2017
SUMMIT COUNTY
PROPERTY ASSESSMENT
STUDY

WILDROSE
APPRAISAL, INCORPORATED
Audit Division

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APPRAISAL, INCORPORATED
Audit Division

September 15, 2017

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

RE: Final Report for the 2017 Colorado Property Assessment Study

Dear Mr. Mauer:

Wildrose Appraisal Inc.-Audit Division is pleased to submit the Final Reports for the 2017 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

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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.

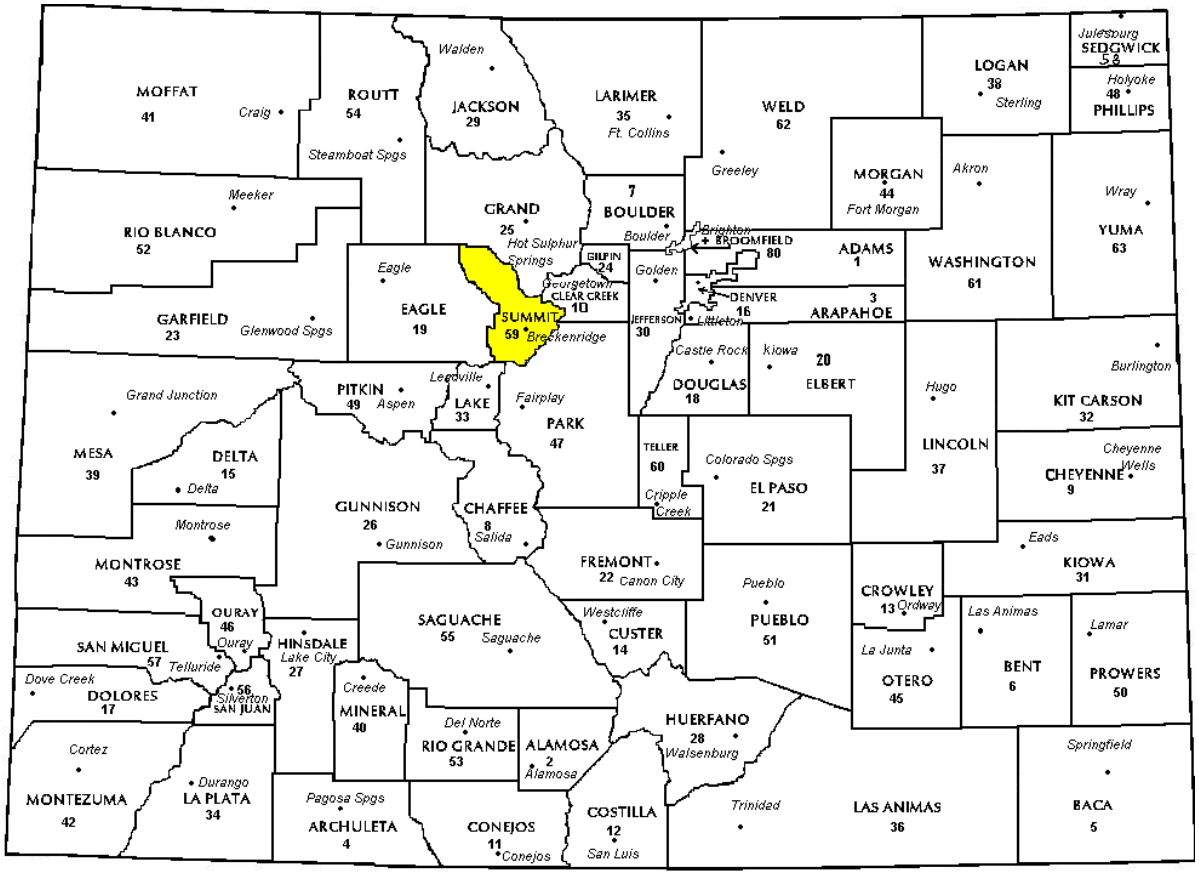
Statistical analysis is performed on vacant land, residential properties, commercial industrial properties, agricultural land, and personal property. The statistical study results are compared with State Board of Equalization compliance requirements and the manuals published by the State Property Tax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

Wildrose Audit has completed the Property Assessment Study for 2017 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 50.0 people per square mile, according to the U.S. Census Bureau's 2016 estimated census data. This represents an 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, 2015 through June 20, 2016. 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. 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	76	0.997	1.128	11.9	Compliant
Condominium	2,070	1.000	1.009	4.4	Compliant
Single Family	1,757	1.000	1.007	5.1	Compliant
Vacant Land	428	1.000	1.074	14.6	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

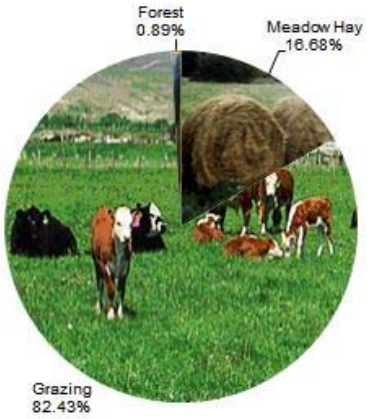
After applying the above described methodologies, it is concluded that Summit County is reasonably treating its sold and unsold properties in the same manner.

Recommendations

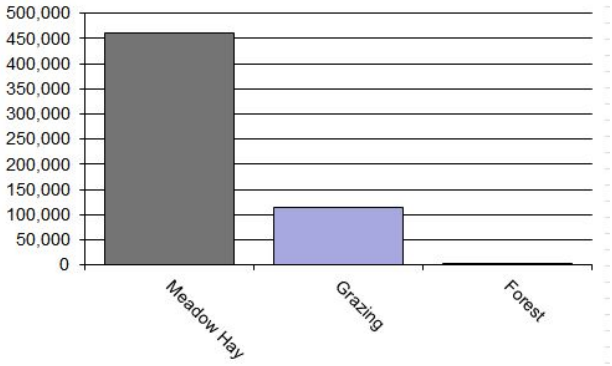
None

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	4,827	95.43	460,650	460,977	1.00
4147	Grazing	23,854	4.81	114,817	114,817	1.00
4177	Forest	259	3.03	784	784	1.00
Total/Avg		**28,940**	**19.91**	**576,252**	**576,578**	**1.00**

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 2017 for Summit County. This study was conducted by checking selected sales from the master sales list for the current valuation period. Specifically WRA selected 31 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 $500, the contractor has examined and reported the ratio of qualified sales to total sales by class and performed the following analyses of unqualified sales:

> The contractor has examined the manner in which sales have been classified as qualified or unqualified, including a listing of each step in the sales verification process, any adjustment procedures, and the county official responsible for making the final decision on qualification.
>
> When less than 50 percent of sales are qualified in any of the three property classes (residential, commercial, and vacant land), the contractor analyzed the reasons for disqualifying sales in any subclass that constitutes at least 20 percent of the class, either by number of properties or by value, from the prior year. The contractor has

reviewed with the assessor any analysis indicating that sales data are inadequate, fail to reflect typical properties, or have been disqualified for insufficient cause. In addition, the contractor has reviewed the disqualified sales by assigned code. If there appears to be any inconsistency in the coding, the contractor has conducted further analysis to determine if the sales included in that code have been assigned appropriately.

If 50 percent or more of the sales are qualified, the contractor has reviewed a statistically significant sample of unqualified sales, excluding sales that were disqualified for obvious reasons.

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 2017 in Summit County. The review showed that subdivisions were discounted pursuant to the Colorado Revised Statutes in Article 39-1-103 (14). Discounting procedures were applied to all subdivisions where less than 80 percent of all sites were sold using the present worth method. The market approach was applied where 80 percent or more of the subdivision sites were sold. An absorption period was estimated for each subdivision that was discounted. An appropriate discount rate was developed using the summation method. Subdivision land with structures was appraised at full market value.

Conclusions

Summit County has implemented proper procedures to adequately estimate absorption periods, discount rates, and lot values for qualifying subdivisions.

Recommendations

None

POSSESSORY INTEREST PROPERTIES

Possessory Interest

Possessory interest property discovery and valuation is described in the Assessor's Reference Library (ARL) Volume 3 section 7 in accordance with the requirements of Chapter 39-1-103 (17)(a) (II) C.R.S. Possessory Interest is defined by the Property Tax Administrator's Publication ARL Volume 3, Chapter 7: A private property interest in government-owned property or the right to the occupancy and use of any benefit in government-owned property that has been granted under lease, permit, license, concession, contract, or other agreement.

Summit County has been reviewed for their procedures and adherence to guidelines when assessing and valuing agricultural, commercial and ski area possessory interest properties. The county has also been queried as to their confidence that the possessory interest properties have been discovered and placed on the tax rolls.

Conclusions

Summit County has implemented a discovery process to place possessory interest properties on the roll. They have also correctly and consistently applied the correct procedures and valuation methods in the valuation of possessory interest properties.

Recommendations

None

PERSONAL PROPERTY AUDIT

Summit County was studied for its procedural compliance with the personal property assessment outlined in the Assessor's Reference Library (ARL) Volume 5, and in the State Board of Equalization (SBOE) requirements for the assessment of personal property. The SBOE requires that counties use ARL Volume 5, including current discovery, classification, documentation procedures, current economic lives table, cost factor tables, depreciation table, and level of value adjustment factor table.

The personal property audit standards narrative must be in place and current. A listing of businesses that have been audited by the assessor within the twelve-month period reflected in the plan is given to the auditor. The audited businesses must be in conformity with those described in the plan.

Aggregate ratio will be determined solely from the personal property accounts that have been physically inspected. The minimum assessment sample is one percent or ten schedules, whichever is greater, and the maximum assessment audit sample is 100 schedules.

For the counties having over 100,000 population, WRA selected a sample of all personal property schedules to determine whether the assessor is correctly applying the provisions of law and manuals of the Property Tax Administrator in arriving at the assessment levels of such property. This sample was selected from the personal property schedules audited by the assessor. In no event was the sample selected by the contractor less than 30 schedules. The counties to be included in this study are Adams, Arapahoe, Boulder, Denver, Douglas, El Paso, Jefferson, Larimer, Mesa, Pueblo, and Weld. All other counties received a procedural study.

Summit County is compliant with the guidelines set forth in ARL Volume 5 regarding discovery procedures, using the following methods to discover personal property accounts in the county:

- Public Record Documents
- MLS Listing and/or Sold Books
- Local Telephone Directories, Newspapers or Other Local Publications
- Personal Observation, Physical Canvassing or Word of Mouth
- Town & County Business Reports

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 2017 valuation period. The number and listing of businesses audited was also submitted and was in conformance with the written audit plan. The following audit triggers were used by the county to select accounts to be audited:

- Businesses in a selected area
- Accounts with obvious discrepancies
- New businesses filing for the first time
- Accounts with greater than 10% change
- Incomplete or inconsistent declarations
- Accounts with omitted property
- Same business type or use
- Businesses with no deletions or additions for 2 or more years

- Non-filing Accounts - Best Information Available
- Accounts close to the $7,400 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*

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Carl W. Ross, *Agricultural/Natural Resource Analyst*

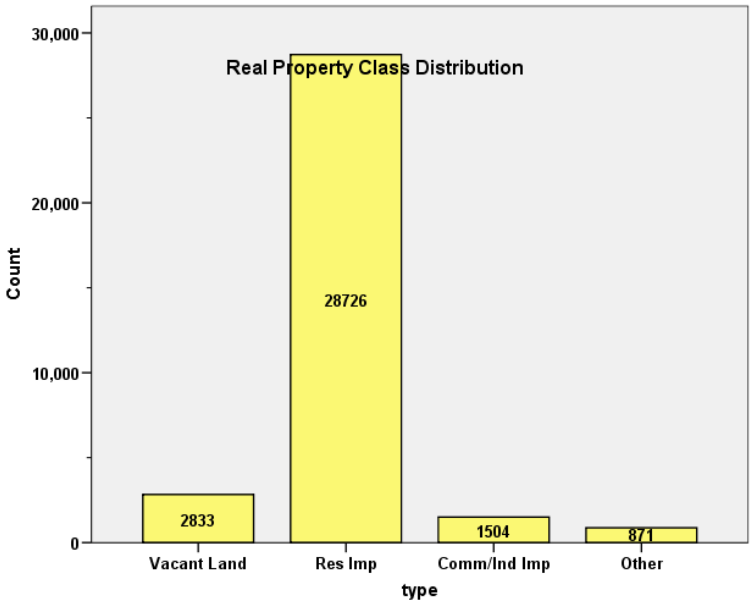
J. Andrew Rodriguez, *Field Analyst*

APPENDICES

STATISTICAL COMPLIANCE RESULTS
FOR SUMMIT COUNTY
2017

I. OVERVIEW

Summit County is located in central Colorado. The county has a total of 33,934 real property parcels, according to data submitted by the county assessor's office in 2017. 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 1112) accounted for 46.7% of all vacant land parcels.

For residential improved properties, single family properties accounted for 32.5% of all residential properties. Residential condominiums, coded as 1230, accounted for 46.0% of all residential properties. Based on the guidelines of the 2017 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 sales accounted for 4.4% of all such properties in this county.

II. DATA FILES

The following sales analyses were based on the requirements of the 2017 Colorado Property Assessment Study. Information was provided by the Summit Assessor's Office in May 2017. The data included all 5 property record files as specified by the Auditor.

III. RESIDENTIAL SALES RESULTS

There were 3,827 qualified residential sales for the 24 month sale period ending June 30, 2016. We stratified our sales ratio analysis by residential non-condominiums and condominiums, as follows:

Residential Non-Condo = 1,757

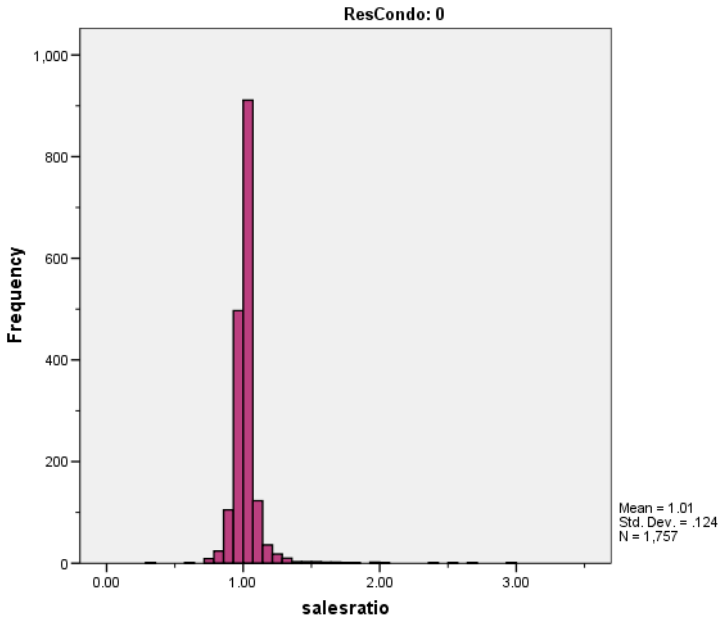
Median	**1.000**
Price Related Differential	**1.007**
Coefficient of Dispersion	**5.1**

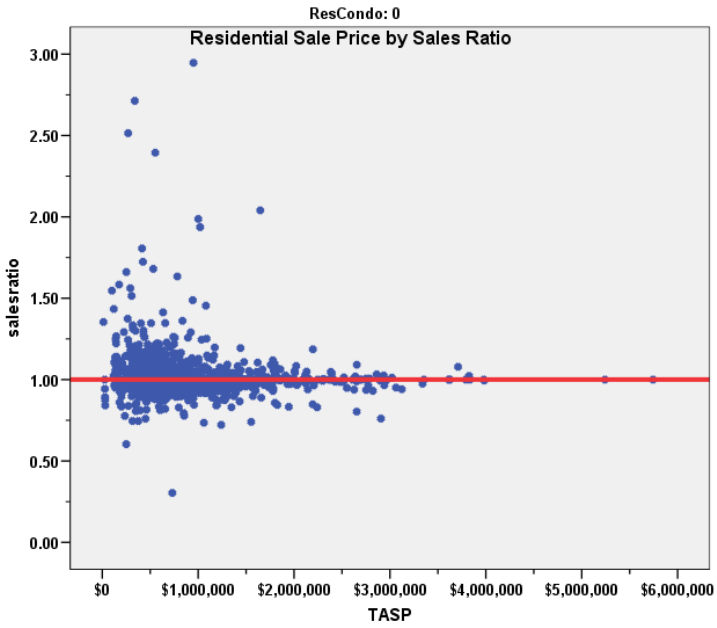
Residential Condo = 2,070

Median	**1.000**
Price Related Differential	**1.009**
Coefficient of Dispersion	**4.4**

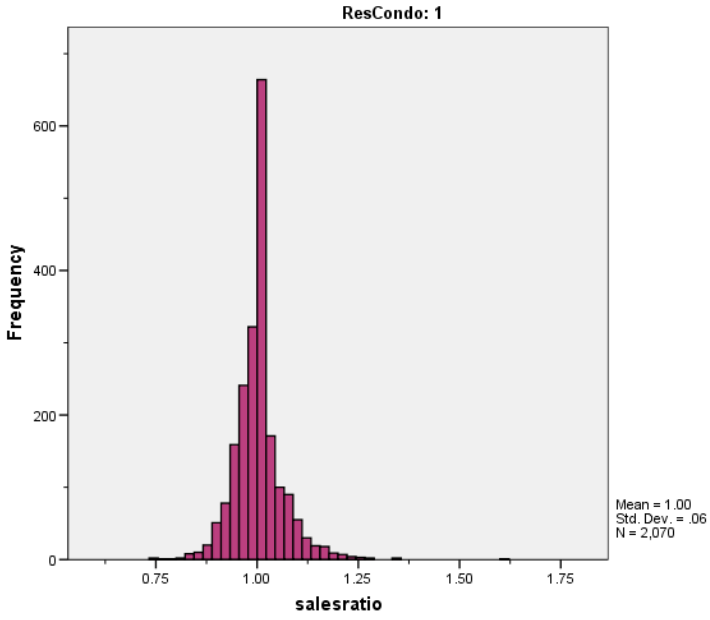
The above ratio statistics were in compliance with the standards set forth by the Colorado State Board of Equalization (SBOE) for the overall residential sales. The following graphs describe further the sales ratio distribution for these properties:

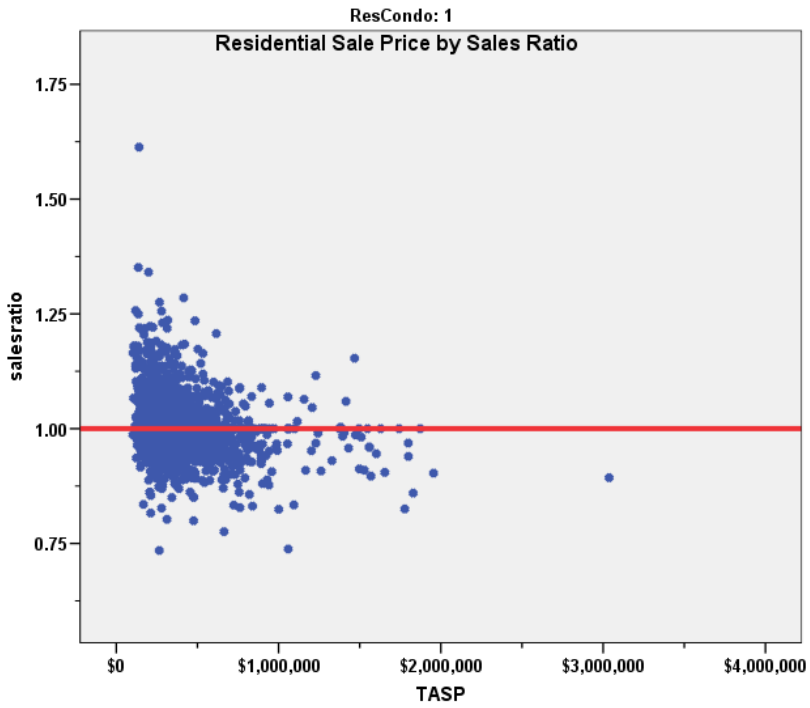
RESIDENTIAL NON-CONDOMINIUMS





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

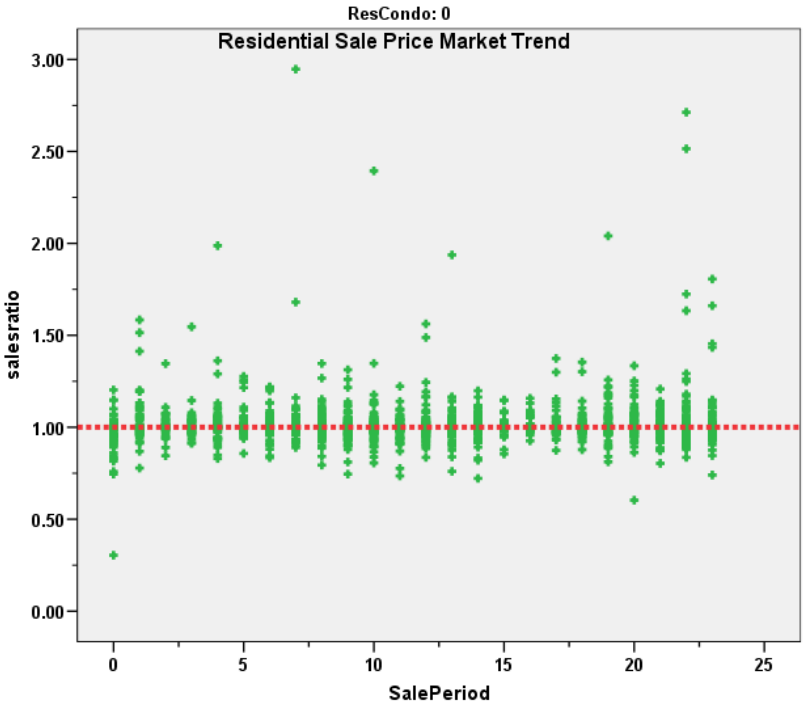
We next analyzed the residential dataset using the 24-month sale period for any residual market trending. We again stratified the analysis between residential non-condominiums and condominiums, with the following results:

Coefficients[a]

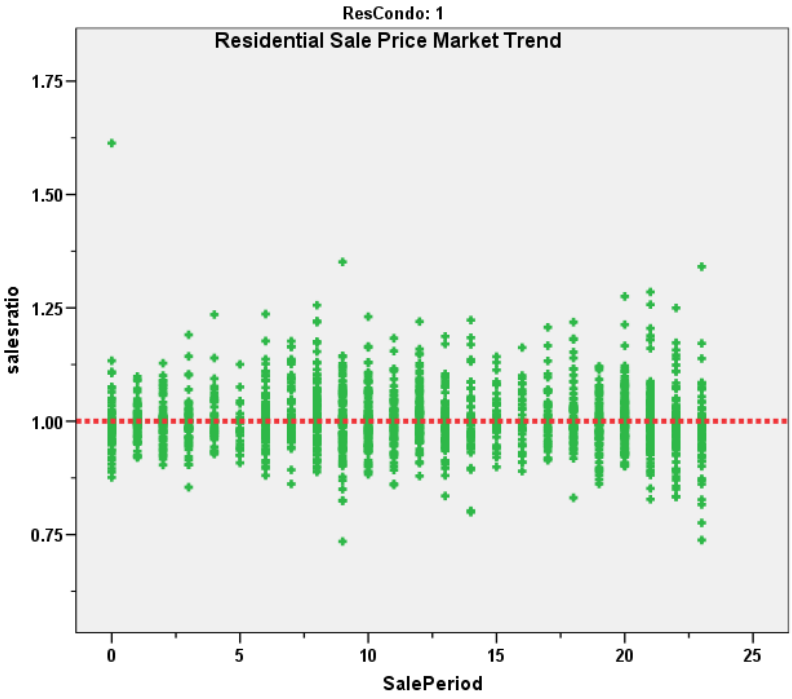
ResCondo	Model		Unstandardized Coefficients B	Unstandardized Coefficients Std. Error	Standardized Coefficients Beta	t	Sig.
0	1	(Constant)	1.005	.006		171.461	.000
		SalePeriod	.001	.000	.046	1.917	.055
1	1	(Constant)	1.004	.003		390.256	.000
		SalePeriod	.000	.000	-.012	-.544	.587

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 2017 between each group stratified by residential non-condominiums and condominiums, as follows:

Report
VALSF

ResCondo	sold	N	Median	Mean
0	UNSOLD	13,579	$391	$435
	SOLD	1,715	$409	$468
1	UNSOLD	11,130	$386	$410
	SOLD	2,069	$393	$422

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 2016 and 2017 between sold and unsold residential properties, broken down by condominiums and non-condominiums:

Report
DIFF

ResCondo	sold	N	Median	Mean
0	UNSOLD	13,780	1.16	1.55
	SOLD	1,758	1.18	1.22
1	UNSOLD	11,129	1.20	1.21
	SOLD	2,069	1.21	1.23

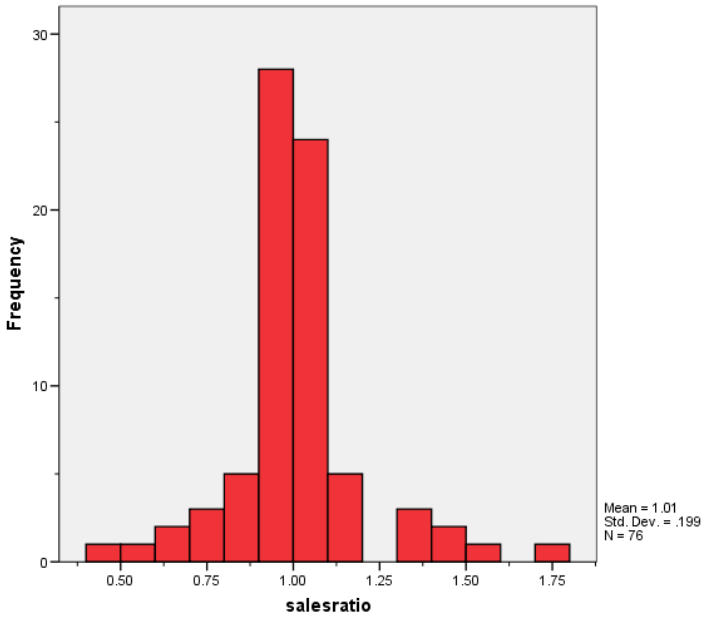
The above results indicate that sold and unsold residential properties were valued in a consistent manner.

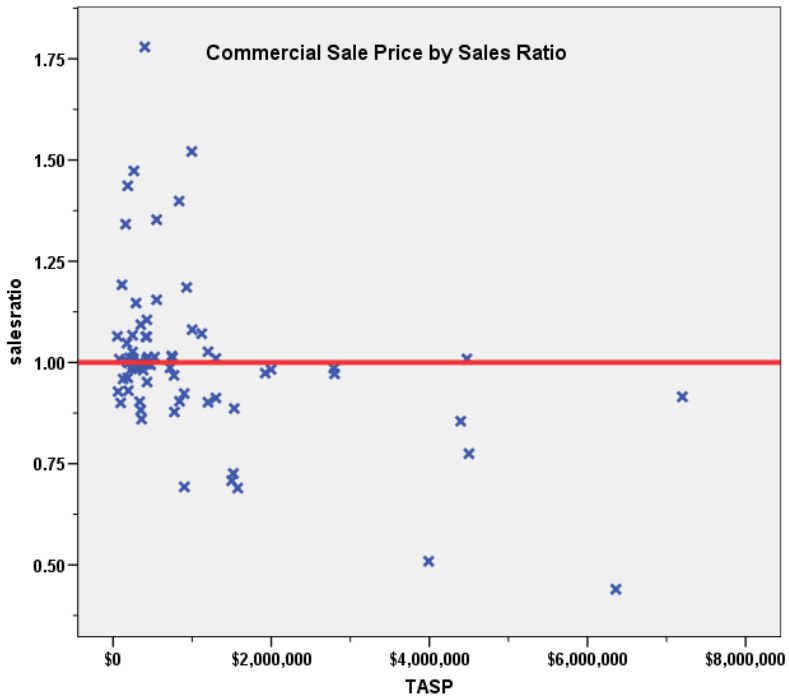
IV. COMMERCIAL/INDUSTRIAL SALE RESULTS

There were 76 qualified commercial and industrial sales for the 60 month sale period ending June 30, 2016. The sales ratio analysis results were as follows:

Median	**0.997**
Price Related Differential	**1.128**
Coefficient of Dispersion	**11.9**

The above tables indicate 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:





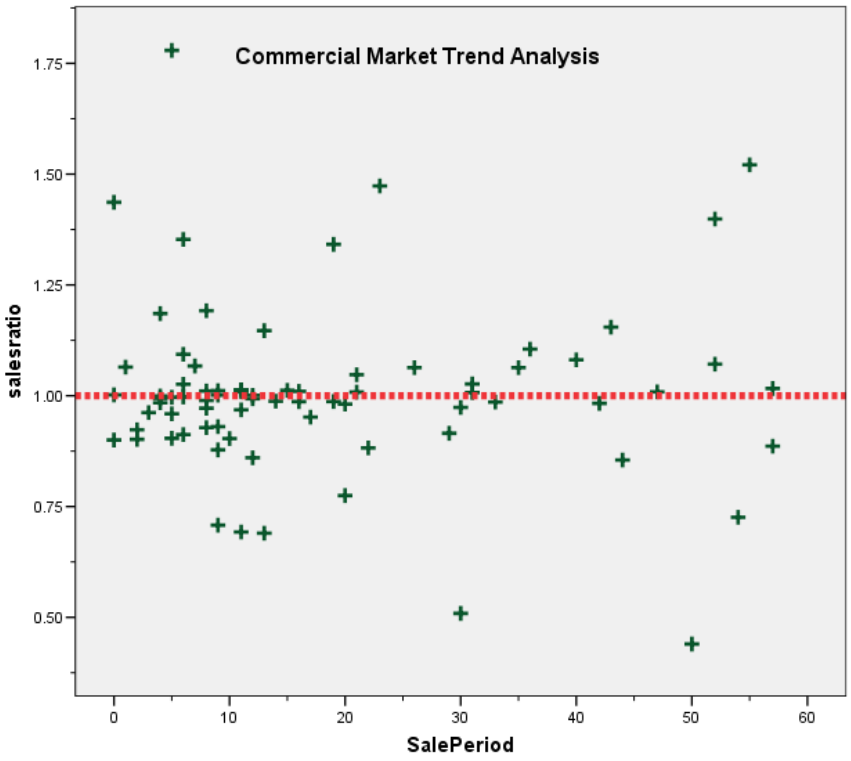
Commercial Market Trend Analysis

The 76 commercial/industrial sales were next analyzed by subclass for any residual market trending, examining the sale ratios across the 60-month sale period with the following results:

Coefficients[a]

Model		Unstandardized Coefficients B	Std. Error	Standardized Coefficients Beta	t	Sig.
1	(Constant)	1.015	.035		28.925	.000
	SalePeriod	.000	.001	-.034	-.293	.771

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 2017 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	1,413	$185	$219
SOLD	76	$238	$274

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	.000	Reject the null hypothesis.

Asymptotic significances are displayed. The significance level is .05.

Given that there was a statistically significant difference in the above comparison analysis, we next compared sold and unsold commercial properties using the median change in actual value between taxable years 2016 and 2017 both overall and by subclass:

Report

DIFF

sold	N	Median	Mean
UNSOLD	1,428	1.08	1.63
SOLD	76	1.16	1.21

Report

DIFF

ABSTRIMP	sold	N	Median	Mean
2212.00	UNSOLD	101	1.16	1.18
	SOLD	10	1.15	1.23
2215.00	UNSOLD	17	1.18	1.15
	SOLD	3	1.21	1.17
2220.00	UNSOLD	41	1.10	1.11
	SOLD	1	1.38	1.38
2230.00	UNSOLD	100	1.12	1.16
	SOLD	12	1.19	1.25
2235.00	UNSOLD	22	1.15	1.14
	SOLD	3	1.08	1.06
2245.00	UNSOLD	1005	1.08	1.10
	SOLD	40	1.18	1.20

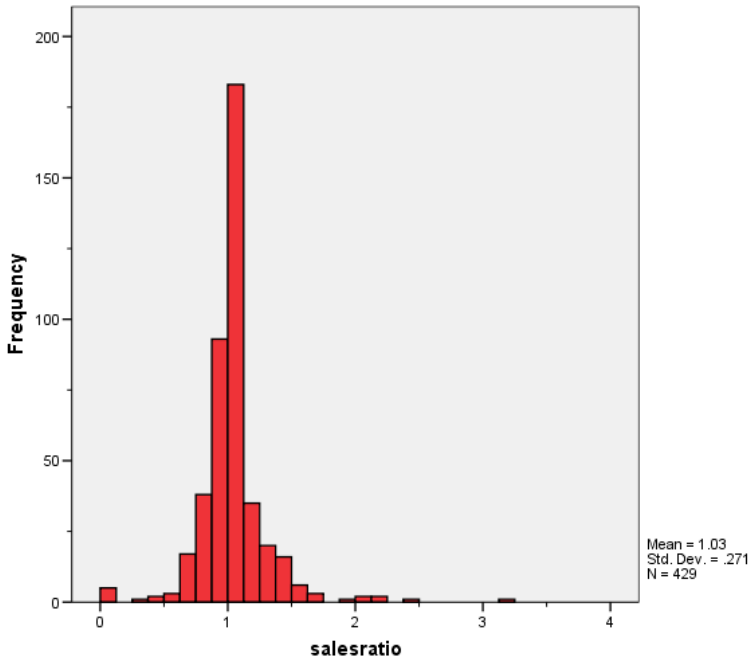
Based on the results of these comparisons, we concluded that the Summit County assessor was valuing sold and unsold commercial properties consistently.

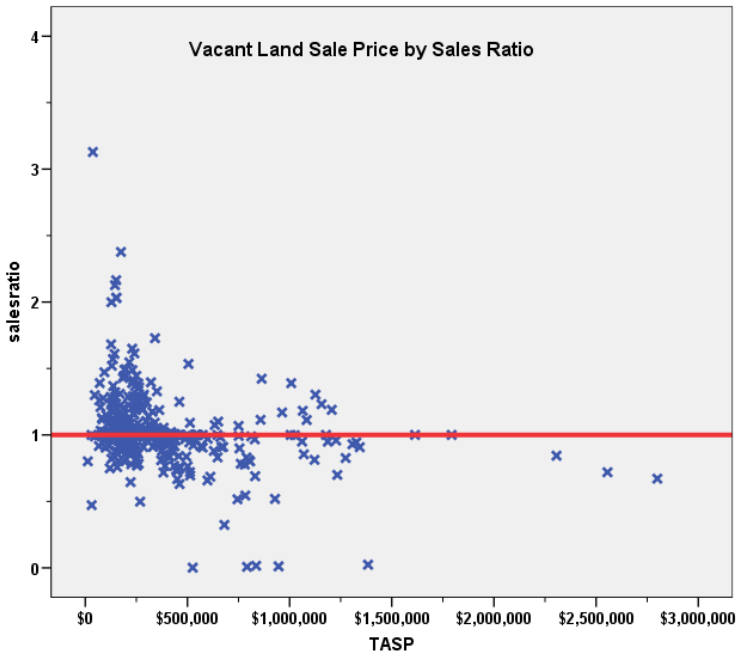
V. VACANT LAND SALE RESULTS

There were 429 qualified vacant land sales for this analysis. Vacant land sales for Economic Areas 1 and 3 spanned the 60-month period ending June 30, 2016, while vacant land sales in Economic Areas 2, 4, 5 and 6 spanned the 36-month period ending June 30, 2016. The sales ratio analysis results were as follows:

Median	**1.000**
Price Related Differential	**1.074**
Coefficient of Dispersion	**14.6**

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:





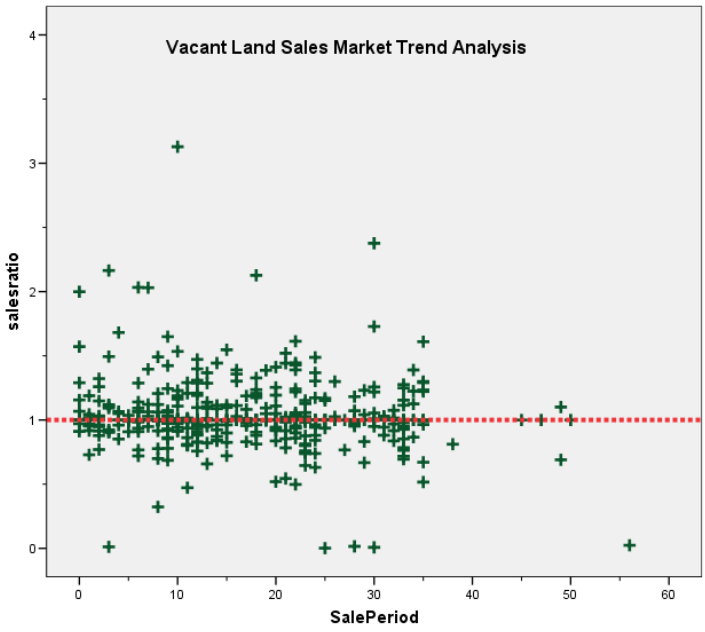
Vacant Land Market Trend Analysis

The vacant land sales were next analyzed for residual market trending, examining the sale ratios across the 36 and 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)	1.073	.024		44.521	.000
	SalePeriod	-.003	.001	-.103	-2.141	.033

a. Dependent Variable: salesratio



The market trend results indicated no statistically significant trend. We concluded that the assessor has adequately considered market tending in Summit County's vacant land valuation for 2017.

Sold/Unsold Analysis

We compared the 2017 median change in actual value between taxable years 2016 and 2017 for vacant land properties to determine if sold and unsold properties were valued consistently, as follows:

Group	N	Median Chg Val	Mean Chg Val
Unsold	2,626	0.92	1.06
Sold	397	0.91	0.96

We next stratified this analysis by subdivision with at least 3 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	65	1.05	1.09
	SOLD	5	.99	1.01
1170	UNSOLD	119	1.05	1.11
	SOLD	3	1.16	1.14
120	UNSOLD	146	1.03	1.05
	SOLD	3	1.05	1.23
1216	UNSOLD	126	1.02	1.04
	SOLD	8	1.09	1.20
1220	UNSOLD	287	1.08	1.23
	SOLD	9	1.16	1.15
1299	UNSOLD	47	1.03	1.06
	SOLD	12	1.13	1.18
130	UNSOLD	113	1.08	1.14
	SOLD	5	1.10	1.25
1488	UNSOLD	77	1.33	1.38
	SOLD	4	1.50	1.59
1611	UNSOLD	86	.91	1.04
	SOLD	5	1.43	1.45
1613	UNSOLD	330	1.34	1.36
	SOLD	42	1.41	1.41
1619	UNSOLD	69	1.08	1.16
	SOLD	4	1.00	.99
1721	UNSOLD	102	.90	.95
	SOLD	3	.89	.88
1785	UNSOLD	154	1.15	1.13
	SOLD	11	1.04	1.23
1812	UNSOLD	84	1.04	1.05
	SOLD	4	1.10	1.07
20	UNSOLD	137	1.08	1.19
	SOLD	3	.75	.91
2018	UNSOLD	86	1.07	1.08
	SOLD	11	1.18	1.20
2025	UNSOLD	18	1.08	1.10
	SOLD	4	1.07	1.09
2032	UNSOLD	23	1.29	1.30
	SOLD	3	1.11	1.11
2070	UNSOLD	40	1.13	1.23
	SOLD	14	1.33	1.36
2076	UNSOLD	27	1.07	1.12
	SOLD	6	1.27	1.24
2109	UNSOLD	18	1.00	1.02
	SOLD	6	1.02	1.00
2121	UNSOLD	20	1.23	1.14
	SOLD	3	1.20	1.11
2159	UNSOLD	27	1.04	1.08
	SOLD	5	.98	.99
2202	UNSOLD	20	1.13	1.61
	SOLD	3	.79	.81
2208	UNSOLD	39	1.05	1.10
	SOLD	14	1.07	1.09
223	UNSOLD	8	1.17	1.15
	SOLD	3	1.18	1.18

240	UNSOLD	35	1.13	1.15
	SOLD	3	1.04	1.10
250	UNSOLD	114	1.04	1.04
	SOLD	3	.85	.85
300	UNSOLD	68	.94	.95
	SOLD	3	.95	1.04
350	UNSOLD	245	1.21	1.24
	SOLD	3	1.18	1.19
406	UNSOLD	261	1.06	1.20
	SOLD	23	1.07	1.21
448	UNSOLD	31	1.07	1.10
	SOLD	4	1.05	1.08
583	UNSOLD	9	1.11	1.12
	SOLD	5	1.07	1.15
607	UNSOLD	27	.93	.97
	SOLD	3	.90	.93
651	UNSOLD	280	1.05	1.09
	SOLD	21	1.16	1.23
656	UNSOLD	29	1.21	1.22
	SOLD	3	1.55	1.53
690	UNSOLD	56	1.07	1.13
	SOLD	5	1.17	1.17
74	UNSOLD	110	1.09	1.18
	SOLD	3	1.02	1.06
880	UNSOLD	31	.87	.93
	SOLD	4	.91	.88
9000	UNSOLD	798	1.05	4.66
	SOLD	14	1.32	1.35

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

V. AGRICULTURAL IMPROVEMENTS ANALYSIS

The final statistical verification concerned the assigned actual values for agricultural residential improvements. We compared the actual value per square foot rate for this group and compared it to rates assigned to residential single family improvements in Summit County.

The following indicates that agricultural residential improvements were valued in a manner similar to the single family residential improvements in this county:

Report
IMPVALSF

ABSTRIMP	N	Median	Mean
1212.00	9319	$259.25	$293.63
4277.00	7	$249.81	$274.45

Hypothesis Test Summary

	Null Hypothesis	Test	Sig.	Decision
1	The distribution of IMPVALSF is the same across categories of ABSTRIMP.	Independent-Samples Mann-Whitney U Test	.800	Retain the null hypothesis.

Asymptotic significances are displayed. The significance level is .05.

VI. 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

Res Condo	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
0	1.0	1.009	1.020	1.000	1.000	1.000	95.5%	1.007	1.002	1.013	1.007	.051	12.2%
1	1.0	1.000	1.005	1.000	1.000	1.000	95.5%	.994	.991	.997	1.009	.039	6.0%

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

Commercial/Industrial

Ratio Statistics for CURRTOT / TASP

Mean	95% Confidence Interval for Mean		Median	95% Confidence Interval for Median			Weighted Mean	95% Confidence Interval for Weighted Mean		Price Related Differential	Coefficient of Dispersion	Coefficient of Variation
	Lower Bound	Upper Bound		Lower Bound	Upper Bound	Actual Coverage		Lower Bound	Upper Bound			Mean Centered
1.008	.962	1.053	.997	.983	1.010	97.1%	.893	.799	.988	1.128	.119	19.8%

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.

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
1.030	1.004	1.055	1.000	1.000	1.000	95.8%	.958	.922	.994	1.074	.146	26.3%

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.

Residential Median Ratio Stratification

Sale Price

Case Processing Summary

		Count	Percent
SPRec	LT $25K	2	0.1%
	$25K to $50K	4	0.1%
	$50K to $100K	1	0.0%
	$100K to $150K	98	2.6%
	$150K to $200K	187	4.9%
	$200K to $300K	653	17.1%
	$300K to $500K	1201	31.4%
	$500K to $750K	831	21.7%
	$750K to $1,000K	429	11.2%
	Over $1,000K	421	11.0%
Overall		3827	100.0%
Excluded		0	
Total		3827	

Ratio Statistics for CURRTOT / TASP

Group	Median	Price Related Differential	Coefficient of Dispersion	Coefficient of Variation Median Centered
LT $25K	1.177	1.056	.150	21.3%
$25K to $50K	.884	1.002	.034	4.8%
$50K to $100K	1.547	1.000	.000	.
$100K to $150K	1.043	1.001	.071	10.5%
$150K to $200K	1.000	1.001	.047	8.1%
$200K to $300K	1.000	1.000	.046	9.5%
$300K to $500K	1.000	1.001	.041	8.6%
$500K to $750K	1.000	1.001	.039	8.4%
$750K to $1,000K	1.000	1.000	.043	11.7%
Over $1,000K	1.000	1.002	.048	10.8%
Overall	1.000	1.005	.044	9.5%

Subclass

Case Processing Summary

		Count	Percent
ABSTRIMP	.00	37	1.0%
	1212.00	987	25.8%
	1213.00	219	5.7%
	1214.00	479	12.5%
	1215.00	1	0.0%
	1217.00	8	0.2%
	1218.00	4	0.1%
	1219.00	6	0.2%
	1220.00	1	0.0%
	1229.00	6	0.2%
	1230.00	2069	54.1%
	1234.00	1	0.0%
	1245.50	1	0.0%
	1256.67	1	0.0%
	1750.00	3	0.1%
	1752.50	1	0.0%
	3268.40	1	0.0%
	3278.33	1	0.0%
	4278.50	1	0.0%
Overall		3827	100.0%
Excluded		0	
Total		3827	

Ratio Statistics for CURRTOT / TASP

Group	Median	Price Related Differential	Coefficient of Dispersion	Coefficient of Variation Median Centered
.00	1.023	1.036	.147	20.0%
1212.00	1.000	1.010	.056	15.0%
1213.00	1.000	1.008	.041	7.0%
1214.00	1.000	1.003	.032	5.4%
1215.00	.994	1.000	.000	.
1217.00	.998	1.003	.025	4.4%
1218.00	1.031	1.004	.042	5.4%
1219.00	1.000	1.014	.071	10.9%
1220.00	.994	1.000	.000	.
1229.00	.918	1.045	.125	22.1%
1230.00	1.000	1.009	.039	6.0%
1234.00	.735	1.000	.000	.
1245.50	.997	1.000	.000	.
1256.67	.917	1.000	.000	.
1750.00	.857	1.001	.066	10.2%
1752.50	.927	1.000	.000	.
3268.40	.761	1.000	.000	.
3278.33	.722	1.000	.000	.
4278.50	.304	1.000	.000	.
Overall	1.000	1.005	.044	9.5%

Age

Case Processing Summary

		Count	Percent
AgeRec	0	37	1.0%
	Over 100	9	0.2%
	75 to 100	10	0.3%
	50 to 75	72	1.9%
	25 to 50	1826	47.7%
	5 to 25	1641	42.9%
	5 or Newer	232	6.1%
Overall		3827	100.0%
Excluded		0	
Total		3827	

Ratio Statistics for CURRTOT / TASP

Group	Median	Price Related Differential	Coefficient of Dispersion	Coefficient of Variation Median Centered
0	1.023	1.036	.147	20.0%
Over 100	.984	1.054	.147	22.9%
75 to 100	1.000	.997	.014	2.8%
50 to 75	1.000	.990	.100	23.8%
25 to 50	1.000	1.004	.045	8.6%
5 to 25	1.000	1.004	.036	5.9%
5 or Newer	1.000	1.007	.057	20.2%
Overall	1.000	1.005	.044	9.5%

Improved Area

Case Processing Summary

		Count	Percent
ImpSFRec	0	37	1.0%
	LE 500 sf	224	5.9%
	500 to 1,000 sf	1185	31.0%
	1,000 to 1,500 sf	1267	33.1%
	1,500 to 2,000 sf	526	13.7%
	2,000 to 3,000 sf	401	10.5%
	3,000 sf or Higher	187	4.9%
Overall		3827	100.0%
Excluded		0	
Total		3827	

Ratio Statistics for CURRTOT / TASP

Group	Median	Price Related Differential	Coefficient of Dispersion	Coefficient of Variation Median Centered
0	1.023	1.036	.147	20.0%
LE 500 sf	1.000	1.004	.047	8.4%
500 to 1,000 sf	1.000	1.005	.041	6.7%
1,000 to 1,500 sf	1.000	1.005	.037	6.3%
1,500 to 2,000 sf	1.000	1.005	.048	10.8%
2,000 to 3,000 sf	1.000	1.012	.053	16.6%
3,000 sf or Higher	1.000	1.010	.059	15.0%
Overall	1.000	1.005	.044	9.5%

Improvement Quality

Case Processing Summary

		Count	Percent
QUALITY		37	1.0%
	A	6	0.2%
	B	187	4.9%
	C	946	24.7%
	D	2565	67.0%
	E	79	2.1%
	F	6	0.2%
	X	1	0.0%
Overall		3827	100.0%
Excluded		0	
Total		3827	

Ratio Statistics for CURRTOT / TASP

Group	Median	Price Related Differential	Coefficient of Dispersion	Coefficient of Variation Median Centered
	1.023	1.036	.147	20.0%
A	1.000	1.001	.017	3.7%
B	1.000	1.013	.060	20.0%
C	1.000	1.004	.042	9.7%
D	1.000	1.005	.042	7.9%
E	1.000	1.015	.038	9.6%
F	1.118	.999	.128	15.0%
X	1.000	1.000	.000	.
Overall	1.000	1.005	.044	9.5%

Improvement Condition

Case Processing Summary

		Count	Percent
CONDITION		37	1.0%
	D	3768	98.5%
	E	17	0.4%
	F	5	0.1%
Overall		3827	100.0%
Excluded		0	
Total		3827	

Ratio Statistics for CURRTOT / TASP

Group	Median	Price Related Differential	Coefficient of Dispersion	Coefficient of Variation Median Centered
	1.023	1.036	.147	20.0%
D	1.000	1.005	.043	9.3%
E	1.014	1.007	.050	9.5%
F	1.223	1.009	.107	15.3%
Overall	1.000	1.005	.044	9.5%

Commercial Median Ratio Stratification

Sale Price

Case Processing Summary

		Count	Percent
SPRec	$50K to $100K	4	5.3%
	$100K to $150K	2	2.6%
	$150K to $200K	7	9.2%
	$200K to $300K	13	17.1%
	$300K to $500K	16	21.1%
	$500K to $750K	6	7.9%
	$750K to $1,000K	9	11.8%
	Over $1,000K	19	25.0%
Overall		76	100.0%
Excluded		0	
Total		76	

Ratio Statistics for CURRTOT / TASP

Group	Median	Price Related Differential	Coefficient of Dispersion	Coefficient of Variation Median Centered
$50K to $100K	.968	1.009	.063	7.8%
$100K to $150K	1.076	1.006	.108	15.3%
$150K to $200K	1.001	1.006	.133	22.9%
$200K to $300K	1.009	.999	.060	14.0%
$300K to $500K	.999	.997	.098	21.3%
$500K to $750K	1.015	1.011	.084	16.2%
$750K to $1,000K	.968	.992	.205	29.2%
Over $1,000K	.912	1.052	.142	20.2%
Overall	.997	1.128	.119	20.0%

Subclass

Case Processing Summary

		Count	Percent
ABSTRIMP	1230.00	1	1.3%
	1732.50	1	1.3%
	1741.00	3	3.9%
	1745.00	1	1.3%
	2212.00	11	14.5%
	2215.00	3	3.9%
	2220.00	1	1.3%
	2230.00	12	15.8%
	2235.00	3	3.9%
	2245.00	40	52.6%
Overall		76	100.0%
Excluded		0	
Total		76	

Ratio Statistics for CURRTOT / TASP

Group	Median	Price Related Differential	Coefficient of Dispersion	Coefficient of Variation Median Centered
1230.00	.882	1.000	.000	.
1732.50	.775	1.000	.000	.
1741.00	1.063	1.040	.054	8.1%
1745.00	1.016	1.000	.000	.
2212.00	.986	1.048	.172	24.9%
2215.00	.915	1.043	.205	33.6%
2220.00	.923	1.000	.000	.
2230.00	.998	1.169	.143	24.0%
2235.00	1.081	1.077	.117	23.3%
2245.00	.998	1.015	.092	18.3%
Overall	.997	1.128	.119	20.0%

Age

Case Processing Summary

		Count	Percent
AgeRec	Over 100	3	3.9%
	75 to 100	1	1.3%
	50 to 75	4	5.3%
	25 to 50	33	43.4%
	5 to 25	34	44.7%
	5 or Newer	1	1.3%
Overall		76	100.0%
Excluded		0	
Total		76	

Ratio Statistics for CURRTOT / TASP

Group	Median	Price Related Differential	Coefficient of Dispersion	Coefficient of Variation Median Centered
Over 100	1.007	1.030	.057	10.5%
75 to 100	1.013	1.000	.000	.
50 to 75	.810	1.020	.163	19.8%
25 to 50	.989	1.074	.093	16.6%
5 to 25	1.009	1.210	.147	23.6%
5 or Newer	.974	1.000	.000	.
Overall	.997	1.128	.119	20.0%

Improved Area

Case Processing Summary

		Count	Percent
ImpSFRec	LE 500 sf	4	5.3%
	500 to 1,000 sf	14	18.4%
	1,000 to 1,500 sf	16	21.1%
	1,500 to 2,000 sf	6	7.9%
	2,000 to 3,000 sf	11	14.5%
	3,000 sf or Higher	25	32.9%
Overall		76	100.0%
Excluded		0	
Total		76	

Ratio Statistics for CURRTOT / TASP

Group	Median	Price Related Differential	Coefficient of Dispersion	Coefficient of Variation Median Centered
LE 500 sf	.968	1.009	.063	7.8%
500 to 1,000 sf	1.000	1.056	.078	13.7%
1,000 to 1,500 sf	.999	1.016	.035	6.1%
1,500 to 2,000 sf	.941	1.126	.169	28.0%
2,000 to 3,000 sf	1.063	1.008	.137	19.0%
3,000 sf or Higher	.983	1.140	.179	27.8%
Overall	.997	1.128	.119	20.0%

Improvement Quality

Case Processing Summary

		Count	Percent
QUALITY	C	12	15.8%
	D	61	80.3%
	E	3	3.9%
Overall		76	100.0%
Excluded		0	
Total		76	

Ratio Statistics for CURRTOT / TASP

Group	Median	Price Related Differential	Coefficient of Dispersion	Coefficient of Variation Median Centered
C	1.006	1.269	.083	18.0%
D	.997	1.096	.124	20.5%
E	.987	1.006	.166	25.4%
Overall	.997	1.128	.119	20.0%

Improvement Condition

Case Processing Summary

		Count	Percent
CONDITION	D	73	96.1%
	E	3	3.9%
Overall		76	100.0%
Excluded		0	
Total		76	

Ratio Statistics for CURRTOT / TASP

Group	Median	Price Related Differential	Coefficient of Dispersion	Coefficient of Variation Median Centered
D	.997	1.128	.118	20.0%
E	.987	1.137	.157	24.4%
Overall	.997	1.128	.119	20.0%

Vacant Land Median Ratio Stratification

Sale Price

Case Processing Summary

		Count	Percent
SPRec	LT $25K	1	0.2%
	$25K to $50K	5	1.2%
	$50K to $100K	22	5.1%
	$100K to $150K	46	10.7%
	$150K to $200K	74	17.2%
	$200K to $300K	105	24.5%
	$300K to $500K	99	23.1%
	$500K to $750K	34	7.9%
	$750K to $1,000K	18	4.2%
	Over $1,000K	25	5.8%
Overall		429	100.0%
Excluded		0	
Total		429	

Ratio Statistics for CURRLND / TASP

Group	Median	Price Related Differential	Coefficient of Dispersion	Coefficient of Variation Median Centered
LT $25K	.801	1.000	.000	.
$25K to $50K	1.000	.989	.593	110.7%
$50K to $100K	1.000	1.006	.103	17.1%
$100K to $150K	1.063	.997	.168	27.5%
$150K to $200K	1.000	1.002	.142	31.1%
$200K to $300K	1.000	.999	.131	20.3%
$300K to $500K	1.000	1.009	.085	14.7%
$500K to $750K	.961	1.005	.159	27.5%
$750K to $1,000K	.806	1.003	.348	50.1%
Over $1,000K	.950	1.037	.176	27.6%
Overall	1.000	1.074	.146	27.2%

Subclass

Case Processing Summary

		Count	Percent
ABSTRLND	100.00	135	31.5%
	190.00	12	2.8%
	200.00	8	1.9%
	401.00	29	6.8%
	491.00	12	2.8%
	521.00	2	0.5%
	531.00	1	0.2%
	541.00	2	0.5%
	1112.00	173	40.3%
	1115.00	3	0.7%
	1135.00	3	0.7%
	1170.00	2	0.5%
	1177.00	1	0.2%
	2115.00	40	9.3%
	2230.00	3	0.7%
	4148.00	1	0.2%
	5140.00	2	0.5%
Overall		429	100.0%
Excluded		0	
Total		429	

Ratio Statistics for CURRLND / TASP

Group	Median	Price Related Differential	Coefficient of Dispersion	Coefficient of Variation Median Centered
100.00	1.000	1.027	.059	13.6%
190.00	1.000	1.020	.045	12.0%
200.00	.999	1.013	.031	6.0%
401.00	1.000	1.020	.051	10.8%
491.00	1.000	1.010	.040	9.9%
521.00	1.047	1.013	.045	6.3%
531.00	1.000	1.000	.000	.
541.00	.984	1.006	.017	2.3%
1112.00	1.028	1.114	.234	34.7%
1115.00	1.188	.987	.068	11.4%
1135.00	.937	.998	.065	10.0%
1170.00	.999	1.003	.009	1.3%
1177.00	.024	1.000	.000	.
2115.00	.999	.972	.091	12.6%
2230.00	.012	.994	.235	35.2%
4148.00	.001	1.000	.000	.
5140.00	.637	1.130	.258	36.5%
Overall	1.000	1.074	.146	27.2%