

**Field Operations Section** 

Agricultural Land Analysis Procedure

March 19, 2019

## **Purpose**

This procedure establishes the uniform process to be used in conducting analysis and determining a level of value for the agricultural and horticultural land (agricultural) class of property in the State of Nebraska. This procedure is intended to create consistent measurements of assessed values and intra-county and inter-county equalization.

# **Prepare the Sales Data**

Before beginning the analysis, it is important to ensure that the data is accurate. Export the roster of all agricultural land sales to excel. Review the reasons provided by the assessor for disqualifying sales. If the assessor explanations for excluding sales are missing or do not clearly describe why the sales are not arm's length, work with the assessor to ensure that sales are properly qualified and explained.

Failure to properly identify arm's length transactions on the part of the county assessor may result in possible inclusion pursuant to REG 12-003.04. Communication with the county is also necessary to ensure that all sales information is updated and correctly listed in the sales file.

### **Prior to Analysis**

Before conducting any statistical analysis, it is important to understand geographic and economic conditions that affect the market.

#### Evaluate Market Areas and Determine Comparable Areas

For the statistical analysis, each market area will be analyzed individually when possible. Therefore, the field liaison's first step is to understand how market areas were established by the county assessor. Prior to statistical analysis, discuss the market areas with the county assessor and determine the unique market characteristics of each. Once the characteristics of the parcels in each market area have been defined, the same characteristics should be identified in the neighboring area, developing the comparable area from which sales can be drawn. Characteristics considered may include (but are not limited to) legal restrictions such as NRD restrictions, non-agricultural influences (special valuation), parcel size, soil make-up, and topography.

If the discussion with the county assessor and review of characteristics indicates that market areas were <u>not</u> established using market characteristics, they should be discussed with the county assessor in an attempt to assign appropriate market areas per the requirements of § 77-103.01. If

market areas remain unchanged after discussion the field liaison will analyze the market to ensure parcels with similar characteristics are grouped as they are treated in the marketplace.

In the event parcels with similar market influences are stratified separately and valued separately by the county assessor, the field liaison must be prepared to identify and recommend adjustment to bring all parcels with similar characteristics to the same proportion of market value. Actions of the county assessor that result in disparate treatment of parcels within a common market are not considered to be in compliance with generally accepted mass appraisal practices. If the levels of value for the market areas that are not in statutory compliance are within the acceptable range, no recommendations for adjustment shall be made. However, the assessment practices of the county shall be brought to the attention of the Property Tax Administrator.

## **Conduct the Analysis**

After confirming the market areas and identifying comparable areas, statistical analysis can be performed. From the state sales file, run a statistical analysis of agricultural sales from within the county and a statistical analysis including comparable sales from outside of the county. As a starting point, all sales from comparable areas within six miles of the county should be considered. Evaluate the results of each to determine whether both profiles reflect similar economic conclusions. If the two statistics produce reasonably similar results, compare those results to the general movement of agricultural land in surrounding counties and across the state. If there is general correlation between both statistical profiles and the overall movement of the agricultural land market, the field liaison can have confidence that the statistical results are a valid reflection of the level of value within the county. In those cases, the statistics from sales within the county will then be relied upon to determine the county's level of value.

If there are significant differences between the two statistical profiles, the field liaison should investigate the cause of the differences to arrive at an opinion regarding the level of value of agricultural land within the county. Although this list is not exhaustive, the following factors should be considered to investigate the difference between statistical profiles.

- 1. **Sample size**. When samples are small the addition or subtraction of a small number of sales can have a significant impact on statistical calculations. Generally, statistical reliability increases as sample size increases. For that reason, expanding the area around the county from which comparable sales are drawn may be helpful to determine how volatile the sale sample is; however, as the sample is expanded the field liaison may have to accept less statistical precision in arriving at level of value determinations.
- 2. **Outlier Ratios**. The field liaison should examine the impact of outlier ratios to the calculated statistics. This can be achieved by temporarily removing the outliers from the file to determine the impact to the calculated statistics. Outlier sales should be reviewed with the county assessor to ensure that they are properly qualified, whether a premium was

paid to acquire the property (1031 exchanges, purchases of adjoining land, etc.), whether any non-agricultural interest influence the purchase, and any other extenuating circumstances. This review can be conducted with the county assessor, but may also require independent verification of sales information.

- 3. **Review Comparable Areas**. Ensure the comparable area surrounding the county is truly comparable. This review should consider geographical characteristics, compare sales prices per acre, and involve discussion with the Regional Field Operations Tax Specialist and/or the county assessor.
- 4. **Market Trends**. Analyzing the ratio study by time period will indicate how the market is trending. If the market is either increasing or decreasing the time distribution of sales may create statistical differences between samples of sales. If a time bias exists in the sample, additional analysis may be necessary to ensure that level of value determinations are equalized between similar counties.
- 5. **General Economic Indicators**. When various samples of sales produce significantly different statistical indicators correlation to the general movement of the agricultural market can provide insight in evaluating the statistics. This can be achieved by comparing the assessed values and/or statistical results to surrounding comparable counties.
- 6. **Parcel Size**. Parcels that are extremely small, typically less than 40 acres are often not typical of the agricultural market and can be influenced by non-agricultural influences. For that reason, the field liaison should consider whether small parcels are adversely impacting the statistics, and if necessary remove them for the statistical profile.

#### When Insufficient Sales Information Exists

After expanding the sample with comparable sales, the field liaison must determine if the statistical calculations produced from the analysis are reasonably reliable. If the statistics are not determined to be reliable, additional analysis may be necessary.

# **Additional Analysis:**

The field liaison shall consider additional professionally accepted methods for determining if the existing sample of sales is a reliable indicator of the level, or if other information is available to identify a level of value. These methods may include, but not be limited to the following:

- If the sample of sales is not reliable or representative of the overall movement of the market, use comparable sales from a distance further than six miles as long as the proximity and comparability to the county are analyzed to develop truly comparable areas.
- Comparison of assessed values to neighboring counties with similar market areas to identify if comparable areas are equalized. Both proximity and comparability to the county

should be examined. If the comparable area is sufficiently represented by sales, and values between the subject and comparable counties are similar, it is reasonable to conclude that the subject county's values are acceptable and equalized.

- Identify the general movement of the market in the area, then compare the historical assessed value change to the general market activity. If assessed values and the general market have changed at similar rates, the field liaison may be able to conclude that assessed values are acceptable.
- Weighting the ratios by majority land use, may provide an additional indicator of the level of value for the class or subclass. Weighting by percent majority land use would reduce the weight given to outlier sales that are of mixed use, but could additionally overweight outliers that are a high percentage of a particular land use. Small acreage sales of a high land use percentage should also be identified and mitigated as these ratios could be given a greater weight than sales more typical of the parcels in the local market.

The conclusions of the additional analysis should be adequately described in the correlation section of the Reports and Opinions to inform the reader of the analysis performed the strengths or limitations identified, and the resulting opinion of the Property Tax Administrator based on the additional analysis.

#### Review

Each analysis is subject to review by the Field Operations Tax Specialist and/or the Field Operations Manager, which will include discussion with the field liaison and a detailed review of each county/market area to ensure consistent sales review, utilization of comparable sales, and measurement/determination of level of value. The Field Operations Tax Specialist will report their findings to management.

# **Preliminary Level of Value**

The comparable sales analysis is available in the state sales file to county assessors. Each year the field liaison will discuss the preliminary statistical analysis with each county assessor by January 15<sup>th</sup>.

## **Final Analysis**

Once the assessor has determined the new assessed values, input the values into the sales file to calculate the final statistics. Communicate to the assessor the statistical results produced by the final analysis as soon as reasonably practical.

### **Preparation of Statistical Profiles**

The final statistical report can be created after the subject county assessor has filed the Assessed Value Update. The statistical profile will be generated using the state sales file and will use the values certified by the assessor as the source for the subject county values. Any sales that were imported from neighboring counties will be valued using the subject county's schedule of values, which is entered into the sales file by the field liaison.

### **Determining the Level of Value**

When the final statistical profile has been completed, the field liaison will correlate all relevant information to make level of value determinations as well as recommendations for non-binding adjustments. The field liaison should consider their knowledge of the subject county and surrounding area, any assessment actions taken by the assessor, and all other relevant information when making level of value determinations. The rationale should be adequately explained in the correlation section of the Reports and Opinions. Additional analysis should be described in detail, and references made to the statistical results of such analysis. It is sufficient to rely on statistics generated from spreadsheets and not necessary to reproduce expanded samples using the sales file.

Determination of the quality of assessment will be based on the knowledge of the field liaison of the counties assessment practices and are not necessarily based strictly on the calculated coefficient of dispersion or price related differential.

# **Non-binding Recommendations**

When a non-binding recommendation is made to adjust the class or a subclass of agricultural property, the adjustment should take the class or subclass being adjusted to the mid-point of the acceptable range. A what-if statistical profile will be included in the Reports & Opinions to demonstrate the adjustment's impact on the calculated statistics.

If the non-binding recommendation is calculated for a subclass of agricultural property from the 95% or 80% Majority Land Use Statistics, the total value of sold properties within the subclass should be adjusted in the what-if statistics. Sales that contain at least 80% of one land use best represent the price paid for the majority use, with little to no contributory value for the minority acres. Therefore, a ratio comparing an adjustment of all acres in the sale to the total selling price is the most meaningful.