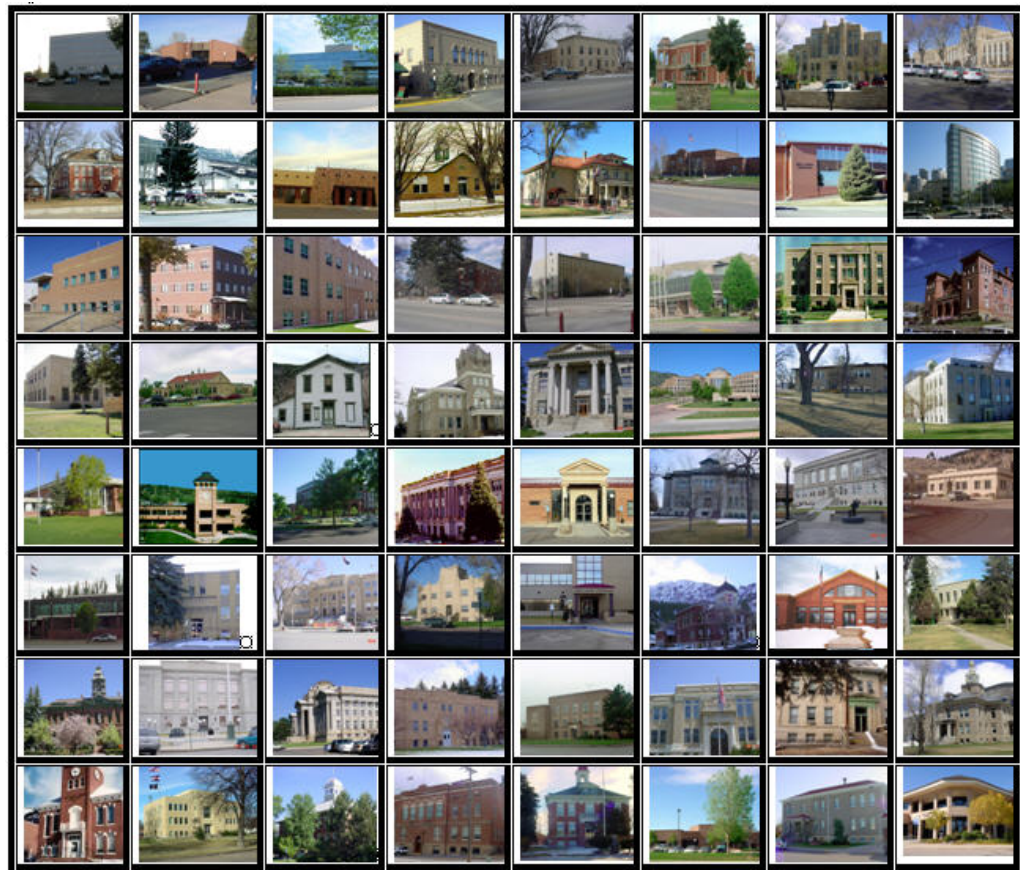




2013  
ADAMS COUNTY  
PROPERTY ASSESSMENT  
STUDY

---





September 15, 2013

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

**RE: Final Report for the 2013 Colorado Property Assessment Study**

Dear Mr. Mauer:

Wildrose Appraisal Inc.-Audit Division is pleased to submit the Final Reports for the 2013 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> .....	13
<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 2013 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 2011 and June 2012. Counties with less than 30 sales typically extended the sale period back up to 5 years prior to June 30, 2012 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:

<b>Adams County Ratio Grid</b>					
<b>Property Class</b>	<b>Number of Qualified Sales</b>	<b>Unweighted Median Ratio</b>	<b>Price Related Differential</b>	<b>Coefficient of Dispersion</b>	<b>Time Trend Analysis</b>
Commercial/Industrial	104	0.999	1.029	11.6	Compliant
Condominium	N/A	N/A	N/A	N/A	N/A
Single Family	6,738	1.024	1.014	9.3	Compliant
Vacant Land	127	1.000	1.084	20.5	Compliant

**Ratio Statistics for CURRTOT / TASP**

<b>Group</b>	<b>Median</b>	<b>Price Related Differential</b>	<b>Coefficient of Dispersion</b>
1	1.027	1.008	.082
2	1.021	1.010	.086
3	1.012	1.034	.141
4	1.039	1.038	.130
5	1.017	1.005	.075
6	1.027	1.012	.092
7	1.025	1.011	.087
8	1.001	1.000	.121
9	1.033	1.018	.110
10	1.015	1.006	.071
11	1.032	1.010	.105
12	1.035	1.031	.122
13	1.025	1.018	.097
14	1.230	1.033	.216
15	1.478	.972	.158
16	1.009	1.325	.399
Overall	1.024	1.014	.093

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 methodology 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.

All qualified residential and commercial class properties were examined using the unit value method, where the actual value per square foot was compared between sold and unsold properties. A class was considered qualified if it met the criteria for the ratio analysis. The median value per square foot for both groups was compared from an appraisal and statistical perspective. If no significant difference was indicated, then we concluded that no further testing was warranted and that the county was in compliance in terms of sold/unsold consistency.

If either residential or commercial differences were significant using the unit value method, or if data limitations made the comparison invalid, then the next step was to perform a ratio analysis comparing the 2012 and 2013 actual values for each qualified class of property. All qualified vacant land classes were tested using this method. The sale property ratios were arrayed using a range of 0.8 to 1.5, which theoretically excluded changes between years that were due to other unrelated changes in the property. These ratios were also stratified at the appropriate level of analysis. Once the percent change was determined for each appropriate class and sub-class, the next step was to select the unsold sample. This sample

was at least 1% of the total population of unsold properties and excluded any sale properties. The unsold sample was filtered based on the attributes of the sold dataset to closely correlate both groups. The ratio analysis was then performed on the unsold properties and stratified. The median and mean ratio distribution was then compared between the sold and unsold group. A non-parametric test such as the Mann-Whitney test for differences between independent samples was undertaken to determine whether any observed differential was significant. If this test determined that the unsold properties were treated in a manner similar to the sold properties, it was concluded that no further testing was warranted and that the county was in compliance.

If a class or sub-class of property was determined to be significantly different by this method, the final step was to perform a multi-variate mass appraisal model that developed ratio statistics from the sold properties that were then applied to the unsold sample. This test compared the measures of central tendency and confidence intervals for the sold properties with the unsold property sample. If this comparison was also determined to be significantly different, then the conclusion was that the county had treated the unsold properties in a different manner than sold properties.

These tests were supported by both tabular and chart presentations, along with saved sold and unsold sample files.

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

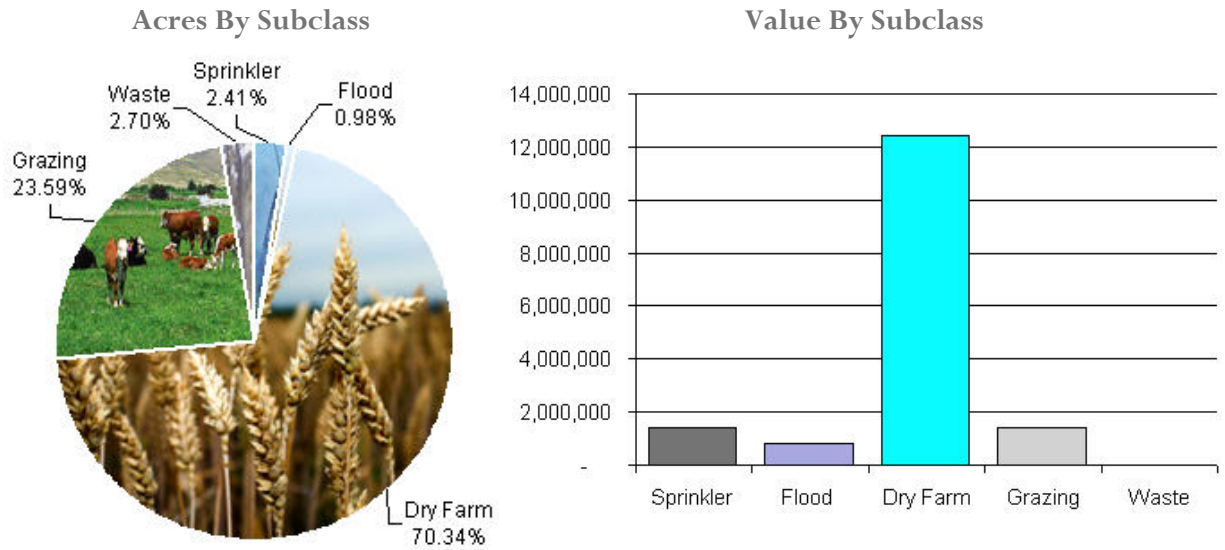
### **Conclusions**

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. 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:

<b>Adams County Agricultural Land Ratio Grid</b>						
<b>Abstract Code</b>	<b>Land Class</b>	<b>Number Of Acres</b>	<b>County Value Per Acre</b>	<b>County Assessed Total Value</b>	<b>WRA Total Value</b>	<b>Ratio</b>
4107	Sprinkler	13,494	103.00	1,388,959	1,344,959	1.03
4117	Flood	5,485	149.00	819,095	1	0.00
4127	Dry Farm	394,562	31.00	12,421,434	11,832,514	1.05
4147	Grazing	132,310	11.00	1,419,770	1,419,770	1.00
4167	Waste	15,123	2.00	26,399	26,399	1.00
<b>Total/Avg</b>		<b>560,975</b>	<b>29.00</b>	<b>16,074,894</b>	<b>15,432,742</b>	<b>1.04</b>

### **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.

### Conclusions

Adams County has substantially complied with the procedures provided by the Division of Property Taxation for the valuation of agricultural outbuildings.

### Recommendations

None

---

## 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.

Adams County utilized the following discovery method(s):

- Questionnaires
- Phone Interviews
- Personal Knowledge of Owners and Tenants

### Conclusions

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 2013 for Adams County. This study was conducted by checking selected sales from the master sales list for the current valuation period. Specifically WRA selected 81 sales listed as unqualified.

All but two of the sales selected in the sample gave reasons that were clear and supportable. Two sales 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 2013 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 and

market/investor surveys. 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
- Questionnaires, Letters and/or Phone Calls to Buyer, Seller and/or Realtor

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 2013 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 \$7,000 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*

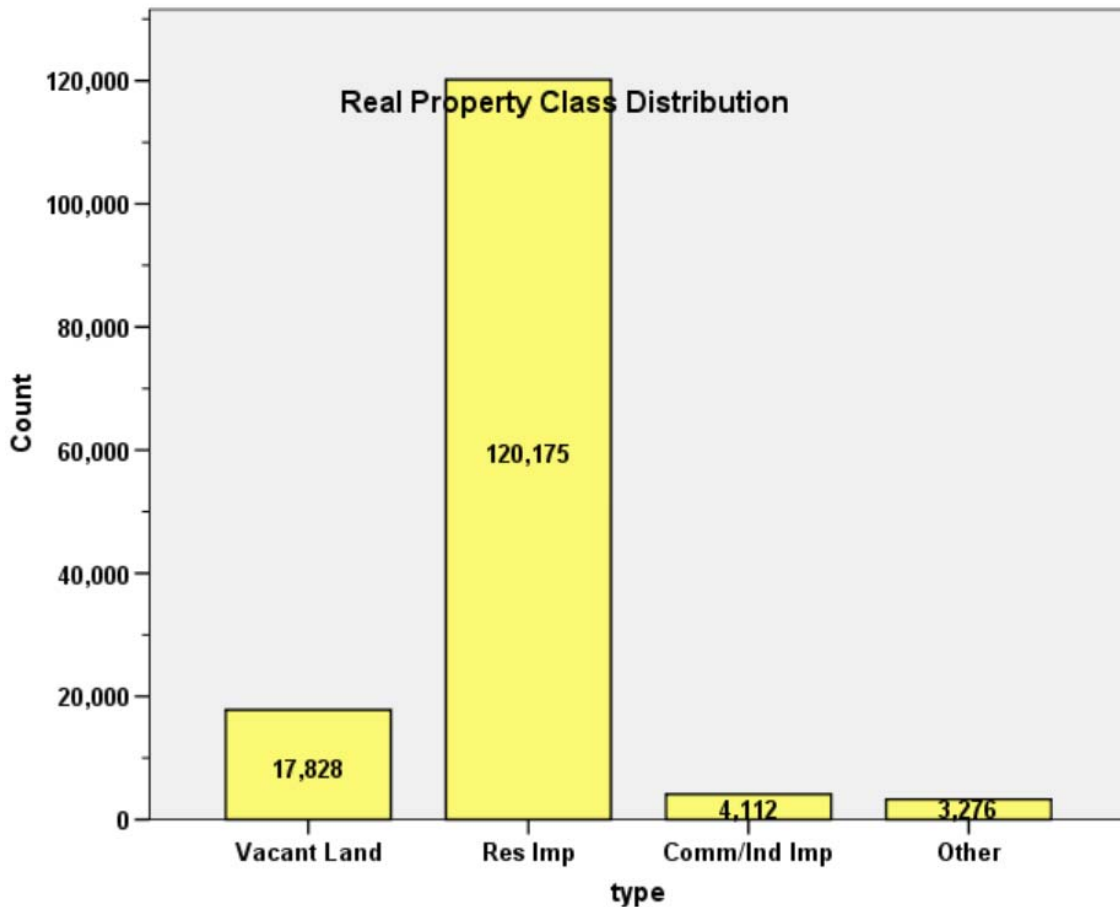
**J. Andrew Rodriguez**, *Field Analyst*

# APPENDICES

**STATISTICAL COMPLIANCE REPORT  
 FOR ADAMS COUNTY  
 2013**

**I. OVERVIEW**

Adams County is an urban county located along Colorado’s Front Range. The county has a total of 145,391 real property parcels, according to data submitted by the county assessor’s office in 2013. 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 72.8% of all vacant land parcels.

For residential improved properties, single family properties accounted for 82.2% 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 2013 Colorado Property Assessment Study. Information was provided by the Adams Assessor's Office in April 2013. The data included all 5 property record files as specified by the Auditor.

## III. RESIDENTIAL SALES RESULTS

There were 6,738 qualified residential sales for the 18 month period prior to June 30, 2013. The sales ratio analysis was analyzed as follows:

**Case Processing Summary**

		Count	Percent
ECONAREA	1	105	1.6%
	2	1226	18.2%
	3	123	1.8%
	4	86	1.3%
	5	889	13.2%
	6	376	5.6%
	7	1846	27.4%
	8	137	2.0%
	9	250	3.7%
	10	415	6.2%
	11	685	10.2%
	12	357	5.3%
	13	200	3.0%
	14	23	.3%
	15	3	.0%
	16	17	.3%
Overall		6738	100.0%
Excluded		0	
Total		6738	

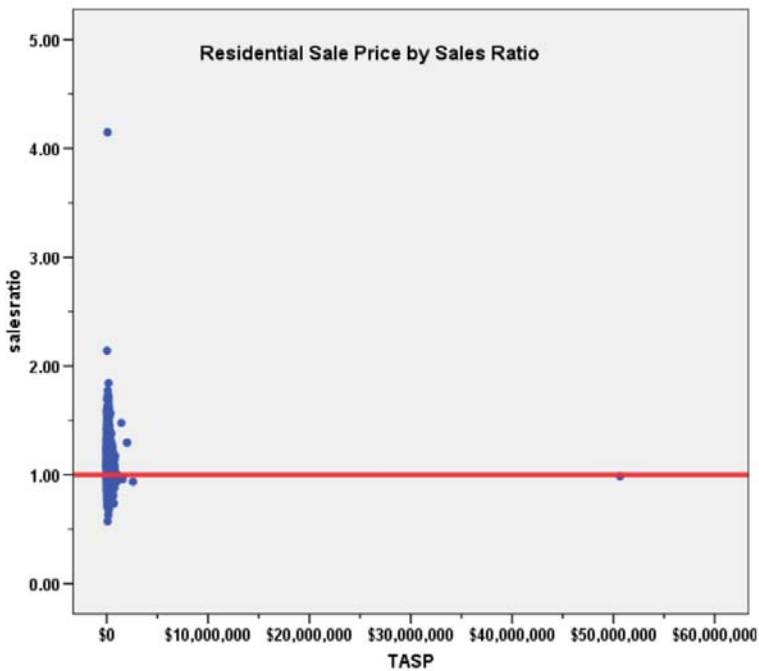
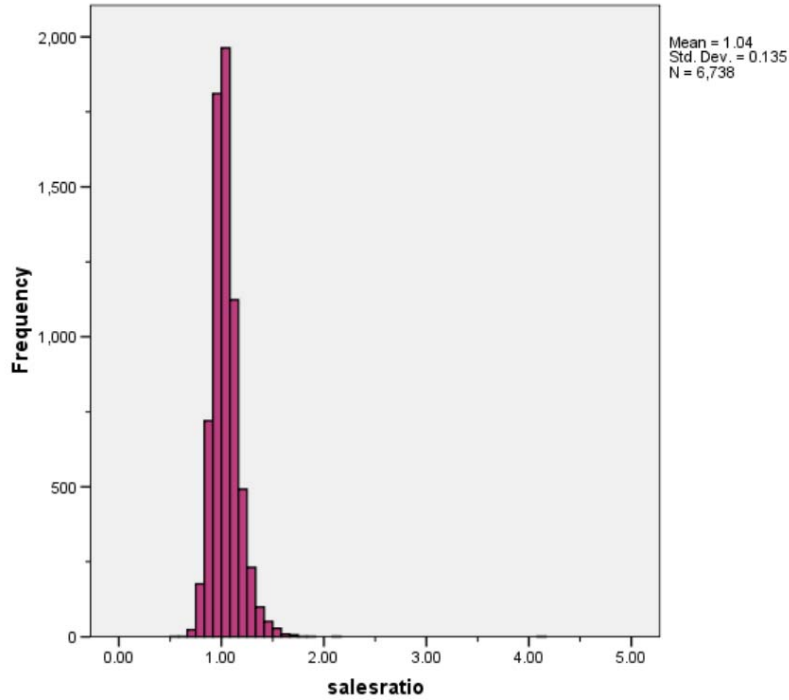


**Ratio Statistics for CURRTOT / TASP**

Group	Median	Price Related Differential	Coefficient of Dispersion
1	1.027	1.008	.082
2	1.021	1.010	.086
3	1.012	1.034	.141
4	1.039	1.038	.130
5	1.017	1.005	.075
6	1.027	1.012	.092
7	1.025	1.011	.087
8	1.001	1.000	.121
9	1.033	1.018	.110
10	1.015	1.006	.071
11	1.032	1.010	.105
12	1.035	1.031	.122
13	1.025	1.018	.097
14	1.230	1.033	.216
15	1.478	.972	.158
16	1.009	1.325	.399
Overall	1.024	1.014	.093

Please note that the median ratio and COD totals for Economic Areas 14, 15 and 16 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), the median ratio and COD totals were all in compliance in terms of the SBOE thresholds.

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



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 18-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)	1.019	.018		55.776	.000
		SalePeriod	.002	.002	.090	.917	.361
2	1	(Constant)	1.003	.006		167.846	.000
		SalePeriod	.004	.001	.175	6.232	.000
3	1	(Constant)	.993	.029		34.137	.000
		SalePeriod	.009	.003	.250	2.841	.005
4	1	(Constant)	1.035	.037		27.928	.000
		SalePeriod	.005	.004	.142	1.311	.193
5	1	(Constant)	1.010	.006		169.158	.000
		SalePeriod	.002	.001	.122	3.647	.000
6	1	(Constant)	1.004	.011		89.564	.000
		SalePeriod	.005	.001	.203	4.011	.000
7	1	(Constant)	1.020	.005		203.839	.000
		SalePeriod	.003	.001	.124	5.371	.000
8	1	(Constant)	1.021	.026		39.916	.000
		SalePeriod	.002	.003	.058	.671	.504
9	1	(Constant)	1.020	.017		59.333	.000
		SalePeriod	.005	.002	.166	2.654	.008
10	1	(Constant)	1.010	.008		119.141	.000
		SalePeriod	.002	.001	.092	1.877	.061
11	1	(Constant)	1.006	.010		100.954	.000
		SalePeriod	.004	.001	.136	3.576	.000
12	1	(Constant)	1.042	.017		60.936	.000
		SalePeriod	.002	.002	.069	1.311	.191
13	1	(Constant)	.976	.017		56.511	.000
		SalePeriod	.007	.002	.266	3.879	.000
14	1	(Constant)	1.069	.109		9.801	.000
		SalePeriod	.026	.013	.404	2.022	.056
15	1	(Constant)	.949	.135		7.019	.090
		SalePeriod	.048	.012	.969	3.903	.016
16	1	(Constant)	1.648	.361		4.564	.000
		SalePeriod	-.042	.040	-.259	-1.040	.315

a. Dependent Variable: salesratio

There was no residual market trending present in the sale ratio data for any of the 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 2013 between each group. The data was analyzed both as a whole and broken down by economic area, as follows:

Group	N	Median	Mean
Unsold	113,437	\$118	\$120
Sold	6,738	\$118	\$120

ECONAREA	Group	N	Median	Mean
1	Unsold	1,573	\$121.03	\$119.71
	Sold	105	\$128.12	\$127.16
2	Unsold	14,856	\$104.17	\$108.37
	Sold	1,226	\$104.77	\$107.08
3	Unsold	1,940	\$101.31	\$102.71
	Sold	123	\$109.55	\$110.43
4	Unsold	2,314	\$129.42	\$133.87
	Sold	86	\$131.26	\$138.64
5	Unsold	22,851	\$140.56	\$142.07
	Sold	889	\$145.48	\$148.59
6	Unsold	8,301	\$145.28	\$139.55
	Sold	376	\$146.02	\$141.51
7	Unsold	28,121	\$120.98	\$123.63
	Sold	1,846	\$123.04	\$125.35
8	Unsold	6,348	\$106.08	\$107.34
	Sold	137	\$110.17	\$110.47
9	Unsold	7,088	\$113.38	\$113.81
	Sold	250	\$115.67	\$115.36
10	Unsold	3,387	\$148.32	\$150.80
	Sold	415	\$150.47	\$152.44
11	Unsold	8,980	\$96.03	\$98.97
	Sold	685	\$101.44	\$104.55
12	Unsold	4,561	\$66.81	\$73.41
	Sold	357	\$67.29	\$75.00
13	Unsold	2,180	\$70.03	\$71.35
	Sold	200	\$72.64	\$75.31

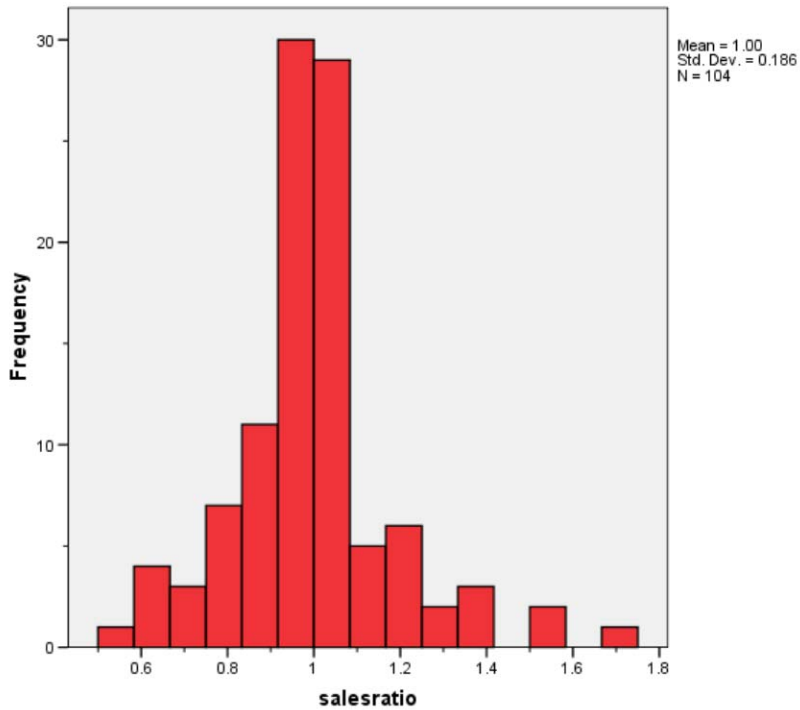
The above results indicate that sold and unsold residential properties were valued in a consistent manner.

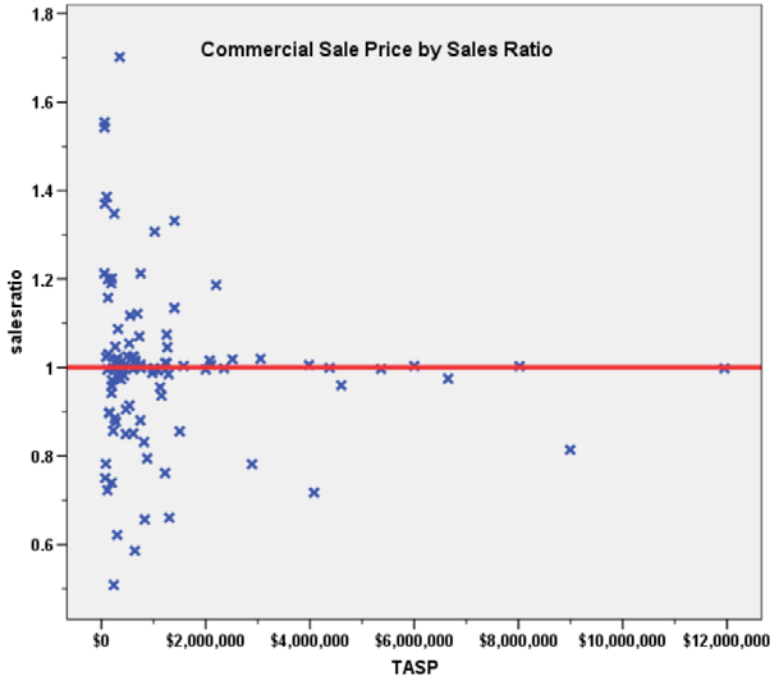
#### IV. COMMERCIAL/INDUSTRIAL SALE RESULTS

There were 104 qualified commercial and industrial sales for the 18 month period prior to June 30, 2013. The sales ratio analysis was analyzed as follows:

Median	<b>0.999</b>
Price Related Differential	<b>1.029</b>
Coefficient of Dispersion	<b>.116</b>

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

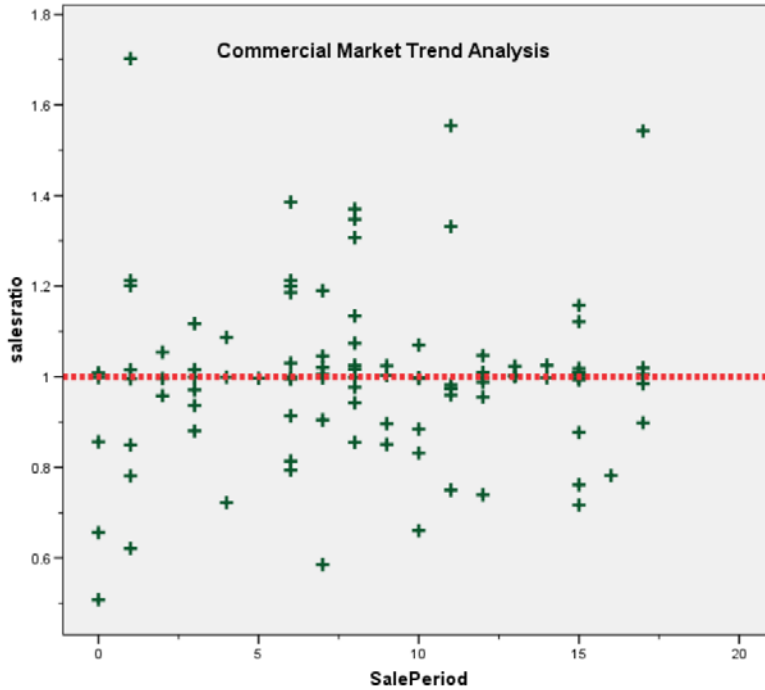
The 104 commercial/industrial sales were next analyzed by examining the sale ratios across the 18 month sale period. The purpose was to check for any residual market trending. The results were as follows:

**Coefficients<sup>a</sup>**

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	.983	.036		27.514	.000
	SalePeriod	.002	.004	.051	.513	.609

a. Dependent Variable: salesratio





There was no residual market trending present in the commercial sale ratios. 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	3,723	\$66.30	\$95.56
Sold	97	\$75.46	\$99.95

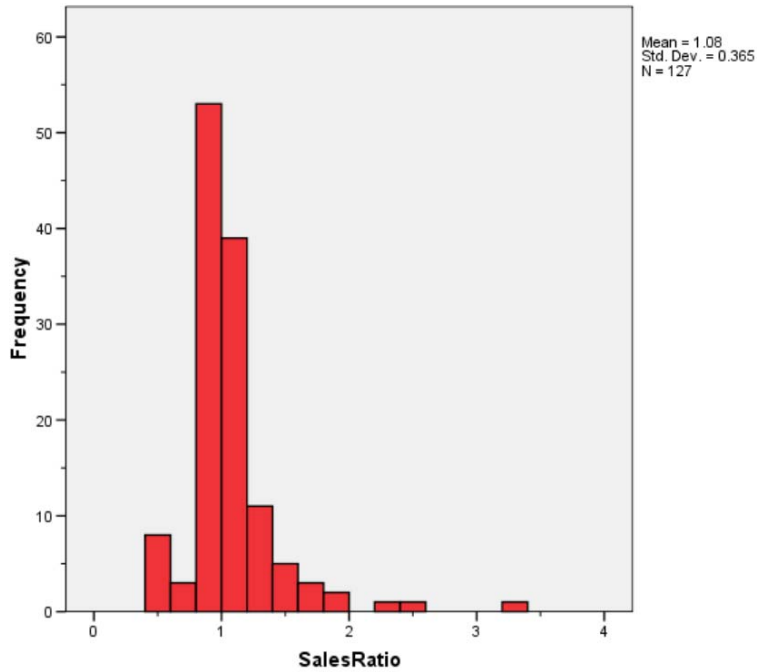
The above results indicate that sold and unsold commercial and industrial properties were valued in a consistent manner.

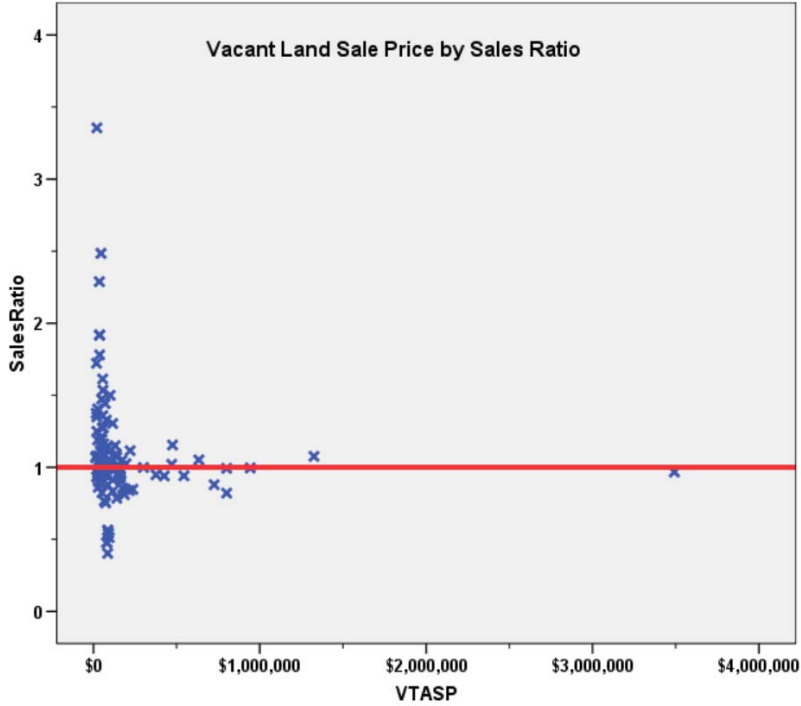
## V. VACANT LAND SALE RESULTS

There were 127 qualified vacant land sales for the 18 month period prior to June 30, 2013. The sales ratio analysis was analyzed as follows:

<b>Median</b>	<b>1.000</b>
<b>Price Related Differential</b>	<b>1.084</b>
<b>Coefficient of Dispersion</b>	<b>0.205</b>

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.

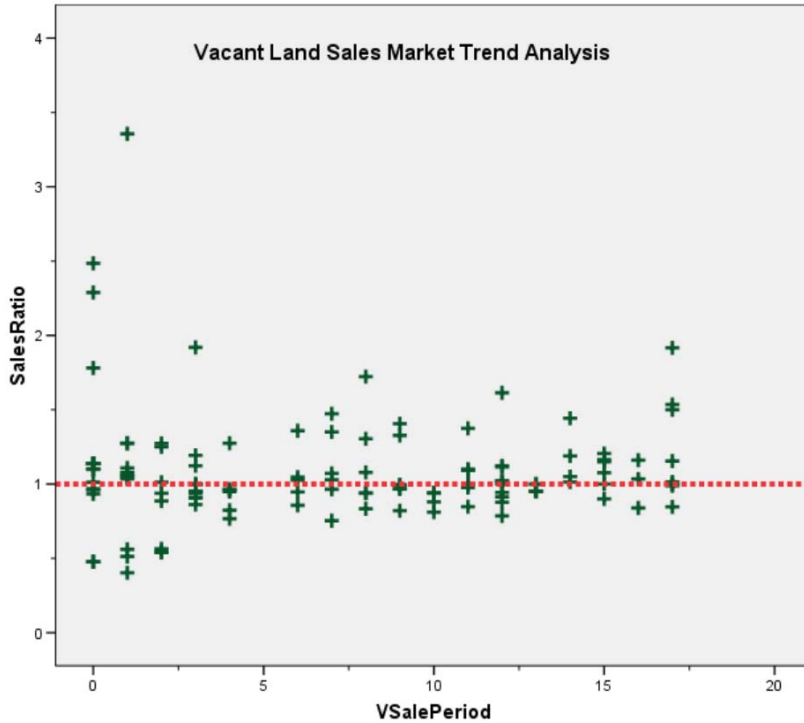
### Vacant Land Market Trend Analysis

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

**Coefficients<sup>a</sup>**

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	1.080	.054		20.039	.000
	VSalePeriod	.000	.006	-.002	-.025	.980

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 2013 between each group, as follows:

Group	No. Props	Median Chg Val	Mean Chg Val
Unsold	17,416	1.0000	1.0126
Sold	116	0.9391	1.0443

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 2013.

## **VI. CONCLUSIONS**

Based on this 2013 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	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			
1	1.033	1.011	1.054	1.027	1.003	1.046	96.9%	1.025	1.000	1.049	1.008	.082	10.6%
2	1.034	1.027	1.040	1.021	1.014	1.028	95.1%	1.024	1.018	1.030	1.010	.086	11.3%
3	1.062	1.028	1.095	1.012	.992	1.078	95.3%	1.027	.994	1.059	1.034	.141	17.6%
4	1.077	1.039	1.114	1.039	1.011	1.097	96.0%	1.038	1.000	1.076	1.038	.130	16.4%
5	1.028	1.022	1.035	1.017	1.012	1.025	95.6%	1.024	1.017	1.030	1.005	.075	9.8%
6	1.042	1.030	1.054	1.027	1.016	1.040	95.6%	1.030	1.018	1.041	1.012	.092	11.7%
7	1.042	1.037	1.048	1.025	1.020	1.031	95.2%	1.031	1.027	1.036	1.011	.097	11.6%
8	1.036	1.009	1.062	1.001	.976	1.040	96.0%	1.035	1.005	1.065	1.000	.121	15.2%
9	1.057	1.038	1.076	1.033	1.021	1.050	95.0%	1.038	1.021	1.055	1.018	.110	14.7%
10	1.023	1.014	1.032	1.015	1.006	1.022	95.1%	1.017	1.007	1.026	1.006	.071	9.5%
11	1.036	1.026	1.047	1.032	1.019	1.043	95.3%	1.026	1.016	1.036	1.010	.105	13.7%
12	1.061	1.044	1.078	1.035	1.017	1.058	95.6%	1.029	1.014	1.044	1.031	.122	15.4%
13	1.034	1.015	1.052	1.025	1.009	1.047	96.0%	1.015	.999	1.032	1.018	.097	12.8%
14	1.248	1.106	1.390	1.230	1.054	1.414	96.5%	1.207	1.078	1.337	1.033	.216	26.3%
15	1.395	.509	2.281	1.478	1.004	1.702	100.0%	1.434	1.114	1.755	.972	.158	25.6%
16	1.331	.922	1.739	1.009	.955	1.338	95.1%	1.004	.963	1.045	1.325	.399	59.8%

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.

### 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			
.999	.963	1.035	.999	.996	1.006	96.1%	.971	.937	1.005	1.029	.116	18.6%

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			
1.079	1.015	1.143	1.000	.988	1.046	96.7%	.995	.964	1.026	1.084	.205	33.9%

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	LT \$25K	2	.0%
	\$25K to \$50K	115	1.7%
	\$50K to \$100K	594	8.8%
	\$100K to \$150K	1521	22.6%
	\$150K to \$200K	1776	26.4%
	\$200K to \$300K	1851	27.5%
	\$300K to \$500K	754	11.2%
	\$500K to \$750K	105	1.6%
	\$750K to \$1,000K	13	.2%
	Over \$1,000K	7	.1%
Overall		6738	100.0%
Excluded		0	
Total		6738	

**Ratio Statistics for CURRTOT / TASP**

Group	Median	Price Related Differential	Coefficient of Dispersion	Coefficient of Variation
				Median Centered
LT \$25K	1.588	1.000	.000	.0%
\$25K to \$50K	1.142	1.003	.116	16.3%
\$50K to \$100K	1.099	1.000	.130	20.0%
\$100K to \$150K	1.042	1.002	.107	13.8%
\$150K to \$200K	1.018	1.000	.088	11.7%
\$200K to \$300K	1.012	1.000	.072	9.5%
\$300K to \$500K	1.003	1.001	.068	9.5%
\$500K to \$750K	1.011	1.002	.082	10.4%
\$750K to \$1,000K	1.022	1.003	.054	7.4%
Over \$1,000K	.969	1.080	.132	25.6%
Overall	1.024	1.014	.093	13.3%



Subclass

**Case Processing Summary**

	Count	Percent
ABSTRIMP 1212	5338	79.2%
1214	623	9.2%
1215	64	.9%
1215	29	.4%
1215	7	.1%
1216	1	.0%
1220	35	.5%
1225	9	.1%
1230	632	9.4%
Overall	6738	100.0%
Excluded	0	
Total	6738	

**Ratio Statistics for CURRTOT / TASP**

Group	Median	Price Related Differential	Coefficient of Dispersion	Coefficient of Variation
				Median Centered
1212	1.022	1.011	.087	11.8%
1214	1.032	1.021	.117	15.0%
1215	.997	1.000	.094	12.1%
1215	1.180	1.035	.162	20.5%
1215	.973	1.012	.060	7.9%
1216	.938	1.000	.000	.%
1220	1.230	1.092	.270	47.8%
1225	1.143	1.268	.248	36.9%
1230	1.031	1.014	.101	13.6%
Overall	1.024	1.014	.093	13.3%

Age

**Case Processing Summary**

		Count	Percent
AgeRec	Over 100	6	.1%
	75 to 100	44	.7%
	50 to 75	771	11.4%
	25 to 50	1594	23.7%
	5 to 25	3224	47.8%
	5 or Newer	1099	16.3%
Overall		6738	100.0%
Excluded		0	
Total		6738	

**Ratio Statistics for CURRTOT / TASP**

Group	Median	Price Related Differential	Coefficient of Dispersion	Coefficient of Variation
				Median Centered
Over 100	1.028	1.053	.169	22.7%
75 to 100	.977	1.015	.111	14.5%
50 to 75	1.026	1.016	.120	19.7%
25 to 50	1.025	1.016	.111	15.0%
5 to 25	1.028	1.011	.084	11.3%
5 or Newer	1.012	1.006	.073	9.4%
Overall	1.024	1.014	.093	13.3%

## Improved Area

### Case Processing Summary

		Count	Percent
ImpSFRec	LE 500 sf	1	.0%
	500 to 1,000 sf	834	12.4%
	1,000 to 1,500 sf	2233	33.1%
	1,500 to 2,000 sf	1684	25.0%
	2,000 to 3,000 sf	1633	24.2%
	3,000 sf or Higher	353	5.2%
Overall		6738	100.0%
Excluded		0	
Total		6738	

### Ratio Statistics for CURRTOT / TASP

Group	Median	Price Related Differential	Coefficient of Dispersion	Coefficient of Variation
				Median Centered
LE 500 sf	1.084	1.000	.000	.%
500 to 1,000 sf	1.002	1.024	.119	16.0%
1,000 to 1,500 sf	1.027	1.017	.102	13.8%
1,500 to 2,000 sf	1.024	1.010	.082	11.1%
2,000 to 3,000 sf	1.025	1.012	.080	13.2%
3,000 sf or Higher	1.033	1.025	.094	13.4%
Overall	1.024	1.014	.093	13.3%

## Quality

### Case Processing Summary

		Count	Percent
QUALITY	Average	4942	73.3%
	Average Plus	1224	18.2%
	Excellent	7	.1%
	Fair	37	.5%
	Fair Plus	12	.2%
	Good	312	4.6%
	Good Plus	67	1.0%
	Low	3	.0%
	Very Good	100	1.5%
	Very Good Plus	34	.5%
Overall		6738	100.0%
Excluded		0	
Total		6738	

### Ratio Statistics for CURRTOT / TASP

Group	Median	Price Related Differential	Coefficient of Dispersion	Coefficient of Variation
				Median Centered
Average	1.021	1.014	.098	13.4%
Average Plus	1.031	1.013	.078	10.6%
Excellent	.969	1.024	.086	13.6%
Fair	.995	1.027	.202	55.2%
Fair Plus	.933	1.014	.131	18.8%
Good	1.029	1.024	.086	11.6%
Good Plus	1.016	1.005	.079	10.2%
Low	.934	.988	.050	9.7%
Very Good	1.025	1.005	.068	8.9%
Very Good Plus	1.047	1.014	.076	10.1%
Overall	1.024	1.014	.093	13.3%

## Condition

### Case Processing Summary

		Count	Percent
CONDITION	Average	4825	71.6%
	Badly Worn	132	2.0%
	Excellent	56	.8%
	Good	1636	24.3%
	Very Good	82	1.2%
	Worn Out	7	.1%
Overall		6738	100.0%
Excluded		0	
Total		6738	

### Ratio Statistics for CURRTOT / TASP

Group	Median	Price Related Differential	Coefficient of Dispersion	Coefficient of Variation
				Median Centered
Average	1.028	1.013	.095	13.0%
Badly Worn	1.031	1.010	.149	31.6%
Excellent	.997	.998	.080	10.6%
Good	1.012	1.006	.084	11.4%
Very Good	1.021	1.042	.082	11.4%
Worn Out	.996	1.053	.201	33.6%
Overall	1.024	1.014	.093	13.3%

**Commercial Median Ratio Stratification**

**Sale Price**

**Case Processing Summary**

	Count	Percent
SPRec \$50K to \$100K	8	7.7%
\$100K to \$150K	7	6.7%
\$150K to \$200K	6	5.8%
\$200K to \$300K	12	11.5%
\$300K to \$500K	13	12.5%
\$500K to \$750K	16	15.4%
\$750K to \$1,000K	7	6.7%
Over \$1,000K	35	33.7%
Overall	104	100.0%
Excluded	0	
Total	104	

**Ratio Statistics for CURRTOT / TASP**

Group	Median	Price Related Differential	Coefficient of Dispersion	Coefficient of Variation
				Median Centered
\$50K to \$100K	1.291	1.020	.202	25.8%
\$100K to \$150K	.995	1.002	.125	16.6%
\$150K to \$200K	.965	1.001	.125	18.4%
\$200K to \$300K	.997	1.000	.142	22.5%
\$300K to \$500K	.999	1.010	.088	21.1%
\$500K to \$750K	1.012	.998	.086	14.1%
\$750K to \$1,000K	.988	.993	.103	17.1%
Over \$1,000K	.998	1.018	.080	13.6%
Overall	.999	1.029	.116	18.6%

Subclass

**Case Processing Summary**

	Count	Percent
ABSTRIMP 0	7	6.7%
2212	30	28.8%
2215	1	1.0%
2220	15	14.4%
2221	1	1.0%
2225	1	1.0%
2227	3	2.9%
2230	15	14.4%
2233	1	1.0%
2235	29	27.9%
3212	1	1.0%
Overall	104	100.0%
Excluded	0	
Total	104	

**Ratio Statistics for CURRTOT / TASP**

Group	Median	Price Related Differential	Coefficient of Dispersion	Coefficient of Variation
				Median Centered
0	1.200	1.286	.214	30.2%
2212	.999	1.000	.117	18.8%
2215	.717	1.000	.000	.%
2220	.998	.960	.085	15.4%
2221	1.006	1.000	.000	.%
2225	.942	1.000	.000	.%
2227	.960	1.024	.156	26.7%
2230	1.009	.986	.113	21.3%
2233	.661	1.000	.000	.%
2235	.997	1.026	.067	11.0%
3212	1.025	1.000	.000	.%
Overall	.999	1.029	.116	18.6%

## Age

### Case Processing Summary

	Count	Percent
AgeRec .00	7	6.7%
Over 100	2	1.9%
75 to 100	3	2.9%
50 to 75	9	8.7%
25 to 50	51	49.0%
5 to 25	25	24.0%
5 or Newer	7	6.7%
Overall	104	100.0%
Excluded	0	
Total	104	

### Ratio Statistics for CURRTOT / TASP

Group	Median	Price Related Differential	Coefficient of Dispersion	Coefficient of Variation
				Median Centered
.00	1.200	1.286	.214	30.2%
Over 100	.961	1.017	.065	9.2%
75 to 100	1.047	1.056	.246	38.7%
50 to 75	.958	.993	.135	20.8%
25 to 50	1.003	1.004	.093	16.4%
5 to 25	.988	1.038	.102	15.2%
5 or Newer	.998	1.004	.023	4.0%
Overall	.999	1.029	.116	18.6%



## Improved Area

### Case Processing Summary

	Count	Percent
ImpSFRec .00	7	6.7%
LE 500 sf	1	1.0%
500 to 1,000 sf	2	1.9%
1,000 to 1,500 sf	5	4.8%
1,500 to 2,000 sf	5	4.8%
2,000 to 3,000 sf	10	9.6%
3,000 sf or Higher	74	71.2%
Overall	104	100.0%
Excluded	0	
Total	104	

### Ratio Statistics for CURRTOT / TASP

Group	Median	Price Related Differential	Coefficient of Dispersion	Coefficient of Variation
				Median Centered
.00	1.200	1.286	.214	30.2%
LE 500 sf	.995	1.000	.000	.%
500 to 1,000 sf	.873	.969	.140	19.9%
1,000 to 1,500 sf	.782	1.122	.220	33.5%
1,500 to 2,000 sf	1.023	1.142	.177	28.7%
2,000 to 3,000 sf	1.011	1.005	.036	5.8%
3,000 sf or Higher	.998	1.018	.092	15.6%
Overall	.999	1.029	.116	18.6%

## Quality

### Case Processing Summary

	Count	Percent
QUALITY	7	6.7%
Average	82	78.8%
Average Plus	3	2.9%
Fair	2	1.9%
Good	5	4.8%
Low	5	4.8%
Overall	104	100.0%
Excluded	0	
Total	104	

### Ratio Statistics for CURRTOT / TASP

Group	Median	Price Related Differential	Coefficient of Dispersion	Coefficient of Variation
				Median Centered
	1.200	1.286	.214	30.2%
Average	.998	1.022	.098	15.7%
Average Plus	.998	1.001	.009	1.7%
Fair	1.276	1.228	.218	30.8%
Good	1.003	1.003	.008	1.2%
Low	.897	1.145	.178	26.4%
Overall	.999	1.029	.116	18.6%

**Condition**

**Case Processing Summary**

	Count	Percent
CONDITION	7	6.7%
Average	91	87.5%
Badly Worn	1	1.0%
Good	5	4.8%
Overall	104	100.0%
Excluded	0	
Total	104	

**Ratio Statistics for CURRTOT / TASP**

Group	Median	Price Related Differential	Coefficient of Dispersion	Coefficient of Variation
				Median Centered
	1.200	1.286	.214	30.2%
Average	.998	1.019	.104	17.2%
Badly Worn	.942	1.000	.000	.%
Good	.996	1.011	.019	2.6%
Overall	.999	1.029	.116	18.6%

## Vacant Land Median Ratio Stratification

### Sale Price

**Case Processing Summary**

		Count	Percent
SPRec	LT \$25K	11	8.7%
	\$25K to \$50K	25	19.7%
	\$50K to \$100K	50	39.4%
	\$100K to \$150K	12	9.4%
	\$150K to \$200K	13	10.2%
	\$200K to \$300K	4	3.1%
	\$300K to \$500K	4	3.1%
	\$500K to \$750K	3	2.4%
	\$750K to \$1,000K	3	2.4%
	Over \$1,000K	2	1.6%
Overall		127	100.0%
Excluded		0	
Total		127	

**Ratio Statistics for CURRLND /VTASP**

Group	Median	Price Related Differential	Coefficient of Dispersion	Coefficient of Variation
				Median Centered
LT \$25K	1.250	.996	.290	56.3%
\$25K to \$50K	1.100	.996	.259	43.7%
\$50K to \$100K	1.006	1.022	.205	28.2%
\$100K to \$150K	1.006	1.001	.093	13.7%
\$150K to \$200K	.938	1.001	.052	7.2%
\$200K to \$300K	.923	.997	.116	14.7%
\$300K to \$500K	.985	.994	.073	10.7%
\$500K to \$750K	.942	1.003	.061	9.5%
\$750K to \$1,000K	.993	.996	.059	12.3%
Over \$1,000K	1.022	1.024	.053	7.5%
Overall	1.000	1.084	.205	37.4%

**Subclass**

**Case Processing Summary**

	Count	Percent
ABSTR LND 0	4	3.1%
100	58	45.7%
200	11	8.7%
300	4	3.1%
540	1	.8%
1112	43	33.9%
1115	1	.8%
2112	3	2.4%
2115	1	.8%
2120	1	.8%
Overall	127	100.0%
Excluded	0	
Total	127	

**Ratio Statistics for CURRLND /VTASP**

Group	Median	Price Related Differential	Coefficient of Dispersion	Coefficient of Variation
				Median Centered
0	.952	1.029	.104	24.1%
100	1.031	1.101	.269	39.9%
200	.988	1.032	.074	9.7%
300	.997	1.042	.054	11.1%
540	1.076	1.000	.000	.%
1112	1.000	1.071	.180	41.8%
1115	.938	1.000	.000	.%
2112	.993	1.010	.072	12.1%
2115	1.052	1.000	.000	.%
2120	.940	1.000	.000	.%
Overall	1.000	1.084	.205	37.4%