



2021

# SUMMIT COUNTY PROPERTY ASSESSMENT STUDY

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**WILDROSE**  
APPRAISAL, INCORPORATED  
**Audit Division**



September 15, 2021

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

**RE: Final Report for the 2021 Colorado Property Assessment Study**

Dear Ms. Mullis:

Wildrose Appraisal Inc.-Audit Division is pleased to submit the Final Reports for the 2021 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

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# INTRODUCTION

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## 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.

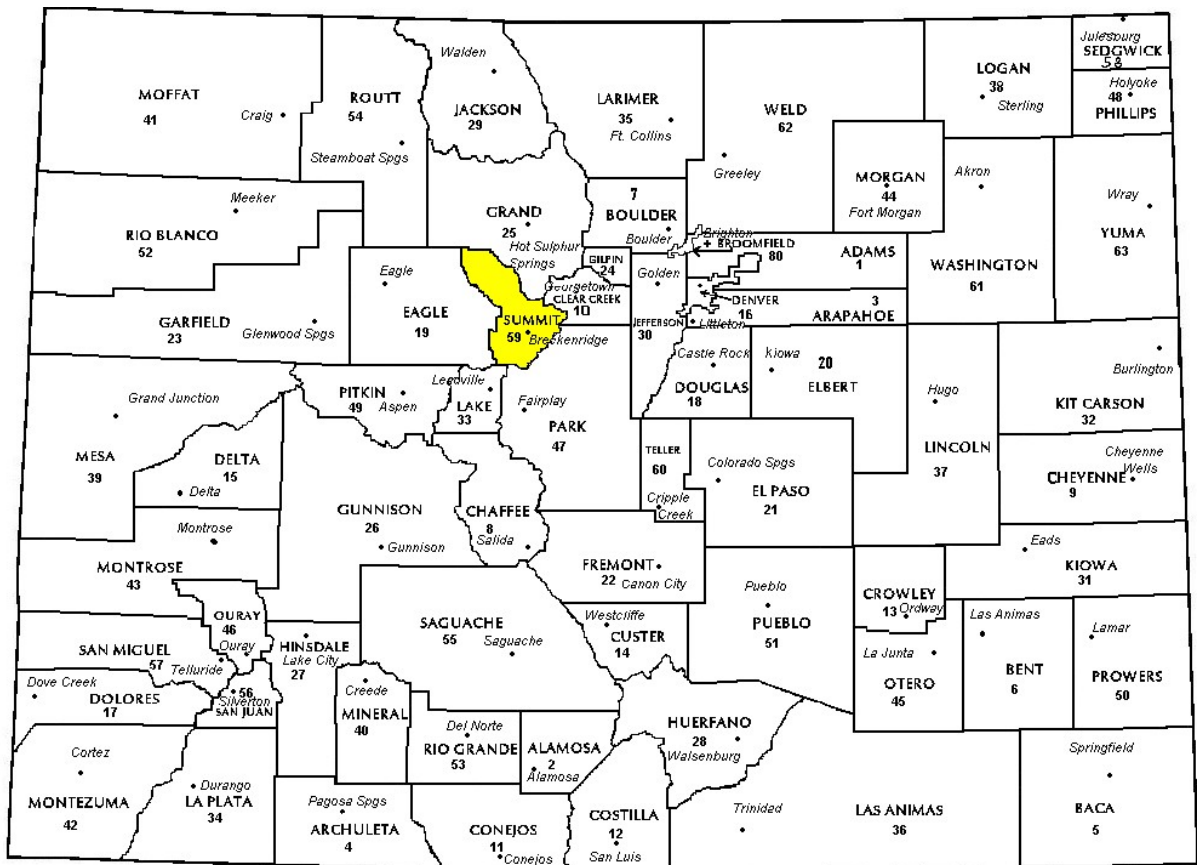
Wildrose Audit has completed the Property Assessment Study for 2021 and is pleased to report its findings for Summit County in the following report.

# REGIONAL/HISTORICAL SKETCH OF SUMMIT COUNTY

## Regional Information

Summit County is located in the Western Slope region of Colorado. The Western Slope of Colorado refers to the region west of the Rocky Mountains. It includes Archuleta, Delta, Dolores, Eagle, Garfield, Grand,

Gunnison, Hinsdale, Jackson, La Plata, Mesa, Moffat, Montezuma, Montrose, Ouray, Pitkin, Rio Blanco, Routt, San Juan, San Miguel, and Summit counties.





## Historical Information

Summit County has approximately 608.4 square miles and an estimated population of approximately 31,011 people with 46.0 people per square mile, according to the U.S. Census Bureau's 2020 estimated census data. This represents a 10.8 percent change from April 1, 2010 to July 1, 2019.

Summit County was organized as one of the seventeen original Colorado counties by the First Territorial Legislature on November 1, 1861. It was named for the many mountain summits in the county. Until February 2, 1874, its boundaries included the area now comprising Summit County, Grand County, Routt County, Moffat County, Garfield County, Eagle County, and Rio Blanco County.

In 1874, the northern half of the original Summit County was split off to form Grand County. With the creation of Garfield and Eagle counties in 1883, Summit County arrived at its present boundaries.

Established in 1859, the historic Town of Breckenridge is a Home Rule Municipality and is the county seat. The town of Breckenridge was formally created in November 1859 by General George E. Spencer. Spencer chose the name "Breckenridge" after the United States' Vice President of the time, John C.

Breckenridge of Kentucky in the hopes of flattering the government and gaining a post office. Spencer succeeded in his plan and a post office was built in Breckenridge. When the Civil War broke out in 1861, however, the former vice president sided with the Confederates (as a brigadier general) and the pro-Union citizens of Breckenridge decided to change the town's name. The first "i" was changed to an "e" and the town's name has been spelled Breckenridge ever since.

Prospectors entered what is now Summit County (then part of Utah Territory) during the Pikes Peak Gold Rush of 1859 and soon after that, the placer gold discoveries farther east at Idaho Springs. Breckenridge was founded to serve the miners working rich placer gold deposits discovered along Georgia Gulch. Placer gold mining was soon joined by hard rock mining, as prospectors followed the gold to its source veins in the hills.

Summit county is rich in activities for locals and visitors. It is home to Copper Mountain, Breckenridge, Keystone and Arapahoe Ski Resorts. Winter activities include skiing, snowboarding, ice-skating, cross-country skiing, dog sleigh, and snowmobiling. Summer activities include hiking, biking, fishing, and trail running. ([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, 2019 through June 30th, 2020. 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
Residential Condominium	Between .95-1.05	Less than 15.99
Residential	Between .95-1.05	Less than 15.99
Vacant Land	Between .95-1.05	Less than 20.99

The results for Summit County are:

<b>Summit 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	58	0.981	1.024	10.7	Compliant
Residential Condo	1,615	0.970	1.002	5.4	Compliant
Residential	1,525	1.000	1.010	5.2	Compliant
Vacant Land	300	0.988	1.011	18	Compliant

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

Summit 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
Residential Condos	Compliant
Residential	Compliant
Vacant Land	Compliant

**Conclusions**

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

**Recommendations**

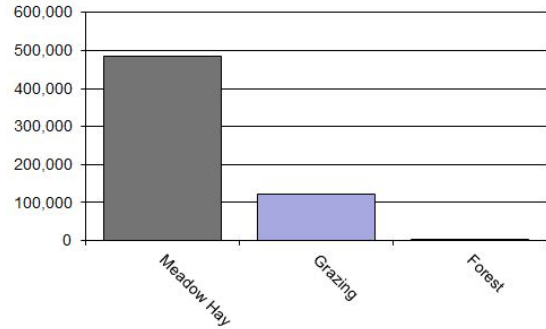
None

# 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>Summit 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>
4137	Meadow Hay	4,666	104.11	485,736	489,219	0.99
4147	Grazing	23,256	5.22	121,408	121,408	1.00
4177	Forest	259	3.30	854	854	1.00
<b>Total/Avg</b>		<b>28,181</b>	<b>21.57</b>	<b>607,997</b>	<b>611,481</b>	<b>0.99</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.

Property Taxation for the valuation of agricultural outbuildings.

### **Recommendations**

None

### **Conclusions**

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

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## Agricultural Land Under Improvements

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### 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

Summit 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.:

- Questionnaires
- Personal Knowledge of Occupants at Assessment Date
- Aerial Photography/Pictometry

Summit 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.:

- Personal Knowledge of Occupants at Assessment Date
- Aerial Photography/Pictometry

Summit 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 2021 for Summit County. This study was conducted by checking selected sales from the master sales list for the current valuation period. Specifically WRA selected 39 sales listed as unqualified.

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

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

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

### **Conclusions**

Summit County appears to be doing an adequate job of verifying their sales.

### **Recommendations**

None



# ECONOMIC AREA REVIEW AND EVALUATION

## **Methodology**

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

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## Earth and Stone Products

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### 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

## VACANT LAND

### **Subdivision Discounting**

Subdivisions were reviewed in 2021 in Summit County. The review showed that subdivisions were discounted pursuant to the Colorado Revised Statutes in Article 39-1-103 (14). Discounting procedures were applied to all subdivisions where less than 80 percent of all sites were sold using the present worth method. The market approach was applied where 80 percent or more of the subdivision sites were sold. An absorption period was estimated for each subdivision that was discounted. An appropriate discount rate was

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

### **Conclusions**

Summit 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.

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

Summit 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

Summit 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.

Summit 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
- Towns' business license reports
- Towns' and County's list of active short term rental permits/licenses

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.

Summit County submitted their personal property written audit plan and was current for the 2021 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
- 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 \$7,900 actual value exemption status
- Accounts protested with substantial disagreement

### **Conclusions**

Summit 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*

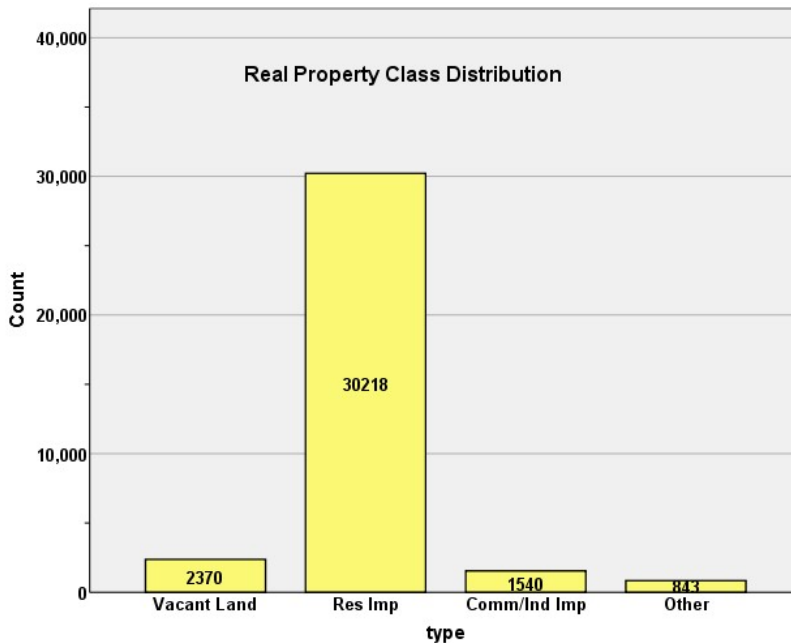
# STATISTICAL APPENDIX



## STATISTICAL COMPLIANCE RESULTS FOR SUMMIT COUNTY 2021

### I. OVERVIEW

Summit County is located in central Colorado. The county has a total of 34,971 real property parcels, according to data submitted by the county assessor’s office in 2021. 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 and 1111) accounted for 45.9% of all vacant land parcels.

For residential improved properties, single family properties accounted for 32.6% of all residential properties. Residential condominiums, coded as 1230, accounted for 44.0% of all residential properties. Based on the guidelines of the 2021 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 4.4% of all such properties in this county.

### II. DATA FILES

The following sales analyses were based on the requirements of the 2021 Colorado Property Assessment Study. Information was provided by the Summit Assessor’s Office in April 2021. The data included all 5 property record files as specified by the Auditor.

### III. RESIDENTIAL SALES RESULTS

There were 3,140 qualified residential sales for the 24 month sale period ending June 30, 2020. We stratified our sales ratio analysis by residential non-condominiums and condominiums, as follows:

**Non-Condo = 1,525**

Median	<b>1.000</b>
Price Related Differential	<b>1.010</b>
Coefficient of Dispersion	<b>5.2</b>

**Residential Condo = 1,615**

Median	<b>0.970</b>
Price Related Differential	<b>1.002</b>
Coefficient of Dispersion	<b>5.4</b>

We next stratified the sale ratio analysis by economic area and neighborhood. The minimum count for the neighborhood stratification is 20 sales. The following are the results of this stratification analysis:

**Economic Area  
Case Processing Summary**

ResCondo		Count	Percent	
.00	ECONAREA	1.00	21	1.4%
		2.00	160	10.5%
		3.00	23	1.5%
		4.00	584	38.3%
		5.00	635	41.6%
		6.00	102	6.7%
	Overall	1525	100.0%	
	Excluded	0		
	Total	1525		
1.00	ECONAREA	2.00	172	10.7%
		3.00	116	7.2%
		4.00	520	32.2%
		5.00	439	27.2%
		6.00	368	22.8%
		Overall	1615	100.0%
	Excluded	0		
		Total	1615	

**Ratio Statistics for CURRTOT / TASP**

ResCondo	Group	Median	Price Related Differential	Coefficient of Dispersion
.00	1.00	1.080	1.033	.104
	2.00	.993	1.008	.073
	3.00	1.065	1.100	.132
	4.00	.983	1.006	.065
	5.00	.996	1.002	.075
	6.00	1.016	1.018	.065
	Overall	.995	1.006	.073
1.00	2.00	.988	1.003	.054
	3.00	.974	1.005	.078
	4.00	.991	1.000	.054
	5.00	.993	.999	.060
	6.00	.992	.995	.060
	Overall	.991	.999	.059

**Neighborhoods with at least 15 sales**

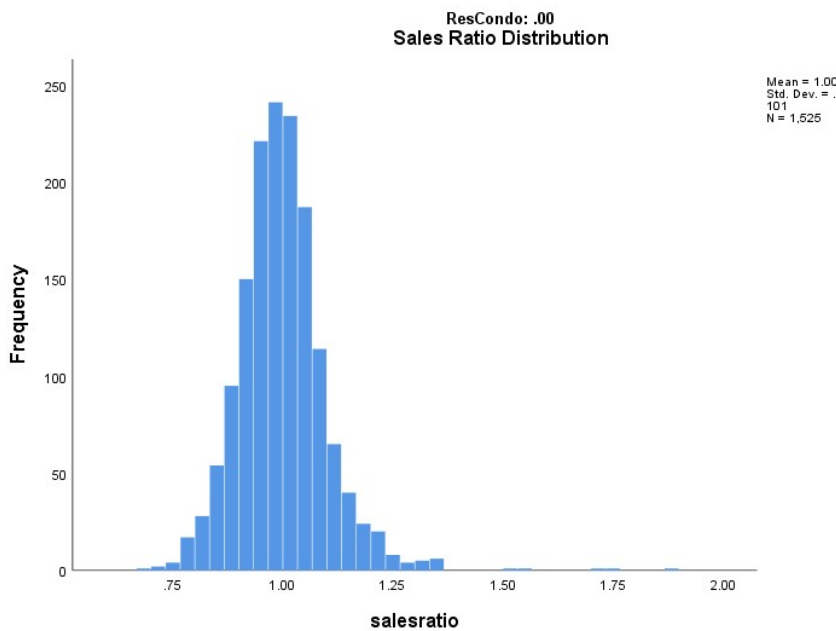
**Ratio Statistics for CURRTOT / TASP**

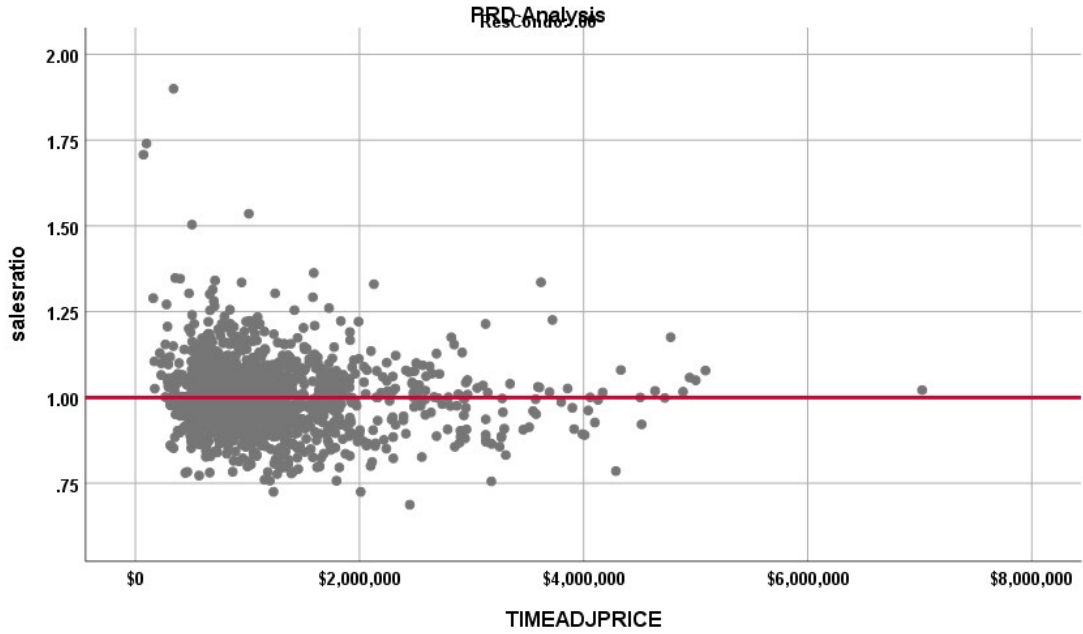
Group	Median	Price Related Differential	Coefficient of Dispersion
01300	.968	1.002	.058
01600	.955	1.002	.056
01900	.997	.992	.038
02300	1.000	.998	.047
03600	.986	1.001	.056
03615	1.021	1.004	.032
03630	.990	1.005	.051
04400	.993	1.008	.066
05000	.919	1.000	.056
05100	1.003	.998	.044
05300	.976	1.005	.064
05600	1.000	.999	.060
05700	.984	1.005	.054
06000	.959	1.004	.069
06600	1.003	1.000	.067
06610	.973	1.033	.094
06630	1.046	1.031	.131
07300	.978	.994	.052
07500	.997	.985	.070
07600	.994	1.003	.060
07800	.991	.995	.056
20700	.986	1.008	.078
20750	.977	1.009	.088
20800	.980	1.015	.091
21000	.997	.996	.055
21010	1.000	.987	.057
21020	.958	1.003	.082
21050	.986	.976	.078
21100	1.049	1.020	.112
21150	1.014	1.013	.069
21800	.976	1.002	.055
22100	1.003	1.013	.060
22300	1.021	1.007	.078
22500	1.030	1.018	.056

23000	.990	1.005	.074
23100	.977	1.010	.085
24000	.983	1.010	.067
24300	.997	1.004	.085
24600	.976	.999	.060
24800	1.089	1.028	.067
25000	.985	1.000	.066
25100	.972	.985	.053
26100	.988	1.007	.060
26200	1.000	1.007	.071
26300	1.023	1.023	.064
28000	1.009	1.009	.042
Overall	.992	1.003	.066

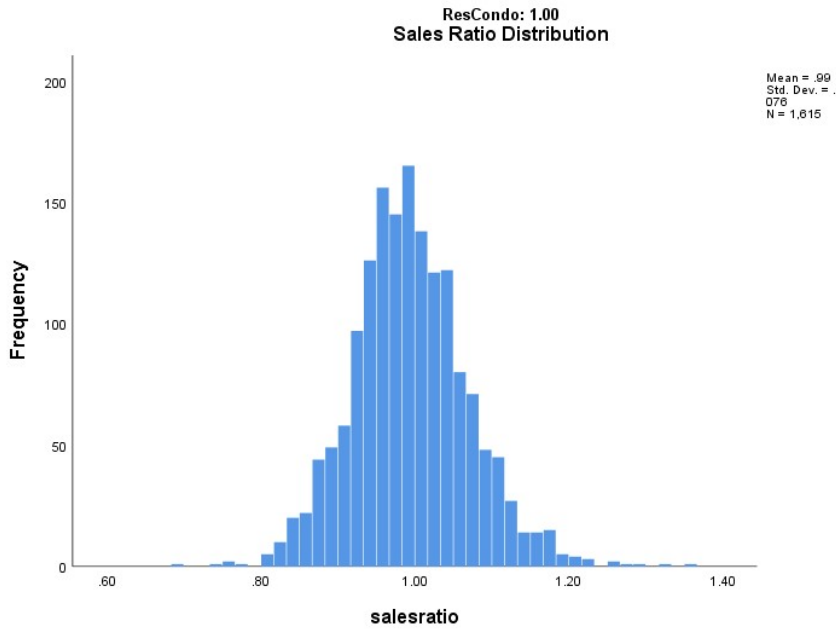
The above ratio statistics were in compliance with the standards set forth by the Colorado State Board of Equalization (SBOE) for the overall residential sales. The following graphs describe further the sales ratio distribution for these properties:

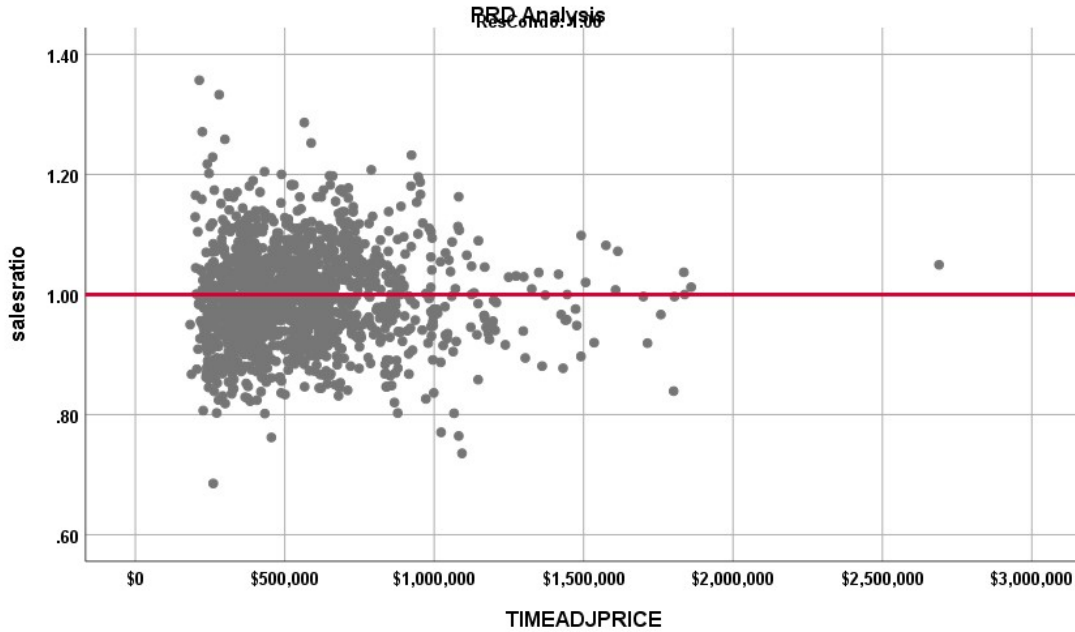
### RESIDENTIAL NON-CONDOMINIUMS





**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	Standardized Coefficients	t	Sig.
			B	Beta		
.00	1	(Constant)	.993		183.899	.000
		SalePeriod	.000	.030	1.163	.245
1.00	1	(Constant)	.996		252.584	.000
		SalePeriod	.000	-.015	-.619	.536

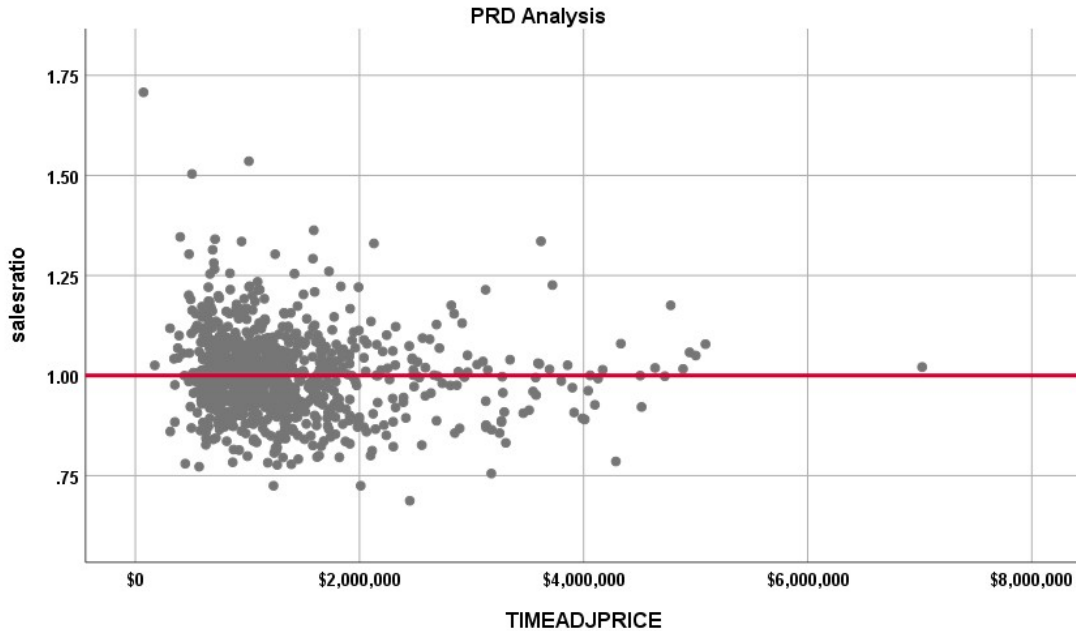
a. Dependent Variable: salesratio

Based on the lack of a statistically significant trend in the above analysis, we concluded that the assessor has adequately addressed market trending in the valuation of residential properties for both condominiums and non-condominium properties.

### Subclass 1212 PRD Analysis

We next analyzed residential properties identified as 1212 using the state abstract code system. These include single family residences, town homes and purged manufactured homes. The following indicates the distribution of sales ratios across the sale price spectrum:

**1212 SALES**



The Price-Related Differential (PRD) for 1212 sales is 1.006, which is within IAAO standards for the PRD. We also performed a regression analysis between the sales ratio and the assessor’s current value to further test for regressivity or progressivity in the residential sales valuation, as follows:

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

Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
		B	Std. Error	Beta		
1	(Constant)	.991	.007		150.214	.000
	CURRTOT	.0000000079	.000	.062	1.866	.062

a. Dependent Variable: salesratio

The slope of the line at 0.0000000079 indicates that there is virtually no slope in the regression line, which indicates that sales ratios are similar across the entire sale price array. This indicates no regressivity or progressivity in the residential values assigned by the assessor.

We also stratified the sales ratio analysis by the sale price range, as follows:

**Case Processing Summary**

		Count	Percent
SPRec	LT \$600K	58	6.4%
	\$600K to \$800K	152	16.8%
	\$800K to \$1000K	149	16.5%
	\$1000K to \$2000K	427	47.2%
	\$2000K to \$3000K	68	7.5%
	Over \$3000K	50	5.5%
Overall		904	100.0%
Excluded		0	
Total		904	

### Ratio Statistics for CURRTOT / TASP

Group	Median	Price Related Differential	Coefficient of Dispersion	Coefficient of Variation Median Centered
LT \$600K	1.004	1.012	.098	15.8%
\$600K to \$800K	1.005	1.001	.073	9.6%
\$800K to \$1000K	1.008	1.000	.070	9.0%
\$1000K to \$2000K	.987	1.002	.076	10.0%
\$2000K to \$3000K	1.000	.998	.082	11.1%
Over \$3000K	.994	.995	.079	10.8%
Overall	.998	1.006	.077	10.4%

The above table indicates no regressivity in the sales ratios across sale price categories.

### Sold/Unsold Analysis

In terms of the valuation consistency between sold and unsold residential properties, we compared the median change in actual value between valuation year 2018 and valuation year 2020 for sold and unsold groups, broken down by condominiums and non-condominiums:

#### Report

DIFF			
DIFF	N	Median	Mean
UNSOLD	26892	1.1083	1.1487
SOLD	3119	1.1186	1.1285

We stratified this analysis by non-condominiums and condominiums, as follows:

#### Report

DIFF				
ResCondo	DIFF	N	Median	Mean
NON--CONDO	UNSOLD	15278	1.0970	1.1659
	SOLD	1522	1.1127	1.1280
CONDO	UNSOLD	11614	1.1211	1.1260
	SOLD	1597	1.1246	1.1290

We next stratified this analysis by economic area and neighborhoods with at least 15 sales, as follows:

#### Economic Area

#### Report

DIFF					
ResCondo	ECONAREA	DIFF	N	Median	Mean
NON-CONDO	1.00	UNSOLD	367	1.0258	1.1136
		SOLD	21	1.0408	1.0531
	2.00	UNSOLD	1791	1.1322	1.1469
		SOLD	160	1.1569	1.1623
	3.00	UNSOLD	291	1.1876	1.2223
		SOLD	23	1.3711	1.3476
	4.00	UNSOLD	4975	1.1132	1.2143
		SOLD	581	1.1231	1.1378
	5.00	UNSOLD	7042	1.0796	1.1338
		SOLD	635	1.0986	1.1107



	6.00	UNSOLD	812	1.0605	1.1940
		SOLD	102	1.0863	1.0912
CONDO	2.00	UNSOLD	1356	1.1396	1.1490
		SOLD	172	1.1391	1.1439
	3.00	UNSOLD	1043	1.1561	1.1600
		SOLD	116	1.1645	1.1698
	4.00	UNSOLD	3133	1.1273	1.1377
		SOLD	503	1.1417	1.1458
	5.00	UNSOLD	3756	1.1288	1.1310
		SOLD	438	1.1255	1.1368
	6.00	UNSOLD	2326	1.0636	1.0735
		SOLD	368	1.0630	1.0769

### Neighborhoods with at least 15 sales

#### Report

DIFF

NBHD	sold	N	Median	Mean
01300	UNSOLD	300	1.1756	1.1888
	SOLD	54	1.1180	1.1247
01600	UNSOLD	646	1.0831	1.0852
	SOLD	90	1.1141	1.1156
01900	UNSOLD	284	1.1185	1.1298
	SOLD	40	1.1374	1.1538
02300	UNSOLD	1301	1.1229	1.1236
	SOLD	226	1.1433	1.1431
03600	UNSOLD	875	1.1418	1.1524
	SOLD	96	1.1474	1.1584
03615	UNSOLD	37	1.1186	1.1454
	SOLD	24	1.2006	1.1842
03630	UNSOLD	560	1.1308	1.1235
	SOLD	74	1.1391	1.1277
04400	UNSOLD	787	1.1726	1.1701
	SOLD	93	1.2109	1.1901
05100	UNSOLD	296	1.1384	1.1472
	SOLD	32	1.1607	1.1501
05300	UNSOLD	521	1.1374	1.1335
	SOLD	55	1.1476	1.1415
05600	UNSOLD	3224	1.0985	1.0928
	SOLD	258	1.1216	1.1334
05700	UNSOLD	577	1.1252	1.1265
	SOLD	64	1.1181	1.1389
06000	UNSOLD	194	1.0925	1.0930
	SOLD	28	1.1181	1.1257
06600	UNSOLD	335	1.1528	1.1753
	SOLD	32	1.1518	1.1684
06610	UNSOLD	694	1.1711	1.1813
	SOLD	74	1.1792	1.1989
06630	UNSOLD	168	1.1321	1.1563
	SOLD	20	1.1789	1.2531
07300	UNSOLD	306	1.0514	1.0596
	SOLD	36	1.0669	1.0604
07500	UNSOLD	639	1.0905	1.0837
	SOLD	73	1.0673	1.0766
07600	UNSOLD	654	1.0631	1.0635
	SOLD	122	1.0745	1.0759
07800	UNSOLD	840	1.0434	1.0752

	SOLD	138	1.0448	1.0817
20700	UNSOLD	385	1.0599	1.2806
	SOLD	71	1.0622	1.0781
20750	UNSOLD	655	1.0910	1.1290
	SOLD	73	1.1012	1.1046
20800	UNSOLD	829	1.0743	1.2173
	SOLD	89	1.0849	1.1002
21000	UNSOLD	713	1.0877	1.0952
	SOLD	77	1.1091	1.1200
21010	UNSOLD	290	1.1098	1.1022
	SOLD	26	1.1324	1.1040
21020	UNSOLD	404	1.0582	1.0799
	SOLD	20	1.1312	1.1415
21050	UNSOLD	349	1.1036	1.1316
	SOLD	43	1.1391	1.1929
21150	UNSOLD	670	1.0967	1.1748
	SOLD	90	1.0818	1.0882
21800	UNSOLD	501	1.1098	1.1296
	SOLD	45	1.0932	1.0963
22100	UNSOLD	431	1.0951	1.1992
	SOLD	39	1.0712	1.1238
22300	UNSOLD	223	1.0816	1.1478
	SOLD	21	1.1106	1.0962
23000	UNSOLD	1063	1.1347	1.1468
	SOLD	81	1.1384	1.1429
23100	UNSOLD	600	1.1441	1.1653
	SOLD	57	1.1461	1.1766
24000	UNSOLD	1692	1.1025	1.3137
	SOLD	278	1.1142	1.1263
24300	UNSOLD	503	1.2010	1.2309
	SOLD	40	1.2023	1.2202
24600	UNSOLD	953	1.1168	1.1479
	SOLD	118	1.1238	1.1387
25000	UNSOLD	400	1.0979	1.1325
	SOLD	33	1.1097	1.1239
25100	UNSOLD	311	1.1305	1.1544
	SOLD	25	1.1111	1.1257
26100	UNSOLD	895	1.1203	1.1779
	SOLD	87	1.1436	1.1446
26200	UNSOLD	210	1.0187	1.0259
	SOLD	24	1.0650	1.0828
26300	UNSOLD	398	1.0894	1.2782
	SOLD	74	1.0882	1.0937

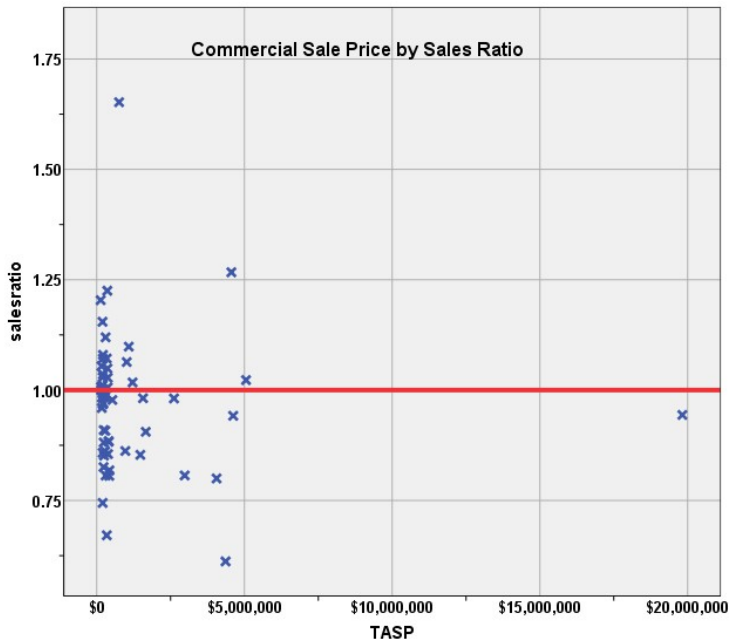
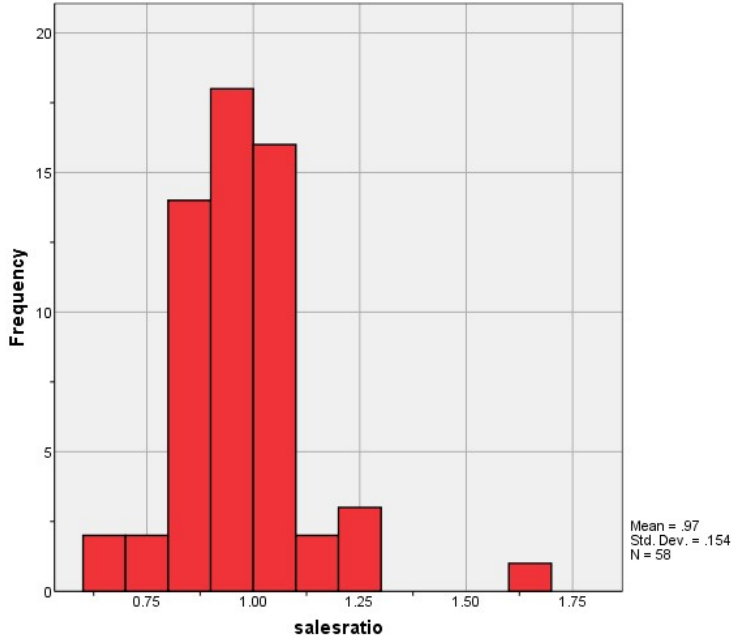
The above results indicate that sold and unsold residential properties were valued in a consistent manner.

#### IV. COMMERCIAL/INDUSTRIAL SALE RESULTS

There were 58 qualified commercial and industrial sales for the 24 month sale period ending June 30, 2020. The sales ratio analysis results were as follows:

Median	<b>0.981</b>
Price Related Differential	<b>1.024</b>
Coefficient of Dispersion	<b>10.7</b>

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



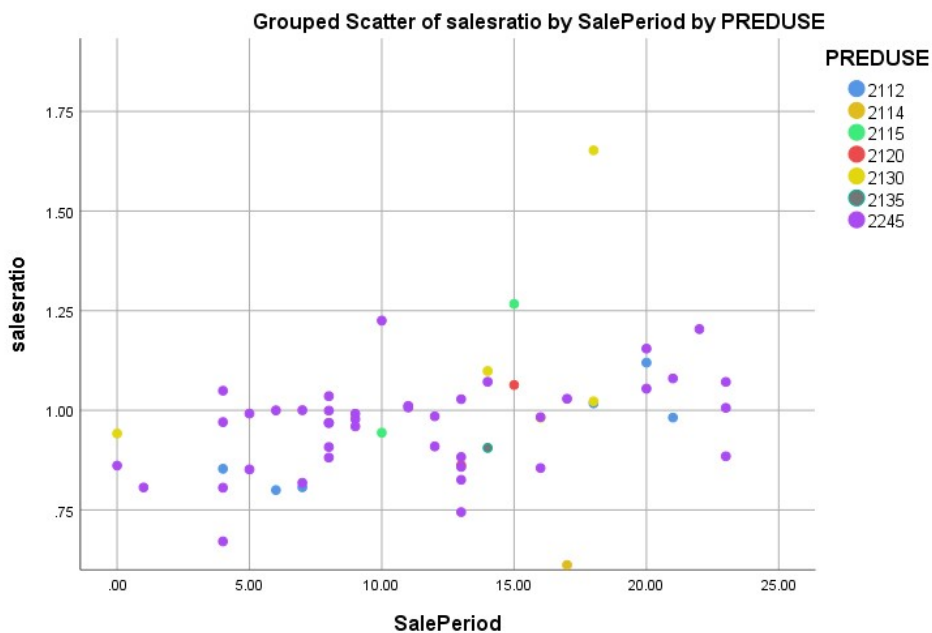
## Commercial Market Trend Analysis

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)	.856	.041		20.880	.000
	SalePeriod	.010	.003	.389	3.162	.003

a. Dependent Variable: salesratio



The market trend results indicated a statistically significant residual market trend, but when stratified by subclass, the trend was less significant. We concluded that the assessor adequately considered market trending in their valuation of commercial/industrial properties.

### Sold/Unsold Analysis

For the sold/unsold analysis of commercial properties, we compared the 2021 median actual value per square foot between sold and unsold commercial properties to determine if the assessor was valuing each group consistently, as follows:

#### Report

VALSF			
	N	Median	Mean
UNSOLD	1469	\$213	\$256
SOLD	58	\$235	\$277

### 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	.015	Retain the null hypothesis.

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

We also compared sold and unsold commercial properties using the median change in actual value between valuation year 2018 and valuation year 2020 both overall and by subclass:

#### Report

DIFF		N	Median	Mean
sold				
UNSOLD		1428	1.0779	1.1626
SOLD		64	1.1521	1.2238

#### Report

VALSF			N	Median	Mean
ABSTRIMP	sold				
2212	UNSOLD		109	\$284	\$364
	SOLD		6	\$308	\$342
2230	UNSOLD		115	\$309	\$395
	SOLD		3	\$302	\$340
2245	UNSOLD		1019	\$215	\$222
	SOLD		41	\$206	\$248

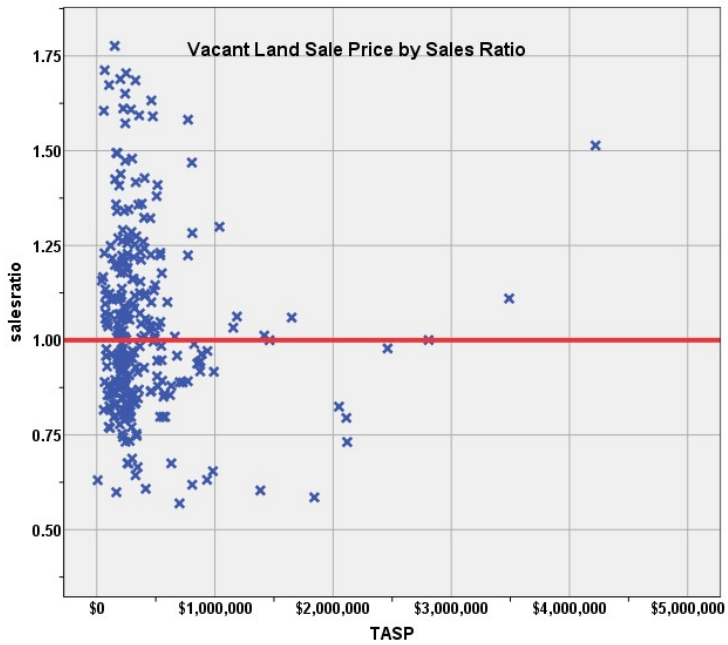
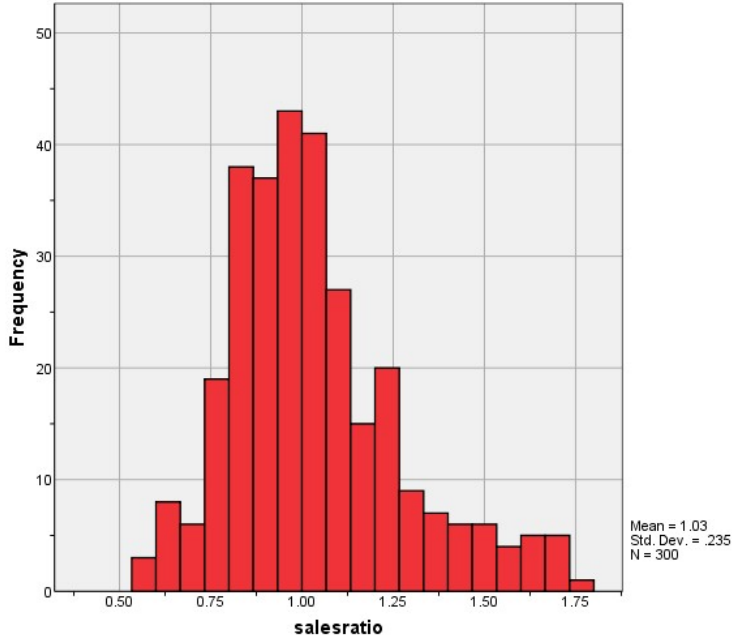
Based on the results of these comparisons, we concluded that the Summit County assessor was valuing sold and unsold commercial properties consistently.

## V. VACANT LAND SALE RESULTS

There were 320 qualified vacant land sales for the 24 month sale period ending June 30, 2020. We trimmed 20 sales using IAAO standards, resulting in a total of 300 sales for this analysis. The sales ratio analysis results were as follows:

Median	<b>0.988</b>
Price Related Differential	<b>1.011</b>
Coefficient of Dispersion	<b>18.0</b>

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



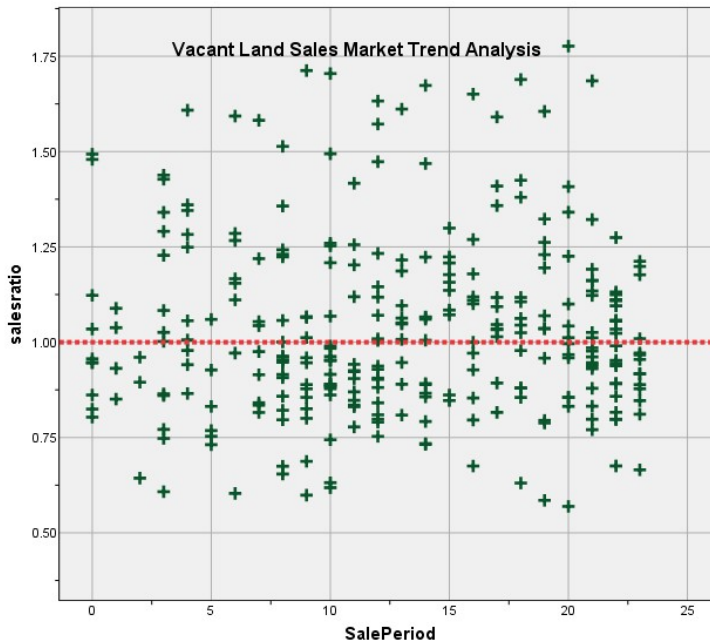
### Vacant Land Market Trend Analysis

The vacant land sales were next analyzed for residual market trending, using the 24 month sale period, with the following results:

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

Model		Unstandardized Coefficients		Standardized	t	Sig.
		B	Std. Error	Coefficients Beta		
1	(Constant)	1.031	.030		34.213	.000
	SalePeriod	.000	.002	.005	.078	.938

a. Dependent Variable: salesratio



The market trend results indicate no statistically significant trend. We concluded that the assessor has adequately considered market tending in Summit County’s vacant land valuation for 2021.

**Sold/Unsold Analysis**

We compared the 2021 median change in actual value between taxable years 2019 and 2021 for vacant land properties to determine if sold and unsold properties were valued consistently, as follows:

**Report**

DIFF			
	N	Median	Mean
UNSOLD	2086	1.1323	1.4556
SOLD	300	1.1686	1.2150

### 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	.131	Retain the null hypothesis.

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

We next stratified this analysis by subdivision with at least 5 sales, which indicated that there was no pattern of the change in value being greater for sold properties than unsold properties, as follows:

#### Report

DIFF	SUBDIVNO	sold	N	Median	Mean
1220	UNSOLD		134	1.0875	1.0860
	SOLD		23	1.1866	1.1884
130	UNSOLD		24	1.0230	1.0455
	SOLD		5	1.0511	1.0638
1488	UNSOLD		7	1.1275	1.1215
	SOLD		5	1.3033	1.2820
1613	UNSOLD		306	1.0087	.9913
	SOLD		65	1.0478	1.0393
1785	UNSOLD		21	1.1917	1.2247
	SOLD		6	1.2101	1.2485
2018	UNSOLD		9	1.2228	1.2427
	SOLD		10	1.2216	1.2976
2208	UNSOLD		18	1.1620	1.1798
	SOLD		12	1.3630	1.3222
406	UNSOLD		58	1.1015	1.0872
	SOLD		15	1.1895	1.2875
651	UNSOLD		28	1.1475	1.1579
	SOLD		11	1.3561	1.4034

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 Summit 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			
.00	.998	.993	1.003	.995	.988	1.000	95.4%	.992	.986	.998	1.006	.073	10.1%
1.00	.994	.990	.998	.991	.987	.995	95.4%	.995	.991	.999	.999	.059	7.6%

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.

0 = RES Non-Condo, 1 = Res Condo

### 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				
.971	.930	1.012	.981	.942	1.000	95.2%	.949	.881	1.016	1.024	.107	15.9%	

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				
1.033	1.006	1.059	.988	.959	1.025	95.7%	1.022	.974	1.070	1.011	.180	22.8%	

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.



**Residential Median Ratio Stratification**

**Subclass**

**Case Processing Summary**

	Count	Percent
ABSTRIMP		
1212	902	28.7%
1213	207	6.6%
1214	359	11.4%
1217	6	0.2%
1218	1	0.0%
1219	5	0.2%
1225	1	0.0%
1230	1614	51.4%
1234	24	0.8%
1237	3	0.1%
1238	17	0.5%
1713	1	0.0%
Overall	3140	100.0%
Excluded	0	
Total	3140	

**Ratio Statistics for CURRTOT / TASP**

Group	Median	Price Related Differential	Coefficient of Dispersion	Coefficient of Variation Median Centered
1212	.998	1.007	.076	10.3%
1213	.999	1.005	.073	9.5%
1214	.983	1.006	.058	7.6%
1217	.951	.992	.130	17.6%
1218	.924	1.000	.000	.
1219	.950	.986	.044	6.0%
1225	1.043	1.000	.000	.
1230	.991	.999	.059	7.6%
1234	1.038	1.038	.158	25.6%
1237	1.002	1.006	.061	9.5%
1238	1.033	1.000	.021	2.8%
1713	.812	1.000	.000	.
Overall	.992	1.003	.066	9.0%

**Age**

**Case Processing Summary**

	Count	Percent
AgeRec		
Over 100	5	0.2%
75 to 100	5	0.2%
50 to 75	107	3.4%
25 to 50	1531	48.8%
5 to 25	1107	35.3%
5 or Newer	385	12.3%
Overall	3140	100.0%
Excluded	0	
Total	3140	

### Ratio Statistics for CURRTOT / TASP

Group	Median	Price Related Differential	Coefficient of Dispersion	Coefficient of Variation Median Centered
Over 100	1.000	1.017	.139	18.0%
75 to 100	1.007	1.005	.075	11.5%
50 to 75	.956	1.011	.068	11.2%
25 to 50	.990	1.004	.065	9.1%
5 to 25	.997	1.002	.064	8.4%
5 or Newer	.997	1.009	.069	9.1%
Overall	.992	1.003	.066	9.0%

### Improved Area

#### Case Processing Summary

		Count	Percent
ImpSFRec	LE 500 sf	147	4.7%
	500 to 1,000 sf	949	30.2%
	1,000 to 1,500 sf	1023	32.6%
	1,500 to 2,000 sf	472	15.0%
	2,000 to 3,000 sf	395	12.6%
	3,000 sf or Higher	154	4.9%
Overall		3140	100.0%
Excluded		0	
Total		3140	

### Ratio Statistics for CURRTOT / TASP

Group	Median	Price Related Differential	Coefficient of Dispersion	Coefficient of Variation Median Centered
LE 500 sf	.963	1.006	.082	12.4%
500 to 1,000 sf	.985	1.004	.057	7.8%
1,000 to 1,500 sf	1.000	1.006	.062	8.6%
1,500 to 2,000 sf	.998	1.006	.068	8.6%
2,000 to 3,000 sf	.987	1.010	.075	9.8%
3,000 sf or Higher	1.021	1.009	.083	11.4%
Overall	.992	1.003	.066	9.0%

### Improvement Quality

#### Case Processing Summary

		Count	Percent
QUALITY	A	23	0.7%
	B	167	5.3%
	C	900	28.7%
	D	1989	63.3%
	E	58	1.8%
	F	2	0.1%
	X	1	0.0%
Overall		3140	100.0%
Excluded		0	
Total		3140	

### Ratio Statistics for CURRTOT / TASP

Group	Median	Price Related Differential	Coefficient of Dispersion	Coefficient of Variation Median Centered
A	1.019	1.004	.077	11.6%
B	1.007	1.010	.071	9.3%
C	.997	1.007	.067	8.8%
D	.988	1.004	.064	8.8%
E	.985	1.008	.072	10.0%
F	1.244	1.368	.373	52.7%
X	1.021	1.000	.000	.
Overall	.992	1.003	.066	9.0%

### Improvement Condition

#### Case Processing Summary

CONDITION	D	Count	Percent
	D	3124	99.5%
	E	15	0.5%
	F	1	0.0%
Overall		3140	100.0%
Excluded		0	
Total		3140	

### Ratio Statistics for CURRTOT / TASP

Group	Median	Price Related Differential	Coefficient of Dispersion	Coefficient of Variation Median Centered
D	.992	1.003	.065	8.9%
E	.961	1.029	.092	11.5%
F	1.708	1.000	.000	.
Overall	.992	1.003	.066	9.0%

### Commercial Median Ratio Stratification

#### Sale Price

#### Case Processing Summary

SPRec	Count	Percent
\$100K to \$150K	3	5.2%
\$150K to \$200K	7	12.1%
\$200K to \$300K	19	32.8%
\$300K to \$500K	12	20.7%
\$500K to \$750K	1	1.7%
\$750K to \$1,000K	2	3.4%
Over \$1,000K	14	24.1%
Overall	58	100.0%
Excluded	0	
Total	58	

### Ratio Statistics for CURRTOT / TASP

Group	Median	Price Related Differential	Coefficient of Dispersion	Coefficient of Variation Median Centered
\$100K to \$150K	1.007	1.003	.067	13.8%
\$150K to \$200K	.983	1.004	.093	13.6%
\$200K to \$300K	.970	1.007	.066	8.5%
\$300K to \$500K	.945	1.008	.139	16.6%
\$500K to \$750K	.978	1.000	.000	.
\$750K to \$1,000K	1.257	1.040	.314	44.4%
Over \$1,000K	.962	1.011	.116	16.3%
Overall	.981	1.024	.107	15.8%

### Subclass

### Case Processing Summary

	Count	Percent
ABSTRIMP	1212	1
	1713	1
	1745	1
	1910	1
	2212	6
	2215	2
	2220	1
	2230	3
	2235	1
	2245	41
Overall	58	100.0%
Excluded	0	
Total	58	

### Ratio Statistics for CURRTOT / TASP

Group	Median	Price Related Differential	Coefficient of Dispersion	Coefficient of Variation Median Centered
1212	1.652	1.000	.000	.
1713	.612	1.000	.000	.
1745	1.064	1.000	.000	.
1910	1.023	1.000	.000	.
2212	.918	1.076	.120	14.2%
2215	1.105	1.101	.146	20.7%
2220	.862	1.000	.000	.
2230	.981	1.033	.053	8.9%
2235	.906	1.000	.000	.
2245	.983	1.012	.089	12.0%
Overall	.981	1.024	.107	15.8%

## Age

### Case Processing Summary

		Count	Percent
AgeRec	Over 100	3	5.2%
	75 to 100	2	3.4%
	50 to 75	1	1.7%
	25 to 50	24	41.4%
	5 to 25	28	48.3%
Overall		58	100.0%
Excluded		0	
Total		58	

### Ratio Statistics for CURRTOT / TASP

Group	Median	Price Related Differential	Coefficient of Dispersion	Coefficient of Variation Median Centered
Over 100	.981	1.171	.287	50.0%
75 to 100	.922	.985	.065	9.2%
50 to 75	.853	1.000	.000	.
25 to 50	.995	1.017	.108	15.5%
5 to 25	.965	1.009	.087	10.7%
Overall	.981	1.024	.107	15.8%

## Improved Area

### Case Processing Summary

		Count	Percent
ImpSFRec	LE 500 sf	3	5.2%
	500 to 1,000 sf	13	22.4%
	1,000 to 1,500 sf	19	32.8%
	1,500 to 2,000 sf	5	8.6%
	2,000 to 3,000 sf	4	6.9%
	3,000 sf or Higher	14	24.1%
Overall		58	100.0%
Excluded		0	
Total		58	

### Ratio Statistics for CURRTOT / TASP

Group	Median	Price Related Differential	Coefficient of Dispersion	Coefficient of Variation Median Centered
LE 500 sf	.983	1.035	.119	18.5%
500 to 1,000 sf	.992	1.006	.057	10.3%
1,000 to 1,500 sf	.978	.957	.111	18.7%
1,500 to 2,000 sf	.862	1.005	.105	16.7%
2,000 to 3,000 sf	1.046	.991	.084	13.9%
3,000 sf or Higher	.962	1.024	.128	17.7%
Overall	.981	1.024	.107	15.8%

## Improvement Quality

### Case Processing Summary

		Count	Percent
QUALITY	B	1	1.7%
	C	13	22.4%
	D	42	72.4%
	E	2	3.4%
Overall		58	100.0%
Excluded		0	
Total		58	

### Ratio Statistics for CURRTOT / TASP

Group	Median	Price Related Differential	Coefficient of Dispersion	Coefficient of Variation Median Centered
B	1.652	1.000	.000	.
C	.981	1.039	.092	13.8%
D	.980	.971	.093	12.2%
E	.871	1.001	.230	32.5%
Overall	.981	1.024	.107	15.8%

## Improvement Condition

### Case Processing Summary

		Count	Percent
QUALITY	B	1	1.7%
	C	13	22.4%
	D	42	72.4%
	E	2	3.4%
Overall		58	100.0%
Excluded		0	
Total		58	

### Ratio Statistics for CURRTOT / TASP

Group	Median	Price Related Differential	Coefficient of Dispersion	Coefficient of Variation Median Centered
B	1.652	1.000	.000	.
C	.981	1.039	.092	13.8%
D	.980	.971	.093	12.2%
E	.871	1.001	.230	32.5%
Overall	.981	1.024	.107	15.8%

## Vacant Land Median Ratio Stratification

### Sale Price

#### Case Processing Summary

		Count	Percent
SPRec	LT \$25K	1	0.3%
	\$25K to \$50K	1	0.3%
	\$50K to \$100K	20	6.7%
	\$100K to \$150K	18	6.0%
	\$150K to \$200K	41	13.7%
	\$200K to \$300K	99	33.0%
	\$300K to \$500K	62	20.7%
	\$500K to \$750K	27	9.0%
	\$750K to \$1,000K	16	5.3%
	Over \$1,000K	15	5.0%
Overall		300	100.0%
Excluded		0	
Total		300	

#### Ratio Statistics for CURRLND / TASP

Group	Median	Price Related Differential	Coefficient of Dispersion	Coefficient of Variation Median Centered
LT \$25K	.630	1.000	.000	.
\$25K to \$50K	1.157	1.000	.000	.
\$50K to \$100K	1.046	1.015	.138	21.9%
\$100K to \$150K	.861	1.007	.177	30.1%
\$150K to \$200K	1.014	1.003	.184	25.7%
\$200K to \$300K	.956	1.002	.178	24.7%
\$300K to \$500K	1.063	.995	.166	22.0%
\$500K to \$750K	.905	1.010	.156	22.4%
\$750K to \$1,000K	.943	1.012	.193	29.7%
Over \$1,000K	1.000	.962	.171	24.6%
Overall	.988	1.011	.180	24.2%

### Subclass

#### Case Processing Summary

		Count	Percent
ABSTRLND	100.00	101	33.7%
	190.00	3	1.0%
	200.00	1	0.3%
	401.00	20	6.7%
	402.00	2	0.7%
	491.00	4	1.3%
	521.00	1	0.3%
	531.00	1	0.3%
	541.00	1	0.3%
	800.00	1	0.3%
	1111.00	22	7.3%
	1112.00	76	25.3%



	1115.00	2	0.7%
	1135.00	31	10.3%
	2115.00	34	11.3%
Overall		300	100.0%
Excluded		0	
Total		300	

### Ratio Statistics for CURRLND / TASP

Group	Median	Price Related Differential	Coefficient of Dispersion	Coefficient of Variation Median Centered
100.00	.971	1.028	.141	18.6%
190.00	1.469	1.022	.061	9.7%
200.00	1.000	1.000	.000	.
401.00	.983	.876	.161	21.4%
402.00	1.006	1.002	.006	0.8%
491.00	1.110	1.010	.117	19.7%
521.00	.851	1.000	.000	.
531.00	.889	1.000	.000	.
541.00	.603	1.000	.000	.
800.00	.630	1.000	.000	.
1111.00	1.050	.998	.162	24.0%
1112.00	1.128	1.070	.206	25.4%
1115.00	.913	1.208	.376	53.2%
1135.00	.953	1.028	.130	17.8%
2115.00	.861	.984	.090	15.2%
Overall	.988	1.011	.180	24.2%