## Preface

The requirements for the assessment of real property for the purposes of property taxation are found in Nebraska law. The Constitution of Nebraska requires that "taxes shall be levied by valuation uniformly and proportionately upon all real property and franchises as defined by the Legislature except as otherwise provided in or permitted by this Constitution." Neb. Const. art. VIII, sec. 1 (1) (1998). 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 (R.R.S., 2003). The assessment level for all real property, except agricultural land and horticultural land, is one hundred percent of actual value. The assessment level for agricultural land and horticultural land, hereinafter referred to as agricultural land, is seventy-five percent of actual value. Neb. Rev. Stat. §77-201(1) and (2)(R.S. Supp., 2007). More importantly, for purposes of equalization, similar properties must be assessed at the same proportion of actual value when compared to each other. Achieving the constitutional requirement of proportionality ultimately ensures the balance equity in the imposition of the property tax by local units of government on each parcel of real property.

The assessment process, implemented under the authority of the county assessor, seeks to value similarly classed properties at the same proportion to actual value. This is not a precise mathematical process, but instead depends on the judgment of the county assessor, based on his or her analysis of relevant factors that affect the actual value of real property. Nebraska law provides ranges of acceptable levels of value that must be met to achieve the uniform and proportionate valuation of classes and subclasses of real property in each county. Neb. Rev. Stat. §77-5023 (R.S. Supp., 2007) requires that all classes of real property, except agricultural land, be assessed within the range of ninety-two and one hundred percent of actual value; the class of agricultural land be assessed within the range of sixty-nine to seventy-five percent of actual value; the class of agricultural land receiving special valuation be assessed within the range sixty-nine to seventy-five percent of its special value; and, when the land is disqualified for special value the recapture value be assessed at actual value.

To ensure that the classes of real property are assessed at these required levels of actual value, the Department of Revenue Property Assessment Division, hereinafter referred to as the Division, is annually responsible for analyzing and measuring the assessment performance of each county. This responsibility includes requiring the Property Tax Administrator to prepare statistical and narrative reports for the Tax Equalization and Review Commission, hereinafter referred to as the Commission, and the county assessors. Pursuant to Neb. Rev. Stat. §77-5027 (R.S. Supp., 2005):
(2) ... the Property Tax Administrator shall prepare and deliver to the commission and to each county assessor his or her annual reports and opinions.
(3) The annual reports and opinions of the Property Tax Administrator shall contain statistical and narrative reports informing the commission of the level of value and the quality of assessment of the classes and subclasses of real property within the county and a certification of the opinion of the Property Tax

Administrator regarding the level of value and quality of assessment of the classes and subclasses of real property in the county.
(4) In addition to an opinion of level of value and quality of assessment in the county, the Property Tax Administrator may make nonbinding recommendations for consideration by the commission.

The narrative and statistical reports contained in the Reports and Opinions of the Property Tax Administrator, hereinafter referred to as the R\&O, provide a thorough, concise analysis of the assessment process implemented by each county assessor to reach the levels of value and quality of assessment required by Nebraska law. The Property Tax Administrator's opinion of level of value and quality of assessment achieved by each county assessor is a conclusion based upon all the data provided by the county assessor and gathered by the Division regarding the assessment activities during the preceding year. This is done in recognition of the fact that the measurement of assessment compliance, in terms of the concepts of actual value and uniformity and proportionality mandated by Nebraska law, requires both statistical and narrative analysis.

The Division is required by Neb. Rev. Stat. §77-1327 (R. S. Supp., 2007) to develop and maintain a state-wide sales file of all arm's length transactions. From this sales file the Division prepares an assessment sales ratio study in compliance with acceptable mass appraisal standards. The assessment sales ratio study is the primary mass appraisal performance evaluation tool. From the sales file, the Division prepares statistical analysis from a non-randomly selected set of observations, known as sales, from which inferences about the population, known as a class or subclass of real property, may be drawn. The statistical reports contained in the R\&O are developed in compliance with standards developed by the International Association of Assessing Officers, hereinafter referred to as the IAAO.

However, just as the valuation of property is sometimes more art than science, a narrative analysis of assessment practices in each county is necessary to give proper context to the statistical inferences from the assessment sales ratio study. There may be instances when the analysis of assessment practices outweighs or limits the reliability of the statistical inferences of central tendency or quality measures. This may require an opinion of the level of value that is not identical to the result of the statistical calculation. The Property Tax Administrator's goal is to provide statistical and narrative analysis of the assessment level and practices to the Commission, providing the Commission with the most complete picture possible of the true level of value and quality of assessment in each county.

The Property Tax Administrator's opinions of level of value and quality of assessment are stated as a single numeric representation for level of value and a simple judgment regarding the quality of assessment practices. Based on the information collected in developing this report the Property Tax Administrator may feel further recommendations must be stated for a county to assist the Commission in determining the level of value and quality of assessment within a county. These opinions are made only after considering all narrative and statistical analysis provided by the county assessor and gathered by the Division. An evaluation of these opinions must only be made after considering all other information provided in the R\&O.

Finally, after reviewing all of the information available to the Property Tax Administrator regarding the level and quality of assessment for classes and subclasses of real property in each county, the Property Tax Administrator, pursuant to Neb. Rev. Stat. §77-5027(4) (R.S. Supp., 2005), may make recommendations for adjustments to value for classes and subclasses of property. All of the factors relating to the Property Tax Administrator's determination of level of value and quality of assessment shall be taken into account in the making of such recommendations. Such recommendations are not binding on the Commission.

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## 2008 Commission Summary

| Residential Real Property - Current |  |  |  |
| :---: | :---: | :---: | :---: |
| Number of Sales | 142 | COD | 22.19 |
| Total Sales Price | \$9,985,839 | PRD | 108.51 |
| Total Adj. Sales Price | - \$9,985,839 | COV | 36.06 |
| Total Assessed Value | ( $\$ 9,261,360$ | STD | 36.29 |
| Avg. Adj. Sales Price | e $\$ 70,323$ | Avg. Abs. Dev. | 21.32 |
| Avg. Assessed Value | - \$65,221 | Min | 34.14 |
| Median | 96.08 | Max | 329.85 |
| Wgt. Mean | 92.74 | 95\% Median C.I. | 93.02 to 100.32 |
| Mean | 100.64 | 95\% Wgt. Mean C.I. | 89.48 to 96.01 |
|  |  | 95\% Mean C.I. | 94.67 to 106.60 |
| \% of Value of the Class of all Real Property Value in the County |  |  | 15.53 |
| \% of Records Sold in the Study Period |  |  | 6.64 |
| \% of Value Sold in the Study Period |  |  | 8.4 |
| Average Assessed Value of the Base |  |  | 51,502 |
| Residential Real Property - History |  |  |  |
| Year $\quad$ N | Number of Sales | Median COD | PRD |
| 2008 | 142 | 96.08 22.19 | 108.51 |
| 2007 | 114 | 95.73 27.34 | 114.97 |
| 2006 | 109 | 96.08 25.43 | 112.18 |
| 2005 | 100 | 96.67 22.75 | 108.19 |
| 2004 | 101 | 99.4023 .55 | 110.07 |
| 2003 | 115 | $99 \quad 12.21$ | 104.49 |
| 2002 | 177 | $94 \quad 27.19$ | 117.57 |
| 2001 | 180 | $92 \quad 22.42$ | 109.53 |

## 2008 Commission Summary

Commercial Real Property - Current

| Number of Sales | 28 | COD | 25.84 |
| :--- | :---: | :--- | ---: |
| Total Sales Price | $\$ 882,475$ | PRD | 105.39 |
| Total Adj. Sales Price | $\$ 857,475$ | COV | 36.53 |
| Total Assessed Value | $\$ 863,890$ | STD | 38.79 |
| Avg. Adj. Sales Price | $\$ 30,624$ | Avg. Abs. Dev. | 25.62 |
| Av. Assessed Value | $\$ 30,853$ | Min | 46.44 |
| Median | 99.13 | Max | 229.14 |
| Wgt. Mean | 100.75 | $95 \%$ Median C.I. | 94.25 to 116.58 |
| Mean | 106.18 | $95 \%$ Wgt. Mean C.I. | 89.33 to 112.17 |
|  |  | $95 \%$ Mean C.I. | 91.14 to 121.22 |


| \% of Value of the Class of all Real Property Value in the County | 3.79 |
| :--- | ---: |
| $\%$ of Records Sold in the Study Period | 6.73 |
| $\%$ of Value Sold in the Study Period | 3.21 |
| Average Assessed Value of the Base | 64,728 |


| Commercial Real Property - History |  |  |  |  |
| :---: | :---: | ---: | ---: | ---: |
| Year | Number of Sales | Median | COD | PRD |
| $\mathbf{2 0 0 8}$ | 28 | 99.13 | 25.84 | 105.39 |
| $\mathbf{2 0 0 7}$ | 20 | 92.19 | 35.78 | 104.11 |
| $\mathbf{2 0 0 6}$ | 19 | 94.30 | 44.95 | 109.11 |
| $\mathbf{2 0 0 5}$ | 21 | 99.14 | 29.46 | 115.16 |
| $\mathbf{2 0 0 4}$ | 29 | 99.06 | 24.63 | 112.82 |
| $\mathbf{2 0 0 3}$ | 34 | 99 | 13.44 | 99.22 |
| $\mathbf{2 0 0 2}$ | 37 | 93 | 50.39 | 123.75 |
| $\mathbf{2 0 0 1}$ | 35 | 92 | 46.64 | 136.78 |

## 2008 Commission Summary



Opinions

## 2008 Opinions of the Property Tax Administrator for Boone County

My opinions and recommendations are stated as a conclusion based on all of the factors known to me about the assessment practices and statistical analysis for this county. See, Neb. Rev. Stat. §77-5027 (R. S. Supp., 2005). While I rely primarily on the median assessment sales ratio from the Qualified Statistical Reports for each class of real property, my opinion of level of value for a class of real property may be determined from other evidence contained in the RO. Although my primary resource regarding quality of assessment are the performance standards issued by the 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 Boone County is $96 \%$ of actual value. It is my opinion that the quality of assessment for the class of residential real property in Boone County is not 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 Boone County is $99 \%$ of actual value. It is my opinion that the quality of assessment for the class of commercial real property in Boone County is not in compliance with generally accepted mass appraisal practices.

## Agricultural Land

It is my opinion that the level of value of the class of agricultural land in Boone County is $75 \%$ of actual value. It is my opinion that the quality of assessment for the class of agricultural land in Boone County is not in compliance with generally accepted mass appraisal practices.

Dated this 7th day of April, 2008.



Ruth A. Sorensen
Property Tax Administrator





## Type: Qualified

Date Range: 07/01/2005 to 06/30/2007 Posted Before: 01/18/2008


# Boone County 2008 Assessment Actions taken to address the following property classes/subclasses: 

## Residential

Boone County annually conducts a market analysis that included the qualified residential sales that occurred from 1 July 2005 to 30 June 2007. 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. The county also completes the pick-up of new construction of the residential property.

For 2008, the preliminary median for the residential class of real property is 86.44 , the mean is 93.24 and the weighted mean is 81.21 with 146 qualified sales.

For 2008, the county analyzed the residential land in Albion and it has increased to about 230\% of the 2007 land values.

The county has conducted an extensive study in a 5 mile radius of Albion to possibly develop an adjustments for the house and garage on all rural residential in that study area. After the study was completed, the county actually revalued all of the rural residential parcels for 2008.

The ag residential improvements are being inspected and are slated to be updated for 2009.
In the town of Cedar Rapids, the county adjusted the subclass identified as 1 story 60 years and older. No specific adjustment factor was reported at the time of the assessment actions interview.

The town of Petersburg was analyzed in an attempt to identify an appropriate adjustment factor for 2008. There were only 9 sales in the preliminary statistics with a median of $84 \%$ and an extraordinarily high COD so the county decided against adjustment and may do a full review or inspection in 2009. In 2007, Petersburg had 13 sales and a final median of nearly $96 \%$.

## 2008 Assessment Survey for Boone County

## Residential Appraisal Information

(Includes Urban, Suburban and Rural Residential)

| 1. | Data collection done by: |
| :---: | :---: |
|  | Contract Lister |
| 2. | Valuation done by: |
|  | Assessor and Contract Appraiser |
| 3. | Pickup work done by whom: |
|  | Contract Lister |
| 4. | What is the date of the Replacement Cost New data (Marshall-Swift) that are used to value this property class? |
|  | 2005 |
| 5. | What was the last year the depreciation schedule for this property class was developed using market-derived information? |
|  | 2002 |
| 6. | What was the last year that the Market or Sales Comparison Approach was used to estimate the market value of the properties in this class? |
|  | N/A |
| 7. | Number of market areas/neighborhoods for this property class: |
|  | 6 |
| 8. | How are these defined? |
|  | The areas that are in place in Boone County are the 5 towns, Albion, Cedar Rapids, Petersburg, Primrose and St. Edward. The residential parcels outside the town limits are considered rural and titled Acreage. These areas are identified in the "Assessor Location" section of the residential statistics. |
| 9. | Is "Assessor Location" a usable valuation identity? |
|  | yes |
| 10. | Does the assessor location "suburban" mean something other than rural residential? (that is, does the "suburban" location have its own market?) |
|  | No, Boone County has not identified any parcels as Assessor Location Suburban in 2008. |

11. What is the market significance of the suburban location as defined in Reg. 10001.07B? (Suburban shall mean a parcel of real property located outside of the limits of an incorporated city or village, but within the legal jurisdiction of an incorporated city or village.)
None, these parcels are typically valued with the rural residential or the ag residential, not with the adjacent town.
12. Are the county's ag residential and rural residential improvements classified and valued in the same manner?
The rural residences were last valued in 2003, and the ag residences and improvements were last done in 1996. The ag residences and improvements have been undergoing an inspection process and are to be revalued for 2009.

Residential Permit Numbers:

| Permits | Information Statements | Other | Total |
| :---: | :---: | :---: | :---: |
| 171 | 0 | 0 | 171 |

# PAD 2008 R\&O Statistics <br> Type: Qualified 



PAD 2008 R\&O Statistics
Type: Qualified
Date Range: 07/01/2005 to 06/30/2007 Posted Before: 01/18/2008



# PAD 2008 R\&O Statistics <br> Type: Qualified 



PAD 2008 R\&O Statistics
Type: Qualified


## Residential Real Property

## I. Correlation

RESIDENTIAL: The purpose of the correlation narrative is to connect the assessment actions reported for the county for each class of property to the measurement of those actions. The actions are evaluated by making a comparison of the changes to the class or subclasses reported between the Preliminary Statistics and the R\&O Statistics. There are six tables prepared for each class of property that are used to evaluate the level of value and the quality of the assessment of the class of property.
In this instance, there were several targeted assessment action that reflected in a significant statistical change. It should be noted that improvement to the statistical measurements were consistently reflected through the tables prepared to analyze the measurement process. The county has utilized a typical number of sales in the preparation of the assessment statistics. There is no reason to conclude that they have not used all available arms' length sales. All three measures of the level of value would have been within the acceptable range except the mean which was a fraction of a percent above the range. Since the weighted mean was near the bottom of the range, the quality statistics were both out. The two measures of uniformity, (PRD and COD) were well outside the acceptable range suggesting regressivity and uniformity issues remain in the assessment process.
For 2008, the county upgraded their residential valuations with locally defined subclasses, not typically measurable in the R\&O. Although the statistics improved from the preliminary measurements to the final measurements the quality statistics were outside the acceptable standards. It is also fair to say that the collection of small towns and small dollar sales combines to make it difficult to statistically demonstrate uniform and proportionate measures. About $40 \%$ of the sales used in the measurement process occurred in small towns and rural residential, (acreage) locations. These locations typically do not have highly organized market activity which limits the county's ability to predict the value of future sales. This is a key element in the statistics used to demonstrate the quality of assessment. In summary, there are numerous statistics that have been presented and discussed in the following six tables of the Correlation section of the R\&O. There are a total of five that relate to the measurement of the level of value. In Table V , there was a presentation and narrative explanation prepared about the median, weighted mean and mean ratios. In Table III, there was a presentation and narrative discussion of the trended preliminary median. The fifth measure of central tendency was not independently presented or discussed. That measure, the $95 \%$ Confidence Interval measured around the median deserves mention. In this class, the confidence interval of 93.02 to 100.32 is almost entirely within the acceptable range. This, statistically speaking strongly indicates that the level of value is within the range. There is no indication among the statistics that the entire class should be adjusted and there is no compelling evidence that any notable subclass within this class should be adjusted. The only subclass that might come into question is the "Assessor Location" Petersburg, with 9 sales and a 2008 median ratio of $84.00 \%$. This was discussed in the Assessment Actions section and the county has opted to address the subclass thoroughly in 2009. The conflicting historical measurements of Petersburg in 2005 through 2007 and the one in 2008 should signal caution before adjustment. The assessor has decided to approach the subclass from an on-site inspection and update effort rather than adjusting for 2008. Giving due consideration to all of the measures, the median is considered the best indicator of
the level of value for this class.

Exhibit 06 - Page 24

## 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 |
| :--- | :---: | :---: | :---: |
| 2008 | 233 | 142 | $\mathbf{6 0 . 9 4}$ |
| 2007 | 208 | 114 | 54.81 |
| 2006 | 216 | 109 | 50.46 |
| 2005 | 202 | 100 | 49.5 |
| 2004 | 189 | 101 | 53.44 |
| 2003 | 198 | 121 | 61.11 |
| 2002 | 214 | 177 | 82.71 |
| 2001 | 222 | 190 | 85.59 |

RESIDENTIAL: Table II is indicative 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.

## 2008 Correlation Section <br> for Boone County

## 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 $\mathrm{R} \& O$ 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 $\mathrm{R} \& \mathrm{O}$ 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 Preliminary <br> Ratio | R\&O Median |
| :---: | :---: | :---: | :---: | :---: |
| 2008 | $\mathbf{8 6 . 4 4}$ | $\mathbf{1 0 . 1 5}$ | $\mathbf{9 5 . 2 1}$ |  |
| 2007 | 95.35 | 1.22 | 96.52 | 95.08 |
| 2006 | 96.08 | -0.12 | 95.97 | 96.08 |
| 2005 | 95.76 | 1.1 | 96.81 | 96.67 |
| 2004 | 96.98 | 8.19 | 104.93 | 99.40 |
| 2003 | 91 | 5.09 | 95.63 | 99 |
| 2002 | 89.66 | 0.44 | 90.05 | 94 |
| 2001 | 92 | 0.26 | 92.24 | 92 |

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 population in a similar manner. This also 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 2008 Preliminary Statistical Reports and the 2008 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 2007 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.

Gloudemans, Robert J., Mass Appraisal of Real Property, International Association of Assessing Officers, (1999), p. 311.

## 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 | \% Change in Assessed <br> Value (excl. growth) |  |
| :---: | :---: | :---: |
| 17.6 | 2008 | 10.15 |
| 1.66 | 2007 | 1.22 |
| 4.11 | 2006 | -0.12 |
| 9.02 | 2005 | 1.1 |
| 11.55 | 2004 | 8.19 |
| 11 | 2003 | 5 |
| 1.24 | 2002 | 0.44 |
| -0.98 | 2001 | 0.26 |

RESIDENTIAL: The difference between the percent change in the sales file and percent change in the abstract is significant. Table IV indicates $7.45 \%$ difference, an amount that might be construed as disparate treatment of the sales and the assessed base.
For 2008, the county identified three specific subclasses that are not specifically identified in the R\&O Statistics. The parcels valued were likely disproportionately represented in the sales file, but there is really no way to clearly know. The assessor actions indicate; Albion land increase by about $230 \%$ of the prior year, a study of the rural residential in a 5 mile radius of Albion resulted in a revaluation of those parcels and a select adjustment to 1 story houses over 60 years old in Cedar Rapids. The county targeted these strata based on significantly more information than is present in the R\&O statistics, and the subclasses of Acreage, Albion and Cedar Rapids changed in the measurements. The best indication that the assessment actions were not disparate is illustrated in Table III, where the trended preliminary median and the R\&O median are less than 1 percent apart.

## 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 | $\mathbf{9 6 . 0 8}$ | 92.74 | $\mathbf{1 0 0 . 6 4}$ |

RESIDENTIAL: The median ratio and weighted mean ratio are within the acceptable range. The mean barely is outside the acceptable range. Several outlier ratios of low dollar sales are the influencing factor in the mean calculation. In this class, there are 142 sales with an average selling price of $\$ 70,322$, among them are 10 sales with an average selling price of $\$ 3,904$, an average assessed value of $\$ 4,258$ and a mean ratio of $112.31 \%$. This is by no means bad assessment, but the impact on the overall mean is significant since that is nearly $7 \%$ of the qualified sales in this class that are low dollar. The median is the measure of central tendency to be least influenced by these outliers, and in this subclass, it is 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 | $\mathbf{2 2 . 1 9}$ | $\mathbf{1 0 8 . 5 1}$ |
| Difference | $\mathbf{7 . 1 9}$ | $\mathbf{5 . 5 1}$ |

RESIDENTIAL: In this class of property, both the coefficient of dispersion and price related differential are outside the acceptable range. The interpretation of high COD's and PRD's that this class of property has not been valued uniformly and proportionately. Like many counties with similar demographics, the county has done a statistically respectable job on residences which sold for $\$ 30,000$ or more. They struggle with the lower cost parcels. While, it would be good to have better indicators of uniform valuation, the positive view is that these sales have not been trimmed or selectively revalued. Taking into account the presence of small dollar sales and the population range of towns from 69 to 1,799 , it is difficult to manage the quality statistics in databases with these characteristics. It might be said that there is typically very little organized market structure in small villages and the balance between supply and demand is more coincidence than market forces. Even though the quality of the residential valuation may be stated to be unacceptable, the assessment practices are good in spite of the
measured COD and PRD.

## 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 | 146 | 142 | -4 |
| Median | 86.44 | 96.08 | 9.64 |
| Wgt. Mean | 81.21 | 92.74 | 11.53 |
| Mean | 93.24 | 100.64 | 7.4 |
| COD | 27.51 | 22.19 | -5.32 |
| PRD | 114.81 | 108.51 | -6.3 |
| Min Sales Ratio | 13.47 | 34.14 | 20.67 |
| Max Sales Ratio | 329.85 | 329.85 | 0 |

RESIDENTIAL: The change between the preliminary statistics and the Reports and Opinion statistics is consistent with the assessment actions reported by the County for this class of property. The difference in the number of qualified sales is a result of changes made to the sold property after the date of the sale that were deemed to have a substantial impact on the assessed value. Any such sales were removed from the qualified sales roster. The change between the Preliminary Statistics and the Final R\&O Statistics was favorable or at worst neutral in each case.

## PAD 2008 Preliminary Statistics

## Type: Qualified



Exhibit 06 - Page 35

# Type: Qualified 



## Type: Qualified <br> Date Range: 07/01/2004 to 06/30/2007 Posted Before: 01/18/2008



## PAD 2008 Preliminary Statistics

## Type: Qualified



# Boone County 2008 Assessment Actions taken to address the following property classes/subclasses: 

## Commercial / Industrial

Boone County annually conducts a market analysis that included the qualified commercial and industrial sales that occurred from 1 July 2004 to 30 June 2007. 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. The county also completes the pick-up of new construction of commercial and industrial property.

For 2008, the preliminary median is 94.41 , the mean is 99.95 and the weighted mean is 94.79 with qualified 28 sales.

For 2008, the county reports that they have conducted an analysis of the commercial and industrial land in the town of Albion. Based on the results of the analysis, the land values for these classes in Albion were significantly increased and will be approximately $170 \%$ of the 2007 land values.

## 2008 Assessment Survey for Boone County

## Commercial/Industrial Appraisal Information

| 1. | Data collection done by: |
| :---: | :---: |
|  | Contract appraiser |
| 2. | Valuation done by: |
|  | Contract appraiser |
| 3. | Pickup work done by whom: |
|  | Contract lister |
| 4. | What is the date of the Replacement Cost New data (Marshall-Swift) that are used to value this property class? |
|  | 2005 |
| 5. | What was the last year the depreciation schedule for this property class was developed using market-derived information? |
|  | 2000 |
| 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? |
|  | N/A |
| 7. | When was the last year that the Market or Sales Comparison Approach was used to estimate the market value of the properties in this class? |
|  | N/A |
| 8. | Number of market areas/neighborhoods for this property class? |
|  | 6 |
| 9. | How are these defined? |
|  | The areas that are in place in Boone County are the 5 towns, Albion, Cedar Rapids, Petersburg, Primrose and St. Edward. The commercial parcels outside the town limits are considered rural. These areas are identified in the "Assessor Location" section of the commercial statistics. In the 2008 Preliminary Stats, there were no sales in Petersburg. |
| 10. | Is "Assessor Location" a usable valuation identity? |
|  | yes |

11. Does the assessor location "suburban" mean something other than rural commercial? (that is, does the "suburban" location have its own market?) No, Boone County does not identify parcels as Assessor Location Suburban.
12. What is the market significance of the suburban location as defined in Reg. 10001.07B? (Suburban shall mean a parcel of real property located outside of the limits of an incorporated city or village, but within the legal jurisdiction of an incorporated city or village.)
None, these parcels are typically valued with the rural commercial.

Commercial Permit Numbers:

| Permits | Information Statements | Other | Total |
| :---: | :---: | :---: | :---: |
| 26 |  |  | 26 |

# PAD 2008 R\&O Statistics 



Exhibit 06 - Page 42

# Type: Qualified <br> Date Range: 07/01/2004 to 06/30/2007 Posted Before: 01/18/2008 




PAD 2008 R\&O Statistics
Type: Qualified
Date Range: 07/01/2004 to 06/30/2007 Posted Before: 01/18/2008


Exhibit 06 - Page 45

Commerical Real Property

## I. Correlation

COMMERCIAL: Analysis of the following tables demonstrates that the statistics support a level of value within the acceptable range. Analysis of the qualified commercial statistics indicates that all valuation subclasses with a sufficient number of sales are within the acceptable range. The COD and PRD statistics are both outside of the range. The narrative in Table VI suggests that the assessment of the commercial class cannot be critically evaluated due to the diversity of the class and she small number of sales. There is little information to confidently determine whether the valuations have been done uniformly and proportionately or not. The county's action for 2008 did appear to improve the level of value of the only subclass with more than 6 sales. The fact that the action was taken when the preliminary median was in the center of the range speaks louder for the quality of assessment than the calculated statistics.
In summary, there are numerous statistics that have been presented and discussed in the following six tables of the Correlation section of the R\&O. There are a total of five that relate to the measurement of the level of value. In Table V, there was a presentation and narrative explanation prepared about the median, weighted mean and mean ratios. In Table III, there was a presentation and narrative discussion of the trended preliminary median. The fifth measure of central tendency was not independently presented or discussed. That measure, the $95 \%$ Confidence Interval measured around the median deserves mention. In this class, the confidence interval of 94.25 to 116.58 includes upper end of the acceptable range, allowing for the likelihood that the level of value is in the acceptable range. There is no indication among the statistics that the entire class should be adjusted and there is no compelling evidence that any notable subclass within this class should be adjusted. Given the wide diversity of the property uses and the relatively small number of sales representing the commercial class, there are rarely circumstances when the statistical data will clearly support an adjustment to any subclass. Giving due consideration to all of the measures, the median is considered the best indicator of the level of value for this class.

## 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 |
| :--- | :---: | :---: | :---: |
| 2008 | 55 | 28 | $\mathbf{5 0 . 9 1}$ |
| 2007 | 47 | 20 | 42.55 |
| 2006 | 48 | 19 | 39.58 |
| 2005 | 58 | 21 | 36.21 |
| 2004 | 52 | 29 | 55.77 |
| 2003 | 63 | 34 | 53.97 |
| 2002 | 53 | 37 | 69.81 |
| 2001 | 59 | 37 | 62.71 |

COMMERCIAL: Table II is indicative 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.

## 2008 Correlation Section <br> for Boone County

## 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 $\mathrm{R} \& O$ 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 $\mathrm{R} \& \mathrm{O}$ 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 Preliminary <br> Ratio | R\&O Median |
| :---: | :---: | :---: | :---: | :---: |
| 2008 | 94.41 | $\mathbf{3 . 1 5}$ | $\mathbf{9 7 . 3 8}$ |  |
| 2007 | 92.19 | 0.83 | 92.95 | 99.13 |
| 2006 | 94.30 | -58.14 | 39.47 | 94.30 |
| 2005 | 99.14 | -0.14 | 99 | 99.14 |
| 2004 | 99.06 | 0.54 | 99.6 | 99.06 |
| 2003 | 92 | 3.23 | 94.97 | 99 |
| 2002 | 92 | -1.87 | 90.28 | 93 |
| 2001 | 77 | 0.14 | 77.11 | 92 |

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 population in a similar manner. This also 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 2008 Preliminary Statistical Reports and the 2008 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 2007 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.

Gloudemans, Robert J., Mass Appraisal of Real Property, International Association of Assessing Officers, (1999), p. 311.

## 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 | \% Change in Assessed <br> Value (excl. growth) |  |
| :---: | :---: | :---: |
| 9.48 | 2008 | 3.15 |
| 0 | 2007 | 0.83 |
| 0 | 2006 | -58.14 |
| 0 | 2005 | -0.14 |
| -0.95 | 2004 | 0.54 |
| 12 | 2003 | 3 |
| 0 | 2002 | -1.87 |
| 2.87 | 2001 | 0.14 |

COMMERCIAL: The difference between the percent change in the sales file and percent change in the abstract is significant. Table IV indicates $6.33 \%$ difference, an amount that might be construed as disparate treatment of the sales and the assessed base.
For 2008, the county identified one subclass that is not specifically identified in the R\&O Statistics. The parcels valued were likely disproportionately represented in the sales file, but there is really no way to clearly know. The assessor actions indicate; Albion commercial land increase by about $170 \%$ of the prior year. The best indication that the assessment actions were not disparate is illustrated in Table III, where the trended preliminary median and the R\&O median are less than 2 percent apart. This action moved the median for Albion into the range and the preliminary median from 94.41 to 99.13 , both within the range. There was no evidence for disparate treatment of the sales and no real reason to do it. The median remains the best indicator of the level of value for this class.

## 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 | 99.13 | 100.75 | $\mathbf{1 0 6 . 1 8}$ |

COMMERCIAL: Only the median ratio is within the acceptable range. The weighted mean is barely above and the mean is significantly above the acceptable range. Several outlier ratios in a sample of only 28 sales are the influencing factor in the mean calculation. The median and weighted mean are less than $2 \%$ apart and the trended preliminary median is slightly below the two, lending support. The median is the measure of central tendency to be least influenced by these outliers, and in this subclass, it is 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 | 25.84 | $\mathbf{1 0 5 . 3 9}$ |
| Difference | $\mathbf{5 . 8 4}$ | $\mathbf{2 . 3 9}$ |

COMMERCIAL: In this class of property, both the coefficient of dispersion and price related differential are outside the acceptable range. The interpretation of high COD's and PRD's that this class of property has not been valued uniformly and proportionately. Before making such a blanket statement 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 Albion, several villages and rural locations. Among the 28 commercial sales, there were 10 different occupancy codes listed, each with the potential to be operating in a different economic environment. There are a few low dollar sales with and a few outlying ratios. With all of these variables, the commercial class is far too small to make either realistic adjustments or profound statements about the quality of assessment. It is difficult to manage the quality statistics in databases with these characteristics. Some may be tempted to trim unwieldy sales or selectively revalue sold properties, but Boone County does
neither. It might be said that there is very little organized market structure that is common to all of the small villages. Considering all of these variables, and the size of the sample, 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 | 28 | 28 | 0 |
| Median | 94.41 | 99.13 | 4.72 |
| Wgt. Mean | 94.79 | 100.75 | 5.96 |
| Mean | 99.95 | 106.18 | 6.23 |
| COD | 28.89 | 25.84 | -3.05 |
| PRD | 105.44 | 105.39 | -0.05 |
| Min Sales Ratio | 46.44 | 46.44 | 0 |
| Max Sales Ratio | 207.74 | 229.14 | 21.4 |

COMMERCIAL: The change between the preliminary statistics and the Reports and Opinion statistics is consistent with the assessment actions reported by the County for this class of property. Each of the quality statistics indicates improvement in the assessment of the commercial property if they actually do represent quality of assessment. The action taken for 2008 was not done to achieve an acceptable level of value, since the preliminary median already was within the range. The county's action was intended to increase the level of value of Albion into the acceptable range and that was accomplished.

Date Range: 07/01/2004 to 06/30/2007 Posted Before: 01/18/2008


## PAD 2008 Preliminary Statistics

Date Range: 07/01/2004 to 06/30/2007 Posted Before: 01/18/2008


## AGRICULTURAL UNIMPROVED

## Type: Qualified <br> Date Range: 07/01/2004 to 06/30/2007 Posted Before: 01/18/2008



## AGRICULTURAL UNIMPROVED

Type: Qualified
Date Range: 07/01/2004 to 06/30/2007 Posted Before: 01/18/2008


Date Range: 07/01/2004 to 06/30/2007 Posted Before: 01/18/2008


# Boone County 2008 Assessment Actions taken to address the following property classes/subclasses: 

## Agricultural

Boone County annually conducts a market analysis that includes the qualified unimproved agricultural sales that occurred from 1 July 2004 to 30 June 2007.
In this analysis, the county considers each of the following: across the board adjustments; broad adjustments to each individual market area; adjustments to each major land use countywide; adjustments to each major land use within individual market area; adjustments to individual land capability groups (LCGs) countywide; and adjustments to individual land capability groups within individual market area.
After careful consideration of each possibility, the county analyzes the sales in a database of all the unimproved qualified sales and tests the change or combination of changes that produces the best statistical fit in the database. Those adjustments, if any, are then made to the applicable parcels in the assessment record files and reported in the abstract.

For 2008, the preliminary median for the agricultural land class of real property is 70.17 , the mean is 69.08 and the weighted mean is 61.62 with 59 qualified unimproved sales.

In 2008, even though the median ratio was within the acceptable range, the county's analysis indicated that irrigated land values were lagging dry land and grass land values. In an attempt to correct that disparity, the county reports that in general, irrigated land will be increased in all three market areas. In Market Area 2, all of the major subclasses of agricultural land will be increased. The changes will be varied, based on the adjustment that was developed for each LCG during the county's market analysis process.

## 2008 Assessment Survey for Boone County

## Agricultural Appraisal Information

| 1. | Data collection done by: |
| :---: | :---: |
|  | Contract lister |
| 2. | Valuation done by: |
|  | Assessor |
| 3. | Pickup work done by whom: |
|  | Contract lister |
| 4. | Does the county have a written policy or written standards to specifically define agricultural land versus rural residential acreages? |
|  | yes |
| a. | How is agricultural land defined in this county? |
|  | Parcels less than 20 acres cannot qualify as agricultural. |
| 5. | When was the last date that the Income Approach was used to estimate or establish the market value of the properties in this class? |
|  | N/A |
| 6. | What is the date of the soil survey currently used? |
|  | 1989 |
| 7. | What date was the last countywide land use study completed? |
|  | 2007 |
| a. | By what method? (Physical inspection, FSA maps, etc.) |
|  | Contract lister annually reviews FSA for land use changes. Additionally, the county makes physical inspections when needed, reviews NRD registrations and maps, and recently has used the web soil survey as a source document for land use inspection. |
| b. | By whom? |
|  | Contract lister |
| c. | What proportion is complete / implemented at this time? |
|  | 100\% |
| 8. | Number of market areas/neighborhoods in the agricultural property class: |
|  | 3 |

9. How are market areas/neighborhoods defined in this property class?

The areas are defined by topography and similar soil characteristics.
10. Has the county implemented (or is in the process of implementing) special valuation for agricultural land within the county?
No, Boone County has not identified any value differences due to non-agricultural influences.

Agricultural Permit Numbers:

| Permits | Information Statements | Other | Total |
| :---: | :---: | :---: | :---: |
| $*$ |  |  | 140 |

*Among the agricultural parcels, most pick-up work originates from permits, but other sources contribute to the discovery of the new construction.

Date Range: 07/01/2004 to 06/30/2007 Posted Before: 01/18/2008


|  |  | 60 |
| :--- | ---: | ---: |
| (AgLand) | NUMBER of Sales: | 60,762 |
| (AgLand) | TOTAL Adj.Sales Price: | $13,372,762$ |
| (AgLand) | TOTAL Assessed Value: | $9,339,255$ |
|  | AVG. Adj. Sales Price: | 222,879 |
|  | AVG. Assessed Value: | 155,654 |




|  |  |  |
| :--- | ---: | ---: |
|  | NUMBER of Sales: | 60 |
| (AgLand) | TOTAL Sales Price: | $13,372,762$ |
| (AgLand) | TOTAL Adj.Sales Price: | $13,372,762$ |
| (AgLand) | TOTAL Assessed Value: | $9,339,255$ |
|  | AVG. Adj. Sales Price: | 222,879 |
|  | AVG. Assessed Value: | 155,654 |


| MAJORITY LAND USE > | 95\% |
| :--- | ---: |
| RANGE | COUNT |
| DRY | 9 |
| DRY-N/A | 12 |
| GRASS | 6 |
| GRASS-N/A | 12 |
| IRRGTD | 3 |
| IRRGTD-N/A | 18 |
| ALL |  |

MEDIAN
64.40
81.61
77.41
76.72
71.18
72.08

|  | PRD: | $109.35 \quad$ MIN |
| ---: | ---: | ---: |
| MEAN | WGT. MEAN | COD |
| 63.38 | 61.48 | 14.48 |
| 83.36 | 84.05 | 9.13 |
| 78.66 | 78.66 | 20.98 |
| 75.23 | 62.82 | 30.79 |
| 83.50 | 73.82 | 20.20 |
| 77.00 | 68.51 | 23.28 |


| MEAN: | 75 | COV: | 29.24 |
| :--- | :--- | ---: | ---: |
| MEAN: | 70 | STD: | 22.33 |
|  | 76 | AVG.ABS.DEV: | 16.04 |
|  |  |  |  |

Median C.I.: 70.13 to 81.40
(!: Derived)


MAJORITY LAND USE > 80\%

| RANGE | COUN |
| :--- | ---: |
| DRY |  |
| DRY-N/A |  |
| GRASS |  |
| GRASS-N/A |  |
| IRRGTD |  |
| IRRGTD-N/A |  |

$\qquad$


PAD 2008 R\&O Statistics
Type: Qualified
Date Range: 07/01/2004 to 06/30/2007 Posted Before: 01/18/2008


|  |  |  |
| :--- | ---: | ---: |
|  | NUMBER of Sales: | 60 |
| (AgLand) | TOTAL Sales Price: | $13,372,762$ |
| (AgLand) | TOTAL Adj.Sales Price: | $13,372,762$ |
| (AgLand) | TOTAL Assessed Value: | $9,339,255$ |
|  | AVG. Adj. Sales Price: | 222,879 |
|  | AVG. Assessed Value: | 155,654 |

## Type: Qualified <br> Date Range: 07/01/2004 to 06/30/2007 Posted Before: 01/18/2008



| RANGE |  | COUNT | MEDIAN | MEAN | WGT. MEAN |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Low \$ |  |  |  |  |  |
| 1 TO | 4999 | 1 | 93.71 | 93.71 | 93.71 |
| Total \$ |  |  |  |  |  |
| 1 TO | 9999 | 1 | 93.71 | 93.71 | 93.71 |
| 10000 то | 29999 | 2 | 90.98 | 90.98 | 92.67 |
| 30000 то | 59999 | 1 | 163.20 | 163.20 | 163.20 |
| 60000 TO | 99999 | 9 | 82.21 | 85.25 | 86.05 |
| 100000 то | 149999 | 12 | 78.91 | 79.44 | 79.57 |
| 150000 то | 249999 | 13 | 74.17 | 71.61 | 72.12 |
| 250000 то | 499999 | 20 | 67.25 | 69.21 | 67.59 |
| 500000 + |  | 2 | 53.79 | 53.79 | 55.99 |
| ALL |  |  |  |  |  |
|  |  | 60 | 74.79 | 76.37 | 69.84 |



## Agricultural Land

## I. Correlation

AGRICULTURAL UNIMPROVED: Analysis of the unimproved agricultural statistics indicates that all market areas are within the acceptable range in Boone County. The statistics also indicate that the major land uses are probably within the range. The system that the county uses to analyze and apply the values assures that all parcels within each market area have been valued uniformly and proportionately. The analysis is done within the framework of the agricultural land classification structure and the valuations are applied within the same classification structure. In this case, the sales may be more of a variable than the assessments.
The percent change in assessed value for the sold properties was about $5 \%$ more than the unsold properties but at the same time, the R\&O median measurement moved over 5\% less than the trended median. All things considered, it is unlikely that the level of value is as high as the trended preliminary median suggests. None of the three primary measures of central tendency, not even the mean, reach the $79.98 \%$ level of the trended median. Since it is unlikely that either the mean affected by outliers or the trended preliminary median reflect the actual level of value, the median remains as the most logical measure in this case. In summary, there are numerous statistics that have been presented and discussed in the following six tables of the Correlation section of the R\&O. There are a total of five that relate to the measurement of the level of value. In Table V, there was a presentation and narrative explanation prepared about the median, weighted mean and mean ratios. In Table III, there was a presentation and narrative discussion of the trended preliminary median. The fifth measure of central tendency was not independently presented or discussed. That measure, the $95 \%$ Confidence Interval measured around the median deserves mention. In this class, the confidence interval of 70.13 to 81.40 includes most of the acceptable range, allowing for the likelihood that the level of value is in or above the acceptable range. As mentioned the three primary measures indicate that the level of value is in the range it most likely is. There is no indication among the statistics that the entire class should be adjusted and there is no compelling evidence that any notable subclass within this class should be adjusted. Giving due consideration to all of the measures, the median is considered the best indicator of the level of value for this class.

## 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 |
| :--- | :---: | :---: | :---: |
| 2008 | 132 | 60 | 45.45 |
| 2007 | 132 | 64 | 48.48 |
| 2006 | 135 | 63 | 46.67 |
| 2005 | 133 | 70 | 52.63 |
| 2004 | 128 | 63 | 49.22 |
| 2003 | 106 | 58 | 54.72 |
| 2002 | 86 | 57 | 66.28 |
| 2001 | 87 | 63 | 72.41 |

AGRICULTURAL UNIMPROVED: Table II demonstrates a relatively low rate of utilization compared to similar counties. This alone does not indicate that the county has underutilized the available sales. Nothing was observed to indicate other than that the measurement of the class of property was done with all available arms' length sales. This utilization pattern is not deemed to result from the excessive trimming of sales, rather from an extraordinary period of the development of new irrigated land driven by high grain prices. Currently, low levels of sale utilization are common in counties with significant irrigation and contrast sharply with prior years and with predominantly dry land counties.

## 2008 Correlation Section <br> for Boone County

## 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 $\mathrm{R} \& O$ 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 $\mathrm{R} \& \mathrm{O}$ 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 Median | \% Change in Assessed <br> Value (excl. growth) | Trended Preliminary Ratio | R\&O Median |
| :---: | :---: | :---: | :---: | :---: |
| 2008 | 70.17 | 13.98 | 79.98 | 74.79 |
| 2007 | 70.78 | 5.25 | 74.5 | 71.93 |
| 2006 | 72.25 | 4.09 | 75.21 | 74.45 |
| 2005 | 71.11 | 9.52 | 77.88 | 77.01 |
| 2004 | 67.04 | 10.83 | 74.3 | 75.93 |
| 2003 | 70 | 6.83 | 74.78 | 75 |
| 2002 | 70.12 | 3.48 | 72.56 | 75 |
| 2001 | 70 | 2.3 | 71.61 | 74 |

AGRICULTURAL UNIMPROVED: The trended preliminary shows a significant difference from the calculated R\&O median. This might suggest that the trended median is a preferred measurement for this class. All things considered, it is unlikely that the level of value is higher than the mean which includes outliers. None of the three primary measures of central tendency, not even the mean reach the $79.98 \%$ level of the trended median. The preliminary median for agricultural land was within the acceptable range, but the assessor's actions were intended to bring irrigated and grass to the same level as dry land and to move all 3 market areas into the acceptable range. This change did both and also made improvement to both the COD and the PRD. In this case, the disparity between the two statistics is more an anomaly of the statistics when higher value property is increased the most. It is also notable that the weighted mean increased nearly twice the amount of the median. However, the most remarkable observation is that in cases where selective reappraisal was done, the expected measurement change using the trended preliminary median is less than the change to the median. In this case, it is considerably more. Nothing in this data offers a good alternative to the median as the best indicator of the level of value.

## 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 2008 Preliminary Statistical Reports and the 2008 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 2007 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.

Gloudemans, Robert J., Mass Appraisal of Real Property, International Association of Assessing Officers, (1999), p. 311.
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 | \% Change in Assessed <br> Value (excl. growth) |  |
| :---: | :---: | :---: |
| 18.95 | 2008 | 13.98 |
| 4.86 | 2007 | 5.25 |
| 8.31 | 2006 | 4.09 |
| 5.82 | 2005 | 9.52 |
| 17.25 | 2004 | 10.83 |
| 7 | 2003 | 7 |
| 5.63 | 2002 | 3.48 |
| 5.78 | 2001 | 2.3 |

AGRICULTURAL UNIMPROVED: The difference between the percent change in the sales file and percent change in the abstract is significant. Table IV indicates $4.97 \%$ difference, an amount that might be construed as disparate treatment of the sales and the assessed base. As discussed in the narrative for Table III, The county's actions were primarily motivated to attain uniformity, not increase the level of value. The statistics that resulted seem to indicate disparate treatment when actually; the county was only making changes within selected subclasses which cannot be directly be measured in the R\&O Statistics. The median still provides the best measure of the level of value in this case.

## 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 | 74.79 | $\mathbf{6 9 . 8 4}$ | $\mathbf{7 6 . 3 7}$ |

AGRICULTURAL UNIMPROVED: The median and weighted mean are within the acceptable range, while the mean is above the range. The mean was able to rise above the acceptable range largely based on a few high ratios. Since there are only 60 sales in the sample, a few high ratios can 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 | 21.45 | 109.35 |
| Difference | 1.45 | 6.35 |

AGRICULTURAL UNIMPROVED: The COD and PRD statistics are both outside of the range. Analyzing the statistics for this class suggests that the assessment has not been done uniformly and proportionately. There are a few outlying ratios in this analysis that have the tendency to drive the mean and consequently the PRD higher. In the case of the valuation of agricultural land, the system of market analysis and value application in Boone County is done consistently within the agricultural classification structure. In the valuation of agricultural land it is arguable that the valuation process is much more uniform than the market.

## 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 | $\mathbf{5 9}$ | $\mathbf{6 0}$ | 1 |
| Median | 70.17 | 74.79 | $\mathbf{4 . 6 2}$ |
| Wgt. Mean | 61.62 | 69.84 | $\mathbf{8 . 2 2}$ |
| Mean | 69.08 | 76.37 | 7.29 |
| COD | 23.35 | 21.45 | -1.9 |
| PRD | 112.12 | 109.35 | -2.77 |
| Min Sales Ratio | 16.77 | 16.77 | 0 |
| Max Sales Ratio | 163.20 | 163.20 | 0 |

AGRICULTURAL UNIMPROVED: The change between the preliminary statistics and the Reports and Opinion statistics is consistent with the assessment actions reported by the County for this class of property. The changes shown between the Preliminary Statistics and the Final R\&O Statistics were all considered to be favorable ones and depicted a sound assessment process.

## County 6 - Boone



Exhibit 06 - Page 80

## County 6 - Boone



Exhibit 06 - Page 81

## County 6 - Boone

| Schedule II:Tax Increment Financing (TIF) |  | Urban |  | SubUrban |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Records | Value Base | Value Excess | Records | Value Base | Value Excess |
| 18. Residential | 0 | 0 | 0 | 0 | 0 | 0 |
| 19. Commercial | 0 | 0 | 0 | 0 | 0 | 0 |
| 20. Industrial | 1 | 193,725 | 47,964,730 | 0 | 0 | 0 |
| 21. Other | 0 | 0 | 0 | 0 | 0 | 0 |
|  | Records | Rural Value Base | Value Excess | Records | Total <br> Value Base | Value Excess |
| 18. Residential | 0 | 0 | 0 | 0 | 0 | 0 |
| 19. Commercial | 0 | 0 | 0 | 0 | 0 | 0 |
| 20. Industrial | 0 | 0 | 0 | 1 | 193,725 | 47,964,730 |
| 21. Other | 0 | 0 | 0 | 0 | 0 | 0 |
| 22. Total Sch II |  |  |  | 1 | 193,725 | 47,964,730 |


| Schedule III: Mineral Interest Records | Urban |  |  | SubUrban |  |  | Rural |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Records |  | Value | Records |  | Value | Records | Value |
| 23. Mineral Interest-Producing | 0 | 0 | 0 |  | 0 | 0 | 0 | 0 |
| 24. Mineral Interest-Non-Producing | 0 | 0 | 0 |  | 0 | 0 | 0 | 0 |


|  | Total |  | Growth |  |
| :--- | :---: | :---: | :---: | :---: |
| 23. Mineral Interest-Producing | 0 | 0 | 0 |  |
| 24. Mineral Interest-Non-Producing | 0 | 0 | 0 |  |
| 25. Mineral Interest Total | $\mathbf{0}$ | $\mathbf{0}$ | $\mathbf{0}$ |  |


| Schedule IV: Exempt Records: Non-Agricultural |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
|  | Urban Records | SubUrban Records | Rural Records | Total Records |
| 26. Exempt | 156 | 16 | 79 | 251 |


| Schedule V: Agricultural Records Records | Urban | Value | SubUrban <br> Records | Value | Records | Value | Records | Value |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 27. Ag-Vacant Land | 0 | 0 | 11 | 21,445 | 1,768 | 265,924,375 | 1,779 | 265,945,820 |
| 28. Ag-Improved Land | 0 | 0 | 0 | 0 | 1,110 | 228,406,425 | 1,110 | 228,406,425 |
| 29. Ag-Improvements | 0 | 0 | 0 | 0 | 1,215 | 78,105,805 | 1,215 | 78,105,805 |
| 30. Ag-Total Taxable |  |  |  |  |  |  | 2,994 | 572,458,050 |

County 6 - Boone


## County 6 - Boone

## 2008 County Abstract of Assessment for Real Property, Form 45

Schedule IX: Agricultural Records: AgLand Market Area Detail

| Irrigated: | Urban |  | SubUrban |  | Rural |  | Total |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Acres | Value | Acres | Value | Acres | Value | Acres | Value |
| 45. 1A1 | 0.000 | 0 | 0.000 | 0 | 17,745.210 | 34,146,360 | 17,745.210 | 34,146,360 |
| 46. 1A | 0.000 | 0 | 0.000 | 0 | 12,688.440 | 22,198,205 | 12,688.440 | 22,198,205 |
| 47. 2A1 | 0.000 | 0 | 0.000 | 0 | 7,380.550 | 12,884,185 | 7,380.550 | 12,884,185 |
| 48. 2A | 0.000 | 0 | 0.000 | 0 | 2,064.500 | 3,247,615 | 2,064.500 | 3,247,615 |
| 49. 3A1 | 0.000 | 0 | 0.000 | 0 | 10,480.710 | 16,715,595 | 10,480.710 | 16,715,595 |
| 50. 3A | 0.000 | 0 | 0.000 | 0 | 40,705.670 | 65,123,470 | 40,705.670 | 65,123,470 |
| 51. 4A1 | 0.000 | 0 | 0.000 | 0 | 8,079.630 | 11,109,075 | 8,079.630 | 11,109,075 |
| 52. 4A | 0.000 | 0 | 0.000 | 0 | 9,397.760 | 12,215,340 | 9,397.760 | 12,215,340 |
| 53. Total | 0.000 | 0 | 0.000 | 0 | 108,542.470 | 177,639,845 | 108,542.470 | 177,639,845 |
| Dryland: |  |  |  |  |  |  |  |  |
| 54. 1D1 | 0.000 | 0 | 0.000 | 0 | 5,952.210 | 7,736,075 | 5,952.210 | 7,736,075 |
| 55.1D | 0.000 | 0 | 0.000 | 0 | 8,666.820 | 11,050,270 | 8,666.820 | 11,050,270 |
| 56. 2D1 | 0.000 | 0 | 0.000 | 0 | 5,421.030 | 6,846,680 | 5,421.030 | 6,846,680 |
| 57. 2D | 0.000 | 0 | 0.000 | 0 | 1,457.250 | 1,790,310 | 1,457.250 | 1,790,310 |
| 58. 3D1 | 0.000 | 0 | 0.000 | 0 | 6,553.000 | 7,580,725 | 6,553.000 | 7,580,725 |
| 59.3D | 0.000 | 0 | 0.000 | 0 | 31,335.090 | 33,990,230 | 31,335.090 | 33,990,230 |
| 60.4 D 1 | 0.000 | 0 | 0.000 | 0 | 6,170.310 | 5,204,200 | 6,170.310 | 5,204,200 |
| 61. 4D | 0.000 | 0 | 0.000 | 0 | 3,901.470 | 2,340,975 | 3,901.470 | 2,340,975 |
| 62. Total | 0.000 | 0 | 0.000 | 0 | 69,457.180 | 76,539,465 | 69,457.180 | 76,539,465 |
| Grass: |  |  |  |  |  |  |  |  |
| 63.1G1 | 0.000 | 0 | 0.000 | 0 | 1,419.130 | 837,330 | 1,419.130 | 837,330 |
| 64.1G | 0.000 | 0 | 0.000 | 0 | 2,655.590 | 1,723,900 | 2,655.590 | 1,723,900 |
| 65. 2G1 | 0.000 | 0 | 0.000 | 0 | 2,438.780 | 1,392,460 | 2,438.780 | 1,392,460 |
| 66. 2G | 0.000 | 0 | 0.000 | 0 | 2,088.340 | 994,930 | 2,088.340 | 994,930 |
| 67.3G1 | 0.000 | 0 | 0.000 | 0 | 8,780.680 | 4,338,080 | 8,780.680 | 4,338,080 |
| 68. 3G | 0.000 | 0 | 0.000 | 0 | 22,561.720 | 11,676,430 | 22,561.720 | 11,676,430 |
| 69.4G1 | 0.000 | 0 | 0.000 | 0 | 5,311.340 | 2,243,775 | 5,311.340 | 2,243,775 |
| 70.4G | 0.000 | 0 | 0.000 | 0 | 27,781.900 | 10,985,560 | 27,781.900 | 10,985,560 |
| 71. Total | 0.000 | 0 | 0.000 | 0 | 73,037.480 | 34,192,465 | 73,037.480 | 34,192,465 |
| 72. Waste | 0.000 | 0 | 0.000 | 0 | 1,788.960 | 69,730 | 1,788.960 | 69,730 |
| 73. Other | 0.000 | 0 | 0.000 | 0 | 667.130 | 26,515 | 667.130 | 26,515 |
| 74. Exempt | 0.000 |  | 0.000 |  | 9.640 |  | 9.640 |  |
| 75. Total | 0.000 | 0 | 0.000 | 0 | 253,493.220 | 288,468,020 | 253,493.220 | 288,468,020 |

Exhibit 06 - Page 84

## County 6 - Boone <br> 2008 County Abstract of Assessment for Real Property, Form 45

Schedule IX: Agricultural Records: AgLand Market Area Detail
Market Area:

| Irrigated: | Urban |  | SubUrban |  | Rural |  | Total |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Acres | Value | Acres | Value | Acres | Value | Acres | Value |
| 45. 1A1 | 0.000 | 0 | 0.000 | 0 | 93.760 | 118,605 | 93.760 | 118,605 |
| 46. 1A | 0.000 | 0 | 0.000 | 0 | 196.000 | 225,400 | 196.000 | 225,400 |
| 47. 2A1 | 0.000 | 0 | 0.000 | 0 | 796.690 | 916,195 | 796.690 | 916,195 |
| 48. 2A | 0.000 | 0 | 0.000 | 0 | 960.550 | 1,047,000 | 960.550 | 1,047,000 |
| 49. 3A1 | 0.000 | 0 | 0.000 | 0 | 2,587.830 | 2,820,740 | 2,587.830 | 2,820,740 |
| 50. 3A | 0.000 | 0 | 0.000 | 0 | 426.330 | 464,700 | 426.330 | 464,700 |
| 51. 4A1 | 0.000 | 0 | 0.000 | 0 | 1,073.870 | 987,965 | 1,073.870 | 987,965 |
| 52. 4A | 0.000 | 0 | 0.000 | 0 | 2,013.650 | 1,741,810 | 2,013.650 | 1,741,810 |
| 53. Total | 0.000 | 0 | 0.000 | 0 | 8,148.680 | 8,322,415 | 8,148.680 | 8,322,415 |
| Dryland: |  |  |  |  |  |  |  |  |
| 54. 1D1 | 0.000 | 0 | 0.000 | 0 | 32.000 | 37,760 | 32.000 | 37,760 |
| 55.1D | 0.000 | 0 | 0.000 | 0 | 77.000 | 83,930 | 77.000 | 83,930 |
| 56. 2D1 | 0.000 | 0 | 0.000 | 0 | 758.810 | 598,010 | 758.810 | 598,010 |
| 57. 2D | 0.000 | 0 | 0.000 | 0 | 948.690 | 809,575 | 948.690 | 809,575 |
| 58. 3D1 | 0.000 | 0 | 0.000 | 0 | 1,876.500 | 1,209,180 | 1,876.500 | 1,209,180 |
| 59.3D | 0.000 | 0 | 0.000 | 0 | 316.640 | 241,865 | 316.640 | 241,865 |
| 60.4D1 | 0.000 | 0 | 0.000 | 0 | 270.250 | 150,935 | 270.250 | 150,935 |
| 61.4D | 0.000 | 0 | 0.000 | 0 | 1,384.510 | 764,040 | 1,384.510 | 764,040 |
| 62. Total | 0.000 | 0 | 0.000 | 0 | 5,664.400 | 3,895,295 | 5,664.400 | 3,895,295 |

Grass:

| 63. 1G1 | 0.000 | 0 | 0.000 | 0 | 36.000 | 20,055 | 36.000 | 20,055 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 64.1G | 0.000 | 0 | 0.000 | 0 | 26.000 | 14,895 | 26.000 | 14,895 |
| 65. 2G1 | 0.000 | 0 | 0.000 | 0 | 335.000 | 183,875 | 335.000 | 183,875 |
| 66. 2G | 0.000 | 0 | 0.000 | 0 | 1,385.030 | 674,445 | 1,385.030 | 674,445 |
| 67.3G1 | 0.000 | 0 | 0.000 | 0 | 4,240.980 | 2,106,045 | 4,240.980 | 2,106,045 |
| 68. 3G | 0.000 | 0 | 0.000 | 0 | 1,612.200 | 638,520 | 1,612.200 | 638,520 |
| 69.4G1 | 0.000 | 0 | 0.000 | 0 | 6,910.860 | 2,402,320 | 6,910.860 | 2,402,320 |
| 70.4G | 0.000 | 0 | 0.000 | 0 | 24,101.140 | 8,696,810 | 24,101.140 | 8,696,810 |
| 71. Total | 0.000 | 0 | 0.000 | 0 | 38,647.210 | 14,736,965 | 38,647.210 | 14,736,965 |
| 72. Waste | 0.000 | 0 | 0.000 | 0 | 2,835.760 | 15,025 | 2,835.760 | 15,025 |
| 73. Other | 0.000 | 0 | 0.000 | 0 | 675.170 | 17,000 | 675.170 | 17,000 |
| 74. Exempt | 0.000 |  | 0.000 |  | 42.350 |  | 42.350 |  |
| 75. Total | 0.000 | 0 | 0.000 | 0 | 55,971.220 | 26,986,700 | 55,971.220 | 26,986,700 |

Exhibit 06 - Page 85

## County 6 - Boone

## 2008 County Abstract of Assessment for Real Property, Form 45

Schedule IX: Agricultural Records: AgLand Market Area Detail
Market Area:
3

| Irrigated: | Urban |  | SubUrban |  | Rural |  | Total |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Acres | Value | Acres | Value | Acres | Value | Acres | Value |
| 45. 1A1 | 0.000 | 0 | 0.000 | 0 | 13,329.880 | 29,992,295 | 13,329.880 | 29,992,295 |
| 46. 1A | 0.000 | 0 | 0.000 | 0 | 9,011.500 | 17,617,505 | 9,011.500 | 17,617,505 |
| 47. 2A1 | 0.000 | 0 | 0.000 | 0 | 4,260.130 | 7,838,640 | 4,260.130 | 7,838,640 |
| 48. 2A | 0.000 | 0 | 0.000 | 0 | 1,600.670 | 2,945,235 | 1,600.670 | 2,945,235 |
| 49. 3A1 | 0.000 | 0 | 0.000 | 0 | 4,051.230 | 7,454,270 | 4,051.230 | 7,454,270 |
| 50. 3A | 0.000 | 0 | 0.000 | 0 | 28,157.320 | 51,809,475 | 28,157.320 | 51,809,475 |
| 51. 4A1 | 0.000 | 0 | 0.000 | 0 | 7,198.880 | 9,934,440 | 7,198.880 | 9,934,440 |
| 52. 4A | 0.000 | 0 | 0.000 | 0 | 2,726.530 | 3,121,880 | 2,726.530 | 3,121,880 |
| 53. Total | 0.000 | 0 | 0.000 | 0 | 70,336.140 | 130,713,740 | 70,336.140 | 130,713,740 |
| Dryland: |  |  |  |  |  |  |  |  |
| 54. 1D1 | 0.000 | 0 | 0.000 | 0 | 2,209.080 | 3,313,640 | 2,209.080 | 3,313,640 |
| 55.1D | 0.000 | 0 | 0.000 | 0 | 3,530.220 | 5,295,335 | 3,530.220 | 5,295,335 |
| 56. 2D1 | 0.000 | 0 | 0.000 | 0 | 1,331.880 | 1,664,860 | 1,331.880 | 1,664,860 |
| 57. 2D | 0.000 | 0 | 0.000 | 0 | 162.950 | 203,695 | 162.950 | 203,695 |
| 58.3D1 | 0.000 | 0 | 0.000 | 0 | 1,052.400 | 1,315,510 | 1,052.400 | 1,315,510 |
| 59.3D | 0.000 | 0 | 0.000 | 0 | 10,640.980 | 13,301,340 | 10,640.980 | 13,301,340 |
| 60.4D1 | 0.000 | 0 | 0.000 | 0 | 2,587.150 | 2,069,730 | 2,587.150 | 2,069,730 |
| 61. 4D | 0.000 | 0 | 0.000 | 0 | 692.530 | 554,025 | 692.530 | 554,025 |
| 62. Total | 0.000 | 0 | 0.000 | 0 | 22,207.190 | 27,718,135 | 22,207.190 | 27,718,135 | Grass:


| 63.1G1 | 0.000 | 0 | 0.000 | 0 | 635.670 | 392,150 | 635.670 | 392,150 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 64.1G | 0.000 | 0 | 0.000 | 0 | 715.110 | 504,645 | 715.110 | 504,645 |
| 65. 2G1 | 0.000 | 0 | 0.000 | 0 | 1,082.090 | 619,260 | 1,082.090 | 619,260 |
| 66. 2G | 0.000 | 0 | 0.000 | 0 | 690.130 | 416,240 | 690.130 | 416,240 |
| 67.3G1 | 0.000 | 0 | 7.080 | 4,775 | 1,007.350 | 680,930 | 1,014.430 | 685,705 |
| 68. 3G | 0.000 | 0 | 11.810 | 7,970 | 6,982.070 | 4,688,720 | 6,993.880 | 4,696,690 |
| 69.4G1 | 0.000 | 0 | 1.270 | 855 | 3,449.520 | 2,308,095 | 3,450.790 | 2,308,950 |
| 70.4G | 0.000 | 0 | 11.620 | 7,845 | 4,798.300 | 3,029,170 | 4,809.920 | 3,037,015 |
| 71. Total | 0.000 | 0 | 31.780 | 21,445 | 19,360.240 | 12,639,210 | 19,392.020 | 12,660,655 |


| 72. Waste | 0.000 | 0 | 0.000 | 0 | 934.410 | 37,365 | 934.410 | 37,365 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 73. Other | 0.000 | 0 | 0.000 | 0 | 192.070 | 7,685 | 192.070 | 7,685 |
| 74. Exempt | 0.000 |  | 0.000 |  | 0.000 |  | 0.000 |  |
| 75. Total | 0.000 | 0 | 31.780 | 21,445 | 113,030.050 | 171,116,135 | 113,061.830 | 171,137,580 |

Exhibit 06 - Page 86

## County 6 - Boone

## 2008 County Abstract of Assessment for Real Property, Form 45

Schedule X: Agricultural Records: AgLand Market Area Totals

|  | Urban |  | SubUrban |  | Rural |  | Total |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| AgLand | Acres | Value | Acres | Value | Acres | Value | Acres | Value |
| 76.Irrigated | 0.000 | 0 | 0.000 | 0 | 187,027.290 | 316,676,000 | 187,027.290 | 316,676,000 |
| 77.Dry Land | 0.000 | 0 | 0.000 | 0 | 97,328.770 | 108,152,895 | 97,328.770 | 108,152,895 |
| 78.Grass | 0.000 | 0 | 31.780 | 21,445 | 131,044.930 | 61,568,640 | 131,076.710 | 61,590,085 |
| 79.Waste | 0.000 | 0 | 0.000 | 0 | 5,559.130 | 122,120 | 5,559.130 | 122,120 |
| 80.Other | 0.000 | 0 | 0.000 | 0 | 1,534.370 | 51,200 | 1,534.370 | 51,200 |
| 81.Exempt | 0.000 | 0 | 0.000 | 0 | 51.990 | 0 | 51.990 | 0 |
| 82.Total | 0.000 | 0 | 31.780 | 21,445 | 422,494.490 | 486,570,855 | 422,526.270 | 486,592,300 |

## 2008 Agricultural Land Detail

County 6 - Boone
Market Area:

| Value | \% of Value* | Average Assessed Value ${ }^{\star}$ |
| :--- | ---: | :---: |
| $34,146,360$ | $19.22 \%$ | $1,924.257$ |
| $22,198,205$ | $12.50 \%$ | $1,749.482$ |
| $12,884,185$ | $7.25 \%$ | $1,745.694$ |
| $3,247,615$ | $1.83 \%$ | $1,573.075$ |
| $16,715,595$ | $9.41 \%$ | $1,594.891$ |
| $65,123,470$ | $36.66 \%$ | $1,599.862$ |
| $11,109,075$ | $6.25 \%$ | $1,374.948$ |
| $12,215,340$ | $6.88 \%$ | $1,299.814$ |
| $177,639,845$ | $100.00 \%$ | $1,636.592$ |


| Dry: |
| :--- |
| 1D1 $5,952.210$ $8.57 \%$    <br> 1D $8,666.820$ $12.48 \%$ $7,736,075$ $10.11 \%$ $1,299.697$ <br> 2D1 $5,421.030$ $7.80 \%$ $11,050,270$ $14.44 \%$ $1,275.008$ <br> 2D $1,457.250$ $2.10 \%$ $6,846,680$ $8.95 \%$ $1,262.985$ <br> 3D1 $6,553.000$ $9.43 \%$ $1,790,310$ $2.34 \%$ $1,228.553$ <br> 3D $31,335.090$ $45.11 \%$ $7,580,725$ $9.90 \%$ $1,156.832$ <br> 4D1 $6,170.310$ $8.88 \%$ $33,990,230$ $44.41 \%$ $1,084.733$ <br> 4D $3,901.470$ $5.62 \%$ $5,204,200$ $6.80 \%$ 843.426 <br> Dry Total $69,457.180$ $100.00 \%$ $2,340,975$ $3.06 \%$ 600.023 |

Grass:

| 1G1 | $1,419.130$ | $1.94 \%$ | 837,330 | $2.45 \%$ | 590.030 |
| :--- | ---: | ---: | ---: | ---: | ---: |
| 1G | $2,655.590$ | $3.64 \%$ | $1,723,900$ | $5.04 \%$ | 649.158 |
| 2G1 | $2,438.780$ | $3.34 \%$ | $1,392,460$ | $4.07 \%$ | 570.965 |
| 2G | $2,088.340$ | $2.86 \%$ | 994,930 | $2.91 \%$ | 476.421 |
| 3G1 | $8,780.680$ | $12.02 \%$ | $4,338,080$ | $12.69 \%$ | 494.048 |
| 3G | $22,561.720$ | $30.89 \%$ | $11,676,430$ | $34.15 \%$ | 517.532 |
| 4G1 | $5,311.340$ | $7.27 \%$ | $2,243,775$ | $6.56 \%$ | 422.449 |
| 4G | $27,781.900$ | $38.04 \%$ | $10,985,560$ | $32.13 \%$ | 395.421 |
| Grass Total | $73,037.480$ | $100.00 \%$ | $34,192,465$ | $100.00 \%$ | 468.149 |
| Irrigated Total | $108,542.470$ | $42.82 \%$ | $177,639,845$ | $61.58 \%$ | $1,636.592$ |
| Dry Total | $69,457.180$ | $27.40 \%$ | $76,539,465$ | $26.53 \%$ | $1,101.966$ |
| Grass Total | $73,037.480$ | $28.81 \%$ | $34,192,465$ | $11.85 \%$ | 468.149 |
| Waste | $1,788.960$ | $0.71 \%$ | 69,730 | $0.02 \%$ | 38.977 |
| Other | 667.130 | $0.26 \%$ | 26,515 | $0.01 \%$ | 39.744 |
| Exempt | 9.640 | $0.00 \%$ |  |  | $1,137.971$ |
| Market Area Total | $253,493.220$ | $100.00 \%$ | $288,468,020$ | $100.00 \%$ |  |

## As Related to the County as a Whole

| Irrigated Total | $108,542.470$ | $58.04 \%$ | $177,639,845$ | $56.10 \%$ |
| :--- | ---: | ---: | ---: | ---: |
| Dry Total | $69,457.180$ | $71.36 \%$ | $76,539,465$ | $70.77 \%$ |
| Grass Total | $73,037.480$ | $55.72 \%$ | $34,192,465$ | $55.52 \%$ |
| Waste | $1,788.960$ | $32.18 \%$ | 69,730 | $57.10 \%$ |
| Other | 667.130 | $43.48 \%$ | 26,515 | $51.79 \%$ |
| Exempt | 9.640 | $18.54 \%$ |  |  |
| Market Area Total | $253,493.220$ | $59.99 \%$ | $288,468,020$ | $59.28 \%$ |

2008 Agricultural Land Detail
County 6 - Boone
Market Area:

| Irrigated: |
| :--- |
| Acres |
| 1A1 |
| 1A |

Grass:

| 1G1 | 36.000 | $0.09 \%$ | 20,055 | $0.14 \%$ | 557.083 |
| :--- | ---: | ---: | ---: | ---: | ---: |
| 1G | 26.000 | $0.07 \%$ | 14,895 | $0.10 \%$ | 572.884 |
| 2G1 | 335.000 | $0.87 \%$ | 183,875 | $1.25 \%$ | 548.880 |
| 2G | $1,385.030$ | $3.58 \%$ | 674,445 | $4.58 \%$ | 486.953 |
| 3G1 | $4,240.980$ | $10.97 \%$ | $2,106,045$ | $14.29 \%$ | 496.593 |
| 3G | $1,612.200$ | $4.17 \%$ | 638,520 | $4.33 \%$ | 396.055 |
| 4G1 | $6,910.860$ | $17.88 \%$ | $2,402,320$ | $16.30 \%$ | 347.615 |
| 4G | $24,101.140$ | $62.36 \%$ | $8,696,810$ | $59.01 \%$ | 360.846 |
| Grass Total | $38,647.210$ | $100.00 \%$ | $14,736,965$ | $100.00 \%$ | 381.320 |
|  | $8,148.680$ | $14.56 \%$ | $8,322,415$ | $30.84 \%$ | $1,021.320$ |
| Irrigated Total | $5,664.400$ | $10.12 \%$ | $3,895,295$ | $14.43 \%$ | 687.680 |
| Dry Total | $38,647.210$ | $69.05 \%$ | $14,736,965$ | $54.61 \%$ | 381.320 |
| Grass Total | $2,835.760$ | $5.07 \%$ | 15,025 | $0.06 \%$ | 5.298 |
| Waste | 675.170 | $1.21 \%$ | 17,000 | $0.06 \%$ | 25.178 |
| Other | 42.350 | $0.08 \%$ |  |  | 4 |
| Exempt | $55,971.220$ | $100.00 \%$ | $26,986,700$ | $100.00 \%$ |  |
| Market Area Total |  |  |  | 4 |  |

As Related to the County as a Whole

| Irrigated Total | $8,148.680$ | $4.36 \%$ | $8,322,415$ | $2.63 \%$ |
| :--- | ---: | ---: | ---: | ---: |
| Dry Total | $5,664.400$ | $5.82 \%$ | $3,895,295$ | $3.60 \%$ |
| Grass Total | $38,647.210$ | $29.48 \%$ | $14,736,965$ | $23.93 \%$ |
| Waste | $2,835.760$ | $51.01 \%$ | 15,025 | $12.30 \%$ |
| Other | 675.170 | $44.00 \%$ | 17,000 | $33.20 \%$ |
| Exempt | 42.350 | $81.46 \%$ |  |  |
| Market Area Total | $55,971.220$ | $13.25 \%$ | $26,986,700$ | $5.55 \%$ |

2008 Agricultural Land Detail
County 6 - Boone
Market Area:

| Irrigated: |
| :--- |
| Acres |
| 1A1 |
| 13 |

Grass:

| 1G1 | 635.670 | $3.28 \%$ | 392,150 | $3.10 \%$ | 616.908 |
| :--- | ---: | ---: | ---: | ---: | ---: |
| 1G | 715.110 | $3.69 \%$ | 504,645 | $3.99 \%$ | 705.688 |
| 2G1 | $1,082.090$ | $5.58 \%$ | 619,260 | $4.89 \%$ | 572.281 |
| 2G | 690.130 | $3.56 \%$ | 416,240 | $3.29 \%$ | 603.132 |
| 3G1 | $1,014.430$ | $5.23 \%$ | 685,705 | $5.42 \%$ | 675.951 |
| 3G | $6,993.880$ | $36.07 \%$ | $4,696,690$ | $37.10 \%$ | 671.542 |
| 4G1 | $3,450.790$ | $17.79 \%$ | $2,308,950$ | $18.24 \%$ | 669.107 |
| 4G | $4,809.920$ | $24.80 \%$ | $3,037,015$ | $23.99 \%$ | 631.406 |
| Grass Total | $19,392.020$ | $100.00 \%$ | $12,660,655$ | $100.00 \%$ | 652.879 |
| Irigated Total | $70,336.140$ | $62.21 \%$ | $130,713,740$ | $76.38 \%$ | $1,858.415$ |
| Dry Total | $22,207.190$ | $19.64 \%$ | $27,718,135$ | $16.20 \%$ | $1,248.160$ |
| Grass Total | $19,392.020$ | $17.15 \%$ | $12,660,655$ | $7.40 \%$ | 652.879 |
| Waste | 934.410 | $0.83 \%$ | 37,365 | $0.02 \%$ | 39.987 |
| Other | 192.070 | $0.17 \%$ | 7,685 | $0.00 \%$ | 40.011 |
| Exempt | 0.000 | $0.00 \%$ |  |  | 1 |
| Market Area Total | $113,061.830$ | $100.00 \%$ |  |  |  |

## As Related to the County as a Whole

| Irrigated Total | $70,336.140$ | $37.61 \%$ | $130,713,740$ | $41.28 \%$ |
| :--- | ---: | ---: | ---: | ---: |
| Dry Total | $22,207.190$ | $22.82 \%$ | $27,718,135$ | $25.63 \%$ |
| Grass Total | $19,392.020$ | $14.79 \%$ | $12,660,655$ | $20.56 \%$ |
| Waste | 934.410 | $16.81 \%$ | 37,365 | $30.60 \%$ |
| Other | 192.070 | $12.52 \%$ | 7,685 | $15.01 \%$ |
| Exempt | 0.000 | $0.00 \%$ |  |  |
| Market Area Total | $113,061.830$ | $26.76 \%$ | $171,137,580$ | $35.17 \%$ |

2008 Agricultural Land Detail
County 6 - Boone


| Total | $422,526.270$ | $486,592,300$ | $422,526.270$ | $100.00 \%$ | $486,592,300$ | $100.00 \%$ | $1,151.626$ |
| :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- | :--- |

[^0]
## 2008 County Abstract of Assessment for Real Property, Form 45 Compared with the 2007 Certificate of Taxes Levied (CTL)

|  | 2007 CTL <br> County Total | 2008 Form 45 County Total | Value Difference <br> (2007 Form 45-2006 CTL) | Percent Change | 2008 Growth <br> (New Construction Value) | \% Change excl. Growth |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 1. Residential | 98,280,565 | 110,214,345 | 11,933,780 | 12.14 | 1,959,210 | 10.15 |
| 2. Recreational | 0 | 0 | 0 |  | 0 |  |
| 3. Ag-Homesite Land, Ag-Res Dwellings | 27,913,360 | 28,064,005 | 150,645 | 0.54 | *--------- | 0.54 |
| 4. Total Residential (sum lines 1-3) | 126,193,925 | 138,278,350 | 12,084,425 | 9.58 | 1,959,210 | 8.02 |
| 5. Commercial | 24,440,165 | 26,733,290 | 2,293,125 | 9.38 | 1,517,495 | 3.17 |
| 6. Industrial | 193,725 | 193,725 | 0 | 0 | 0 | 0 |
| 7. Ag-Farmsite Land, Outbuildings | 58,633,370 | 57,801,745 | -831,625 | -1.42 | 1,155,183 | -3.39 |
| 8. Minerals | 0 | 0 | 0 |  | 0 |  |
| 9. Total Commercial (sum lines 5-8) | 83,267,260 | 84,728,760 | 1,461,500 | 1.76 | 2,281,780 | -0.99 |
| 10. Total Non-Agland Real Property | 209,461,185 | 223,007,110 | 13,545,925 | 6.47 | 4,631,888 | 4.26 |
| 11. Irrigated | 251,001,485 | 316,676,000 | 65,674,515 | 26.16 |  |  |
| 12. Dryland | 115,109,425 | 108,152,895 | -6,956,530 | -6.04 |  |  |
| 13. Grassland | 60,612,100 | 61,590,085 | 977,985 | 1.61 |  |  |
| 14. Wasteland | 123,300 | 122,120 | -1,180 | -0.96 |  |  |
| 15. Other Agland | 50,925 | 50,925 | 275 | 0.54 |  |  |
| 16. Total Agricultural Land | 426,897,235 | 486,592,300 | 59,695,065 | 13.98 |  |  |
| 17. Total Value of All Real Property | 636,358,420 | 709,599,410 | 73,240,990 | 11.51 | 4,631,888 | 10.78 |
| (Locally Assessed) |  |  |  |  |  |  |

[^1]
# 2007 Plan of Assessment for Boone County Assessment Years 2008, 2009, 2010 Date: June 15 ${ }^{\text {th }}, 2007$ 

## General Description of Real Property in Boone County:

Per the 2007 County Abstract, Boone County consists of the following real property types:
Parcels $\quad$ \% of Total Parcels $\%$ of Taxable Value Base

| Residential | 2122 | $38 \%$ | $15 \%$ |
| :--- | :---: | :---: | :---: |
| Commercial | 416 | $8 \%$ | $4 \%$ |
| Industrial | 1 | 0 | 0 |
| Recreational | 0 | 0 | 0 |
| TIF | 1 | 0 |  |
| Agricultural | 2982 | $54 \%$ | $81 \%$ |

Boone County had 103 Residential, 23 Commercial, 97 Agricultural permits, with additional 39 by other. These include new construction along with removal of buildings also.

Current Resources
Staff: Deputy
Secretary
Budget: Adopted 96,985 The budget is the only item amended from the Requested 96,985 June one given to the Board.
Educational 1,200
Reappraisal 48,000
Other 13,003
Training: Go workshops to get the hours needed to keep our certificates up to date.

Cadastral Maps: They are kept up to date by the Deputy with the assistance of the Assessor. These are dated 1969 in average condition for their age. We also have the aerial maps from the FSA office.

Property Record Card: They are kept up to date with the 521's also. We have 5,773 total parcels, of which approximately 3287 are improved, the agland houses and sketches are being entered in the Cama so when we are ready to do the rural reappraisal they are all listed.
Our aerial photos are 2000.
Software: We are using Cama 2000, along with the AS400 with MIPS County Solutions. We have the Apex3 version.

Web Based: N/A

## Current Assessment Procedures for Real Property

Discover, List \& Inventory all property.
Our residential and rural pickup work is done by Bill Scarlett, and he also does our land update use changes. The Commercial pickup work was done by Gary Davis under the direction of Jeff White of Blaser Appraisal.

Jeff White of Blaser Appraisal assists with the ratio study for the Residential and Commercial sales in Boone County. This study consists of the sales in the sales file along with studying and reviewing past sales.

Agland value is determined by the sales in the sales file and entered into the computer program I made in Excel from the Agland Book, Market Study 1A thru 4A. With this program I have Boone County as a whole, each Area, then into Irrigated, Dry, \& Grass.

Level of Value, Quality, and Uniformity for assessment year 2007:

| Property Class | Median |  | COD | $\underline{\text { PRD }}$ |
| :--- | :---: | :---: | :---: | :---: |
|  |  |  |  |  |
| Residential | 95.73 |  | 27.34 | 114.97 |
| Commercial | 92.19 |  | 35.78 | 104.11 |
| Agricultural Land | 71.93 |  | 16.98 | 108.17 |
| Special Value Ag | N/A |  |  |  |

## Assessment Actions Planned for Assessment Year 2008

Residential: We are hoping to get Albion and the Acreages revalued. If enough time available the country values will also be entered.

Commercial: We will watch the trend threw out the year if there is any need for adjustment.

Agricultural Land: Review sales, enter them in each Area and class then determine the value of each area.

Special Value If any applications come in, then we will take the necessary steps to be in compliance.

## Assessment Actions Planned for Assessment Year 2009

Residential: Review sales through out the year and make adjustments accordingly.
Commercial: Review current and past sales to see if any adjustment is necessary.
Agricultural: Review sales make any adjustments necessary
Working on the reappraisal of farm buildings if possible.

Assessment Actions Planned for Assessment Year 2010
Residential: Review sales make any adjustments necessary
Commercial: Review sales make any adjustments necessary
Agricultural: Review sales make any adjustments necessary

Joyce Sock
Boone County Assessor

Date

## 2008 Assessment Survey for Boone County

## I. General Information

## A. Staffing and Funding Information

| 1. | Deputy(ies) on staff |
| :--- | :--- |
| 2. | Appraiser(s) on staff |
|  | 0 |
| 3. | Other full-time employees |
|  | 1 |
| 4. | Other part-time employees |
|  | 0 |
| 5. | Number of shared employees |
|  | 0 |
| 6. | Assessor's requested budget for current fiscal year |
|  | $\$ 96,985$ |
| 7. | Part of the budget that is dedicated to the computer system |
|  | \$1,500 from budget goes to data processing costs. MIPS is paid by County Board. |
| 8. | Adopted budget, or granted budget if different from above |
|  | \$96,985 |
| 9. | Amount of the total budget set aside for appraisal work |
|  | N/A |
| 10. | Amount of the total budget set aside for education/workshops |
| $\$ 2,500$ |  |
| 11. | Appraisal/Reappraisal budget, if not part of the total budget |
|  | \$61,003 Total appraisal budget includes $\$ 48,000$ for contract appraiser, \$3,500 for <br> pick-up work, and the balance for misc. <br> 12. |
|  | Other miscellaneous funds |
|  | N/A |


|  | Total budget |
| ---: | :--- |
| 13. | $\$ 157,988$ |$|$|  | Of the FY 2007 appraisal budget, $\$ 30,180$ was not used but has been rolled into the <br> 2008 appraisal budget. Of the FY 2007 general fund budget, $\$ 10,226$ was not used <br> and lost. |
| ---: | :--- |

## B. Computer, Automation Information and GIS

| 1. | Administrative software |
| :--- | :--- |
|  | MIPS County Solutions |
| 2. | CAMA software |
| 3. | CAMA 2000 |
|  | Cadastral maps: Are they currently being used? |
| 4. | Who maintains the Cadastral Maps? |
|  | Assessor and Staff |
| 5. | Does the county have GIS software? |
|  | no |
| 6. | Who maintains the GIS software and maps? |
|  | Clerical staff -Lori does maps |
| 7. | Personal Property software: |
|  | MIPS County Solutions |

## 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? |
| :--- | :--- |
| 4. | all |
|  | 1999 |

## D. Contracted Services

| 1. | Appraisal Services |
| :--- | :--- |
|  | Blaser Appraisal -for valuation projects <br> William Scarlett -is a part time per parcel contract for pick-up work only |
| 2. | Other services |
| none |  |

## Certification

This is to certify that the 2008 Reports and Opinions of the Property Tax Administrator have been sent to the following:
-Five copies to the Tax Equalization and Review Commission, by hand delivery.

- One copy to the Boone County Assessor, by certified mail, return receipt requested, 70062760000063875388.

Dated this 7th day of April, 2008.


[^0]:    * Department of Property Assessment \& Taxation Calculates

[^1]:     outbuildings is shown in line 7.

