



2019 SUMMIT COUNTY PROPERTY ASSESSMENT STUDY





September 15, 2019

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

RE: Final Report for the 2019 Colorado Property Assessment Study

Dear Ms. Mullis:

Wildrose Appraisal Inc.-Audit Division is pleased to submit the Final Reports for the 2019 Colorado Property Assessment Study.

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

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

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

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

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

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
<i>Agricultural Land</i>	11
<i>Agricultural Outbuildings</i>	12
<i>Agricultural Land Under Improvements</i>	13
Sales Verification.....	14
Economic Area Review and Evaluation	16
Natural Resources	17
<i>Earth and Stone Products</i>	17
Vacant Land.....	18
Possessory Interest Properties	19
Personal Property Audit	20
Wildrose Auditor Staff.....	22
STATISTICAL APPENDIX	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 2019 and is pleased to report its findings for Summit County in the following report.



Historical Information

Summit County had an estimated population of approximately 30,374 people with 50.0 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 property were analyzed. Sales were collected for each property class over the eighteen month period from January 1, 2017 through June 30, 2018. Property classes with less than thirty sales had the sales period extended in six month increments up to an additional forty-two months. If this extended sales period did not produce the minimum thirty qualified sales, the Audit performed supplemental appraisals to reach the minimum.

Although it was required that we examine the median and coefficient of dispersion for all counties, we also calculated the weighted mean and price-related differential for each class of property. Counties were not passed or failed by these latter measures, but were counseled if there were anomalies noted during our analysis. Qualified sales were based on the qualification code used by each county, which were typically coded as either “Q” or “C.” The ratio analysis included all sales. The data was trimmed for counties with obvious outliers using IAAO standards for data analysis. In

every case, we examined the loss in data from trimming to ensure that only true outliers were excluded. Any county with a significant portion of sales excluded by this trimming method was examined further. No county was allowed to pass the audit if more than 5% of the sales were “lost” because of trimming.

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

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

Conclusions

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

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

The results for 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	1.147	8.9	Compliant
Condominium	2,115	0.995	1.011	4.6	Compliant
Single Family	1,796	1.000	1.007	4.8	Compliant
Vacant Land	747	1.000	1.070	16.7	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

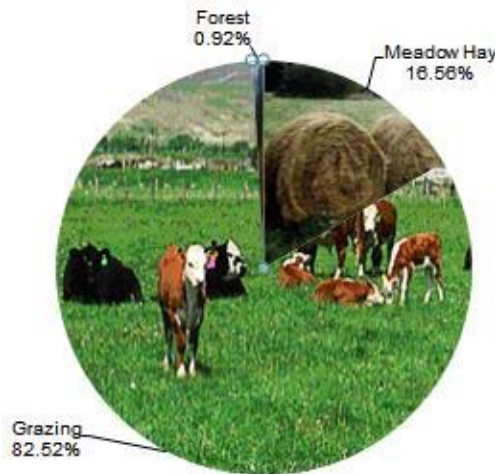
After applying the above described methodologies, it is concluded that Summit County is reasonably treating its sold and unsold properties in the same manner.

Recommendations

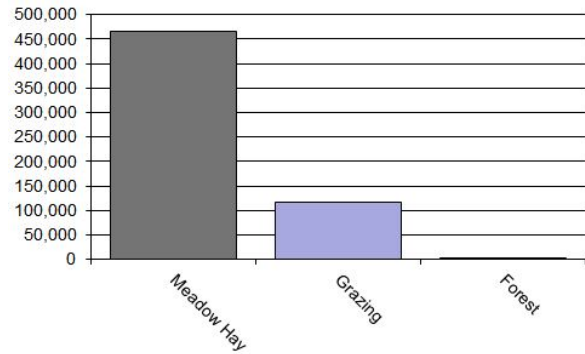
None

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

Recommendations

None

Agricultural Land Under Improvements

Methodology

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

Conclusions

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 2019 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.

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 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 2019 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.

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
- Town 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 2019 valuation period. The number and listing of businesses audited was also submitted and was in conformance with the written audit plan. The following audit triggers were used by the county to select accounts to be audited:

- Businesses in a selected area
- Accounts with obvious discrepancies
- New businesses filing for the first time
- 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
- Lowest or highest quartile of value per square foot
- 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*

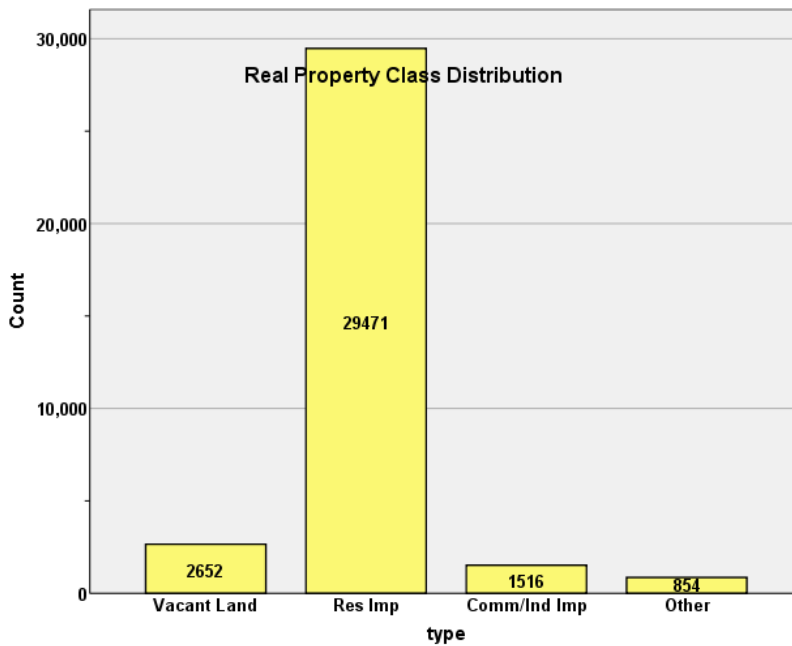
J. Andrew Rodriguez, *Field Analyst*

STATISTICAL APPENDIX

STATISTICAL COMPLIANCE RESULTS FOR SUMMIT COUNTY 2019

I. OVERVIEW

Summit County is located in central Colorado. The county has a total of 34,493 real property parcels, according to data submitted by the county assessor’s office in 2019. The following provides a breakdown of property classes for this county:



The vacant land class of properties was dominated by residential land. Residential lots (coded 100 and 1111) accounted for 44.2% 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 44.7% of all residential properties. Based on the guidelines of the 2019 audit, we will analyze residential condominiums separately in the following analysis.

Commercial and industrial properties represented a much smaller proportion of property classes in comparison. Commercial/industrial properties accounted for 4.5% 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 2019 Colorado Property Assessment Study. Information was provided by the Summit Assessor’s Office in May 2019. The data included all 5 property record files as specified by the Auditor.

III. RESIDENTIAL SALES RESULTS

There were 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 = 1,796

Median	1.000
Price Related Differential	1.007
Coefficient of Dispersion	4.8

Residential Condo = 2,115

Median	0.995
Price Related Differential	1.011
Coefficient of Dispersion	4.6

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	ECONAREA	Count	Percent	
NON- CONDO	1.00	28	1.6%	
	2.00	152	8.5%	
	3.00	17	0.9%	
	4.00	657	36.6%	
	5.00	806	44.9%	
	6.00	136	7.6%	
	Overall		1796	100.0%
	Excluded	0		
	Total	1796		
CONDO	ECONAREA	2.00	212	10.0%
		3.00	186	8.8%
		4.00	605	28.6%

	5.00	592	28.0%
	6.00	520	24.6%
Overall		2115	100.0%
Excluded		0	
Total		2115	

Ratio Statistics for CURRTOT / TASP

ResCondo	Group	Median	Price Related Differential	Coefficient of Dispersion
0	1.00	1.000	1.017	.050
	2.00	1.000	1.007	.036
	3.00	1.000	1.000	.040
	4.00	1.000	1.005	.043
	5.00	1.000	1.009	.056
	6.00	1.000	1.003	.037
	Overall	1.000	1.007	.048
1	2.00	1.000	1.003	.036
	3.00	1.000	1.006	.035
	4.00	1.000	1.005	.038
	5.00	.985	1.009	.050
	6.00	.989	1.019	.060
	Overall	.995	1.011	.046

Neighborhoods with at least 10 sales

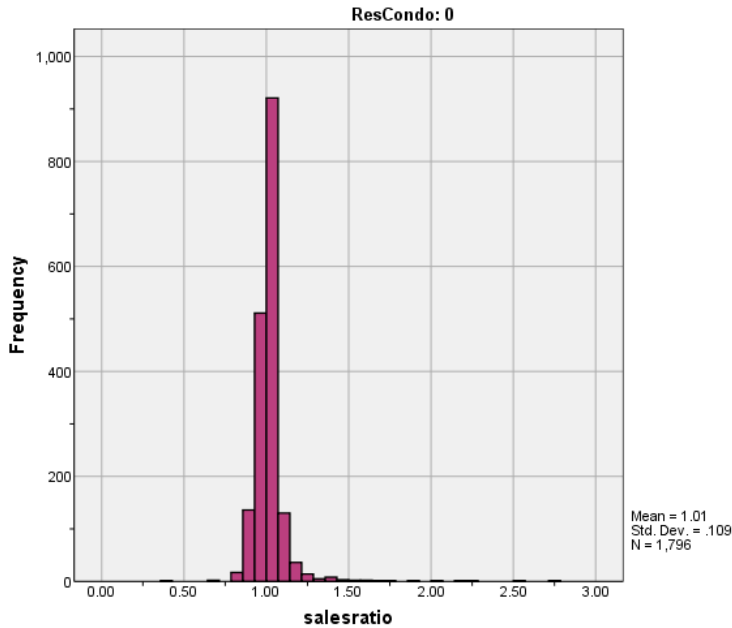
Ratio Statistics for CURRTOT / TASP

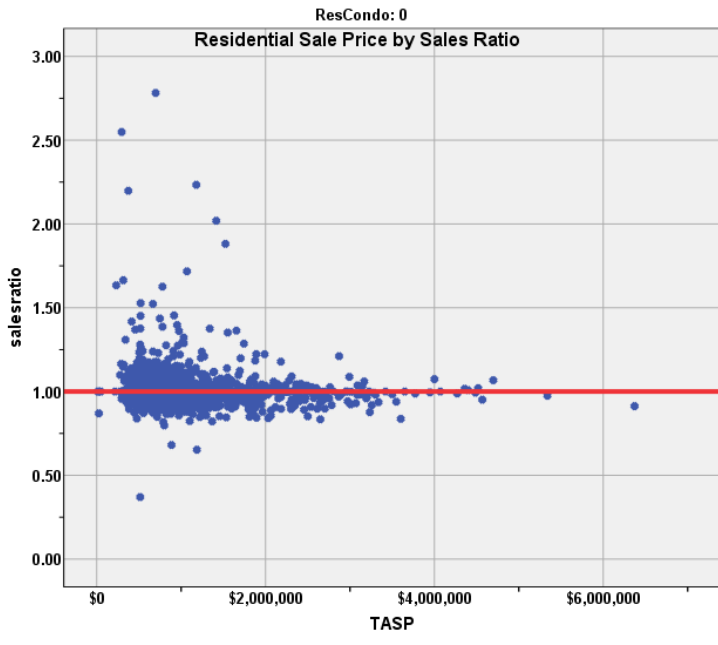
ResCondo	Group	Median	Price Related Differential	Coefficient of Dispersion	
0	20700	1.000	1.003	.049	
	20750	1.000	1.015	.082	
	20800	1.000	1.006	.058	
	21000	1.000	1.005	.038	
	21010	1.000	1.047	.147	
	21020	1.005	1.008	.045	
	21050	1.000	1.002	.046	
	21100	1.006	1.011	.047	
	21150	1.000	1.003	.044	
	21800	1.000	1.001	.045	
	22100	1.000	1.004	.038	
	22300	1.000	1.002	.068	
	22500	1.000	1.016	.060	
	23000	1.000	1.005	.033	
	23100	1.000	1.016	.047	
	24000	1.000	1.004	.036	
	24300	1.000	1.041	.123	
	24600	1.000	1.005	.036	
	24800	1.000	1.016	.056	
	25000	1.000	1.002	.034	
	25100	.993	.999	.028	
	26100	1.000	1.000	.051	
	26200	1.000	1.006	.046	
	26300	1.000	1.002	.034	
	28000	1.000	1.000	.040	
	1	1300	.987	1.002	.035
		1600	.993	1.002	.038
1900		1.000	1.003	.027	

2300	1.000	1.004	.035
3600	1.000	1.004	.034
3630	1.000	1.002	.041
4400	1.000	1.014	.053
5000	.989	1.001	.048
5100	.950	1.000	.055
5300	.986	1.003	.038
5600	.989	1.011	.052
5700	.974	1.008	.044
6000	.973	1.005	.052
6600	1.000	1.005	.039
6610	.999	1.002	.030
6630	.989	1.021	.042
7300	.992	1.006	.038
7500	.991	1.029	.075
7600	.988	1.010	.053
7800	.989	1.022	.064
Overall	.995	1.011	.046

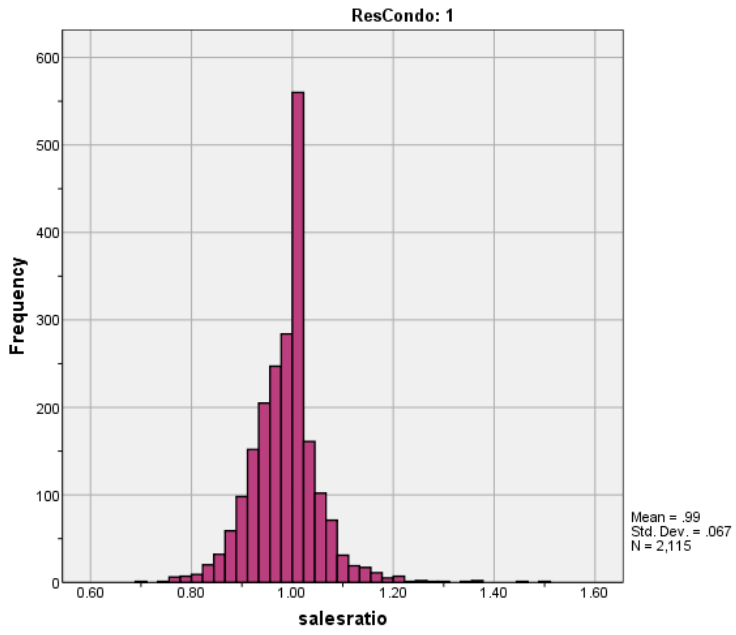
The above ratio statistics were in compliance with the standards set forth by the Colorado State Board of Equalization (SBOE) for the overall residential sales. The following graphs describe further the sales ratio distribution for these properties:

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

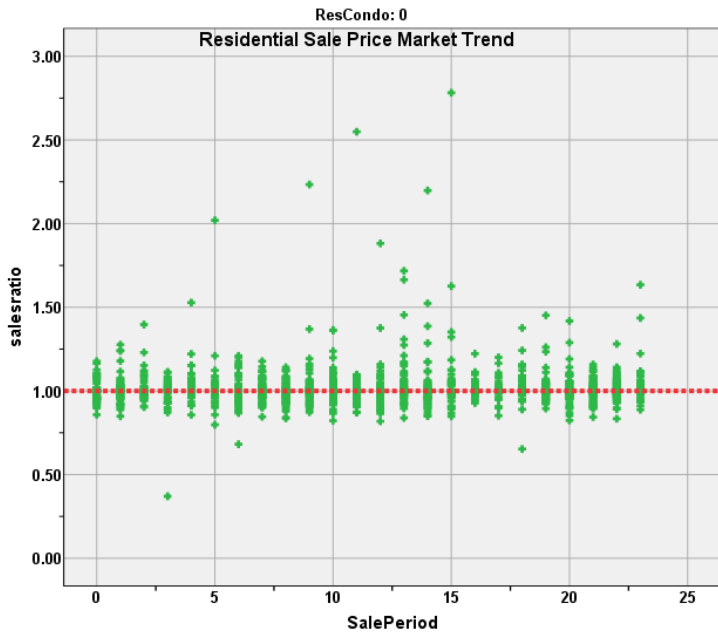
We next analyzed the residential dataset using the 24-month sale period for any residual market trending. We again stratified the analysis between residential non-condominiums and condominiums, with the following results:

Coefficients^a

ResCondo	Model		Unstandardized Coefficients		Standardized Coefficients	t	Sig.
			B	Std. Error	Beta		
0	1	(Constant)	1.006	.005		198.480	.000
		SalePeriod	.001	.000	.035	1.474	.141
1	1	(Constant)	.989	.003		336.031	.000
		SalePeriod	.000	.000	-.025	-1.168	.243

a. Dependent Variable: salesratio

RESIDENTIAL Non-CONDOMINIUMS



RESIDENTIAL CONDOMINIUMS



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 actual value per square foot for 2019 between each group stratified by residential non-condominiums and condominiums, as follows:

Report
VALSF

ResCondo	sold	N	Median	Mean
RES NON-CONDO	UNSOLD	14261	\$472	\$528
	SOLD	1794	\$529	\$574
RES CONDO	UNSOLD	11068	\$502	\$532
	SOLD	2112	\$516	\$547

Given that there was a significant difference between sold and unsold residential properties, we next compared the median change in actual value from taxable years 2018 and 2019 between sold and unsold residential properties, broken down by condominiums and non-condominiums:

Report
DIFF

ResCondo	sold	N	Median	Mean
RES NON-CONDO	UNSOLD	14209	1.21	1.23
	SOLD	1792	1.23	1.25
RES CONDO	UNSOLD	11050	1.32	1.33
	SOLD	2112	1.37	1.38

We next stratified this analysis by economic area and neighborhoods with at least 10 sales, as follows:

Economic Area
Report
DIFF

ResCondo	ECONAREA	sold	N	Median	Mean
RES NON-CONDO	1.00	UNSOLD	354	1.15	1.19
		SOLD	28	1.17	1.17
	2.00	UNSOLD	1757	1.23	1.25
		SOLD	153	1.27	1.30
	3.00	UNSOLD	296	1.14	1.21
		SOLD	17	1.06	1.08
	4.00	UNSOLD	4643	1.22	1.24
		SOLD	656	1.22	1.24
	5.00	UNSOLD	6511	1.20	1.22
		SOLD	803	1.24	1.27
	6.00	UNSOLD	648	1.19	1.19
		SOLD	135	1.12	1.16
RES CONDO	2.00	UNSOLD	1322	1.22	1.24
		SOLD	211	1.24	1.26
	3.00	UNSOLD	973	1.28	1.29
		SOLD	186	1.30	1.32
	4.00	UNSOLD	2974	1.38	1.39
		SOLD	605	1.40	1.40
	5.00	UNSOLD	3616	1.29	1.29

	SOLD	590	1.34	1.34
6.00	UNSOLD	2162	1.42	1.42
	SOLD	520	1.47	1.47

Neighborhoods with at least 10 sales

Report

DIFF

ResCondo	NBHD	sold	N	Median	Mean
0	20700	UNSOLD	392	1.28	1.30
		SOLD	68	1.30	1.32
	20750	UNSOLD	617	1.26	1.28
		SOLD	90	1.27	1.31
	20800	UNSOLD	710	1.27	1.28
		SOLD	126	1.27	1.30
	21000	UNSOLD	636	1.18	1.19
		SOLD	88	1.18	1.20
	21010	UNSOLD	278	1.20	1.21
		SOLD	33	1.23	1.24
	21020	UNSOLD	371	1.11	1.14
		SOLD	32	1.24	1.26
	21050	UNSOLD	337	1.22	1.23
		SOLD	54	1.29	1.30
	21100	UNSOLD	230	1.25	1.27
		SOLD	24	1.28	1.32
	21150	UNSOLD	579	1.14	1.15
		SOLD	122	1.16	1.17
	21800	UNSOLD	524	1.25	1.26
		SOLD	62	1.34	1.35
	22100	UNSOLD	400	1.20	1.23
		SOLD	54	1.28	1.33
	22300	UNSOLD	208	1.19	1.19
		SOLD	25	1.29	1.27
	22500	UNSOLD	149	1.22	1.22
		SOLD	22	1.28	1.35
	23000	UNSOLD	1018	1.24	1.25
		SOLD	114	1.26	1.29
	23100	UNSOLD	596	1.22	1.23
		SOLD	38	1.28	1.33
	24000	UNSOLD	1434	1.21	1.24
		SOLD	314	1.20	1.21
	24300	UNSOLD	500	1.18	1.21
		SOLD	37	1.20	1.30
	24600	UNSOLD	907	1.23	1.24
		SOLD	156	1.26	1.25
	24800	UNSOLD	212	1.13	1.17
		SOLD	25	1.16	1.15
	25000	UNSOLD	396	1.27	1.29
		SOLD	36	1.32	1.32
	25100	UNSOLD	322	1.17	1.19
		SOLD	14	1.17	1.17
	26100	UNSOLD	870	1.21	1.24
		SOLD	97	1.24	1.25
	26200	UNSOLD	205	1.19	1.18
		SOLD	27	1.16	1.16
	26300	UNSOLD	274	1.16	1.16
		SOLD	98	1.12	1.14

	28000	UNSOLD	131	1.06	1.08
		SOLD	17	1.06	1.08
	Total	UNSOLD	12296	1.21	1.23
		SOLD	1773	1.23	1.25
1	1300	UNSOLD	256	1.34	1.44
		SOLD	72	1.26	1.26
	1600	UNSOLD	568	1.42	1.45
		SOLD	141	1.43	1.47
	1900	UNSOLD	242	1.32	1.31
		SOLD	41	1.35	1.38
	2300	UNSOLD	1172	1.37	1.37
		SOLD	271	1.39	1.39
	3600	UNSOLD	756	1.21	1.23
		SOLD	115	1.25	1.27
	3630	UNSOLD	528	1.22	1.23
		SOLD	92	1.23	1.24
	4400	UNSOLD	736	1.39	1.38
		SOLD	80	1.40	1.43
	5000	UNSOLD	65	1.44	1.40
		SOLD	14	1.45	1.44
	5100	UNSOLD	228	1.24	1.25
		SOLD	33	1.24	1.25
	5300	UNSOLD	451	1.30	1.31
		SOLD	70	1.34	1.36
	5600	UNSOLD	2180	1.28	1.27
		SOLD	363	1.33	1.32
	5700	UNSOLD	545	1.31	1.33
		SOLD	80	1.38	1.41
	6000	UNSOLD	147	1.37	1.39
		SOLD	30	1.40	1.44
	6600	UNSOLD	282	1.27	1.28
		SOLD	62	1.30	1.30
	6610	UNSOLD	583	1.29	1.29
		SOLD	92	1.32	1.33
	6630	UNSOLD	108	1.29	1.27
		SOLD	32	1.29	1.31
	7300	UNSOLD	253	1.44	1.38
		SOLD	61	1.45	1.44
	7500	UNSOLD	564	1.38	1.42
		SOLD	93	1.43	1.47
	7600	UNSOLD	589	1.44	1.45
		SOLD	145	1.47	1.48
	7800	UNSOLD	756	1.43	1.40
		SOLD	221	1.49	1.46
	Total	UNSOLD	11009	1.32	1.33
		SOLD	2108	1.37	1.38

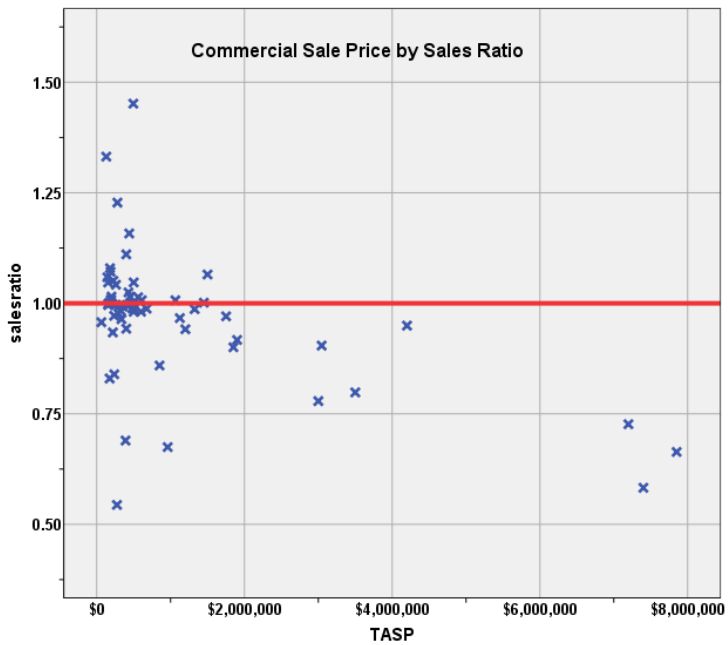
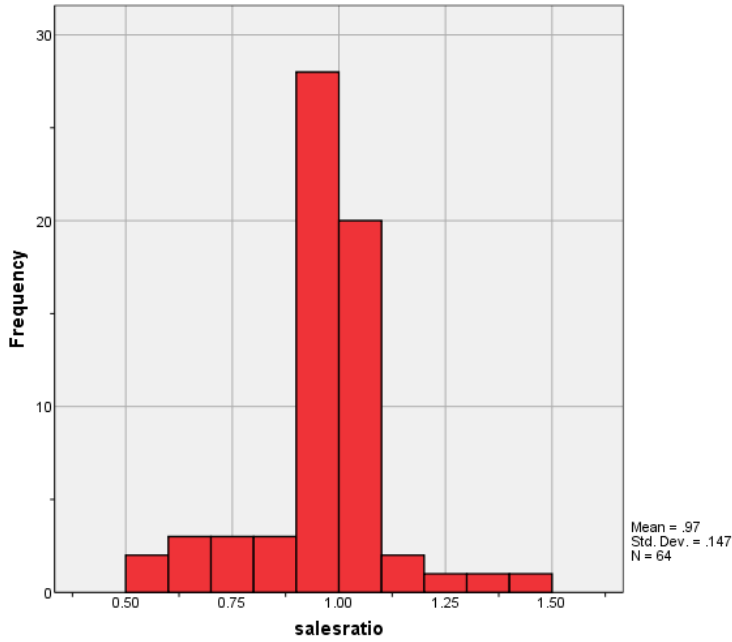
The above results indicate that sold and unsold residential properties were valued in a consistent manner.

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	1.147
Coefficient of Dispersion	8.9

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:



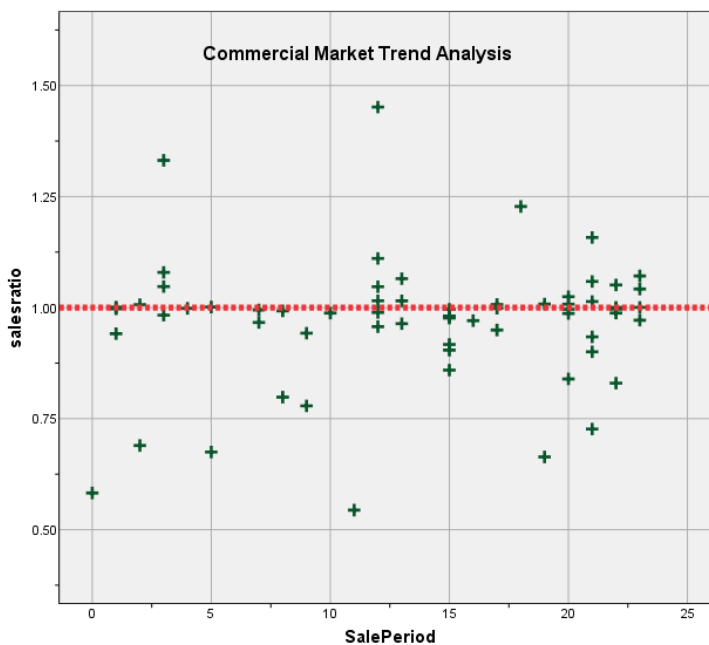
Commercial Market Trend Analysis

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	Std. Error	Standardized Coefficients Beta	t	Sig.
1	(Constant)	.940	.040		23.698	.000
	SalePeriod	.002	.003	.102	.804	.425

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 2019 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	1435	\$205	\$249
SOLD	64	\$216	\$283

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	.035	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 2019 both overall and by subclass:

Report

DIFF		N	Median	Mean
sold	UNSOLD	1444	1.09	1.19
	SOLD	64	1.15	1.21

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	.005	Retain the null hypothesis.

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

Report

DIFF	ABSTRIMP	sold	N	Median	Mean
2212.00	UNSOLD		109	1.22	1.39
	SOLD		5	1.32	1.38
2220.00	UNSOLD		39	1.16	1.21
	SOLD		2	1.08	1.08
2230.00	UNSOLD		106	1.21	1.23
	SOLD		9	1.42	1.35
2235.00	UNSOLD		22	1.20	1.29
	SOLD		2	1.26	1.26
2245.00	UNSOLD		1007	1.07	1.12
	SOLD		44	1.14	1.15

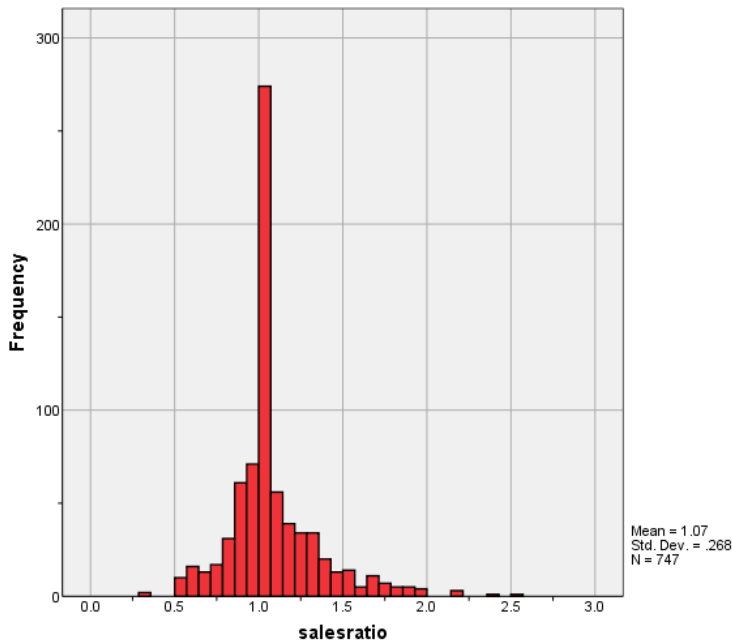
Based on the results of these comparisons, we concluded that the Summit County assessor was valuing sold and unsold commercial properties consistently.

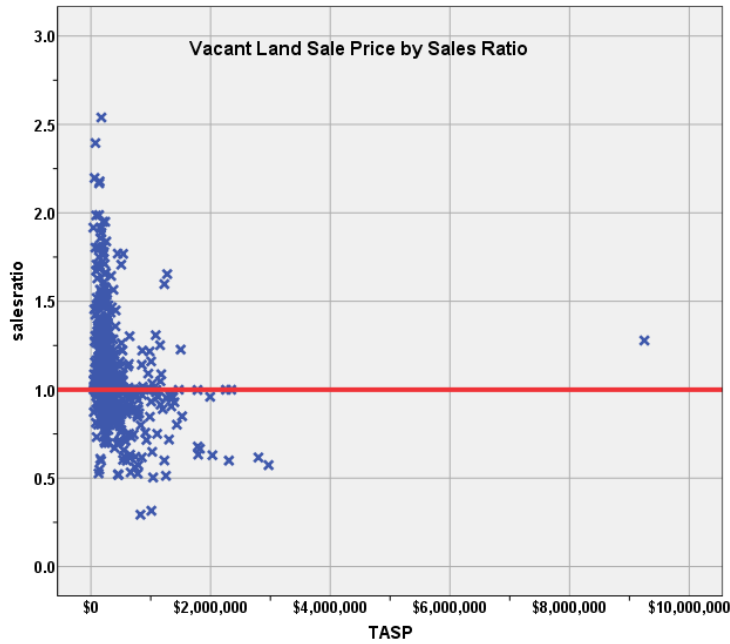
V. VACANT LAND SALE RESULTS

There were 760 qualified vacant land sales for this analysis. The vacant land sales period varied from 36 to 60 months, depending on the type of vacant land. We trimmed 13 sales using IAAO standards, resulting in a total of 747 sales for this analysis. The sales ratio analysis results were as follows:

Median	1.000
Price Related Differential	1.070
Coefficient of Dispersion	16.7

The above tables indicate 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:





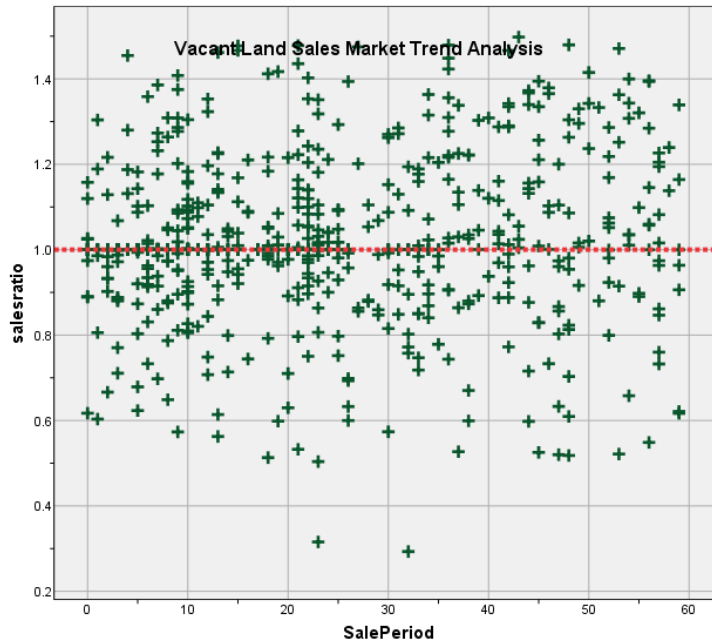
Vacant Land Market Trend Analysis

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	Std. Error	Standardized Coefficients Beta	t	Sig.
1	(Constant)	.995	.012		83.926	.000
	SalePeriod	.001	.000	.095	2.509	.012

a. Dependent Variable: salesratio



While 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 2019.

Sold/Unsold Analysis

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

Report

DIFF	N	Median	Mean
UNSOLD	2190	1.08	1.25
SOLD	747	1.10	1.16

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	.018	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
1082	UNSOLD		18	.99	.95
	SOLD		6	1.04	1.06
120	UNSOLD		7	1.09	1.06
	SOLD		5	1.25	1.27
1216	UNSOLD		10	1.05	1.06
	SOLD		12	1.05	1.24
1220	UNSOLD		139	.85	.89
	SOLD		29	.90	.93
1299	UNSOLD		11	1.85	1.88
	SOLD		13	1.02	1.19
130	UNSOLD		24	1.19	1.19
	SOLD		10	1.07	1.11
1393	UNSOLD		4	1.15	1.15
	SOLD		5	1.13	1.16
1488	UNSOLD		6	1.16	1.15
	SOLD		8	1.13	1.14
1520	UNSOLD		4	1.00	1.00
	SOLD		5	1.12	1.28
1611	UNSOLD		14	1.10	1.12
	SOLD		10	1.02	1.03
1613	UNSOLD		290	1.23	1.27
	SOLD		81	1.22	1.25
1619	UNSOLD		6	1.12	1.10
	SOLD		9	1.25	1.24
1721	UNSOLD		19	1.08	1.15
	SOLD		10	1.15	1.08
1785	UNSOLD		21	1.24	1.24
	SOLD		15	1.15	1.21
1812	UNSOLD		3	1.11	1.07
	SOLD		5	.97	.99
1830	UNSOLD		7	1.19	1.07
	SOLD		5	1.11	1.07
2018	UNSOLD		14	1.28	1.30

	SOLD	15	1.01	1.12
2032	UNSOLD	7	1.31	1.33
	SOLD	5	1.28	1.22
2070	UNSOLD	13	1.20	1.25
	SOLD	19	1.21	1.23
2076	UNSOLD	7	1.05	1.08
	SOLD	7	1.08	1.13
2091	UNSOLD	14	1.09	1.18
	SOLD	5	1.03	1.05
2109	UNSOLD	1	1.02	1.02
	SOLD	6	.92	1.05
2121	UNSOLD	4	1.25	1.23
	SOLD	5	1.17	1.24
2159	UNSOLD	1	1.19	1.19
	SOLD	5	1.04	1.04
2202	UNSOLD	7	1.00	1.05
	SOLD	8	1.15	1.12
2208	UNSOLD	9	1.14	1.18
	SOLD	23	1.15	1.18
2276	UNSOLD	4	.98	.98
	SOLD	5	1.05	1.01
2339	UNSOLD	1	.96	.96
	SOLD	24	1.01	1.00
250	UNSOLD	8	1.21	1.22
	SOLD	6	1.18	1.20
300	UNSOLD	2	1.39	1.39
	SOLD	8	1.34	1.33
386	UNSOLD	7	1.04	.99
	SOLD	5	1.00	.96
406	UNSOLD	66	.91	.88
	SOLD	42	1.06	1.06
448	UNSOLD	10	1.19	1.18
	SOLD	6	1.02	1.00
583	UNSOLD	3	.98	.99
	SOLD	5	1.05	1.02
607	UNSOLD	6	1.13	1.13
	SOLD	7	1.06	1.13
651	UNSOLD	28	1.38	1.34
	SOLD	30	1.19	1.21
656	UNSOLD	2	1.20	1.20
	SOLD	5	1.09	1.15
690	UNSOLD	7	1.03	1.02
	SOLD	6	1.04	1.07
880	UNSOLD	3	1.06	1.06
	SOLD	8	1.10	1.15
9000	UNSOLD	216	1.00	1.01
	SOLD	12	1.08	1.14
Total	UNSOLD	1023	1.10	1.11
	SOLD	495	1.12	1.14

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			
0	1.012	1.007	1.018	1.000	1.000	1.000	95.5%	1.006	1.001	1.010	1.007	.048	10.8%
1	.986	.983	.989	.995	.991	.999	95.5%	.975	.972	.979	1.011	.046	6.8%

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.

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			
.969	.932	1.005	.994	.977	1.000	96.7%	.844	.761	.927	1.147	.089	15.1%

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 Mean Centered
	Lower Bound	Upper Bound		Lower Bound	Upper Bound	Actual Coverage		Lower Bound	Upper Bound			
1.019	1.005	1.033	1.000	1.000	1.000	95.2%	.969	.938	1.001	1.051	.120	17.9%

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



Residential Median Ratio Stratification

Sale Price

Case Processing Summary

		Count	Percent
SPRec	LT \$25K	2	0.1%
	\$25K to \$50K	2	0.1%
	\$150K to \$200K	60	1.5%
	\$200K to \$300K	292	7.5%
	\$300K to \$500K	1110	28.4%
	\$500K to \$750K	1017	26.0%
	\$750K to \$1,000K	703	18.0%
	Over \$1,000K	725	18.5%
Overall		3911	100.0%
Excluded		0	
Total		3911	

Ratio Statistics for CURRTOT / TASP

Group	Median	Price Related Differential	Coefficient of Dispersion	Coefficient of Variation Median Centered
LT \$25K	.935	1.031	.070	9.8%
\$25K to \$50K	1.000	1.000	.000	0.0%
\$150K to \$200K	1.010	1.001	.048	9.0%
\$200K to \$300K	1.000	1.000	.060	12.5%
\$300K to \$500K	1.000	1.001	.041	7.2%
\$500K to \$750K	1.000	1.000	.048	9.3%
\$750K to \$1,000K	1.000	1.000	.047	7.8%
Over \$1,000K	1.000	1.002	.051	10.3%
Overall	1.000	1.004	.047	9.0%

Subclass

Case Processing Summary

		Count	Percent
ABSTRIMP	.00	1	0.0%
	1212.00	1116	28.5%
	1213.00	202	5.2%
	1214.00	456	11.7%
	1217.00	1	0.0%
	1218.00	3	0.1%
	1219.00	5	0.1%
	1220.00	1	0.0%
	1229.00	4	0.1%
	1230.00	2112	54.0%
	1234.00	2	0.1%
	1245.50	1	0.0%
	1256.67	1	0.0%
	1713.00	1	0.0%
	1737.50	1	0.0%
	1752.50	1	0.0%
	3015.75	1	0.0%

	4278.00	1	0.0%
	4278.33	1	0.0%
Overall		3911	100.0%
Excluded		0	
Total		3911	

Ratio Statistics for CURRTOT / TASP

Group	Median	Price Related Differential	Coefficient of Dispersion	Coefficient of Variation Median Centered
.00	.370	1.000	.000	.
1212.00	1.000	1.010	.054	12.9%
1213.00	1.000	1.005	.038	6.0%
1214.00	1.000	1.004	.035	6.0%
1217.00	1.007	1.000	.000	.
1218.00	.985	1.000	.019	3.1%
1219.00	.999	1.002	.043	6.2%
1220.00	1.294	1.000	.000	.
1229.00	1.000	.996	.033	7.5%
1230.00	.995	1.011	.046	6.8%
1234.00	.882	1.003	.021	2.9%
1245.50	1.005	1.000	.000	.
1256.67	1.004	1.000	.000	.
1713.00	1.050	1.000	.000	.
1737.50	1.083	1.000	.000	.
1752.50	.912	1.000	.000	.
3015.75	.837	1.000	.000	.
4278.00	.681	1.000	.000	.
4278.33	.653	1.000	.000	.
Overall	1.000	1.004	.047	9.0%

Age

Case Processing Summary

		Count	Percent
AgeRec	0	1	0.0%
	Over 100	8	0.2%
	75 to 100	2	0.1%
	50 to 75	58	1.5%
	25 to 50	1817	46.5%
	5 to 25	1643	42.0%
	5 or Newer	382	9.8%
Overall		3911	100.0%
Excluded		0	
Total		3911	

Ratio Statistics for CURRTOT / TASP

Group	Median	Price Related Differential	Coefficient of Dispersion	Coefficient of Variation Median Centered
0	.370	1.000	.000	.
Over 100	1.000	1.044	.057	8.8%
75 to 100	1.041	1.004	.115	16.2%
50 to 75	1.000	1.030	.124	30.3%
25 to 50	1.000	1.002	.046	8.7%
5 to 25	1.000	1.003	.047	8.2%
5 or Newer	1.000	1.000	.036	5.4%
Overall	1.000	1.004	.047	9.0%

Improved Area

Case Processing Summary

	Count	Percent
ImpSFRec 0	1	0.0%
LE 500 sf	227	5.8%
500 to 1,000 sf	1257	32.1%
1,000 to 1,500 sf	1227	31.4%
1,500 to 2,000 sf	536	13.7%
2,000 to 3,000 sf	461	11.8%
3,000 sf or Higher	202	5.2%
Overall	3911	100.0%
Excluded	0	
Total	3911	

Ratio Statistics for CURRTOT / TASP

Group	Median	Price Related Differential	Coefficient of Dispersion	Coefficient of Variation Median Centered
0	.370	1.000	.000	.
LE 500 sf	1.000	1.006	.047	7.3%
500 to 1,000 sf	1.000	1.005	.043	7.7%
1,000 to 1,500 sf	1.000	1.006	.046	7.2%
1,500 to 2,000 sf	1.000	1.006	.044	7.6%
2,000 to 3,000 sf	1.000	1.009	.049	11.6%
3,000 sf or Higher	1.000	1.019	.081	18.7%
Overall	1.000	1.004	.047	9.0%

Improvement Quality

Case Processing Summary

	Count	Percent
QUALITY	1	0.0%
A	20	0.5%
B	183	4.7%
C	1088	27.8%
D	2541	65.0%
E	78	2.0%
Overall	3911	100.0%
Excluded	0	
Total	3911	

Ratio Statistics for CURRTOT / TASP

Group	Median	Price Related Differential	Coefficient of Dispersion	Coefficient of Variation Median Centered
	.370	1.000	.000	.
A	1.000	1.003	.040	6.8%
B	1.000	1.003	.059	12.5%
C	1.000	1.002	.047	9.8%
D	1.000	1.003	.046	8.2%
E	1.000	1.006	.054	10.2%
Overall	1.000	1.004	.047	9.0%

Improvement Condition

Case Processing Summary

	Count	Percent
CONDITION	1	0.0%
D	3898	99.7%
E	12	0.3%
Overall	3911	100.0%
Excluded	0	
Total	3911	

Ratio Statistics for CURRTOT / TASP

Group	Median	Price Related Differential	Coefficient of Dispersion	Coefficient of Variation Median Centered
	.370	1.000	.000	.
D	1.000	1.004	.047	8.9%
E	.998	1.006	.043	6.6%
Overall	1.000	1.004	.047	9.0%

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	.997	1.001	.013	1.6%
\$750K to \$1,000K	.767	1.007	.120	17.0%
Over \$1,000K	.929	1.109	.109	15.5%
Overall	.994	1.147	.089	15.0%

Subclass

Case Processing Summary

		Count	Percent
ABSTRIMP	1745.00	2	3.1%
	2212.00	5	7.8%
	2220.00	2	3.1%
	2230.00	9	14.1%
	2235.00	2	3.1%
	2245.00	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
1745.00	.962	.971	.107	15.1%
2212.00	.967	1.216	.197	29.7%
2220.00	.929	1.003	.013	1.8%
2230.00	.900	1.089	.137	19.1%
2235.00	1.080	1.040	.073	10.3%
2245.00	.997	1.005	.060	11.6%
Overall	.994	1.147	.089	15.0%

Age

Case Processing Summary

AgeRec		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	.933	1.013	.079	11.2%
25 to 50	.988	1.061	.106	17.0%
5 to 25	.996	1.238	.075	13.8%
5 or Newer	.900	1.102	.096	15.2%
Overall	.994	1.147	.089	15.0%

Improved Area

Case Processing Summary

ImpSFRec		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	11	17.2%
	3,000 sf or Higher	17	26.6%
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	1.040	.078	12.6%
3,000 sf or Higher	.941	1.148	.138	20.6%
Overall	.994	1.147	.089	15.0%

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	1.224	.120	16.9%
D	.995	1.101	.083	14.7%
E	.927	.963	.094	13.3%
Overall	.994	1.147	.089	15.0%

Improvement Condition

Case Processing Summary

		Count	Percent
CONDITION	D	61	95.3%
	E	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
D	.993	1.152	.090	15.2%
E	1.007	.971	.058	11.8%
Overall	.994	1.147	.089	15.0%

Economic Area

Case Processing Summary

		Count	Percent
ECONAREA	2.00	21	32.8%
	4.00	20	31.3%
	5.00	23	35.9%
Overall		64	100.0%
Excluded		0	
Total		64	

Ratio Statistics for CURRTOT / TASP

Group	Median	Price Related Differential	Coefficient of Dispersion
2.00	.998	1.147	.060
4.00	.974	1.200	.179
5.00	.989	1.043	.037
Overall	.994	1.147	.089

Vacant Land Median Ratio Stratification

Sale Price

Case Processing Summary

		Count	Percent
SPRec	\$25K to \$50K	4	0.5%
	\$50K to \$100K	41	5.5%
	\$100K to \$150K	78	10.4%
	\$150K to \$200K	141	18.9%
	\$200K to \$300K	198	26.5%
	\$300K to \$500K	153	20.5%
	\$500K to \$750K	61	8.2%
	\$750K to \$1,000K	27	3.6%
	Over \$1,000K	44	5.9%
Overall		747	100.0%
Excluded		0	
Total		747	

Ratio Statistics for CURRLND / TASP

Group	Median	Price Related Differential	Coefficient of Dispersion	Coefficient of Variation Median Centered
\$25K to \$50K	1.029	1.020	.267	50.6%
\$50K to \$100K	1.000	1.002	.237	42.6%
\$100K to \$150K	1.102	.997	.203	29.4%
\$150K to \$200K	1.043	1.002	.174	27.4%
\$200K to \$300K	1.000	1.001	.156	25.9%
\$300K to \$500K	1.000	1.008	.103	17.4%
\$500K to \$750K	.990	1.010	.162	24.1%
\$750K to \$1,000K	.942	.995	.161	23.0%
Over \$1,000K	.956	.980	.210	29.0%
Overall	1.000	1.070	.167	27.8%

Subclass

Case Processing Summary

		Count	Percent
ABSTRLND	100.00	234	31.3%
	190.00	38	5.1%
	200.00	9	1.2%
	290.00	2	0.3%
	401.00	54	7.2%
	491.00	18	2.4%
	521.00	1	0.1%
	531.00	4	0.5%
	541.00	1	0.1%
	551.00	1	0.1%
	1111.00	9	1.2%
	1112.00	288	38.6%
	1115.00	3	0.4%
	1125.00	1	0.1%
	1135.00	45	6.0%
	1170.00	2	0.3%
	2112.00	1	0.1%
	2115.00	36	4.8%
Overall		747	100.0%
Excluded		0	
Total		747	

Ratio Statistics for CURRLND / TASP

Group	Median	Price Related Differential	Coefficient of Dispersion	Coefficient of Variation Median Centered
100.00	1.000	.998	.075	15.9%
190.00	1.000	1.039	.066	18.8%
200.00	.977	1.075	.088	18.0%
290.00	1.023	.991	.068	9.6%
401.00	1.000	1.043	.078	15.4%
491.00	1.000	1.033	.083	14.5%
521.00	1.218	1.000	.000	.
531.00	.872	1.155	.220	26.8%
541.00	1.091	1.000	.000	.
551.00	1.000	1.000	.000	.
1111.00	1.205	1.010	.183	26.6%
1112.00	1.072	1.164	.249	33.7%
1115.00	1.315	.968	.205	31.0%
1125.00	1.278	1.000	.000	.
1135.00	1.120	1.031	.170	24.3%
1170.00	.929	1.026	.088	12.4%
2112.00	1.000	1.000	.000	.
2115.00	.997	1.022	.100	15.0%
Overall	1.000	1.070	.167	27.8%

Economic Area

Case Processing Summary

		Count	Percent
ECONAREA	1.00	13	1.7%
	2.00	35	4.7%
	3.00	5	0.7%
	4.00	165	22.1%
	5.00	495	66.3%
	6.00	34	4.6%
Overall		747	100.0%
Excluded		0	
Total		747	

Ratio Statistics for CURRLND / TASP

Group	Median	Price Related Differential	Coefficient of Dispersion
1.00	1.000	.998	.119
2.00	1.014	1.060	.227
3.00	.986	1.010	.075
4.00	1.017	1.061	.186
5.00	1.000	1.070	.159
6.00	1.044	1.019	.134
Overall	1.000	1.070	.167