2020
SUMMIT COUNTY
PROPERTY ASSESSMENT
STUDY

WILDROSE
APPRAISAL, INCORPORATED
Audit Division

WILDROSE
APPRAISAL, INCORPORATED
Audit Division

September 15, 2020

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

RE: Final Report for the 2020 Colorado Property Assessment Study

Dear Ms. Mullis:

Wildrose Appraisal Inc.-Audit Division is pleased to submit the Final Reports for the 2020 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.

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

TABLE OF CONTENTS

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

INTRODUCTION

Colorado

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

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

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

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

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

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

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

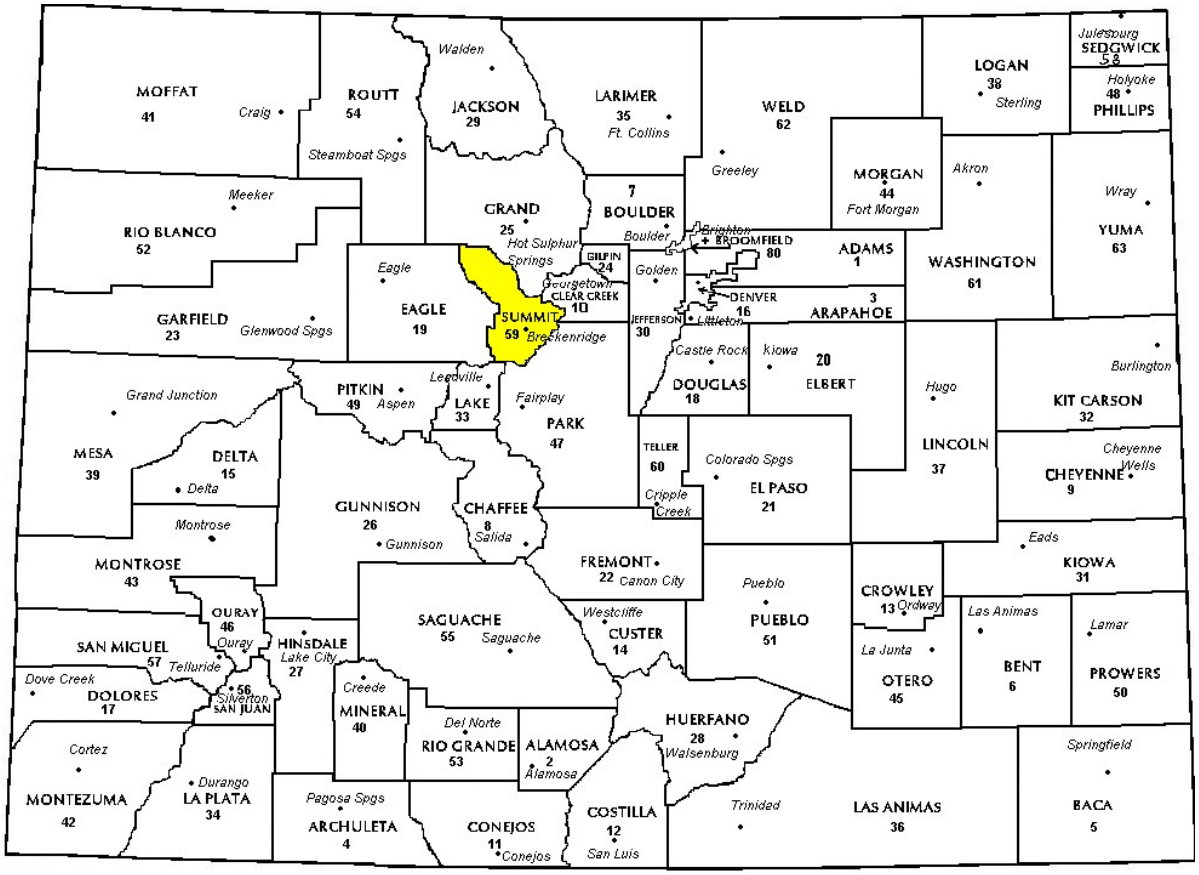
Statistical analysis is performed on vacant land, residential properties, commercial/industrial properties, agricultural land, and personal property. The statistical study results are compared with State Board of Equalization compliance requirements and the manuals published by the State Property Tax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

Wildrose Audit has completed the Property Assessment Study for 2020 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 had an estimated population of approximately 30,374 people with 49.95 people per square mile, according to the U.S. Census Bureau's 2016 estimated census data. This represents a 8.5 percent change from April 1, 2010 to July 1, 2016.

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 "Breckinridge" after the United States' Vice President of the time, John C. Breckinridge 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 Breckinridge. 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 Breckinridge 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*

RATIO ANALYSIS

Methodology

All significant classes of properties were analyzed. Sales were collected for each property class over the appropriate sale period, which was typically defined as the 18-month period between January 1, 2017 and June 30, 2018. Counties with less than 30 sales typically extended the sale period back up to 5 years prior to June 30, 2018 in 6-month increments. If there were still fewer than 30 sales, supplemental appraisals were performed and treated as proxy sales. Residential sales for all counties using this method totaled at least 30 per county. For commercial sales, the total number analyzed was allowed, in some cases, to fall below 30. There were no sale quantity issues for counties requiring vacant land analysis or condominium analysis. Although it was required that we examine the median and coefficient of dispersion for all counties, we also calculated the weighted mean and price-related differential for each class of property. Counties were not passed or failed by these latter measures, but were counseled if there were anomalies noted during our analysis. Qualified sales were based on the qualification code used by each county, which were typically coded as either "Q" or "C." The ratio analysis included all sales. The data was trimmed for counties with obvious outliers using IAAO standards for data analysis. In every case, we examined the loss in data from trimming to ensure that only true outliers were excluded. Any county with a significant portion of sales excluded by this trimming method was examined further. No county was allowed to pass the audit if more than 5% of the sales were "lost" because of trimming. For the largest 11 counties, the residential ratio statistics were broken down by economic area as well.

Conclusions

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

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

The results for Summit County are:

Summit County Ratio Grid					
Property Class	Number of Qualified Sales	Unweighted Median Ratio	Price Related Differential	Coefficient of Dispersion	Time Trend Analysis
Commercial/Industrial	64	0.994	1.180	11	Compliant
Condominium	2,116	0.970	1.002	5.4	Compliant
Single Family	1,836	1.000	1.010	5.2	Compliant
Vacant Land	702	1.000	1.098	20.6	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.

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

Conclusions

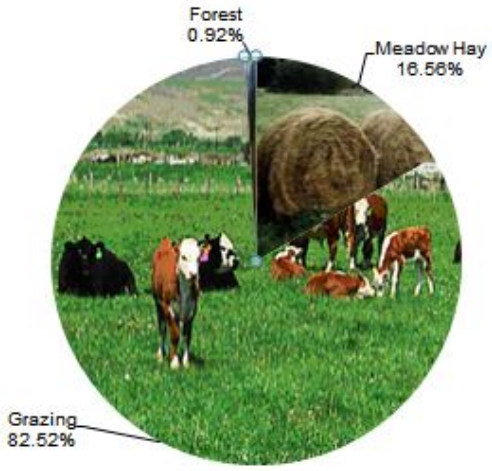
After applying the above described methodologies, it is concluded that Summit County is reasonably treating its sold and unsold properties in the same manner.

Recommendations

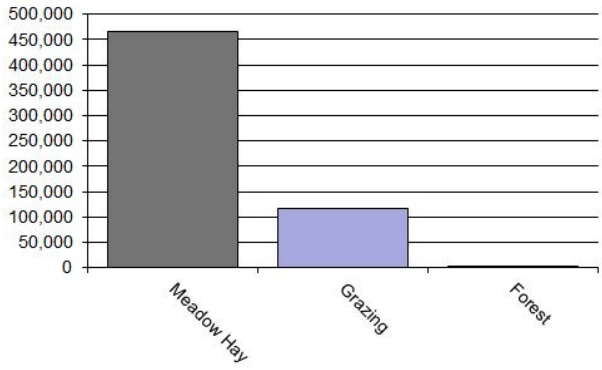
None

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:

Summit County Agricultural Land Ratio Grid						
Abstract Code	Land Class	Number Of Acres	County Value Per Acre	County Assessed Total Value	WRA Total Value	Ratio
4137	Meadow Hay	4,666	99.63	464,859	468,185	0.99
4147	Grazing	23,256	5.06	117,709	117,709	1.00
4177	Forest	259	3.22	835	835	1.00
Total/Avg		**28,181**	**20.70**	**583,403**	**586,730**	**0.99**

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

Summit County has 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

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 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 2020 for Summit County. This study was conducted by checking selected sales from the master sales list for the current valuation period. Specifically WRA selected 30 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.

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.

Conclusions

Summit 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

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

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

VACANT LAND

Subdivision Discounting

Subdivisions were reviewed in 2020 in Summit 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.

In instances where the number of sales within an approved plat was less than the absorption rate per year calculated for the plat, the absorption period was left unchanged.

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
- Town/County rental permits

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 2020 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 $7,700 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*

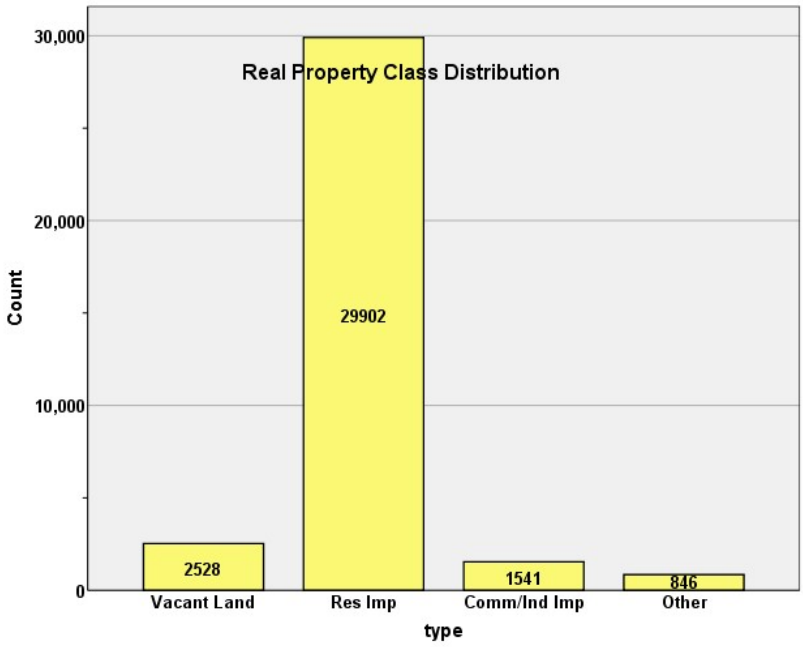
J. Andrew Rodriguez, *Field Analyst*

APPENDICES

STATISTICAL COMPLIANCE RESULTS
FOR SUMMIT COUNTY
2020

I. OVERVIEW

Summit County is located in central Colorado. The county has a total of 34,817 real property parcels, according to data submitted by the county assessor's office in 2020. 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 46.1% of all vacant land parcels.

For residential improved properties, single family properties accounted for 30.7% of all residential properties. Residential condominiums, coded as 1230, accounted for 44.0% of all residential properties. Based on the guidelines of the 2020 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.

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	*V*	*V*	*V*
Subdivision	*N*	*N*	*N*

Codes
V*=Valid Geographic Level – used for modeling*
N *= Not used as Geographic Level for modeling*

II. DATA FILES

The following sales analyses were based on the requirements of the 2020 Colorado Property Assessment Study. Information was provided by the Summit Assessor's Office in May 2020. The data included all 5 property record files as specified by the Auditor.

III. RESIDENTIAL SALES RESULTS

There were 3,911 qualified residential sales for the 24 month sale period ending June 30, 2018. We stratified our sales ratio analysis by residential non-condominiums and condominiums, as follows:

Residential Non-Condo = 1,836

Median	**1.000**
Price Related Differential	**1.010**
Coefficient of Dispersion	**5.2**

Residential Condo = 2,116

Median	**0.970**
Price Related Differential	**1.002**
Coefficient of Dispersion	**5.4**

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	28	1.5%
		2.00	152	8.3%
		3.00	17	0.9%
		4.00	656	35.7%
		5.00	848	46.2%
		6.00	135	7.4%
	Overall		1836	100.0%
	Excluded		138	
	Total		1974	
1.00	ECONAREA	2.00	213	10.1%
		3.00	186	8.8%
		4.00	605	28.6%

		5.00	592	28.0%
		6.00	520	24.6%
	Overall		2116	100.0%
	Excluded		0	
	Total		2116	

Ratio Statistics for CURRTOT / TASP

ResCondo	Group	Median	Price Related Differential	Coefficient of Dispersion
.00	1.00	1.000	1.017	.046
	2.00	1.000	1.007	.036
	3.00	1.000	1.000	.039
	4.00	1.000	1.006	.044
	5.00	1.000	1.016	.063
	6.00	1.000	1.004	.037
	Overall	1.000	1.010	.052
1.00	2.00	1.000	1.003	.040
	3.00	.999	1.006	.036
	4.00	.969	1.006	.048
	5.00	.979	1.010	.051
	6.00	.951	1.020	.064
	Overall	.970	1.010	.054

Neighborhoods with at least 15ales

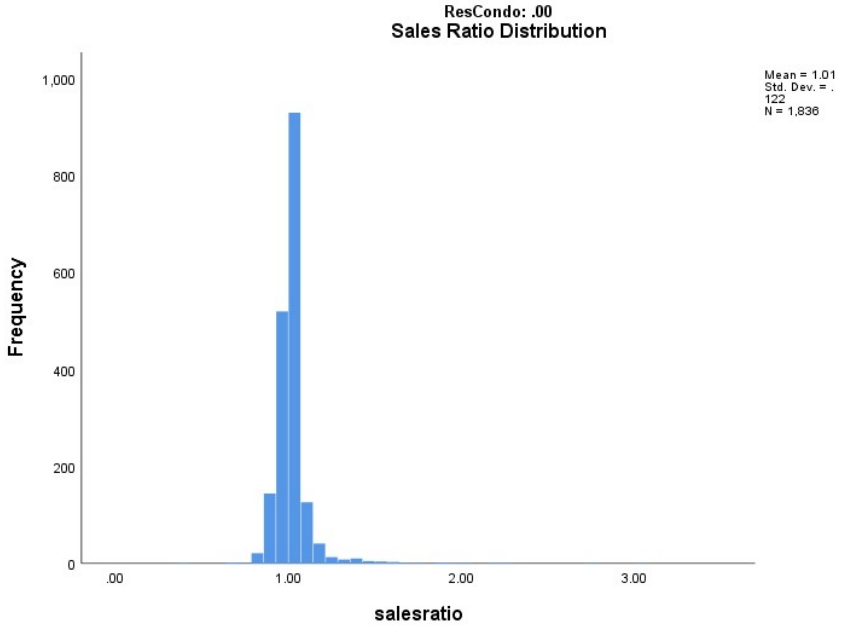
Ratio Statistics for CURRTOT / TASP

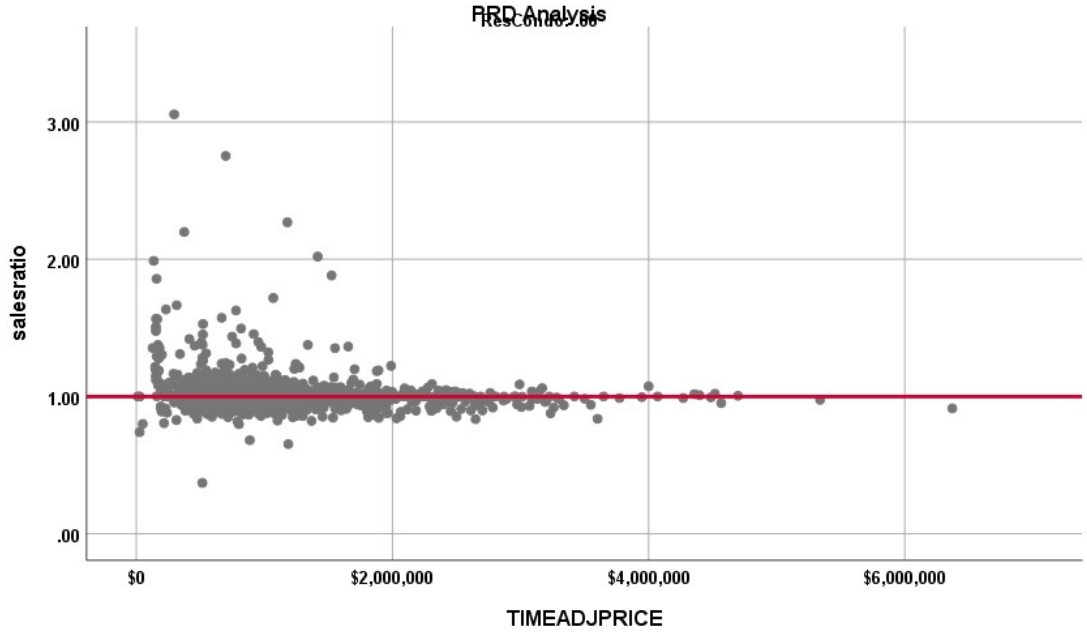
Group	Median	Price Related Differential	Coefficient of Dispersion
1300	.948	1.004	.039
1600	.978	1.005	.051
1900	.962	.997	.034
2300	.974	1.002	.045
3600	1.000	1.002	.039
3630	.998	1.004	.042
4400	.941	1.014	.069
5100	.943	1.000	.055
5300	.984	1.003	.038
5600	.981	1.011	.055
5700	.972	1.008	.045
6000	.956	1.005	.054
6600	1.000	1.006	.038
6610	.998	1.002	.031
6630	.989	1.021	.042
7300	.946	1.004	.047
7500	.936	1.024	.075
7600	.946	1.012	.061
7800	.933	1.023	.065
20700	1.000	1.003	.048
20750	1.000	1.015	.081
20800	1.000	1.008	.055
21000	1.000	1.006	.033
21010	1.000	1.047	.146
21020	1.005	1.008	.045
21050	1.000	1.004	.046
21100	1.007	1.020	.067
21150	1.000	1.003	.044

21800	1.000	1.001	.044
22100	1.000	1.004	.038
22300	1.038	1.071	.147
22500	1.000	1.014	.061
23000	1.000	1.004	.032
23100	1.000	1.016	.049
24000	1.000	1.004	.035
24300	1.000	1.051	.145
24600	1.000	1.005	.039
24800	1.000	1.015	.051
25000	1.000	1.002	.034
26100	1.000	1.003	.047
26200	1.000	1.006	.045
26300	1.000	1.002	.033
28000	1.000	1.000	.039
Overall	.996	1.002	.054

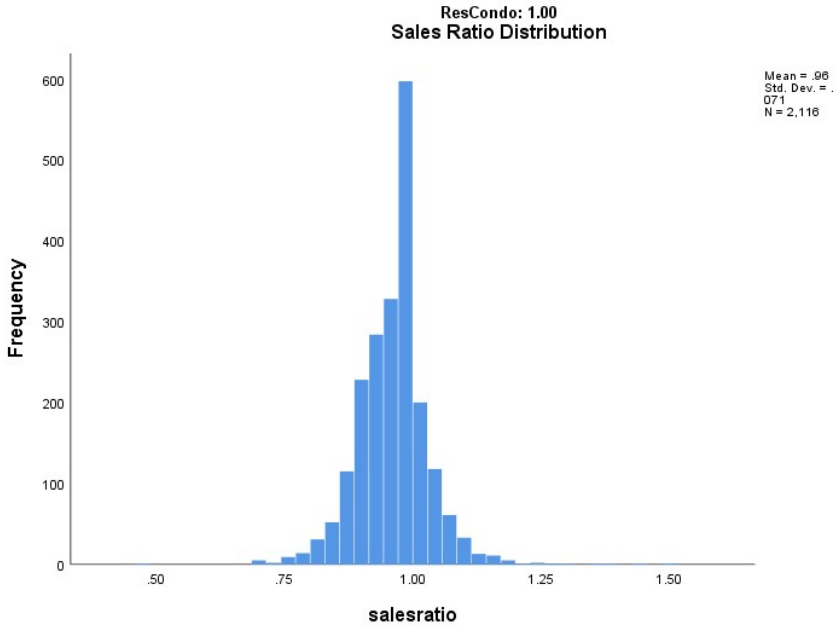
The above ratio statistics were in compliance with the standards set forth by the Colorado State Board of Equalization (SBOE) for the overall residential sales. The following graphs describe further the sales ratio distribution for these properties:

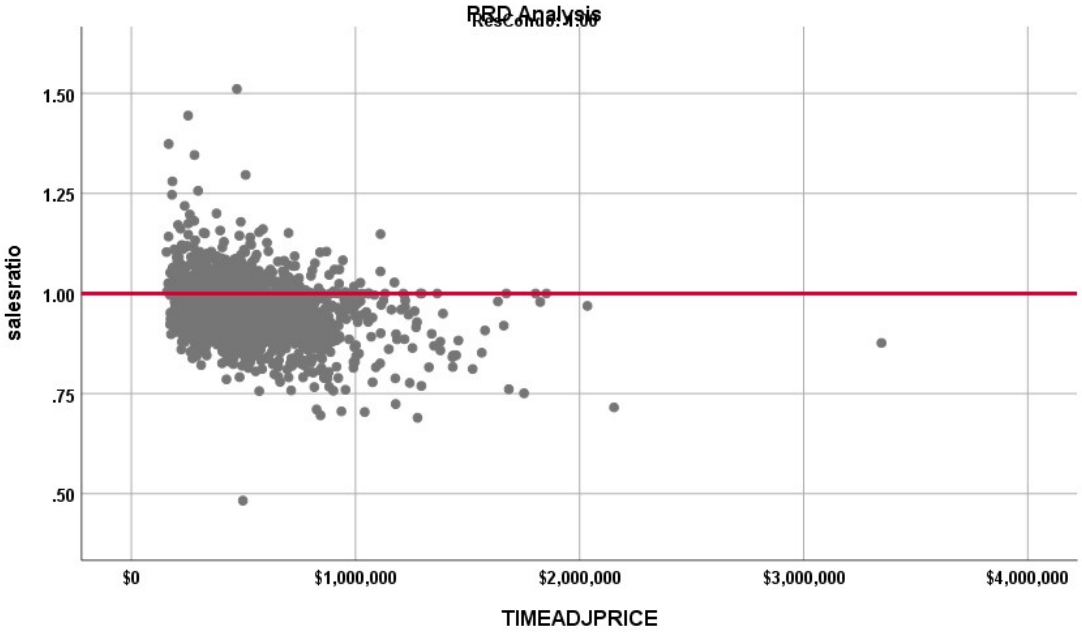
RESIDENTIAL NON-CONDOMINIUMS





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[a]

ResCondo	Model		Unstandardized Coefficients B	Unstandardized Coefficients Std. Error	Standardized Coefficients Beta	t	Sig.
.00	1	(Constant)	1.005	.006		179.685	.000
		SalePeriod	.001	.000	.048	2.075	.038
1.00	1	(Constant)	.970	.003		312.543	.000
		SalePeriod	.000	.000	-.047	-2.174	.030

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.

Sold/Unsold Analysis

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

Report
DIFF

sold	N	Median	Mean
UNSOLD	25418	1.2449	1.4645
SOLD	4090	1.2853	1.4044

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

Report
DIFF

ResCondo	sold	N	Median	Mean
NON-CONDO	UNSOLD	14435	1.2041	1.5840
	SOLD	1978	1.2243	1.4645
CONDO	UNSOLD	10983	1.2970	1.3076
	SOLD	2112	1.3407	1.3481

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

Economic Area

Report
DIFF

ResCondo	ECONAREA	sold	N	Median	Mean
NON-CONDO	1.00	UNSOLD	358	1.1490	1.1997
		SOLD	28	1.1664	1.1630
	2.00	UNSOLD	1776	1.2256	1.2590
		SOLD	166	1.2719	1.2985
	3.00	UNSOLD	284	1.1353	1.2093
		SOLD	32	1.0494	1.0662
	4.00	UNSOLD	4758	1.2088	1.5185
		SOLD	658	1.2202	1.2356
	5.00	UNSOLD	6576	1.1953	1.1664
		SOLD	952	1.2313	1.1058
	6.00	UNSOLD	683	1.1859	1.4858
		SOLD	142	1.1229	1.2503
CONDO	2.00	UNSOLD	1297	1.2130	1.2233
		SOLD	211	1.2353	1.2543
	3.00	UNSOLD	970	1.2732	1.2767
		SOLD	186	1.2990	1.3146
	4.00	UNSOLD	2958	1.3284	1.3352
		SOLD	605	1.3601	1.3587
	5.00	UNSOLD	3592	1.2771	1.2720
		SOLD	590	1.3284	1.3336
	6.00	UNSOLD	2163	1.3696	1.3933
		SOLD	520	1.4090	1.4021

Neighborhoods with at least 15 sales

Report
DIFF

ResCondo	NBHD	sold	N	Median	Mean
.00	20700	UNSOLD	388	1.2677	1.2824
		SOLD	68	1.2974	1.3196
	20750	UNSOLD	617	1.2438	1.2616
		SOLD	90	1.2729	1.3089
	20800	UNSOLD	706	1.2544	1.2623

		SOLD	127	1.2542	1.2919
	21000	UNSOLD	682	1.1728	1.1850
		SOLD	110	1.1516	1.1778
	21010	UNSOLD	277	1.1840	1.1792
		SOLD	33	1.2317	1.2399
	21020	UNSOLD	291	1.0688	1.1277
		SOLD	111	1.1169	1.1202
	21050	UNSOLD	336	1.2184	1.2222
		SOLD	54	1.2766	1.2951
	21100	UNSOLD	229	1.2318	1.2418
		SOLD	23	1.2798	1.3082
	21150	UNSOLD	577	1.1365	1.1404
		SOLD	122	1.1586	1.1662
	21800	UNSOLD	458	1.2527	1.2487
		SOLD	58	1.3367	1.3383
	22100	UNSOLD	400	1.1976	1.2088
		SOLD	53	1.2665	1.3087
	22300	UNSOLD	208	1.1748	1.1754
		SOLD	67	1.3002	1.3183
	22500	UNSOLD	148	1.2106	1.1912
		SOLD	22	1.2811	1.3424
	23000	UNSOLD	1016	1.2330	1.2380
		SOLD	114	1.2603	1.2895
	23100	UNSOLD	583	1.2130	1.2218
		SOLD	50	1.2864	1.3241
	24000	UNSOLD	1431	1.2022	1.2147
		SOLD	313	1.1943	1.2023
	24300	UNSOLD	499	1.1609	1.1810
		SOLD	36	1.2229	1.2865
	24600	UNSOLD	903	1.2262	1.2234
		SOLD	156	1.2561	1.2507
	24800	UNSOLD	210	1.1270	1.1483
		SOLD	25	1.1589	1.1401
	25000	UNSOLD	394	1.2732	1.2745
		SOLD	37	1.3199	1.3091
	26100	UNSOLD	866	1.1994	1.2149
		SOLD	97	1.2327	1.2410
	26200	UNSOLD	205	1.1732	1.1656
		SOLD	27	1.1699	1.1605
	26300	UNSOLD	268	1.1534	1.1556
		SOLD	101	1.1185	1.1371
	28000	UNSOLD	116	1.0627	1.0690
		SOLD	32	1.0494	1.0662
1.00	1300	UNSOLD	247	1.2923	1.3678
		SOLD	72	1.2013	1.2250
	1600	UNSOLD	569	1.4082	1.4130
		SOLD	141	1.4185	1.4428
	1900	UNSOLD	242	1.2957	1.2800
		SOLD	41	1.3141	1.3390
	2300	UNSOLD	1163	1.3094	1.3261
		SOLD	271	1.3516	1.3522
	3600	UNSOLD	746	1.1979	1.2199
		SOLD	115	1.2404	1.2664
	3630	UNSOLD	520	1.2192	1.2253
		SOLD	92	1.2296	1.2357
	4400	UNSOLD	730	1.2775	1.2876
		SOLD	80	1.3384	1.3630

5100	UNSOLD	223	1.2354	1.2428
	SOLD	33	1.2391	1.2549
5300	UNSOLD	447	1.3016	1.2977
	SOLD	70	1.3352	1.3566
5600	UNSOLD	2172	1.2550	1.2475
	SOLD	363	1.3185	1.3086
5700	UNSOLD	540	1.3115	1.3141
	SOLD	80	1.3756	1.4018
6000	UNSOLD	144	1.3636	1.3842
	SOLD	30	1.3952	1.4379
6600	UNSOLD	279	1.2706	1.2667
	SOLD	62	1.2987	1.3012
6610	UNSOLD	582	1.2704	1.2821
	SOLD	92	1.2990	1.3244
6630	UNSOLD	108	1.2904	1.2662
	SOLD	32	1.2919	1.3124
7300	UNSOLD	249	1.3820	1.3479
	SOLD	61	1.3843	1.3987
7500	UNSOLD	562	1.3482	1.3623
	SOLD	93	1.4017	1.4194
7600	UNSOLD	589	1.3797	1.3929
	SOLD	145	1.4136	1.4200
7800	UNSOLD	755	1.3724	1.3395
	SOLD	221	1.4261	1.3840

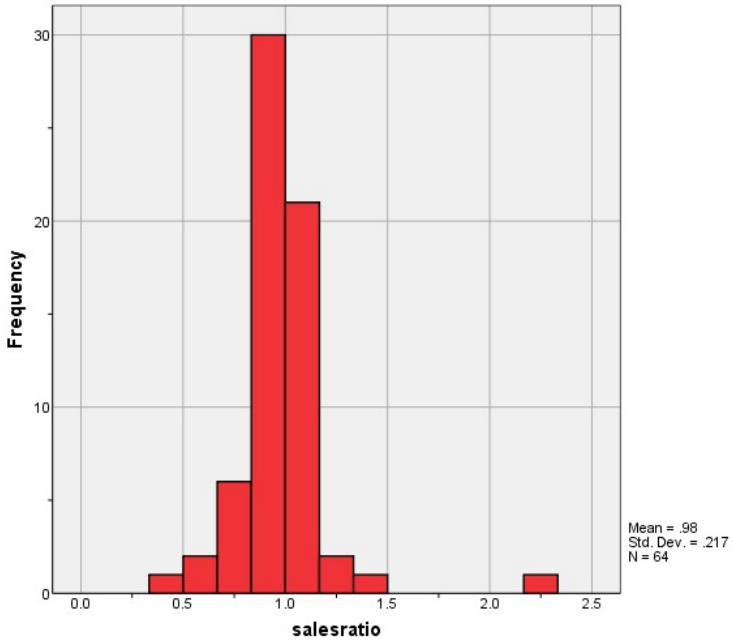
The above results indicate that sold and unsold residential properties were valued in a consistent manner.

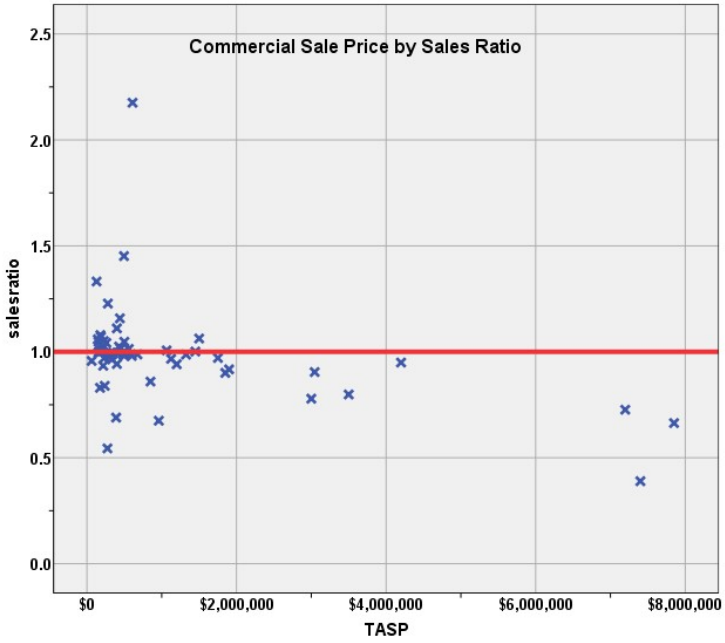
IV. COMMERCIAL/INDUSTRIAL SALE RESULTS

There were 64 qualified commercial and industrial sales for the 24 month sale period ending June 30, 2018. The sales ratio analysis results were as follows:

Median	**0.994**
Price Related Differential	**1.180**
Coefficient of Dispersion	**11.0**

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:





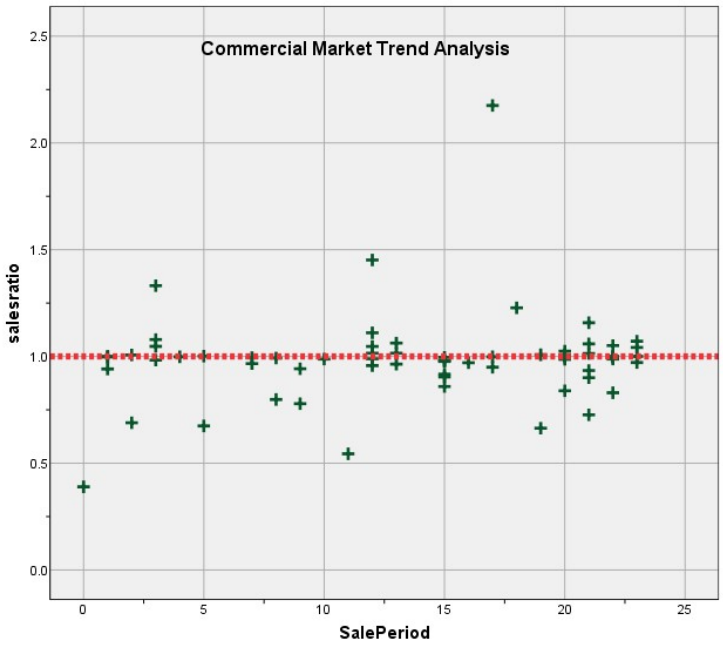
Commercial Market Trend Analysis

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[a]

Model		Unstandardized Coefficients B	Unstandardized Coefficients Std. Error	Standardized Coefficients Beta	t	Sig.
1	(Constant)	.928	.059		15.821	.000
	SalePeriod	.004	.004	.136	1.081	.284

a. Dependent Variable: salesratio



The market trend results indicated no statistically significant residual market trend. 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 2020 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

sold	N	Median	Mean
UNSOLD	1462	$201	$241
SOLD	64	$215	$280

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	.016	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 taxable years 2018 and 2020 both overall and by subclass:

Report

DIFF

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

Report

DIFF

ABSTRIMP	sold	N	Median	Mean
2212	UNSOLD	108	1.1302	1.2126
	SOLD	5	1.3236	1.3850
2220	UNSOLD	36	1.1202	1.1437
	SOLD	2	1.0789	1.0789
	Total	38	1.1202	1.1402
2230	UNSOLD	104	1.1717	1.3149
	SOLD	8	1.3514	1.3230
2235	UNSOLD	22	1.2002	1.2605
	SOLD	2	1.2608	1.2608
2245	UNSOLD	996	1.0584	1.1042
	SOLD	44	1.1448	1.1502

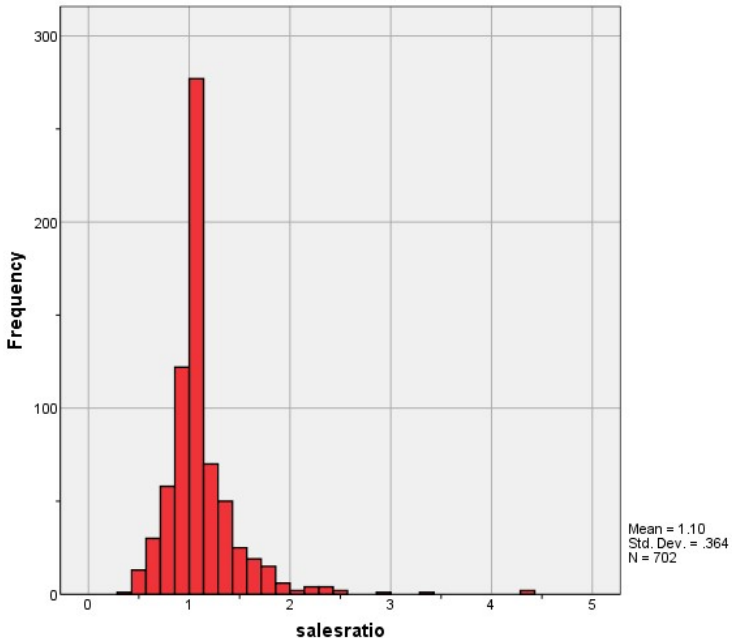
Based on the results of these comparisons, we concluded that the Summit County assessor was valuing sold and unsold commercial properties consistently.

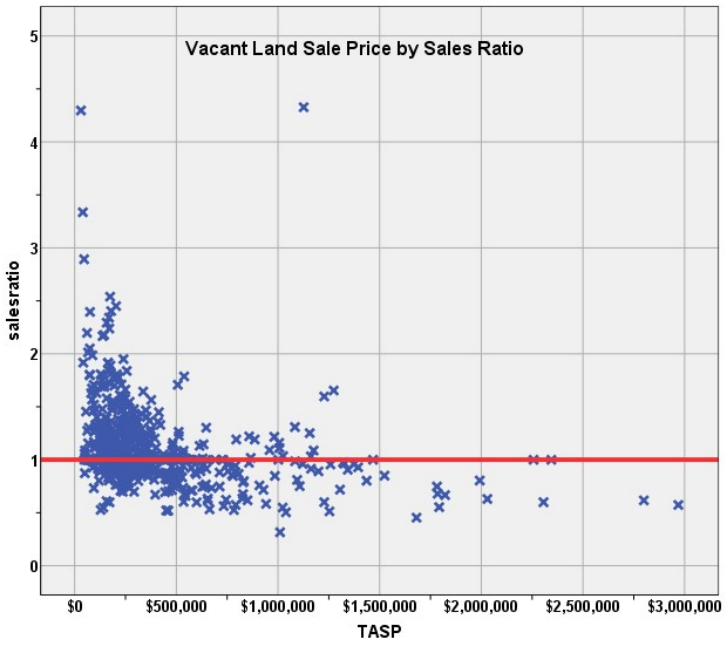
V. VACANT LAND SALE RESULTS

There were 710 qualified vacant land sales for this analysis. We trimmed 8 sales using IAAO standards, resulting in a total of 702 sales for this analysis. The sales ratio analysis results were as follows:

Median	**1.000**
Price Related Differential	**1.098**
Coefficient of Dispersion	**20.6**

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:





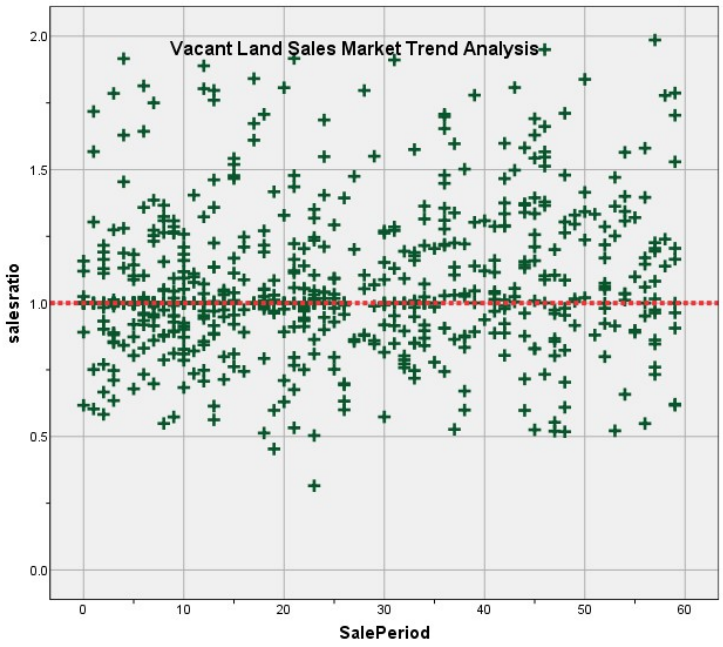
Vacant Land Market Trend Analysis

The vacant land sales were next analyzed for residual market trending, examining the sale ratios across the 36 to 60 month sale period with the following results:

Coefficients[a]

Model		Unstandardized Coefficients B	Unstandardized Coefficients Std. Error	Standardized Coefficients Beta	t	Sig.
1	(Constant)	1.011	.017		58.722	.000
	SalePeriod	.002	.001	.140	3.704	.000

a. Dependent Variable: salesratio



The market trend results indicated a statistically significant trend; the magnitude of the trend was not significant. We concluded that the assessor has adequately considered market tending in Summit County's vacant land valuation for 2020.

Sold/Unsold Analysis

We compared the 2020 median change in actual value between taxable years 2018 and 2020 for vacant land properties to determine if sold and unsold properties were valued consistently, as follows:

Report

DIFF

sold	N	Median	Mean
UNSOLD	2077	1.0919	1.5813
SOLD	702	1.1000	1.1712

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	.065	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
1216	UNSOLD	9	1.0458	1.0633
	SOLD	12	1.0458	1.2507
1220	UNSOLD	141	.8986	.9028
	SOLD	29	.9488	.9769
1299	UNSOLD	10	1.4344	1.7931
	SOLD	13	1.0165	1.1911
130	UNSOLD	23	1.1949	1.1853
	SOLD	10	1.0664	1.1448
1611	UNSOLD	13	1.1029	1.1265
	SOLD	10	1.0229	1.0297
1613	UNSOLD	332	1.2451	1.2701
	SOLD	39	1.1759	1.1311
1721	UNSOLD	19	1.0784	1.1327
	SOLD	10	1.1526	1.0831
1785	UNSOLD	21	1.2434	1.2394
	SOLD	15	1.1530	1.2279
2018	UNSOLD	13	1.2694	1.2777
	SOLD	15	1.0019	1.0495
2070	UNSOLD	11	1.1850	1.2597
	SOLD	19	1.2030	1.2153
406	UNSOLD	64	.9249	.8779
	SOLD	42	1.1500	1.2304
651	UNSOLD	24	1.3159	1.3097
	SOLD	30	1.1029	1.1937
9000	UNSOLD	206	1.0000	1.3006
	SOLD	13	1.0416	1.2243

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
		Lower Bound	Upper Bound		Lower Bound	Upper Bound	Actual Coverage		Lower Bound	Upper Bound			Mean Centered
.00	1.015	1.009	1.020	1.000	1.000	1.000	95.3%	1.004	.999	1.009	1.010	.052	12.0%
1.00	.965	.962	.968	.970	.967	.975	95.2%	.955	.951	.958	1.010	.054	7.3%

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
	Lower Bound	Upper Bound		Lower Bound	Upper Bound	Actual Coverage		Lower Bound	Upper Bound			Mean Centered
.984	.930	1.038	.994	.977	1.000	96.7%	.834	.716	.951	1.180	.110	22.1%

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
	Lower Bound	Upper Bound		Lower Bound	Upper Bound	Actual Coverage		Lower Bound	Upper Bound			Mean Centered
1.099	1.072	1.126	1.000	1.000	1.000	95.5%	1.001	.960	1.042	1.098	.206	33.2%

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.

Residential Median Ratio Stratification

Sale Price

Case Processing Summary

		Count	Percent
SPRec	LT $25K	2	0.1%
	$25K to $50K	2	0.1%
	$100K to $150K	4	0.1%
	$150K to $200K	86	2.2%
	$200K to $300K	301	7.6%
	$300K to $500K	1114	28.2%
	$500K to $750K	1017	25.7%
	$750K to $1,000K	702	17.8%
	Over $1,000K	724	18.3%
Overall		3952	100.0%
Excluded		138	
Total		4090	

Ratio Statistics for CURRTOT / TASP

Group	Median	Price Related Differential	Coefficient of Dispersion	Coefficient of Variation Median Centered
LT $25K	.870	1.068	.149	21.1%
$25K to $50K	.900	1.033	.111	15.7%
$100K to $150K	1.284	1.006	.181	32.2%
$150K to $200K	1.018	1.007	.102	17.8%
$200K to $300K	.989	1.001	.068	15.0%
$300K to $500K	.987	1.000	.049	7.9%
$500K to $750K	.994	1.000	.054	9.9%
$750K to $1,000K	1.000	1.000	.051	8.4%
Over $1,000K	1.000	1.002	.051	10.5%
Overall	.996	1.002	.054	10.2%

Subclass

Case Processing Summary

		Count	Percent
ABSTRIMP	0	43	1.1%
	1212	1114	28.2%
	1213	202	5.1%
	1214	457	11.6%
	1217	1	0.0%
	1218	3	0.1%
	1219	5	0.1%
	1229	4	0.1%
	1230	2112	53.4%
	1234	2	0.1%
	1246	1	0.0%
	1257	1	0.0%
	1280	1	0.0%
	1713	1	0.0%

	1738	1	0.0%
	1753	1	0.0%
	3016	1	0.0%
	4278	1	0.0%
	4278	1	0.0%
Overall		3952	100.0%
Excluded		138	
Total		4090	

Ratio Statistics for CURRTOT / TASP

Group	Median	Price Related Differential	Coefficient of Dispersion	Coefficient of Variation Median Centered
0	1.100	1.058	.177	26.0%
1212	1.000	1.011	.054	13.6%
1213	1.000	1.005	.039	6.4%
1214	1.000	1.004	.035	6.0%
1217	1.007	1.000	.000	.
1218	.985	1.000	.019	3.1%
1219	.999	1.002	.043	6.2%
1229	.900	1.037	.128	15.1%
1230	.970	1.010	.053	7.2%
1234	.882	1.003	.021	2.9%
1246	1.005	1.000	.000	.
1257	1.004	1.000	.000	.
1280	.482	1.000	.000	.
1713	1.050	1.000	.000	.
1738	1.083	1.000	.000	.
1753	.912	1.000	.000	.
3016	.837	1.000	.000	.
4278	.681	1.000	.000	.
4278	.653	1.000	.000	.
Overall	.996	1.002	.054	10.2%

Age

Case Processing Summary

		Count	Percent
AgeRec	.00	43	1.1%
	Over 100	8	0.2%
	75 to 100	2	0.1%
	50 to 75	57	1.4%
	25 to 50	1817	46.0%
	5 to 25	1641	41.5%
	5 or Newer	384	9.7%
Overall		3952	100.0%
Excluded		138	
Total		4090	

Ratio Statistics for CURRTOT / TASP

Group	Median	Price Related Differential	Coefficient of Dispersion	Coefficient of Variation Median Centered
.00	1.100	1.058	.177	26.0%
Over 100	1.000	1.063	.117	20.7%
75 to 100	1.041	1.004	.115	16.2%
50 to 75	1.000	1.030	.137	35.6%
25 to 50	.992	.998	.053	9.1%
5 to 25	.996	1.000	.052	8.7%
5 or Newer	1.000	1.000	.039	6.1%
Overall	.996	1.002	.054	10.2%

Improved Area

Case Processing Summary

		Count	Percent
ImpSFRec	.00	43	1.1%
	LE 500 sf	227	5.7%
	500 to 1,000 sf	1259	31.9%
	1,000 to 1,500 sf	1227	31.0%
	1,500 to 2,000 sf	534	13.5%
	2,000 to 3,000 sf	461	11.7%
	3,000 sf or Higher	201	5.1%
Overall		3952	100.0%
Excluded		138	
Total		4090	

Ratio Statistics for CURRTOT / TASP

Group	Median	Price Related Differential	Coefficient of Dispersion	Coefficient of Variation Median Centered
.00	1.100	1.058	.177	26.0%
LE 500 sf	.991	1.003	.049	7.0%
500 to 1,000 sf	.981	1.004	.051	9.1%
1,000 to 1,500 sf	.991	1.005	.052	7.8%
1,500 to 2,000 sf	1.000	1.006	.051	8.7%
2,000 to 3,000 sf	1.000	1.008	.049	11.6%
3,000 sf or Higher	1.000	1.019	.074	18.5%
Overall	.996	1.002	.054	10.2%

Improvement Quality

Case Processing Summary

		Count	Percent
QUALITY		43	1.1%
	A	18	0.5%
	B	185	4.7%
	C	1090	27.6%
	D	2540	64.3%
	E	76	1.9%
Overall		3952	100.0%
Excluded		138	
Total		4090	

Ratio Statistics for CURRTOT / TASP

Group	Median	Price Related Differential	Coefficient of Dispersion	Coefficient of Variation Median Centered
	1.100	1.058	.177	26.0%
A	1.000	1.002	.022	3.7%
B	1.000	1.002	.060	12.6%
C	.991	.997	.053	10.3%
D	.996	1.000	.052	9.1%
E	1.000	1.003	.058	10.5%
Overall	.996	1.002	.054	10.2%

Improvement Condition

Case Processing Summary

		Count	Percent
CONDITION		43	1.1%
	D	3899	98.7%
	E	10	0.3%
Overall		3952	100.0%
Excluded		138	
Total		4090	

Ratio Statistics for CURRTOT / TASP

Group	Median	Price Related Differential	Coefficient of Dispersion	Coefficient of Variation Median Centered
	1.100	1.058	.177	26.0%
D	.996	1.000	.052	9.7%
E	.998	1.006	.046	7.0%
Overall	.996	1.002	.054	10.2%

Commercial Median Ratio Stratification

Sale Price

Case Processing Summary

		Count	Percent
SPRec	$50K to $100K	1	1.6%
	$100K to $150K	2	3.1%
	$150K to $200K	12	18.8%
	$200K to $300K	9	14.1%
	$300K to $500K	18	28.1%
	$500K to $750K	4	6.3%
	$750K to $1,000K	2	3.1%
	Over $1,000K	16	25.0%
Overall		64	100.0%
Excluded		0	
Total		64	

Ratio Statistics for CURRTOT / TASP

Group	Median	Price Related Differential	Coefficient of Dispersion	Coefficient of Variation Median Centered
$50K to $100K	.957	1.000	.000	.
$100K to $150K	1.195	1.006	.114	16.1%
$150K to $200K	1.004	1.000	.033	6.2%
$200K to $300K	.977	1.000	.117	19.2%
$300K to $500K	.995	.994	.071	14.4%
$500K to $750K	1.001	1.001	.305	67.8%
$750K to $1,000K	.767	1.007	.120	17.0%
Over $1,000K	.929	1.135	.122	19.3%
Overall	.994	1.180	.110	21.9%

Subclass

Case Processing Summary

		Count	Percent
ABSTRIMP	1745	2	3.1%
	1750	1	1.6%
	2212	5	7.8%
	2220	2	3.1%
	2230	8	12.5%
	2235	2	3.1%
	2245	44	68.8%
Overall		64	100.0%
Excluded		0	
Total		64	

Ratio Statistics for CURRTOT / TASP

Group	Median	Price Related Differential	Coefficient of Dispersion	Coefficient of Variation Median Centered
1745	.961	.972	.106	15.0%
1750	2.175	1.000	.000	.
2212	.967	1.216	.197	29.7%
2220	.929	1.003	.013	1.8%
2230	.849	1.103	.176	24.8%
2235	1.080	1.040	.073	10.3%
2245	.997	1.005	.060	11.6%
Overall	.994	1.180	.110	21.9%

Age

Case Processing Summary

		Count	Percent
AgeRec	Over 100	1	1.6%
	50 to 75	2	3.1%
	25 to 50	26	40.6%
	5 to 25	32	50.0%
	5 or Newer	3	4.7%
Overall		64	100.0%
Excluded		0	
Total		64	

Ratio Statistics for CURRTOT / TASP

Group	Median	Price Related Differential	Coefficient of Dispersion	Coefficient of Variation Median Centered
Over 100	1.007	1.000	.000	.
50 to 75	1.517	1.077	.434	61.3%
25 to 50	.988	1.061	.106	17.0%
5 to 25	.996	1.317	.081	15.9%
5 or Newer	.900	1.102	.096	15.2%
Overall	.994	1.180	.110	21.9%

Improved Area

Case Processing Summary

		Count	Percent
ImpSFRec	LE 500 sf	2	3.1%
	500 to 1,000 sf	10	15.6%
	1,000 to 1,500 sf	18	28.1%
	1,500 to 2,000 sf	6	9.4%
	2,000 to 3,000 sf	10	15.6%
	3,000 sf or Higher	18	28.1%
Overall		64	100.0%
Excluded		0	
Total		64	

Ratio Statistics for CURRTOT / TASP

Group	Median	Price Related Differential	Coefficient of Dispersion	Coefficient of Variation Median Centered
LE 500 sf	.979	.990	.022	3.1%
500 to 1,000 sf	.990	1.004	.059	8.5%
1,000 to 1,500 sf	.999	1.015	.049	10.2%
1,500 to 2,000 sf	.988	.947	.131	24.2%
2,000 to 3,000 sf	.981	1.044	.083	13.3%
3,000 sf or Higher	.945	1.241	.213	38.9%
Overall	.994	1.180	.110	21.9%

Improvement Quality

Case Processing Summary

		Count	Percent
QUALITY	C	10	15.6%
	D	52	81.3%
	E	2	3.1%
Overall		64	100.0%
Excluded		0	
Total		64	

Ratio Statistics for CURRTOT / TASP

Group	Median	Price Related Differential	Coefficient of Dispersion	Coefficient of Variation Median Centered
C	.952	1.315	.140	22.5%
D	.995	1.106	.106	22.2%
E	.927	.963	.094	13.3%
Overall	.994	1.180	.110	21.9%

Improvement Condition

Case Processing Summary

		Count	Percent
CONDITION	D	62	96.9%
	E	2	3.1%
Overall		64	100.0%
Excluded		0	
Total		64	

Ratio Statistics for CURRTOT / TASP

Group	Median	Price Related Differential	Coefficient of Dispersion	Coefficient of Variation Median Centered
D	.994	1.185	.111	22.2%
E	.927	.963	.094	13.3%
Overall	.994	1.180	.110	21.9%

Vacant Land Median Ratio Stratification

Sale Price

Case Processing Summary

		Count	Percent
SPRec	$25K to $50K	7	1.0%
	$50K to $100K	40	5.7%
	$100K to $150K	74	10.5%
	$150K to $200K	115	16.4%
	$200K to $300K	189	26.9%
	$300K to $500K	147	20.9%
	$500K to $750K	60	8.5%
	$750K to $1,000K	26	3.7%
	Over $1,000K	44	6.3%
Overall		702	100.0%
Excluded		0	
Total		702	

Ratio Statistics for CURRLND / TASP

Group	Median	Price Related Differential	Coefficient of Dispersion	Coefficient of Variation Median Centered
$25K to $50K	1.916	1.076	.566	71.6%
$50K to $100K	1.119	1.004	.283	40.8%
$100K to $150K	1.090	.997	.197	29.1%
$150K to $200K	1.043	1.001	.232	38.2%
$200K to $300K	1.000	1.001	.169	28.0%
$300K to $500K	1.000	1.010	.118	18.1%
$500K to $750K	.945	1.009	.175	24.8%
$750K to $1,000K	.863	.997	.187	23.8%
Over $1,000K	.910	1.051	.316	65.0%
Overall	1.000	1.098	.206	37.8%

Subclass

Case Processing Summary

		Count	Percent
ABSTRLND	100	201	28.6%
	190	6	0.9%
	200	11	1.6%
	401	38	5.4%
	491	11	1.6%
	521	1	0.1%
	531	4	0.6%
	541	1	0.1%
	1111	42	6.0%
	1112	342	48.7%
	1115	1	0.1%
	1135	3	0.4%
	1170	3	0.4%
	2112	1	0.1%
	2115	37	5.3%
Overall		702	100.0%
Excluded		0	
Total		702	

Ratio Statistics for CURRLND / TASP

Group	Median	Price Related Differential	Coefficient of Dispersion	Coefficient of Variation Median Centered
100	1.000	1.009	.079	27.6%
190	1.363	1.295	.288	36.0%
200	.954	1.099	.111	18.5%
401	1.000	1.055	.078	16.3%
491	1.191	1.009	.122	15.5%
521	1.218	1.000	.000	.
531	.872	1.155	.220	26.8%
541	1.091	1.000	.000	.
1111	1.000	1.031	.124	21.3%
1112	1.070	1.189	.279	39.4%
1115	1.315	1.000	.000	.
1135	1.308	1.012	.163	26.1%
1170	.970	1.032	.056	9.4%
2112	1.000	1.000	.000	.
2115	.994	.736	.190	57.9%
Overall	1.000	1.098	.206	37.8%