



2015

ADAMS COUNTY PROPERTY ASSESSMENT STUDY



WILDROSE
APPRAISAL, INCORPORATED
Audit Division



September 15, 2015

Mr. Mike Mauer
Director of Research
Colorado Legislative Council
Room 029, State Capitol Building
Denver, Colorado 80203

RE: Final Report for the 2015 Colorado Property Assessment Study

Dear Mr. Mauer:

Wildrose Appraisal Inc.-Audit Division is pleased to submit the Final Reports for the 2015 Colorado Property Assessment Study.

These reports are the result of two analyses: A procedural audit and a statistical audit.

The procedural audit examines all classes of property. It specifically looks at how the assessor develops economic areas, confirms and qualifies sales, develops time adjustments and performs periodic physical property inspections. The audit reviews the procedures for determining subdivision absorption and subdivision discounting. Valuation methodology is examined for residential properties and commercial properties. Procedures are reviewed for producing mines, oil and gas leaseholds and lands producing, producing coal mines, producing earth and stone products, severed mineral interests, and non-producing patented mining claims.

Statistical audits are performed on vacant land, residential properties, commercial/industrial properties and agricultural land. A statistical analysis is performed for personal property compliance on the eleven largest counties: Adams, Arapahoe, Boulder, Denver, Douglas, El Paso, Jefferson, Larimer, Mesa, Pueblo and Weld. The remaining counties receive a personal property procedural study.

Wildrose Appraisal Inc. – Audit Division appreciates the opportunity to be of service to the State of Colorado. Please contact us with any questions or concerns.

A handwritten signature in black ink that reads "Harry J. Fuller". The signature is written in a cursive, flowing style.

Harry J. Fuller
Project Manager
Wildrose Appraisal Inc. – Audit Division

TABLE OF CONTENTS

Introduction	3
Regional/Historical Sketch of Adams County	4
Ratio Analysis.....	6
Time Trending Verification	8
Sold/Unsold Analysis	9
Agricultural Land Study	11
<i>Agricultural Land</i>	11
<i>Agricultural Outbuildings</i>	12
<i>Agricultural Land Under Improvements</i>	13
Sales Verification.....	14
Economic Area Review and Evaluation	16
Natural Resources	17
<i>Earth and Stone Products</i>	17
<i>Producing Oil and Gas</i>	17
Vacant Land.....	18
Possessory Interest Properties	19
Personal Property Audit	20
Wildrose Auditor Staff.....	22
Appendices.....	23

INTRODUCTION



Colorado

The State Board of Equalization (SBOE) reviews assessments for conformance to the Constitution. The SBOE will order revaluations for counties whose valuations do not reflect the proper valuation period level of value.

The statutory basis for the audit is found in C.R.S. 39-1-104 (16)(a)(b) and (c).

The legislative council sets forth two criteria that are the focus of the audit group:

To determine whether each county assessor is applying correctly the constitutional and statutory provisions, compliance requirements of the State Board of Equalization, and the manuals published by the State Property Tax Administrator to arrive at the actual value of each class of property.

To determine if each assessor is applying correctly the provisions of law to the actual values when arriving at valuations for assessment of all locally valued properties subject to the property tax.

The property assessment audit conducts a two-part analysis: A procedural analysis and a statistical analysis.

The procedural analysis includes all classes of property and specifically looks at how the assessor develops economic areas, confirms and qualifies sales, and develops time adjustments. The audit also examines the procedures for adequately discovering, classifying and valuing agricultural outbuildings, discovering subdivision build-out and subdivision discounting procedures. Valuation methodology for vacant land, improved residential properties and commercial properties is examined. Procedures for producing mines, oil and gas leaseholds and lands producing, producing coal mines, producing earth and stone products, severed mineral interests and non-producing patented mining claims are also reviewed.

Statistical analysis is performed on vacant land, residential properties, commercial industrial properties, agricultural land, and personal property. The statistical study results are compared with State Board of Equalization compliance requirements and the manuals published by the State Property Tax Administrator.

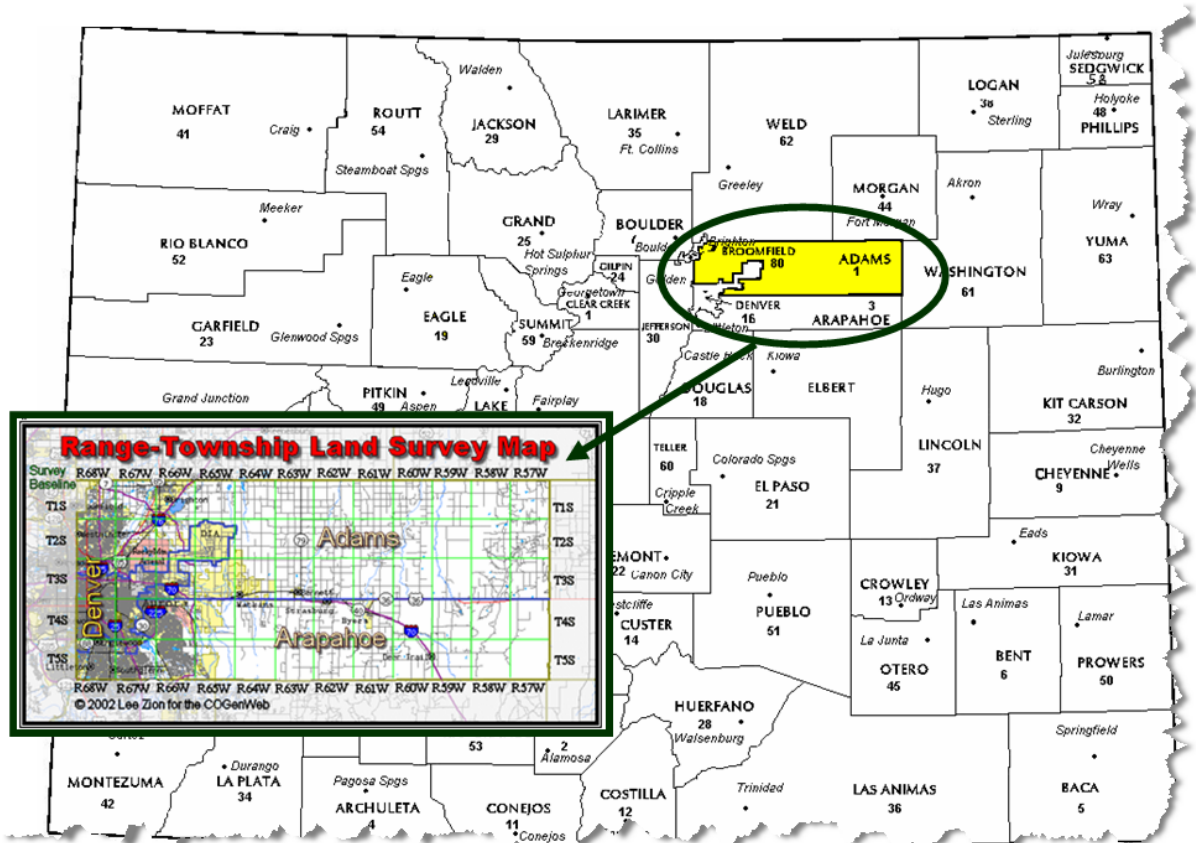
Wildrose Audit has completed the Property Assessment Study for 2015 and is pleased to report its findings for Adams County in the following report.

REGIONAL/HISTORICAL SKETCH OF ADAMS COUNTY

Regional Information

Adams County is located in the Front Range region of Colorado. The Colorado Front Range is a colloquial geographic term for the populated areas of the State that are just east of the foothills of the Front Range. It includes

Adams, Arapahoe, Boulder, Broomfield, Denver, Douglas, El Paso, Jefferson, Larimer, Pueblo, and Weld counties.



Historical Information

Adams County has a population of approximately 441,603 people with 370.47 people per square mile, according to the U.S. Census Bureau's 2010 census data. This represents a 21.37 percent change from the 2000 Census.

Adams County is the fifth most populous of the 64 counties of the State of Colorado. It is named for Alva Adams, Governor of the State of Colorado 1887-1889, 1897-1899, and 1905. The county seat is Brighton.

On May 30, 1854, the Kansas-Nebraska Act created the Territory of Nebraska and Territory of Kansas, divided by the Parallel 40° North (168th Avenue in present-day Adams County). The future Adams County, Colorado, occupied a strip of northern Arapahoe County, Kansas Territory, immediately south of the Nebraska Territory.

In 1859, John D. "Colonel Jack" Henderson built a ranch, trading post, and hotel on Henderson Island in the South Platte River in Arapahoe County, Kansas Territory. Jack Henderson was the former editor and proprietor of the Leavenworth (Kansas Territory) Journal and an outspoken pro-slavery politician who had been accused of vote fraud in eastern Kansas. Henderson sold meat and provisions to gold seekers on their way up the South Platte River Trail to the gold fields during the Pike's Peak Gold Rush. Henderson Island was the first permanent settlement in the South Platte River Valley between Fort Saint Vrain in the Nebraska Territory and the Cherry Creek Diggings in the Kansas Territory. Jack Henderson eventually returned to eastern Kansas and (ironically) fought for the Union in the American Civil War. Henderson Island is today the site of the Adams County Regional Park and Fairgrounds.

The eastern portion of the Kansas Territory was admitted to the Union as the State of Kansas on January 29, 1861, and on February 28, 1861, the remaining western portion of the territory was made part of the new Colorado Territory. The Colorado Territory created Arapahoe County, on November 1, 1861, and Colorado was admitted to the Union on August 1, 1876.

In 1901, the Colorado General Assembly voted to split Arapahoe County into three parts: a new Adams County, a new consolidated City and County of Denver, and the remainder of the Arapahoe County to be renamed South Arapahoe County. A ruling by the Colorado Supreme Court, subsequent legislation, and a referendum delayed the creation of Adams County until November 15, 1902. Governor James Bradley Orman designated Brighton as the temporary Adams County Seat. Adams County originally stretched 160 miles from present-day Sheridan Boulevard to the Kansas state border. On May 12, 1903, the eastern 88 miles of Adams County was transferred to the new Washington County and the new Yuma County, reducing the length of Adams County to the present 72 miles. On November 8, 1904, Adams County voters chose Brighton as the permanent county seat.

A 1989 vote transferred 53 square miles of Adams County to the City and County of Denver for the proposed Denver International Airport, leaving the densely populated western portion of the county as two oddly-shaped peninsulas. Adams County lost the tip of its northwest corner when the consolidated City and County of Broomfield was created on November 15, 2001.

(Wikipedia.org)

RATIO ANALYSIS

Methodology

All significant classes of properties were analyzed. Sales were collected for each property class over the appropriate sale period, which was typically defined as the 18-month period between January 1, 2013 and June 30, 2014. Counties with less than 30 sales typically extended the sale period back up to 5 years prior to June 30, 2014 in 6-month increments. If there were still fewer than 30 sales, supplemental appraisals were performed and treated as proxy sales. Residential sales for all counties using this method totaled at least 30 per county. For commercial sales, the total number analyzed was allowed, in some cases, to fall below 30. There were no sale quantity issues for counties requiring vacant land analysis or condominium analysis. Although it was required that we examine the median and coefficient of dispersion for all counties, we also calculated the weighted mean and price-related differential for each class of property. Counties were not passed or failed by these

latter measures, but were counseled if there were anomalies noted during our analysis. Qualified sales were based on the qualification code used by each county, which were typically coded as either “Q” or “C.” The ratio analysis included all sales. The data was trimmed for counties with obvious outliers using IAAO standards for data analysis. In every case, we examined the loss in data from trimming to ensure that only true outliers were excluded. Any county with a significant portion of sales excluded by this trimming method was examined further. No county was allowed to pass the audit if more than 5% of the sales were “lost” because of trimming. For the largest 11 counties, the residential ratio statistics were broken down by economic area as well.

Conclusions

For this final analysis report, the minimum acceptable statistical standards allowed by the State Board of Equalization are:

ALLOWABLE STANDARDS RATIO GRID		
Property Class	Unweighted Median Ratio	Coefficient of Dispersion
Commercial/Industrial	Between .95-1.05	Less than 20.99
Condominium	Between .95-1.05	Less than 15.99
Single Family	Between .95-1.05	Less than 15.99
Vacant Land	Between .95-1.05	Less than 20.99

The results for Adams County are:

Adams County Ratio Grid					
Property Class	Number of Qualified Sales	Unweighted Median Ratio	Price Related Differential	Coefficient of Dispersion	Time Trend Analysis
Commercial/Industrial	232	0.978	1.068	10.6	Compliant
Condominium	N/A	N/A	N/A	N/A	N/A
Single Family	14,249	0.964	1.030	7.4	Compliant
Vacant Land	246	1.000	1.043	8.3	Compliant

Ratio Statistics for CURRTOT / TASP

Group	Median	Price Related Differential	Coefficient of Dispersion
1	.965	1.003	.073
2	.959	1.002	.072
3	.964	1.002	.076
4	.971	1.006	.079
5	.967	1.000	.068
6	.949	1.005	.080
7	.957	1.021	.068
8	.969	1.167	.092
9	.972	1.001	.080
10	.973	1.004	.072
11	.979	1.008	.071
12	.979	1.016	.094
13	.977	1.006	.081
14	.948	1.033	.101
15	.995	1.069	.072
16	.952	1.106	.136
18	1.035	1.136	.140
Overall	.964	1.030	.074

After applying the above described methodologies, it is concluded from the sales ratios that Adams County is in compliance with

SBOE, DPT, and Colorado State Statute valuation guidelines.

Recommendations

None



TIME TRENDING VERIFICATION

Methodology

While we recommend that counties use the inverted ratio regression analysis method to account for market (time) trending, some counties have used other IAAO-approved methods, such as the weighted monthly median approach. We are not auditing the methods used, but rather the results of the methods used. Given this range of methodologies used to account for market trending, we concluded that the best validation method was to examine the sale ratios for each class across the appropriate sale period. To be specific, if a county has considered and adjusted correctly for market trending, then the sale ratios should remain stable (i.e. flat) across the sale period. If a residual market trend is detected, then the county may or may not have addressed market

trending adequately, and a further examination is warranted. This validation method also considers the number of sales and the length of the sale period. Counties with few sales across the sale period were carefully examined to determine if the statistical results were valid.

Conclusions

After verification and analysis, it has been determined that Adams County has complied with the statutory requirements to analyze the effects of time on value in their county. Adams County has also satisfactorily applied the results of their time trending analysis to arrive at the time adjusted sales price (TASP).

Recommendations

None

SOLD / UNSOLD ANALYSIS

Methodology

Adams County was tested for the equal treatment of sold and unsold properties to ensure that “sales chasing” has not occurred. The auditors employed a multi-step process to determine if sold and unsold properties were valued in a consistent manner.

We test the hypothesis that the assessor has valued unsold properties consistent with what is observed with the sold properties based on several units of comparison and tests. The units of comparison include the actual value per square foot and the change in value from the previous base year period to the current base year. The first test compares the actual value per square foot between sold and unsold properties by class. The median and mean value per square foot is compared and tested for any significant difference. This is tested using non-parametric methods, such as the Mann-Whitney test for differences in the distributions or medians between sold and unsold groups. It is also examined graphically and from an appraisal perspective. Data can be stratified based on location and subclass. The second test compares the difference in the median change in value from the previous base year to the current base year between sold and unsold properties by class. The same combination of non-parametric and appraisal testing is used as with the first test. A third test employing a valuation model testing a sold/unsold binary variable while controlling for property attributes such as location, size, age and other attributes. The model determines if the sold/unsold variable is statistically and empirically significant. If all three tests indicate a significant difference between sold and unsold properties for a given class, the Auditor may meet with the county to determine if sale chasing is actually occurring,

or if there are other explanations for the observed difference.

If the unsold properties have a higher median value per square foot than the sold properties, or if the median change in value is greater for the unsold properties than the sold properties, the analysis is stopped and the county is concluded to be in compliance with sold and unsold guidelines. All sold and unsold properties in a given class are first tested, although properties with extreme unit values or percent changes can be trimmed to stabilize the analysis. The median is the primary comparison metric, although the mean can also be used as a comparison metric if the distribution supports that type of measure of central tendency.

The first test (unit value method) is applied to both residential and commercial/industrial sold and unsold properties. The second test is applied to sold and unsold vacant land properties. The second test (change in value method) is also applied to residential or commercial sold and unsold properties if the first test results in a significant difference observed and/or tested between sold and unsold properties. The third test (valuation modeling) is used in instances where the results from the first two tests indicate a significant difference between sold and unsold properties. It can also be used when the number of sold and unsold properties is so large that the non-parametric testing is indicating a false rejection of the hypothesis that there is no difference between the sold and unsold property values.

These tests were supported by both tabular and graphics presentations, along with written documentation explaining the methodology used.

Sold/Unsold Results	
Property Class	Results
Commercial/Industrial	Compliant
Condominium	N/A
Single Family	Compliant
Vacant Land	Compliant

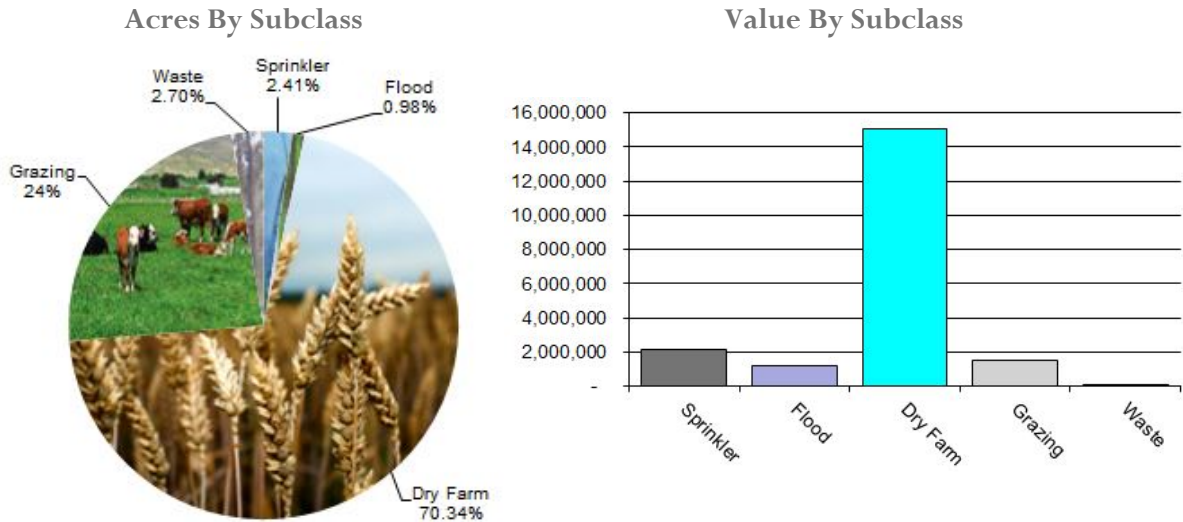
Conclusions

After applying the above described methodologies, it is concluded that Adams County is reasonably treating its sold and unsold properties in the same manner.

Recommendations

None

AGRICULTURAL LAND STUDY



Agricultural Land

County records were reviewed to determine major land categories such as irrigated farm, dry farm, meadow hay, grazing and other lands. In addition, county records were reviewed in order to determine if: Aerial photographs are available and are being used; soil conservation guidelines have been used to classify lands based on productivity; crop rotations have been documented; typical commodities and yields have been determined; orchard lands have been properly classified and valued; expenses reflect a ten year average and are typical landlord expenses; grazing lands have been properly classified and valued; the number of acres in each class and subclass have been determined; the capitalization rate was properly applied. Also, documentation was required for the valuation methods used and any locally developed yields, carrying capacities, and expenses. Records were also checked to ensure that the commodity prices and expenses, furnished by the Property Tax

Administrator (PTA), were applied properly. (See Assessor Reference Library Volume 3 Chapter 5.)

Conclusions

An analysis of the agricultural land data indicates an acceptable appraisal of this property type. Directives, commodity prices and expenses provided by the PTA were properly applied. County yields compared favorably to those published by Colorado Agricultural Statistics. Expenses used by the county were allowable expenses and were in an acceptable range. Grazing lands carrying capacities were in an acceptable range. The data analyzed resulted in the following ratios:

Adams County Agricultural Land Ratio Grid						
Abstract Code	Land Class	Number Of Acres	County Value Per Acre	County Assessed Total Value	WRA Total Value	Ratio
4107	Sprinkler	13,494	161.96	2,185,554	2,207,037	0.99
4117	Flood	5,485	212.16	1,163,661	1,182,646	0.98
4127	Dry Farm	394,562	38.16	15,057,661	14,681,354	1.03
4147	Grazing	132,310	11.65	1,541,916	1,541,916	1.00
4167	Waste	15,123	1.99	30,043	30,043	1.00
Total/Avg		560,975	35.61	19,978,836	19,642,995	1.02

Recommendations

None

Agricultural Outbuildings

Methodology

Data was collected and reviewed to determine if the guidelines found in the Assessor's Reference Library (ARL) Volume 3, pages 5.74 through 5.77 were being followed.

Property Taxation for the valuation of agricultural outbuildings.

Recommendations

None

Conclusions

Adams County has substantially complied with the procedures provided by the Division of

Agricultural Land Under Improvements

Methodology

Data was collected and reviewed to determine if the guidelines found in the Assessor's Reference Library (ARL) Volume 3, pages 5.19 and 5.20 were being followed.

Conclusions

Adams County has used the following methods to discover land under a residential improvement on a farm or ranch that is determined to be not integral under 39-1-102, C.R.S.:

- Field Inspections
- In-Person Interviews with Owners/Tenants
- Personal Knowledge of Occupants at Assessment Date
- Aerial Photography/Pictometry

- Deeds through the Clerk & Recorder's Office

Adams County has used the following methods to discover the land area under a residential improvement that is determined to be not integral under 39-1-102, C.R.S.:

- Property Record Card Analysis
- Field Inspections

Adams County has substantially complied with the procedures provided by the Division of Property Taxation for the valuation of land under residential improvements that may or may not be integral to an agricultural operation.

Recommendations

None

SALES VERIFICATION

According to Colorado Revised Statutes:

A representative body of sales is required when considering the market approach to appraisal.

(8) In any case in which sales prices of comparable properties within any class or subclass are utilized when considering the market approach to appraisal in the determination of actual value of any taxable property, the following limitations and conditions shall apply:

(a)(I) Use of the market approach shall require a representative body of sales, including sales by a lender or government, sufficient to set a pattern, and appraisals shall reflect due consideration of the degree of comparability of sales, including the extent of similarities and dissimilarities among properties that are compared for assessment purposes. In order to obtain a reasonable sample and to reduce sudden price changes or fluctuations, all sales shall be included in the sample that reasonably reflect a true or typical sales price during the period specified in section 39-1-104 (10.2). Sales of personal property exempt pursuant to the provisions of sections 39-3-102, 39-3-103, and 39-3-119 to 39-3-122 shall not be included in any such sample.

(b) Each such sale included in the sample shall be coded to indicate a typical, negotiated sale, as screened and verified by the assessor. (39-1-103, C.R.S.)

The assessor is required to use sales of real property only in the valuation process.

(8)(f) Such true and typical sales shall include only those sales which have been determined on an individual basis to reflect the selling price of the real property only or which have been adjusted on an individual basis to reflect the selling price of the real property only. (39-1-103, C.R.S.)

Part of the Property Assessment Study is the sales verification analysis. WRA has used the above-cited statutes as a guide in our study of the county's procedures and practices for verifying sales.

WRA reviewed the sales verification procedures in 2015 for Adams County. This study was conducted by checking selected sales from the master sales list for the current valuation period. Specifically WRA selected 60 sales listed as unqualified.

All but one of the sales selected in the sample gave reasons that were clear and supportable. One sale had insufficient reason for disqualification.

For residential, commercial, and vacant land sales with considerations over \$500, the contractor has examined and reported the ratio of qualified sales to total sales by class and performed the following analyses of unqualified sales:

The contractor has examined the manner in which sales have been classified as qualified or unqualified, including a listing of each step in the sales verification process, any adjustment procedures, and the county official responsible for making the final decision on qualification.

When less than 50 percent of sales are qualified in any of the three property classes (residential, commercial, and vacant land), the contractor analyzed the reasons for disqualifying sales in any subclass that constitutes at least 20 percent of the class, either by number



of properties or by value, from the prior year. The contractor has reviewed with the assessor any analysis indicating that sales data are inadequate, fail to reflect typical properties, or have been disqualified for insufficient cause. In addition, the contractor has reviewed the disqualified sales by assigned code. If there appears to be any inconsistency in the coding, the contractor has conducted further analysis to determine if the sales included in that code have been assigned appropriately.

If 50 percent or more of the sales are qualified, the contractor has reviewed a

statistically significant sample of unqualified sales, excluding sales that were disqualified for obvious reasons.

Adams County did not qualify for in-depth subclass analysis.

Conclusions

Adams County appears to be doing a good job of verifying their sales. There are no recommendations.

Recommendations

None

ECONOMIC AREA REVIEW AND EVALUATION

Methodology

Adams County has submitted a written narrative describing the economic areas that make up the county's market areas. Adams County has also submitted a map illustrating these areas. Each of these narratives have been read and analyzed for logic and appraisal sensibility. The maps were also compared to the narrative for consistency between the written description and the map.

Conclusions

After review and analysis, it has been determined that Adams County has adequately

identified homogeneous economic areas comprised of smaller neighborhoods. Each economic area defined is equally subject to a set of economic forces that impact the value of the properties within that geographic area and this has been adequately addressed. Each economic area defined adequately delineates an area that will give "similar values for similar properties in similar areas."

Recommendations

None

NATURAL RESOURCES

Earth and Stone Products

Methodology

Under the guidelines of the Assessor's Reference Library (ARL), Volume 3, Natural Resource Valuation Procedures, the income approach was applied to determine value for production of earth and stone products. The number of tons was multiplied by an economic royalty rate determined by the Division of Property Taxation to determine income. The income was multiplied by a recommended Hoskold factor to determine the actual value. The Hoskold factor is determined by the life of the reserves or the lease. Value is based on two variables: life and tonnage. The operator determines these since there is no other means to obtain production data through any state or private agency.

Conclusions

The County has applied the correct formulas and state guidelines to earth and stone production.

Recommendations

None

Producing Oil and Gas

Methodology

Assessors Reference Library (ARL) Volume 3, Chapter 6: Valuation of Natural Resources

STATUTORY REFERENCES

Section § 39-1-103, C.R.S., specifies that producing oil or gas leaseholds and lands are valued according to article 7 of title 39, C.R.S.

Actual value determined - when.

(2) The valuation for assessment of leaseholds and lands producing oil or gas shall be determined as provided in article 7 of this title.

§ 39-1-103, C.R.S.

Article 7 covers the listing, valuation, and assessment of producing oil and gas leaseholds and lands.

Valuation:

Valuation for assessment.

(1) Except as provided in subsection (2) of this section, on the basis of the information contained in such statement, the assessor shall value such oil and gas leaseholds and lands for assessment, as real property, at an amount equal to eighty-seven and one-half percent of:

(a) The selling price of the oil or gas sold there from during the preceding calendar year, after excluding the selling price of all oil or gas delivered to the United States government or any agency thereof, the state of Colorado or any agency thereof, or any political subdivision of the state as royalty during the preceding calendar year;

(b) The selling price of oil or gas sold in the same field area for oil or gas transported from the premises which is not sold during the preceding calendar year, after excluding the selling price of all oil or gas delivered to the United States government or any agency thereof, the state of Colorado or any agency thereof, or any political subdivision of the state as royalty during the preceding calendar year.

§ 39-7-102, C.R.S.

Conclusions

The county applied approved appraisal procedures in the valuation of oil and gas.

Recommendations

None

VACANT LAND

Subdivision Discounting

Subdivisions were reviewed in 2015 in Adams County. The review showed that subdivisions were discounted pursuant to the Colorado Revised Statutes in Article 39-1-103 (14). Discounting procedures were applied to all subdivisions where less than 80 percent of all sites were sold using the present worth method. The market approach was applied where 80 percent or more of the subdivision sites were sold. An absorption period was estimated for each subdivision that was discounted. An appropriate discount rate was

developed using the summation method. Subdivision land with structures was appraised at full market value.

Conclusions

Adams County has implemented proper procedures to adequately estimate absorption periods, discount rates, and lot values for qualifying subdivisions.

Recommendations

None

POSSESSORY INTEREST PROPERTIES

Possessory Interest

Possessory interest property discovery and valuation is described in the Assessor's Reference Library (ARL) Volume 3 section 7 in accordance with the requirements of Chapter 39-1-103 (17)(a) (II) C.R.S. Possessory Interest is defined by the Property Tax Administrator's Publication ARL Volume 3, Chapter 7: A private property interest in government-owned property or the right to the occupancy and use of any benefit in government-owned property that has been granted under lease, permit, license, concession, contract, or other agreement.

Adams County has been reviewed for their procedures and adherence to guidelines when assessing and valuing agricultural and

commercial possessory interest properties. The county has also been queried as to their confidence that the possessory interest properties have been discovered and placed on the tax rolls.

Conclusions

Adams County has implemented a discovery process to place possessory interest properties on the roll. They have also correctly and consistently applied the correct procedures and valuation methods in the valuation of possessory interest properties.

Recommendations

None

PERSONAL PROPERTY AUDIT

Adams County was studied for its procedural compliance with the personal property assessment outlined in the Assessor's Reference Library (ARL) Volume 5, and in the State Board of Equalization (SBOE) requirements for the assessment of personal property. The SBOE requires that counties use ARL Volume 5, including current discovery, classification, documentation procedures, current economic lives table, cost factor tables, depreciation table, and level of value adjustment factor table.

The personal property audit standards narrative must be in place and current. A listing of businesses that have been audited by the assessor within the twelve-month period reflected in the plan is given to the auditor. The audited businesses must be in conformity with those described in the plan.

Aggregate ratio will be determined solely from the personal property accounts that have been physically inspected. The minimum assessment sample is one percent or ten schedules, whichever is greater, and the maximum assessment audit sample is 100 schedules.

For the counties having over 100,000 population, WRA selected a sample of all personal property schedules to determine whether the assessor is correctly applying the provisions of law and manuals of the Property Tax Administrator in arriving at the assessment levels of such property. This sample was selected from the personal property schedules audited by the assessor. In no event was the sample selected by the contractor less than 30 schedules. The counties to be included in this study are Adams, Arapahoe, Boulder, Denver, Douglas, El Paso, Jefferson, Larimer, Mesa, Pueblo, and Weld. All other counties received a procedural study.

Adams County is compliant with the guidelines set forth in ARL Volume 5 regarding discovery procedures, using the following methods to discover personal property accounts in the county:

- Public Record Documents
- Chamber of Commerce/Economic Development Contacts
- Local Telephone Directories, Newspapers or Other Local Publications
- Personal Observation, Physical Canvassing or Word of Mouth

The county uses the Division of Property Taxation (DPT) recommended classification and documentation procedures. The DPT's recommended cost factor tables, depreciation tables and level of value adjustment factor tables are also used.

Adams County submitted their personal property written audit plan and was current for the 2015 valuation period. The number and listing of businesses audited was also submitted and was in conformance with the written audit plan. The following audit triggers were used by the county to select accounts to be audited:

- Accounts with obvious discrepancies
- New businesses filing for the first time
- Incomplete or inconsistent declarations
- Accounts with omitted property
- Same business type or use
- Businesses with no deletions or additions for 2 or more years
- Non-filing Accounts - Best Information Available
- Accounts close to the \$7,300 actual value exemption status



- Accounts protested with substantial disagreement

Adams County's median ratio is 1.00. This is in compliance with the State Board of Equalization (SBOE) compliance requirements which range from .90 to 1.10 with no COD requirements.

Conclusions

Adams County has employed adequate discovery, classification, documentation, valuation, and auditing procedures for their personal property assessment and is in statistical compliance with SBOE requirements.

Recommendations

None

WILDROSE AUDITOR STAFF

Harry J. Fuller, *Audit Project Manager*

Suzanne Howard, *Audit Administrative Manager*

Steve Kane, *Audit Statistician*

Carl W. Ross, *Agricultural / Natural Resource Analyst*

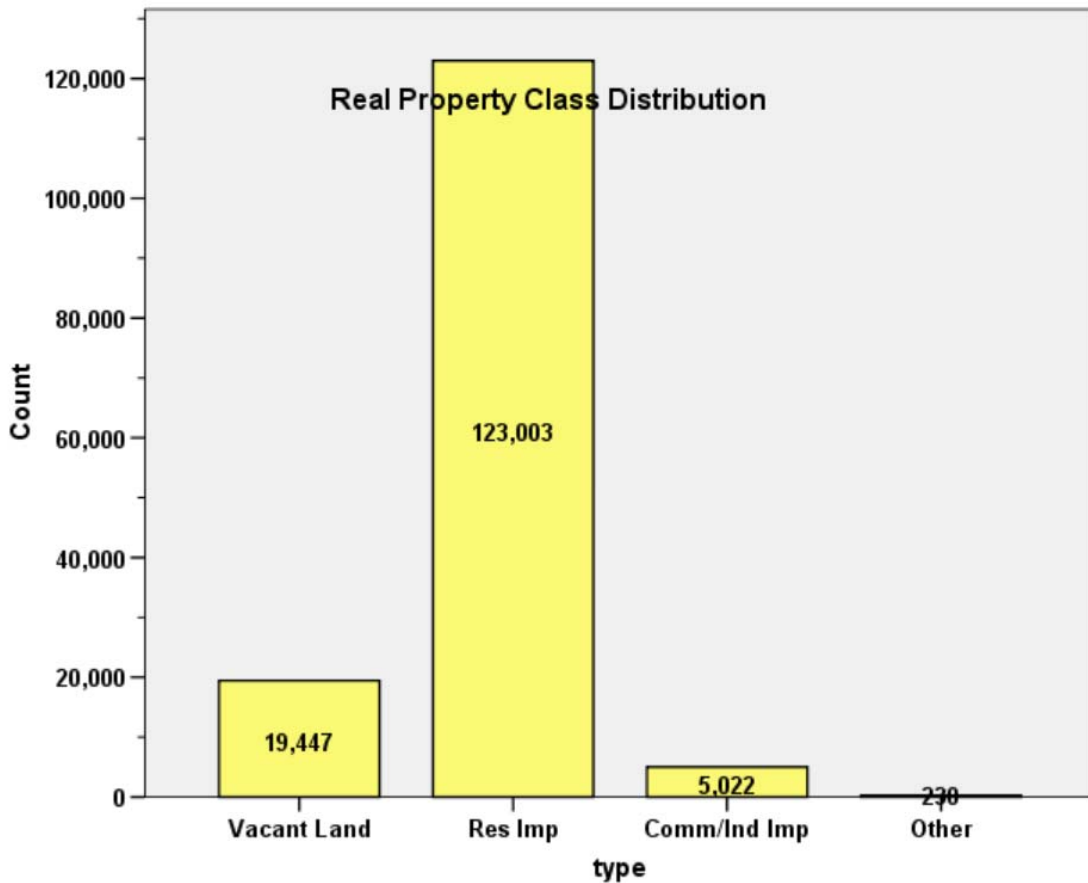
J. Andrew Rodriguez, *Field Analyst*

APPENDICES

STATISTICAL COMPLIANCE REPORT
FOR ADAMS COUNTY
2015

I. OVERVIEW

Adams County is an urban county located along Colorado’s Front Range. The county has a total of 147,702 real property parcels, according to data submitted by the county assessor’s office in 2015. The following provides a breakdown of property classes for this county:



The vacant land class of properties was dominated by residential land. Residential lots (coded 100) accounted for 65.8% of all vacant land parcels.

For residential improved properties, single family properties accounted for 81.9% of all residential properties.

Commercial and industrial properties represented a much smaller proportion of property classes in comparison. Commercial/industrial properties accounted for 2.8% of all such properties in this county.

II. DATA FILES

The following sales analyses were based on the requirements of the 2015 Colorado Property Assessment Study. Information was provided by the Adams Assessor's Office in April 2015. The data included all 5 property record files as specified by the Auditor.

III. RESIDENTIAL SALES RESULTS

There were 14,249 qualified residential sales for the 24 month period prior to June 30, 2014. The sales ratio analysis was analyzed as follows:

Case Processing Summary

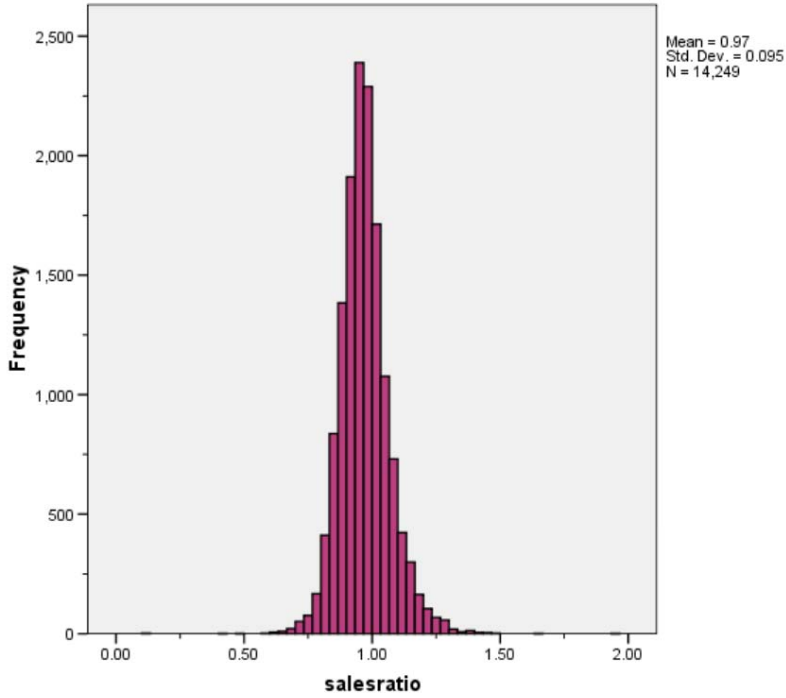
	Count	Percent
ECONAREA 1	148	1.0%
2	2919	20.5%
3	264	1.9%
4	248	1.7%
5	2108	14.8%
6	742	5.2%
7	3736	26.2%
8	314	2.2%
9	636	4.5%
10	661	4.6%
11	1433	10.1%
12	610	4.3%
13	352	2.5%
14	27	.2%
15	2	.0%
16	47	.3%
18	2	.0%
Overall	14249	100.0%
Excluded	0	
Total	14249	

Ratio Statistics for CURRTOT / TASP

Group	Median	Price Related Differential	Coefficient of Dispersion
1	.965	1.003	.073
2	.959	1.002	.072
3	.964	1.002	.076
4	.971	1.006	.079
5	.967	1.000	.068
6	.949	1.005	.080
7	.957	1.021	.068
8	.969	1.167	.092
9	.972	1.001	.080
10	.973	1.004	.072
11	.979	1.008	.071
12	.979	1.016	.094
13	.977	1.006	.081
14	.948	1.033	.101
15	.995	1.069	.072
16	.952	1.106	.136
18	1.035	1.136	.140
Overall	.964	1.030	.074

Please note that the median ratio and COD totals for Economic Areas 14, 15 and 18 are not valid, based on the very low number of residential sales for those areas. In terms of the valid economic areas (1 through 13 and 16), the median ratio and COD totals were all in compliance in terms of the SBOE thresholds. Economic Area 6 is barely in compliance after rounding to 0.95.

The following graphs describe the overall sales ratio results for Adams County:



NOTE: Scale adjusted for above chart for illustration purposes.

The above graphs indicate that the distribution of the sale ratios was within state mandated limits.

Residential Market Trend Analysis

We next analyzed the residential dataset using the 24-month sale period for any residual market trending and broken down by economic area, as follows:

ECONAREA	Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
			B	Std. Error	Beta		
1	1	(Constant)	.975	.014		71.740	.000
		SalePeriod	.000	.001	-.026	-.320	.750
2	1	(Constant)	.948	.003		315.470	.000
		SalePeriod	.002	.000	.119	6.458	.000
3	1	(Constant)	.949	.011		88.457	.000
		SalePeriod	.002	.001	.155	2.538	.012
4	1	(Constant)	.946	.010		94.561	.000
		SalePeriod	.003	.001	.215	3.459	.001
5	1	(Constant)	.946	.003		273.387	.000
		SalePeriod	.002	.000	.170	7.904	.000
6	1	(Constant)	.955	.007		137.955	.000
		SalePeriod	.001	.001	.037	1.002	.317
7	1	(Constant)	.951	.003		367.282	.000
		SalePeriod	.001	.000	.093	5.705	.000
8	1	(Constant)	.956	.013		74.472	.000
		SalePeriod	.001	.001	.059	1.053	.293
9	1	(Constant)	.975	.007		136.241	.000
		SalePeriod	.000	.001	.011	.273	.785
10	1	(Constant)	.962	.007		140.703	.000
		SalePeriod	.001	.001	.051	1.301	.194
11	1	(Constant)	.968	.004		218.861	.000
		SalePeriod	.002	.000	.176	6.748	.000
12	1	(Constant)	.968	.010		98.823	.000
		SalePeriod	.003	.001	.142	3.528	.000
13	1	(Constant)	.931	.010		94.202	.000
		SalePeriod	.006	.001	.344	6.858	.000
14	1	(Constant)	.969	.052		18.774	.000
		SalePeriod	.001	.004	.065	.325	.748
15	1	(Constant)	.443	.000		.	.
		SalePeriod	.048	.000	1.000	.	.
16	1	(Constant)	.863	.050		17.348	.000
		SalePeriod	.004	.004	.153	1.039	.305

a. Dependent Variable: salesratio

There was no residual market trending present in the sale ratio data for most economic areas. While several economic areas had statistically significant results, the magnitude of each trend was not significant; we therefore concluded that the assessor has adequately addressed market trending in the valuation of residential properties.

Sold/Unsold Analysis

In terms of the valuation consistency between sold and unsold residential properties, we compared the median actual value per square foot for 2015 between each group. The data was analyzed both as a whole and broken down by economic area, as follows:

Group	N	Median	Mean
Unsold	114,528	\$117.95	\$120.06
Sold	6,729	\$117.50	\$120.11

ECONAREA	Group	N	Median	Mean
1	Unsold	1507	\$125.76	\$132.41
	Sold	148	\$130.33	\$135.12
2	Unsold	14316	\$122.10	\$126.68
	Sold	2919	\$124.76	\$129.21
3	Unsold	1898	\$122.34	\$123.39
	Sold	263	\$132.00	\$136.22
4	Unsold	2319	\$142.22	\$150.40
	Sold	248	\$180.92	\$174.88
5	Unsold	21914	\$155.64	\$156.84
	Sold	2108	\$163.56	\$167.76
6	Unsold	7940	\$168.52	\$162.18
	Sold	742	\$167.80	\$164.01
7	Unsold	27064	\$139.62	\$143.53
	Sold	3735	\$140.76	\$145.50
8	Unsold	6190	\$128.08	\$129.54
	Sold	312	\$133.70	\$139.83
9	Unsold	6905	\$138.44	\$137.13
	Sold	636	\$142.97	\$144.39
10	Unsold	3095	\$167.42	\$168.05
	Sold	661	\$179.39	\$177.54
11	Unsold	8315	\$129.36	\$128.17
	Sold	1433	\$131.20	\$131.80
12	Unsold	4310	\$108.50	\$107.21
	Sold	610	\$112.98	\$110.44
13	Unsold	2032	\$104.52	\$103.27
	Sold	352	\$107.47	\$105.35
14	Unsold	294	\$73.39	\$73.64
	Sold	27	\$72.21	\$75.56
16	Unsold	398	\$84.70	\$89.92
	Sold	47	\$92.44	\$95.08

Given that there were minor indications that the value per square foot was higher for sold properties than unsold properties, we also examined the percent change in value from 2014 to 2015 for residential properties, again by class and by economic area, as follows:

Report

DIFF

DIFF	sold	N	Median	Mean
0		107360	1.16	1.19
1		14001	1.19	1.23
Total		121361	1.17	1.20

ECONAREA	DIFF	sold	N	Median	Mean
1	0		1457	1.14	1.15
	1		145	1.12	1.15
2	0		13961	1.18	1.17
	1		2773	1.19	1.20
3	0		1851	1.19	1.22
	1		255	1.31	1.30
4	0		2223	1.11	1.12
	1		200	1.17	1.20
5	0		21821	1.10	1.12
	1		2098	1.15	1.18
6	0		7935	1.16	1.16
	1		742	1.18	1.18
7	0		26853	1.15	1.17
	1		3697	1.16	1.18
8	0		6155	1.20	1.21
	1		303	1.30	1.31
9	0		6735	1.21	1.21
	1		613	1.24	1.26
10	0		2924	1.11	1.13
	1		630	1.14	1.16
11	0		8114	1.31	1.32
	1		1420	1.31	1.31
	Total		9534	1.31	1.32
12	0		3848	1.48	1.46
	1		552	1.49	1.47
13	0		1906	1.48	1.45
	1		346	1.51	1.47
14	0		288	1.00	1.05
	1		25	1.20	1.17
16	0		390	1.19	1.28
	1		44	1.13	1.16
	Total		434	1.18	1.27

As a final check, we compared sold and unsold residential properties by major subclass, as follows:

Report

VaISF

ABSTRIMP	sold	N	Median	Mean
1212	0	89327	\$142.20	\$146.53
	1	11438	\$142.62	\$149.45
	Total	100765	\$142.26	\$146.86
1214	0	7205	\$126.89	\$127.58
	1	1211	\$129.89	\$130.82
	Total	8416	\$127.47	\$128.04
1215	0	983	\$106.03	\$110.78
	1	98	\$111.17	\$123.26
	Total	1081	\$106.23	\$111.91
1220	0	392	\$85.42	\$88.39
	1	45	\$84.21	\$86.23
	Total	437	\$85.30	\$88.17
1230	0	7633	\$111.17	\$110.82
	1	1229	\$113.44	\$114.74
	Total	8862	\$111.56	\$111.36
Total	0	105540	\$138.52	\$142.11
	1	14021	\$138.93	\$144.41
	Total	119561	\$138.57	\$142.38

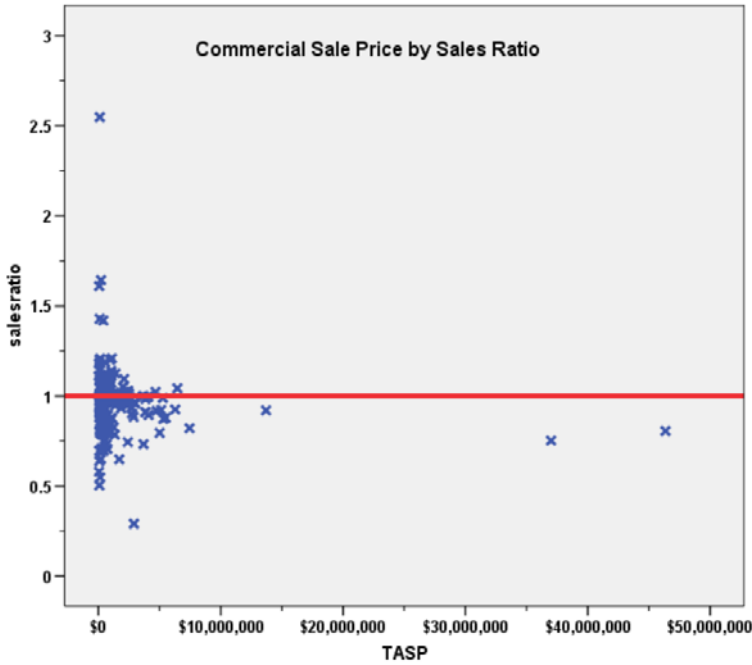
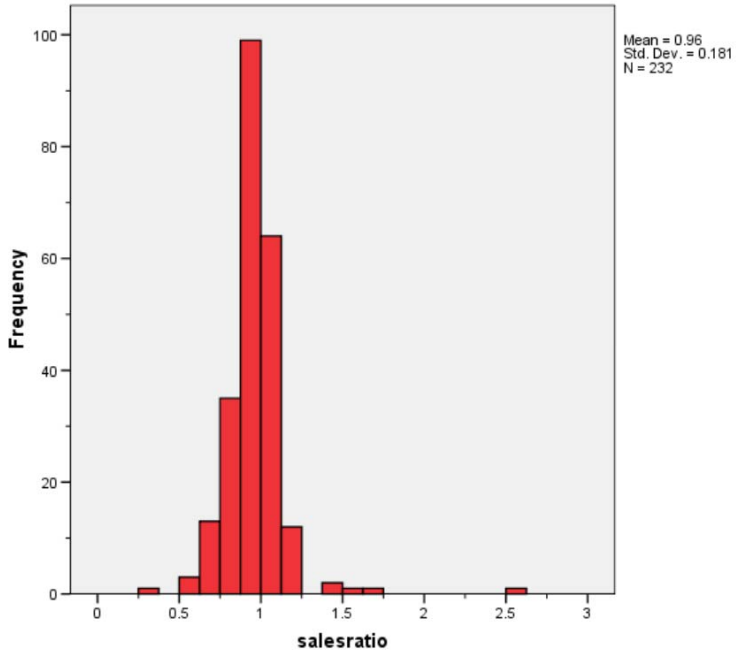
The above results indicate that sold and unsold residential properties were valued in a consistent manner.

IV. COMMERCIAL/INDUSTRIAL SALE RESULTS

There were 232 qualified commercial and industrial sales for the 24 month period prior to June 30, 2014. The sales ratio analysis was analyzed as follows:

Median	0.978
Price Related Differential	1.068
Coefficient of Dispersion	10.6

The above table indicates that the Adams County commercial/industrial sale ratios were in compliance with the SBOE standards. The following histogram and scatter plot describe the sales ratio distribution further:



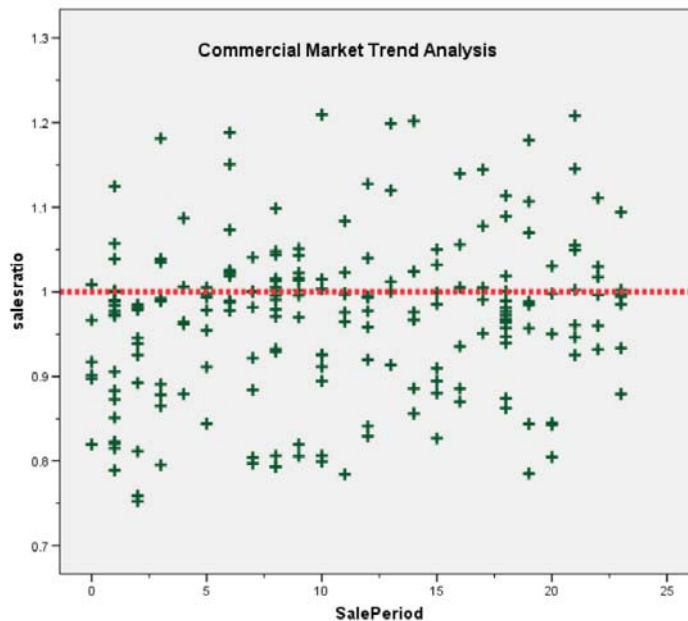
Commercial/Industrial Market Trend Analysis

The 232 commercial/industrial sales were next analyzed by examining the sale ratios across the 24 month sale period. The purpose was to check for any residual market trending. The results were as follows:

Coefficients^a

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	.945	.012		81.374	.000
	SalePeriod	.002	.001	.175	2.569	.011

a. Dependent Variable: salesratio



While there was marginal statistical significance in the residual market trend, the magnitude at 0.2% per month was not. We concluded that the assessor has adequately considered market trending adjustments as part of the commercial/industrial valuation.

Sold/Unsold Analysis

We compared the median and mean value per square feet for sold and unsold commercial/industrial properties, as follows:

Group	No. Props	Median Val SF	Mean Val SF
Unsold	3,774	\$71	\$99
Sold	191	\$78	\$110

We next stratified this comparison by subclass. The following table compared sold and unsold commercial/industrial properties for subclasses with at least 3 sales:

ABSTRIMP	sold	N	Median	Mean
2212	Unsold	1230	\$82.34	\$111.27
	Sold	58	\$125.20	\$142.89
2215	Unsold	44	\$63.56	\$64.14
	Sold	4	\$66.09	\$67.75
2220	Unsold	293	\$89.74	\$110.64
	Sold	20	\$77.99	\$104.09
2230	Unsold	736	\$107.55	\$145.99
	Sold	30	\$121.30	\$173.87
2235	Unsold	1060	\$50.63	\$58.33
	Sold	54	\$62.70	\$68.90
2245	Unsold	48	\$37.82	\$46.58
	Sold	3	\$20.26	\$22.23
3212	Unsold	49	\$50.63	\$66.58
	Sold	3	\$64.13	\$103.53
3215	Unsold	71	\$44.17	\$58.47
	Sold	11	\$46.12	\$48.35

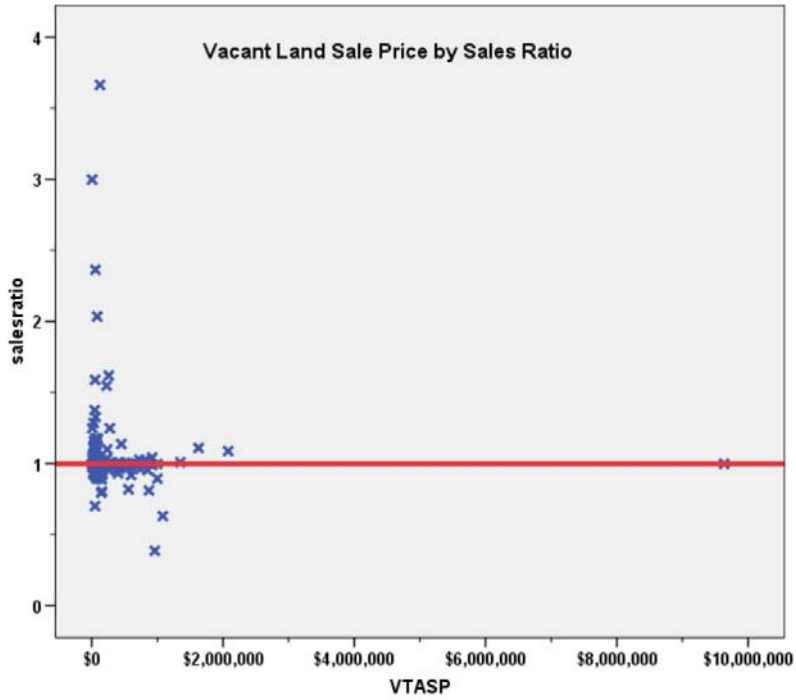
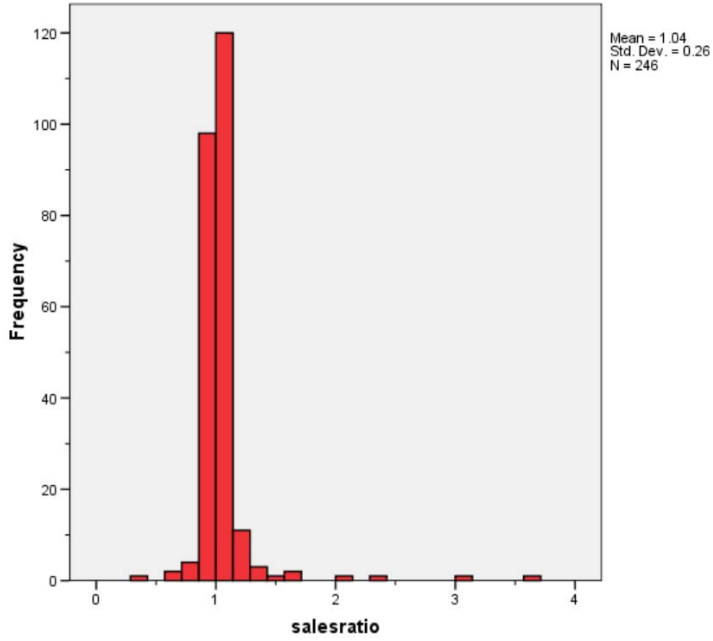
The above comparison indicates that when stratified by subclass, there were instances where the sold property had a greater value per square foot, where the sold properties had a greater value per square foot, and instances where there was little difference. Based on this pattern, we concluded that there was no evidence that sold commercial/industrial properties were valued consistently higher than unsold properties.

V. VACANT LAND SALE RESULTS

There were 246 qualified vacant land sales for the 24 month period prior to June 30, 2014. The sales ratio analysis was analyzed as follows:

Median	1.000
Price Related Differential	1.043
Coefficient of Dispersion	8.3

The above ratio statistics were in compliance overall with the standards set forth by the Colorado State Board of Equalization (SBOE) for the overall vacant land sales. The following graphs describe further the sales ratio distribution for all of these properties:



The above histogram indicates that the distribution of the vacant land sale ratios was within state mandated limits. No sales were trimmed.

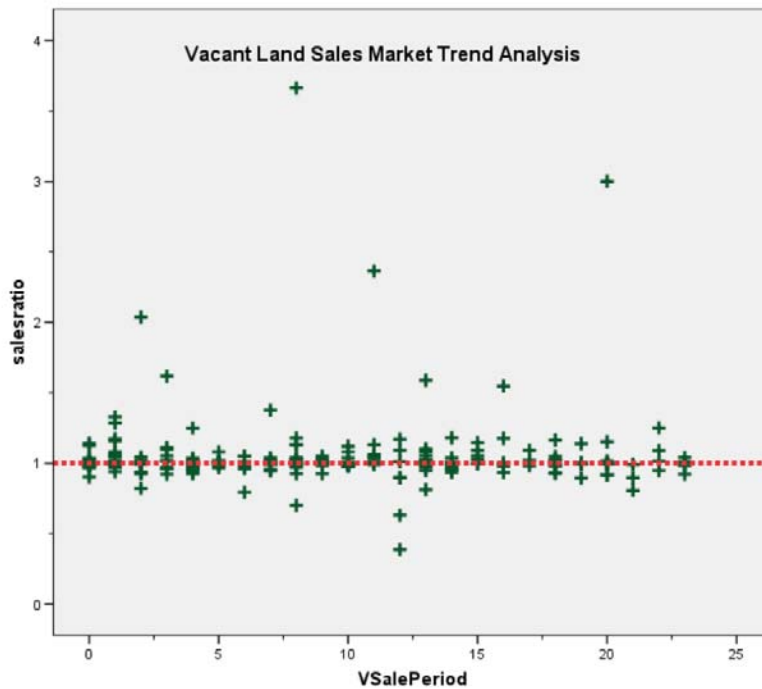
Vacant Land Market Trend Analysis

We next analyzed the vacant land dataset using the 18-month sale period, with the following results:

Coefficients^a

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	1.031	.028		37.443	.000
	VSalePeriod	.001	.003	.029	.459	.647

a. Dependent Variable: salesratio



The above analysis indicated that no significant market trending was present in the vacant land sale data. We concluded that the assessor has adequately dealt with market trending for vacant land properties.

Sold/Unsold Analysis

In terms of the valuation consistency between sold and unsold vacant land properties, we compared the median change in value for 2010 and 2015 between each group, as follows:

Group	No. Props	Median Chg Val	Mean Chg Val
Unsold	14,144	1.00	1.08
Sold	203	1.01	1.09

Hypothesis Test Summary

	Null Hypothesis	Test	Sig.	Decision
1	The distribution of DIFF is the same across categories of sold.	Independent-Samples Mann-Whitney U Test	.786	Retain the null hypothesis.

Asymptotic significances are displayed. The significance level is .05.

Overall, we concluded that the county assessor valued sold and unsold vacant properties consistently.

V. AGRICULTURAL IMPROVEMENTS ANALYSIS

Based on the parameters of the state audit analysis, this county was exempt from this analysis for 2015.

VI. CONCLUSIONS

Based on this 2015 audit statistical analysis, residential, commercial/industrial and vacant land properties were found to be in compliance with state guidelines.

STATISTICAL ABSTRACT

Residential

Ratio Statistics for CURRTOT / TASP

ECONAREA	95% Confidence Interval for Mean			Median	95% Confidence Interval for Median			Weighted Mean	95% Confidence Interval for Weighted Mean		Price Related Differential	Coefficient of Dispersion	Coefficient of Variation
	Mean	Lower Bound	Upper Bound		Lower Bound	Upper Bound	Actual Coverage		Lower Bound	Upper Bound			
1	.972	.957	.986	.965	.951	.989	96.0%	.968	.954	.983	1.003	.073	9.5%
2	.964	.961	.967	.959	.956	.963	95.0%	.962	.959	.965	1.002	.072	9.5%
3	.971	.960	.983	.964	.952	.975	95.8%	.969	.957	.982	1.002	.076	10.0%
4	.973	.960	.985	.971	.959	.985	95.1%	.967	.955	.979	1.006	.079	10.2%
5	.970	.966	.973	.967	.963	.971	95.3%	.969	.966	.973	1.000	.068	8.7%
6	.961	.954	.968	.949	.943	.958	95.7%	.956	.949	.963	1.005	.080	10.1%
7	.963	.960	.966	.957	.955	.961	95.2%	.944	.918	.970	1.021	.068	8.9%
8	.967	.954	.980	.969	.954	.984	95.2%	.829	.730	.928	1.167	.092	12.2%
9	.976	.968	.984	.972	.962	.979	95.7%	.975	.967	.982	1.001	.080	10.5%
10	.970	.963	.977	.973	.964	.982	95.7%	.966	.959	.973	1.004	.072	9.3%
11	.992	.987	.997	.979	.974	.983	95.5%	.984	.980	.989	1.008	.071	9.8%
12	.997	.986	1.008	.979	.973	.987	95.3%	.982	.973	.991	1.016	.094	13.6%
13	.987	.975	.998	.977	.968	.987	95.2%	.981	.971	.992	1.006	.081	11.4%
14	.983	.932	1.035	.948	.899	1.048	98.1%	.952	.893	1.011	1.033	.101	13.2%
15	.995	.080	1.910	.995	.923	1.067	100.0%	.931	.736	1.127	1.069	.072	10.2%
16	.908	.856	.959	.952	.856	.978	96.0%	.821	.725	.917	1.106	.136	19.4%
18	1.035	-.811	2.881	1.035	.890	1.180	100.0%	.911	.401	1.422	1.136	.140	19.9%

The confidence interval for the median is constructed without any distribution assumptions. The actual coverage level may be greater than the specified level. Other confidence intervals are constructed by assuming a Normal distribution for the ratios.

Commercial Land

Ratio Statistics for CURRTOT / TASP

Mean	95% Confidence Interval for Mean		Median	95% Confidence Interval for Median			Weighted Mean	95% Confidence Interval for Weighted Mean		Price Related Differential	Coefficient of Dispersion	Coefficient of Variation
	Lower Bound	Upper Bound		Lower Bound	Upper Bound	Actual Coverage		Lower Bound	Upper Bound			
.962	.939	.986	.978	.966	.989	95.8%	.901	.857	.946	1.068	.106	18.8%

The confidence interval for the median is constructed without any distribution assumptions. The actual coverage level may be greater than the specified level. Other confidence intervals are constructed by assuming a Normal distribution for the ratios.

Vacant Land

Ratio Statistics for CURRLND /VTASP

Mean	95% Confidence Interval for Mean		Median	95% Confidence Interval for Median			Weighted Mean	95% Confidence Interval for Weighted Mean		Price Related Differential	Coefficient of Dispersion	Coefficient of Variation
	Lower Bound	Upper Bound		Lower Bound	Upper Bound	Actual Coverage		Lower Bound	Upper Bound			Mean Centered
1.041	1.009	1.074	1.000	1.000	1.003	95.2%	.998	.966	1.031	1.043	.083	24.9%

The confidence interval for the median is constructed without any distribution assumptions. The actual coverage level may be greater than the specified level. Other confidence intervals are constructed by assuming a Normal distribution for the ratios.

Residential Median Ratio Stratification

Sale Price

Case Processing Summary

	Count	Percent
SPRec \$25K to \$50K	47	.3%
\$50K to \$100K	349	2.4%
\$100K to \$150K	1318	9.2%
\$150K to \$200K	3369	23.6%
\$200K to \$300K	5701	40.0%
\$300K to \$500K	3009	21.1%
\$500K to \$750K	366	2.6%
\$750K to \$1,000K	49	.3%
Over \$1,000K	41	.3%
Overall	14249	100.0%
Excluded	0	
Total	14249	

Ratio Statistics for CURRTOT / TASP

Group	Median	Price Related Differential	Coefficient of Dispersion	Coefficient of Variation
				Median Centered
\$25K to \$50K	1.040	1.007	.149	19.7%
\$50K to \$100K	1.004	1.003	.117	15.7%
\$100K to \$150K	.994	1.001	.099	13.2%
\$150K to \$200K	.972	1.000	.076	10.1%
\$200K to \$300K	.958	1.000	.066	8.5%
\$300K to \$500K	.957	1.001	.062	8.0%
\$500K to \$750K	.956	1.000	.076	9.7%
\$750K to \$1,000K	.989	1.002	.055	7.7%
Over \$1,000K	.902	1.059	.143	19.1%
Overall	.964	1.030	.074	9.9%

Subclass

Case Processing Summary

	Count	Percent
ABSTRIMP 0	1	.0%
600	1	.0%
1010	1	.0%
1212	11438	80.3%
1214	1	.0%
1214	1	.0%
1214	1211	8.5%
1215	134	.9%
1215	98	.7%
1215	20	.1%
1216	5	.0%
1216	1	.0%
1217	3	.0%
1220	45	.3%
1225	18	.1%
1225	2	.0%
1225	1	.0%
1225	1	.0%
1225	1	.0%
1225	2	.0%
1225	1	.0%
1225	2	.0%
1225	1	.0%
1225	1	.0%
1225	1	.0%
1225	1	.0%
1226	1	.0%
1230	1229	8.6%
1236	22	.2%
1240	3	.0%
2212	1	.0%
2746	1	.0%
Overall	14249	100.0%

Group	Median	Price Related Differential	Coefficient of Dispersion	Coefficient of Variation
				Median Centered
0	.801	1.000	.000	.%
600	.984	1.000	.000	.%
1010	1.046	1.000	.000	.%
1212	.962	1.002	.071	9.3%
1214	.781	1.000	.000	.%
1214	.929	1.000	.000	.%
1214	.981	1.007	.069	9.8%
1215	.954	1.003	.074	10.1%
1215	.952	1.008	.086	11.5%
1215	.913	1.016	.082	10.7%
1216	.944	1.014	.070	10.2%
1216	.974	1.000	.000	.%
1217	.105	.823	1.955	414.8%
1220	.952	1.007	.098	14.2%
1225	.956	1.232	.155	20.0%
1225	.745	1.064	.211	29.9%
1225	1.001	1.000	.000	.%
1225	.777	1.000	.000	.%
1225	.955	1.000	.000	.%
1225	.984	1.000	.015	2.1%
1225	.785	1.000	.000	.%
1225	.695	1.012	.097	13.7%
1225	.697	1.000	.000	.%
1225	.928	1.000	.000	.%
1225	.482	1.000	.000	.%
1225	.923	1.000	.000	.%
1226	.592	1.000	.000	.%
1230	.975	1.014	.086	12.3%
1236	.877	1.021	.136	17.6%
1240	.709	.976	.200	32.1%
2212	.890	1.000	.000	.%
2746	1.055	1.000	.000	.%
Overall	.964	1.030	.074	9.9%

Age

Case Processing Summary

	Count	Percent
AgeRec 0	1	.0%
Over 100	20	.1%
75 to 100	111	.8%
50 to 75	1963	13.8%
25 to 50	3179	22.3%
5 to 25	6912	48.5%
5 or Newer	2063	14.5%
Overall	14249	100.0%
Excluded	0	
Total	14249	

Ratio Statistics for CURRTOT / TASP

Group	Median	Price Related Differential	Coefficient of Dispersion	Coefficient of Variation
				Median Centered
0	.801	1.000	.000	.%
Over 100	.906	.991	.114	14.1%
75 to 100	.902	.992	.119	14.4%
50 to 75	.957	1.006	.089	11.4%
25 to 50	.956	1.092	.083	11.2%
5 to 25	.969	1.019	.067	9.2%
5 or Newer	.966	1.005	.062	8.0%
Overall	.964	1.030	.074	9.9%

Improved Area

Case Processing Summary

	Count	Percent
ImpSFRec 0	1	.0%
LE 500 sf	10	.1%
500 to 1,000 sf	1842	12.9%
1,000 to 1,500 sf	4607	32.3%
1,500 to 2,000 sf	3623	25.4%
2,000 to 3,000 sf	3390	23.8%
3,000 sf or Higher	776	5.4%
Overall	14249	100.0%
Excluded	0	
Total	14249	

Ratio Statistics for CURRTOT / TASP

Group	Median	Price Related Differential	Coefficient of Dispersion	Coefficient of Variation
				Median Centered
0	.801	1.000	.000	.%
LE 500 sf	.814	1.055	.343	52.0%
500 to 1,000 sf	.949	1.010	.095	12.6%
1,000 to 1,500 sf	.966	1.008	.078	10.5%
1,500 to 2,000 sf	.962	1.007	.067	8.8%
2,000 to 3,000 sf	.969	1.005	.062	8.1%
3,000 sf or Higher	.977	1.115	.074	10.0%
Overall	.964	1.030	.074	9.9%

Quality

Case Processing Summary

	Count	Percent
QUALITY	1	.0%
Average	10437	73.2%
Average Plus	2582	18.1%
Excellent	21	.1%
Fair	42	.3%
Fair Plus	27	.2%
Good	677	4.8%
Good Plus	161	1.1%
Low	32	.2%
Very Good	219	1.5%
Very Good Plus	50	.4%
Overall	14249	100.0%
Excluded	0	
Total	14249	

Ratio Statistics for CURRTOT / TASP

Group	Median	Price Related Differential	Coefficient of Dispersion	Coefficient of Variation
				Median Centered
	.801	1.000	.000	.%
Average	.959	1.025	.076	10.2%
Average Plus	.981	1.052	.064	8.8%
Excellent	.977	1.006	.055	8.2%
Fair	.905	1.116	.107	13.9%
Fair Plus	.963	1.470	.110	14.5%
Good	.967	1.002	.066	8.6%
Good Plus	.973	.999	.062	8.1%
Low	.936	.991	.135	17.8%
Very Good	.982	1.001	.057	7.5%
Very Good Plus	1.006	1.002	.054	7.1%
Overall	.964	1.030	.074	9.9%

Condition

Case Processing Summary

	Count	Percent
CONDITION	1	.0%
Average	9451	66.3%
Badly Worn	104	.7%
Excellent	79	.6%
Good	4441	31.2%
Very Good	156	1.1%
Worn Out	17	.1%
Overall	14249	100.0%
Excluded	0	
Total	14249	

Ratio Statistics for CURRTOT / TASP

Group	Median	Price Related Differential	Coefficient of Dispersion	Coefficient of Variation
				Median Centered
	.801	1.000	.000	.%
Average	.967	1.036	.075	10.1%
Badly Worn	.999	1.007	.108	14.5%
Excellent	.974	1.014	.068	9.0%
Good	.958	1.003	.070	9.2%
Very Good	.978	1.226	.074	10.4%
Worn Out	.978	1.000	.061	9.8%
Overall	.964	1.030	.074	9.9%

Commercial Median Ratio Stratification

Sale Price

Case Processing Summary

		Count	Percent
SPRec	\$25K to \$50K	2	.9%
	\$50K to \$100K	14	6.0%
	\$100K to \$150K	20	8.6%
	\$150K to \$200K	10	4.3%
	\$200K to \$300K	24	10.3%
	\$300K to \$500K	37	15.9%
	\$500K to \$750K	33	14.2%
	\$750K to \$1,000K	21	9.1%
	Over \$1,000K	71	30.6%
Overall		232	100.0%
Excluded		0	
Total		232	

Ratio Statistics for CURRTOT / TASP

Group	Median	Price Related Differential	Coefficient of Dispersion	Coefficient of Variation
				Median Centered
\$25K to \$50K	.845	1.059	.315	44.5%
\$50K to \$100K	1.022	.997	.209	27.6%
\$100K to \$150K	.990	1.012	.196	40.2%
\$150K to \$200K	.813	.999	.147	19.5%
\$200K to \$300K	.987	1.008	.111	17.9%
\$300K to \$500K	.957	1.000	.086	12.9%
\$500K to \$750K	.976	1.001	.077	11.3%
\$750K to \$1,000K	.999	.996	.048	7.9%
Over \$1,000K	.971	1.062	.083	13.3%
Overall	.978	1.068	.106	18.6%

Subclass

Case Processing Summary

	Count	Percent
ABSTRIMP 0	1	.4%
2212	58	25.0%
2215	4	1.7%
2216	2	.9%
2220	20	8.6%
2221	1	.4%
2224	1	.4%
2225	2	.9%
2230	30	12.9%
2233	1	.4%
2235	54	23.3%
2245	42	18.1%
2724	1	.4%
3212	3	1.3%
3215	12	5.2%
Overall	232	100.0%
Excluded	0	
Total	232	

Ratio Statistics for CURRTOT / TASP

Group	Median	Price Related Differential	Coefficient of Dispersion	Coefficient of Variation
				Median Centered
0	.291	1.000	.000	.%
2212	.986	1.010	.070	12.0%
2215	.895	1.045	.070	10.2%
2216	.883	1.018	.158	22.3%
2220	.992	1.041	.089	17.6%
2221	.972	1.000	.000	.%
2224	.806	1.000	.000	.%
2225	1.003	.998	.003	.4%
2230	.981	1.070	.124	18.0%
2233	.873	1.000	.000	.%
2235	.979	1.058	.083	13.2%
2245	.912	1.064	.196	33.9%
2724	.989	1.000	.000	.%
3212	.967	1.010	.038	7.5%
3215	.973	.992	.045	5.6%
Overall	.978	1.068	.106	18.6%

Age

Case Processing Summary

	Count	Percent
AgeRec 0	1	.4%
Over 100	3	1.3%
75 to 100	7	3.0%
50 to 75	21	9.1%
25 to 50	107	46.1%
5 to 25	89	38.4%
5 or Newer	4	1.7%
Overall	232	100.0%
Excluded	0	
Total	232	

Ratio Statistics for CURRTOT / TASP

Group	Median	Price Related Differential	Coefficient of Dispersion	Coefficient of Variation
				Median Centered
0	.291	1.000	.000	.%
Over 100	1.001	1.000	.000	.1%
75 to 100	.979	.956	.074	13.2%
50 to 75	.994	.982	.128	22.2%
25 to 50	.977	1.022	.086	13.4%
5 to 25	.964	1.068	.125	22.6%
5 or Newer	.983	1.165	.068	11.0%
Overall	.978	1.068	.106	18.6%

Improved Area

Case Processing Summary

	Count	Percent
ImpSFRec 0	1	.4%
LE 500 sf	1	.4%
500 to 1,000 sf	4	1.7%
1,000 to 1,500 sf	7	3.0%
1,500 to 2,000 sf	12	5.2%
2,000 to 3,000 sf	17	7.3%
3,000 sf or Higher	190	81.9%
Overall	232	100.0%
Excluded	0	
Total	232	

Ratio Statistics for CURRTOT / TASP

Group	Median	Price Related Differential	Coefficient of Dispersion	Coefficient of Variation
				Median Centered
0	.291	1.000	.000	.%
LE 500 sf	.504	1.000	.000	.%
500 to 1,000 sf	.804	1.044	.196	24.5%
1,000 to 1,500 sf	1.039	.974	.114	19.6%
1,500 to 2,000 sf	.993	1.021	.091	19.9%
2,000 to 3,000 sf	.951	1.058	.091	12.5%
3,000 sf or Higher	.980	1.071	.100	17.8%
Overall	.978	1.068	.106	18.6%

Quality

Case Processing Summary

	Count	Percent
QUALITY	1	.4%
Average	197	84.9%
Average Plus	6	2.6%
Fair	3	1.3%
Good	13	5.6%
Good Plus	3	1.3%
Low	6	2.6%
Low Plus	1	.4%
Very Good	2	.9%
Overall	232	100.0%
Excluded	0	
Total	232	

Ratio Statistics for CURRTOT / TASP

Group	Median	Price Related Differential	Coefficient of Dispersion	Coefficient of Variation
				Median Centered
	.291	1.000	.000	.%
Average	.979	1.043	.100	18.0%
Average Plus	.942	1.116	.118	16.5%
Fair	1.002	1.002	.004	.7%
Good	.922	1.010	.150	18.4%
Good Plus	.988	1.014	.021	4.4%
Low	.988	1.094	.141	28.8%
Low Plus	1.051	1.000	.000	.%
Very Good	.881	1.149	.170	24.0%
Overall	.978	1.068	.106	18.6%

Condition

Case Processing Summary

	Count	Percent
CONDITION	1	.4%
Average	205	88.4%
Badly Worn	3	1.3%
Good	21	9.1%
Very Good	1	.4%
Worn Out	1	.4%
Overall	232	100.0%
Excluded	0	
Total	232	

Ratio Statistics for CURRTOT / TASP

Group	Median	Price Related Differential	Coefficient of Dispersion	Coefficient of Variation
				Median Centered
	.291	1.000	.000	.%
Average	.979	1.073	.102	18.0%
Badly Worn	1.051	1.125	.235	39.6%
Good	.964	.976	.102	14.3%
Very Good	1.073	1.000	.000	.%
Worn Out	1.000	1.000	.000	.%
Overall	.978	1.068	.106	18.6%

Vacant Land Median Ratio Stratification

Sale Price

Case Processing Summary

	Count	Percent
SPRec LT \$25K	13	5.3%
\$25K to \$50K	37	15.0%
\$50K to \$100K	111	45.1%
\$100K to \$150K	25	10.2%
\$150K to \$200K	9	3.7%
\$200K to \$300K	12	4.9%
\$300K to \$500K	12	4.9%
\$500K to \$750K	11	4.5%
\$750K to \$1,000K	11	4.5%
Over \$1,000K	5	2.0%
Overall	246	100.0%
Excluded	0	
Total	246	

Ratio Statistics for CURRLND / VTASP

Group	Median	Price Related Differential	Coefficient of Dispersion	Coefficient of Variation
				Median Centered
LT \$25K	1.000	1.101	.202	58.3%
\$25K to \$50K	1.021	1.002	.061	10.3%
\$50K to \$100K	1.002	1.003	.069	18.6%
\$100K to \$150K	.995	.998	.132	55.0%
\$150K to \$200K	.986	.995	.048	7.8%
\$200K to \$300K	1.007	1.005	.133	25.7%
\$300K to \$500K	.997	.998	.026	5.0%
\$500K to \$750K	.991	.997	.034	6.1%
\$750K to \$1,000K	.999	1.006	.094	20.6%
Over \$1,000K	1.009	.969	.113	19.9%
Overall	1.000	1.043	.083	26.3%

Subclass

Case Processing Summary

		Count	Percent
ABSTR/LND	100	98	39.8%
	200	26	10.6%
	300	10	4.1%
	520	1	.4%
	530	1	.4%
	540	1	.4%
	700	3	1.2%
	1112	77	31.3%
	1117	1	.4%
	1120	1	.4%
	1135	1	.4%
	2112	14	5.7%
	2130	8	3.3%
	2135	4	1.6%
Overall		246	100.0%
Excluded		0	
Total		246	

Ratio Statistics for CURRLND /VTASP

Group	Median	Price Related Differential	Coefficient of Dispersion	Coefficient of Variation
				Median Centered
100	1.003	1.018	.118	38.7%
200	.990	1.094	.091	19.6%
300	.995	.999	.017	2.8%
520	.894	1.000	.000	.%
530	.997	1.000	.000	.%
540	.955	1.000	.000	.%
700	.976	1.025	.027	4.8%
1112	1.003	1.014	.052	10.4%
1117	.980	1.000	.000	.%
1120	1.151	1.000	.000	.%
1135	.984	1.000	.000	.%
2112	.997	1.001	.058	9.4%
2130	1.001	1.013	.018	3.9%
2135	1.056	1.074	.189	30.1%
Overall	1.000	1.043	.083	26.3%