sample* is a sample of observations from a larger population of observations, such that statistics calculated from the sample can be expected to represent the characteristics of the population being studied. *IAAO Glossary for Property Appraisal and Assessment, pp. 120.*

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**Purpose**

The purpose of this analysis is to establish a uniform process for analyzing and measuring agricultural land while recognizing the specific factors existing in all counties. Samples will be analyzed for time distribution, representation, and adequacy. In instances where the sample is not proportionate, representative and/or adequate the sample will be expanded in order to improve the reliability of ratio studies and to promote equalization. This process is intended to produce a rationalized estimate of the level of value for agricultural land.

**Analysis Components**

The Summary of Analysis tab serves as the initial output to the county assessor after the sales data is inserted into the roster tab. The various tables and charts display the proportionality among the study years, representativeness by majority land use, adequacy of the sample size, and comparison of values between counties.

*-Adequacy of the Sample*

For any given population, the representativeness of a sample will increase with its size. As size increases, the characteristics of the sample converge with those of the population, so that the statistics computed from the sample are more likely to be valid measures of the population.<sup>1</sup> In order to make the analysis a useful measure of the population, every attempt must be made to add comparable sales in areas that are determined by the liaison to be insufficient. Since a sufficient number of sales depends on factors such as likeness of properties and size of the

parcels involved, it is inappropriate to use an absolute number as a yes or no answer when determining whether or not a particular sample is sufficient.

*-Time Distribution of the Sample*

Analyzing the sales distribution within the three year study period ensures the median is not skewed towards the front or back of the study period.

In areas where the middle year of the study period contains a disproportionately larger number of sales, the potential for distortion exists. The liaison should test the potential impact using methods such as randomly removing sales from the overrepresented year. Samples that are disproportionate in numbers of sales for any particular timeframe can be used on their face if the liaison has demonstrated the insignificance of their contribution. Samples in which the middle year contains a disproportionately smaller number of sales should be supplemented with comparable sales whenever possible.

Study year distribution must be analyzed for each market area as well for the entire county. Strata are generally considered disproportionate when the number of sales in each year of the study period differs by more than 10 percent. See Figure 1 below.

Figure 1.

<u>Year</u>	<u>County Total</u>	<u>Market Area 1</u>	<u>Market Area 2</u>
1	23	5	18
2	36	14	36
3	<u>32</u>	<u>9</u>	<u>22</u>
	105	28	77

County Total:  $10\% * 105 \text{ sales} = 11 \text{ sale tolerable difference}$ ; sample is proportionate

Market Area 1:  $10\% * 28 \text{ sales} = 3 \text{ sale tolerable difference}$ ; sample not proportionate

Market Area 2:  $10\% * 77 \text{ sales} = 8 \text{ sale tolerable difference}$ ; sample is proportionate

*-Land Use*

The accuracy of statistics as estimators of the population depends on the representativeness of the sample. Types of property should appear with *approximately* the same frequency in both the sample and the population. Ideally, the sample would be a miniature replica of the population. The use of the land provides a standard means of comparing the sales file to the entire county when making representativeness determinations in agricultural land.

Charts displayed in the analysis compare land use based on number of acres for each market area and for the entire county, as reported in the Form 45, Abstract of Assessment. The general degree of representativeness acceptable for this analysis is any comparison in which the profile

of the county and profile of the sales differ by a margin of less than 10 percent. In Figure 2, Sample A is not a representative sample; Sample B is a representative sample based on the 10 percent threshold.

Figure 2.

	<u>County Percent of Acres by Land Use</u>	<u>Sample A</u>	<u>Sample B</u>
Irrigated	56%	78%	60%
Dry	14%	5%	18%
Grass	28%	17%	22%
Other	2%	0%	0%

*Source: Prior year Abstract of Assessment, Form 45 and State Sales File.*

*-Comparisons of assessed values between counties.*

Table IV of the Summary of Analysis serves as a visual representation of comparability in assessed values across market and political boundaries. The Land Capability Groupings are listed with the current year values calculated from the County Abstract of Assessment Report, Form 45. This table allows the liaison to identify significant disparities between contiguous areas.

The Summary of Analysis should be completed by the liaison and delivered in person to the county assessor. The purpose of this initial visit is to identify to the assessor areas of deficiency in the sample, and to begin the process of identification of comparable areas in bordering counties.

**Identifying Comparable Sales**

In situations where deficiencies are identified and comparable sales are needed to expand the sample, the following describes the process for identifying comparable sales.

*Determining comparable characteristics.*

Discuss the market areas with the assessor and determine from them what is unique about each of their market areas. Once the characteristics of parcels in each market area have been defined, then the criteria for the comparables have been established. As an example, if parcels in Market Area 'A' are grouped together because all are topographically flat, have productive soil, and have irrigation potential, then comparables sought out for the subject area should be comprised

of those same general characteristics. This discussion should be held with the assessor during the initial visit when the summary of analysis is delivered.

*Selecting comparable sales.*

After determining a general area from which comparable sales may be drawn, a query of the sales file will offer sales. This can be accomplished with a roster export from the sales file. The geo code and section fields will give the general location of the sales. Because it is important that sales are added to the analysis without bias a selection process has been established.

Sales should be selected using criteria that make the sample proportionate and representative at the same time. For example, if the sample contains a deficient number of sales in the third year of the study period and also is under represented for irrigated land, irrigated sales from the third year of the study period should be added to the sample. If an abundance of sales meeting the identified criteria exist, preference should be given to sales closest in proximity to the subject county. Care must be taken to ensure that level of value judgments on land use categories are not skewed by a disproportionate group of sales.

If the sample is already proportionate, but is not representative or adequate, sales should be added to the sample in a way that would maintain the proportionate time distribution while increasing the year(s) with the smallest number of sales. For example, in Figure 3 below, all three samples are proportionate. Suppose that both market areas are underrepresented for grassland requiring them to be expanded. For market area 1, it would be appropriate to add grassland sales to years 1 and 3 of the sample as year two already contains an excess of sales. For market area 2, it would be more appropriate to add grassland sales to the second year of the study period, as years 1 and 3 are already proportionate in terms of time and each contain more sales than year 2 does.

Figure 3.

<u>Year</u>	<u>County Total</u>	<u>Market Area 1</u>	<u>Market Area 2</u>
1	30	5	25
2	50	35	15
3	<u>30</u>	<u>7</u>	<u>23</u>
	110	47	63

The process of selecting comparable sales can best be done in cooperation with the county assessor. Any concerns or opinions that the assessor has regarding the comparability of surrounding areas or specific sales should be considered by the liaison. The liaison must be accepting of the sales qualification process used by all counties from which sales are drawn. If however, bias or selective exclusion exists, a further review of the sales must be conducted to ensure the provisions of Neb. Rev. Stat. §77-1371 have been met. Failure to properly identify arm's length transactions on the part of the county assessor will result in a review and possible inclusion pursuant to REG 12-003.04

*When no comparables exist,*

The preferred method of addressing time distribution or representativeness issues is to expand the analysis by including comparable sales from the same time period. In some instances a limited number of comparable sales may exist. In these occurrences other methods may be employed to ensure a meaningful ratio study is conducted. First, the liaison should review the sales that were previously determined to be non-qualified with the assessor. It may be possible to include some of these sales in the sales file. Secondly, the time period from which sales are drawn can be expanded. Finally, when all other methods have been exhausted the liaison should randomly eliminate sales from the over represented areas.

Caution must be taken when eliminating sales to ensure other substrata are not stripped of a sufficient number of sales. In general, a lesser degree of precision will have to be accepted when removing qualified sales from the subject county.

### **Preliminary Report**

The preliminary report to the assessor will include a listing of all sales used in the ratio study for the subject county. The report will also include preliminary statistics using the county's qualified sales as well as any comparable sales added. The comparable sales' assessed values used in the ratio study will be calculated using the schedule of values from the subject county. The preliminary report should be delivered to the county assessor by December 15<sup>th</sup>.

### **Final Report**

The final report is completed after the assessor has established their agricultural and horticultural land values for the year. The liaison will apply the values established by the assessor to the expanded sample. The final report displays the original analysis, a summary of the added sales, the final analysis, and statistical calculations for the class and subclasses. The report will serve as the agricultural correlation section of the Reports and Opinions of the Property Tax Administrator.