2021
PUEBLO COUNTY
PROPERTY ASSESSMENT
STUDY

WILDROSE
APPRAISAL, INCORPORATED
Audit Division

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APPRAISAL, INCORPORATED
Audit Division

September 15, 2021

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

RE: Final Report for the 2021 Colorado Property Assessment Study

Dear Ms. Mullis:

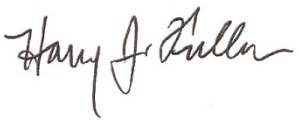
Wildrose Appraisal Inc.-Audit Division is pleased to submit the Final Reports for the 2021 Colorado Property Assessment Study.

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

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

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

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



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.

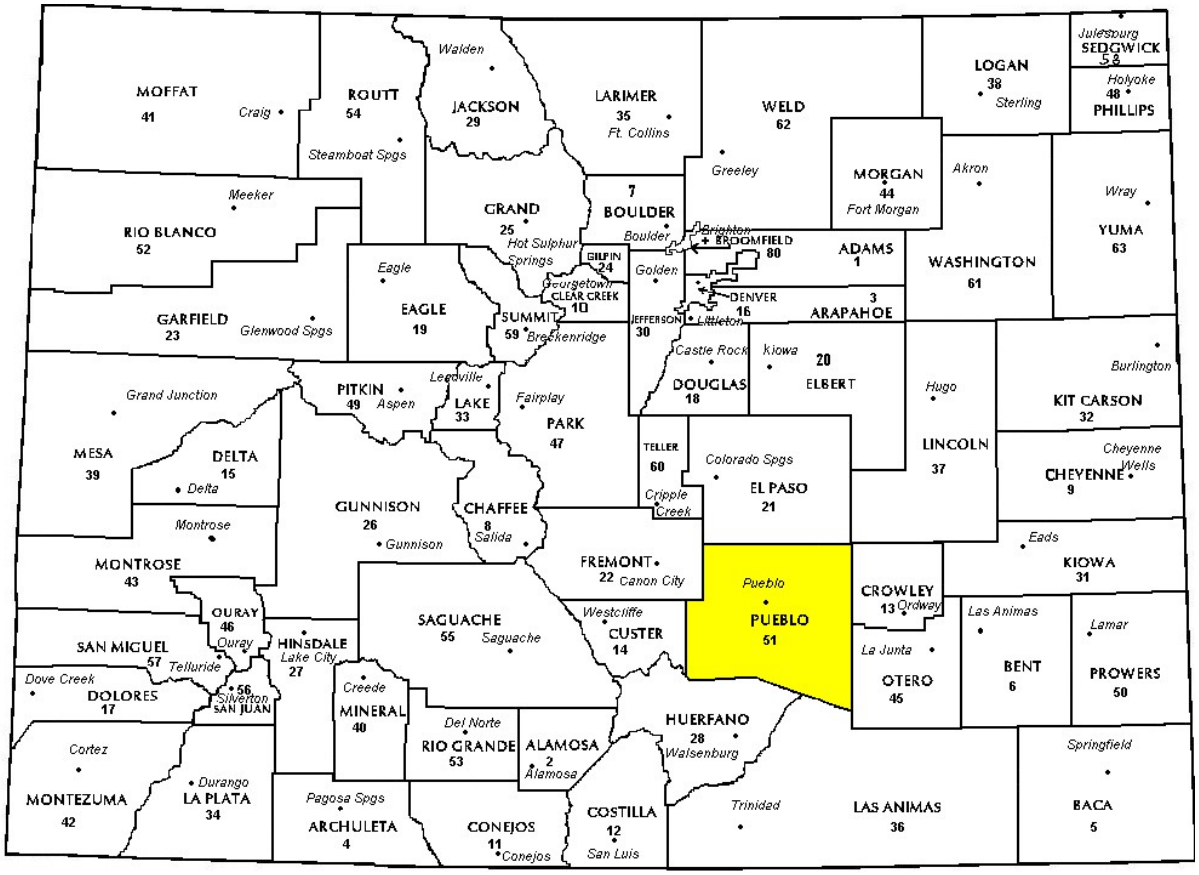
Statistical analysis is performed on vacant land, residential properties, commercial industrial properties, agricultural land, and personal property. The statistical study results are compared with State Board of Equalization compliance requirements and the manuals published by the State Property Tax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

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

REGIONAL/HISTORICAL SKETCH OF PUEBLO COUNTY

Regional Information

Pueblo County is located in the Front Range region of Colorado. The Colorado Front Range is a colloquial geographic term for the populated areas of the State that are just east of the foothills of the Front Range. It includes Adams, Arapahoe, Boulder, Broomfield, Denver, Douglas, El Paso, Jefferson, Larimer, Pueblo, and Weld counties.



Historical Information

Pueblo County has approximately 2,386.1 square miles and an estimated population of approximately 168,424 people with 66.7 people per square mile, according to the U.S. Census Bureau's 2020 estimated census data. This represents a 5.9 percent change from April 1, 2010 to July 1, 2019.

Pueblo County, one of the seventeen original territorial counties, was established in 1861 with an area of 2,405 square miles. The county was named for its county seat, Pueblo, Spanish for 'town' or 'village.' Originally called Independence, it had been a settlement for many years, occupied at times by Spaniards, trappers, Indian traders, and Mexicans.

Pueblo is a Home Rule Municipality and is the county seat and the most populous city of Pueblo County. It is situated at the confluence of the Arkansas River and Fountain Creek. The area is considered to be semi-arid with approximately 14 inches of precipitation annually; however with its location in the "banana belt," Pueblo tends to get less snow than the other major cities in Colorado. Pueblo is one of the largest steel-producing cities in the United States. Because of this, Pueblo is referred to as the "Steel City." Many consider Pueblo to be the economic hub of south eastern Colorado. Due to this some people call Pueblo "Colorado's second city" even though Pueblo is the state's ninth most populous city. It is now home to a number of electronics and aviation companies. The Historic Arkansas River Project (HARP) is a beautiful river walk that graces the historic Union Avenue district. It shows the history of the Pueblo Flood.

Pueblo is also the home to Colorado's largest single event, the Colorado State Fair and the largest parade, the state fair parade. Pueblo also hosts an annual Chili Festival and the Wild West Fest.

(www.Wikipedia.org, William Bright, Colorado Place Names, 3rd Edition, Johnson Books, 2004, p. 143)

RATIO ANALYSIS

Methodology

All significant classes of property were analyzed. Sales were collected for each property class over the eighteen month period from January 1, 2019 through June 30th, 2020. Property classes with less than thirty sales had the sales period extended in six month increments up to an additional forty-two months. If this extended sales period did not produce the minimum thirty qualified sales, the Audit performed supplemental appraisals to reach the minimum.

Although it was required that we examine the median and coefficient of dispersion for all counties, we also calculated the weighted mean and price-related differential for each class of property. Counties were not passed or failed by these latter measures, but were counseled if there were anomalies noted during our analysis. Qualified sales were based on the qualification code used by each county, which were typically coded as either "Q" or "C." The ratio analysis included all sales. The data was trimmed for counties with obvious outliers using IAAO standards for data analysis. In every case, we examined the loss in data from trimming to ensure that only true outliers were excluded. Any county with a significant portion of sales excluded by this trimming method was examined further. No county was allowed to pass the audit if more than 5% of the sales were "lost" because of trimming.

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

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

Conclusions

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

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

The results for Pueblo County are:

Pueblo County Ratio Grid					
Property Class	Number of Qualified Sales	Unweighted Median Ratio	Price Related Differential	Coefficient of Dispersion	Time Trend Analysis
Commercial/Industrial	31	0.977	1.078	12.2	Compliant
Residential	2,732	0.973	1.003	9.2	Compliant
Vacant Land	356	0.967	1.183	17.9	Compliant

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

Pueblo 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
Residential	Compliant
Vacant Land	Compliant

Conclusions

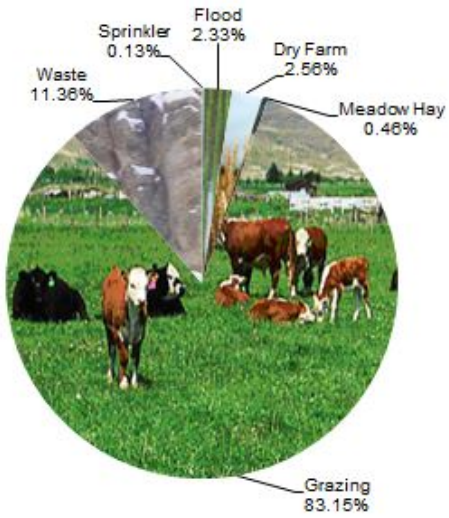
After applying the above described methodologies, it is concluded that Pueblo County is reasonably treating its sold and unsold properties in the same manner.

Recommendations

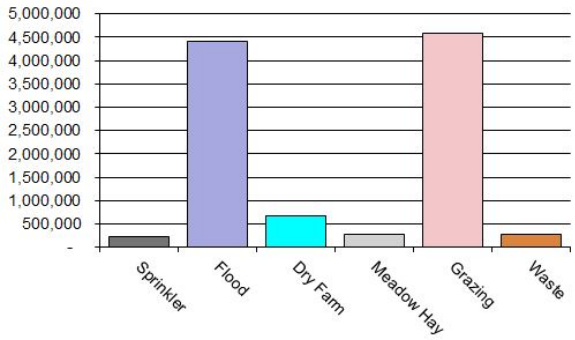
None

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:

Pueblo County Agricultural Land Ratio Grid						
Abstract Code	Land Class	Number Of Acres	County Value Per Acre	County Assessed Total Value	WRA Total Value	Ratio
4107	Sprinkler	1,337	168.81	225,689	225,846	1.00
4117	Flood	23,640	186.24	4,402,826	4,368,245	1.01
4127	Dry Farm	25,969	26.00	675,182	622,029	1.09
4137	Meadow Hay	4,676	60.06	280,843	280,843	1.00
4147	Grazing	843,161	5.43	4,577,183	4,577,183	1.00
4167	Waste	115,217	2.42	278,614	278,614	1.00
Total/Avg		**1,014,001**	**10.30**	**10,440,337**	**10,352,760**	**1.01**

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

Pueblo 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

Pueblo 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.:

- Field Inspections
- Phone Interviews
- In-Person Interviews with Owners/Tenants
- Written Correspondence other than Questionnaire
- Personal Knowledge of Occupants at Assessment Date
- Aerial Photography/Pictometry

Pueblo 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.:

- Property Record Card Analysis
- Questionnaires
- Field Inspections
- Phone Interviews
- In-Person Interviews with Owners/Tenants
- Written Correspondence other than Questionnaire
- Personal Knowledge of Occupants at Assessment Date
- Aerial Photography/Pictometry

Pueblo County has substantially complied with the procedures provided by the Division of Property Taxation for the valuation of land under residential improvements that may or may not be integral to an agricultural operation.

Recommendations

None

SALES VERIFICATION

According to Colorado Revised Statutes:

A representative body of sales is required when considering the market approach to appraisal.

(8) In any case in which sales prices of comparable properties within any class or subclass are utilized when considering the market approach to appraisal in the determination of actual value of any taxable property, the following limitations and conditions shall apply:

(a)(I) Use of the market approach shall require a representative body of sales, including sales by a lender or government, sufficient to set a pattern, and appraisals shall reflect due consideration of the degree of comparability of sales, including the extent of similarities and dissimilarities among properties that are compared for assessment purposes. In order to obtain a reasonable sample and to reduce sudden price changes or fluctuations, all sales shall be included in the sample that reasonably reflect a true or typical sales price during the period specified in section 39-1-104 (10.2). Sales of personal property exempt pursuant to the provisions of sections 39-3-102, 39-3-103, and 39-3-119 to 39-3-122 shall not be included in any such sample.

(b) Each such sale included in the sample shall be coded to indicate a typical, negotiated sale, as screened and verified by the assessor. (39-1-103, C.R.S.)

The assessor is required to use sales of real property only in the valuation process.

(8)(f) Such true and typical sales shall include only those sales which have been determined on an individual basis to reflect the selling price of the real property only or which have been adjusted on an individual basis to reflect the selling price of the real property only. (39-1-103, C.R.S.)

Part of the Property Assessment Study is the sales verification analysis. WRA has used the above-cited statutes as a guide in our study of the county's procedures and practices for verifying sales.

WRA reviewed the sales verification procedures in 2021 for Pueblo County. This study was conducted by checking selected sales from the master sales list for the current valuation period. Specifically WRA selected 95 sales listed as unqualified.

All but 2 of the sales selected in the sample gave reasons that were clear and supportable. Two sales had insufficient reason for disqualification.

For residential, commercial, and vacant land sales with considerations over $100,000, the contractor has examined and reported the ratio of qualified sales to total sales by class and performed the following analyses of unqualified sales:

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

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

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

The following subclasses were analyzed for Pueblo County:

0100 Residential Lots
0200 Commercial Lots
2230 Special Purpose

Conclusions

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

Recommendations

None

ECONOMIC AREA REVIEW AND EVALUATION

Methodology

Pueblo County has submitted a written narrative describing the economic areas that make up the county's market areas. Pueblo 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 Pueblo 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 2021 in Pueblo 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

Pueblo 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.

Pueblo County has been reviewed for their procedures and adherence to guidelines when assessing and valuing agricultural and commercial 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

Pueblo 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

Pueblo 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.

Pueblo 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
- Local Telephone Directories, Newspapers or Other Local Publications
- Personal Observation, Physical Canvassing or Word of Mouth

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.

Pueblo County submitted their personal property written audit plan and was current for the 2021 valuation period. The number and listing of businesses audited was also submitted and was in conformance with the written audit plan. The following audit triggers were used by the county to select accounts to be audited:

- Businesses in a selected area
- New businesses filing for the first time
- Accounts with greater than 10% change
- Incomplete or inconsistent declarations
- Accounts with omitted property
- Non-filing Accounts - Best Information Available
- Accounts close to the $7,900 actual value exemption status
- Lowest or highest quartile of value per square foot

- Accounts protested with substantial disagreement

Pueblo County's median ratio is 1.00. This is in compliance with the State Board of Equalization (SBOE) compliance requirements which range from .90 to 1.10 with no COD requirements.

Conclusions

Pueblo 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

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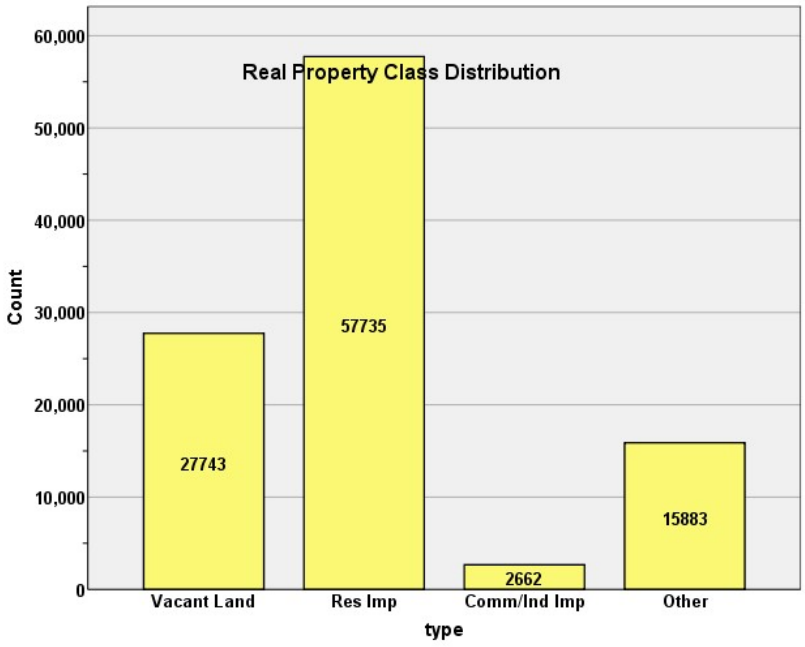
STATISTICAL APPENDIX

STATISTICAL COMPLIANCE REPORT
FOR PUEBLO COUNTY
2021

I. OVERVIEW

Pueblo County is located along the southern portion of Colorado's Front Range urban corridor. The county had a total of 104,023 real property parcels, according to data submitted by the county assessor's office in 2021. The following provides a breakdown of property classes for this county:



The vacant land class of properties was dominated by residential land. Residential lots (coded 100) accounted for 81.0% of all vacant land parcels.

For residential improved properties, single family properties accounted for 94.0% of all residential properties.

Commercial and industrial properties represented a much smaller proportion of property classes in comparison. Commercial/industrial properties accounted for 2.6% of all such properties in this county.

Based on the Audit questionnaire filled out by the assessor, the assessor uses economic area and neighborhood levels in the valuation of residential properties. For this analysis, we will analyze economic area and neighborhood in the following residential sales ratio and sold/unsold comparison analyses.

II. DATA FILES

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

III. RESIDENTIAL SALES RESULTS

There were 2,732 qualified residential sales that occurred in the 18-month sale period ending June 30, 2020. The sales ratio analysis results were as follows:

Median	**0.973**
Price Related Differential	**1.003**
Coefficient of Dispersion	**9.2**

We next stratified the sale ratio analysis by economic area and neighborhood. The minimum count for the neighborhood stratification is 25 sales. The following are the results of this stratification analysis:

Economic Area

Case Processing Summary

		Count	Percent
ECONAREA	1.00	100	3.7%
	2.00	257	9.5%
	3.00	304	11.2%
	4.00	122	4.5%
	5.00	290	10.7%
	6.00	208	7.7%
	7.00	274	10.1%
	8.00	468	17.3%
	9.00	266	9.8%
	10.00	77	2.8%
	11.00	62	2.3%
	12.00	101	3.7%
	13.00	184	6.8%
Overall		2713	100.0%
Excluded		19	
Total		2732	

Ratio Statistics for CURRTOT / TASP

Group	Median	Price Related Differential	Coefficient of Dispersion
1.00	.988	1.008	.119
2.00	.965	.999	.099
3.00	.980	.996	.089
4.00	.987	1.009	.116
5.00	.988	1.003	.098
6.00	.966	.997	.089
7.00	.971	1.000	.092
8.00	.966	.995	.077
9.00	.970	1.004	.099
10.00	.966	1.000	.071
11.00	.968	1.004	.081
12.00	.975	1.006	.085
13.00	.965	.997	.085
Overall	.973	1.002	.092

Neighborhoods with at least 25 sales

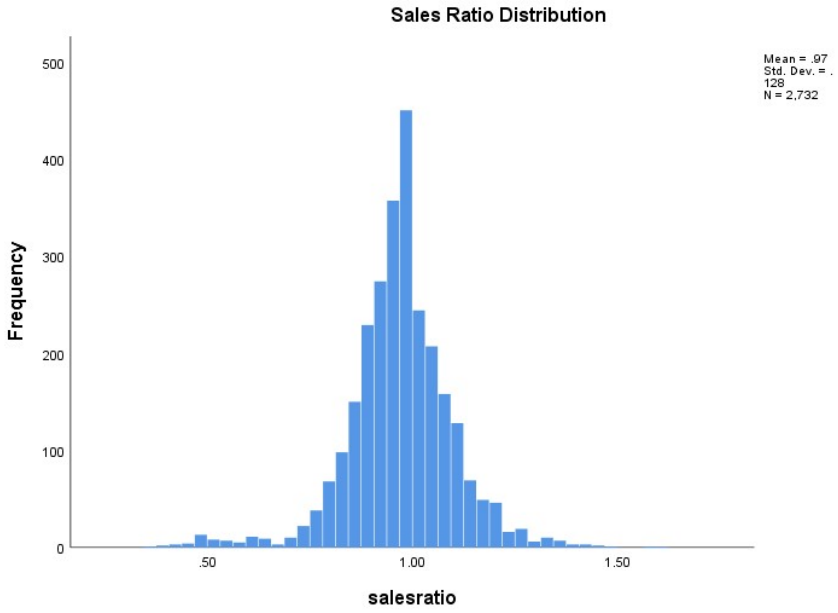
Ratio Statistics for CURRTOT / TASP

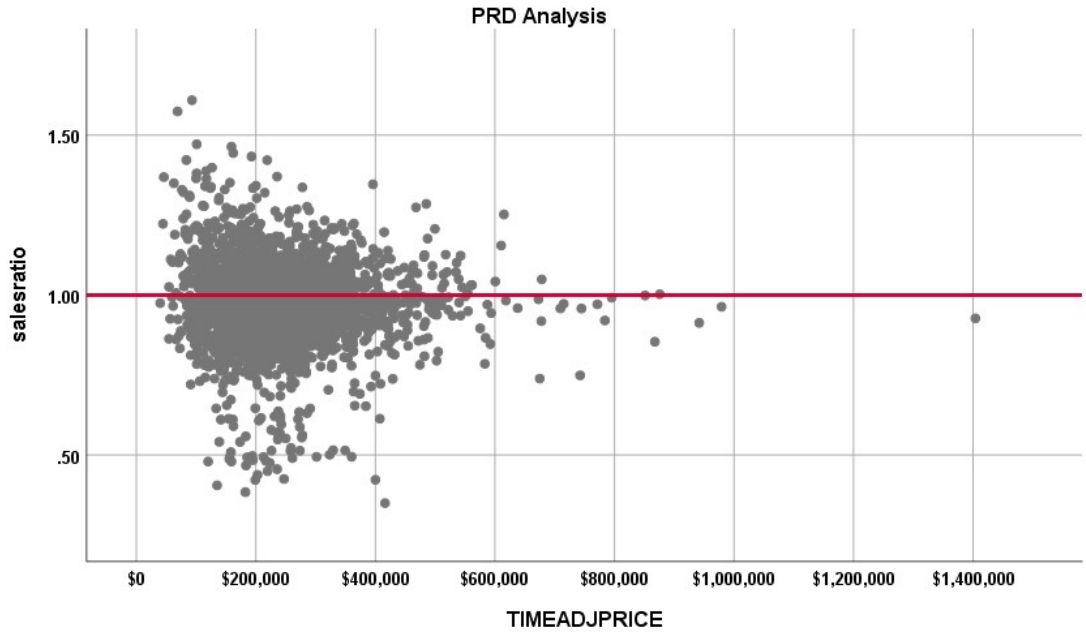
Group	Median	Price Related Differential	Coefficient of Dispersion
10	.989	1.010	.139
20	.970	1.000	.106
30	.949	1.000	.079
35	.992	.997	.075
36	.964	.995	.077
40	.991	1.000	.094
60	.972	.999	.105
63	.964	.999	.100
70	.966	1.006	.092
86	.977	1.021	.124
95	.999	1.003	.094
110	.990	1.003	.114
120	.972	1.006	.096
126	.966	.995	.089
127	.974	1.002	.053
128	.966	.998	.102
129	.945	.990	.118
133	.990	1.002	.109
135	1.054	1.000	.113
150	.949	1.004	.122
151	.994	.999	.080
162	.965	.997	.085
166	.965	.996	.081
167	.951	1.001	.075
177	.976	.999	.078
178	.958	.998	.065
180	.977	.998	.072
181	.962	1.004	.071
182	.979	1.004	.082
191	.970	1.001	.112
204	.969	1.016	.153
215	.972	1.011	.089
Overall	.973	1.003	.099

The above results when stratified by economic area were all in compliance.

In terms of residential neighborhoods with at least 25 sales, there were no neighborhoods with median sales ratios less than the 0.95 lower threshold after rounding to two digits.

The following graphs describe further the sales ratio distribution for these properties:

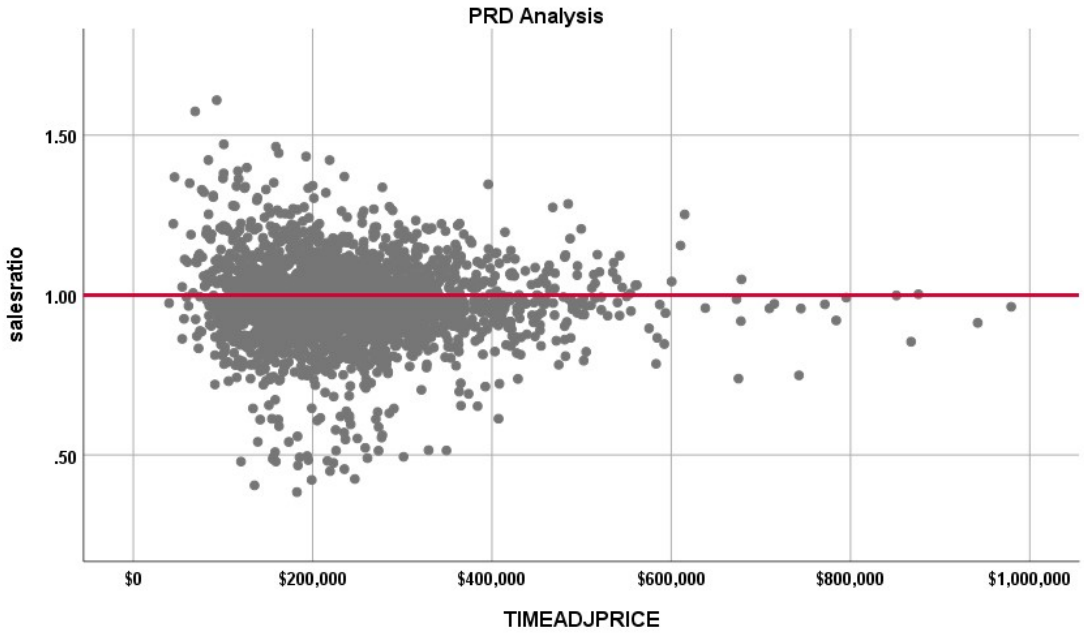




Subclass 1212 PRD Analysis

We next analyzed residential properties identified as 1112 using the state abstract code system. These include single family residences, town homes and purged manufactured homes. The following indicates the distribution of sales ratios across the sale price spectrum:

1212 SALES



The Price-Related Differential (PRD) for 1212 sales is 1.002, which is within IAAO standards for the PRD. We also performed a regression analysis between the sales ratio and the assessor's current value to further test for regressivity or progressivity in the residential sales valuation, as follows:

Coefficients[a]

Model		Unstandardized Coefficients B	Unstandardized Coefficients Std. Error	Standardized Coefficients Beta	t	Sig.
1	(Constant)	.907	.006		152.221	.000
	CURRTOT	.00000028	.000	.225	11.914	.000

a. Dependent Variable: salesratio

The slope of the line at 0.00000028 indicates that there is virtually no slope in the regression line, which indicates that sales ratios are similar across the entire sale price array. This indicates no regressivity or progressivity in the residential values assigned by the assessor.

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

Case Processing Summary

		Count	Percent
SPRec	LT $150K	431	16.2%
	$150K to $200K	528	19.9%
	$200K to $250K	597	22.5%
	$250K to $300K	523	19.7%
	$300K to $400K	401	15.1%
	$400K to $500K	120	4.5%
	Over $500K	54	2.0%
Overall		2654	100.0%
Excluded		0	
Total		2654	

Ratio Statistics for CURRTOT / TASP

Group	Median	Price Related Differential	Coefficient of Dispersion	Coefficient of Variation Median Centered
LT $150K	.986	1.007	.111	15.1%
$150K to $200K	.970	.999	.103	14.7%
$200K to $250K	.967	1.001	.091	12.8%
$250K to $300K	.969	.999	.081	11.3%
$300K to $400K	.975	1.000	.078	10.9%
$400K to $500K	.975	.999	.079	10.7%
Over $500K	.972	1.004	.071	10.0%
Overall	.973	1.002	.092	13.0%

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

Residential Market Trend Analysis

We next analyzed the residential dataset for any residual market trending using the 18-month sale period and stratified by economic area, as follows:

Coefficients[a]

ECONAREA	Model		Unstandardized Coefficients B	Unstandardized Coefficients Std. Error	Standardized Coefficients Beta	t	Sig.
.	1	(Constant)	.748	.097		7.735	.000
		SalePeriod	.011	.015	.179	.750	.463
1.00	1	(Constant)	1.021	.039		25.990	.000
		SalePeriod	-.001	.004	-.035	-.352	.726
2.00	1	(Constant)	.969	.019		51.862	.000
		SalePeriod	.000	.002	-.007	-.114	.910
3.00	1	(Constant)	1.033	.016		63.228	.000
		SalePeriod	-.005	.002	-.186	-3.284	.001
4.00	1	(Constant)	1.117	.040		27.915	.000
		SalePeriod	-.009	.003	-.235	-2.646	.009
5.00	1	(Constant)	1.038	.021		50.040	.000
		SalePeriod	-.005	.002	-.146	-2.509	.013
6.00	1	(Constant)	.961	.018		54.161	.000
		SalePeriod	-.002	.002	-.059	-.843	.400

7.00	1	(Constant)	.979	.018		53.015	.000
		SalePeriod	-.001	.002	-.048	-.799	.425
8.00	1	(Constant)	.979	.012		83.402	.000
		SalePeriod	-.002	.001	-.076	-1.648	.100
9.00	1	(Constant)	.979	.019		52.376	.000
		SalePeriod	-.002	.002	-.067	-1.089	.277
10.00	1	(Constant)	.929	.025		37.659	.000
		SalePeriod	.003	.002	.128	1.114	.269
11.00	1	(Constant)	.990	.031		31.581	.000
		SalePeriod	-.002	.003	-.099	-.769	.445
12.00	1	(Constant)	1.019	.029		35.117	.000
		SalePeriod	-.005	.003	-.177	-1.790	.076
13.00	1	(Constant)	1.008	.018		55.459	.000
		SalePeriod	-.005	.002	-.205	-2.819	.005

a. Dependent Variable: salesratio

While there were several economic areas with statistically significant trends, the magnitude was marginal for these economic areas. We therefore concluded that the assessor has adequately addressed market trending in the valuation of residential properties.

Sold/Unsold Analysis

In terms of the valuation consistency between sold and unsold residential properties, we compared the median actual value per square foot for 2021 between each group, as follows:

Report

VALSF

sold	N	Median	Mean
UNSOLD	54976	$132	$139
SOLD	2732	$163	$167

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 .01.

Given that there was a statistically significant difference using the non-parametric Mann Whitney U test, we next compared the percent change in actual value between valuation year 2018 and valuation year 2020 for sold and unsold residential properties. The data was analyzed both as a whole and broken down by economic area, as follows:

Report
DIFF

sold	N	Median	Mean
UNSOLD	52658	1.1903	1.1536
SOLD	2613	1.2724	1.3071

Report
DIFF

ECONAREA	sold	N	Median	Mean
1.00	UNSOLD	4315	1.4526	1.3874
	SOLD	87	1.5641	1.5558
2.00	UNSOLD	3795	1.1417	1.0497
	SOLD	255	1.2398	1.2177
3.00	UNSOLD	5003	1.2314	1.1666
	SOLD	298	1.3238	1.3545
4.00	UNSOLD	3151	1.3800	1.3165
	SOLD	98	1.5678	1.5715
5.00	UNSOLD	5341	1.3120	1.2610
	SOLD	261	1.4467	1.4674
6.00	UNSOLD	4063	1.1401	1.0551
	SOLD	207	1.2245	1.2302
7.00	UNSOLD	5183	1.1597	1.0805
	SOLD	273	1.2765	1.2929
8.00	UNSOLD	7999	1.1517	1.1034
	SOLD	463	1.2217	1.2283
9.00	UNSOLD	7263	1.0719	1.0554
	SOLD	255	1.2533	1.2895
10.00	UNSOLD	893	1.0707	1.0326
	SOLD	77	1.2053	1.2002
11.00	UNSOLD	646	1.1821	1.1532
	SOLD	61	1.2836	1.2715
12.00	UNSOLD	2225	1.3613	1.3181
	SOLD	81	1.4457	1.4716
13.00	UNSOLD	2057	1.1519	1.1162
	SOLD	180	1.1957	1.1956

We also stratified this analysis by residential neighborhoods with at least 30 sales, as follows:

Report
DIFF

NBHD	sold	N	Median	Mean
10	UNSOLD	3043	1.3079	1.3314
	SOLD	76	1.2931	1.3212
110	UNSOLD	2333	1.2079	1.2398
	SOLD	116	1.2032	1.2317
120	UNSOLD	1314	1.1907	1.2032
	SOLD	88	1.1931	1.1997
126	UNSOLD	437	1.1333	1.1471
	SOLD	36	1.1257	1.1380
127	UNSOLD	635	1.1062	1.1130
	SOLD	37	1.1155	1.1175
128	UNSOLD	1095	1.1961	1.2055
	SOLD	61	1.1975	1.2041
129	UNSOLD	470	1.0813	1.0976
	SOLD	33	1.0856	1.0853

133	UNSOLD	892	1.2151	1.2520
	SOLD	39	1.2192	1.2328
150	UNSOLD	1126	1.2006	1.2105
	SOLD	41	1.2052	1.2165
151	UNSOLD	377	1.1364	1.1433
	SOLD	36	1.1382	1.1488
153	UNSOLD	470	1.1651	1.1709
	SOLD	30	1.1721	1.1734
162	UNSOLD	1937	1.1402	1.1552
	SOLD	192	1.1416	1.1492
166	UNSOLD	1258	1.1721	1.1838
	SOLD	104	1.1732	1.1891
167	UNSOLD	534	1.3406	1.3560
	SOLD	31	1.3440	1.3622
171	UNSOLD	491	1.1779	1.1853
	SOLD	32	1.1818	1.1907
172	UNSOLD	309	1.1074	1.1122
	SOLD	34	1.1085	1.0876
174	UNSOLD	542	1.1360	1.1508
	SOLD	45	1.1406	1.1469
178	UNSOLD	732	1.1537	1.1607
	SOLD	75	1.1562	1.1642
180	UNSOLD	1229	1.1167	1.1295
	SOLD	106	1.1199	1.1375
187	UNSOLD	336	1.0647	1.0799
	SOLD	33	1.0668	1.0739
191	UNSOLD	2539	1.1728	1.1876
	SOLD	79	1.1856	1.2086
20	UNSOLD	2239	1.2371	1.2473
	SOLD	149	1.2433	1.2500
200	UNSOLD	1286	1.1061	1.1381
	SOLD	42	1.1027	1.1139
210	UNSOLD	774	1.2127	1.2602
	SOLD	53	1.2147	1.2492
25	UNSOLD	393	1.1457	1.1542
	SOLD	32	1.1516	1.1679
30	UNSOLD	591	1.1422	1.1490
	SOLD	40	1.1468	1.1489
35	UNSOLD	966	1.1114	1.1202
	SOLD	118	1.1110	1.1175
36	UNSOLD	206	1.0887	1.0891
	SOLD	35	1.0930	1.0913
40	UNSOLD	588	1.1479	1.1575
	SOLD	35	1.1506	1.1254
60	UNSOLD	1606	1.1378	1.1711
	SOLD	90	1.1401	1.1502
63	UNSOLD	875	1.1922	1.2318
	SOLD	58	1.1917	1.2391
70	UNSOLD	1451	1.2658	1.2802
	SOLD	51	1.2162	1.2485
86	UNSOLD	1709	1.2078	1.2397
	SOLD	52	1.2121	1.2351
95	UNSOLD	1009	1.1001	1.1313
	SOLD	54	1.0807	1.1153

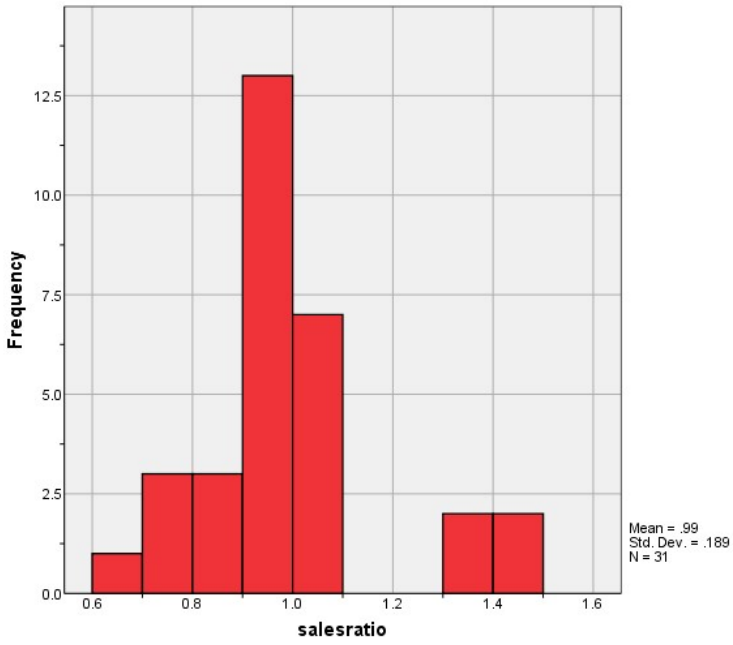
Based on the consistent difference observed between residential sold and unsold properties when using the percent change in base year value, we also performed an econometric analysis of sold and unsold residential properties. The model used the assessor's actual value as the dependent variable, and used as the independent variables the age, size, economic area, quality and sold/unsold. Based on the results of the analysis, sold properties were on the average 8.75 percent higher in value than unsold properties. While this is below the 10 percent limit used for passing the sold/unsold analysis, we will consult with the assessor and advise the assessor that further steps may be required to narrow this difference.

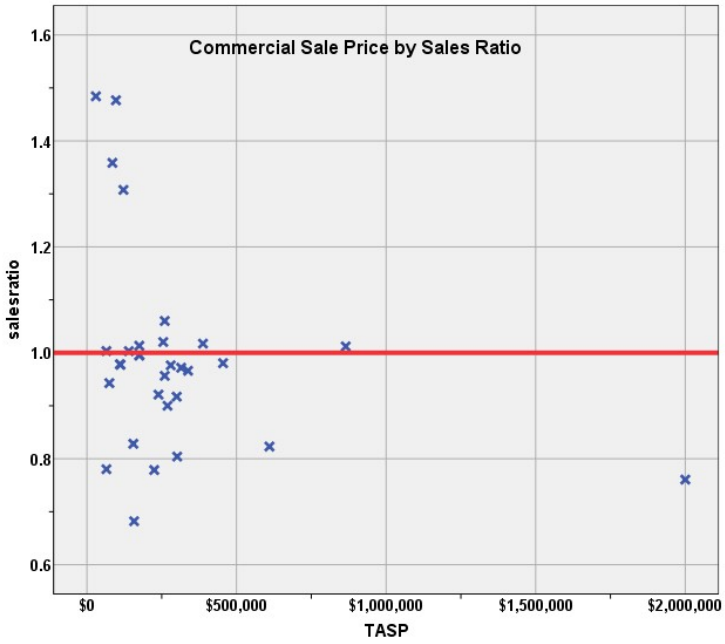
IV. COMMERCIAL/INDUSTRIAL SALE RESULTS

There were 31 qualified commercial/industrial sales for the 18 month period ending June 30, 2020. The sales ratio analysis was analyzed as follows:

Median	**0.977**
Price Related Differential	**1.078**
Coefficient of Dispersion	**12.2**

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





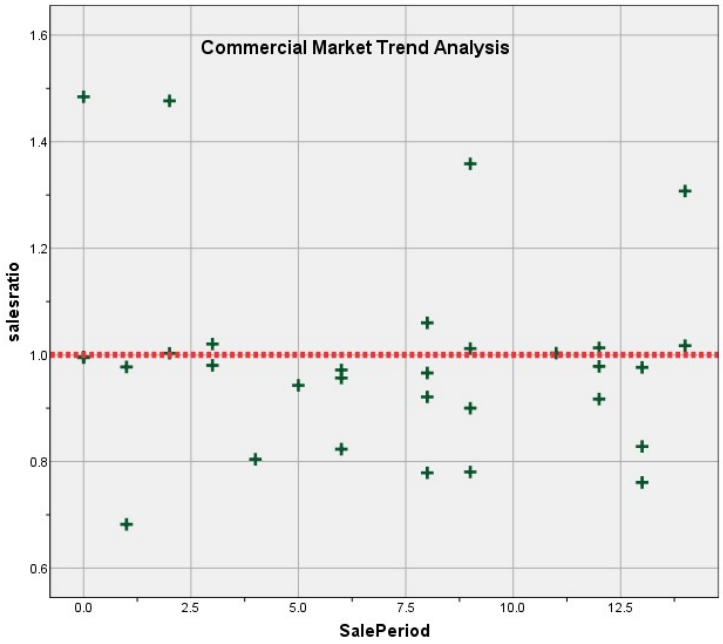
Commercial/Industrial Market Trend Analysis

The commercial/industrial sales were analyzed, examining the sale ratios across the 18 month sale period with the following results:

Coefficients[a]

Model		Unstandardized Coefficients B	Unstandardized Coefficients Std. Error	Standardized Coefficients Beta	t	Sig.
1	(Constant)	1.031	.064		16.138	.000
	SalePeriod	-.006	.008	-.140	-.759	.454

a. Dependent Variable: salesratio



There was no residual market trending present in the commercial sale ratios. We concluded that the assessor has adequately considered market trending adjustments as part of the commercial/industrial valuation.

Sold/Unsold Analysis

We compared the median and mean change in value from valuation year 2018 to valuation year 2020 between sold and unsold commercial/industrial properties to determine if sold and unsold properties were valued consistently, as follows:

Report
DIFF

sold	N	Median	Mean
UNSOLD	2575	1.0213	1.1735
SOLD	56	1.0597	1.2690

Report
DIFF

ABSTRIMP	sold	N	Median	Mean
2220.00	UNSOLD	209	1.0000	1.1802
	SOLD	6	1.4859	1.4829
2230.00	UNSOLD	1145	.9969	1.0470
	SOLD	19	1.2409	1.2279

Based on the above analysis, while there was some differences noted between sold and unsold commercial properties at the subclass level, the sold properties were much newer, with an average effective age of 20 years, as compared to 35 year for the unsold properties. The sold properties were also smaller on average, with an average size of 3,000 sf, compared to 3,500 sf for unsold properties. We also ran an econometric model using current value as the dependent variable, and age, size, quality

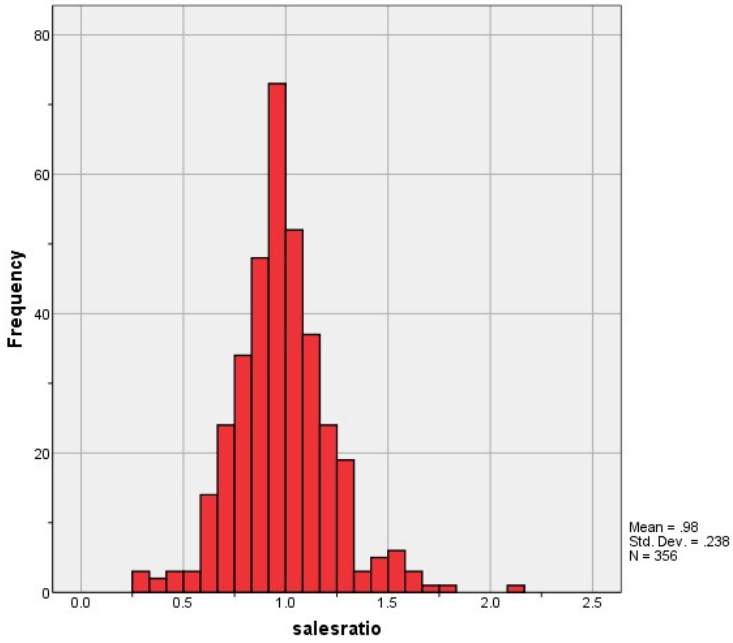
and sold/unsold as the independent variables. After controlling for the other three variables, sold/unsold was not a significant variable.

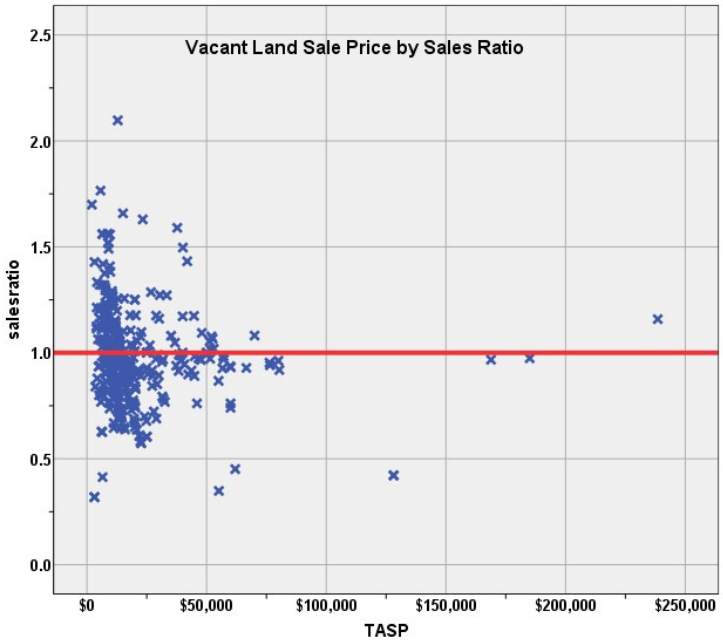
V. VACANT LAND SALE RESULTS

There were 356 qualified vacant land sales for the 18 month period ending June 30, 2020. The sales ratio analysis was analyzed as follows:

Median	**0.967**
Price Related Differential	**1.183**
Coefficient of Dispersion	**17.9**

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





NOTE: SALES UNDER $250,000

The above histogram indicates that the distribution of the vacant land sale ratios was within state mandated limits, while the above scatter plot indicated that there were no price related differential issues. No sales were trimmed.

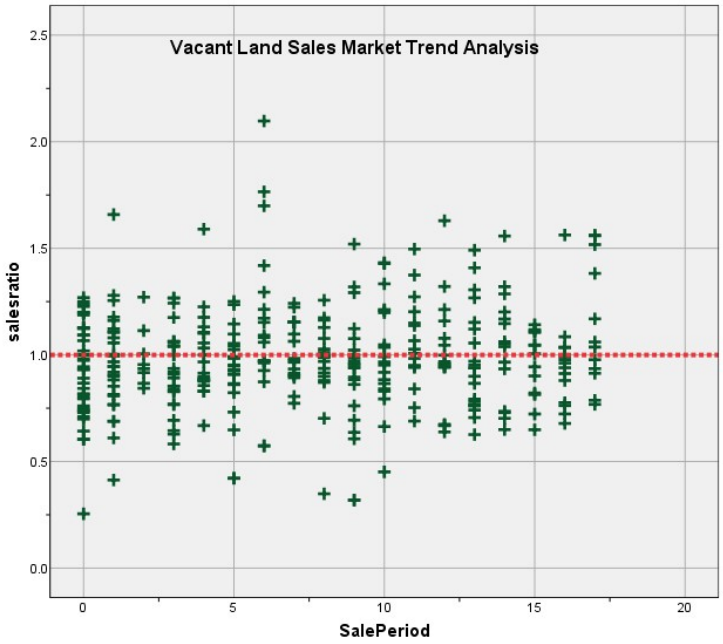
Vacant Land Market Trend Analysis

We next analyzed the vacant land dataset using the 18-month sale period and stratified by economic area, with the following results:

Coefficients[a]

Model		Unstandardized Coefficients B	Unstandardized Coefficients Std. Error	Standardized Coefficients Beta	t	Sig.
1	(Constant)	.949	.022		43.480	.000
	SalePeriod	.004	.002	.097	1.843	.066

a. Dependent Variable: salesratio



The above analysis indicated that no significant market trending was present in the vacant land sale data. We concluded that the assessor has adequately dealt with market trending for vacant land properties.

Sold/Unsold Analysis

In terms of the valuation consistency between sold and unsold vacant land properties, we compared the median change in actual value for valuation year 2018 and valuation year 2020 between each group, as follows:

Report

DIFF

sold	N	Median	Mean
UNSOLD	27612	1.0000	1.2309
SOLD	741	1.1706	1.2751

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	.337	Retain the null hypothesis.

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

We also performed this comparison analysis by subdivision. The following table indicates that sold and unsold properties were valued in a similar manner for subdivisions with at least 5 sales:

Report
DIFF

SUBDIVNO	sold	N	Median	Mean
1 EASTWOOD	UNSOLD	172	1.5056	1.4806
	SOLD	2	1.6330	1.6330
161 PW NO	UNSOLD	49	1.1111	1.1367
	SOLD	6	1.1111	1.1343
162 PW NO	UNSOLD	2285	1.3500	1.3159
	SOLD	109	1.3500	1.3350
166 PW	UNSOLD	204	.9091	.9324
	SOLD	16	.7795	.8045
169 PW LI	UNSOLD	149	.5556	.6485
	SOLD	8	.5469	.5659
170 PW	UNSOLD	53	1.5556	1.4140
	SOLD	5	1.0211	1.2349
17055	UNSOLD	8	1.7692	1.5674
	SOLD	7	1.0769	1.0081
17056	UNSOLD	129	1.4063	1.2199
	SOLD	5	1.4063	1.2479
171 PW	UNSOLD	224	1.4615	1.4261
	SOLD	14	1.9000	1.4825
177 PW	UNSOLD	100	1.0000	.9520
	SOLD	6	1.0000	1.0000
180 PW	UNSOLD	118	.6233	.6816
	SOLD	8	.6456	.6891
182 PW	UNSOLD	64	1.3636	1.3806
	SOLD	3	.7576	.8597
186 PW WE	UNSOLD	47	1.0833	1.1924
	SOLD	7	.6292	.7055
187 PW WE	UNSOLD	112	1.1083	1.0738
	SOLD	5	1.1083	1.0564
189 PUEBL	UNSOLD	7	.6429	.9184
	SOLD	11	1.2857	1.2857
191 ST.CHA	UNSOLD	156	.5000	.6705
	SOLD	10	.7000	.7840
213 TWIN B	UNSOLD	61	1.1411	1.0956
	SOLD	7	1.2876	1.3248
7074	UNSOLD	99	1.3333	1.2735
	SOLD	5	1.3333	1.4406

Overall, we concluded that the county assessor valued sold and unsold vacant land properties consistently.

V. CONCLUSIONS

Based on this 2021 audit statistical analysis for Pueblo County, residential, commercial/industrial and vacant land properties were found to be in compliance with state guidelines.

STATISTICAL ABSTRACT

Residential

Ratio Statistics for CURRTOT / TASP

ECONAREA	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
.	.805	.683	.928	.878	.501	.982	98.1%	.805	.679	.930	1.001	.218	31.5%
1.00	1.009	.978	1.039	.988	.960	1.036	96.5%	1.001	.973	1.028	1.008	.119	15.1%
2.00	.967	.950	.984	.965	.951	.976	95.4%	.968	.951	.984	.999	.099	14.2%
3.00	.984	.971	.998	.980	.969	.990	95.5%	.988	.975	1.001	.996	.089	12.4%
4.00	1.017	.990	1.044	.987	.967	1.036	96.3%	1.008	.981	1.034	1.009	.116	14.8%
5.00	.989	.974	1.005	.988	.970	1.001	96.0%	.987	.973	1.001	1.003	.098	13.1%
6.00	.948	.931	.965	.966	.952	.979	95.6%	.951	.933	.968	.997	.089	13.2%
7.00	.966	.950	.981	.971	.956	.981	95.4%	.966	.952	.980	1.000	.092	13.4%
8.00	.962	.952	.972	.966	.959	.975	95.3%	.967	.956	.977	.995	.077	11.0%
9.00	.960	.944	.976	.970	.964	.978	95.7%	.956	.941	.972	1.004	.099	13.8%
10.00	.953	.926	.979	.966	.958	.984	96.0%	.953	.925	.981	1.000	.071	12.2%
11.00	.968	.938	.999	.968	.947	.991	97.0%	.964	.931	.998	1.004	.081	12.2%
12.00	.972	.948	.996	.975	.958	.987	95.4%	.966	.941	.991	1.006	.085	12.5%
13.00	.962	.946	.977	.965	.940	.981	95.4%	.964	.949	.979	.997	.085	11.0%

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 Land

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
.990	.921	1.059	.977	.921	1.003	97.1%	.918	.837	.999	1.078	.122	19.1%

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

Vacant Land

Ratio Statistics for CURRLND / TASP

Mean	95% Confidence Interval for Mean		Median	95% Confidence Interval for Median			Weighted Mean	95% Confidence Interval for Weighted Mean		Price Related Differential	Coefficient of Dispersion	Coefficient of Variation
	Lower Bound	Upper Bound		Lower Bound	Upper Bound	Actual Coverage		Lower Bound	Upper Bound			Mean Centered
.982	.957	1.007	.967	.946	.987	95.0%	.830	.678	.982	1.183	.179	24.2%

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

Residential Median Ratio Stratification

Subclass

Case Processing Summary

		Count	Percent
ABSTRIMP	1212.00	2654	97.1%
	1215.00	2	0.1%
	1217.00	1	0.0%
	1220.00	10	0.4%
	1229.00	2	0.1%
	1230.00	63	2.3%
Overall		2732	100.0%
Excluded		0	
Total		2732	

Ratio Statistics for CURRTOT / TASP

Group	Median	Price Related Differential	Coefficient of Dispersion	Coefficient of Variation Median Centered
1212.00	.973	1.002	.092	13.0%
1215.00	1.089	.995	.034	4.8%
1217.00	1.009	1.000	.000	.
1220.00	.604	.998	.322	38.5%
1229.00	.919	.994	.009	1.3%
1230.00	.966	1.006	.088	14.0%
Overall	.973	1.003	.092	13.2%

Improvement Age

Case Processing Summary

		Count	Percent
AgeRec	Over 100	257	9.4%
	75 to 100	182	6.7%
	50 to 75	692	25.3%
	25 to 50	531	19.4%
	5 to 25	971	35.5%
	5 or Newer	99	3.6%
Overall		2732	100.0%
Excluded		0	
Total		2732	

Ratio Statistics for CURRTOT / TASP

Group	Median	Price Related Differential	Coefficient of Dispersion	Coefficient of Variation Median Centered
Over 100	.982	1.017	.114	15.9%
75 to 100	.980	1.003	.105	13.6%
50 to 75	.966	1.007	.105	14.9%
25 to 50	.971	1.004	.084	11.8%
5 to 25	.972	.997	.081	11.8%
5 or Newer	.988	1.000	.075	11.0%
Overall	.973	1.003	.092	13.2%

Improved Area

Case Processing Summary

		Count	Percent
ImpSFRec	LE 500 sf	3	0.1%
	500 to 1,000 sf	596	21.8%
	1,000 to 1,500 sf	1187	43.4%
	1,500 to 2,000 sf	614	22.5%
	2,000 to 3,000 sf	287	10.5%
	3,000 sf or Higher	45	1.6%
Overall		2732	100.0%
Excluded		0	
Total		2732	

Ratio Statistics for CURRTOT / TASP

Group	Median	Price Related Differential	Coefficient of Dispersion	Coefficient of Variation Median Centered
LE 500 sf	.926	1.050	.131	20.4%
500 to 1,000 sf	.969	1.008	.109	14.8%
1,000 to 1,500 sf	.967	1.004	.092	13.5%
1,500 to 2,000 sf	.978	1.001	.084	11.9%
2,000 to 3,000 sf	.978	1.003	.079	11.3%
3,000 sf or Higher	.970	.995	.087	11.6%
Overall	.973	1.003	.092	13.2%

Improvement Quality

Case Processing Summary

		Count	Percent
QUALITY	3	3	0.1%
	4	151	5.5%
	5	2479	90.7%
	7	68	2.5%
	8	29	1.1%
	9	2	0.1%
Overall		2732	100.0%
Excluded		0	
Total		2732	

Ratio Statistics for CURRTOT / TASP

Group	Median	Price Related Differential	Coefficient of Dispersion	Coefficient of Variation Median Centered
3	.911	1.232	.241	44.2%
4	.962	1.025	.129	16.7%
5	.972	1.003	.091	13.0%
7	.985	1.000	.089	12.1%
8	.992	1.005	.058	8.5%
9	1.000	1.014	.037	5.2%
Overall	.973	1.003	.092	13.2%

Improvement Condition

Case Processing Summary

		Count	Percent
CONDITION		12	0.4%
	AV	2720	99.6%
Overall		2732	100.0%
Excluded		0	
Total		2732	

Ratio Statistics for CURRTOT / TASP

Group	Median	Price Related Differential	Coefficient of Dispersion	Coefficient of Variation Median Centered
	.722	.937	.276	32.2%
AV	.973	1.002	.092	13.0%
Overall	.973	1.003	.092	13.2%

Commercial Median Ratio Stratification

Sale Price

Case Processing Summary

		Count	Percent
SPRec	$25K to $50K	1	3.2%
	$50K to $100K	5	16.1%
	$100K to $150K	4	12.9%
	$150K to $200K	5	16.1%
	$200K to $300K	8	25.8%
	$300K to $500K	5	16.1%
	$500K to $750K	1	3.2%
	$750K to $1,000K	1	3.2%
	Over $1,000K	1	3.2%
Overall		31	100.0%
Excluded		0	
Total		31	

Ratio Statistics for CURRTOT / TASP

Group	Median	Price Related Differential	Coefficient of Dispersion	Coefficient of Variation Median Centered
$25K to $50K	1.484	1.000	.000	.
$50K to $100K	1.003	.967	.222	31.7%
$100K to $150K	.991	.998	.090	18.5%
$150K to $200K	.995	.993	.100	17.8%
$200K to $300K	.939	.997	.066	9.1%
$300K to $500K	.972	.993	.047	9.0%
$500K to $750K	.823	1.000	.000	.
$750K to $1,000K	1.012	1.000	.000	.
Over $1,000K	.761	1.000	.000	.
Overall	.977	1.078	.122	19.4%

Subclass

Case Processing Summary

		Count	Percent
ABSTRIMP	1716.00	1	3.2%
	2212.00	1	3.2%
	2220.00	6	19.4%
	2230.00	19	61.3%
	2235.00	2	6.5%
	2245.00	2	6.5%
Overall		31	100.0%
Excluded		0	
Total		31	

Ratio Statistics for CURRTOT / TASP

Group	Median	Price Related Differential	Coefficient of Dispersion	Coefficient of Variation Median Centered
1716.00	.828	1.000	.000	.
2212.00	.995	1.000	.000	.
2220.00	.991	1.013	.028	3.9%
2230.00	.972	1.044	.097	14.6%
2235.00	1.144	1.322	.297	42.0%
2245.00	1.418	.997	.042	5.9%
Overall	.977	1.078	.122	19.4%

Improvement Age

Case Processing Summary

		Count	Percent
AgeRec	Over 100	3	9.7%
	75 to 100	6	19.4%
	50 to 75	8	25.8%
	25 to 50	8	25.8%
	5 to 25	6	19.4%
Overall		31	100.0%
Excluded		0	
Total		31	

Ratio Statistics for CURRTOT / TASP

Group	Median	Price Related Differential	Coefficient of Dispersion	Coefficient of Variation Median Centered
Over 100	.900	.998	.062	9.3%
75 to 100	.991	1.036	.136	24.4%
50 to 75	.971	1.007	.045	8.0%
25 to 50	1.004	1.002	.102	17.1%
5 to 25	.897	1.243	.264	38.2%
Overall	.977	1.078	.122	19.4%

Improved Area

Case Processing Summary

		Count	Percent
ImpSFRec	500 to 1,000 sf	2	6.5%
	1,000 to 1,500 sf	6	19.4%
	1,500 to 2,000 sf	2	6.5%
	2,000 to 3,000 sf	5	16.1%
	3,000 sf or Higher	16	51.6%
Overall		31	100.0%
Excluded		0	
Total		31	

Ratio Statistics for CURRTOT / TASP

Group	Median	Price Related Differential	Coefficient of Dispersion	Coefficient of Variation Median Centered
500 to 1,000 sf	.830	1.031	.178	25.2%
1,000 to 1,500 sf	.991	1.012	.131	20.5%
1,500 to 2,000 sf	1.245	1.056	.186	26.3%
2,000 to 3,000 sf	.921	.999	.059	9.1%
3,000 sf or Higher	.978	1.104	.112	18.4%
Overall	.977	1.078	.122	19.4%

Improvement Quality

Case Processing Summary

		Count	Percent
QUALITY	3	7	22.6%
	5	22	71.0%
	6	2	6.5%
Overall		31	100.0%
Excluded		0	
Total		31	

Ratio Statistics for CURRTOT / TASP

Group	Median	Price Related Differential	Coefficient of Dispersion	Coefficient of Variation Median Centered
3	1.020	1.331	.230	31.3%
5	.978	1.006	.080	12.0%
6	.827	.945	.175	24.8%
Overall	.977	1.078	.122	19.4%

Vacant Land Median Ratio Stratification

Sale Price

Case Processing Summary

		Count	Percent
SPRec	LT $25K	277	77.8%
	$25K to $50K	47	13.2%
	$50K to $100K	23	6.5%
	$100K to $150K	2	0.6%
	$150K to $200K	2	0.6%
	$200K to $300K	2	0.6%
	$300K to $500K	1	0.3%
	$500K to $750K	1	0.3%
	Over $1,000K	1	0.3%
Overall		356	100.0%
Excluded		0	
Total		356	

Ratio Statistics for CURRLND / TASP

Group	Median	Price Related Differential	Coefficient of Dispersion	Coefficient of Variation Median Centered
LT $25K	.971	1.037	.187	25.0%
$25K to $50K	.971	.995	.133	19.9%
$50K to $100K	.954	1.000	.111	19.7%
$100K to $150K	.421	1.000	.000	0.0%
$150K to $200K	.971	1.000	.004	0.5%
$200K to $300K	1.049	1.006	.105	14.8%
$300K to $500K	.668	1.000	.000	.
$500K to $750K	.664	1.000	.000	.
Over $1,000K	.255	1.000	.000	.
Overall	.967	1.183	.179	24.6%

Subclass

Case Processing Summary

		Count	Percent
ABSTRLND	100.00	304	85.4%
	200.00	19	5.3%
	300.00	6	1.7%
	520.00	1	0.3%
	540.00	1	0.3%
	550.00	2	0.6%
	560.00	1	0.3%
	1112.00	5	1.4%
	1114.00	16	4.5%
	1135.00	1	0.3%
Overall		356	100.0%
Excluded		0	
Total		356	

Ratio Statistics for CURRLND / TASP

Group	Median	Price Related Differential	Coefficient of Dispersion	Coefficient of Variation Median Centered
100.00	.966	1.051	.179	24.0%
200.00	.974	1.624	.121	21.1%
300.00	.972	1.054	.161	21.7%
520.00	.348	1.000	.000	.
540.00	1.035	1.000	.000	.
550.00	1.224	.991	.039	5.5%
560.00	.761	1.000	.000	.
1112.00	1.064	1.137	.223	48.9%
1114.00	.960	.961	.174	27.0%
1135.00	.840	1.000	.000	.
Overall	.967	1.183	.179	24.6%