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## 2009 Commission Summary

18 Clay

## Residential Real Property - Current

| Number of Sales | 152 | COD | 19.23 |
| :--- | ---: | :--- | ---: |
| Total Sales Price | $\$ 8,413,771$ | PRD | 109.27 |
| Total Adj. Sales Price | $\$ 8,417,771$ | COV | 37.32 |
| Total Assessed Value | $\$ 8,301,765$ | STD | 40.22 |
| Avg. Adj. Sales Price | $\$ 55,380$ | Avg. Absolute Deviation | 18.80 |
| Avg. Assessed Value | $\$ 54,617$ | Average Assessed Value <br> of the Base | $\$ 46,603$ |
| Median | 98 | Wgt. Mean | 99 |
| Mean | 108 | Max | 440 |
| Min | 15.46 |  |  |

## Confidenence Interval - Current

| $95 \%$ Median C.I | 96.37 to 99.17 |
| :--- | ---: |
| $95 \%$ Mean C.I | 101.37 to 114.16 |
| $95 \%$ Wgt. Mean C.I | 95.47 to 101.77 |

$\%$ of Value of the Class of all Real Property Value in the County 20.47
$\%$ of Records Sold in the Study Period 4.41
$\%$ of Value Sold in the Study Period 5.17

## Residential Real Property - History

| Year | Number of Sales | Median | COD | PRD |
| ---: | :---: | :---: | :---: | ---: |
| $\mathbf{2 0 0 8}$ | 194 | 97 | 18.45 | 108.87 |
| $\mathbf{2 0 0 7}$ | 195 | 96 | 25.26 | 111.87 |
| $\mathbf{2 0 0 6}$ | 155 | 97 | 16.1 | 105.08 |
| $\mathbf{2 0 0 5}$ | 170 | 98 | 16.87 | 104.96 |

## 2009 Commission Summary

## 18 Clay

## Commercial Real Property - Current

| Number of Sales | 27 | COD | 11.96 |
| :--- | ---: | :--- | ---: |
| Total Sales Price | $\$ 1,117,147$ | PRD | 102.01 |
| Total Adj. Sales Price | $\$ 1,142,424$ | COV | 23.58 |
| Total Assessed Value | $\$ 1,138,495$ | STD | 23.97 |
| Avg. Adj. Sales Price | $\$ 42,312$ | Avg. Absolute Deviation | 11.55 |
| Avg. Assessed Value | $\$ 42,166$ | Average Assessed Value <br> of the Base | $\$ 85,495$ |
| Median | 97 | Wgt. Mean | 100 |
| Mean | 102 | Max | 196 |
| Min | 71 |  |  |

## Confidenence Interval - Current

| $95 \%$ Median C.I | 93.34 to 99.72 |
| :--- | ---: |
| $95 \%$ Mean C.I | 92.18 to 111.15 |
| $95 \%$ Wgt. Mean C.I | 91.48 to 107.83 |


| $\%$ of Value of the Class of all Real Property Value in the County | 7.67 |
| :--- | :--- |
| $\%$ of Records Sold in the Study Period | 3.84 |
| $\%$ of Value Sold in the Study Period | 1.89 |

## Commercial Real Property - History

| Year | Number of Sales | Median | COD | PRD |
| ---: | :---: | :---: | ---: | ---: |
| $\mathbf{2 0 0 8}$ | 28 | 94 | 14.7 | 105.19 |
| $\mathbf{2 0 0 7}$ | 43 | 99 | 27.85 | 137.89 |
| $\mathbf{2 0 0 6}$ | 45 | 98 | 23.24 | 139.65 |
| $\mathbf{2 0 0 5}$ | 45 | 98 | 19.21 | 133.52 |

## 2009 Commission Summary

## 18 Clay

Agricultural Land - Current

| Number of Sales | 45 | COD | 19.62 |
| :--- | ---: | :--- | ---: |
| Total Sales Price | $\$ 15,183,246$ | PRD | 106.20 |
| Total Adj. Sales Price | $\$ 15,621,246$ | COV | 24.60 |
| Total Assessed Value | $\$ 10,532,990$ | STD | 17.62 |
| Avg. Adj. Sales Price | $\$ 347,139$ | Avg. Absolute Deviation | 14.10 |
| Avg. Assessed Value | $\$ 234,066$ | Average Assessed Value |  |
| of the Base | $\$ 177,742$ |  |  |
| Median | 72 | Wgt. Mean |  |
| Mean | 72 | Max | 67 |
| Min | 42.83 |  | 113.25 |

## Confidenence Interval - Current

| $95 \%$ Median C.I | 64.72 to 78.49 |
| :--- | :--- |
| $95 \%$ Mean C.I | 66.46 to 76.75 |
| $95 \%$ Wgt. Mean C.I | 61.36 to 73.49 |


| \% of Value of the Class of all Real Property Value in the County | 71.85 |
| :--- | ---: |
| $\%$ of Records Sold in the Study Period | 1.42 |
| $\%$ of Value Sold in the Study Period | 4.15 |


| Agricultural Land - History |  |  |  |
| :---: | :---: | :---: | ---: |
|  | Number of Sales | Median | COD | PRD

Opinions

# 2009 Opinions of the Property Tax Administrator for Clay County 

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

## Residential Real Property

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

## Commercial Real Property

It is my opinion that the level of value of the class of commercial real property in Clay County is $97.00 \%$ of actual value. It is my opinion that the quality of assessment for the class of commercial real property in Clay County is in compliance with generally accepted mass appraisal practices.

## Agricultural Land or Special Valuation of Agricultural Land

It is my opinion that the level of value of the class of agricultural or special value land in Clay County is $72.00 \%$ of actual value. It is my opinion that the quality of assessment for the class of agricultural land in Clay County is in compliance with generally accepted mass appraisal practices.

Dated this 7th day of April, 2009.


Ruth A. Sorensen<br>Property Tax Administrato

## PAD 2009 Preliminary Statistics



## PAD 2009 Preliminary Statistics

## RESIDENTIAL

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


Exhibit 18 Page 6

## PAD 2009 Preliminary Statistics




## PAD 2009 Preliminary Statistics

## Type: Qualified

Date Range: 07/01/2006 to 06/30/2008 Posted Before: 01/22/2009


Exhibit 18 Page 9

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

## Residential

The Clay County staff physically reviewed the towns of Harvard, Ong and Verona Village. The residential areas of Inland, Lynn, Lewis and Sutton townships were also physically reviewed. All "No Trespassing" signs were honored. The staff"s physical review consisted of visiting each property with a copy of the record card, physically inspecting all property from the outside and taking pictures of each improvement. Updates of the condition were made to improvements, measurements of additions were made and deletions noted according to the on-site review. Owners were interviewed at the time of the review if possible. If the owner was not available, the Clay County staff left a questionnaire with the changes to the property assessment and noted if additional information was needed from the owner. The number of urban properties reviewed was 613.

As each township and town was reviewed new property cards were made for each parcel. All information pertinent to the property was updated. A sketch of the house was put in the parcel folder along with a photo page if the property consisted of the house with outbuildings. The picture of the house was printed on the parcel card. Lots in the towns of Harvard, Ong and Verona were valued by square foot vs. front foot. All lots being farmed were valued by current use and updated per acre value.

The Clay County Assessor reviewed all sales by sending questionnaires to the buyer and seller. If there was no response, a follow-up call was made to gather as much information about the sale as possible. A spreadsheet analysis of all sales within the study period was completed by location. As a result the economic was removed from all house/garage in the rural areas. Building sites were increased to $\$ 2000$ per acre. Harvard Courts remaining residences were compared by condition and depreciation.

The Clay County Assessor and Deputy did all permit and pickup work. All was completed in a timely manner.

# 2009 Assessment Survey for Clay County 

## Residential Appraisal Information

(Includes Urban, Suburban and Rural Residential)

| 1. | Data collection done by: |
| :---: | :---: |
|  | ASSESSOR/STAFF |
| 2. | Valuation done by: |
|  | ASSESSOR/STAFF WITH ASSESSOR RESPONSIBLE FOR FINAL VALUE |
| 3. | Pickup work done by whom: |
|  | ASSESSOR \& DEPUTY |
| 4. | What is the date of the Replacement Cost New data (Marshall-Swift) that are used to value this property class? |
|  | 6-2000 |
| 5. | What was the last year a depreciation schedule for this property class was developed using market-derived information? |
|  | 2000 |
| 6. | What approach to value is used in this class or subclasses to estimate the market value of properties? |
|  | MARKET OR SALES COMPARISON APPROACH |
| 7. | Number of Market Areas/Neighborhoods/Assessor Locations? |
|  | 3 |
| 8. | How are these Market Areas/Neighborhoods/Assessor Locations defined? |
|  | LOCATION |
| 9. | Is "Market Area/Neighborhoods/Assessor Locations" a unique usable valuation grouping? If not, what is a unique usable valuation grouping? |
|  | YES |
| 10. | Is there unique market significance of the suburban location as defined in Reg. 10-001.07B? (Suburban shall mean a parcel of real estate property located outside of the limits of an incorporated city or village, but within the legal jurisdiction of an incorporated city or village.) |
|  | NO SUBURBAN |
| 11. | Are dwellings on agricultural parcels and dwellings on rural residential parcels valued in a manner that would provide the same relationship to the market? Explain? |
|  | YES, THERE IS NO DIFFERENCE SHOWN IN MARKET BETWEEN THE TWO. IF SO AN ECONOMIC FACTOR WOULD BE USED. |

Residential Permit Numbers:

| Permits | Information Statements | Other | Total |
| :---: | :---: | :---: | :---: |
| $\mathbf{1 0 5}$ | $\mathbf{5 8}$ | $\mathbf{1 7 1}$ | $\mathbf{3 3 4}$ |




| LOCATIONS: UR |
| :--- |
| RANGE |
| 1 |
| 3 |
|  |
|  |






## Residential Real Property

## I. Correlation

RESIDENTIAL:The calculated median indicates that the level of value for residential real property in Clay County is $98 \%$ This is supported by the trended preliminary ratio as well as the detailed assessment actions. This county is committed to improving their assessment practices and valuation uniformity in the county.

Clay County has long had excellent cyclical physical inspection. They are diligent in annually physically inspecting, measuring, photographing and updating their records. The Assessor has done an excellent job in cross training her staff to be able to handle all facets of the job.

Clay County is committed to moving forward technologically. They have begun the process of implementing a GIS program and offered the personal property schedules online this year.

Clay County has established sales verification procedures to identify any sales that should be excluded from use in setting values. They should be commended for their diligence, willingness to move forward technologically, and solid assessment practices.

## II. Analysis of Percentage of Sales Used

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

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

|  | Total Sales | Qualified Sales | Percent Used |
| :---: | :---: | :---: | :---: |
| 2009 | 326 | 152 | 46.63 |
| 2008 | 365 | 194 | 53.15 |
| 2007 | 350 | 195 | 55.71 |
| 2006 | 305 | 155 | 50.82 |
| 2005 | 285 | 170 | 59.65 |

RESIDENTIAL:The number of qualified residential sales in Clay County has declined the past two years. As well, over the course of the two study years, the most recent year has 45 fewer total sales than the first year reflecting a decline in the residential market activity. Of these total sales, 24 of them were removed for having been substantially changed since the date of the sale. The remaining disqualified sales are a mixture of family sales, foreclosure and other legal actions, estate planning and estate settlements. Clay County is diligent in their sales review. Questionnaires are sent to both the buyer and the seller, if the questionnaire is not returned, follow up phone calls are made to both parties. The Assessor also physically inspected each sale.

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

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

## Adjusting for Selective Reappraisal

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

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

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

 Continued|  | Preliminary <br> Median | \% Change in Assessed <br> Value (excl. growth) | Trended <br> Preliminary Ratio | R\&O <br> Median |
| :---: | :---: | :---: | :---: | :---: |
| 2009 | 98 | 1.91 | 100 | 98 |
| 2008 | 97.22 | -2.01 | 95 | 97.07 |
| 2007 | 93 | 13.22 | 105 | 96 |
| 2006 | 95 | 11.23 | 105 | 97 |
| 2005 | 93 | 10.01 | 103 | 98 |

RESIDENTIAL:Table 3 illustrates that the residential values when trended from the previous year arrive at a ratio very similar to the R \& O Ratio. The conclusion may be drawn that the residential population and the residential sales were treated uniformly. The trended ratio offers strong support for the calculated level of value at $98 \%$ of market and either the calculated ratio or the trended ratio could be used to call a level of value for residential property in Clay County.

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

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

## Comparison of Average Value Changes

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

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

\% Change in Total
Assessed Value in the Sales File
\% Change in Total Assessed
Value (excl. growth)

| 0 | 2009 | 1.91 |
| :---: | :---: | :---: |
| 2.20 | 2008 | -2.01 |
| 3.17 | 2007 | 7.47 |
| 4.86 | 2006 | 11.23 |
| 6.96 | 2005 | 10.01 |

RESIDENTIAL:Table 4 shows no percentage change in the sales file while there was a slight increase in the residential base for Clay County. This increase may be attributed to the diligent physical cyclical inspection that has been in place for many years in Clay County. According to the residential assessment actions the towns of Harvard, Ong and Verona were inspected. Property conditions were updated, building sites were increased and lots in town were valued by square foot. These towns only accounted for 27 of the 152 qualified residential sales.

## 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 | 98 | 99 | 108 |

RESIDENTIAL:A review of Table 5 indicates the median calculating to $98 \%$ and the weighted mean very close at $99 \%$. The mean, being more susceptible to outliers, is higher at $108 \%$. A review of the statistical page shows these outliers with the minimum sales ratio at $15.46 \%$ and the maximum sales ratio at $440.09 \%$. It is the policy of the Clay County Assessor to use every possible sale and she is diligent in her sales verification. The median and weighted mean, being within $1 \%$ of each other, give credibility to the calculated statistical 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 | 19.23 | 109.27 |
| Difference | 4.23 | 6.27 |

RESIDENTIAL:Table 6 accurately reflects that the COD and PRD are both above the acceptable range for qualitative measures, but not excessively. This is reflective of the diligent cyclical physical inspection in Clay County. A review of the qualified residential statistics and the residential assessment actions show the towns most recently inspected have qualitative measures within or close to within the acceptable range as would be expected with recent physical inspection. A further review of the residential statistics shows the qualitative measures being negatively affected by low dollar sales with 22 sales having a sale price of under $\$ 10,000$. Although the measures are above the required standards, the assessment practices in Clay County give confidence to the fact that the residential properties are being treated in a uniform and proportionate manner.

## 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 | 152 | 152 | 0 |
| Median | 98 | 98 | 0 |
| Wgt. Mean | 98 | 99 | 1 |
| Mean | 108 | 108 | 0 |
| COD | 20.07 | 19.23 | -0.84 |
| PRD | 109.81 | 109.27 | -0.54 |
| Minimum | 14.41 | 15.46 | 1.05 |
| Maximum | 440.09 | 440.09 | 0.00 |

RESIDENTIAL:There were no changes in the number of sales between the preliminary statistics and the $\mathrm{R} \& \mathrm{O}$ Statistics. The statistics accurately reflect the residential assessment actions taken in Clay County. Minimal changes occurred due to the routine cyclical physical inspection and sales verification.

## VIII. Trended Ratio Analysis

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

| R\&O Statistics |
| :--- |
| Number of Sales 152 Trended Ratio Difference <br> Median 98 122 30 <br> Wgt. Mean 99 101 -3 <br> Mean 108 101 -2 <br> COD 19.23 115 -7 <br> PRD 109.27 114.37 -5.10 <br> Minimum 15.46 35.61 -20.15 <br> Maximum 440.09 563.53 -123.44 |

In January of 2009, the Field Liaison went to Clay County. Historical values were not available online or in the computer system. Certified tax rolls were obtained from the Clay County Treasurer. The Field Liaison went through each qualified residential sale and obtained the certified assessed valuation for the year preceding the sale. For example, for a sale that occurred in the calendar year 2006 the 2005 certified assessed valuation was recorded. Sales that were substantially changed, as documented by the assessor, and sales where there was no preceding year's valuation, land that had been split away from a different parcel, and valuations that were adjusted by the County Board of Equalization were discarded for this Trending analysis. Values were entered into a spreadsheet. These values were then trended by the percentage of movement in the base (abstract) as documented in the $\mathrm{R} \& \mathrm{O}$ for each subsequent year including 2009. Ratios were run using the trended assessed values and the adjusted sale prices. A Median was run from these ratios and the results are documented in the adjoining table. This trended median for qualified residential is $3.57 \%$ different than the calculated $\mathrm{R} \& \mathrm{O}$ median and just slightly higher than the acceptable range. There is nothing to suggest that the sales file is not representative of the population in Clay County.

## PAD 2009 Preliminary Statistics




## PAD 2009 Preliminary Statistics

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



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


## PAD 2009 Preliminary Statistics

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


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

## Commercial

The Clay County staff physically reviewed a total of 118 commercial parcels in the townships of Inland, Lynn, Lewis and Sutton and also the towns of Harvard and Ong. The staff's physical review consisted of visiting each property with a copy of the record card, physically inspecting all property from the outside, and taking pictures of all improvements. Improvements no longer physically there were deleted from the record card. New additions were referred to the contract appraiser if needed. Owners were interviewed at the time of the inspection, if possible. If the owner was not available, a follow up phone call or letter was sent to gather the needed information. New property cards with the current pictures and information were made and put in folders along with new assessment sheets. An audit of the past appraisal commercial cards was completed to ensure accuracy and uniformity of current records. This will be ongoing until the review cycle has been completed. Any discrepancies were referred to the contract appraiser for review.

The Clay County Assessor reviewed all sales by sending questionnaires to the grantor and grantee. If there was no response, a follow-up phone call was made to gather as much information about the sale as possible. This information was shared with the contract appraiser. If needed, a physical review was made to further process the sale information. An analysis of sales and market areas was done. Potential areas to review further were recommended and discussed with the contract appraiser. Maintenance work was done by the contract appraiser consisting of reviewing sales and neighborhoods as well as spreadsheet analysis and adjustments to valuation according to the market.

Assessment of all new commercial construction and most pickup work was made by the contract appraiser. Some pickup work was done by the assessor and deputy. All statutory duties were completed in a timely manner.

# 2009 Assessment Survey for Clay County 

## Commercial/Industrial Appraisal Information

| 1. | Data collection done by: |
| :---: | :---: |
|  | ASSESSOR/STAFF NEW CONSTRUCTION/MAINTENANCE-APPRAISER |
| 2. | Valuation done by: |
|  | ASSESSOR/APPRAISER WITH ASSESSOR RESPONSIBLE FOR FINAL VALUE |
| 3. | Pickup work done by whom: |
|  | ASSESSOR/DEPUTY/APPRAISER |
| 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 a depreciation schedule for this property class was developed using market-derived information? |
|  | 2004 FOR 2005 |
| 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? |
|  | 2004 FOR 2005 |
| 7. | What approach to value is used in this class or subclasses to estimate the market value of properties? |
|  | MARKET/SALES COMPARISON WITH SOME INCOME APPROACH |
| 8. | Number of Market Areas/Neighborhoods/Assessor Locations? |
|  | 3 |
| 9. | How are these Market Areas/Neighborhoods/Assessor Locations defined? |
|  | LOCATION |
| 10. | Is "Market Area/Neighborhood/Assessor Location" a unique usable valuation grouping? If not, what is a unique usable valuation grouping? |
|  | YES |
| 11. | Do the various subclasses of Commercial Property such as convenience stores, warehouses, hotels, etc. have common value characteristics? |
|  | YES |
| 12. | Is there unique market significance of the suburban location as defined in Reg. 10-001.07B? (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.) |
|  | NO SUBURBAN |

Commercial Permit Numbers:

| Permits | Information Statements | Other | Total |
| :---: | :---: | :---: | :---: |
| 14 | 12 | 43 | 69 |

# Type: Qualified <br> Date Range: 07/01/2005 to 06/30/2008 Posted Before: 01/23/2009 



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


# Type: Qualified <br> Date Range: 07/01/2005 to 06/30/2008 Posted Before: 01/23/2009 

State Stat Run

|  |  |  |  |  |  | Date Rang | , | 1/2005 to 06/30/2 | 08 Posted | ore. 01/23/2 | , |  |  | ( $!:$ AVTot=0) |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | NUMBE | f Sale |  | 27 | MEDIAN: | 97 |  | COV: | 23.58 | 95\% | dian | C.I.: 93.3 | to 99.72 | (!: Derived) |
|  | TOTAL S | s Pric |  | , 147 | WGT. MEAN: | 100 |  | STD: | 23.97 | 95\% Wg | Mean | C.I.: 91.4 | to 107.83 |  |
| TOTA | L Adj. S | s Pric |  | , 424 | MEAN : | 102 |  | AVG.ABS.DEV: | 11.55 |  | Mean | C.I.: 92. | to 111.15 |  |
| TO | AL Asse | d Valu |  | , 495 |  |  |  |  |  |  |  |  |  |  |
| AVG | Adj. S | s Pric |  | , 312 | COD : | 11.96 | MAX | Sales Ratio: | 196.05 |  |  |  |  |  |
|  | G. Asse | d Valu |  | , 166 | PRD : | 102.01 | MIN | Sales Ratio: | 71.11 |  |  |  | Printed: 03/06/ | 9 12:44:10 |
| YEAR BUILT |  |  |  |  |  |  |  |  |  |  |  |  | Avg. Adj. | Avg. |
| RANGE |  | COUNT | MEDIAN | MEAN | WGT. MEAN | COD |  | PRD | MIN | MAX | 95\% M | Median C.I. | Sale Price | Assd Val |
| 0 OR Blank |  | 4 | 98.79 | 106.67 | 94.58 | 29.89 |  | 112.78 | 71.11 | 158.00 |  | N/A | 53,803 | 50,887 |
| Prior TO 1860 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 1860 TO 1899 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 1900 то 1919 |  | 5 | 95.96 | 94.57 | 95.45 | 1.76 |  | 99.08 | 90.89 | 96.55 |  | N/A | 24,500 | 23,386 |
| 1920 TO 1939 |  | 2 | 98.26 | 98.26 | 98.30 | 0.26 |  | 99.96 | 98.00 | 98.51 |  | N/A | 7,200 | 7,077 |
| 1940 TO 1949 |  | 9 | 97.61 | 98.29 | 98.08 | 5.90 |  | 100.22 | 86.87 | 113.00 | 93.16 | 6 to 108.60 | 46,926 | 46,023 |
| 1950 TO 1959 |  | 2 | 88.20 | 88.20 | 91.27 | 5.70 |  | 96.64 | 83.17 | 93.23 |  | N/A | 40,375 | 36,850 |
| 1960 TO 1969 |  | 1 | 196.05 | 196.05 | 196.05 |  |  |  | 196.05 | 196.05 |  | N/A | 36,657 | 71,865 |
| 1970 то 1979 |  | 1 | 99.93 | 99.93 | 99.93 |  |  |  | 99.93 | 99.93 |  | N/A | 68,000 | 67,955 |
| 1980 TO 1989 |  | 2 | 99.09 | 99.09 | 98.56 | 0.64 |  | 100.53 | 98.45 | 99.72 |  | N/A | 52,532 | 51,775 |
| 1990 TO 1994 |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 1995 TO 1999 |  | 1 | 93.65 | 93.65 | 93.65 |  |  |  | 93.65 | 93.65 |  | N/A | 77,500 | 72,575 |
| 2000 TO Pres | ent |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  | 27 | 96.55 | 101.66 | 99.66 | 11.96 |  | 102.01 | 71.11 | 196.05 | 93.34 | 34 to 99.72 | 42,312 | 42,166 |
| SALE PRICE |  |  |  |  |  |  |  |  |  |  |  |  | Avg. Adj. | Avg. |
| RANGE |  | COUNT | MEDIAN | MEAN | WGT. MEAN | COD |  | PRD | MIN | MAX | 95\% M | Median C.I. | Sale Price | Assd Val |
| Low \$ |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 1 TO | 4999 | 2 | 93.51 | 93.51 | 93.35 | 2.80 |  | 100.17 | 90.89 | 96.13 |  | N/A | 4,250 | 3,967 |
| 5000 TO | 9999 | 4 | 99.12 | 113.56 | 110.92 | 15.44 |  | 102.38 | 98.00 | 158.00 |  | N/A | 7,350 | 8,152 |
| Total \$ |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
| 1 TO | 9999 | 6 | 98.26 | 106.88 | 106.98 | 12.08 |  | 99.90 | 90.89 | 158.00 | 90.89 | 9 to 158.00 | 6,316 | 6,757 |
| 10000 TO | 29999 | 5 | 93.16 | 89.88 | 90.63 | 10.23 |  | 99.17 | 71.11 | 108.60 |  | N/A | 19,068 | 17,281 |
| 30000 TO | 59999 | 6 | 95.28 | 111.19 | 107.90 | 20.69 |  | 103.05 | 86.87 | 196.05 | 86.87 | 7 to 196.05 | 43,901 | 47,368 |
| 60000 TO | 99999 | 9 | 97.72 | 100.44 | 100.28 | 5.15 |  | 100.16 | 93.23 | 114.40 | 93.65 | 5 to 113.00 | 69,530 | 69,726 |
| 100000 TO | 149999 | 1 | 83.17 | 83.17 | 83.17 |  |  |  | 83.17 | 83.17 |  | N/A | 120,000 | 99,800 |
|  |  |  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  | 27 | 96.55 | 101.66 | 99.66 | 11.96 |  | 102.01 | 71.11 | 196.05 | 93.34 | 34 to 99.72 | 42,312 | 42,166 |

# Type: Qualified <br> Date Range: 07/01/2005 to 06/30/2008 Posted Before: 01/23/2009 



PAD 2009 R\&O Statistics
Type: Qualified
NUMBER of Sales: TOTAL Sales Price: TOTAL Adj.Sales Price: TOTAL Assessed Value:
AVG. Adj. Sales Price
AVG. Assessed Value:

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



## Commerical Real Property

## I. Correlation

COMMERCIAL:The calculated median indicates that the level of value for commercial real property in Clay County is $97 \%$ This is supported by the trended preliminary ratio as well as the detailed assessment actions. This county is committed to improving their assessment practices and valuation uniformity in the county.

Clay County has long had excellent cyclical physical inspection. They are diligent in annually physically inspecting, measuring, photographing and updating their records. The Assessor has done an excellent job in cross training her staff to be able to handle all facets of the job.

Clay County is committed to moving forward technologically. They have begun the process of implementing a GIS program and offered the personal property schedules online this year. Clay County employs a contract appraiser who helps with the commercial property maintenance valuation.

Clay County has established sales verification procedures to identify any sales that should be excluded from use in setting values. They should be commended for their diligence, willingness to move forward technologically, and solid assessment practices.

## II. Analysis of Percentage of Sales Used

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

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

|  | Total Sales | Qualified Sales | Percent Used |
| :---: | :---: | :---: | :---: |
| 2009 | 68 | 27 | 39.71 |
| 2008 | 63 | 28 | 44.44 |
| 2007 | 72 | 43 | 59.72 |
| 2006 | 75 | 45 | 60.00 |
| 2005 | 74 | 45 | 60.81 |

COMMERCIAL:After a decrease in the total number of sales from July 1, 2006 through June 30, 2007, the total number of commercial sales has risen to be more comparable to previous years. Of these total sales, 21 of them were removed for having been substantially changed since the date of the sale. The remaining disqualified sales are a mixture of partial interest sales to partners, sales to exempt entities, family sales and legal action. Clay County is diligent in their sales review. Questionnaires are sent to both the buyer and the seller, if the questionnaire is not returned, follow up phone calls are made to both parties. The Assessor also physically inspects each sale.

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

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

## Adjusting for Selective Reappraisal

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

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

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

 Continued|  | Preliminary <br> Median | \% Change in Assessed <br> Value (excl. growth) | Trended <br> Preliminary Ratio | R\&O <br> Median |
| :---: | :---: | :---: | :---: | :---: |
| 2009 | 98 | 1.48 | 99 | 97 |
| 2008 | 94.94 | 0.26 | 95 | 93.72 |
| 2007 | 98 | 0.73 | 99 | 99 |
| 2006 | 97 | 8.42 | 105 | 98 |
| 2005 | 98 | 23.67 | 122 | 98 |

COMMERCIAL:Table 3 illustrates that the commercial values when trended from the previous year arrive at a ratio similar to the $\mathrm{R} \& \mathrm{O}$ Ratio. The slight disproportionate movement may be attributed to the commercial maintenance work being done in the county by the contract appraiser. There were only 27 commercial sales in the county but the contract appraiser does borrow sales from surrounding counties to ensure commercial valuations are at an acceptable level of value even though there may be no sales to represent the type of commercial property in the Clay County sales file. The conclusion may be drawn that the commercial population and the commercial sales were treated uniformly. The trended ratio offers support for the calculated level of value at $97 \%$ of market and either the calculated ratio or the trended ratio could be used to call a level of value for commercial property in Clay County.

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

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

## Comparison of Average Value Changes

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

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

| \% Change in Total <br> Assessed Value in the Sales File |
| :---: |
| -2.8 2009 \% Change in Total Assessed <br> Value (excl. growth) <br> 11.99 2008 1.48 <br> 0.25 2007 0.26 <br> 1.90 2006 0.75 <br> 13.16 2005 8.42 |

COMMERCIAL:Table 4 reveals some disproportionate movement between the sales file and the commercial base of property. According to the commercial assessment actions the towns of Harvard and Ong were physically inspected and the contract appraiser did the commercial maintenance work. This maintenance consisted of reviewing sales and neighborhoods as well as spreadsheet analysis and adjustments to valuation according to the market. Ten sales were removed from the sales file after the review with the majority removed due to being substantially changed since the date of the sale. The adjustments to the sales file were slight but with only 27 qualified sales the movement in the sales file when compared to the commercial base of property appears slightly skewed.

## 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 | $\mathbf{9 7}$ | $\mathbf{1 0 0}$ | $\mathbf{1 0 2}$ |

COMMERCIAL:A review of Table 5 indicates all three measures of central tendency to be close. The median calculates to $97 \%$, the weighted mean close at $100 \%$ and the mean, being more susceptible to outliers, just slightly high at $102 \%$. A review of the statistical page shows these outliers with the minimum sales ratio at $71.11 \%$ and the maximum sales ratio at $196.05 \%$. It is the policy of the Clay County Assessor to use every possible sale and she is diligent in her sales verification. The three measures being close to each other give credibility to the calculated statistical 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 | 11.96 | 102.01 |
| Difference | 0.00 | 0.00 |

COMMERCIAL:Both qualitative measures reflect good assessment uniformity and they meet performance standards as outlined in the IAAO standards. The COD and PRD are within the prescribed parameters for the 2009 assessment year and reflect the assessment actions taken by the Clay County Assessor and contract appraiser to equalize the commercial property within the county.

## 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 | 37 | 27 | -10 |
| Median | 98 | 97 | -1 |
| Wgt. Mean | 98 | 100 | 2 |
| Mean | 134 | 102 | -32 |
| COD | 60.88 | 11.96 | -48.92 |
| PRD | 136.45 | 102.01 | -34.44 |
| Minimum | 46.70 | 71.11 | 24.41 |
| Maximum | $1,430.77$ | 196.05 | $-1,234.72$ |

COMMERCIAL:The above table reflects that ten sales were removed from the preliminary sales database. These sales included a partial interest sale and parcels that had substantially changed since the date of the sale. The $\mathrm{R} \& \mathrm{O}$ statistics accurately reflect the assessment actions taken for the commercial class of property in Clay County, including the first year of maintenance work by the contract appraiser.

## PAD 2009 Preliminary Statistics

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


## AGRICULTURAL UNIMPROVED

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


## PAD 2009 Preliminary Statistics

## AGRICULTURAL UNIMPROVED

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


91-0074
NonValid School
$\qquad$


## AGRICULTURAL UNIMPROVED

## Type: Qualified

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


## PAD 2009 Preliminary Statistics

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


## PAD 2009 Preliminary Statistics

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




91-0074
NonValid School
__ALL_

|  |  | 67 | 57.63 | 59.35 | 56.02 | 27.49 | 105.94 | 20.67 | 111.29 | 53.91 to 64.83 | 351,630 | 196,988 |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| ACRES IN SALERANGE |  |  |  |  |  |  |  |  |  |  | Avg. Adj. | Avg. |
|  |  | COUNT | MEDIAN | MEAN | WGT. MEAN | COD | PRD | MIN | MAX | 95\% Median C.I. | Sale Price | Assd Val |
| 0.01 TO | 10.00 | 1 | 20.67 | 20.67 | 20.67 |  |  | 20.67 | 20.67 | N/A | 750 | 155 |
| 10.01 TO | 30.00 | 1 | 111.29 | 111.29 | 111.29 |  |  | 111.29 | 111.29 | N/A | 27,500 | 30,605 |
| 30.01 то | 50.00 | 2 | 63.16 | 63.16 | 62.48 | 12.59 | 101.09 | 55.21 | 71.11 | N/A | 53,156 | 33,210 |
| 50.01 TO | 100.00 | 23 | 57.63 | 58.22 | 56.05 | 21.81 | 103.87 | 21.96 | 90.86 | 51.91 to 63.54 | 179,912 | 100,834 |
| 100.01 TO | 180.00 | 28 | 59.85 | 58.79 | 55.19 | 25.52 | 106.52 | 22.90 | 97.12 | 46.09 to 70.62 | 353,532 | 195,112 |
| 180.01 TO | 330.00 | 10 | 70.78 | 65.42 | 62.00 | 25.70 | 105.51 | 32.28 | 102.64 | 37.27 to 83.43 | 701,136 | 434,694 |
| 330.01 TO | 650.00 | 2 | 39.39 | 39.39 | 40.89 | 0.76 | 96.33 | 39.09 | 39.69 | N/A | 1,188,206 | 485,887 |
| ALL |  | 67 | 57.63 | 59.35 | 56.02 | 27.49 | 105.94 | 20.67 | 111.29 | 53.91 to 64.83 | 351,630 | 196,988 |
| MAJORITY LAND USE > 95\% |  |  |  |  |  |  |  |  |  |  | Avg. Adj. | Avg. |
| RANGE |  | COUNT | MEDIAN | MEAN | WGT. MEAN | COD | PRD | MIN | MAX | 95\% Median C.I. | Sale Price | Assd Val |
| DRY |  | 7 | 49.85 | 56.20 | 47.94 | 34.42 | 117.24 | 31.01 | 94.42 | 31.01 to 94.42 | 231,667 | 111,058 |
| DRY-N/A |  | 10 | 55.98 | 55.73 | 50.80 | 19.90 | 109.70 | 22.90 | 77.53 | 35.05 to 74.70 | 261,398 | 132,786 |
| GRASS |  | 2 | 21.32 | 21.32 | 21.95 | 3.03 | 97.10 | 20.67 | 21.96 | N/A | 75,055 | 16,475 |
| GRASS-N/A |  | 5 | 48.56 | 55.08 | 56.00 | 27.95 | 98.37 | 36.01 | 77.46 | N/A | 119,191 | 66,742 |
| IRRGTD |  | 15 | 64.75 | 64.09 | 57.37 | 22.17 | 111.71 | 33.20 | 90.86 | 47.38 to 77.49 | 413,234 | 237,063 |
| $\begin{gathered} \text { IRRGTD-N } / \mathrm{A} \\ \text { ALL_ } \end{gathered}$ |  | 28 | 61.93 | 62.37 | 57.92 | 24.62 | 107.67 | 32.28 | 111.29 | 51.91 to 70.62 | 442,106 | 256,084 |
|  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  | 67 | 57.63 | 59.35 | 56.02 | 27.49 | 105.94 | 20.67 | 111.29 | 53.91 to 64.83 | 351,630 | 196,988 |



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


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

## Agricultural

The Clay County staff physically reviewed the townships of Inland, Lynn, Lewis and Sutton. The staff's physical review consisted of visiting each property with a copy of the record card, physically inspecting all property from the outside, and taking pictures of all improvements. New additions were measured and assessed; other improvements no longer physically there were deleted from the record card. Owners were interviewed at the time of the inspection, if possible. If the owner was not available, the Clay County staff left a questionnaire with the changes made to the property assessment and noted if any additional information was needed from the owner. All "No Trespassing" signs were honored. In addition to land used gathered during physical inspection, certified acres and maps from the FSA office were used by requesting this information from the owner/renter, well permits as well as FSA and GIS digitals and NRD reports of irrigated acres were used. Parcels reviewed $=918$.

As each township was reviewed new property cards were made for each parcel. All information pertinent to the property was updated. A sketch of the house was put in the parcel folder along with a photo page of improvements. In addition a diagram of placement on property was included with a list of outbuildings with description, size and any information unique to the structure.

All rural acres, 25 acres or less, were reviewed to determine the highest and best use. All agland was assessed according to LB777. Implementation of the new soil survey is under way but not quite ready to use for assessment year 2009. The GIS has discovered a few new acres.

The Clay County Assessor reviewed all sales by sending questionnaires to the buyer and seller. If there was no response, a follow-up phone call was made to gather as much information about the sale as possible. A spreadsheet analysis of all usable sales within the study period was completed, analyzing existing and potential market areas. Ag land within city limits was also updated. The assessor also plotted agricultural sales within the study period with a visual analysis. This visual aid is available on a map for public viewing in the office.

All pickup work was completed by the Assessor and staff in a timely manner.

## 2009 Assessment Survey for Clay County

## Agricultural Appraisal Information

| 1. | Data collection done by: |
| :---: | :---: |
|  | ASSESSOR/STAFF |
| 2. | Valuation done by: |
|  | ASSESSOR/STAFF WITH ASSESSOR RESPONSIBLE FOR FINAL VALUE |
| 3. | Pickup work done by whom: |
|  | ASSESSOR \& DEPUTY |
| 4. | Does the county have a written policy or written standards to specifically define agricultural land versus rural residential acreages? |
|  | YES, 25 ACRES OR LESS IS CONSIDERED RURAL RESIDENTIAL |
| a. | How is agricultural land defined in this county? |
|  | BY LOCATION AND LAND USE |
| 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. | If the income approach was used, what Capitalization Rate was used? |
|  | N/A |
| 7. | What is the date of the soil survey currently used? |
|  | 1978 |
| 8. | What date was the last countywide land use study completed? |
|  | 2008 |
| a. | By what method? (Physical inspection, FSA maps, etc.) |
|  | PHYSICAL,FSA DIGITALS, GIS, WELL LISTS FROM NRD'S |
| b. | By whom? |
|  | ASSESSOR AND STAFF |
| c. | What proportion is complete / implemented at this time? |
|  | 100\% |
| 9. | Number of Market Areas/Neighborhoods/Assessor Locations in the agricultural property class: |
|  | 3 |
| 10. | How are Market Areas/Neighborhoods/Assessor Locations developed? |
|  | LOCATION-TOPOGRAPHY -SALES |
| 11. | In the assessor's opinion, are there any other class or subclass groupings, other than LCG groupings, that are more appropriate for valuation? <br> Yes or No NO |
| a. | If yes, list. |

12. In your opinion, what is the level of value of these groupings?
13. Has the county implemented (or is in the process of implementing) special valuation for agricultural land within the county?
NO

Agricultural Permit Numbers:

| Permits | Information Statements | Other | Total |
| :---: | :---: | :---: | :---: |
| 27 | $\mathbf{2 0}$ | $\mathbf{6 8}$ | $\mathbf{1 1 5}$ |

18 - CLAY COUNTY AGRICULTURAL UNIMPROVED

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


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

|  | NUMBER of Sales: | 45 |
| :--- | ---: | ---: |
| (AgLand) | TOTAL Sales Price: | $15,183,246$ |
| (AgLand) | TOTAL Adj.Sales Price: | $15,621,246$ |
| (AgLand) | TOTAL Assessed Value: | $10,532,990$ |
|  | AVG. Adj. Sales Price: | 347,138 |
|  | AVG. Assessed Value: | 234,066 |




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


18 - CLAY COUNTY AGRICULTURAL UNIMPROVED

|  |  | 45 |
| :--- | ---: | ---: |
| (AgLand) | NUMBER of Sales: | $45,183,246$ |
| (AgLand) | TOTALAdj.Sales Price: | $15,15,621,246$ |
| (AgLand) | TOTAL Assessed Value: | $10,532,990$ |
|  | AVG. Adj. Sales Price: | 347,138 |
|  | AVG. Assessed Value: | 234,066 |

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

| ASSESSED V <br> RANGE |  | COUNT | MEDIAN | MEAN | WGT. MEAN | COD | PRD | MIN | MAX | 95\% Median C.I. | Avg. Adj. <br> Sale Price | Avg. <br> Assd Val |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Low \$ |  |  |  |  |  |  |  |  |  |  |  |  |
| Total \$ |  |  |  |  |  |  |  |  |  |  |  |  |
| 10000 TO | 29999 | 1 | 103.56 | 103.56 | 103.56 |  |  | 103.56 | 103.56 | N/A | 27,500 | 28,480 |
| 30000 TO | 59999 | 2 | 71.97 | 71.97 | 71.40 | 9.07 | 100.79 | 65.44 | 78.49 | N/A | 53,156 | 37,952 |
| 60000 TO | 99999 | 7 | 72.16 | 68.67 | 65.22 | 15.25 | 105.28 | 45.41 | 91.82 | 45.41 to 91.82 | 137,266 | 89,525 |
| 100000 то | 149999 | 3 | 64.72 | 63.58 | 57.58 | 20.79 | 110.43 | 42.83 | 83.20 | N/A | 223,986 | 128,963 |
| 150000 то | 249999 | 13 | 70.02 | 68.30 | 64.30 | 15.96 | 106.21 | 43.65 | 97.90 | 53.15 to 78.79 | 275,934 | 177,431 |
| 250000 то | 499999 | 17 | 76.37 | 74.29 | 68.52 | 20.66 | 108.42 | 45.58 | 113.25 | 51.11 to 87.57 | 502,532 | 344,340 |
| 500000 + |  | 2 | 76.29 | 76.29 | 72.76 | 23.84 | 104.85 | 58.10 | 94.47 | N/A | 862,206 | 627,317 |
|  |  |  |  |  |  |  |  |  |  |  |  |  |
|  |  | 45 | 71.88 | 71.61 | 67.43 | 19.62 | 106.20 | 42.83 | 113.25 | 64.72 to 78.49 | 347,138 | 234,066 |

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





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


## Agricultural Land

## I. Correlation

AGRICULTURAL UNIMPROVED:The calculated median indicates that the level of value for agricultural unimproved real property in Clay County is $72 \%$ Although the tables indicate some issues with representativeness, it is believed that the calculated ratio is an accurate reflection of the agricultural level of value in Clay County.

This county is committed to improving their assessment practices and valuation uniformity in the county.
Clay County has long had excellent cyclical physical inspection. They are diligent in annually physically inspecting, measuring, photographing and updating their records. The Assessor has done an excellent job in cross training her staff to be able to handle all facets of the job.

Clay County is committed to moving forward technologically. They have begun the process of implementing a GIS program and offered the personal property schedules online this year.

Clay County has established sales verification procedures to identify any sales that should be excluded from use in setting values. They should be commended for their diligence, willingness to move forward technologically, and solid assessment practices.

## II. Analysis of Percentage of Sales Used

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

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

|  | Total Sales | Qualified Sales | Percent Used |
| :--- | :---: | :---: | :---: |
| 2009 | 152 | 45 | 29.61 |
| 2008 | 171 | 51 | 29.82 |
| 2007 | 181 | 82 | 45.30 |
| 2006 | 163 | 55 | 33.74 |
| 2005 | 141 | 70 | 49.65 |

AGRICULTURAL UNIMPROVED:The number of qualified unimproved agricultural sales in Clay County has declined the past two years. The percentage of sales used is consistent with the percentage used last year. Of the total sales, 43 of them were removed for having been substantially changed since the date of the sale. This would include sales that went from dry/grass to irrigated or parcels that were combined with other parcels. The remaining disqualified sales are a mixture of family sales, foreclosure and other legal actions, estate planning and estate settlements. Clay County is diligent in their sales review. Questionnaires are sent to both the buyer and the seller, if the questionnaire is not returned, follow up phone calls are made to both parties. The Assessor also physically inspected each sale.

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

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

## Adjusting for Selective Reappraisal

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

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

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

 Continued|  | Preliminary <br> Median | \% Change in Assessed <br> Value (excl. growth) | Trended <br> Preliminary Ratio | R\&O <br> Median |
| :---: | :---: | :---: | :---: | :---: |
| 2009 | $\mathbf{5 8}$ | $\mathbf{1 4 . 3 8}$ | $\mathbf{6 6}$ | $\mathbf{7 2}$ |
| 2008 | 65.71 | $\mathbf{9 . 9 6}$ | $\mathbf{7 2}$ | $\mathbf{7 3}$ |
| 2007 | 73 | $\mathbf{4 . 6 2}$ | $\mathbf{7 0}$ | $\mathbf{7 5}$ |
| 2006 | 74 | $\mathbf{8 . 0 0}$ | $\mathbf{8 0}$ | $\mathbf{7 9}$ |
| 2005 | 72 | 11.54 | $\mathbf{8 0}$ | $\mathbf{7 8}$ |

AGRICULTURAL UNIMPROVED:Table 3 indicates that there is a difference in the trended preliminary ratios and the calculated ratio. This can be attributed to the fact that the sales file is not completely representative of the agricultural land makeup in Clay County. According to the abstract the majority of the value of agricultural land in Clay County is from irrigated land. The sales file also contains a majority of irrigated land but also the market is strong for dry and grass land which are both slightly over-represented in the sales file causing the base of the agricultural land to not move as much as the sales file. Dry agricultural land increased across the county from $.5 \%$ to $25 \%$ depending on market area and grass values increased $4 \%$ to $40 \%$ also depending on market area thus causing the trended median to not move to the level of value shown by the calculated median.

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

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

## Comparison of Average Value Changes

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

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

| \% Change in Total | \% Change in Total Assessed |
| :---: | :---: |
| Value (excl. growth) |  |


| 19.15 | 2009 | 14.38 |
| :---: | :---: | :---: |
| 9.26 | 2008 | 9.96 |
| 7.58 | 2007 | -1.83 |
| 10.41 | 2006 | 8.00 |
| 10.06 | 2005 | 11.54 |

AGRICULTURAL UNIMPROVED:Table 4 indicates disproportionate movement between the sales file and the base of agricultural land in Clay County. As has been previously discussed, this uneven movement may be attributed to the over-representation of dry and grass sales in the salse file.

## 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 | 72 | 67 | 72 |

AGRICULTURAL UNIMPROVED:Of the three measures of central tendency, the median and the mean both calculate to the midpoint of the range at $72 \%$. The weighted mean is slightly lower at $67 \%$. A review of the statistical page shows outliers with the minimum sales ratio at $42.83 \%$ and the maximum sales ratio at $113.25 \%$. It is the policy of the Clay County Assessor to use every possible sale and she is diligent in her sales verification. These three measures are sufficiently close to give credibility to the calculated 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 | $\mathbf{1 9 . 6 2}$ | $\mathbf{1 0 6 . 2 0}$ |
| Difference | $\mathbf{0 . 0 0}$ | $\mathbf{3 . 2 0}$ |

AGRICULTURAL UNIMPROVED:A review of the qualitative measures indicates good assessment uniformity. The coefficient of dispersion is within the range and the price-related differential is slightly above the range. The qualitative measures indicate that the Clay County Assessor has valued agricultural property in Clay County uniformly.

## 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 | 59 | 45 | -14 |
| Median | 58 | 72 | 14 |
| Wgt. Mean | 58 | 67 | 9 |
| Mean | 60 | 72 | 12 |
| COD | 27.83 | 19.62 | -8.21 |
| PRD | 104.50 | 106.20 | 1.70 |
| Minimum | 20.67 | 42.83 | 22.16 |
| Maximum | 111.29 | 113.25 | 1.96 |

AGRICULTURAL UNIMPROVED:The above table reflects that fourteen sales were removed from the preliminary sales database. These sales included partial interest sales, parcels that are now irrigated and parcels that were combined with adjoining land. The $\mathrm{R} \& \mathrm{O}$ statistics accurately reflect the assessment actions taken for the agricultural class of property in Clay County.

| Total Real Property | Records : 7,315 | Value : 784,124,920 | Growth $6,241,765$ |
| ---: | :--- | :--- | :--- |
| Sum Lines 17, 25, \& 30 |  |  |  |


|  | Urban |  | SubUrban |  | Rural |  | Total |  | Growth |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Records | Value | Records | Value | Records | Value | Records | Value |  |
| 01. Res UnImp Land | 587 | 1,827,255 | 0 | 0 | 132 | 356,310 | 719 | 2,183,565 |  |
| 02. Res Improve Land | 2,243 | 7,243,325 | 0 | 0 | 466 | 10,693,835 | 2,709 | 17,937,160 |  |
| 03. Res Improvements | 2,254 | 100,084,470 | 0 | 0 | 473 | 40,386,895 | 2,727 | 140,471,365 |  |
| 04. Res Total | 2,841 | 109,155,050 | 0 | 0 | 605 | 51,437,040 | 3,446 | 160,592,090 | 1,812,331 |
| \% of Res Total | 82.44 | 67.97 | 0.00 | 0.00 | 17.56 | 32.03 | 47.11 | 20.48 | 29.04 |
|  |  |  |  |  |  |  |  |  |  |
| 05. Com UnImp Land | 140 | 775,485 | 0 | 0 | 17 | 159,780 | 157 | 935,265 |  |
| 06. Com Improve Land | 390 | 1,070,180 | 0 | 0 | 65 | 3,530,705 | 455 | 4,600,885 |  |
| 07. Com Improvements | 390 | 33,485,090 | 0 | 0 | 66 | 9,578,405 | 456 | 43,063,495 |  |
| 08. Com Total | 530 | 35,330,755 | 0 | 0 | 83 | 13,268,890 | 613 | 48,599,645 | 514,140 |
| \% of Com Total | 86.46 | 72.70 | 0.00 | 0.00 | 13.54 | 27.30 | 8.38 | 6.20 | 8.24 |
|  |  |  |  |  |  |  |  |  |  |
| 09. Ind UnImp Land | 0 | 0 | 0 | 0 | 11 | 50,600 | 11 | 50,600 |  |
| 10. Ind Improve Land | 0 | 0 | 0 | 0 | 78 | 579,165 | 78 | 579,165 |  |
| 11. Ind Improvements | 0 | 0 | 0 | 0 | 78 | 10,819,195 | 78 | 10,819,195 |  |
| 12. Ind Total | 0 | 0 | 0 | 0 | 89 | 11,448,960 | 89 | 11,448,960 | 130,005 |
| \% of Ind Total | 0.00 | 0.00 | 0.00 | 0.00 | 100.00 | 100.00 | 1.22 | 1.46 | 2.08 |
|  |  |  |  |  |  |  |  |  |  |
| 13. Rec UnImp Land | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |  |
| 14. Rec Improve Land | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |  |
| 15. Rec Improvements | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |  |
| 16. Rec Total | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 | 0 |
| \% of Rec Total | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 | 0.00 |
|  |  |  |  |  |  |  |  |  |  |
| $\begin{aligned} & \text { Res \& Rec Total } \\ & \text { \% of Res \& Rec Total } \end{aligned}$ | 2,841 | 109,155,050 | 0 | 0 | 605 | 51,437,040 | 3,446 | 160,592,090 | 1,812,331 |
|  | 82.44 | 67.97 | 0.00 | 0.00 | 17.56 | 32.03 | 47.11 | 20.48 | 29.04 |
| Com \& Ind Total | 530 | 35,330,755 | 0 | 0 | 172 | 24,717,850 | 702 | 60,048,605 | 644,145 |
| \% of Com \& Ind Total | 75.50 | 58.84 | 0.00 | 0.00 | 24.50 | 41.16 | 9.60 | 7.66 | 10.32 |
| 17. Taxable Total | 3,371 | 144,485,805 | 0 | 0 | 777 | 76,154,890 | 4,148 | 220,640,695 | 2,456,476 |
| \% of Taxable Total | 81.27 | 65.48 | 0.00 | 0.00 | 18.73 | 34.52 | 56.71 | 28.14 | 39.36 |

Exhibit 18 Page 83

Schedule II : Tax Increment Financing (TIF)

|  | Records | Urban <br> Value Base | Value Excess | Records | SubUrban Value Base | Value Excess |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| 18. Residential | 0 | 0 | 0 | 0 | 0 | 0 |
| 19. Commercial | 4 | 382,210 | 682,275 | 0 | 0 | 0 |
| 20. Industrial | 0 | 0 | 0 | 0 | 0 | 0 |
| 21. Other |  | 0 <br> Rural <br> Value Base | 0 <br> Value Excess | 0 <br> Records | $\begin{gathered} 0 \\ \text { Total } \\ \text { Value Base } \end{gathered}$ | 0 <br> Value Excess |
| 18. Residential | 0 | 0 | 0 | 0 | 0 | 0 |
| 19. Commercial | 0 | 0 | 0 | 4 | 382,210 | 682,275 |
| 20. Industrial | 0 | 0 | 0 | 0 | 0 | 0 |
| 21. Other | 0 | 0 | 0 | 0 | 0 | 0 |
| 22. Total Sch II |  |  |  | 4 | 382,210 | 682,275 |

Schedule III : Mineral Interest Records

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


| Schedule IV : Exempt Records : Non-Agricultural |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: |
|  | Urban Records | SubUrban Records | Rural Records | Total Records |
| 26. Producing | 381 | 0 | 154 | 535 |


| Schedule V : Agricultural Records |  |  |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Urban |  | SubUrban |  | Rural |  | Total |  |
|  | Records | Value | Records | Value | Records | Value | Records | Value |
| 27. Ag-Vacant Land | 0 | 0 | 0 | 0 | 2,466 | 397,401,920 | 2,466 | 397,401,920 |
| 28. Ag-Improved Land | 2 | 0 | 0 | 0 | 699 | 120,469,595 | 701 | 120,469,595 |
| 29. Ag Improvements | 2 | 68,545 | 0 | 0 | 699 | 45,544,165 | 701 | 45,612,710 |
| 30. Ag Total |  |  |  |  |  |  | 3,167 | 563,484,225 |

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|  | Urban |  |  | SubUrban |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Records | Acres | Value | Records | Acres | Value |
| 42. Game \& Parks | 0 | 0.00 | 0 | 0 | 0.00 | 0 |
|  | Records | Acres | Value | Records | Total Acres | Value |
| 42. Game \& Parks | 15 | 1,461.37 | 1,494,340 | 15 | 1,461.37 | 1,494,340 |


| Schedule VIII : Agricultural Records : Special Value |  |  |  |  |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Records | Urban Acres | Value | Records | SubUrban Acres | Value |
| 43. Special Value | 0 | 0.00 | 0 | 0 | 0.00 | 0 |
| 44. Recapture Value N/A |  |  | 0 Value | 0 Records |  |  |
| 43. Special Value | 0 | 0.00 | 0 | 0 | 0.00 | 0 |
| 44. Recapture Value | 0 | 0 | 0 | 0 | 0 | 0 |

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

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

| Irrigated | Acres | \% of Acres* | Value | \% of Value* | Average Assessed Value* |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 45. 1A1 | 25,860.73 | 25.85\% | 62,065,745 | 30.05\% | 2,400.00 |
| 46. 1A | 46,114.92 | 46.10\% | 101,684,015 | 49.23\% | 2,205.01 |
| 47. 2A1 | 10,436.96 | 10.43\% | 19,830,225 | 9.60\% | 1,900.00 |
| 48. 2A | 590.03 | 0.59\% | 958,855 | 0.46\% | 1,625.10 |
| 49.3A1 | 11,551.75 | 11.55\% | 16,750,050 | 8.11\% | 1,450.00 |
| 50.3A | 0.00 | 0.00\% | 0 | 0.00\% | 0.00 |
| 51.4A1 | 3,319.78 | 3.32\% | 3,485,775 | 1.69\% | 1,050.00 |
| 52. 4A | 2,168.68 | 2.17\% | 1,767,550 | 0.86\% | 815.03 |
| 53. Total | 100,042.85 | 100.00\% | 206,542,215 | 100.00\% | 2,064.54 |
| Dry |  |  |  |  |  |
| 54. 1D1 | 3,795.43 | 14.75\% | 5,560,430 | 18.39\% | 1,465.03 |
| 55. 1D | 11,243.95 | 43.69\% | 15,404,245 | 50.94\% | 1,370.00 |
| 56. 2D1 | 2,984.41 | 11.60\% | 3,581,280 | 11.84\% | 1,200.00 |
| 57. 2D | 579.88 | 2.25\% | 559,635 | 1.85\% | 965.09 |
| 58.3D1 | 3,974.35 | 15.44\% | 2,961,130 | 9.79\% | 745.06 |
| 59.3D | 0.00 | 0.00\% | 0 | 0.00\% | 0.00 |
| 60.4D1 | 2,159.94 | 8.39\% | 1,544,455 | 5.11\% | 715.05 |
| 61. 4D | 995.34 | 3.87\% | 627,060 | 2.07\% | 630.00 |
| 62. Total | 25,733.30 | 100.00\% | 30,238,235 | 100.00\% | 1,175.06 |
| Grass |  |  |  |  |  |
| 63. 1G1 | 886.01 | 0.00\% | 797,410 | 15.66\% | 900.00 |
| 64. 1G | 1,089.83 | 10.13\% | 801,110 | 15.73\% | 735.08 |
| 65. 2G1 | 1,050.97 | 9.77\% | 746,185 | 14.65\% | 710.00 |
| 66. 2G | 610.64 | 5.68\% | 406,155 | 7.97\% | 665.13 |
| 67.3G1 | 706.19 | 6.57\% | 363,770 | 7.14\% | 515.12 |
| 68. 3G | 0.00 | 0.00\% | 0 | 0.00\% | 0.00 |
| 69.4G1 | 1,596.53 | 14.84\% | 630,740 | 12.38\% | 395.07 |
| 70.4G | 4,815.16 | 44.77\% | 1,348,245 | 26.47\% | 280.00 |
| 71. Total | 10,755.33 | 100.00\% | 5,093,615 | 100.00\% | 473.59 |
| Irrigated Total | 100,042.85 | 72.02\% | 206,542,215 | 85.16\% | 2,064.54 |
| Dry Total | 25,733.30 | 18.53\% | 30,238,235 | 12.47\% | 1,175.06 |
| Grass Total | 10,755.33 | 7.74\% | 5,093,615 | 2.10\% | 473.59 |
| Waste | 2,266.07 | 1.63\% | 566,555 | 0.23\% | 250.02 |
| Other | 103.27 | 0.07\% | 95,750 | 0.04\% | 927.18 |
| Exempt | 3,773.27 | 2.72\% | 0 | 0.00\% | 0.00 |
| Market Area Total | 138,900.82 | 100.00\% | 242,536,370 | 100.00\% | 1,746.11 |

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Schedule IX : Agricultural Records : Ag Land Market Area Detail Market Area 2

| Irrigated | Acres | \% of Acres* | Value | \% of Value* | Average Assessed Value* |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 45. 1A1 | 33,405.32 | 30.61\% | 81,342,265 | 36.07\% | 2,435.01 |
| 46. 1A | 44,425.26 | 40.70\% | 99,512,540 | 44.13\% | 2,240.00 |
| 47. 2A1 | 11,307.69 | 10.36\% | 21,089,220 | 9.35\% | 1,865.03 |
| 48. 2A | 1,054.45 | 0.97\% | 1,861,175 | 0.83\% | 1,765.07 |
| 49.3A1 | 9,940.99 | 9.11\% | 14,464,475 | 6.41\% | 1,455.03 |
| 50.3A | 0.00 | 0.00\% | 0 | 0.00\% | 0.00 |
| 51.4A1 | 6,609.11 | 6.06\% | 5,485,580 | 2.43\% | 830.00 |
| 52. 4A | 2,405.46 | 2.20\% | 1,744,160 | 0.77\% | 725.08 |
| 53. Total | 109,148.28 | 100.00\% | 225,499,415 | 100.00\% | 2,065.99 |
| Dry |  |  |  |  |  |
| 54. 1D1 | 5,860.47 | 20.40\% | 7,823,970 | 24.54\% | 1,335.04 |
| 55. 1D | 11,752.24 | 40.91\% | 15,219,560 | 47.74\% | 1,295.03 |
| 56. 2D1 | 3,457.37 | 12.03\% | 3,803,110 | 11.93\% | 1,100.00 |
| 57. 2D | 573.94 | 2.00\% | 516,545 | 1.62\% | 900.00 |
| 58.3D1 | 4,252.97 | 14.80\% | 3,126,135 | 9.81\% | 735.05 |
| 59.3D | 0.00 | 0.00\% | 0 | 0.00\% | 0.00 |
| 60.4D1 | 2,200.46 | 7.66\% | 1,078,210 | 3.38\% | 489.99 |
| 61. 4D | 632.85 | 2.20\% | 310,120 | 0.97\% | 490.04 |
| 62. Total | 28,730.30 | 100.00\% | 31,877,650 | 100.00\% | 1,109.55 |
| Grass |  |  |  |  |  |
| 63. 1G1 | 590.54 | 0.00\% | 531,485 | 14.24\% | 900.00 |
| 64. 1G | 1,244.37 | 14.65\% | 933,300 | 25.01\% | 750.02 |
| 65. 2G1 | 514.27 | 6.05\% | 334,280 | 8.96\% | 650.01 |
| 66. 2G | 257.07 | 3.03\% | 141,390 | 3.79\% | 550.01 |
| 67.3G1 | 888.45 | 10.46\% | 386,540 | 10.36\% | 435.07 |
| 68. 3G | 0.00 | 0.00\% | 0 | 0.00\% | 0.00 |
| 69.4G1 | 1,217.46 | 14.33\% | 365,240 | 9.79\% | 300.00 |
| 70.4G | 3,781.73 | 44.52\% | 1,040,165 | 27.87\% | 275.05 |
| 71. Total | 8,493.89 | 100.00\% | 3,732,400 | 100.00\% | 439.42 |
| Irrigated Total | 109,148.28 | 73.91\% | 225,499,415 | 86.19\% | 2,065.99 |
| Dry Total | 28,730.30 | 19.46\% | 31,877,650 | 12.18\% | 1,109.55 |
| Grass Total | 8,493.89 | 5.75\% | 3,732,400 | 1.43\% | 439.42 |
| Waste | 1,011.51 | 0.68\% | 252,905 | 0.10\% | 250.03 |
| Other | 289.12 | 0.20\% | 282,240 | 0.11\% | 976.20 |
| Exempt | 3,681.33 | 2.49\% | 0 | 0.00\% | 0.00 |
| Market Area Total | 147,673.10 | 100.00\% | 261,644,610 | 100.00\% | 1,771.78 |

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## County 18 Clay

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

| Irrigated | Acres | \% of Acres* | Value | \% of Value* | Average Assessed Value* |
| :---: | :---: | :---: | :---: | :---: | :---: |
| 45. 1A1 | 1,259.70 | 61.82\% | 1,637,605 | 69.22\% | 1,300.00 |
| 46. 1A | 87.63 | 4.30\% | 111,740 | 4.72\% | 1,275.13 |
| 47. 2A1 | 76.41 | 3.75\% | 91,690 | 3.88\% | 1,199.97 |
| 48. 2A | 235.67 | 11.57\% | 259,235 | 10.96\% | 1,099.99 |
| 49.3A1 | 94.71 | 4.65\% | 102,295 | 4.32\% | 1,080.09 |
| 50.3A | 0.00 | 0.00\% | 0 | 0.00\% | 0.00 |
| 51.4A1 | 179.02 | 8.79\% | 116,360 | 4.92\% | 649.98 |
| 52. 4A | 104.51 | 5.13\% | 47,035 | 1.99\% | 450.05 |
| 53. Total | 2,037.65 | 100.00\% | 2,365,960 | 100.00\% | 1,161.12 |
| Dry |  |  |  |  |  |
| 54. 1D1 | 3,280.95 | 56.44\% | 3,002,080 | 67.72\% | 915.00 |
| 55. 1D | 364.91 | 6.28\% | 333,895 | 7.53\% | 915.01 |
| 56. 2D1 | 199.75 | 3.44\% | 179,775 | 4.06\% | 900.00 |
| 57. 2D | 586.07 | 10.08\% | 410,250 | 9.25\% | 700.00 |
| 58.3D1 | 623.06 | 10.72\% | 305,290 | 6.89\% | 489.98 |
| 59.3D | 0.00 | 0.00\% | 0 | 0.00\% | 0.00 |
| 60.4D1 | 472.59 | 8.13\% | 129,990 | 2.93\% | 275.06 |
| 61. 4D | 286.33 | 4.93\% | 71,585 | 1.61\% | 250.01 |
| 62. Total | 5,813.66 | 100.00\% | 4,432,865 | 100.00\% | 762.49 |
| Grass |  |  |  |  |  |
| 63. 1G1 | 376.80 | 0.00\% | 169,565 | 14.78\% | 450.01 |
| 64. 1G | 34.00 | 0.86\% | 13,600 | 1.19\% | 400.00 |
| 65. 2G1 | 425.72 | 10.73\% | 149,005 | 12.98\% | 350.01 |
| 66. 2G | 402.58 | 10.14\% | 124,800 | 10.88\% | 310.00 |
| 67.3G1 | 274.10 | 6.91\% | 76,740 | 6.69\% | 279.97 |
| 68.3G | 0.00 | 0.00\% | 0 | 0.00\% | 0.00 |
| 69.4G1 | 213.72 | 5.39\% | 53,435 | 4.66\% | 250.02 |
| 70.4G | 2,241.55 | 56.48\% | 560,390 | 48.83\% | 250.00 |
| 71. Total | 3,968.47 | 100.00\% | 1,147,535 | 100.00\% | 289.16 |
| Irrigated Total | 2,037.65 | 16.64\% | 2,365,960 | 29.38\% | 1,161.12 |
| Dry Total | 5,813.66 | 47.47\% | 4,432,865 | 55.04\% | 762.49 |
| Grass Total | 3,968.47 | 32.40\% | 1,147,535 | 14.25\% | 289.16 |
| Waste | 428.14 | 3.50\% | 107,045 | 1.33\% | 250.02 |
| Other | 0.00 | 0.00\% | 0 | 0.00\% | 0.00 |
| Exempt | 41.80 | 0.34\% | 0 | 0.00\% | 0.00 |
| Market Area Total | 12,247.92 | 100.00\% | 8,053,405 | 100.00\% | 657.53 |

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## Schedule X : Agricultural Records :Ag Land Total

|  | Urban |  | SubUrban |  | Rural |  | Total |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | Acres | Value | Acres | Value | Acres | Value | Acres | Value |
| 76. Irrigated | 0.00 | 0 | 0.00 | 0 | 211,228.78 | 434,407,590 | 211,228.78 | 434,407,590 |
| 77. Dry Land | 0.00 | 0 | 0.00 | 0 | 60,277.26 | 66,548,750 | 60,277.26 | 66,548,750 |
| 78. Grass | 0.00 | 0 | 0.00 | 0 | 23,217.69 | 9,973,550 | 23,217.69 | 9,973,550 |
| 79. Waste | 0.00 | 0 | 0.00 | 0 | 3,705.72 | 926,505 | 3,705.72 | 926,505 |
| 80. Other | 0.00 | 0 | 0.00 | 0 | 392.39 | 377,990 | 392.39 | 377,990 |
| 81. Exempt | 0.00 | 0 | 0.00 | 0 | 7,496.40 | 0 | 7,496.40 | 0 |
| 82. Total | 0.00 | 0 | 0.00 | 0 | 298,821.84 | 512,234,385 | 298,821.84 | 512,234,385 |


|  | Acres | \% of Acres* | Value | \% of Value* | Average Assessed Value* |
| :---: | :---: | :---: | :---: | :---: | :---: |
| Irrigated | 211,228.78 | 70.69\% | 434,407,590 | 84.81\% | 2,056.57 |
| Dry Land | 60,277.26 | 20.17\% | 66,548,750 | 12.99\% | 1,104.04 |
| Grass | 23,217.69 | 7.77\% | 9,973,550 | 1.95\% | 429.57 |
| Waste | 3,705.72 | 1.24\% | 926,505 | 0.18\% | 250.02 |
| Other | 392.39 | 0.13\% | 377,990 | 0.07\% | 963.30 |
| Exempt | 7,496.40 | 2.51\% | 0 | 0.00\% | 0.00 |
| Total | 298,821.84 | 100.00\% | 512,234,385 | 100.00\% | 1,714.18 |

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

| 18 Clay |  |  |  | E3 |  |  |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
|  | $\begin{aligned} & 2008 \text { CTL } \\ & \text { County Total } \end{aligned}$ | 2009 Form 45 <br> County Total | Value Difference <br> (2009 form 45-2008 CTL) | Percent <br> Change | 2009 Growth <br> (New Construction Value) | Percent Change excl. Growth |
| 01. Residential | 155,798,025 | 160,592,090 | 4,794,065 | 3.08\% | 1,812,331 | 1.91\% |
| 02. Recreational | 0 | 0 | 0 |  | 0 |  |
| 03. Ag-Homesite Land, Ag-Res Dwelling | 23,507,425 | 25,893,755 | 2,386,330 | 10.15\% | 256,740 | 9.06\% |
| 04. Total Residential (sum lines 1-3) | 179,305,450 | 186,485,845 | 7,180,395 | 4.00\% | 2,069,071 | 2.85\% |
| 05. Commercial | 47,237,025 | 48,599,645 | 1,362,620 | 2.88\% | 514,140 | 1.80\% |
| 06. Industrial | 11,301,775 | 11,448,960 | 147,185 | 1.30\% | 130,005 | 0.15\% |
| 07. Ag-Farmsite Land, Outbuildings | 20,891,255 | 25,356,085 | 4,464,830 | 21.37\% | 3,528,549 | 4.48\% |
| 08. Minerals | 0 | 0 | 0 |  | 0 |  |
| 09. Total Commercial (sum lines 5-8) | 79,430,055 | 85,404,690 | 5,974,635 | 7.52\% | 4,172,694 | 2.27\% |
| 10. Total Non-Agland Real Property | 258,735,505 | 271,890,535 | 13,155,030 | 5.08\% | 6,241,765 | 2.67\% |
| 11. Irrigated | 373,112,620 | 434,407,590 | 61,294,970 | 16.43\% |  |  |
| 12. Dryland | 64,115,215 | 66,548,750 | 2,433,535 | 3.80\% |  |  |
| 13. Grassland | 9,351,925 | 9,973,550 | 621,625 | 6.65\% |  |  |
| 14. Wasteland | 767,380 | 926,505 | 159,125 | 20.74\% |  |  |
| 15. Other Agland | 477,475 | 377,990 | -99,485 | -20.84\% |  |  |
| 16. Total Agricultural Land | 447,824,615 | 512,234,385 | 64,409,770 | 14.38\% |  |  |
| 17. Total Value of all Real Property | 706,560,120 | 784,124,920 | 77,564,800 | 10.98\% | 6,241,765 | 10.09\% |
| (Locally Assessed) |  |  |  |  |  |  |

## CLAY COUNTY

## 3-YEAR PLAN OF ASSESSMENT

The Clay County office staff consists of the County Assessor, Deputy Assessor and two full time clerks. We use part-time employees to assist with physical review, field listing, ag land use updating and other duties as needed. The Assessor and Deputy have current certification and are taking continued education classes to meet those requirements. We currently do not have an appraiser to do our pickup work. Our office staff does the needed pickup work in the urban and rural areas. Stanard Appraisal will be used for any commercial pickup work. Zoning and building permits are made available to us. Improvements not needing permits are reported to our office by owner, staff, concerned citizens etc.

The Clay County Assessor's staff has been physically reviewing properties as an ongoing rotation process since 1997. A copy of the property card, worksheets and permits are first made in the office. This copy is then taken with us for the on-site reviews. These reviews consist of interviewing the property owner if at home (leaving a questionnaire with noted changes and/or information needed if not at home), physically inspecting all property from the outside, taking new pictures of the house and the outbuildings as well, making any corrections to the information on the property card and if in the rural area drawing a ground plan and noting any land use change. In the event that the property owner refuses a review, a refusal form is given him to sign (sometimes mailed) to document the attempt. These are later given to our County Attorney to enact an Inspection Warrant.

After returning to the office, the information gathered is then entered in the P.C. on the 2000 CAMA pricing, the pictures are downloaded in the P.C.--printed off and attached to the property card. The sketching of the house is done on the CAMA also. Any updates of information are recorded from the copy to the original property card. If needed a call to the property owner is made to gain any additional information needed. Properties are compared as to year built, quality, condition, square foot, style, etc. to be able to value them equally per market value. New cards for each parcel (urban, rural and commercial) are being made as they are reviewed. New cards have not been made since 1981.

In the rural areas, we gather information on the improvements the same way as we do in the urban area. Our ag-land is measured by soil map and we are on the most recent soil conversion. We check certified acres with the FSA office for land use changes after obtaining signed permission from land owner or renter. In September 2007, our office purchased the GIS Workshop for cadastral mapping.

Our office makes a concerted effort to research sales as they are filed. Questionnaires are sent to both the grantor and grantee requesting specific information on the sale. We receive more than $80 \%$ return on the questionnaires. The information attained is then used to represent the sales going into the ratio study. This has proven to be an effective
tool not only for sales study, but we are also able to check current land use and residential data from the information provided. Assessment required levels for residential and commercial/industrial property is $100 \%$ of actual value while agricultural/horticultural requirement is $75 \%$ of actual value. In the 2008 Reports \& Opinions the county of Clay level of value for residential real property was $97 \%$, commercial real property was $94 \%$, and the agricultural land was $73 \%$. We will maintain the level of value and quality of assessment to meet the required statutes.

## Our 3-year plan is as follows for the tax year:

## $\underline{2009}$

Residential---The following residential properties will be up for review in our rotation of residential properties:

Harvard City - 700 parcels - Market Area 2
Ong Village - 157 parcels - Market Area 1
Verona Village-Market Area 1
A lateral filing system has been established. New record cards will be made as each residential property is reviewed. Updated pictures of the front and back of the house and all outbuildings will be taken and place in the folder. Any changes to the property will be noted and updated in the CAMA pricing.

Rural Residential and Agricultural land---The following townships will be up for review in our rotation of rural properties:

Sutton - 278 parcels-Market Area 2
Lewis-346 parcels-Market Area 2
Lynn -163 parcels-Market Area 2
Inland-131 parcels-Market Area 2
New record cards will be made with all updated information, including new pictures of all improvements. The lateral filing system will allow all pertinent information about the parcel to be found in one folder. For example it may include certifications, aerial maps, soils maps, surveys, transfer statements etc.

Commercial---Stanard Appraisals will be contracted to do any new construction and the assessor and staff will do the pickup work.

## $\underline{2010}$

Residential---The following residential properties will be up for review in our rotation of residential properties:

Edgar-503 parcels-Market Area 1

## Saronville-91 parcels-Market Area 2

Eldorado Village-Market Area 2
New record cards will be made with all updated information and pictures. All pertinent information about the parcel will be put in one folder.

Rural Residential \& Agricultural Land-The following townships will be up for review in our rotation of rural properties:

School Creek-325 parcels-Market Area 2
Eldorado-310 parcels-Market Area 2
Harvard-323 parcels-Market Area 2
Leicester-255 parcels-Market Area 2
New record cards will be made with all updated information, including new pictures of all improvements. The lateral filing system will allow all pertinent information about the parcel to be found in one folder. For example it may include certifications, aerial maps, soils maps, surveys, transfer statements etc. This will complete new record cards for Market Area 2.

Commercial-Stanard Appraisals will be contracted for any new construction and the assessor and staff will do the pickup work.

## $\underline{2011}$

Residential-the following residential properties will be up for review in our rotation of residential properties:

Deweese-103 parcels-Market Area 1
NAD -Inland-Lynn-Area B-1-Area B-2 (Mostly commercial/industrial)

## COMMENTS

Since acquiring the GIS Workshop last September not much time has been devoted to getting the information on the computer until recently. In order to be able to utilize the GIS, we would have to devote more time to it. As an office decision, one personnel will be working on the GIS every day unless another project needs her help to meet a deadline. Two full time and one part time person attended a two-day workshop given by Claire Brown in April. This class helped a lot to build up enthusiasm and incentive to complete this project. We have contacted our County Surveyor to find the GPS points and he will do so as soon as possible this summer and if it stays in our budget. We are also looking at surveying the Little Blue River that runs in the south part of the county as our budget will allow since much has changed since our cadastral maps were made in 1964.

As gas prices rise, we are having more and more phone calls for parcel information. This takes up a lot of time that we could be spending on other projects. Our intention is to get as much of our information on line to serve the public better. Hopefully, all our information will be available on line by the end of this year. Personal property schedules will be available for the individuals to access for 2009 year. This will also help out the accountants.

Reviews are going rather quickly this year. We have four townships reviewed and are now in the process of working our data. After June protest month we will continue. We are going to be taking a closer look at the commercials for each area and will get Stanard Appraisals to do maintenance for us in other areas.

The assessor and deputy will take continuing education hours as needed. We also will attend the fall workshop and any meetings held of the Central District.

## 2009 Assessment Survey for Clay County

## I. General Information

## A. Staffing and Funding Information

| 1. | Deputy(ies) on staff |
| :---: | :---: |
|  | 1 |
| 2. | Appraiser(s) on staff |
|  | 0 |
| 3. | Other full-time employees |
|  | 2 |
| 4. | Other part-time employees |
|  | 0 |
| 5. | Number of shared employees |
|  | 0 |
| 6. | Assessor's requested budget for current fiscal year |
|  | \$182,565 |
| 7. | Part of the budget that is dedicated to the computer system |
|  | \$37,250 |
| 8. | Adopted budget, or granted budget if different from above |
|  | SAME |
| 9. | Amount of the total budget set aside for appraisal work |
|  | \$5000 |
| 10. | Amount of the total budget set aside for education/workshops |
|  | \$2000 |
| 11. | Appraisal/Reappraisal budget, if not part of the total budget |
|  | ---- |
| 12. | Other miscellaneous funds |
|  | ---- |
| 13. | Total budget |
|  | \$182565 |
| a. | Was any of last year's budget not used: |
|  | NO |

## B. Computer, Automation Information and GIS

| 1. | Administrative software |
| :--- | :--- |
| 2. | COUNTY SOLUTIONS |
|  | CAMA software |

## 3. Cadastral maps: Are they currently being used? <br> YES

4. Who maintains the Cadastral Maps?

ASSESSOR/STAFF
5. Does the county have GIS software?

YES, BUT NOT IMPLEMENTED YET
6. Who maintains the GIS software and maps?

FULL TIME EMPLOYEE WHO IS PUTTING ON INFORMATION
7. Personal Property software:

COUNTY SOLUTIONS-SCHEDULES AVAILABLE ON-LINE

## C. Zoning Information

1. Does the county have zoning?

YES
2. If so, is the zoning countywide? YES
3. What municipalities in the county are zoned?

ALL WITH THE EXCEPTION OF SUTTON (HAS OWN) ONG HAS NONE
4. When was zoning implemented?

1975 UPDATED IN 2004

## D. Contracted Services

| 1. | Appraisal Services |
| :--- | :--- |
| 2. | COMMERCIAL APPRAISAL DONE BY STANARD APPRAISALS |
|  | Other services |
|  | GIS-GIS WORKSHOP; COUNTY SOLUTIONS-CAMA-PERSONAL <br> PROPERTY SCHEDULES ON-LINE-ANDY PFEIFER |

## Certification

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

Four copies to the Tax Equalization and Review Commission, by hand delivery.
One copy to the Clay County Assessor, by hand delivery.

Dated this 7th day of April, 2009.



Ruth A. Sorensen
Property Tax Administrator

