## Table of Contents

## 2009 Commission Summary

## 2009 Opinions of the Property Tax Administrator

## Residential Reports

Preliminary Statistics
Residential Assessment Actions
Residential Assessment Survey
R\&O Statistics

## Residential Correlation

Residential Real Property
I. Correlation
II. Analysis of Percentage of Sales Used
III. Analysis of the Preliminary, Trended Preliminary, and R\&O Median Ratio
IV. Analysis of Percentage Change in Total Assessed Value in the Sales File to Percentage Change in Assessed Value
V. Analysis of the R\&O Median, Weighted Mean, and Mean Ratios
VI. Analysis of R\&O COD and PRD
VII. Analysis of Change in Statistics Due to the Assessor Actions
VIII. Trended Ratio Analysis

## Commercial Reports

Preliminary Statistics
Commercial Assessment Actions
Commercial Assessment Survey
R\&O Statistics

## Commercial Correlation

Commercial Real Property
I. Correlation
II. Analysis of Percentage of Sales Used
III. Analysis of the Preliminary, Trended Preliminary, and R\&O Median Ratio
IV. Analysis of Percentage Change in Total Assessed Value in the Sales File to Percentage Change in Assessed Value
V. Analysis of the R\&O Median, Weighted Mean, and Mean Ratios
VI. Analysis of R\&O COD and PRD
VII. Analysis of Change in Statistics Due to the Assessor Actions

## Agricultural or Special Valuation Reports

Preliminary Statistics
Agricultural Assessment Actions
Agricultural Assessment Survey
R\&O Statistics
2009 Special Valuation Methodology

## Agricultural or Special Valuation Correlation

Agricultural or Special Valuation Land
I. Correlation
II. Analysis of Percentage of Sales Used
III. Analysis of the Preliminary, Trended Preliminary, and R\&O Median Ratio
IV. Analysis of Percentage Change in Total Assessed Value in the Sales File to Percentage Change in Assessed Value
V. Analysis of the R\&O Median, Weighted Mean, and Mean Ratios
VI. Analysis of R\&O COD and PRD
VII. Analysis of Change in Statistics Due to the Assessor Actions

## County Reports

2009 County Abstract of Assessment for Real Property, Form 45
2009 County Agricultural Land Detail
2009 County Abstract of Assessment for Real Property Compared with the 2008
Certificate of Taxes Levied (CTL)
County Assessor's Three Year Plan of Assessment
Assessment Survey - General Information

## Certification

Maps
Market Areas
Registered Wells > 500 GPM
Geo Codes
Soil Classes
Valuation History Charts

## 2009 Commission Summary

59 Madison

## Residential Real Property - Current

| Number of Sales | 1,203 | COD | 22.36 |
| :--- | ---: | :--- | ---: |
| Total Sales Price | $\$ 119,579,730$ | PRD | 110.02 |
| Total Adj. Sales Price | $\$ 119,798,230$ | COV | 37.54 |
| Total Assessed Value | $\$ 110,793,682$ | STD | 38.20 |
| Avg. Adj. Sales Price | $\$ 99,583$ | Avg. Absolute Deviation |  |
| Avg. Assessed Value | $\$ 92,098$ | Average Assessed Value <br> of the Base | 21.02 |
| Median | 94 | Wgt. Mean | $\$ 85,239$ |
| Mean | 102 | Max | 92 |
| Min | 23.13 |  | 409 |

## Confidenence Interval - Current

| $95 \%$ Median C.I | 92.82 to 94.89 |
| :--- | ---: |
| $95 \%$ Mean C.I | 99.59 to 103.91 |
| $95 \%$ Wgt. Mean C.I | 91.35 to 93.62 |

$\%$ of Value of the Class of all Real Property Value in the County 47.15
$\%$ of Records Sold in the Study Period 9.80
\% of Value Sold in the Study Period

## Residential Real Property - History

| Year | Number of Sales | Median | COD | PRD |
| :---: | :---: | :---: | :---: | ---: |
| $\mathbf{2 0 0 8}$ | 1,208 | 95 | 19.44 | 107.67 |
| $\mathbf{2 0 0 7}$ | 1,273 | 94 | 17.53 | 105.89 |
| $\mathbf{2 0 0 6}$ | 1,318 | 95 | 16.5 | 105.2 |
| $\mathbf{2 0 0 5}$ | 1,435 | 93 | 18.37 | 105.38 |

## 2009 Commission Summary

59 Madison

## Commercial Real Property - Current

| Number of Sales | 142 | COD | 30.20 |
| :--- | ---: | :--- | ---: |
| Total Sales Price | $\$ 40,910,672$ | PRD | 104.87 |
| Total Adj. Sales Price | $\$ 40,910,672$ | COV | 43.62 |
| Total Assessed Value | $\$ 39,568,461$ | STD | 44.24 |
| Avg. Adj. Sales Price | $\$ 288,103$ | Avg. Absolute Deviation | 29.45 |
| Avg. Assessed Value | $\$ 278,651$ | Average Assessed Value |  |
|  |  | of the Base | $\$ 265,425$ |
| Median | 98 | Wgt. Mean | 97 |
| Mean | 101 | Max | 332 |
| Min | 22 |  |  |

## Confidenence Interval - Current

| $95 \%$ Median C.I | 92.49 to 102.70 |
| :--- | :--- |
| $95 \%$ Mean C.I | 94.16 to 108.71 |
| $95 \%$ Wgt. Mean C.I | 87.27 to 106.16 |

$\%$ of Value of the Class of all Real Property Value in the County 22.97
$\%$ of Records Sold in the Study Period 7.40
$\%$ of Value Sold in the Study Period 7.76

## Commercial Real Property - History

| Year | Number of Sales | Median | COD | PRD |
| :---: | :---: | :---: | :---: | ---: |
| $\mathbf{2 0 0 8}$ | 176 | 97 | 27.72 | 104.71 |
| $\mathbf{2 0 0 7}$ | 174 | 95 | 26.21 | 101.57 |
| $\mathbf{2 0 0 6}$ | 163 | 93 | 28.03 | 101.31 |
| $\mathbf{2 0 0 5}$ | 132 | 96 | 27.37 | 105.84 |

## 2009 Commission Summary

59 Madison

Agricultural Land - Current

| Number of Sales | 94 | COD | 21.26 |
| :--- | ---: | :--- | ---: |
| Total Sales Price | $\$ 25,186,206$ | PRD | 101.09 |
| Total Adj. Sales Price | $\$ 25,186,206$ | COV | 29.98 |
| Total Assessed Value | $\$ 17,501,242$ | STD | 21.06 |
| Avg. Adj. Sales Price | $\$ 267,938$ | Avg. Absolute Deviation | 15.07 |
| Avg. Assessed Value | $\$ 186,183$ | Average Assessed Value |  |
| of the Base | $\$ 196,413$ |  |  |
| Median | 71 | Wgt. Mean |  |
| Mean | 70 | Max | 69 |
| Min | -26.82 |  | 119.50 |

## Confidenence Interval - Current

| $95 \%$ Median C.I | 66.16 to 74.84 |
| :--- | :--- |
| $95 \%$ Mean C.I | 65.99 to 74.50 |
| $95 \%$ Wgt. Mean C.I | 65.47 to 73.50 |


| \% of Value of the Class of all Real Property Value in the County | 29.88 |
| :--- | ---: |
| $\%$ of Records Sold in the Study Period | 2.78 |
| $\%$ of Value Sold in the Study Period | 2.81 |


| Agricultural Land - History |  |  |  |
| :---: | :---: | :---: | ---: |
|  |  |  |  |
| Year | Number of Sales | Median | COD |
| $\mathbf{2 0 0 8}$ | 92 | 73 | 19.64 |
| $\mathbf{2 0 0 7}$ | 64 | 72 | 14.9 |
| $\mathbf{2 0 0 6}$ | 55 | 71 | 102.49 |
| $\mathbf{2 0 0 5}$ | 61 | 78 | 25.8 |

Opinions

# 2009 Opinions of the Property Tax Administrator for Madison County 

My opinions and recommendations are stated as a conclusion based on all of the factors known to me regarding the assessment practices and statistical analysis for this county. See, Neb. Rev. Stat. §77-5027 (R. S. Supp., 2005). While the median assessment sales ratio from the Qualified Statistical Reports for each class of real property is considered, my opinion of the level of value for a class of real property may be determined from other evidence contained within this Reports and Opinions of the Property Tax Administrator. The resource used regarding the quality of assessment for each class of real property in this county are the performance standards issued by the International Association of Assessing Officers (IAAO). My opinion of quality of assessment for a class of real property may be influenced by the assessment practices of the county assessor.

## Residential Real Property

It is my opinion that the level of value of the class of residential real property in Madison County is $94.00 \%$ of actual value. It is my opinion that the quality of assessment for the class of residential real property in Madison County is in compliance with generally accepted mass appraisal practices.

## Commercial Real Property

It is my opinion that the level of value of the class of commercial real property in Madison County is $98.00 \%$ of actual value. It is my opinion that the quality of assessment for the class of commercial real property in Madison County is in compliance with generally accepted mass appraisal practices.

## Agricultural Land or Special Valuation of Agricultural Land

It is my opinion that the level of value of the class of agricultural or special value land in Madison County is $71.00 \%$ of actual value. It is my opinion that the quality of assessment for the class of agricultural land in Madison County is in compliance with generally accepted mass appraisal practices.

Dated this 7th day of April, 2009.


Ruth A. Sorensen<br>Property Tax Administrato

# PAD 2009 Preliminary Statistics 

## Type: Qualified <br> Date Range: 07/01/2006 to 06/30/2008 Posted Before: 01/22/2009



Exhibit 59 Page 5

## PAD 2009 Preliminary Statistics



## PAD 2009 Preliminary Statistics



Exhibit 59 Page 7

## PAD 2009 Preliminary Statistics



## PAD 2009 Preliminary Statistics



Exhibit 59 Page 9

# Madison County 2009 Assessment Actions taken to address the following property classes/subclasses: 

## Residential:

Annually the county conducts a market analysis that included the qualified residential sales that occurred from 1 July 2006 to 30 June 2008. The review and analysis is done to identify any adjustments or other assessment actions that are necessary to properly value the residential class of real property.

Annually, the county conducts the pick-up of new construction of the residential property in a timely manner.

Annually, the county plans to accomplish a portion of the required 6 year inspection process. During 2008, they focused on 3 and 4 unit apartments which are technically classified as commercial property. So there was no cyclical residential inspection done during 2008.

For 2009, the county completed their analysis and will use the subclass of "Assessor Location" to make any adjustments needed to move the values to an acceptable level.

The "Assessor Location" Rural with a preliminary median of 88.46 needed the largest adjustment.

During the analysis of the residential property in the City of Norfolk it was determined that the higher valued properties were undervalued. For this reason, attention was given to propertied with valuations over $\$ 100,000$.

## 2009 Assessment Survey for Madison County

## Residential Appraisal Information

(Includes Urban, Suburban and Rural Residential)

| 1. | Data collection done by: |
| :--- | :--- |
|  | Assessor and part time lister |
| 2. | Valuation done by: |
|  | Assessor |
| 3. | Pickup work done by whom: |
|  | Assessor and part time lister |
| 4. | What is the date of the Replacement Cost New data (Marshall-Swift) that are <br> used to value this property class? |
| 1990 | What was the last year a depreciation schedule for this property class was <br> developed using market-derived information? |
| 1991 | What approach to value is used in this class or subclasses to estimate the <br> market value of properties? |
|  | N/A <br> 7. |
| Number of Market Areas/Neighborhoods/Assessor Locations? |  |
| 7: Market Areas |  |
| 8. | How are these Market Areas/Neighborhoods/Assessor Locations defined? |
|  | The 7 market areas are defined the same as "Assessor Location". They are Battle <br> Creek, Madison, Meadow Grove Newman Grove, Norfolk, Tilden and Rural. For <br> Norfolk, the area designated as suburban surrounding the city is reported in and <br> analyzed with the assessor location "Norfolk". The each of the other 5 towns, the <br> area designated as suburban location is reported in and analyzed with the assessor <br> location "Rural". Occasionally, there is analysis done using groupings of similar <br> property characteristics, but only reported into the sales file using Assessor <br> Location. |
| 9. | Is "Market Area/Neighborhoods/Assessor Locations" a unique usable <br> valuation grouping? If not, what is a unique usable valuation grouping? |
|  | Yes |


| 10. | Is there unique market significance of the suburban location as defined in Reg. <br> $\mathbf{1 0 - 0 0 1 . 0 7 B}$ ? (Suburban shall mean a parcel of real estate property located outside <br> of the limits of an incorporated city or village, but within the legal jurisdiction of an <br> incorporated city or village.) |
| :--- | :--- |
|  | The county does not recognize an assessor location "suburban" as a market <br> designation. In preparing the assessor locations, the designated suburban area <br> around Norfolk is reported with the urban parcels. Around the other towns, the <br> parcels within the 1 mile distance are reported with the rural parcels. There is no <br> acknowledged market significance to location "Suburban". |
| 11. | Are dwellings on agricultural parcels and dwellings on rural residential parcels <br> valued in a manner that would provide the same relationship to the market? <br> Explain? |
|  | Yes |

## Residential Permit Numbers:

| Permits | Information Statements | Other | Total |
| :---: | :---: | :---: | :---: |
| 327 | 0 | 0 | 327 |




PAD 2009 R\&O Statistics
Type: Qualified
Date Range: 07/01/2006 to 06/30/2008 Posted Before: 01/23/2009



PAD 2009 R\&O Statistics
Type: Qualified
Date Range: 07/01/2006 to 06/30/2008 Posted Before: 01/23/2009
State Stat Run

## Residential Real Property

## I. Correlation

RESIDENTIAL:The tables in the correlation section indicate that the statistics support a level of value for the residential class of property within the acceptable range. Analysis of the qualified PAD 2009 R\&O Statistics for the residential class indicates that the median ratio is $94 \%$ and all of the relevant subclasses with a sufficient number of sales are within the acceptable range. The COD at 22.36 is not in the acceptable range and PRD at 110.02 is not in the acceptable range.
In this report are several stratifications that can be reviewed and analyzed: Under the stratification of Assessor Location; each of the named strata are likely to be relevant subclasses because they are assessor defined and should have both locational and organizational integrity. There are two other stratifications that may be of interest in the residential class of property. They are Locations: Urban, Suburban \& Rural, and Status: Improved, Unimproved \& IOLL. Both of these stratifications contain interesting and relevant assessment information. When taken alone as relevant subclasses, both present problems if they are broken down and analyzed as candidates for proposed adjustments. The biggest problem that is common to both is that none of the sub strata in either stratification are related to a common location. The most important factor relating to value is and always has been location. The second but equally important problem is that assessors and appraisers rarely organize an analysis or valuation project according to those criteria. That means that some parts of each of these groupings are probably being reviewed, updated or appraised at different times and with different sets of considerations. Among the Locations: Urban, Suburban \& Rural, the members of the urban group contain all of the individual towns scattered throughout the county and each subject to their own economic conditions. Suburban is similar with the same locational and economic disparity. Rural gathers everything else together as a catch-all and then is often used to predict the valuation of agricultural houses. The grouping called rural may relate to the agricultural houses in some counties or in some parts of counties, but that is best left to the judgment of local experts. Nothing that is contained in the residential R\&O Statistics can define those relationships. That leaves Assessor Location as the only stratification that is defined and supported by the assessor. Assessor Location will be the only stratification from which adjustment recommendations will be offered. Other groups with a reasonable number of sales and questionable statistics will be pointed out in order to be thorough but likely not recommended for adjustment.
Analysis:
Under the stratification of Assessor Location; no relevant substratum has a median ratio outside the acceptable range of 92 to $100 \%$.
Collectively the data suggests that the median holds up as the best indication of the level of value for the class and probably each relevant subclass. There is no recommendation for adjustment.

## II. Analysis of Percentage of Sales Used

This section documents the utilization of total sales compared to qualified sales in the sales file. Neb. Rev. Stat. 77-1327(2) (R. S. Supp., 2007) provides that all sales are deemed to be arm's length transactions unless determined to be otherwise under professionally accepted mass appraisal techniques. The county assessor is responsible for the qualification of the sales included in the residential sales file. The Division periodically reviews the procedures utilized by the county assessor to qualify/disqualify sales.

The Standard on Ratio Studies, International Association of Assessing Officials, (2007), indicates that low levels of sale utilization may indicate excessive trimming by the county assessor. Excessive trimming, the arbitrary exclusion or adjustment of arm's length transactions, may indicate an attempt to inappropriately exclude arm's length transactions to create the appearance of a higher level of value and quality of assessment. The sales file, in a case of excess trimming, will fail to properly represent the level of value and quality of assessment of the population of residential real property.

|  | Total Sales | Qualified Sales | Percent Used |
| :---: | :---: | :---: | :---: |
| 2009 | $\mathbf{1 , 4 8 3}$ | $\mathbf{1 , 2 0 3}$ | $\mathbf{8 1 . 1 2}$ |
| 2008 | $\mathbf{1 , 5 5 3}$ | $\mathbf{1 , 2 0 8}$ | $\mathbf{7 7 . 7 8}$ |
| 2007 | $\mathbf{1 , 6 4 4}$ | $\mathbf{1 , 2 7 3}$ | $\mathbf{7 7 . 4 3}$ |
| 2006 | $\mathbf{1 , 6 6 7}$ | $\mathbf{1 , 3 1 8}$ | $\mathbf{7 9 . 0 6}$ |
| 2005 | $\mathbf{1 , 6 2 5}$ | $\mathbf{1 , 4 3 5}$ | $\mathbf{8 8 . 3 1}$ |

RESIDENTIAL:This table indicates that the county has utilized an acceptable portion of the available sales and that the measurement of the class of property was done with all available arms length sales. Nothing in this data or in the assessment actions suggests a pattern of excessive trimming of sales.

## III. Analysis of the Preliminary, Trended Preliminary and R\&O Median Ratio

The trended preliminary ratio is an alternative method to calculate a point estimate as an indicator of the level of value. This table compares the preliminary median ratio, trended preliminary median ratio, and $\mathrm{R} \& \mathrm{O}$ median ratio, presenting four years of data to reveal any trends in assessment practices. The analysis that follows compares the changes in these ratios to the assessment actions taken by the county assessor. If the county assessor's assessment practices treat all properties in the sales file and properties in the population in a similar manner, the trended preliminary ratio will correlate closely with the R\&O median ratio. The following is the justification for the trended preliminary ratio:

## Adjusting for Selective Reappraisal

The reliability of sales ratio statistics depends on unsold parcels being appraised in the same manner as sold parcels. Selective reappraisal of sold parcels distorts sales ratio results, possibly rendering them useless. Equally important, selective reappraisal of sold parcels (sales chasing) is a serious violation of basic appraisal uniformity and is highly unprofessional. Oversight agencies must be vigilant to detect the practice if it occurs and take necessary corrective action.
[To monitor sales chasing] A preferred approach is to use only sales that occur after appraised values are determined. However, as long as values from the most recent appraisal year are used in ratio studies, this is likely to be impractical. A second approach is to use values from the previous assessment year, so that most (or all) sales in the study follow the date values were set. In this approach, measures of central tendency must be adjusted to reflect changes in value between the previous and current year. For example, assume that the measure of central tendency is 0.924 and, after excluding parcels with changes in use or physical characteristics, that the overall change in value between the previous and current assessment years is 6.3 percent. The adjusted measure of central tendency is $0.924 \times 1.063=0.982$. This approach can be effective in determining the level of appraisal, but measures of uniformity will be unreliable if there has been any meaningful reappraisal activity for the current year.

Gloudemans, Robert J., Mass Appraisal of Real Property, International Association of Assessing Officers, (1999), p. 315.

## III. Analysis of the Preliminary, Trended Preliminary and R\&O Median Ratio

 Continued|  | Preliminary <br> Median | \% Change in Assessed <br> Value (excl. growth) | Trended <br> Preliminary Ratio | R\&O <br> Median |
| :---: | :---: | :---: | :---: | :---: |
| 2009 | 93 | 1.00 | 94 | 94 |
| 2008 | 91.91 | 3.63 | 95 | 95.03 |
| 2007 | 91 | 3.13 | 94 | 94 |
| 2006 | 91 | 4.01 | 94 | 95 |
| 2005 | 90 | 4.78 | 94 | 93 |

RESIDENTIAL:The relationship between the trended preliminary ratio and the R\&O median ratio suggests the valuation process is applied to the sales file and assessed population in a similar manner. The county has a strong recent history of very similar changes in the two statistics that are recorded in this table. That suggests a pattern of good assessment practices is ongoing in this property type. This table indicates that the statistics in the $\mathrm{R} \& \mathrm{O}$ can be relied on to measure the level of value for this class of property.

## IV. Analysis of Percentage Change in Total Assessed Value in the Sales File to Percentage Change in Assessed Value

This section analyzes the percentage change of the assessed values in the sales file, between the 2009 Preliminary Statistical Reports and the 2009 R\&O Statistical Reports, to the percentage change in the assessed value of all real property base, by class, reported in the 2008 County Abstract of Assessment for Real Property, Form 45, excluding growth valuation, compared to the 2008 Certificate of Taxes Levied (CTL) Report. For purposes of calculating the percentage change in the sales file, only the sales in the most recent year of the study period are used. If assessment practices treat sold and unsold properties consistently, the percentage change in the sales file and assessed base will be similar. The analysis of this data assists in determining if the statistical representations calculated from the sales file are an accurate measure of the population. The following is justification for such an analysis:

## Comparison of Average Value Changes

If sold and unsold properties are similarly appraised, they should experience similar changes in value over time. Accordingly, it is possible to compute the average change in value over a selected period for sold and unsold parcels and, if necessary, test to determine whether observed differences are significant. If, for example, values for vacant sold parcels in an area have increased by 45 percent since the previous reappraisal, but values for vacant unsold parcels have increased only 10 percent, sold and unsold parcels appear to have not been equally appraised. This apparent disparity between the treatment of sold and unsold properties provides an initial indication of poor assessment practices and should trigger further inquiry into the reasons for the disparity.

# IV. Analysis of Percentage Change in Total Assessed Value in the Sales File to Percentage Change in Assessed Value Continued 

| \% Change in Total | \% Change in Total Assessed |
| :---: | :---: |
| sed Value in the Sales File | Value (excl. growth) |


| 2.27 | 2009 | 1.00 |
| :--- | :--- | :--- |
| 4.56 | 2008 | 3.63 |
| 4.85 | 2007 | 3.13 |
| 7.95 | 2006 | 4.01 |
| 8.71 | 2005 | 4.78 |

RESIDENTIAL:The percent change in assessed value for both sold and unsold properties is very similar. Historically, the county has had a consistent relationship between these statistics. This indicates that the statistical calculations from either set of statistics are equally reliable as an accurate measure of the population.

## V. Analysis of the R\&O Median, Wgt. Mean, and Mean Ratios

There are three measures of central tendency calculated by the Division: median ratio, weighted mean ratio, and mean ratio. Since each measure of central tendency has strengths and weaknesses, the use of any statistic for equalization should be reconciled with the other two, as in an appraisal, based on the appropriateness in the use of the statistic for a defined purpose, the quantity of the information from which it was drawn, and the reliability of the data that was used in its calculation. An examination of the three measures can serve to illustrate important trends in the data if the measures do not closely correlate to each other.

The IAAO considers the median ratio the most appropriate statistical measure for use in determining level of value for direct equalization; the process of adjusting the values of classes or subclasses of property in response to the determination of level of value at a point above or below a particular range. Since the median ratio is considered neutral in relationship to either assessed value or selling price, its use in adjusting the class or subclass of properties will not change the relationships between assessed value and level of value already present within the class or subclass of properties, thus rendering an adjustment neutral in its impact on the relative tax burden to an individual property. Additionally, the median ratio is less influenced by the presence of extreme ratios, commonly called outliers. One outlier in a small sample size of sales can have controlling influence over the other measures of central tendency. The median ratio limits the distortion potential of an outlier.

The weighted mean ratio is viewed by the IAAO as the most appropriate statistical measure for indirect equalization; to ensure proper funding distribution of aid to political subdivisions, particularly when the distribution in part is based on the assessable value in that political subdivision, Standard on Ratio Studies, International Association of Assessing Officers, (2007). The weighted mean, because it is a value weighted ratio, best reflects a comparison of the assessed and market value of property in the political subdivision. If the distribution of aid to political subdivisions must relate to the market value available for assessment in the political subdivision, the measurement of central tendency used to analyze level of value should reflect the dollars of value available to be assessed. The weighted mean ratio does that more than either of the other measures of central tendency.

If the weighted mean ratio, because of its dollar-weighting feature, is significantly different from the median ratio, it may be an indication of other problems with assessment proportionality. When this occurs, an evaluation of the county's assessment practices and procedures is appropriate to discover remedies to the situation.

The mean ratio is used as a basis for other statistical calculations, such as the price related differential and coefficient of variation. However, the mean ratio has limited application in the analysis of level of value because it assumes a normal distribution of the data set around the mean ratio with each ratio having the same impact on the calculation regardless of the assessed value or the selling price.

## V. Analysis of the R\&O Median, Wgt. Mean, and Mean Ratios Continued

|  | Median | Wgt. Mean | Mean |
| :---: | :---: | :---: | :---: |
| R\&O Statistics | $\mathbf{9 4}$ | $\mathbf{9 2}$ | 102 |

RESIDENTIAL:The median and weighted mean are within the acceptable range, while the mean is above the range. The mean was calculated above the acceptable range largely based on a few high ratios, and most of the high ratios occurred on lower price sales. In 2009, 148 of the sales sold for less than $\$ 30,000$ and the average selling price for the residential class was almost $\$ 100,000$. It only takes a few high ratios to have a noticeable impact on the mean. The median is the measure of central tendency to be least influenced by these outliers, and in this subclass, the most reliable indicator of the level of value.

## VI. Analysis of R\&O COD and PRD

In analyzing the statistical data of assessment quality, there are two measures primarily relied upon by assessment officials. The Coefficient of Dispersion, COD, is produced to measure assessment uniformity. A low COD tends to indicate good assessment uniformity as there is a smaller spread or dispersion of the ratios in the sales file. A COD of less than 15 suggests that there is good assessment uniformity. Mass Appraisal of Real Property, International Association of Assessing Officers, (1999), pp. 235-237. The IAAO has issued performance standards for major property groups:

Single-family residences: a COD of 15 percent or less.
For newer and fairly homogeneous areas: a COD of 10 or less.
Income-producing property: a COD of 20 or less, or in larger urban jurisdictions, 15 or less. Vacant land and other unimproved property, such as agricultural land: a COD of 20 or less.
Rural residential and seasonal properties: a COD of 20 or less.

Mass Appraisal of Real Property, International Association of Assessing Officers, (1999), p. 246.

The Price Related Differential, PRD, is produced to measure assessment vertical uniformity (progressivity or regressivity). For example, assessments are considered regressive if high value properties are under-assessed relative to low value properties. A PRD of greater than 100 suggests that high value properties are relatively under-assessed. Mass Appraisal of Real Property, International Association of Assessing Officers, (1999), pp. 239-240. A PRD of less than 100 indicates that high value properties are relatively over-assessed. As a general rule, except for small samples, a PRD should range between 98 and 103. This range is centered slightly above 100 to allow for a slightly upward measurement bias inherent in the PRD. Mass Appraisal of Real Property, International Association of Assessing Officers, (1999), p. 247.

The analysis in this section indicates whether the COD and PRD meet the performance standards described above.

|  | COD | PRD |
| :--- | :---: | :---: |
| R\&O Statistics | $\mathbf{2 2 . 3 6}$ | $\mathbf{1 1 0 . 0 2}$ |
| Difference | $\mathbf{7 . 3 6}$ | $\mathbf{7 . 0 2}$ |

RESIDENTIAL:The median and weighted mean are within the acceptable range, while the mean is above the range. The mean was calculated above the acceptable range largely based on a few high ratios, and most of the high ratios occurred on lower price sales. In 2009, 150 of the sales sold for less than $\$ 30,000$ and the average selling price for the residential class was almost $\$ 100,000$. It only takes a few high ratios to have a noticeable impact on the mean. The median is the measure of central tendency to be least influenced by these outliers, and in this subclass, the most reliable indicator of the level of value.

## VII. Analysis of Change in Statistics Due to Assessor Actions

This section compares the statistical indicators from the Preliminary Statistical Reports to the same statistical indicators from the R\&O Statistical Reports. The analysis that follows explains the changes in the statistical indicators in consideration of the assessment actions taken by the county assessor.

|  | Preliminary Statistics | R\&O Statistics | Change |
| :--- | :---: | :---: | :---: |
| Number of Sales | 1,286 | 1,203 | -83 |
| Median | 93 | 94 | 1 |
| Wgt. Mean | 91 | 92 | 1 |
| Mean | 5,362 | 102 | $-5,260$ |
| COD | $5,667.37$ | 22.36 | $-5,645.01$ |
| PRD | $5,865.33$ | 110.02 | $-5,755.31$ |
| Minimum | 1.03 | 23.13 | $\mathbf{2 2 . 1 0}$ |
| Maximum | $4,008,600.00$ | 408.88 | $-4,008,191.12$ |

RESIDENTIAL:The change between the Preliminary Statistics and the Reports and Opinion Statistics is unrelated to the assessment actions reported by the county for this class of property. The county tends to complete sale review and pick up later in the process; so between the preparation of the preliminary statistics and the final statistics they identified and removed 83 substantially changed or non-qualified sales. The preliminary COD and PRD are useless and the result of the extreme ratios calculated based on the sales originally included but subsequently removed or adjusted. A few sales with $\$ 1.00$ reported as consideration and a normal assessed value can produce an extreme outlier ratio. This has clearly happened in the Preliminary Statistics and shows up as extreme changes in this comparison. Earlier attention to the verification of sales would have prevented the inclusion of the obviously unusable ratios. The other changes are consistent with the assessment actions taken in this class of property. This table is not useful to evaluate the assessment practices in Madison County.

## VIII. Trended Ratio Analysis

In order to be meaningful, statistical inferences must be based on a representative and proportionate sample of the population. If the sales are representative of the population and the sales have been appraised in a similar manner to the unsold properties, statistical inferences should be substantially the same as statistics developed from actual assessed value. This comparison is to provide additional information to the analyst in determining the reliability of the statistical inference.

|  | R\&O Statistics | Trended Ratio | Difference |
| :--- | :---: | :---: | :---: |
| Number of Sales | 1,203 | 236 | 967 |
| Median | 94 | 95 | -1 |
| Wgt. Mean | 92 | 94 | -2 |
| Mean | 102 | 108 | -6 |
| COD | 22.36 | 32.98 | -10.62 |
| PRD | 110.02 | 115.52 | -5.50 |
| Minimum | 23.13 | 3.03 | 20.10 |
| Maximum | 408.88 | 487.04 | -78.16 |

There are relatively few small dollar sales in this sample (just under $5 \%$ below $\$ 10,000$ ). The side-by-side comparison to the R\&O statistics demonstrates that the methodology tends to produce a wider range of outlier ratios and inferior quality statistics (COD \& PRD). This pattern has been a consistent observation for this report. The data gathering is done in such a way that some sales that might be substantially changed but wrongly included and others that should be included are not discovered. With that in mind, it is not surprising that the quality statistics are inferior to the R\&O statistics. Otherwise in Madison County; the median and weighted mean are well within the acceptable range and the mean is notably above the range at $108 \%$. This table lends support for the $\mathrm{R} \& \mathrm{O}$ statistics, in that they tend to parallel each other. On their own, the trended statistics suggest that perhaps the level of value is similar to the R\&O statistics report. The quality of assessment may also not be represented by either of the two sets of statistics; rather it may exist somewhere in between. Since this is the first year preparing these statistics, no precedence exists from which one might draw any strong conclusions.

# PAD 2009 Preliminary Statistics 

## Type: Qualified <br> Date Range: 07/01/2005 to 06/30/2008 Posted Before: 01/22/2009



## PAD 2009 Preliminary Statistics

Date Range: 07/01/2005 to 06/30/2008 Posted Before: 01/22/2009


## PAD 2009 Preliminary Statistics

## Type: Qualified <br> Date Range: 07/01/2005 to 06/30/2008 Posted Before: 01/22/2009



## PAD 2009 Preliminary Statistics



## PAD 2009 Preliminary Statistics

Date Range: 07/01/2005 to 06/30/2008 Posted Before: 01/22/2009


## Type: Qualified



# Madison County 2009 Assessment Actions taken to address the following property classes/subclasses: 

## Commercial:

Annually the county conducts a market analysis that included the qualified commercial sales that occurred from 1 July 2006 to 30 June 2008. The review and analysis is done to identify any adjustments or other assessment actions that are necessary to properly value the commercial class of real property.

Annually, the county conducts the pick-up of new construction of the commercial property in a timely manner.

Annually, the county plans to accomplish a portion of the required 6 year inspection process. During 2008, they focused on 3 and 4 unit apartments which are technically classified as commercial property. This process will also result in the revaluation of that group of apartments. The new values are the result of the correlation of a new cost approach, sales comparison approach and income approach. Additionally for 2009, the county began an inspection of all of the commercial property in the city of Norfolk and reports that the project is about 50 to $75 \%$ complete. The inspection process is an on-site, exterior inspection, intended to verify the records and update or correct any discrepancies that were discovered. If there were discrepancies, the county made an attempt to directly interview the property owner. Once the proper information was obtained the valuations were then corrected to reflect the observed changes.

For 2009, the county completed their analysis of the sales and will use the subclass of "Assessor Location" to make any adjustments needed to move the values to an acceptable level. The adjustment process focused on the "Assessor Locations" Rural and Newman Grove which needed the largest adjustment. Additionally all storage space warehouse space in the town of Newman Grove was re-appraised for 2009.

## 2009 Assessment Survey for Madison County

## Commercial/Industrial Appraisal Information

| 1. | Data collection done by: |
| :---: | :---: |
|  | Assessor and part time lister |
| 2. | Valuation done by: |
|  | Assessor |
| 3. | Pickup work done by whom: |
|  | Assessor and part time lister |
| 4. | What is the date of the Replacement Cost New data (Marshall-Swift) that are used to value this property class? |
|  | 1989 for commercial parcels and 1993 for industrial parcels |
| 5. | What was the last year a depreciation schedule for this property class was developed using market-derived information? |
|  | 1989 for commercial parcels and 1993 for industrial parcels (It should be noted that the values of various subclasses are analyzed annually and adjusted as needed to keep all commercial property valued at current market value. The date of the costing and original depreciation does not severely impact the final valuation process, as it also relies on current market analysis and data from other approaches.) |
| 6. | When was the last time that the Income Approach was used to estimate or establish the market value of the properties in this class? |
|  | 1997 for the commercial in general, and 2009 for all of the multi-family parcels |
| 7. | What approach to value is used in this class or subclasses to estimate the market value of properties? |
|  | All commercial parcels are done with the cost approach, most have a sales comparison approach and many have an income approach prepared. All available approaches to value are correlated and the most applicable information is used to establish the estimate of value. |
| 8. | Number of Market Areas/Neighborhoods/Assessor Locations? |
|  | 7: Assessor Locations |
| 9. | How are these Market Areas/Neighborhoods/Assessor Locations defined? |
|  | The 7 market areas are defined the same as "Assessor Location". They are Battle Creek, Madison, Meadow Grove Newman Grove, Norfolk, Tilden and Rural. For Norfolk, the area designated as suburban surrounding the city is reported in and analyzed with the assessor location "Norfolk". The each of the other 5 towns, the |


|  | area designated as suburban location is reported in and analyzed with the assessor <br> location "Rural". |
| :--- | :--- |
| 10. | Is 'Market Area/Neighborhood/Assessor Location" a unique usable valuation <br> grouping? If not, what is a unique usable valuation grouping? |
|  | The Commercial Assessor Locations are considered the best groupings to make <br> broad adjustments during the Statewide Equalization process. The sales file does <br> not contain sufficient detail to make any other adjustments. Any other strata would <br> not reflect a common location and should only be undertaken by the county after <br> detailed analysis. |
| 11. | Do the various subclasses of Commercial Property such as convenience stores, <br> warehouses, hotels, etc. have common value characteristics? |
|  | In some instances, there is sufficient data to make internal adjustments to some of <br> the more predominant occupancies, or to groupings of similar occupancies. <br> Typically, it is uncommon to have sufficient data within a 3 year measurement <br> period to initiate an adjustment to most of the occupancies. It is more typical to <br> monitor occupancies or groups and make changes based on observed trends, or to <br> identify them for inspection and revaluation. The occupancy code statistics as <br> presented in the R\&O give no indication about the location or condition of the <br> individual sales, and those are the two of the most important details in judging <br> value. |
| 12. | Is there unique market significance of the suburban location as defined in Reg. <br> 10-001.07B? (Suburban shall mean a parcel of real property located outside of the <br> limits of an incorporated city or village, but within the legal jurisdiction of an <br> incorporated city or village.) |
| No: Each town including their suburban area could have its own market, but <br> commercial parcels are more appropriately grouped using Assessor Location. The <br> suburban location, as it is defined has no locational homogeneity and thus is an <br> inappropriate stratum for adjustment for either the county or in the Statewide <br> Equalization process. |  |

Commercial Permit Numbers:

| Permits | Information Statements | Other | Total |
| :---: | :---: | :---: | :---: |
| 47 | 0 | 0 | 47 |

# PAD 2009 R\&O Statistics 



# PAD 2009 R\&O Statistics 



PAD 2009 R\&O Statistics
Type: Qualified
Date Range: 07/01/2005 to 06/30/2008 Posted Before: 01/23/2009


PAD 2009 R\&O Statistics
Type: Qualified
Date Range: 07/01/2005 to 06/30/2008 Posted Before: 01/23/2009


# PAD 2009 R\&O Statistics 



Exhibit 59 Page 42

PAD 2009 R\&O Statistics
Type: Qualified

## State Stat Run

## Date Range: 07/01/2005 to 06/30/2008 Posted Before: 01/23/2009



## Commerical Real Property

## I. Correlation

COMMERCIAL:The tables in the correlation section indicate that the statistics support a level of value for the commercial class of property within the acceptable range. Analysis of the qualified PAD 2009 R\&O Statistics for the commercial class indicates that the median ratio is $98 \%$ and all of the relevant subclasses with a sufficient number of sales are within the acceptable range. The COD at 30.20 is not in the acceptable range and PRD at 104.87 is not in the acceptable range.
Analysis of the statistics prepared for the commercial class presents few opportunities to do any subclass analysis or recommendations for adjustment to a relevant subclass. No matter how sales are grouped in the commercial class, there are problems identifying relevant subclasses. These statistics have all of the problems of locational and organizational integrity that the residential statistics plus at least two more. First, there are never very many commercial sales even using a three year study. Second, commercial property is a collection of income producing land and structures that have little or no economic connection to each other. In the end, the only relevant stratification presented in the $\mathrm{R} \& \mathrm{O}$ is the Assessor Location, and even it is weak as an appraisal class. It is assessor defined and usually has locational integrity and to some extent organizational integrity if the assessor or appraiser recognizes the individual economic conditions that exist among the various uses grouped into the commercial class. At least, the assessor is likely to review, appraise and adjust the properties as they are grouped under Assessor Location in the same general time frame. Among commercial properties, there are simply less sales and more subclasses making subclass analysis and adjustment typically ill advised.
Beside Assessor Location; there are two other stratifications that have been of interest in the commercial class of property. They are Locations: Urban, Suburban \& Rural, and Status: Improved, Unimproved \& IOLL. Both of these stratifications contain interesting and relevant assessment information. When taken alone as relevant subclasses, both present problems if they are broken down and analyzed as candidates for proposed adjustments.
Analysis:
Under the stratification of Assessor Location; no relevant substratum has a median ratio outside the acceptable range of 92 to $100 \%$. Collectively the data in the tables suggests that the median holds up as the best indication of the level of value for the class and probably each relevant subclass and no recommendations are offered for adjustments to the commercial class of property.

## II. Analysis of Percentage of Sales Used

This section documents the utilization of total sales compared to qualified sales in the sales file. Neb. Rev. Stat. 77-1327(2) (R. S. Supp., 2007) provides that all sales are deemed to be arm's length transactions unless determined to be otherwise under professionally accepted mass appraisal techniques. The county assessor is responsible for the qualification of the sales included in the residential sales file. The Division periodically reviews the procedures utilized by the county assessor to qualify/disqualify sales.

The Standard on Ratio Studies, International Association of Assessing Officials, (2007), indicates that low levels of sale utilization may indicate excessive trimming by the county assessor. Excessive trimming, the arbitrary exclusion or adjustment of arm's length transactions, may indicate an attempt to inappropriately exclude arm's length transactions to create the appearance of a higher level of value and quality of assessment. The sales file, in a case of excess trimming, will fail to properly represent the level of value and quality of assessment of the population of residential real property.

|  | Total Sales | Qualified Sales | Percent Used |
| :---: | :---: | :---: | :---: |
| 2009 | 223 | 142 | 63.68 |
| 2008 | 268 | 176 | 65.67 |
| 2007 | 272 | 174 | 63.97 |
| 2006 | 256 | 163 | 63.67 |
| 2005 | 207 | 132 | 63.77 |

COMMERCIAL:This table indicates that the county has utilized an acceptable portion of the available sales and that the measurement of the class of property was done with all available arms length sales. Nothing in this data or in the assessment actions suggests a pattern of excessive trimming of sales.

## III. Analysis of the Preliminary, Trended Preliminary and R\&O Median Ratio

The trended preliminary ratio is an alternative method to calculate a point estimate as an indicator of the level of value. This table compares the preliminary median ratio, trended preliminary median ratio, and $\mathrm{R} \& \mathrm{O}$ median ratio, presenting four years of data to reveal any trends in assessment practices. The analysis that follows compares the changes in these ratios to the assessment actions taken by the county assessor. If the county assessor's assessment practices treat all properties in the sales file and properties in the population in a similar manner, the trended preliminary ratio will correlate closely with the R\&O median ratio. The following is the justification for the trended preliminary ratio:

## Adjusting for Selective Reappraisal

The reliability of sales ratio statistics depends on unsold parcels being appraised in the same manner as sold parcels. Selective reappraisal of sold parcels distorts sales ratio results, possibly rendering them useless. Equally important, selective reappraisal of sold parcels (sales chasing) is a serious violation of basic appraisal uniformity and is highly unprofessional. Oversight agencies must be vigilant to detect the practice if it occurs and take necessary corrective action.
[To monitor sales chasing] A preferred approach is to use only sales that occur after appraised values are determined. However, as long as values from the most recent appraisal year are used in ratio studies, this is likely to be impractical. A second approach is to use values from the previous assessment year, so that most (or all) sales in the study follow the date values were set. In this approach, measures of central tendency must be adjusted to reflect changes in value between the previous and current year. For example, assume that the measure of central tendency is 0.924 and, after excluding parcels with changes in use or physical characteristics, that the overall change in value between the previous and current assessment years is 6.3 percent. The adjusted measure of central tendency is $0.924 \times 1.063=0.982$. This approach can be effective in determining the level of appraisal, but measures of uniformity will be unreliable if there has been any meaningful reappraisal activity for the current year.

Gloudemans, Robert J., Mass Appraisal of Real Property, International Association of Assessing Officers, (1999), p. 315.

## III. Analysis of the Preliminary, Trended Preliminary and R\&O Median Ratio

 Continued|  | Preliminary <br> Median | \% Change in Assessed <br> Value (excl. growth) | Trended <br> Preliminary Ratio | R\&O <br> Median |
| :---: | :---: | :---: | :---: | :---: |
| 2009 | 97 | 0.43 | 97 | 98 |
| 2008 | 90.9 | 3.23 | 94 | 97.32 |
| 2007 | 92 | 1.94 | 94 | 95 |
| 2006 | 92 | -0.27 | 91 | 93 |
| 2005 | 91 | 3.93 | 94 | 96 |

COMMERCIAL:The relationship between the trended preliminary ratio and the R\&O median ratio suggests the valuation process is applied to the sales file and assessed population in a similar manner. The county has a strong recent history of very similar changes in the two statistics that are recorded in this table. That suggests a pattern of good assessment practices is ongoing in this property type. This table indicates that the statistics in the $\mathrm{R} \& \mathrm{O}$ can be relied on to measure the level of value for this class of property.

## IV. Analysis of Percentage Change in Total Assessed Value in the Sales File to Percentage Change in Assessed Value

This section analyzes the percentage change of the assessed values in the sales file, between the 2009 Preliminary Statistical Reports and the 2009 R\&O Statistical Reports, to the percentage change in the assessed value of all real property base, by class, reported in the 2008 County Abstract of Assessment for Real Property, Form 45, excluding growth valuation, compared to the 2008 Certificate of Taxes Levied (CTL) Report. For purposes of calculating the percentage change in the sales file, only the sales in the most recent year of the study period are used. If assessment practices treat sold and unsold properties consistently, the percentage change in the sales file and assessed base will be similar. The analysis of this data assists in determining if the statistical representations calculated from the sales file are an accurate measure of the population. The following is justification for such an analysis:

## Comparison of Average Value Changes

If sold and unsold properties are similarly appraised, they should experience similar changes in value over time. Accordingly, it is possible to compute the average change in value over a selected period for sold and unsold parcels and, if necessary, test to determine whether observed differences are significant. If, for example, values for vacant sold parcels in an area have increased by 45 percent since the previous reappraisal, but values for vacant unsold parcels have increased only 10 percent, sold and unsold parcels appear to have not been equally appraised. This apparent disparity between the treatment of sold and unsold properties provides an initial indication of poor assessment practices and should trigger further inquiry into the reasons for the disparity.

# IV. Analysis of Percentage Change in Total Assessed Value in the Sales File to Percentage Change in Assessed Value Continued 

| \% Change in Total <br> Assessed Value in the Sales File |
| :---: |
| 5.62 2009 \% Change in Total Assessed <br> Value (excl. growth) <br> 16.63 2008 0.43 <br> 7.05 2007 3.23 <br> 4.87 2006 1.94 <br> 8.32 2005 -0.27 |

COMMERCIAL:In 2009, the apparent change in the sales file of $9 \%$ far overstates the change due to assessment actions and is merely a quirk based on the change calculation in the measurement methodology. The median for the class increased only $1 \%$ between the preliminary and the final statistics. The weighted mean for the class increased $4 \%$ and the mean decreased about $63 \%$. There were 29 sales removed between the preparation of the preliminary and final statistics, among them were extremely high and low outlying ratios. This happened because the county identifies substantially changed parcels and usability during the sale verification and pick-up work processes. They had not completed their pick-up work until after the preliminary statistics were prepared. It is unlikely that the sales file change represents anything useful and the change to the assessed base indicates the actual change to the class. The statistics, found in the preliminary median were not fully verified, causing them to be a poor representative of the class in this case. So the comparison to the fully verified final statistics does not produce an accurate picture of the actual changes that took place. The county reported beginning an inspection and review process for all of the commercial parcels in Norfolk. They also indicated that the only significant appraisal action taken among commercial property for 2009 was to the 3 and 4 unit apartments. All other strata of commercial were analyzed and some were adjusted if needed based on the analysis. In this case, the methodology used to compute change in the sales file is problematic because nearly $17 \%$ of the total preliminary sales and about $26 \%$ of the final year sales were no longer used for measurement in the final statistics. There is no real useable inference that can be drawn from these statistics in 2009.

## V. Analysis of the R\&O Median, Wgt. Mean, and Mean Ratios

There are three measures of central tendency calculated by the Division: median ratio, weighted mean ratio, and mean ratio. Since each measure of central tendency has strengths and weaknesses, the use of any statistic for equalization should be reconciled with the other two, as in an appraisal, based on the appropriateness in the use of the statistic for a defined purpose, the quantity of the information from which it was drawn, and the reliability of the data that was used in its calculation. An examination of the three measures can serve to illustrate important trends in the data if the measures do not closely correlate to each other.

The IAAO considers the median ratio the most appropriate statistical measure for use in determining level of value for direct equalization; the process of adjusting the values of classes or subclasses of property in response to the determination of level of value at a point above or below a particular range. Since the median ratio is considered neutral in relationship to either assessed value or selling price, its use in adjusting the class or subclass of properties will not change the relationships between assessed value and level of value already present within the class or subclass of properties, thus rendering an adjustment neutral in its impact on the relative tax burden to an individual property. Additionally, the median ratio is less influenced by the presence of extreme ratios, commonly called outliers. One outlier in a small sample size of sales can have controlling influence over the other measures of central tendency. The median ratio limits the distortion potential of an outlier.

The weighted mean ratio is viewed by the IAAO as the most appropriate statistical measure for indirect equalization; to ensure proper funding distribution of aid to political subdivisions, particularly when the distribution in part is based on the assessable value in that political subdivision, Standard on Ratio Studies, International Association of Assessing Officers, (2007). The weighted mean, because it is a value weighted ratio, best reflects a comparison of the assessed and market value of property in the political subdivision. If the distribution of aid to political subdivisions must relate to the market value available for assessment in the political subdivision, the measurement of central tendency used to analyze level of value should reflect the dollars of value available to be assessed. The weighted mean ratio does that more than either of the other measures of central tendency.

If the weighted mean ratio, because of its dollar-weighting feature, is significantly different from the median ratio, it may be an indication of other problems with assessment proportionality. When this occurs, an evaluation of the county's assessment practices and procedures is appropriate to discover remedies to the situation.

The mean ratio is used as a basis for other statistical calculations, such as the price related differential and coefficient of variation. However, the mean ratio has limited application in the analysis of level of value because it assumes a normal distribution of the data set around the mean ratio with each ratio having the same impact on the calculation regardless of the assessed value or the selling price.

## V. Analysis of the R\&O Median, Wgt. Mean, and Mean Ratios Continued

|  | Median | Wgt. Mean | Mean |
| :---: | :---: | :---: | :---: |
| R\&O Statistics | $\mathbf{9 8}$ | $\mathbf{9 7}$ | 101 |

COMMERCIAL:The median and weighted mean ratios are within the acceptable range. The mean is slightly above the acceptable range. The mean was calculated above the acceptable range largely based on a few high ratios, and it only takes a few high ratios to have a noticeable impact on the mean. The median is the measure of central tendency to be least influenced by these outliers, and in this subclass, the most reliable indicator of the level of value.

## VI. Analysis of R\&O COD and PRD

In analyzing the statistical data of assessment quality, there are two measures primarily relied upon by assessment officials. The Coefficient of Dispersion, COD, is produced to measure assessment uniformity. A low COD tends to indicate good assessment uniformity as there is a smaller spread or dispersion of the ratios in the sales file. A COD of less than 15 suggests that there is good assessment uniformity. Mass Appraisal of Real Property, International Association of Assessing Officers, (1999), pp. 235-237. The IAAO has issued performance standards for major property groups:

Single-family residences: a COD of 15 percent or less.
For newer and fairly homogeneous areas: a COD of 10 or less.
Income-producing property: a COD of 20 or less, or in larger urban jurisdictions, 15 or less. Vacant land and other unimproved property, such as agricultural land: a COD of 20 or less.
Rural residential and seasonal properties: a COD of 20 or less.

Mass Appraisal of Real Property, International Association of Assessing Officers, (1999), p. 246.

The Price Related Differential, PRD, is produced to measure assessment vertical uniformity (progressivity or regressivity). For example, assessments are considered regressive if high value properties are under-assessed relative to low value properties. A PRD of greater than 100 suggests that high value properties are relatively under-assessed. Mass Appraisal of Real Property, International Association of Assessing Officers, (1999), pp. 239-240. A PRD of less than 100 indicates that high value properties are relatively over-assessed. As a general rule, except for small samples, a PRD should range between 98 and 103. This range is centered slightly above 100 to allow for a slightly upward measurement bias inherent in the PRD. Mass Appraisal of Real Property, International Association of Assessing Officers, (1999), p. 247.

The analysis in this section indicates whether the COD and PRD meet the performance standards described above.

|  | COD | PRD |
| :--- | :---: | :---: |
| R\&O Statistics | $\mathbf{3 0 . 2 0}$ | 104.87 |
| Difference | $\mathbf{1 0 . 2 0}$ | 1.87 |

COMMERCIAL:The coefficient of dispersion is well above the range and the price related differential is just above the acceptable range; indicating this class of property has not been valued uniformly and proportionately. That said, commercial quality statistics (good or bad), are both more a coincidence of the data than good indicators of assessment performance. Before making any blanket statements about the assessment uniformity of the overall county, certain demographics should be mentioned. First, the commercial property is represented by sales in extremely diverse locations, including the county seat, several villages and rural locations. Among the 142 commercial sales, there were 43 different occupancy codes listed, each with the potential to be operating in a different economic environment. It might be said that there is very little organized market structure that is common to all of the far reaching locations or to all of the different property uses. With all of these variables, the commercial class is far too diverse to make either realistic adjustments or profound statements about the quality of assessment. Some may be tempted to trim unwieldy sales or selectively revalue sold properties, but Madison County does neither. Considering all of these variables, there is little chance that the COD and the PRD tell much about the actual quality of assessment.

## VII. Analysis of Change in Statistics Due to Assessor Actions

This section compares the statistical indicators from the Preliminary Statistical Reports to the same statistical indicators from the R\&O Statistical Reports. The analysis that follows explains the changes in the statistical indicators in consideration of the assessment actions taken by the county assessor.

|  | Preliminary Statistics | R\&O Statistics | Change |
| :--- | :---: | :---: | :---: |
| Number of Sales | 171 | 142 | -29 |
| Median | 97 | 98 | 1 |
| Wgt. Mean | 93 | 97 | 4 |
| Mean | 164 | 101 | -63 |
| COD | 100.79 | 30.20 | -70.59 |
| PRD | 175.46 | 104.87 | -70.59 |
| Minimum | 5.45 | 22.38 | 16.93 |
| Maximum | $10,430.80$ | 332.00 | $-10,098.80$ |

COMMERCIAL:The change between the Preliminary Statistics and the Reports and Opinion Statistics is unrelated to the assessment actions reported by the county for this class of property. The county tends to complete sale review and pick up later in the process; so between the preparation of the preliminary statistics and the final statistics they identified and removed 29 substantially changed or non-qualified sales. The preliminary COD and PRD are useless and the result of the extreme ratios calculated based on the sales originally included but subsequently removed or adjusted, so the comparison is equally useless. This has clearly happened in the Preliminary Statistics and shows up as extreme changes in this comparison. Earlier attention to the verification of sales would have prevented the inclusion of the obviously unusable ratios. The other changes are consistent with the assessment actions taken in this class of property. This table is not useful to evaluate the assessment practices in Madison County.

## PAD 2009 Preliminary Statistics

## AGRICULTURAL UNIMPROVED

Type: Qualified
Date Range: 07/01/2005 to 06/30/2008 Posted Before: 01/22/2009


## 59 - MADISON COUNTY

 AGRICULTURAL UNIMPROVED
## PAD 2009 Preliminary Statistics

Type: Qualified

|  |  | 121 |
| :--- | ---: | ---: |
| (AgLand) | NUMBER of Sales: | $120,862,805$ |
| (AgLand) | TOTAL Adj.Sales Price: | $30,862,805$ |
| (AgLand) | TOTAL Assessed Value: | $19,311,499$ |
|  | AVG. Adj. Sales Price: | 255,064 |
|  | AVG. Assessed Value: | 159,599 |

Date Range: 07/01/2005 to 06/30/2008 Posted Before: 01/22/2009

| GEO CODE / TOWNSHIP \# |  |  |  |  |  |  |  |  |  | Avg. Adj. | Avg. |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| RANGE | COUNT | MEDIAN | MEAN | WGT. MEAN | COD | PRD | MIN | MAX | 95\% Median C.I. | Sale Price | Assd Val |
| (blank) | 9 | 52.46 | 43.19 | 40.62 | 32.02 | 106.31 | 0.00 | 67.56 | 0.00 to 62.10 | 233,672 | 94,925 |
| 1495 | 4 | 115.17 | 260.77 | 169.27 | 163.95 | 154.05 | 56.32 | 756.42 | N/A | 142,777 | 241,684 |
| 1497 | 5 | 54.67 | 51.42 | 43.50 | 20.19 | 118.22 | 27.34 | 66.57 | N/A | 300,302 | 130,617 |
| 1499 | 6 | 61.78 | 59.19 | 58.98 | 39.50 | 100.36 | 0.00 | 102.62 | 0.00 to 102.62 | 252,077 | 148,676 |
| 1501 | 6 | 36.07 | 38.67 | 15.98 | 57.70 | 241.93 | 0.00 | 98.26 | 0.00 to 98.26 | 191,225 | 30,563 |
| 1551 | 7 | 74.85 | 62.94 | 66.93 | 18.08 | 94.04 | 28.25 | 76.89 | 28.25 to 76.89 | 276,178 | 184,837 |
| 1553 | 12 | 71.18 | 81.84 | 83.41 | 20.31 | 98.11 | 65.60 | 127.07 | 66.97 to 90.98 | 213,280 | 177,897 |
| 1555 | 7 | 72.82 | 73.68 | 71.92 | 11.64 | 102.45 | 57.24 | 88.63 | 57.24 to 88.63 | 326,319 | 234,686 |
| 1557 | 4 | 58.86 | 53.55 | 53.84 | 26.63 | 99.46 | 21.29 | 75.17 | N/A | 299,100 | 161,028 |
| 1775 | 6 | 70.25 | 68.01 | 62.98 | 17.68 | 107.98 | 44.60 | 93.12 | 44.60 to 93.12 | 270,033 | 170,074 |
| 1777 | 6 | 57.58 | 64.29 | 64.12 | 24.70 | 100.27 | 46.24 | 95.40 | 46.24 to 95.40 | 305,500 | 195,882 |
| 1779 | 11 | 66.55 | 64.70 | 65.67 | 11.45 | 98.53 | 50.75 | 77.18 | 53.89 to 76.76 | 237,994 | 156,281 |
| 1781 | 5 | 39.79 | 110.05 | 30.83 | 223.35 | 356.93 | 6.20 | 435.64 | N/A | 340,126 | 104,871 |
| 1835 | 5 | 57.84 | 68.68 | 61.87 | 33.93 | 111.01 | 43.89 | 98.43 | N/A | 328,527 | 203,252 |
| 1837 | 9 | 67.44 | 69.28 | 70.76 | 20.55 | 97.91 | 28.16 | 101.23 | 56.63 to 88.80 | 341,345 | 241,535 |
| 1839 | 11 | 68.36 | 69.47 | 66.32 | 11.01 | 104.74 | 55.71 | 88.67 | 56.36 to 80.17 | 246,900 | 163,752 |
| 1841 | 8 | 67.54 | 79.03 | 72.31 | 33.32 | 109.29 | 47.88 | 182.46 | 47.88 to 182.46 | 106,455 | 76,972 |
| ALL |  |  |  |  |  |  |  |  |  |  |  |
|  | 121 | 65.60 | 73.12 | 62.57 | 40.06 | 116.86 | 0.00 | 756.42 | 62.10 to 68.81 | 255,064 | 159,599 |
| AREA (MARKET) |  |  |  |  |  |  |  |  |  | Avg. Adj. | Avg. |
| RANGE | COUNT | MEDIAN | MEAN | WGT. MEAN | COD | PRD | MIN | MAX | 95\% Median C.I. | Sale Price | Assd Val |
| (blank) | 9 | 52.46 | 43.19 | 40.62 | 32.02 | 106.31 | 0.00 | 67.56 | 0.00 to 62.10 | 233,672 | 94,925 |
| 1 | 78 | 66.70 | 69.59 | 61.52 | 34.17 | 113.12 | 0.00 | 435.64 | 61.20 to 71.66 | 246,878 | 151,871 |
| 2 | 9 | 62.25 | 144.46 | 78.15 | 155.06 | 184.85 | 27.34 | 756.42 | 46.28 to 142.73 | 230,291 | 179,980 |
| 3 | 25 | 67.44 | 69.24 | 67.17 | 18.76 | 103.08 | 28.16 | 101.23 | 63.56 to 78.67 | 297,225 | 199,654 |
|  |  |  |  |  |  |  |  |  |  |  |  |
|  | 121 | 65.60 | 73.12 | 62.57 | 40.06 | 116.86 | 0.00 | 756.42 | 62.10 to 68.81 | 255,064 | 159,599 |
| STATUS: IMPROVED, UNIMPROVED \& IOLL |  |  |  |  |  |  |  |  |  | Avg. Adj. | Avg. |
| RANGE | COUNT | MEDIAN | MEAN | WGT. MEAN | COD | PRD | MIN | MAX | 95\% Median C.I. | Sale Price | Assd Val |
| 1 | 3 | 84.74 | 292.15 | 187.07 | 283.66 | 156.17 | 35.29 | 756.42 | N/A | 152,438 | 285,163 |
| 2 | 118 | 65.58 | 67.55 | 60.70 | 31.53 | 111.29 | 0.00 | 435.64 | 61.21 to 68.81 | 257,673 | 156,406 |
| _ALL |  |  |  |  |  |  |  |  |  |  |  |
|  | 121 | 65.60 | 73.12 | 62.57 | 40.06 | 116.86 | 0.00 | 756.42 | 62.10 to 68.81 | 255,064 | 159,599 |

Date Range: 07/01/2005 to 06/30/2008 Posted Before: 01/22/2009


# PAD 2009 Preliminary Statistics 



## PAD 2009 Preliminary Statistics

Type: Qualified
Date Range: 07/01/2005 to 06/30/2008 Posted Before: 01/22/2009


## PAD 2009 Preliminary Statistics

Type: Qualified


## PAD 2009 Preliminary Statistics



## PAD 2009 Preliminary Statistics



# PAD 2009 Preliminary Statistics 



## PAD 2009 Preliminary Statistics

Type: Qualified

## Date Range: 07/01/2005 to 06/30/2008 Posted Before: 01/22/2009



# Madison County 2009 Assessment Actions taken to address the following property classes/subclasses: 

## Agricultural:

Annually the county conducts a market analysis that included the qualified agricultural land sales that occurred from 1 July 2005 to 30 June 2008. The review and analysis is done to identify any adjustments or other assessment actions that are necessary to properly value the agricultural land class of real property. After completing the analysis, the county prepares new value schedules for each market area.

Annually, the county conducts the pick-up of new construction of the agricultural improvements and updates any known land use changes in a timely manner.

Annually, the county plans to accomplish a portion of the required 6 year inspection process. During 2008, the county focused their efforts on the inspection of other property classes so there was no inspection planned or done.

Currently, the county is developing a GIS system that will be used to manage and update the agricultural hand use in the future. They are targeting completion for use in 2010 in conjunction with the implementation of the new digitized soil survey.

For 2009, there was again extensive market analysis conducted to develop new agricultural land values. Again, virtually all of the LCG's in all of the market areas had to be updated, resulting in significant land value increases.

## 2009 Assessment Survey for Madison County

## Agricultural Appraisal Information

| 1. | Data collection done by: |
| :--- | :--- |
|  | Assessor and part time lister |
| 2. | Valuation done by: |
|  | Assessor |
| 3. | Pickup work done by whom: |
|  | Assessor and part time lister |
| 4. | Does the county have a written policy or written standards to specifically <br> define agricultural land versus rural residential acreages? |
|  | No |
| a. | How is agricultural land defined in this county? |
|  | By statute and regulation |
| 5. | When was the last date that the Income Approach was used to estimate or <br> establish the market value of the properties in this class? |
|  | N/A |
| 6. | If the income approach was used, what Capitalization Rate was used? |
|  | N/A |
| 7. | What is the date of the soil survey currently used? |
|  | 1984 |
| 8. | What date was the last countywide land use study completed? |
|  | 1998: (it should be noted that there is an ongoing effort to discover and update <br> changes in land use as they occur) |
| a. | By what method? (Physical inspection, FSA maps, etc.) |
|  | Physical inspection |
| b. | By whom? |
|  | Lister / Assessor <br> c. |
| What proportion is complete / implemented at this time? |  |
|  | 100\% |


|  |  |
| :--- | :--- |
| 9. | Number of Market Areas/Neighborhoods/Assessor Locations in the <br> agricultural property class: |
| 3: Market Areas |  |
| 10. | How are Market Areas/Neighborhoods/Assessor Locations developed? |
|  | The market areas are defined by topography and groupings of similar soil <br> characteristics. They are delineated along township lines. There was no change in <br> the areas for 2009. |
| 11. | In the assessor's opinion, are there any other class or subclass groupings, other <br> than LCG groupings, that are more appropriate for valuation? <br> Yes or No |
|  | No <br> a. |
|  | If yes, list. <br> 12. |
|  | In your opinion, what is the level of value of these groupings? |
| 13. | Has the county implemented (or is in the process of implementing) special <br> valuation for agricultural land within the county? |
|  | Yes: There are only a four applications on file and two that have been approved. <br> This is documented on line 43 of the Abstract, so it is very limited. |

Agricultural Permit Numbers:

| Permits | Information Statements | Other | Total |
| :---: | :---: | :---: | :---: |
| 45 | 0 | 0 | 45 |

59 - MADISON COUNTY

## MINIMAL NON-AG

PAD 2009 R\&O Statistics
Type: Qualified

Date Range: 07/01/2005 to 06/30/2008 Posted Before: 01/23/2009

| NUMBER of | f Sales: |  |  | MEDIAN: | 71 |  |  | 25.19 | 95\% Median C.I.: 66.16 to 74.37 |  |  | $\begin{array}{r} (!: \text { Derived }) \\ (!: \text { land }+N A T=0) \end{array}$ |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| TOTAL Sales | s Price: | 29,800,534 |  | WGT. MEAN: | 68 |  | STD: | 17.68 | 95\% Wg | Mean C.I.: 65.19 | 65.19 to 71.48 |  |
| TOTAL Adj. Sales | s Price: | 29,800,534 |  | MEAN : | 70 |  | AVG.ABS.DEV: | 13.56 |  | Mean C.I.: 66. | 66.82 to 73.58 |  |
| TOTAL Assessed | d Value: | 20,364,151 |  |  |  |  |  |  | 95 |  |  |  |
| AVG. Adj. Sales | s Price: | 283,814 |  | COD : | 19.12 | MAX | Sales Ratio: | 115.36 |  |  |  |  |
| AVG. Assessed | d Value: | 193,944 |  | PRD: | 102.73 | MIN | Sales Ratio: | 12.33 | Printed: 04/07/2009 11:31:27 |  |  |  |
| DATE OF SALE * RANGE | COUNT | MEDIAN MEAN |  | WGT. MEAN | COD |  | PRD | MIN | MAX | 95\% Median C.I. | Avg. Adj. <br> Sale Price | Avg. Assd Val |
| Qrtrs |  |  |  |  |  |  |  |  |  |  |  |  |
| 07/01/05 тO 09/30/05 | 3 | 73.36 | 72.99 | 70.52 | 9.59 |  | 103.49 | 62.25 | 83.35 | N/A | 235,451 | 166,051 |
| 10/01/05 то 12/31/05 | 9 | 87.56 | 86.14 | 81.13 | 10.57 |  | 106.18 | 69.27 | 98.43 | 74.23 to 98.26 | 302,465 | 245,383 |
| 01/01/06 TO 03/31/06 | 8 | 68.02 | 59.51 | 69.58 | 25.54 |  | 85.53 | 12.33 | 87.93 | 12.33 to 87.93 | 250,968 | 174,621 |
| 04/01/06 то 06/30/06 | 7 | 88.61 | 85.35 | 84.35 | 6.93 |  | 101.18 | 75.37 | 93.36 | 75.37 to 93.36 | 286,353 | 241,547 |
| 07/01/06 TO 09/30/06 | 1 | 77.54 | 77.54 | 77.54 |  |  |  | 77.54 | 77.54 | N/A | 444,000 | 344,294 |
| 10/01/06 то 12/31/06 | 12 | 77.87 | 78.26 | 79.38 | 14.59 |  | 98.59 | 59.92 | 103.94 | 66.93 to 88.21 | 153,311 | 121,702 |
| 01/01/07 то 03/31/07 | 20 | 69.37 | 70.12 | 69.69 | 10.01 |  | 100.61 | 46.28 | 93.61 | 64.34 to 73.60 | 320,048 | 223,049 |
| 04/01/07 то 06/30/07 | 4 | 80.02 | 72.96 | 81.88 | 20.50 |  | 89.10 | 36.85 | 94.93 | N/A | 192,180 | 157,361 |
| 07/01/07 TO 09/30/07 | 1 | 74.37 | 74.37 | 74.37 |  |  |  | 74.37 | 74.37 | N/A | 184,000 | 136,849 |
| 10/01/07 то 12/31/07 | 8 | 61.85 | 67.68 | 62.26 | 24.69 |  | 108.69 | 45.76 | 115.36 | 45.76 to 115.36 | 260,750 | 162,347 |
| 01/01/08 TO 03/31/08 | 25 | 58.58 | 62.06 | 58.06 | 22.19 |  | 106.88 | 37.80 | 113.60 | 51.69 to 70.91 | 357,047 | 207,312 |
| 04/01/08 то 06/30/08 | 7 | 63.27 | 60.69 | 61.76 | 18.55 |  | 98.28 | 30.78 | 92.90 | 30.78 to 92.90 | 244,310 | 150,876 |
| __Study Years__ |  | 76.89 |  |  |  |  |  |  |  |  |  |  |
| 07/01/05 TO 06/30/06 | 27 |  | 76.58 | 77.87 | 17.03 |  | 98.34 | 12.33 | 98.43 | 73.36 to 88.61 | 275,583 | 214,607 |
| 07/01/06 TO 06/30/07 | 37 | 71.79 | 63.22 | 72.94 | 13.63 |  | 100.45 | 36.85 | 103.94 | 67.35 to 77.54 | 255,497 | 186,355 |
| 07/01/07 тO 06/30/08 | 41 | 61.18 |  | 59.46 | 21.96 |  | 106.32 | 30.78 | 115.36 | 52.91 to 68.14 | 314,789 | 187,185 |
| __Calendar Yrs__ |  | 76.11 |  |  |  |  |  |  |  |  |  |  |
| 01/01/06 TO 12/31/06 | 28 |  | 74.65 | 77.71 | 16.93 |  | 96.06 | 12.33 | 103.94 | 69.87 to 87.60 | 224,855 | 174,732 |
| 01/01/07 TO 12/31/07 | 33 | 69.54 | 70.00 | 69.13 | 15.65 |  | 101.25 | 36.85 | 115.36 | 64.23 to 74.37 | 286,050 | 197,759 |
| $\ldots$ _ ALL_ |  |  |  |  |  |  |  |  |  |  |  |  |
|  | 105 | 70.91 | 70.20 | 68.33 | 19.12 |  | 102.73 | 12.33 | 115.36 | 66.16 to 74.37 | 283,814 | 193,944 |

PAD 2009 R\&O Statistics
Type: Qualified
Date Range: 07/01/2005 to 06/30/2008 Posted Before: 01/23/2009



PAD 2009 R\&O Statistics
Type: Qualified
Date Range: 07/01/2005 to 06/30/2008 Posted Before: 01/23/2009


59 - MADISON COUNTY

Date Range: 07/01/2005 to 06/30/2008 Posted Before: 01/23/2009


PAD 2009 R\&O Statistics
Type: Qualified
Date Range: 07/01/2005 to 06/30/2008 Posted Before: 01/23/2009


|  |  |  |  |  | Date Rang | зе: 07/0 | $01 / 2005$ to 06/30/2 | 88 Posted | efore: 01/2 |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | NUMBER of Sales: |  | 94 | MEDIAN: | 71 |  | cov: | 29.98 |  | dian C.I.: 66. | to 74.84 | (!: Derived) |
| (AgLand) | TOTAL Sales Price: |  | 206 | WGT. MEAN: | 69 |  | STD: | 21.06 | 95\% Wg | Mean C.I.: 65 | to 73.50 | (!: land+NAT=0) |
| (AgLand) | total Adj. Sales Price: |  | 206 | MEAN : | 70 |  | AVG.ABS.DEV: | 15.07 |  | Mean C.I.: 65 | 99 to 74.50 |  |
| (AgLand) | TOTAL Assessed Value: |  | 242 |  |  |  |  |  |  |  |  |  |
|  | AVG. Adj. Sales Price: |  | 938 | COD : | 21.26 | MAX | Sales Ratio: | 119.50 |  |  |  |  |
|  | AVG. Assessed Value: |  | 183 | PRD : | 101.09 | MIN | Sales Ratio: | -26.82 |  |  | Printed: 04/07 | 11:31:12 |
| GEO COD | / TOWNSHIP \# |  |  |  |  |  |  |  |  |  | Avg. Adj. | Avg. |
| RANGE | COUNT | MEDIAN | MEAN | WGT. MEAN | COD |  | PRD | MIN | MAX | 95\% Median C.I. | Sale Price | Assd Val |
| 1495 | 3 | 87.60 | 90.72 | 75.25 | 17.57 |  | 120.55 | 69.19 | 115.36 | N/A | 153,333 | 115,387 |
| 1497 | 4 | 57.58 | 57.83 | 56.16 | 14.30 |  | 102.96 | 46.28 | 69.87 | N/A | 286,784 | 161,066 |
| 1499 | 6 | 63.88 | 72.43 | 68.30 | 41.83 |  | 106.05 | 12.33 | 119.50 | 12.33 to 119.50 | 264,445 | 180,614 |
| 1501 | 5 | 37.80 | 38.37 | 57.50 | 70.89 |  | 66.74 | -26.82 | 98.26 | N/A | 172,770 | 99,336 |
| 1551 | 5 | 76.89 | 65.02 | 67.12 | 24.59 |  | 96.87 | 28.25 | 87.56 | N/A | 283,450 | 190,253 |
| 1553 | 9 | 73.67 | 78.92 | 78.76 | 9.63 |  | 100.21 | 66.16 | 103.94 | 73.27 to 88.21 | 223,627 | 176,122 |
| 1555 | 7 | 81.05 | 80.71 | 78.16 | 11.97 |  | 103.26 | 63.83 | 93.61 | 63.83 to 93.61 | 326,319 | 255,063 |
| 1557 | 2 | 64.20 | 64.20 | 65.51 | 4.91 |  | 97.99 | 61.05 | 67.35 | N/A | 357,000 | 233,886 |
| 1775 | 5 | 73.83 | 72.56 | 68.42 | 18.80 |  | 106.06 | 46.76 | 94.93 | N/A | 295,240 | 201,999 |
| 1777 | 8 | 60.29 | 64.49 | 64.05 | 20.60 |  | 100.70 | 46.24 | 95.40 | 46.24 to 95.40 | 309,125 | 197,985 |
| 1779 | 8 | 70.67 | 74.72 | 73.17 | 10.62 |  | 102.12 | 63.27 | 93.15 | 63.27 to 93.15 | 272,225 | 199,183 |
| 1781 | 2 | 48.65 | 48.65 | 51.34 | 10.21 |  | 94.76 | 43.68 | 53.61 | N/A | 332,000 | 170,437 |
| 1835 | 5 | 64.97 | 71.13 | 65.30 | 28.63 |  | 108.93 | 46.12 | 98.43 | N/A | 328,527 | 214,543 |
| 1837 | 8 | 76.31 | 76.37 | 75.11 | 9.04 |  | 101.68 | 58.58 | 93.36 | 58.58 to 93.36 | 344,794 | 258,974 |
| 1839 | 8 | 69.43 | 70.72 | 70.53 | 10.37 |  | 100.28 | 58.19 | 82.85 | 58.19 to 82.85 | 291,845 | 205,832 |
| 1841 | 9 | 70.89 | 70.92 | 69.99 | 14.26 |  | 101.33 | 47.88 | 89.92 | 59.92 to 83.35 | 130,404 | 91,274 |
| __AL |  |  |  |  |  |  |  |  |  |  |  |  |
|  | 94 | 70.90 | 70.25 | 69.49 | 21.26 |  | 101.09 | -26.82 | 119.50 | 66.16 to 74.84 | 267,938 | 186,183 |
| AREA (M | ARKET) |  |  |  |  |  |  |  |  |  | Avg. Adj. | Avg. |
| RANGE | COUNT | MEDIAN | MEAN | WGT. MEAN | COD |  | PRD | MIN | MAX | 95\% Median C.I. | Sale Price | Assd Val |
| 1 | 66 | 70.22 | 69.20 | 69.58 | 23.24 |  | 99.46 | -26.82 | 119.50 | 63.83 to 75.37 | 255,201 | 177,570 |
| 2 | 7 | 69.19 | 71.92 | 61.63 | 23.00 |  | 116.71 | 46.28 | 115.36 | 46.28 to 115.36 | 229,591 | 141,489 |
| 3 | 21 | 73.55 | 72.97 | 71.13 | 14.26 |  | 102.59 | 46.12 | 98.43 | 64.97 to 80.73 | 320,750 | 228,151 |
| _ALI |  |  |  |  |  |  |  |  |  |  |  |  |
|  | 94 | 70.90 | 70.25 | 69.49 | 21.26 |  | 101.09 | -26.82 | 119.50 | 66.16 to 74.84 | 267,938 | 186,183 |
| STATUS: | IMPROVED, UNIMPROVED | \& IOLI |  |  |  |  |  |  |  |  | Avg. Adj. | Avg. |
| RANGE | COUNT | MEDIAN | MEAN | WGT. MEAN | COD |  | PRD | MIN | MAX | 95\% Median C.I. | Sale Price | Assd Val |
| 1 | 2 | 46.34 | 46.34 | 1936.59 | 157.88 |  | 2.39 | -26.82 | 119.50 | N/A | 8,229 | 159,372 |
| 2 | 92 | 70.90 | 70.77 | 68.27 | 19.48 |  | 103.66 | 12.33 | 115.36 | 66.78 to 74.37 | 273,584 | 186,766 |
| $\ldots$ ALI | - |  |  |  |  |  |  |  |  |  |  |  |
|  | 94 | 70.90 | 70.25 | 69.49 | 21.26 |  | 101.09 | -26.82 | 119.50 | 66.16 to 74.84 | 267,938 | 186,183 |


|  |  | 94 |
| :--- | ---: | ---: |
| (AgLand) | NUMBER of Sales: | $25,186,206$ |
| (AgLand) | TOTAL Adj.Sales Price: | $25,186,206$ |
| (AgLand) | TOTAL Assessed Value: | $17,501,242$ |
|  | AVG.Adj. Sales Price: | 267,938 |
|  | AVG. Assessed Value: | 186,183 |


| SCHOOL DISTRICT *RANGE |  |  |  |  |  |  |  |  |  | Avg. Adj. | Avg. |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | COUNT | MEDIAN | MEAN | WGT. MEAN | COD | PRD | MIN | MAX | 95\% Median C.I. | Sale Price | Assd Val |
| (blank) |  |  |  |  |  |  |  |  |  |  |  |
| 59-0001 | 30 | 71.41 | 69.40 | 67.32 | 18.04 | 103.09 | 43.68 | 98.43 | 61.18 to 76.89 | 324,205 | 218,266 |
| 59-0002 | 7 | 37.80 | 53.11 | 65.62 | 97.28 | 80.93 | -26.82 | 113.60 | -26.82 to 113.60 | 102,404 | 67,202 |
| 59-0005 | 32 | 70.83 | 72.18 | 71.62 | 17.90 | 100.78 | 12.33 | 119.50 | 63.83 to 76.25 | 275,245 | 197,132 |
| 59-0013 | 15 | 70.89 | 72.69 | 73.46 | 15.68 | 98.95 | 47.88 | 94.93 | 62.51 to 83.35 | 188,004 | 138,105 |
| 59-0080 | 10 | 71.51 | 74.92 | 67.51 | 23.41 | 110.99 | 45.76 | 115.36 | 46.76 to 93.61 | 311,526 | 210,300 |

NonValid School
_ ALL__

|  |  | 94 | 70.90 | 70.25 | 69.49 | 21.26 | 101.09 | -26.82 | 119.50 | 66.16 to 74.84 | 267,938 | 186,183 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| ACRES IN SALERANGE |  |  |  |  |  |  |  |  |  |  | Avg. Adj. | Avg. |
|  |  | COUNT | MEDIAN | MEAN | WGT. MEAN | COD | PRD | MIN | MAX | 95\% Median C.I. | Sale Price | Assd Val |
| 10.01 TO | 30.00 | 5 | 63.83 | 53.92 | 36157.82 | 42.95 | 0.15 | -26.82 | 87.60 | N/A | 110 | 39,773 |
| 30.01 TO | 50.00 | 16 | 66.72 | 70.07 | 65.18 | 32.36 | 107.50 | 28.25 | 115.36 | 46.28 to 89.92 | 81,071 | 52,838 |
| 50.01 то | 100.00 | 28 | 69.71 | 67.72 | 66.01 | 17.33 | 102.60 | 12.33 | 103.94 | 62.51 to 73.83 | 192,637 | 127,152 |
| 100.01 TO | 180.00 | 38 | 73.63 | 74.46 | 70.76 | 16.88 | 105.23 | 46.12 | 119.50 | 66.78 to 81.05 | 378,417 | 267,750 |
| 180.01 TO | 330.00 | 7 | 73.55 | 69.56 | 66.16 | 18.58 | 105.14 | 37.80 | 89.41 | 37.80 to 89.41 | 587,827 | 388,881 |
| ALL |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  | 94 | 70.90 | 70.25 | 69.49 | 21.26 | 101.09 | -26.82 | 119.50 | 66.16 to 74.84 | 267,938 | 186,183 |
| MAJORITY LAND USE > 95\% |  |  |  |  |  |  |  |  |  |  | Avg. Adj. | Avg. |
| RANGE |  | COUNT | MEDIAN | MEAN | WGT. MEAN | COD | PRD | MIN | MAX | 95\% Median C.I. | Sale Price | Assd Val |
| DRY |  | 41 | 69.54 | 66.47 | 67.50 | 20.84 | 98.48 | -26.82 | 94.93 | 61.05 to 76.18 | 251,518 | 169,769 |
| DRY-N/A |  | 20 | 84.04 | 82.08 | 79.58 | 18.19 | 103.14 | 45.76 | 119.50 | 67.89 to 93.36 | 231,879 | 184,536 |
| GRASS |  | 5 | 66.16 | 65.88 | 64.76 | 29.31 | 101.73 | 36.85 | 98.26 | N/A | 90,600 | 58,668 |
| GRASS-N/A |  | 7 | 73.60 | 66.87 | 67.17 | 33.69 | 99.55 | 12.33 | 115.36 | 12.33 to 115.36 | 106,473 | 71,515 |
| IRRGTD |  | 5 | 63.14 | 68.79 | 67.48 | 11.89 | 101.94 | 59.39 | 93.61 | N/A | 251,077 | 169,423 |
| $\begin{gathered} \text { IRRGTD-N } / \mathrm{A} \\ \text { ALL_ } \end{gathered}$ |  | 16 | 67.75 | 68.44 | 66.93 | 10.65 | 102.25 | 48.58 | 87.93 | 63.42 to 75.37 | 486,415 | 325,555 |
|  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  | 94 | 70.90 | 70.25 | 69.49 | 21.26 | 101.09 | -26.82 | 119.50 | 66.16 to 74.84 | 267,938 | 186,183 |

PAD 2009 R\&O Statistics
Type: Qualified
Date Range: 07/01/2005 to 06/30/2008 Posted Before: 01/23/2009


## 59 - MADISON COUNTY

 AGRICULTURAL UNIMPROVEDPAD 2009 R\&O Statistics
Type: Qualified
Date Range: 07/01/2005 to 06/30/2008 Posted Before: 01/23/2009


MADISON, NE. 68748-0250
PHONE: (402) 454-3311, EXT. 178 or 197 FAX: (402) 454-2441

February 24, 2009

Ruth Sorensen<br>Property Tax Administrator<br>Dept. of Revenue, Property Assessment Division<br>1033 O Street, Suite 600<br>Lincoln, NE 68508

## RE: Annual Special Valuation Report

Dear Ms. Sorensen,
Pursuant to REG-11-005.04, I am hereby submitting a report on Special Valuation in Madison County Nebraska.

As of today two (2) parcels have been granted special valuation in Madison County. Specific descriptions are as follows:

Parcel \#1: Parcel Number: 590158538
Legal Description: E1/2, E1/2, 18-23-1.
This parcel contains approximately 160 acres.
Parcel \#2: Parcel Number: 590146971
Legal Description: SW1/4, 18-24-1
This parcel contains approximately 154.4 acres.
Parcel \#3: Parcel Number: 590150917
Legal Description: Pt. NW1/4, SE1/4, 23-24-2, Tech's $1^{\text {st }}$ Lot Split
This parcel contains approximately 10 acres.
Parcel \#4: Parcel Number: 590150909
Legal Description: Pt. E1/2, NW1/4, SE1/4, 23-24-2, Tech's $2^{\text {nd }}$ Lot Split
This parcel contains approximately 10 acres.
These parcels meet all of the requirements for approval as a special valuation parcel. As such all were approved. At the present time I have been unable to determine a valuation influence other than that of agricultural land for Parcels \# $1 \& 2$. There have been no sales in the area of land for uses other than agricultural land. At this time my opinion of the highest and best use of the property is the current use of agricultural land. I currently have these parcels valued as agricultural land according to the L.V.G.'s present on the parcel. These parcels are currently in agricultural Market Area 1.

Parcels \#3 \& 4 have been determined to have a valuation influence other than agricultural land. These parcels are rural acreages with prime location and size for residential development. As such they have a market value of approximately $\$ 7,000$ per acre. However, both of these parcels are currently used for agricultural use and were planted to soybeans in 2008. These parcels are in Market Area 1 and therefore command an agricultural land market valuation of approximately $\$ 3,000$ per acre.

If I may be of further assistance please do not hesitate to contact me.

Sincorely,

Jeff Hackerott
Madison County Assessor

## Agricultural Land

## I. Correlation

AGRICULTURAL UNIMPROVED:The tables in the correlation section indicate that the statistics support a level of value for the agricultural land class of property within the acceptable range. Analysis of the qualified PAD 2009 R\&O Statistics for the agricultural land class indicates that the median ratio is $71 \%$ and all of the relevant subclasses with a sufficient number of sales are within the acceptable range. The COD at 21.26 is not in the acceptable range and PRD at 101.09 is in the acceptable range.
Analysis of the statistics prepared for the agricultural land class presents few opportunities to do any subclass analysis or recommendations for adjustment to a relevant subclass. No matter how sales are grouped in the agricultural land class, there are problems identifying relevant subclasses. The only relevant stratification presented in the R\&O is the Area (Market). It is assessor defined and usually has locational integrity, geographic similarity and organizational integrity. Typically the assessor or appraiser recognizes the individual economic conditions that exist among the various market areas that stratify the agricultural land class. The assessor is likely to review, appraise and adjust the properties as they are grouped under Area (Market). A second analysis process available in the $\mathrm{R} \& \mathrm{O}$ that relates indirectly to the assessor acknowledged use subclasses of; Irrigated Land, Dry Land \& Grass Land, is the analysis of the three Majority Land Use stratifications. They are relevant to the appraisal of agricultural land, but cannot be used to predict the statistical results of any adjustments within the R\&O. If the prediction of the statistical impact is important, these stratifications though interesting become useless. That said; there may be instances when a recommendation will be made to adjust by land value by use, based on the Majority Land Use tables.
Analysis:
Under the stratification of Market Area; no relevant substratum has a median ratio outside the acceptable range of 69 to $75 \%$. This suggests that the median holds up as the best indication of the level of value for the class and each relevant subclass and no adjustments are recommended.
Under the stratification of Majority Land Use > $80 \%$; the range IRRGTD, with 17 sales has a median ratio of $67.35 \%$ which is outside the acceptable range of 69 to $75 \%$. The companion analysis; Minimal Non-Ag statistic with 22 sales reports a median ratio of $67.75 \%$. The data in both studies was examined as a substat to see what the impact was on each of the three market areas. In both substats, only market area 1 had sufficient sales to be meaningful. In the Agricultural Unimproved substat; Market Area 1 had 13 of the 17 sales and a median ratio of $73.36 \%$ and the Minimal Non-Ag substat; Market Area 1 had 17 of the 22 sales and a median ratio of $73.67 \%$. In light of that, there is no recommendation for change.

## II. Analysis of Percentage of Sales Used

This section documents the utilization of total sales compared to qualified sales in the sales file. Neb. Rev. Stat. 77-1327(2) (R. S. Supp., 2007) provides that all sales are deemed to be arm's length transactions unless determined to be otherwise under professionally accepted mass appraisal techniques. The county assessor is responsible for the qualification of the sales included in the residential sales file. The Division periodically reviews the procedures utilized by the county assessor to qualify/disqualify sales.

The Standard on Ratio Studies, International Association of Assessing Officials, (2007), indicates that low levels of sale utilization may indicate excessive trimming by the county assessor. Excessive trimming, the arbitrary exclusion or adjustment of arm's length transactions, may indicate an attempt to inappropriately exclude arm's length transactions to create the appearance of a higher level of value and quality of assessment. The sales file, in a case of excess trimming, will fail to properly represent the level of value and quality of assessment of the population of residential real property.

|  | Total Sales | Qualified Sales | Percent Used |
| :--- | :---: | :---: | :---: |
| 2009 | 172 | 94 | 54.65 |
| 2008 | 176 | 92 | 52.27 |
| 2007 | 151 | 64 | 42.38 |
| 2006 | 147 | 55 | 37.41 |
| 2005 | 159 | 61 | 38.36 |

AGRICULTURAL UNIMPROVED:This table indicates that the county has utilized an acceptable portion of the available sales and that the measurement of the class of property was done with all available arms length sales. Nothing in this data or in the assessment actions suggests a pattern of excessive trimming of sales.

## III. Analysis of the Preliminary, Trended Preliminary and R\&O Median Ratio

The trended preliminary ratio is an alternative method to calculate a point estimate as an indicator of the level of value. This table compares the preliminary median ratio, trended preliminary median ratio, and $\mathrm{R} \& \mathrm{O}$ median ratio, presenting four years of data to reveal any trends in assessment practices. The analysis that follows compares the changes in these ratios to the assessment actions taken by the county assessor. If the county assessor's assessment practices treat all properties in the sales file and properties in the population in a similar manner, the trended preliminary ratio will correlate closely with the R\&O median ratio. The following is the justification for the trended preliminary ratio:

## Adjusting for Selective Reappraisal

The reliability of sales ratio statistics depends on unsold parcels being appraised in the same manner as sold parcels. Selective reappraisal of sold parcels distorts sales ratio results, possibly rendering them useless. Equally important, selective reappraisal of sold parcels (sales chasing) is a serious violation of basic appraisal uniformity and is highly unprofessional. Oversight agencies must be vigilant to detect the practice if it occurs and take necessary corrective action.
[To monitor sales chasing] A preferred approach is to use only sales that occur after appraised values are determined. However, as long as values from the most recent appraisal year are used in ratio studies, this is likely to be impractical. A second approach is to use values from the previous assessment year, so that most (or all) sales in the study follow the date values were set. In this approach, measures of central tendency must be adjusted to reflect changes in value between the previous and current year. For example, assume that the measure of central tendency is 0.924 and, after excluding parcels with changes in use or physical characteristics, that the overall change in value between the previous and current assessment years is 6.3 percent. The adjusted measure of central tendency is $0.924 \times 1.063=0.982$. This approach can be effective in determining the level of appraisal, but measures of uniformity will be unreliable if there has been any meaningful reappraisal activity for the current year.

Gloudemans, Robert J., Mass Appraisal of Real Property, International Association of Assessing Officers, (1999), p. 315.

## III. Analysis of the Preliminary, Trended Preliminary and R\&O Median Ratio

 Continued| Preliminary <br> Median | \% Change in Assessed <br> Value (excl. growth) | Trended <br> Preliminary Ratio | R\&O <br> Median |  |
| :---: | :---: | :---: | :---: | :---: |
| 2009 | $\mathbf{6 6}$ | $\mathbf{1 0 . 0 5}$ | 73 | 71 |
| 2008 | $\mathbf{6 8 . 1}$ | $\mathbf{6 . 0 0}$ | $\mathbf{7 2}$ | $\mathbf{7 3 . 0 5}$ |
| 2007 | 72 | 3.80 | 75 | 72 |
| 2006 | 60 | 16.56 | 70 | 71 |
| 2005 | 70 | 8.26 | 76 | 78 |

AGRICULTURAL UNIMPROVED:The relationship between the trended preliminary ratio and the $\mathrm{R} \& \mathrm{O}$ median ratio suggests the valuation process is applied to the sales file and assessed population in a similar manner. The county has a strong recent history of very similar changes in the two statistics that are recorded in this table. That suggests a pattern of good assessment practices is ongoing in this property type. This table indicates that the statistics in the R\&O can be relied on to measure the level of value for this class of property.

## IV. Analysis of Percentage Change in Total Assessed Value in the Sales File to Percentage Change in Assessed Value

This section analyzes the percentage change of the assessed values in the sales file, between the 2009 Preliminary Statistical Reports and the 2009 R\&O Statistical Reports, to the percentage change in the assessed value of all real property base, by class, reported in the 2008 County Abstract of Assessment for Real Property, Form 45, excluding growth valuation, compared to the 2008 Certificate of Taxes Levied (CTL) Report. For purposes of calculating the percentage change in the sales file, only the sales in the most recent year of the study period are used. If assessment practices treat sold and unsold properties consistently, the percentage change in the sales file and assessed base will be similar. The analysis of this data assists in determining if the statistical representations calculated from the sales file are an accurate measure of the population. The following is justification for such an analysis:

## Comparison of Average Value Changes

If sold and unsold properties are similarly appraised, they should experience similar changes in value over time. Accordingly, it is possible to compute the average change in value over a selected period for sold and unsold parcels and, if necessary, test to determine whether observed differences are significant. If, for example, values for vacant sold parcels in an area have increased by 45 percent since the previous reappraisal, but values for vacant unsold parcels have increased only 10 percent, sold and unsold parcels appear to have not been equally appraised. This apparent disparity between the treatment of sold and unsold properties provides an initial indication of poor assessment practices and should trigger further inquiry into the reasons for the disparity.

## IV. Analysis of Percentage Change in Total Assessed Value in the Sales File to Percentage Change in Assessed Value Continued

| \% Change in Total <br> Assessed Value in the Sales File |
| :---: |
| 22.92 2009 \% Change in Total Assessed <br> Value (excl. growth) <br> 16.00 2008 10.05 <br> 2.43 2007 6.00 <br> 22.26 2006 3.80 <br> 21.74 2005 16.56 |

AGRICULTURAL UNIMPROVED:In 2009, the apparent change in the sales file of $23 \%$ far overstates the change due to assessment actions and is merely a quirk based on the change calculation in the measurement methodology. The median for the class increased only $5 \%$ between the preliminary and the final statistics. The weighted mean for the class increased $6 \%$ and the mean decreased about $3 \%$. There were 27 sales removed between the preparation of the preliminary and final statistics, among them were extremely high and low outlying ratios. This happened because the county identifies substantially changed parcels and usability during the sale verification and pick-up work processes. They had not completed these processes until after the preliminary statistics were prepared. It is unlikely that the sales file change represents anything useful and the change to the assessed base indicates the actual change to the class. The statistics, found in the preliminary median were not fully verified, causing them to be a poor representative of the class in this case. So the comparison to the fully verified final statistics does not produce an accurate picture of the actual changes that took place. The county reported that all of the 3 market areas were analyzed and values by individual LCG were updated. In this case, the methodology used to compute change in the sales file is problematic because nearly $22 \%$ of the total preliminary sales and about $28 \%$ of the final year sales were no longer used for measurement in the final statistics. There is no real useable inference that can be drawn from these statistics in 2009.

## V. Analysis of the R\&O Median, Wgt. Mean, and Mean Ratios

There are three measures of central tendency calculated by the Division: median ratio, weighted mean ratio, and mean ratio. Since each measure of central tendency has strengths and weaknesses, the use of any statistic for equalization should be reconciled with the other two, as in an appraisal, based on the appropriateness in the use of the statistic for a defined purpose, the quantity of the information from which it was drawn, and the reliability of the data that was used in its calculation. An examination of the three measures can serve to illustrate important trends in the data if the measures do not closely correlate to each other.

The IAAO considers the median ratio the most appropriate statistical measure for use in determining level of value for direct equalization; the process of adjusting the values of classes or subclasses of property in response to the determination of level of value at a point above or below a particular range. Since the median ratio is considered neutral in relationship to either assessed value or selling price, its use in adjusting the class or subclass of properties will not change the relationships between assessed value and level of value already present within the class or subclass of properties, thus rendering an adjustment neutral in its impact on the relative tax burden to an individual property. Additionally, the median ratio is less influenced by the presence of extreme ratios, commonly called outliers. One outlier in a small sample size of sales can have controlling influence over the other measures of central tendency. The median ratio limits the distortion potential of an outlier.

The weighted mean ratio is viewed by the IAAO as the most appropriate statistical measure for indirect equalization; to ensure proper funding distribution of aid to political subdivisions, particularly when the distribution in part is based on the assessable value in that political subdivision, Standard on Ratio Studies, International Association of Assessing Officers, (2007). The weighted mean, because it is a value weighted ratio, best reflects a comparison of the assessed and market value of property in the political subdivision. If the distribution of aid to political subdivisions must relate to the market value available for assessment in the political subdivision, the measurement of central tendency used to analyze level of value should reflect the dollars of value available to be assessed. The weighted mean ratio does that more than either of the other measures of central tendency.

If the weighted mean ratio, because of its dollar-weighting feature, is significantly different from the median ratio, it may be an indication of other problems with assessment proportionality. When this occurs, an evaluation of the county's assessment practices and procedures is appropriate to discover remedies to the situation.

The mean ratio is used as a basis for other statistical calculations, such as the price related differential and coefficient of variation. However, the mean ratio has limited application in the analysis of level of value because it assumes a normal distribution of the data set around the mean ratio with each ratio having the same impact on the calculation regardless of the assessed value or the selling price.

## V. Analysis of the R\&O Median, Wgt. Mean, and Mean Ratios Continued

|  | Median | Wgt. Mean | Mean |
| :---: | :---: | :---: | :---: |
| R\&O Statistics | 71 | 69 | 70 |

AGRICULTURAL UNIMPROVED:The three measures of central tendency all are within the acceptable range and relatively similar, suggesting the level of value for this class of property is within the acceptable range. The median is the measure of central tendency to be least influenced by outliers, and in this subclass, the most reliable indicator of the level of value.

## VI. Analysis of R\&O COD and PRD

In analyzing the statistical data of assessment quality, there are two measures primarily relied upon by assessment officials. The Coefficient of Dispersion, COD, is produced to measure assessment uniformity. A low COD tends to indicate good assessment uniformity as there is a smaller spread or dispersion of the ratios in the sales file. A COD of less than 15 suggests that there is good assessment uniformity. Mass Appraisal of Real Property, International Association of Assessing Officers, (1999), pp. 235-237. The IAAO has issued performance standards for major property groups:

Single-family residences: a COD of 15 percent or less.
For newer and fairly homogeneous areas: a COD of 10 or less.
Income-producing property: a COD of 20 or less, or in larger urban jurisdictions, 15 or less. Vacant land and other unimproved property, such as agricultural land: a COD of 20 or less.
Rural residential and seasonal properties: a COD of 20 or less.

Mass Appraisal of Real Property, International Association of Assessing Officers, (1999), p. 246.

The Price Related Differential, PRD, is produced to measure assessment vertical uniformity (progressivity or regressivity). For example, assessments are considered regressive if high value properties are under-assessed relative to low value properties. A PRD of greater than 100 suggests that high value properties are relatively under-assessed. Mass Appraisal of Real Property, International Association of Assessing Officers, (1999), pp. 239-240. A PRD of less than 100 indicates that high value properties are relatively over-assessed. As a general rule, except for small samples, a PRD should range between 98 and 103. This range is centered slightly above 100 to allow for a slightly upward measurement bias inherent in the PRD. Mass Appraisal of Real Property, International Association of Assessing Officers, (1999), p. 247.

The analysis in this section indicates whether the COD and PRD meet the performance standards described above.

|  | COD | PRD |
| :--- | :---: | :---: |
| R\&O Statistics | 21.26 | 101.09 |
| Difference | 1.26 | 0.00 |

AGRICULTURAL UNIMPROVED:The COD is outside of the range and the PRD is well within the range. Analyzing the statistics for this class suggests that the assessment has been done uniformly and proportionately. In the current market cycle, the value of agricultural land has been increasing at unprecedented rates. Most of the higher ratios show up among the older sales. Conversely many of the lower ratios occurred among the more recent sales. In the case of the valuation of agricultural land, the system of market analysis and value application is done consistently within the agricultural classification structure.

## VII. Analysis of Change in Statistics Due to Assessor Actions

This section compares the statistical indicators from the Preliminary Statistical Reports to the same statistical indicators from the R\&O Statistical Reports. The analysis that follows explains the changes in the statistical indicators in consideration of the assessment actions taken by the county assessor.

|  | Preliminary Statistics | R\&O Statistics | Change |
| :--- | :---: | :---: | :---: |
| Number of Sales | 121 | 94 | -27 |
| Median | 66 | 71 | 5 |
| Wgt. Mean | 63 | 69 | 6 |
| Mean | 73 | 70 | -3 |
| COD | 40.06 | $\mathbf{2 1 . 2 6}$ | -18.80 |
| PRD | $\mathbf{1 1 6 . 8 6}$ | $\mathbf{1 0 1 . 0 9}$ | -15.77 |
| Minimum | 756.42 | -26.82 | -26.82 |
| Maximum |  | 119.50 | -636.92 |

AGRICULTURAL UNIMPROVED:The change between the Preliminary Statistics and the Reports and Opinion Statistics is unrelated to the assessment actions reported by the county for this class of property. The county tends to complete sale review and pick up later in the process; so between the preparation of the preliminary statistics and the final statistics they identified and removed 27 substantially changed or non-qualified sales. The preliminary COD and PRD are useless and the result of the extreme ratios calculated based on the sales originally included but subsequently removed or adjusted, so the comparison is equally useless. This has clearly happened in the Preliminary Statistics and shows up as extreme changes in this comparison. Earlier attention to the verification of sales would have prevented the inclusion of the obviously unusable ratios. The other changes are consistent with the assessment actions taken in this class of property. This table is not useful to evaluate the assessment practices in Madison County.

| Total Real Property |
| ---: | :--- | :--- | :--- |
| Sum Lines 17, 25, \& 30 |$\quad$ Records : 17,570 $\quad$ Value : 2,218,929,278 $\quad$ Growth 24,527,780


| Schedule I : Non-Agricultural Records |  |  | SubUrban |  | Rural |  | Total |  | Growth |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Urban |  |  |  |  |  |  |  |  |
|  | Records | Value | Records | Value | Records | Value | Records | Value |  |
| 01. Res UnImp Land | 1,057 | 9,508,726 | 184 | 2,507,551 | 149 | 1,827,430 | 1,390 | 13,843,707 |  |
| 02. Res Improve Land | 9,219 | 89,385,833 | 607 | 11,159,148 | 668 | 12,778,010 | 10,494 | 113,322,991 |  |
| 03. Res Improvements | 9,436 | 751,783,193 | 732 | 93,020,066 | 714 | 74,177,838 | 10,882 | 918,981,097 |  |
| 04. Res Total | 10,493 | 850,677,752 | 916 | 106,686,765 | 863 | 88,783,278 | 12,272 | 1,046,147,795 | 13,205,502 |
| \% of Res Total | 85.50 | 81.32 | 7.46 | 10.20 | 7.03 | 8.49 | 69.85 | 47.15 | 53.84 |
|  |  |  |  |  |  |  |  |  |  |
| 05. Com UnImp Land | 345 | 14,830,959 | 39 | 844,751 | 52 | 1,460,500 | 436 | 17,136,210 |  |
| 06. Com Improve Land | 1,261 | 69,036,559 | 99 | 3,384,443 | 51 | 2,967,606 | 1,411 | 75,388,608 |  |
| 07. Com Improvements | 1,281 | 296,623,616 | 105 | 17,882,295 | 60 | 41,558,146 | 1,446 | 356,064,057 |  |
| 08. Com Total | 1,626 | 380,491,134 | 144 | 22,111,489 | 112 | 45,986,252 | 1,882 | 448,588,875 | 9,385,901 |
| \% of Com Total | 86.40 | 84.82 | 7.65 | 4.93 | 5.95 | 10.25 | 10.71 | 20.22 | 38.27 |
|  |  |  |  |  |  |  |  |  |  |
| 09. Ind UnImp Land | 3 | 84,929 | 4 | 103,448 | 4 | 102,777 | 11 | 291,154 |  |
| 10. Ind Improve Land | 10 | 694,158 | 11 | 520,177 | 6 | 1,418,413 | 27 | 2,632,748 |  |
| 11. Ind Improvements | 10 | 5,941,296 | 11 | 15,370,907 | 6 | 36,791,275 | 27 | 58,103,478 |  |
| 12. Ind Total | 13 | 6,720,383 | 15 | 15,994,532 | 10 | 38,312,465 | 38 | 61,027,380 | 499,450 |
| \% of Ind Total | 34.21 | 11.01 | 39.47 | 26.21 | 26.32 | 62.78 | 0.22 | 2.75 | 2.04 |
|  |  |  |  |  |  |  |  |  |  |
| 13. Rec UnImp Land | 0 | 0 | 1 | 6,446 | 1 | 68,423 | 2 | 74,869 |  |
| 14. Rec Improve Land | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |  |
| 15. Rec Improvements | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |  |
| 16. Rec Total | 0 | 0 | 1 | 6,446 | 1 | 68,423 | 2 | 74,869 | 0 |
| \% of Rec Total | 0.00 | 0.00 | 50.00 | 8.61 | 50.00 | 91.39 | 0.01 | 0.00 | 0.00 |
|  |  |  |  |  |  |  |  |  |  |
| Res \& Rec Total | 10,493 | 850,677,752 | 917 | 106,693,211 | 864 | 88,851,701 | 12,274 | 1,046,222,664 | 13,205,502 |
| \% of Res \& Rec Total | 85.49 | 81.31 | 7.47 | 10.20 | 7.04 | 8.49 | 69.86 | 47.15 | 53.84 |
| Com \& Ind Total | 1,639 | 387,211,517 | 159 | 38,106,021 | 122 | 84,298,717 | 1,920 | 509,616,255 | 9,885,351 |
| \% of Com \& Ind Total | 85.36 | 75.98 | 8.28 | 7.48 | 6.35 | 16.54 | 10.93 | 22.97 | 40.30 |
| 17. Taxable Total | 12,132 | 1,237,889,269 | 1,076 | 144,799,232 | 986 | 173,150,418 | 14,194 | 1,555,838,919 | 23,090,853 |
| \% of Taxable Total | 85.47 | 79.56 | 7.58 | 9.31 | 6.95 | 11.13 | 80.79 | 70.12 | 94.14 |

Exhibit 59 Page 90

Schedule II : Tax Increment Financing (TIF)

|  | Records | Urban <br> Value Base | Value Excess | Records | SubUrban Value Base | Value Excess |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 18. Residential | 43 | 3,953 | 3,933,762 | 0 | 0 | 0 |
| 19. Commercial | 7 | 1,124,795 | 6,580,668 | 0 | 0 | 0 |
| 20. Industrial | 0 | 0 | 0 | 0 | 0 | 0 |
| 21. Other | Records | 0 <br> Rural <br> Value Base | 0 <br> Value Excess | 0 <br> Records | 0 <br> Total <br> Value Base | $0$ <br> Value Excess |
| 18. Residential | 0 | 0 | 0 | 43 | 3,953 | 3,933,762 |
| 19. Commercial | 0 | 0 | 0 | 7 | 1,124,795 | 6,580,668 |
| 20. Industrial | 0 | 0 | 0 | 0 | 0 | 0 |
| 21. Other | 0 | 0 | 0 | 0 | 0 | 0 |
| 22. Total Sch II |  |  |  | 50 | 1,128,748 | 10,514,430 |

Schedule III : Mineral Interest Records

| Mineral Interest | Records | Urban | Value | Records | SubUrban | Value | Records | Rural | Value | Records | Total | Value | Growth |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 23. Producing | 0 |  | 0 | 0 |  | 0 | 0 |  | 0 | 0 |  | 0 | 0 |
| 24. Non-Producing | 0 |  | 0 | 0 |  | 0 | 0 |  | 0 | 0 |  | 0 | 0 |
| 25. Total | 0 |  | 0 | 0 |  | 0 | 0 |  | 0 | 0 |  | 0 | 0 |


| Schedule IV : Exempt Records : Non-Agricultural |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
|  | Urban Records | SubUrban Records | Rural Records | Total Records |
| 26. Producing | 754 | 106 | 190 | 1,050 |



Exhibit 59 Page 91

| Schedule VI : Agricultural Records :Non-Agricultural Detail |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Records | Urban Acres | Value | Records | SubUrban Acres | Value |  |
| 31. HomeSite UnImp Land | 0 | 0.00 | 0 | 0 | 0.00 | 0 |  |
| 32. HomeSite Improv Land | 0 | 0.00 | 0 | 22 | 23.94 | 229,103 |  |
| 33. HomeSite Improvements | 0 | 0.00 | 0 | 24 | 23.94 | 1,722,946 |  |
| 34. HomeSite Total |  |  |  |  |  |  |  |
| 35. FarmSite UnImp Land | 1 | 22.04 | 144,009 | 8 | 134.39 | 256,869 |  |
| 36. FarmSite Improv Land | 0 | 0.00 | 0 | 28 | 162.27 | 355,204 |  |
| 37. FarmSite Improvements | 2 | 0.00 | 138,804 | 30 | 0.00 | 514,444 |  |
| 38. FarmSite Total |  |  |  |  |  |  |  |
| 39. Road \& Ditches | 0 | 0.48 | 0 | 0 | 82.65 | 0 |  |
| 40. Other- Non Ag Use | $0$ <br> Records | $0.00$ <br> Rural <br> Acres |  | $0$ <br> Records | $0.00$ <br> Total <br> Acres | 0 <br> Value | Growth |
| 31. HomeSite UnImp Land | 18 | 64.43 | 306,002 | 18 | 64.43 | 306,002 |  |
| 32. HomeSite Improv Land | 795 | 1,408.23 | 10,418,061 | 817 | 1,432.17 | 10,647,164 |  |
| 33. HomeSite Improvements | 777 | 1,340.53 | 47,307,454 | 801 | 1,364.47 | 49,030,400 | 1,436,927 |
| 34. HomeSite Total |  |  |  | 819 | 1,496.60 | 59,983,566 |  |
| 35. FarmSite UnImp Land | 160 | 497.47 | 706,779 | 169 | 653.90 | 1,107,657 |  |
| 36. FarmSite Improv Land | 1,003 | 4,214.15 | 7,938,131 | 1,031 | 4,376.42 | 8,293,335 |  |
| 37. FarmSite Improvements | 1,186 | 0.00 | 23,581,921 | 1,218 | 0.00 | 24,235,169 | 0 |
| 38. FarmSite Total |  |  |  | 1,387 | 5,030.32 | 33,636,161 |  |
| 39. Road \& Ditches | 0 | 7,116.44 | 0 | 0 | 7,199.57 | 0 |  |
| 40. Other- Non Ag Use | 0 | 25.07 | 1,536 | 0 | 25.07 | 1,536 |  |
| 41. Total Section VI |  |  |  | 2,206 | 13,751.56 | 93,621,263 | 1,436,927 |

Exhibit 59 Page 92

|  | Urban |  |  | SubUrban |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Records | Acres | Value | Records | Acres | Value |
| 42. Game \& Parks | 0 | 0.00 | 0 | 0 | 0.00 | 0 |
|  | Records | Rural <br> Acres | Value | Records | Total Acres | Value |
| 42. Game \& Parks | 9 | 1,043.94 | 836,137 | 9 | 1,043.94 | 836,137 |

## Schedule VIII : Agricultural Records : Special Value

|  | Records | Urban Acres | Value | Records | SubUrban Acres | Value |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 43. Special Value | 0 | 0.00 | 0 | 0 | 0.00 | 0 |
| 44. Recapture Value N/A |  |  | 0 Value | 0 Records |  |  |
| 43. Special Value | 2 | 283.30 | 275,295 | 2 | 283.30 | 275,295 |
| 44. Recapture Value | 0 | 0 | 0 | 0 | 0 | 0 |

* LB 968 (2006) for tax year 2009 and forward there will be no Recapture value.

Schedule IX : Agricultural Records : Ag Land Market Area Detail Market Area 1

| Irrigated | Acres | \% of Acres* | Value | \% of Value* | Average Assessed Value* |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 45. 1A1 | 6,207.44 | 7.84\% | 15,277,479 | 9.23\% | 2,461.16 |
| 46. 1A | 18,728.65 | 23.67\% | 43,933,753 | 26.55\% | 2,345.80 |
| 47. 2A1 | 6,975.85 | 8.82\% | 15,438,665 | 9.33\% | 2,213.16 |
| 48. 2A | 5,083.02 | 6.42\% | 10,878,359 | 6.57\% | 2,140.14 |
| 49.3A1 | 13,818.24 | 17.46\% | 27,535,243 | 16.64\% | 1,992.67 |
| 50.3A | 23,803.84 | 30.08\% | 46,246,829 | 27.94\% | 1,942.83 |
| 51.4A1 | 3,957.40 | 5.00\% | 5,535,710 | 3.34\% | 1,398.82 |
| 52. 4A | 554.87 | 0.70\% | 651,985 | 0.39\% | 1,175.02 |
| 53. Total | 79,129.31 | 100.00\% | 165,498,023 | 100.00\% | 2,091.49 |
| Dry |  |  |  |  |  |
| 54. 1D1 | 5,869.14 | 5.61\% | 12,862,647 | 6.77\% | 2,191.57 |
| 55. 1D | 24,722.05 | 23.62\% | 51,217,926 | 26.97\% | 2,071.75 |
| 56. 2D1 | 8,778.68 | 8.39\% | 16,830,910 | 8.86\% | 1,917.25 |
| 57. 2D | 7,544.83 | 7.21\% | 13,949,328 | 7.35\% | 1,848.86 |
| 58.3D1 | 16,607.81 | 15.87\% | 28,939,969 | 15.24\% | 1,742.55 |
| 59.3D | 33,752.57 | 32.25\% | 57,151,067 | 30.09\% | 1,693.24 |
| 60.4D1 | 6,792.53 | 6.49\% | 8,304,120 | 4.37\% | 1,222.54 |
| 61. 4D | 592.77 | 0.57\% | 651,942 | 0.34\% | 1,099.82 |
| 62. Total | 104,660.38 | 100.00\% | 189,907,909 | 100.00\% | 1,814.52 |
| Grass |  |  |  |  |  |
| 63. 1G1 | 437.73 | 0.00\% | 393,893 | 1.53\% | 899.85 |
| 64. 1G | 2,015.61 | 6.04\% | 1,780,265 | 6.91\% | 883.24 |
| 65. 2G1 | 2,317.68 | 6.94\% | 1,963,779 | 7.63\% | 847.30 |
| 66. 2G | 2,744.33 | 8.22\% | 2,370,508 | 9.21\% | 863.78 |
| 67.3G1 | 5,242.30 | 15.70\% | 4,326,824 | 16.81\% | 825.37 |
| 68. 3G | 9,671.94 | 28.97\% | 7,788,414 | 30.25\% | 805.26 |
| 69.4G1 | 5,871.17 | 17.58\% | 4,296,125 | 16.69\% | 731.73 |
| 70.4G | 5,089.67 | 15.24\% | 2,825,548 | 10.97\% | 555.15 |
| 71. Total | 33,390.43 | 100.00\% | 25,745,356 | 100.00\% | 771.04 |
| Irrigated Total | 79,129.31 | 35.81\% | 165,498,023 | 43.33\% | 2,091.49 |
| Dry Total | 104,660.38 | 47.36\% | 189,907,909 | 49.73\% | 1,814.52 |
| Grass Total | 33,390.43 | 15.11\% | 25,745,356 | 6.74\% | 771.04 |
| Waste | 2,010.11 | 0.91\% | 302,060 | 0.08\% | 150.27 |
| Other | 1,810.45 | 0.82\% | 452,379 | 0.12\% | 249.87 |
| Exempt | 260.71 | 0.12\% | 0 | 0.00\% | 0.00 |
| Market Area Total | 221,000.68 | 100.00\% | 381,905,727 | 100.00\% | 1,728.07 |

Exhibit 59 Page 94

## County 59 Madison

2009 County Abstract of Assessment for Real Property, Form 45
Schedule IX : Agricultural Records : Ag Land Market Area Detail Market Area 2

| Irrigated | Acres | \% of Acres* | Value | \% of Value* | Average Assessed Value* |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 45. 1A1 | 1,154.36 | 7.10\% | 2,735,252 | 8.65\% | 2,369.50 |
| 46. 1A | 1,471.81 | 9.05\% | 3,307,205 | 10.46\% | 2,247.03 |
| 47. 2A1 | 1,437.34 | 8.84\% | 3,050,016 | 9.65\% | 2,121.99 |
| 48. 2A | 3,586.64 | 22.05\% | 7,432,569 | 23.51\% | 2,072.29 |
| 49.3A1 | 3,237.07 | 19.90\% | 6,061,466 | 19.18\% | 1,872.52 |
| 50.3A | 4,193.75 | 25.78\% | 7,631,511 | 24.14\% | 1,819.73 |
| 51.4A1 | 1,018.21 | 6.26\% | 1,221,843 | 3.87\% | 1,199.99 |
| 52. 4A | 169.13 | 1.04\% | 169,135 | 0.54\% | 1,000.03 |
| 53. Total | 16,268.31 | 100.00\% | 31,608,997 | 100.00\% | 1,942.98 |
| Dry |  |  |  |  |  |
| 54. 1D1 | 493.71 | 4.14\% | 950,187 | 4.94\% | 1,924.59 |
| 55. 1D | 1,409.42 | 11.83\% | 2,566,367 | 13.35\% | 1,820.87 |
| 56. 2D1 | 1,150.45 | 9.65\% | 1,961,856 | 10.20\% | 1,705.29 |
| 57. 2D | 3,108.32 | 26.08\% | 5,349,843 | 27.82\% | 1,721.14 |
| 58.3D1 | 2,092.58 | 17.56\% | 3,364,345 | 17.50\% | 1,607.75 |
| 59.3D | 2,598.58 | 21.80\% | 4,021,512 | 20.91\% | 1,547.58 |
| 60.4D1 | 885.16 | 7.43\% | 863,051 | 4.49\% | 975.02 |
| 61. 4D | 179.33 | 1.50\% | 152,422 | 0.79\% | 849.95 |
| 62. Total | 11,917.55 | 100.00\% | 19,229,583 | 100.00\% | 1,613.55 |
| Grass |  |  |  |  |  |
| 63. 1G1 | 100.12 | 0.00\% | 89,060 | 0.92\% | 889.53 |
| 64. 1G | 327.95 | 2.66\% | 293,819 | 3.03\% | 895.93 |
| 65.2G1 | 174.43 | 1.41\% | 149,224 | 1.54\% | 855.50 |
| 66. 2G | 1,659.30 | 13.44\% | 1,469,077 | 15.15\% | 885.36 |
| 67.3G1 | 1,394.32 | 11.29\% | 1,167,731 | 12.04\% | 837.49 |
| 68. 3G | 3,344.09 | 27.08\% | 2,781,146 | 28.67\% | 831.66 |
| 69.4G1 | 2,839.03 | 22.99\% | 2,384,936 | 24.59\% | 840.05 |
| 70.4G | 2,510.36 | 20.33\% | 1,364,888 | 14.07\% | 543.70 |
| 71. Total | 12,349.60 | 100.00\% | 9,699,881 | 100.00\% | 785.44 |
| Irrigated Total | 16,268.31 | 38.56\% | 31,608,997 | 51.96\% | 1,942.98 |
| Dry Total | 11,917.55 | 28.25\% | 19,229,583 | 31.61\% | 1,613.55 |
| Grass Total | 12,349.60 | 29.27\% | 9,699,881 | 15.94\% | 785.44 |
| Waste | 1,173.19 | 2.78\% | 176,041 | 0.29\% | 150.05 |
| Other | 482.62 | 1.14\% | 120,660 | 0.20\% | 250.01 |
| Exempt | 0.00 | 0.00\% | 0 | 0.00\% | 0.00 |
| Market Area Total | 42,191.27 | 100.00\% | 60,835,162 | 100.00\% | 1,441.89 |

Exhibit 59 Page 95

## County 59 Madison

2009 County Abstract of Assessment for Real Property, Form 45
Schedule IX : Agricultural Records : Ag Land Market Area Detail Market Area 3

| Irrigated | Acres | \% of Acres* | Value | \% of Value* | Average Assessed Value* |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 45. 1A1 | 2,269.34 | 16.48\% | 6,227,315 | 18.91\% | 2,744.11 |
| 46. 1A | 3,313.88 | 24.06\% | 8,525,779 | 25.90\% | 2,572.75 |
| 47. 2A1 | 1,440.60 | 10.46\% | 3,552,033 | 10.79\% | 2,465.66 |
| 48. 2A | 160.22 | 1.16\% | 384,488 | 1.17\% | 2,399.75 |
| 49.3A1 | 1,387.50 | 10.07\% | 3,119,739 | 9.48\% | 2,248.46 |
| 50.3A | 4,699.23 | 34.12\% | 10,337,527 | 31.40\% | 2,199.83 |
| 51.4A1 | 490.99 | 3.56\% | 760,785 | 2.31\% | 1,549.49 |
| 52. 4A | 11.59 | 0.08\% | 16,517 | 0.05\% | 1,425.11 |
| 53. Total | 13,773.35 | 100.00\% | 32,924,183 | 100.00\% | 2,390.43 |
| Dry |  |  |  |  |  |
| 54. 1D1 | 7,248.63 | 15.81\% | 16,582,904 | 18.39\% | 2,287.73 |
| 55. 1D | 9,719.41 | 21.20\% | 21,042,408 | 23.34\% | 2,164.99 |
| 56. 2D1 | 4,560.90 | 9.95\% | 9,154,244 | 10.15\% | 2,007.11 |
| 57. 2D | 530.76 | 1.16\% | 1,021,452 | 1.13\% | 1,924.51 |
| 58.3D1 | 6,722.15 | 14.66\% | 12,408,223 | 13.76\% | 1,845.87 |
| 59.3D | 15,585.39 | 33.99\% | 28,033,406 | 31.10\% | 1,798.70 |
| 60.4D1 | 1,372.22 | 2.99\% | 1,781,665 | 1.98\% | 1,298.38 |
| 61.4D | 107.27 | 0.23\% | 128,726 | 0.14\% | 1,200.02 |
| 62. Total | 45,846.73 | 100.00\% | 90,153,028 | 100.00\% | 1,966.40 |
| Grass |  |  |  |  |  |
| 63. 1G1 | 320.99 | 0.00\% | 268,045 | 7.54\% | 835.06 |
| 64. 1G | 460.97 | 9.72\% | 391,131 | 11.00\% | 848.50 |
| 65. 2G1 | 1,222.55 | 25.78\% | 951,588 | 26.77\% | 778.36 |
| 66. 2G | 453.30 | 9.56\% | 379,225 | 10.67\% | 836.59 |
| 67.3G1 | 483.07 | 10.19\% | 369,376 | 10.39\% | 764.64 |
| 68.3G | 886.79 | 18.70\% | 661,654 | 18.61\% | 746.12 |
| 69.4G1 | 378.76 | 7.99\% | 259,798 | 7.31\% | 685.92 |
| 70.4G | 536.52 | 11.31\% | 274,255 | 7.71\% | 511.17 |
| 71. Total | 4,742.95 | 100.00\% | 3,555,072 | 100.00\% | 749.55 |
| Irrigated Total | 13,773.35 | 21.22\% | 32,924,183 | 25.98\% | 2,390.43 |
| Dry Total | 45,846.73 | 70.64\% | 90,153,028 | 71.14\% | 1,966.40 |
| Grass Total | 4,742.95 | 7.31\% | 3,555,072 | 2.81\% | 749.55 |
| Waste | 390.62 | 0.60\% | 58,594 | 0.05\% | 150.00 |
| Other | 149.31 | 0.23\% | 37,330 | 0.03\% | 250.02 |
| Exempt | 0.00 | 0.00\% | 0 | 0.00\% | 0.00 |
| Market Area Total | 64,902.96 | 100.00\% | 126,728,207 | 100.00\% | 1,952.58 |

Exhibit 59 Page 96

## Schedule X : Agricultural Records :Ag Land Total

|  | Urban |  | SubUrban |  | Rural |  | Total |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Acres | Value | Acres | Value | Acres | Value | Acres | Value |
| 76. Irrigated | 0.00 | 0 | 841.26 | 1,823,186 | 108,329.71 | 228,208,017 | 109,170.97 | 230,031,203 |
| 77. Dry Land | 116.30 | 209,891 | 1,868.65 | 3,454,281 | 160,439.71 | 295,626,348 | 162,424.66 | 299,290,520 |
| 78. Grass | 13.84 | 10,497 | 1,198.88 | 903,675 | 49,270.26 | 38,086,137 | 50,482.98 | 39,000,309 |
| 79. Waste | 0.23 | 35 | 194.15 | 29,125 | 3,379.54 | 507,535 | 3,573.92 | 536,695 |
| 80. Other | 0.00 | 0 | 33.94 | 8,485 | 2,408.44 | 601,884 | 2,442.38 | 610,369 |
| 81. Exempt | 6.53 | 0 | 28.75 | 0 | 225.43 | 0 | 260.71 | 0 |
| 82. Total | 130.37 | 220,423 | 4,136.88 | 6,218,752 | 323,827.66 | 563,029,921 | 328,094.91 | 569,469,096 |


|  | Acres | \% of Acres* | Value | \% of Value* | Average Assessed Value* |
| :--- | :---: | :---: | :---: | :---: | :---: |
| Irrigated | $109,170.97$ | $33.27 \%$ | $230,031,203$ | $40.39 \%$ | $2,107.07$ |
| Dry Land | $162,424.66$ | $49.51 \%$ | $299,290,520$ | $52.56 \%$ | $1,842.64$ |
| Grass | $50,482.98$ | $15.39 \%$ | $39,000,309$ | $6.85 \%$ | 772.54 |
| Waste | $3,573.92$ | $1.09 \%$ | 536,695 | $0.09 \%$ | 150.17 |
| Other | $2,442.38$ | $0.74 \%$ | 610,369 | $0.11 \%$ | 249.91 |
| Exempt | 260.71 | $0.08 \%$ | 0 | $0.00 \%$ | 0.00 |
| Total | $\mathbf{3 2 8 , 0 9 4 . 9 1}$ | $100.00 \%$ | $\mathbf{5 6 9 , 4 6 9 , 0 9 6}$ | $100.00 \%$ | $1,735.68$ |

Exhibit 59 Page 97

## 2009 County Abstract of Assessment for Real Property, Form 45 Compared with the 2008 Certificate of Taxes Levied (CTL)

| 59 Madison | E3 |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | $2008 \text { CTL }$ <br> County Total | 2009 Form 45 County Total | Value Difference <br> (2009 form 45-2008 CTL) | Percent Change | 2009 Growth <br> (New Construction Value) | Percent Change excl. Growth |
| 01. Residential | 1,022,748,965 | 1,046,147,795 | 23,398,830 | 2.29\% | 13,205,502 | 1.00\% |
| 02. Recreational | 74,869 | 74,869 | 0 | 0.00\% | 0 | 0.00\% |
| 03. Ag-Homesite Land, Ag-Res Dwelling | 57,865,091 | 59,983,566 | 2,118,475 | 3.66\% | 1,436,927 | 1.18\% |
| 04. Total Residential (sum lines 1-3) | 1,080,688,925 | 1,106,206,230 | 25,517,305 | 2.36\% | 14,642,429 | 1.01\% |
| 05. Commercial | 437,067,023 | 448,588,875 | 11,521,852 | 2.64\% | 9,385,901 | 0.49\% |
| 06. Industrial | 60,538,694 | 61,027,380 | 488,686 | 0.81\% | 499,450 | -0.02\% |
| 07. Ag-Farmsite Land, Outbuildings | 32,595,677 | 33,636,161 | 1,040,484 | 3.19\% | 0 | 3.19\% |
| 08. Minerals | 0 | 0 | 0 |  | 0 |  |
| 09. Total Commercial (sum lines 5-8) | 530,201,394 | 543,252,416 | 13,051,022 | 2.46\% | 9,885,351 | 0.60\% |
| 10. Total Non-Agland Real Property | 1,610,890,319 | 1,649,460,182 | 38,569,863 | 2.39\% | 24,527,780 | 0.87\% |
| 11. Irrigated | 206,211,427 | 230,031,203 | 23,819,776 | 11.55\% |  |  |
| 12. Dryland | 271,943,566 | 299,290,520 | 27,346,954 | 10.06\% |  |  |
| 13. Grassland | 38,176,740 | 39,000,309 | 823,569 | 2.16\% |  |  |
| 14. Wasteland | 535,508 | 536,695 | 1,187 | 0.22\% |  |  |
| 15. Other Agland | 616,682 | 610,369 | -6,313 | -1.02\% |  |  |
| 16. Total Agricultural Land | 517,483,923 | 569,469,096 | 51,985,173 | 10.05\% |  |  |
| 17. Total Value of all Real Property | 2,128,374,242 | 2,218,929,278 | 90,555,036 | 4.25\% | 24,527,780 | 3.10\% |
| (Locally Assessed) |  |  |  |  |  |  |

# MADISON COUNTY <br> THREE-YEAR PLAN OF ASSESSMENT ASSESSMENT YEARS 2009, 2010, AND 2011 

15-June - 2008

## Plan of Assessment Requirements:

Pursuant to Neb. Laws 2005, LB 263, Section 9, on or before June 15 each year the Assessor shall prepare a plan of assessment. This plan shall describe the assessment actions planned for the next assessment year and two (2) years thereafter. The plan shall indicate the classes or subclasses of real property that the County Assessor plans to examine during the years contained in the plan of assessment. The plan shall describe all the assessment actions necessary to achieve the levels of value and quality of assessment practices required by law, and the resources necessary to complete those actions. On or before July 31 each year, the Assessor shall present the plan to the County Board of Equalization and the Assessor may amend the plan, if necessary, after the budget is approved by the County Board. A copy of the plan and any amendments thereto shall be mailed to the Department of Property Assessment and Taxation on or before October 31 each year.

## Real Property Assessment Requirements:

All property in the State of Nebraska is subject to property tax unless expressly exempt by Nebraska Constitution, Article VIII, or is permitted by the constitution and enabling legislation adopted by the legislature. The uniform standard for the assessed value of real property for tax purposes is actual value, which is defined by law as "the market value of real property in the ordinary course of trade." Neb. Rev. Stat. §77-112 (Reissue 2003).

Assessment levels required for real property are as follows:

1) $100 \%$ of actual value for all classes of real property excluding agricultural and horticultural land.
2) $75 \%$ of actual value for agricultural land and horticultural land
3) $75 \%$ of special value for agricultural land and horticultural land which meets the qualifications for special valuation under §771344 and $75 \%$ of its recapture value as defined in §77-1343 when the land is disqualified for special valuation under §77-1347.

## County Description:

Madison County has a total parcel count of 17,511 as certified on the 2008 Abstract of Assessment dated 25-March-2008. The Residential class of property accounts for $69.80 \%$, the Commercial / Industrial class contains $10.95 \%$, and the Agricultural class accounts for $19.25 \%$ of the total parcel count. Please note that the Agricultural class includes the Special Value parcels. The above numbers include all exempt parcels $(1,031)$, Game \& Parks (9), Recreational (2), and Tax Increment Financing (50) parcels. The following chart provides a visual representation of the property classification breakdown.


The 2008 Abstract of Assessment, dated 25-March-2008, lists the total Madison County real property valuation as $\$ 2,132,277,838$. The Residential class accounts for $47.96 \%$, the Commercial / Industrial class makes up $23.47 \%$, and the Agricultural class accounts for $28.57 \%$ of the total real property valuation. The following chart provides a visual representation of the property valuation breakdown.


Madison County has 2,505 personal property schedules with a total valuation of $\$ 199,166,933$, as certified on the 2008 Personal Property Abstract dated 13-June-2008. Of these schedules 1,699 are commercial property and 806 are agricultural property.

As of this date, Madison County has 974 parcels with a Homestead Exemption.

For assessment year 2008, an estimated 535 building permits and information statements were received by the Madison County Assessor's Office. Seventy-eight (62) of the aforementioned permits were for new single family dwelling construction.

For more information please refer to the 2008 Reports and Opinions of the Property Tax Administrator, Abstract, and Assessor Survey for Madison County.

## Budget, Staffing \& Training:

## Budget:

The 2008 / 2009 Assessor's Budget $=\quad \$ 225,887$
The 2008 / 2009 Re-appraisal Budget $=\quad \$ 181,300$
Total Office Budget: $\$ 407,187$

## Staff:

For the last decade this office has been operated with a less than ideal number of staff members. In addition, many of these staff members have not been utilized in the most efficient manner. It is hoped that some staffing changes can be made in the near future. The most urgent need at this time is a full-time appraiser. It is also hoped that one other staff position may be added. The current lister needs to be replaced by a full-time position with more flexibility. As of today the Madison County Assessor's Office is comprised of 6.5 staff members broken down as follows:
(1) Assessor: This person is responsible for all real property valuation. The Assessor must also do approximately $1 / 2$ of the annual pickup work and sales reviews. At this time the Assessor is responsible for all data entry of property characteristics into TerraScan. In addition, the Assessor is responsible for all of the report generation. The Assessor is also responsible for all computer maintenance and updates.
(1) Deputy Assessor: This person is responsible for entering all agricultural land changes. In addition, the Deputy Assessor must also complete all splits and new additions. This person is also responsible for quality control and checking all data entry. Currently, this position is not utilized to the fullest extent. When a mapping program is obtained the Deputy and one other employee will spend a majority of their time building the data base.
(3) Full-time Clerks: These staff members are responsible for all aspects of both Personal Property and Homestead Exemption except report generation. In addition these members are also responsible for handling phone calls and waiting on the counter. Most walk-in taxpayer assistance is also handled by these members. These staff positions also make copies for customers, pull property record cards, and do all filing of property record cards. All building permits are processed through one of the staff members. In addition, Form 521 Transfer Statements are handled by these members. The sales are entered into TerraScan and green sheets are completed. These members also proof and correct all rosters as provided by D.P.A.T. An additional responsibility is attaching new value sheets to the property record card and writing new values on the outside of the record card. All no-contact letters are produced by these members.
(1) Full-Time GIS Specialist. This person is responsible for building the GIS System from the ground-up. This person does not do any clerical work other than that related to the GIS System.
(1) Part-time Lister: This person is responsible for data collection. This includes listing all new construction, additions, renovations, etc. In addition, this person conducts sales reviews. This person does not do any data entry into the computer system. This person works 3 day per week.

## Contract Appraiser:

The Madison County Assessor's Office contracts with Great Plains Appraisal, (Wayne Kubert), to appraise industrial properties and grain elevators on an as-needed basis. It is anticipated that this office may contract with an outside source to begin a re-appraisal process. This is in response to the unsuccessful attempt to recruit a qualified appraiser with reappraisal experience. Beginning last year this office has begun to contract out small re-appraisal projects to individual appraisers. This office will be including a significant amount of money in the next fiscal years budget to begin meeting the requirements of LB 334 Sec . 100, whereby every parcel shall be inspected and reviewed no less frequently than every six years.

## Training:

The Madison County Assessor attends all required workshops provided by the D.P.A.T. In addition, the Assessor attends annual schooling in order to maintain both the Assessor's Certificate and the Appraisal License.

The Deputy Assessor attends schooling in order to maintain the Assessor's Certificate.

The Clerks have historically not received any training outside of the office. This will probably change as the responsibilities of certain members are increased.

The lister has not received any training outside of the office. When this position is replaced, the new lister will receive some training outside of the office.

## 2008 R \& O Statistics (or T.E.R.C. Statistics):

| Property Class |  | Median |  | C.O.D. |
| :--- | :--- | :--- | :--- | :--- |$\quad$| P.R.D. |
| :--- |
| Residential: |

For more information regarding statistical measures please refer to the 2008 Reports \& Opinions of the Property Tax administrator.

From the above statistical information, it is apparent that there is still room for improvement with regards to both the uniformity and quality of assessment in Madison County. It is the hope of the Madison County Assessor that additional staff, more efficient utilization of current staff, and a disciplined approach to achieving defined goals, will result in the continued improvement of the aforementioned statistical measures. The following plan will address the steps necessary to achieve this goal and in addition satisfy the requirements of LB 334 Sec .100 .

## Three-Year Appraisal Plan: <br> 2009:

Residential: An attempt will be made to contract the reappraisal of Newman Grove Residential property. This will entail entering all information into TerraScan. In addition, new costing and depreciation will be used. An exterior inspection will be conducted on all parcels. An interior inspection will be conducted when possible. Current information will be verified and / or updated based on this physical review. New digital pictures will be taken. In addition, it is hoped that a depreciation study can be done for other areas. This will lay the ground-work for the continuing reappraisal of residential property in future years. Currently there are approximately 398 residential parcels in Newman Grove. In addition, appraisal maintenance will continue to be completed on the balance of the residential property class. Attempts are still being made to recruit an experienced appraiser. In addition, all sales reviews and pick-up work will be completed county-wide.

Commercial / Industrial: All multi-family parcels in Norfolk are being re-appraised for 2009. A re-appraisal of Newman Grove Commercial property is planned. This will be done in conjunction with the residential re-appraisal mentioned above. This will entail entering all information into TerraScan. All new costing and depreciation will be used. All properties will be physically inspected. Current information will be verified and / or updated based on this physical review. An interior inspection will be conducted where possible. New digital pictures will be taken. Currently there are approximately 81 commercial parcels in Newman Grove. In addition, all sales reviews and pick-up work will be completed county-wide.

Agricultural: The new State-wide soil conversion will be implemented. Continuation of the development of the Land Use Layer in GIS. The development and implementation of the GIS system is seen as a long-term process. However, once this is achieved, this will allow the use of digitized satellite imagery in order to more accurately calculate soil types and acreages. There will be an in-depth analysis of all agricultural sales in Madison County. The sales will be analyzed by L.C.G. as well as by market area. The Assessor will determine if adjustments are necessary in order to maintain statistical compliance. In addition, the Assessor will determine if the sales support the current market areas or if an adjustment to these areas is needed. All sales reviews and pick-up work will be completed countywide.

## 2010:

Residential: Depending on the outcome of the 2009 appraisal plan, it is hoped to continue to re-appraise other Assessor Locations. For 2010 the towns of Tilden, Meadow Grove and Battle Creek will be reappraised. This will entail entering all information and property characteristics into TerraScan. In addition, new costing and depreciation will be used. All properties will be physically inspected. Current information will be verified and / or updated based on this physical review. An attempt will be made to inspect the interior of these properties where possible. New digital pictures will be taken. Currently there are approximately 359 residential parcels in Tilden, 187 residential parcels in Meadow Grove and 514 residential parcels in Battle Creek. In addition, all sales and pick-up work will be completed county-wide. It is hoped time will allow the entering of all rural residential data into TerraScan in anticipation of a re-valuation for next year.

Commercial: Commercial properties in the towns of Tilden, Meadow Grove and Battle Creek will be re-appraised. This will entail entering all information and property characteristics into TerraScan. All new costing and depreciation will be used. All properties will be physically inspected. Current information will be verified and / or updated based on this physical review. An attempt will be made to inspect the interior of these properties where possible. New digital pictures will be taken. Currently there are approximately 55 commercial parcels in Tilden, 33 commercial parcels in Meadow Grove and 66 commercial parcels in Battle Creek. In addition, all sales reviews and pick-up work will be completed county-wide.

Agricultural: There will be an in-depth analysis of all
agricultural sales in Madison County. The sales will be analyzed by L.C.G. as well as by market area. The Assessor will determine if adjustments are necessary in order to maintain statistical compliance. In addition, the Assessor will determine if the sales support the current market areas or if an adjustment to these areas is needed. All sales reviews and pick-up work will be completed county-wide.

## 2011:

Residential: For 2011 the city of Madison will be reappraised. It is also hoped that the rural residential properties will be addressed this year. This will entail entering all information and property characteristics into TerraScan. In addition, new costing and depreciation will be used. All properties will be physically inspected. Current information will be verified and / or updated based on this physical review. An attempt will be made to inspect the interior of these properties where possible. New digital pictures will be taken. Currently, there are approximately 892 residential parcels in Madison and 2,269 rural residential parcels. In addition, all sales and pick-up work will be completed countywide.

Commercial: Commercial properties in the city of Madison as well as all rural commercial properties will be re-appraised. This will entail entering all information and property characteristics into TerraScan. All new costing and depreciation will be used. All properties will be physically inspected. Current information will be verified and / or updated based on this physical review. An attempt will be made to inspect the interior of these properties where possible. New digital pictures will be taken. Currently there are approximately 124 commercial parcels in Madison and 288 rural commercial parcels. In addition, all sales reviews and pick-up work will be completed county-wide.

Agricultural: There will be an in-depth analysis of all agricultural sales in Madison County. The sales will be analyzed by L.C.G. as well as by market area. The Assessor will determine if adjustments are necessary in order to maintain statistical compliance. Agricultural improvements are to be re-appraised this year. This will entail approximately 1,708 parcels. In addition, the Assessor will determine if the sales support the current market areas or if an adjustment to these areas is needed. All sales reviews and pick-up work will be completed county-wide.

The following table will provide a visual representation of the proposed Three-Year Plan of Assessment. .

| Prop. Class | Residential | Commercial | Agricultural |
| :---: | :--- | :--- | :--- |
| $\mathbf{2 0 0 9}$ | Newman Grove (398), <br> Appraisal Maintenance | Norfolk Multi-Family, <br> Newman Grove (81), <br> Appraisal <br> Maintenance | Re-valuation of Ag. Land <br> (if necessary) <br> Develop Land Use Layer <br> In GIS. Implementation <br> of New Soil Conversion. |
| $\mathbf{2 0 1 0}$ | Tilden (359), Meadow <br> Grove (187), \& Battle | Tilden (55), Meadow <br> Grove (33), \& Battle <br> Creek | Re-valuation of Ag. Land <br> (if necessary) <br> Creek (66), Appraisal <br> Completion of Land Use <br> Layer in GIS |
| Maintenance | Mappraisal | Maintenance | Re-valuation of Ag. Land <br> (if necessary) \& Ag. <br> Improvements (1,715) |
| $\mathbf{2 0 1 1}$ |  <br> Rural Residential <br> (2,269), Appraisal <br> Maral (288), Appraisal <br> Maintenance | Maintenance |  |

Attest this, the $13^{\text {th }}$. day of June 2009.

Jeff Hackerott
Madison County Assessor

## 2009 Assessment Survey for Madison County

## I. General Information

## A. Staffing and Funding Information

| 1. | Deputy(ies) on staff |
| :--- | :--- |
| 2. | 1 |
|  | Appraiser(s) on staff |
| 3. | Other full-time employees |
|  | 3 |
| 4. | Other part-time employees |
|  | 1 |
| 5. | Number of shared employees |
|  | 0 |
| 6. | Assessor's requested budget for current fiscal year |
|  | $\$ 415,325$ |
| 7. | Part of the budget that is dedicated to the computer system |
|  | $\$ 28,500$ |
| 8. | Adopted budget, or granted budget if different from above |
|  | $\$ 415,325$ |
| 9. | Amount of the total budget set aside for appraisal work |
|  | $\$ 56,000$ |
| 10. | Amount of the total budget set aside for education/workshops |
|  | $\$ 2,500$ |
| 11. | Appraisal/Reappraisal budget, if not part of the total budget |
|  | N/A |
| 12. | Other miscellaneous funds |
|  | None |
|  |  |


| 13. | Total budget |
| ---: | :--- |
|  | $\$ 415,325$ |
| a. | Was any of last year's budget not used: |
|  | Yes |

## B. Computer, Automation Information and GIS

| 1. | Administrative software |
| :--- | :--- |
|  | TerraScan |
| 2. | CAMA software |
|  | TerraScan |
| 3. | Cadastral maps: Are they currently being used? |
|  | Yes |
| 4. | Who maintains the Cadastral Maps? |
|  | Assessor and Staff |
| 5. | Does the county have GIS software? |
|  | Yes |
| 6. | Who maintains the GIS software and maps? |
|  | One full time employee |
| 7. | Personal Property software: |
|  | TerraScan |
|  |  |

## C. Zoning Information

| 1. | Does the county have zoning? |
| :--- | :--- |
|  | Yes |
| 2. | If so, is the zoning countywide? |
|  | Yes |
| 3. | What municipalities in the county are zoned? |
|  | All of them |

4. When was zoning implemented?

1975

## D. Contracted Services

| 1. | Appraisal Services |
| :--- | :--- |
|  | Appraisal work is done in house, except for any industrial appraisal which is <br> contracted |
| 2. | Other services |
|  | None |

## Certification

This is to certify that the 2009 Reports and Opinions of the Property Tax Administrator have been sent to the following:

Four copies to the Tax Equalization and Review Commission, by hand delivery.

One copy to the Madison County Assessor, by hand delivery.

Dated this 7th day of April, 2009.


