

**Routt County**  
Northwest Colorado

2019

ROUTT COUNTY  
PROPERTY ASSESSMENT  
STUDY

---



**WILDROSE**  
APPRAISAL INCORPORATED  
Audit Division



September 15, 2019

Ms. Natalie Mullis  
Director of Research  
Colorado Legislative Council  
Room 029, State Capitol Building  
Denver, Colorado 80203

**RE: Final Report for the 2019 Colorado Property Assessment Study**

Dear Ms. Mullis:

Wildrose Appraisal Inc.-Audit Division is pleased to submit the Final Reports for the 2019 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 Routt 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
<i>Producing Coal Mines</i> .....	18
Vacant Land.....	19
Possessory Interest Properties .....	20
Personal Property Audit .....	21
Wildrose Auditor Staff.....	23
STATISTICAL APPENDIX .....	24

# 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 2019 and is pleased to report its findings for Routt County in the following report.





## Historical Information

Routt County had an estimated population of approximately 24,648 people with 10.4 people per square mile, according to the U.S. Census Bureau's 2016 estimated census data. This represents a 4.8 percent change from April 1, 2010 to July 1, 2016.

Routt County was created out of the western portion of Grand County on January 29, 1877. It was named in honor of John Long Routt, the last territorial and first state governor of Colorado. The western portion of Routt County was split off to form Moffat County on February 27, 1911.

Routt County is a diverse environment offering breathtaking mountain vistas and picturesque ranch lands. Communities located in Routt County include Clark, Hahns Peak, Milner, Phippsburg, and Toponas, the towns of Hayden, Oak Creek and Yampa, and the city of Steamboat Springs.

About 50% of the land in Routt County is publicly owned. The Medicine Bow-Routt National Forest makes up a large portion of the county. This includes the Mt Zirkel and Sarvis Creek Wilderness areas. The local State Parks are Stagecoach Reservoir, Steamboat Lake, Elkhead Reservoir and Pearl Lake. These public lands provide residents and visitors with scenic recreational areas for hiking, picnicking, boating, hunting, fishing and water-skiing.

The City of Steamboat Springs is a Home Rule Municipality that is the county seat and the most populous city of Routt County. The city known as "Steamboat," "The Boat," or "Ski Town USA" had a population of 16,818 at the U.S. Census 2010. The town is an internationally known winter resort

destination. The Steamboat Springs tourism industry is highlighted by the Steamboat Ski Resort, which is on Mount Werner in the Park Range just east of the town. It also contains the much smaller Howelsen Ski Area. It is located in the upper valley of the Yampa River, along U.S. Highway 40 just west of the Continental Divide at Rabbit Ears Pass.

The area surrounding Steamboat Springs was originally inhabited by the Yampatikas Utes, who hunted in the valley during the summer. Trappers began to move into the area during the first decades of the 19th century. Ranchers soon followed, and ranching traditions are still preserved by the large ranching community.

Originally, skiing was the only method of transportation during harsh Rocky Mountain winters. In turn, the popularity of skiing as a winter pastime catalyzed development of the town and other communities all over the Rocky Mountains. In 1913, Carl Howelsen, a Norwegian, moved to town and introduced ski jumping. Howelsen built the first jump on namesake Howelsen Hill, now part of the Howelsen Ski Area. He also founded the annual Winter Carnival, a celebration still held each winter. Traditionally, the festival includes ski racing and jumping, dog sledding, and chariot events down Lincoln Avenue, the city's main street. Light shows on both Mount Werner and Howelsen Hill are highlights.

The Steamboat Ski Resort was largely established by two local men, Jim Temple and John Fetcher. Temple led the effort to develop the area. Fetcher, a local rancher, was the main designer and builder. The resort opened on what was then called Storm Mountain in 1963. ([www.co.routt.co.us](http://www.co.routt.co.us), [www.Wikipedia.org](http://www.Wikipedia.org))

# RATIO ANALYSIS

## Methodology

All significant classes of property were analyzed. Sales were collected for each property class over the eighteen month period from January 1, 2017 through June 30, 2018. Property classes with less than thirty sales had the sales period extended in six month increments up to an additional forty-two months. If this extended sales period did not produce the minimum thirty qualified sales, the Audit performed supplemental appraisals to reach the minimum.

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.

All sixty-four counties were examined for compliance on the economic area level. Where there were sufficient sales data, the neighborhood and subdivision levels were tested for compliance. Although counties are determined to be in or out of compliance at the class level, non-compliant economic areas, neighborhoods and subdivisions (where applicable) were discussed with the Assessor.

**Data on the individual economic areas, neighborhoods and subdivisions are found in the STATISTICAL APPENDIX.**

## 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 Routt County are:

<b>Routt 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	137	1.000	1.003	5.1	Compliant
Condominium	738	0.994	1.009	4.7	Compliant
Single Family	1,012	0.995	1.004	6.2	Compliant
Vacant Land	374	1.000	1.099	18.6	Compliant

After applying the above described methodologies, it is concluded from the sales ratios that Routt 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 Routt County has complied with the statutory requirements to analyze the effects of time on value in their county. Routt 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

Routt 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.

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

**Conclusions**

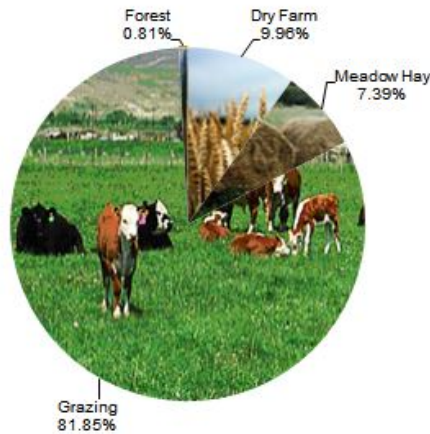
After applying the above described methodologies, it is concluded that Routt County is reasonably treating its sold and unsold properties in the same manner.

**Recommendations**

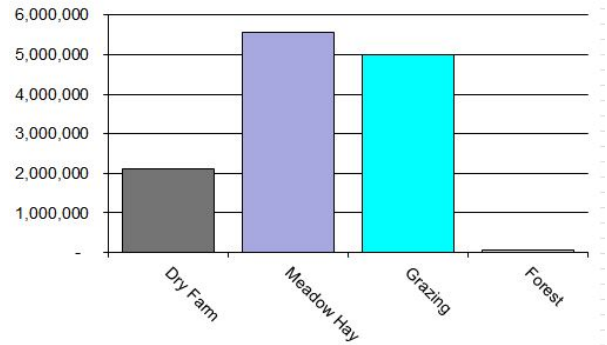
None

# AGRICULTURAL LAND STUDY

Acres By Subclass



Value By Subclass



## 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:



<b>Routt 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>
4127	Dry Farm	71,156	29.88	2,126,118	2,126,218	1.00
4137	Meadow Hay	52,763	105.58	5,570,880	5,591,149	1.00
4147	Grazing	584,686	8.55	4,996,931	4,996,931	1.00
4177	Forest	5,755	12.76	73,414	97,396	0.75
<b>Total/Avg</b>		<b>714,360</b>	<b>17.87</b>	<b>12,767,342</b>	<b>12,811,694</b>	<b>1.00</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

Routt 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.

### Conclusions

Routt 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.:

- Phone Interviews
- Written Correspondence other than Questionnaire

Routt 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.:

- Aerial Photography/Pictometry

Routt 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 2019 for Routt County. This study was conducted by checking selected sales from the master sales list for the current valuation period. Specifically WRA selected 35 sales listed as unqualified.

All of the sales in the unqualified sales sample had reasons that were clear and supportable.

For residential, commercial, and vacant land sales with considerations over \$100,000, 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.

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

### **Conclusions**

Routt County appears to be doing a good job of verifying their sales. WRA agreed with the county's reason for disqualifying each of the sales selected in the sample. There are no recommendations or suggestions.

### **Recommendations**

None



# ECONOMIC AREA REVIEW AND EVALUATION

## **Methodology**

Routt County has submitted a written narrative describing the economic areas that make up the county's market areas. Routt 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 Routt 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



---

## Producing Coal Mines

---

### Methodology

Under the guidelines of the Assessor's Reference Library (ARL), Volume 3, Section 6, Valuation of Producing Coal Leaseholds and Lands, the income approach is the primary method applied to find value for the valuation of coalmines. This methodology estimates annual economic royalty income based on previous year's production, then capitalizes

that income to value using a Hoskold factor to estimate the present worth of the permitted acres. The operator provides production data and the life of the leases.

### Conclusions

County has applied the correct formulas and state guidelines to coal mine valuation.

### Recommendations

None

## VACANT LAND

### **Subdivision Discounting**

Subdivisions were reviewed in 2019 in Routt County. The review showed that subdivisions were discounted pursuant to the Colorado Revised Statutes in Article 39-1-103 (14) and by applying the recommended methodology in ARL Vol 3, Chap 4. Subdivision Discounting in the intervening year can be accomplished by reducing the absorption period by one year.

### **Conclusions**

Routt 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.

Routt County has been reviewed for their procedures and adherence to guidelines when

assessing and valuing commercial and ski area 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

Routt 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

Routt 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.

Routt 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
- MLS Listing and/or Sold Books
- 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
- Internet

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.

Routt County submitted their personal property written audit plan and was current for the 2019 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:

- Businesses in a selected area
- Accounts with obvious discrepancies
- New businesses filing for the first time
- Accounts with greater than 10% change
- 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 \$7,700 actual value exemption status
- Accounts protested with substantial disagreement

### **Conclusions**

Routt 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*

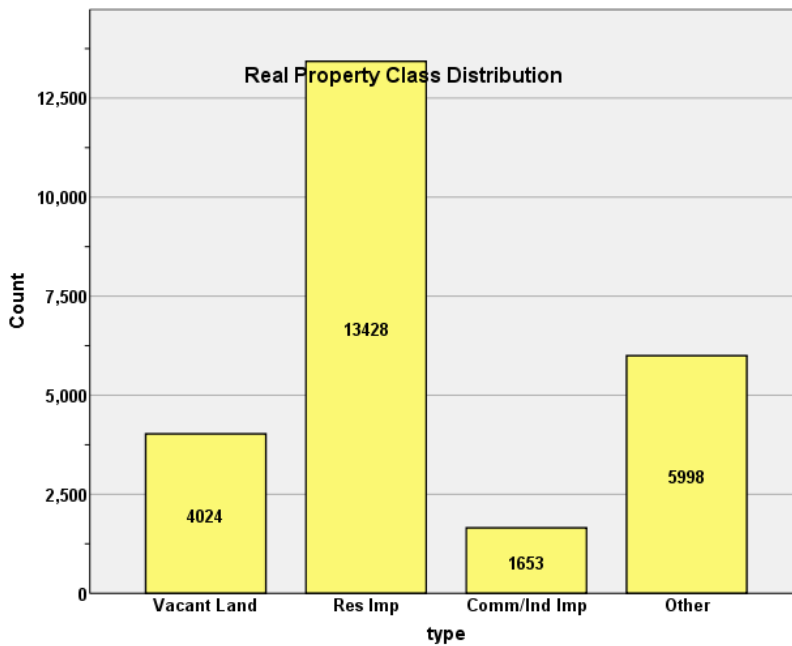


# STATISTICAL APPENDIX

**STATISTICAL COMPLIANCE REPORT  
FOR ROUTT COUNTY  
2019**

**I. OVERVIEW**

Routt County is located in northwestern Colorado. The county has a total of 25,103 real property parcels, according to data submitted by the county assessor’s office in 2019. 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 84.5% of all vacant land parcels.

For residential improved properties, single family properties accounted for 47.3% of all residential properties. Residential condominiums, coded as 1230, accounted for 35.3% of all residential properties. Based on the guidelines of the 2019 audit, we will analyze residential condominiums separately in the following analysis.

Commercial and industrial properties represented a much smaller proportion of property classes in comparison. Commercial/industrial properties accounted for 6.6% of all such properties in this county.

Based on the Audit questionnaire filled out by the assessor (see below), the following geographic levels were used by the assessor to value residential, commercial and vacant land properties:

Geo Area	Residential	Comm/Ind	Vacant Land
Economic Area	V	V	V
Neighborhood	N	N	N
Subdivision	N	N	N

*Codes*

*V=Valid Geographic Level – used for modeling*

*N = Not used as Geographic Level for modeling*

*Note:* Our economic areas have remained the same from prior years.

## II. DATA FILES

The following sales analyses were based on the requirements of the 2019 Colorado Property Assessment Study. Information was provided by the Routt Assessor’s Office in May 2019. The data included all 5 property record files as specified by the Auditor.

## III. RESIDENTIAL SALES RESULTS

There were 1,750 qualified residential sales for the 24 month period ending June 30, 2018. We first stratified our sales ratio analysis by residential non-condominiums and condominiums. The sales ratio analysis results were as follows:

### **Residential Non-Condo = 1,012**

Median	<b>0.995</b>
Price Related Differential	<b>1.004</b>
Coefficient of Dispersion	<b>6.2</b>

### **Residential Condo = 738**

Median	<b>0.994</b>
Price Related Differential	<b>1.009</b>
Coefficient of Dispersion	<b>4.7</b>

We next stratified the sale ratio analysis by economic area and neighborhood. The minimum count for the neighborhood stratification is 15 sales. The following are the results of this stratification analysis:

**Economic Area  
Case Processing Summary**

		Count	Percent
ECONAREA	1.00	268	15.3%
	2.00	61	3.5%
	3.00	71	4.1%
	4.00	99	5.7%
	5.00	68	3.9%
	7.00	3	0.2%
	8.00	57	3.3%
	9.00	46	2.6%
	88.00	335	19.2%
	99.00	738	42.3%
Overall		1746	100.0%
Excluded		4	
Total		1750	

**Ratio Statistics for CURRTOT / TASP**

Group	Median	Price Related Differential	Coefficient of Dispersion
1.00	1.002	1.007	.069
2.00	.960	1.024	.092
3.00	1.001	1.005	.059
4.00	1.002	1.003	.051
5.00	.984	1.016	.101
7.00	1.022	.999	.011
8.00	1.021	.998	.063
9.00	1.001	.998	.084
88.00	.990	.999	.042
99.00	.994	1.009	.047
Overall	.995	1.004	.056

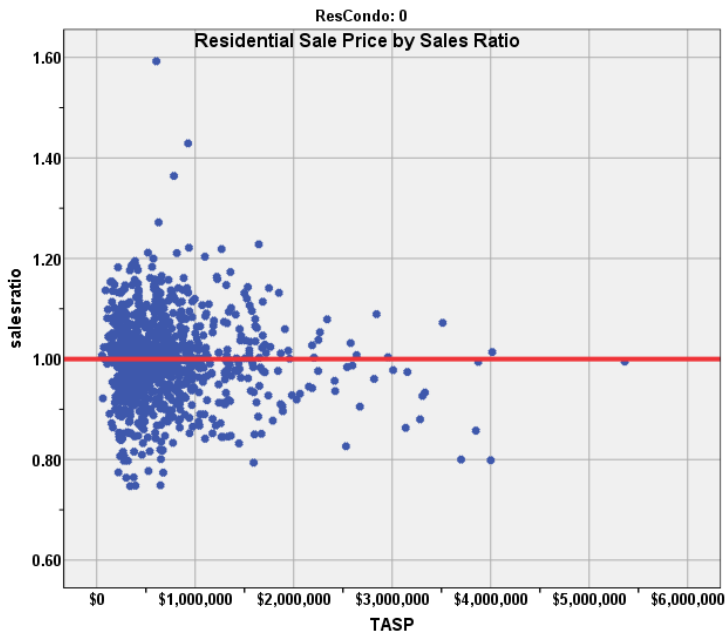
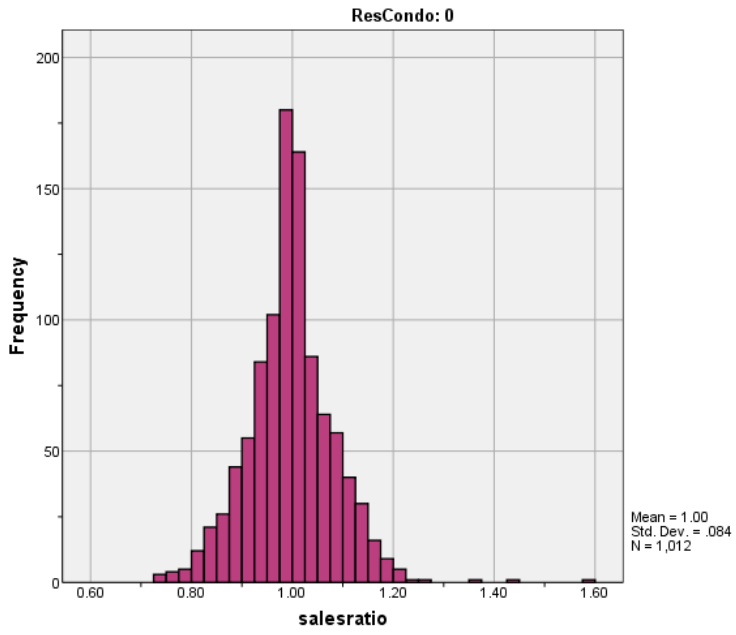
**Neighborhoods with at least 15 sales  
Ratio Statistics for CURRTOT / TASP**

Group	Median	Price Related Differential	Coefficient of Dispersion
200	.989	1.003	.086
320	1.018	.989	.099
575	1.002	.999	.025
576	.976	1.006	.053
725	1.011	1.002	.055
1000	.995	1.005	.064
4480	1.023	.999	.070
4490	1.015	1.000	.064
4495	1.021	1.001	.057
79001	1.021	1.005	.077
Overall	1.008	.995	.067

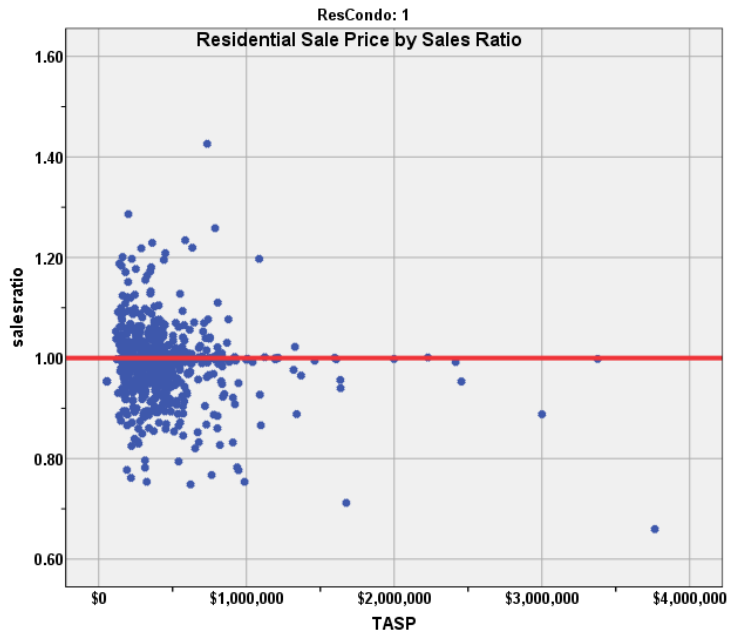
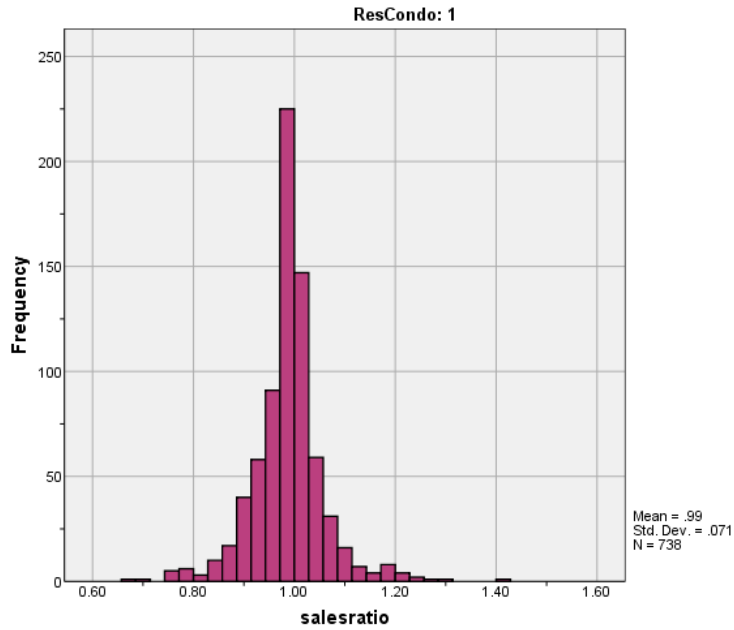
The above ratio statistics were in compliance with the standards set forth by the Colorado State Board of Equalization (SBOE) for the overall residential sales. The following graphs describe further the sales

ratio distribution for these properties (0 = Residential Non-Condominiums, 1 = Residential Condominiums):

**RESIDENTIAL NON-CONDOMINIUMS**



### RESIDENTIAL CONDOMINIUMS



The above graphs indicate that the distribution of the sale ratios was within state mandated limits. No sales were trimmed.

### Residential Market Trend Analysis

We next analyzed the residential dataset using the 24-month sale period for any residual market trending. We again stratified the analysis between residential non-condominiums and condominiums, with the following results:

#### Coefficients<sup>a</sup>

ResCondo	Model		Unstandardized Coefficients B	Std. Error	Standardized Coefficients Beta	t	Sig.
0	1	(Constant)	.992	.005		194.243	.000
		SalePeriod	.000	.000	.031	1.001	.317
1	1	(Constant)	.987	.005		190.405	.000
		SalePeriod	5.298E-5	.000	.005	.138	.890

a. Dependent Variable: salesratio

With no significant market trend evident in the sales ratio data, the above analysis indicated 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 2019 between each group stratified by residential non-condominium and condominiums, as follows:

#### Report

VALSF

ResCondo	sold	N	Median	Mean
RES NON-CONDO	UNSOLD	7613	\$307	\$312
	SOLD	1015	\$301	\$313
RES CONDO	UNSOLD	3955	\$345	\$371
	SOLD	732	\$350	\$366

## RESIDENTIAL NON-CONDOS

### Hypothesis Test Summary

	Null Hypothesis	Test	Sig.	Decision
1	The distribution of VALSF is the same across categories of sold.	Independent-Samples Mann-Whitney U Test	.883	Retain the null hypothesis.

Asymptotic significances are displayed. The significance level is .01.

## RESIDENTIAL CONDOS

### Hypothesis Test Summary

	Null Hypothesis	Test	Sig.	Decision
1	The distribution of VALSF is the same across categories of sold.	Independent-Samples Mann-Whitney U Test	.204	Retain the null hypothesis.

Asymptotic significances are displayed. The significance level is .01.

We also stratified the residential non-condominiums by both economic area and by neighborhoods with at least 10 sales, as follows:

### Economic Area

#### Report

VALSF

ResCondo	ECONAREA	sold	N	Median	Mean
0	1.00	UNSOLD	2574	\$384	\$406
		SOLD	268	\$382	\$410
	2.00	UNSOLD	902	\$346	\$370



	SOLD	61	\$346	\$383
3.00	UNSOLD	571	\$129	\$133
	SOLD	71	\$158	\$160
4.00	UNSOLD	477	\$150	\$153
	SOLD	99	\$182	\$178
5.00	UNSOLD	703	\$191	\$205
	SOLD	68	\$234	\$239
7.00	UNSOLD	38	\$224	\$328
	SOLD	3	\$256	\$368
8.00	UNSOLD	345	\$295	\$297
	SOLD	57	\$301	\$317
9.00	UNSOLD	296	\$230	\$239
	SOLD	46	\$199	\$222

### Neighborhoods with at least 10 Sales

#### Report

DIFF

NBHD	sold	N	Median	Mean
200	UNSOLD	98	1.16	1.17
	SOLD	16	1.22	1.27
320	UNSOLD	248	1.11	1.14
	SOLD	26	1.14	1.22
575	UNSOLD	95	1.23	1.24
	SOLD	15	1.26	1.33
576	UNSOLD	54	1.22	1.23
	SOLD	21	1.21	1.21
725	UNSOLD	230	1.26	1.30
	SOLD	38	1.32	1.38
900	UNSOLD	120	1.28	1.39
	SOLD	10	1.50	1.52
950	UNSOLD	94	1.31	1.37
	SOLD	11	1.40	1.48
1000	UNSOLD	237	1.26	1.38
	SOLD	27	1.29	1.42
4480	UNSOLD	57	1.14	1.15
	SOLD	15	1.13	1.17
4490	UNSOLD	183	1.18	1.19
	SOLD	19	1.22	1.25
4495	UNSOLD	102	1.18	1.18
	SOLD	23	1.14	1.14
67017	UNSOLD	42	1.26	1.26
	SOLD	12	1.23	1.23
69006	UNSOLD	73	1.07	1.09
	SOLD	11	1.09	1.11
69017	UNSOLD	91	1.13	1.14
	SOLD	11	1.10	1.12
76001	UNSOLD	94	1.15	1.16
	SOLD	12	1.15	1.15
77005	UNSOLD	44	1.19	1.20
	SOLD	12	1.18	1.20
79001	UNSOLD	426	1.16	1.18
	SOLD	24	1.18	1.22

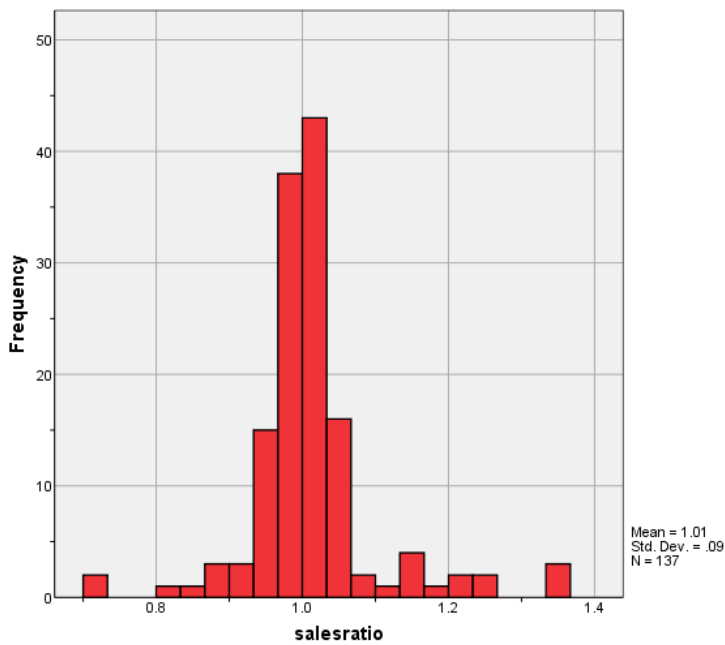
The above results indicate that sold and unsold residential properties were valued in a consistent manner.

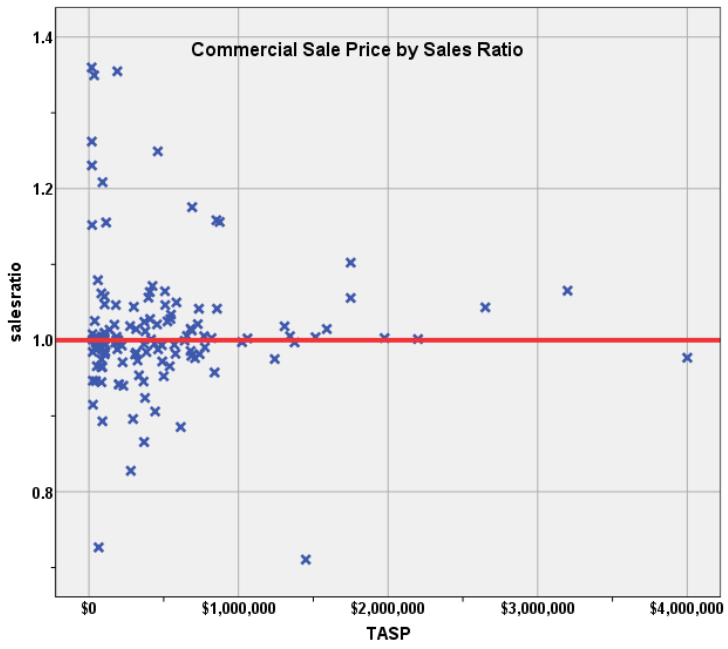
#### IV. COMMERCIAL/INDUSTRIAL SALE RESULTS

There were 137 qualified commercial and industrial sales in the 24 month period ending June 30, 2018. The sales ratio analysis results were as follows:

Median	<b>1.000</b>
Price Related Differential	<b>1.003</b>
Coefficient of Dispersion	<b>5.1</b>

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





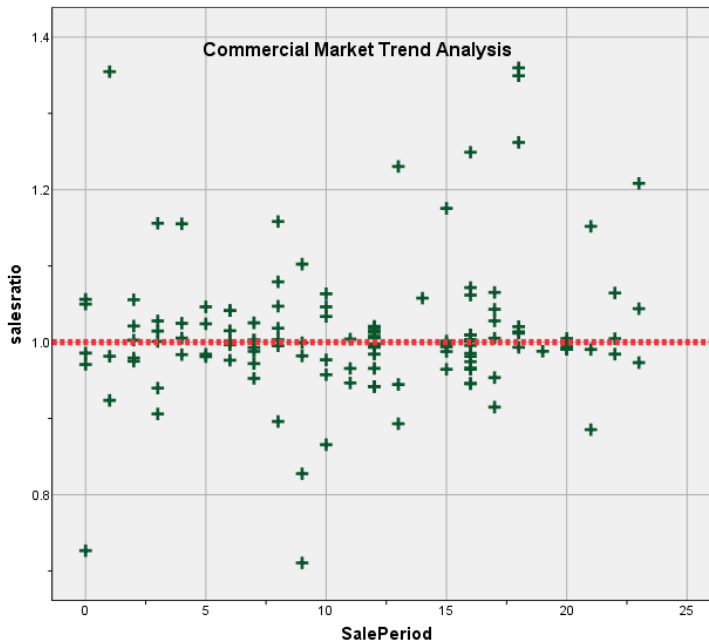
**Commercial Market Trend Analysis**

The commercial/industrial sales were next analyzed by subclass for any residual market trending, examining the sale ratios across the 24-month sale period with the following results:

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

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	.994	.016		61.794	.000
	SalePeriod	.002	.001	.107	1.254	.212

a. Dependent Variable: salesratio



Based on the above results, we concluded that the assessor adequately considered market trending in their valuation of commercial/industrial properties.

### Sold/Unsold Analysis

We compared the 2019 median actual value per square foot between sold and unsold commercial properties to determine if the assessor was valuing each group consistently. This analysis was performed both for the entire class and by subclass, as follows:

#### Report

VALSF			
sold	N	Median	Mean
UNSOLD	1499	\$189	\$218
SOLD	136	\$167	\$213

#### Hypothesis Test Summary

	Null Hypothesis	Test	Sig.	Decision
1	The distribution of VALSF is the same across categories of sold.	Independent-Samples Mann-Whitney U Test	.533	Retain the null hypothesis.

Asymptotic significances are displayed. The significance level is .01.

**Report**

VALSF

ABSTRIMP	sold	N	Median	Mean
2212.00	UNSOLD	98	\$197	\$235
	SOLD	3	\$213	\$222
2215.00	UNSOLD	18	\$198	\$177
	SOLD	2	\$255	\$255
2220.00	UNSOLD	58	\$222	\$279
	SOLD	4	\$292	\$269
2230.00	UNSOLD	98	\$150	\$178
	SOLD	10	\$161	\$196
2242.00	UNSOLD	14	\$192	\$199
	SOLD	2	\$193	\$193
2244.00	UNSOLD	4	\$192	\$157
	SOLD	2	\$286	\$286
2244.50	UNSOLD	63	\$184	\$185
	SOLD	11	\$220	\$201
2245.00	UNSOLD	616	\$188	\$218
	SOLD	80	\$157	\$215

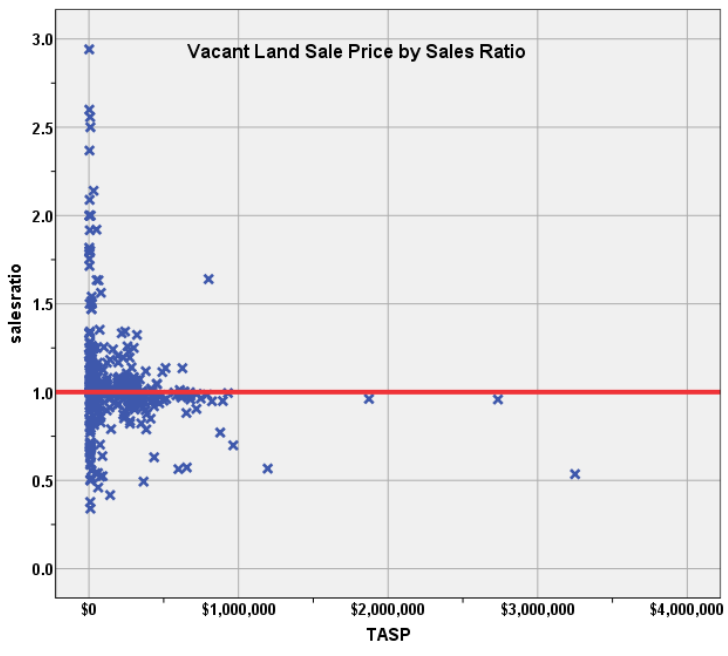
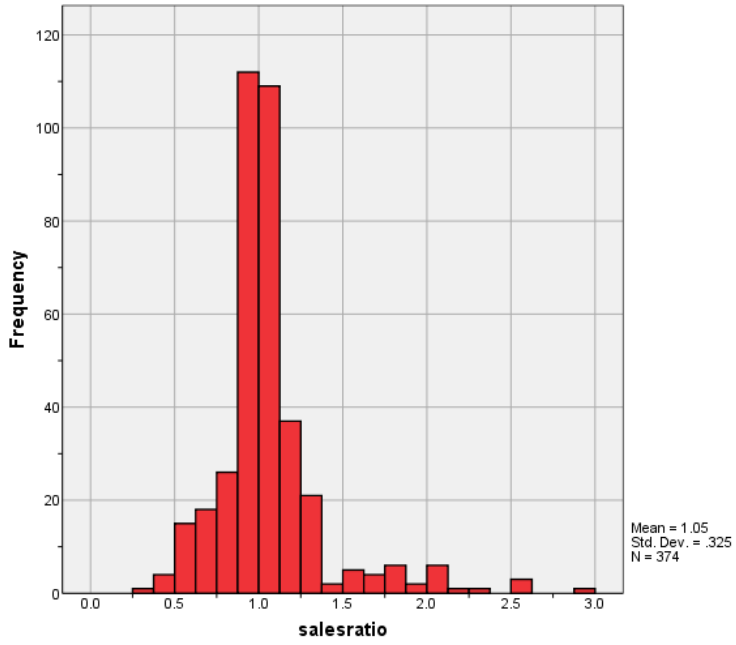
Based on the results of these comparisons, we concluded that the Routt County assessor was valuing sold and unsold commercial properties consistently.

**V. VACANT LAND SALE RESULTS**

There were 382 qualified vacant land sales in the 24 month period ending June 30, 2018; 8 sales were trimmed using IAAO standards, resulting in a final count of 374 sales. The sales ratio analysis results were as follows:

Median	<b>1.000</b>
Price Related Differential	<b>1.099</b>
Coefficient of Dispersion	<b>18.6</b>

The above table indicates that the Routt County vacant land sale ratios were in compliance with the SBOE standards. The following histogram and scatter plot describe the sales ratio distribution further:



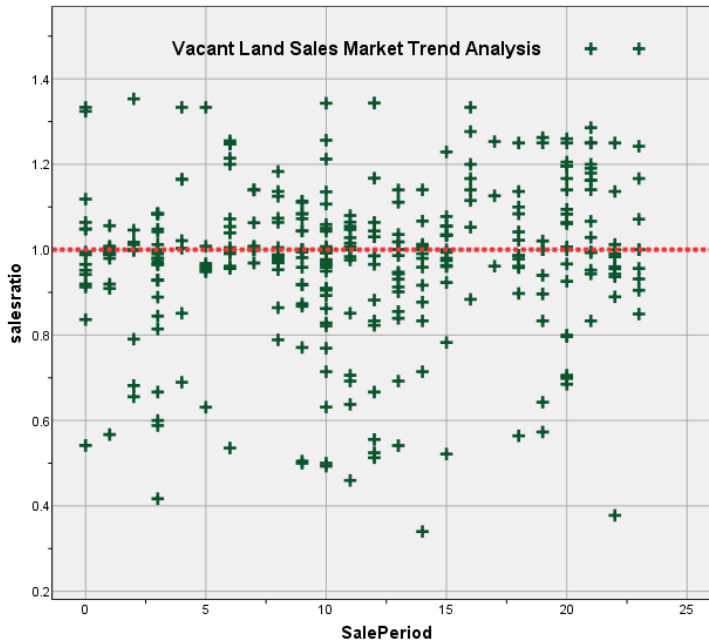
### Vacant Land Market Trend Analysis

The vacant land sales were analyzed, examining the sale ratios across the 24 month sale period with the following results:

### Coefficients<sup>a</sup>

Model		Unstandardized Coefficients B	Std. Error	Standardized Coefficients Beta	t	Sig.
1	(Constant)	.948	.019		49.579	.000
	SalePeriod	.003	.001	.101	1.873	.062

a. Dependent Variable: salesratio



The market trend results indicated no statistically significant trend. We concluded that the assessor has adequately considered market tending in Routt County’s vacant land valuation for 2019.

### Sold/Unsold Analysis

We compared the median change in actual value for taxable years 2018 and 2019 for vacant land properties to determine if sold and unsold properties were valued consistently. We first performed the analysis by class, as follows:

Report			
DIFF	N	Median	Mean
UNSOLD	3543	1.31	1.32
SOLD	363	1.30	1.33

### 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	.583	Retain the null hypothesis.

Asymptotic significances are displayed. The significance level is .00.

We next stratified the comparison results by subdivision with at least 5 sales, as follows:

#### Report

DIFF	SUBDIVNO	sold	N	Median	Mean
1061	UNSOLD		76	1.71	1.70
	SOLD		11	1.71	1.76
1391	UNSOLD		30	1.51	1.49
	SOLD		11	1.51	1.48
1417	UNSOLD		139	1.50	1.50
	SOLD		13	1.50	1.50
1452	UNSOLD		119	1.74	1.73
	SOLD		17	1.74	1.74
1585	UNSOLD		148	1.67	1.64
	SOLD		25	1.67	1.63
1586	UNSOLD		205	1.60	1.60
	SOLD		14	1.60	1.60
1596	UNSOLD		156	1.85	1.85
	SOLD		10	1.85	1.85
1608	UNSOLD		161	1.02	.95
	SOLD		15	.69	.82
2236	UNSOLD		9	1.13	1.12
	SOLD		10	1.01	1.07
2527	UNSOLD		29	1.27	1.23
	SOLD		5	1.12	1.18
2703	UNSOLD		21	1.44	1.39
	SOLD		13	1.44	1.40
2721	UNSOLD		40	1.27	1.23
	SOLD		6	1.27	1.30
2802	UNSOLD		27	1.20	1.20
	SOLD		8	1.20	1.21
3075	UNSOLD		20	1.29	1.28
	SOLD		14	1.34	1.36

The above results indicated that sold and unsold vacant land properties were valued consistently overall.



## V. CONCLUSIONS

Based on this statistical analysis, there were no significant compliance issues concluded for Routt County as of the date of this report.

## STATISTICAL ABSTRACT

### Residential

Ratio Statistics for CURRTOT / TASP													
ResCondo	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 Mean Centered
		Lower Bound	Upper Bound		Lower Bound	Upper Bound	Actual Coverage		Lower Bound	Upper Bound			
0	.997	.992	1.002	.995	.991	1.000	95.2%	.993	.986	1.000	1.004	.062	8.4%
1	.988	.983	.993	.994	.991	.997	95.7%	.979	.969	.989	1.009	.047	7.2%

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/Industrial

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 Mean Centered	
	Lower Bound	Upper Bound		Lower Bound	Upper Bound	Actual Coverage		Lower Bound	Upper Bound				
1.012	.997	1.027	1.000	.995	1.004	96.0%	1.009	.990	1.027	1.003	.051	8.9%	

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.

### Vacant Land

Ratio Statistics for CURRLND / 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 Mean Centered	
	Lower Bound	Upper Bound		Lower Bound	Upper Bound	Actual Coverage		Lower Bound	Upper Bound				
1.053	1.019	1.086	1.000	.994	1.004	95.6%	.958	.912	1.003	1.099	.186	30.9%	

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	\$50K to \$100K	8	0.5%
	\$100K to \$150K	26	1.5%
	\$150K to \$200K	123	7.0%
	\$200K to \$300K	300	17.1%
	\$300K to \$500K	529	30.2%
	\$500K to \$750K	385	22.0%
	\$750K to \$1,000K	178	10.2%
	Over \$1,000K	201	11.5%
Overall		1750	100.0%
Excluded		0	
Total		1750	

**Ratio Statistics for CURRTOT / TASP**

Group	Median	Price Related Differential	Coefficient of Dispersion	Coefficient of Variation Median Centered
\$50K to \$100K	.977	.990	.049	7.1%
\$100K to \$150K	1.027	1.000	.045	6.5%
\$150K to \$200K	.999	1.001	.055	7.3%
\$200K to \$300K	.992	1.000	.056	7.7%
\$300K to \$500K	.992	1.000	.049	7.0%
\$500K to \$750K	.997	1.000	.055	8.5%
\$750K to \$1,000K	.992	1.000	.064	9.3%
Over \$1,000K	.994	1.008	.064	8.8%
Overall	.995	1.004	.055	8.0%

**Subclass**

**Case Processing Summary**

		Count	Percent
ABSTRIMP	1212.00	651	37.2%
	1213.50	1	0.1%
	1215.00	21	1.2%
	1216.50	5	0.3%
	1218.00	330	18.9%
	1220.00	4	0.2%
	1222.50	2	0.1%
	1226.00	1	0.1%
	1230.00	735	42.0%
Overall		1750	100.0%
Excluded		0	
Total		1750	

### Ratio Statistics for CURRTOT / TASP

Group	Median	Price Related Differential	Coefficient of Dispersion	Coefficient of Variation Median Centered
1212.00	1.002	1.006	.072	9.4%
1213.50	.936	1.000	.000	.
1215.00	.986	1.012	.056	7.7%
1216.50	.989	1.000	.034	5.2%
1218.00	.990	.999	.042	6.2%
1220.00	1.017	.998	.013	2.0%
1222.50	.997	1.000	.000	0.0%
1226.00	.875	1.000	.000	.
1230.00	.994	1.009	.047	7.2%
Overall	.995	1.004	.055	8.0%

### Improvement Age

#### Case Processing Summary

		Count	Percent
AgeRec	0	6	0.3%
	Over 100	39	2.2%
	75 to 100	44	2.5%
	50 to 75	25	1.4%
	25 to 50	696	39.8%
	5 to 25	850	48.6%
	5 or Newer	90	5.1%
Overall		1750	100.0%
Excluded		0	
Total		1750	

### Ratio Statistics for CURRTOT / TASP

Group	Median	Price Related Differential	Coefficient of Dispersion	Coefficient of Variation Median Centered
0	.980	.973	.030	3.4%
Over 100	1.009	1.005	.056	7.7%
75 to 100	1.017	1.010	.055	7.2%
50 to 75	1.011	1.003	.087	10.6%
25 to 50	.989	1.004	.058	8.4%
5 to 25	.996	1.007	.053	7.7%
5 or Newer	1.007	1.000	.049	6.3%
Overall	.995	1.004	.055	8.0%

## Improved Area

### Case Processing Summary

		Count	Percent
ImpSFRec	0	3	0.2%
	LE 500 sf	26	1.5%
	500 to 1,000 sf	364	20.8%
	1,000 to 1,500 sf	530	30.3%
	1,500 to 2,000 sf	323	18.5%
	2,000 to 3,000 sf	320	18.3%
	3,000 sf or Higher	184	10.5%
Overall		1750	100.0%
Excluded		0	
Total		1750	

### Ratio Statistics for CURRTOT / TASP

Group	Median	Price Related Differential	Coefficient of Dispersion	Coefficient of Variation Median Centered
0	.954	1.000	.000	0.0%
LE 500 sf	.992	1.002	.037	4.8%
500 to 1,000 sf	.990	1.004	.052	7.3%
1,000 to 1,500 sf	.996	1.004	.051	7.2%
1,500 to 2,000 sf	.991	1.004	.052	7.4%
2,000 to 3,000 sf	.996	1.013	.067	9.7%
3,000 sf or Higher	1.001	1.014	.063	8.9%
Overall	.995	1.004	.055	8.0%

## Improvement Quality

### Case Processing Summary

	Count	Percent
QUALITY	3	0.2%
	10	0.2%
	2	0.1%
	20	5.1%
	3	0.1%
	30	46.4%
	40	23.6%
	50	20.7%
	55	0.1%
	60	3.4%
	70	0.2%
Overall	1750	100.0%
Excluded	0	
Total	1750	

### Ratio Statistics for CURRTOT / TASP

Group	Median	Price Related Differential	Coefficient of Dispersion	Coefficient of Variation Median Centered
	.954	1.000	.000	0.0%
10	.998	.995	.029	5.5%
2	1.006	1.000	.000	.
20	1.002	1.004	.061	8.0%
3	1.017	.999	.005	0.7%
30	.992	1.001	.057	7.7%
40	.993	1.000	.055	8.3%
50	.997	1.001	.053	8.0%
55	.905	1.000	.000	.
60	.995	1.017	.056	9.3%
70	1.004	1.000	.039	5.7%
Overall	.995	1.004	.055	8.0%

### Improvement Condition

#### Case Processing Summary

CONDITION	Count	Percent
	3	0.2%
2	3	0.2%
3	34	1.9%
4	1501	85.8%
5	189	10.8%
6	20	1.1%
Overall	1750	100.0%
Excluded	0	
Total	1750	

### Ratio Statistics for CURRTOT / TASP

Group	Median	Price Related Differential	Coefficient of Dispersion	Coefficient of Variation Median Centered
	.954	1.000	.000	0.0%
2	.988	.982	.082	15.0%
3	1.012	1.008	.058	7.8%
4	.996	1.004	.054	7.8%
5	.984	.995	.063	9.3%
6	.991	1.036	.042	6.9%
Overall	.995	1.004	.055	8.0%

## Commercial Median Ratio Stratification

### Sale Price

#### Case Processing Summary

		Count	Percent
SPRec	LT \$25K	7	5.1%
	\$25K to \$50K	12	8.8%
	\$50K to \$100K	17	12.4%
	\$100K to \$150K	13	9.5%
	\$150K to \$200K	12	8.8%
	\$200K to \$300K	7	5.1%
	\$300K to \$500K	25	18.2%
	\$500K to \$750K	21	15.3%
	\$750K to \$1,000K	7	5.1%
	Over \$1,000K	16	11.7%
Overall		137	100.0%
Excluded		0	
Total		137	

#### Ratio Statistics for CURRTOT / TASP

Group	Median	Price Related Differential	Coefficient of Dispersion	Coefficient of Variation Median Centered
LT \$25K	1.152	1.014	.107	12.9%
\$25K to \$50K	1.000	1.001	.050	11.1%
\$50K to \$100K	.991	.997	.056	9.6%
\$100K to \$150K	1.004	.999	.028	4.9%
\$150K to \$200K	1.000	1.001	.046	11.1%
\$200K to \$300K	.971	1.001	.058	7.9%
\$300K to \$500K	.993	.998	.044	7.1%
\$500K to \$750K	1.013	1.000	.035	5.3%
\$750K to \$1,000K	1.005	.998	.058	9.1%
Over \$1,000K	1.003	.994	.040	8.4%
Overall	1.000	1.003	.051	9.0%

### Subclass

#### Case Processing Summary

		Count	Percent
ABSTRIMP	1218.00	4	2.9%
	1716.00	1	0.7%
	1721.00	1	0.7%
	1737.50	8	5.8%
	1890.67	1	0.7%
	1897.33	1	0.7%
	2212.00	3	2.2%
	2215.00	2	1.5%
	2220.00	4	2.9%
	2228.00	1	0.7%
	2230.00	10	7.3%

	2233.33	1	0.7%
	2237.00	3	2.2%
	2239.50	1	0.7%
	2242.00	2	1.5%
	2244.00	2	1.5%
	2244.50	11	8.0%
	2245.00	81	59.1%
Overall		137	100.0%
Excluded		0	
Total		137	

### Ratio Statistics for CURRTOT / TASP

Group	Median	Price Related Differential	Coefficient of Dispersion	Coefficient of Variation Median Centered
1218.00	1.053	1.005	.054	9.2%
1716.00	1.005	1.000	.000	.
1721.00	1.034	1.000	.000	.
1737.50	1.026	1.000	.057	9.2%
1890.67	.885	1.000	.000	.
1897.33	.828	1.000	.000	.
2212.00	1.002	.999	.018	3.8%
2215.00	1.255	1.054	.079	11.2%
2220.00	.971	.998	.077	15.6%
2228.00	1.065	1.000	.000	.
2230.00	1.015	.997	.052	7.9%
2233.33	.957	1.000	.000	.
2237.00	1.014	.997	.012	2.1%
2239.50	.982	1.000	.000	.
2242.00	.934	.973	.073	10.4%
2244.00	1.003	1.003	.018	2.5%
2244.50	.995	.998	.020	3.1%
2245.00	1.000	1.008	.046	8.7%
Overall	1.000	1.003	.051	9.0%

### Improvement Age

#### Case Processing Summary

		Count	Percent
AgeRec	0	128	93.4%
	75 to 100	1	0.7%
	50 to 75	2	1.5%
	25 to 50	4	2.9%
	5 to 25	2	1.5%
Overall		137	100.0%
Excluded		0	
Total		137	



### Ratio Statistics for CURRTOT / TASP

Group	Median	Price Related Differential	Coefficient of Dispersion	Coefficient of Variation Median Centered
0	1.000	1.003	.048	8.8%
75 to 100	.828	1.000	.000	.
50 to 75	.960	1.004	.077	10.9%
25 to 50	1.053	1.005	.054	9.2%
5 to 25	1.081	1.015	.070	9.9%
Overall	1.000	1.003	.051	9.0%

### Improved Area

### Case Processing Summary

	Count	Percent
ImpSFRec	0	1
	LE 500 sf	19
	500 to 1,000 sf	32
	1,000 to 1,500 sf	18
	1,500 to 2,000 sf	17
	2,000 to 3,000 sf	28
	3,000 sf or Higher	22
Overall	137	100.0%
Excluded	0	
Total	137	

### Ratio Statistics for CURRTOT / TASP

Group	Median	Price Related Differential	Coefficient of Dispersion	Coefficient of Variation Median Centered
0	.966	1.000	.000	.
LE 500 sf	1.001	1.024	.068	12.6%
500 to 1,000 sf	.995	1.015	.054	9.7%
1,000 to 1,500 sf	1.000	1.005	.037	5.8%
1,500 to 2,000 sf	.995	.999	.024	4.0%
2,000 to 3,000 sf	1.018	1.005	.053	9.2%
3,000 sf or Higher	1.004	.988	.055	9.3%
Overall	1.000	1.003	.051	9.0%

## Improvement Quality

### Case Processing Summary

	Count	Percent
QUALITY	1	0.7%
1	1	0.7%
2	16	11.7%
3	38	27.7%
30	6	4.4%
4	56	40.9%
40	2	1.5%
5	10	7.3%
6	4	2.9%
7	3	2.2%
Overall	137	100.0%
Excluded	0	
Total	137	

### Ratio Statistics for CURRTOT / TASP

Group	Median	Price Related Differential	Coefficient of Dispersion	Coefficient of Variation Median Centered
	.966	1.000	.000	.
1	1.175	1.000	.000	.
2	1.000	.996	.009	1.8%
3	1.005	1.013	.087	13.8%
30	1.040	1.053	.064	10.1%
4	1.000	.983	.037	5.4%
40	1.081	1.015	.070	9.9%
5	.994	1.029	.044	9.9%
6	1.006	1.001	.016	2.1%
7	.988	1.011	.013	2.1%
Overall	1.000	1.003	.051	9.0%

## Improvement Condition

### Case Processing Summary

	Count	Percent
CONDITION	1	0.7%
3	5	3.6%
4	94	68.6%
5	33	24.1%
6	2	1.5%
7	2	1.5%
Overall	137	100.0%
Excluded	0	
Total	137	

### Ratio Statistics for CURRTOT / TASP

Group	Median	Price Related Differential	Coefficient of Dispersion	Coefficient of Variation Median Centered
	.966	1.000	.000	.
3	1.020	.991	.124	19.3%
4	1.000	.999	.053	9.2%
5	.999	1.040	.033	6.8%
6	1.012	1.001	.016	2.3%
7	1.060	1.000	.003	0.5%
Overall	1.000	1.003	.051	9.0%

### Vacant Land Median Ratio Stratification

#### Sale Price

#### Case Processing Summary

		Count	Percent
SPRec	LT \$25K	116	31.0%
	\$25K to \$50K	43	11.5%
	\$50K to \$100K	39	10.4%
	\$100K to \$150K	19	5.1%
	\$150K to \$200K	11	2.9%
	\$200K to \$300K	63	16.8%
	\$300K to \$500K	52	13.9%
	\$500K to \$750K	20	5.3%
	\$750K to \$1,000K	7	1.9%
	Over \$1,000K	4	1.1%
Overall		374	100.0%
Excluded		0	
Total		374	

### Ratio Statistics for CURRLND / TASP

Group	Median	Price Related Differential	Coefficient of Dispersion	Coefficient of Variation Median Centered
LT \$25K	1.083	1.057	.325	46.3%
\$25K to \$50K	1.000	.997	.129	25.8%
\$50K to \$100K	1.000	1.008	.180	26.9%
\$100K to \$150K	1.007	1.005	.088	16.3%
\$150K to \$200K	1.022	.999	.079	11.0%
\$200K to \$300K	1.000	1.001	.077	11.1%
\$300K to \$500K	.984	1.002	.068	11.8%
\$500K to \$750K	.979	1.002	.076	14.9%
\$750K to \$1,000K	.950	1.012	.181	32.6%
Over \$1,000K	.763	1.000	.268	31.0%
Overall	1.000	1.099	.186	32.9%

**Subclass**

**Case Processing Summary**

		Count	Percent
ABSTRLND	100.00	261	69.8%
	200.00	16	4.3%
	300.00	1	0.3%
	400.00	1	0.3%
	510.00	1	0.3%
	520.00	2	0.5%
	530.00	2	0.5%
	550.00	9	2.4%
	1111.00	1	0.3%
	1112.00	64	17.1%
	1115.00	3	0.8%
	1135.00	4	1.1%
	1140.00	1	0.3%
	2112.00	1	0.3%
	2120.00	1	0.3%
	2130.00	1	0.3%
	2135.00	4	1.1%
2144.00	1	0.3%	
Overall		374	100.0%
Excluded		0	
Total		374	

**Ratio Statistics for CURRLND / TASP**

Group	Median	Price Related Differential	Coefficient of Dispersion	Coefficient of Variation Median Centered
100.00	1.000	1.132	.204	34.7%
200.00	.993	1.085	.107	17.1%
300.00	.993	1.000	.000	.
400.00	.998	1.000	.000	.
510.00	2.140	1.000	.000	.
520.00	1.058	1.042	.055	7.7%
530.00	1.018	1.026	.055	7.8%
550.00	1.125	1.194	.263	37.3%
1111.00	.956	1.000	.000	.
1112.00	1.000	1.038	.092	17.7%
1115.00	.967	1.003	.034	5.2%
1135.00	.737	.857	.306	36.0%
1140.00	.965	1.000	.000	.
2112.00	.699	1.000	.000	.
2120.00	.417	1.000	.000	.
2130.00	1.640	1.000	.000	.
2135.00	1.018	1.370	.426	87.5%
2144.00	1.008	1.000	.000	.
Overall	1.000	1.099	.186	32.9%