2 0 2 2
J E F F E R S O N   C O U N T Y
P R O P E R T Y   A S S E S S M E N T
S T U D Y

WILDROSE
APPRAISAL, INCORPORATED
Audit Division

WILDROSE
APPRAISAL, INCORPORATED
Audit Division

September 15, 2022

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

RE: Final Report for the 2022 Colorado Property Assessment Study

Dear Ms. Mullis:

Wildrose Appraisal Inc.-Audit Division is pleased to submit the Final Reports for the 2022 Colorado Property Assessment Study.

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

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

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

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

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

TABLE OF CONTENTS

I N T R O D U C T I O N

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 2022 and is pleased to report its findings for Jefferson County in the following report.

REGIONAL/HISTORICAL SKETCH OF JEFFERSON COUNTY

Regional Information

Jefferson 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.
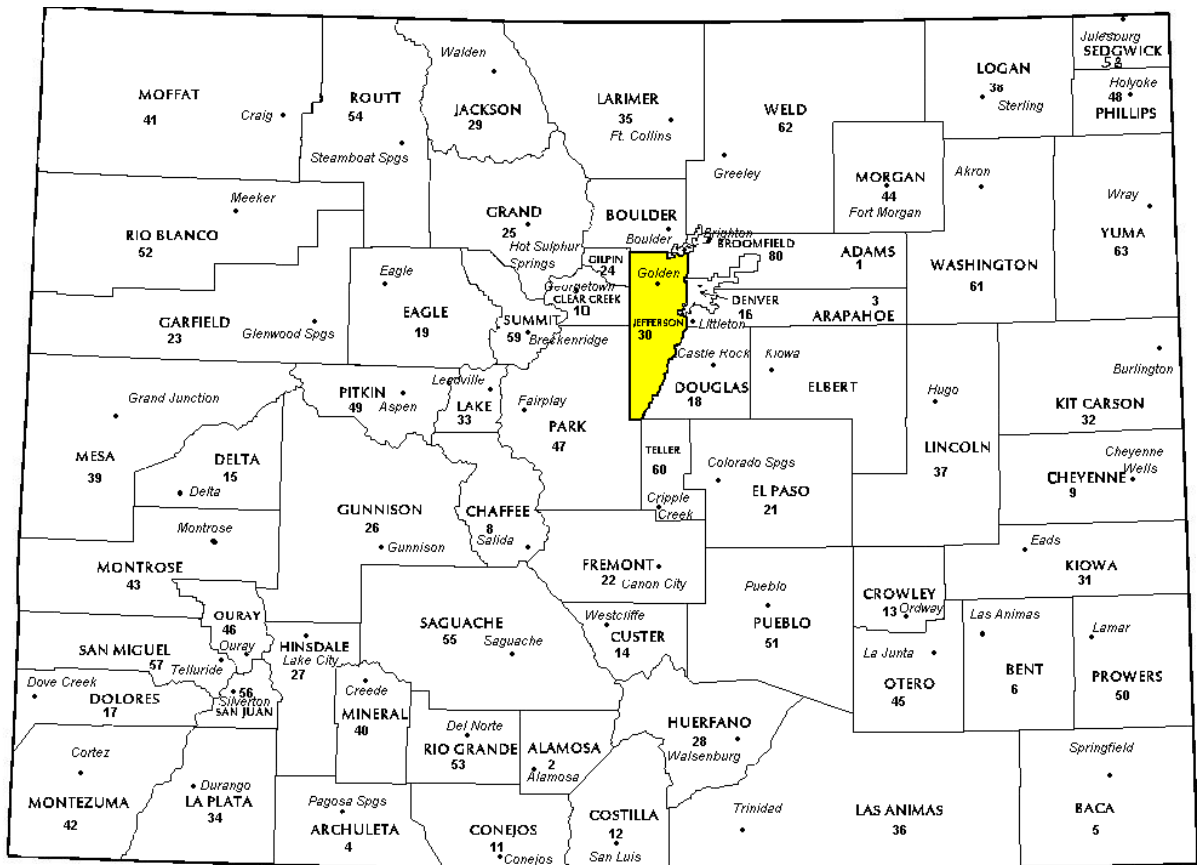
Historical Information

Jefferson County has approximately 764.2 square miles and an estimated population of approximately 582,881 people, according to the U.S. Census Bureau's 2020 estimated census data. This represents a 9.0 percent change from April 1, 2010 to July 1, 2019.

Jefferson County is one of the seventeen original territorial counties. On August 25, 1855, the Kansas Territorial Legislature created Arapahoe County to govern the entire western portion of the territory. The county was named for the Arapaho Nation of Native Americans that lived in the region.

In July 1858, gold was discovered along the South Platte River in Arapahoe County (in present day Englewood). This discovery precipitated the Pike's Peak Gold Rush. Many residents of the mining region felt disconnected from the remote territorial governments of Kansas and Nebraska, so they voted to form their own Territory of Jefferson on October 24, 1959. The following month, the Jefferson Territorial Legislature organized 12 counties for the new territory, including Jefferson County. Jefferson County was named for the namesake of the Jefferson Territory, Thomas Jefferson, the principal author of the Declaration of Independence and the nation's third president. Golden City served as the county seat of Jefferson County. Robert Williamson Steele, Governor of the Provisional Government of the Territory of Jefferson from 1859 to 1861, built his home in the county at Mount Vernon and later at Apex.

The Jefferson Territory never received federal sanction, but during his last week in office, President James Buchanan signed an act which organized the Territory of Colorado on February 28, 1861. That November 1, the new Colorado General Assembly organized the 17 original counties of Colorado, including a new Jefferson County. In 1908, the southern tip of Jefferson County was transferred to Park County, reducing Jefferson County to its present length of 54 miles. Several annexations by the City & County of Denver and the 2001 consolidation of the City & County of Broomfield removed eastern portions of the county.

A major employer in Jefferson County is the large Coors Brewing Company in Golden. Also, the state-supported Colorado School of Mines is located in Jefferson County, offering programs in mining and engineering. The county seat is Golden and the most populous city is Lakewood.

(www.wikipedia.org)

RATIO ANALYSIS

Methodology

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

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

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

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

Conclusions

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

ALLOWABLE STANDARDS RATIO GRID		
Property Class	**Unweighted Median Ratio**	**Coefficient of Dispersion**
Commercial/Industrial	Between .95-1.05	Less than 20.99
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 Jefferson County are:

Jefferson County Ratio Grid					
Property Class	Number of Qualified Sales	Unweighted Median Ratio	Price Related Differential	Coefficient of Dispersion	Time Trend Analysis
Commercial/Industrial	297	0.955	1.039	14.9	Compliant
Single Family	20,673	0.980	1.011	7.9	Compliant
Vacant Land	328	0.994	1.090	18.6	Compliant

After applying the above described methodologies, it is concluded from the sales ratios that Jefferson County is in compliance with SBOE, DPT, and Colorado State Statute valuation guidelines.

Recommendations

None

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 Jefferson County has complied with the statutory requirements to analyze the effects of time on value in their county. Jefferson 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

Jefferson 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.

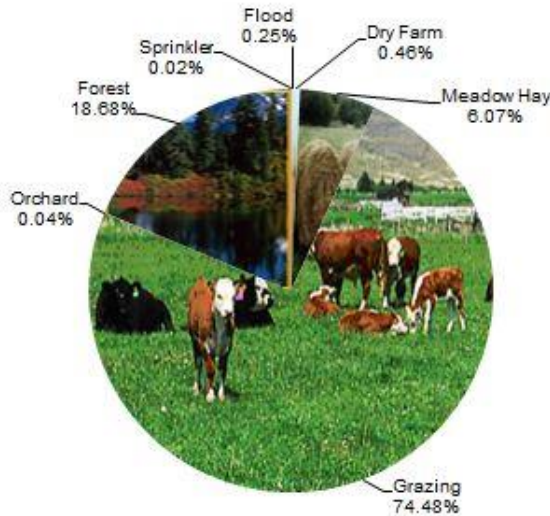| Sold/Unsold Results	
Property Class	**Results**
Commercial/Industrial	Compliant
Single Family	Compliant
Vacant Land	Compliant

Conclusions

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

Recommendations

None

AGRICULTURAL LAND STUDY

Acres By Subclass	Value By Subclass

Acres By Subclass:
- Flood 0.25%
- Sprinkler 0.02%
- Dry Farm 0.46%
- Forest 18.68%
- Meadow Hay 6.07%
- Orchard 0.04%
- Grazing 74.48%

Value By Subclass (bar chart): Sprinkler, Flood, Dry Farm, Meadow Hay, Grazing, Orchard, Forest
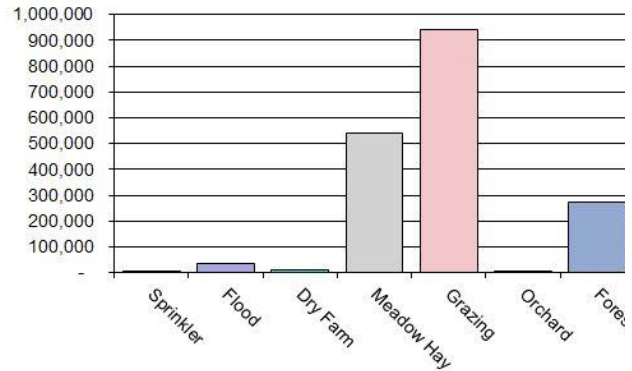
Agricultural Land

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:

Jefferson 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	13	177.69	2,354	2,354	1.00
4117	Flood	174	173.01	30,045	30,044	1.00
4127	Dry Farm	326	32.19	10,479	10,561	0.99
4137	Meadow Hay	4,410	113.94	502,474	502,744	1.00
4147	Grazing	52,157	16.42	856,247	856,247	1.00
4157	Orchard	30	177.69	5,400	5,400	1.00
4177	Forest	12,840	19.00	243,952	243,952	1.00
Total/Avg		69,950	23.60	1,650,951	1,651,302	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

Jefferson County has complied with the procedures provided by the Division of Property Taxation for the valuation of agricultural outbuildings.

Recommendations

None

Agricultural Land Under Improvements

Methodology

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

Conclusions

Jefferson 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
- 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

Jefferson 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

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

Recommendations

None

SALES VERIFICATION

According to Colorado Revised Statutes:

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

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

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

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

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

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

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

WRA reviewed the sales verification procedures in 2022 for Jefferson County. This study was conducted by checking selected sales from the master sales list for the current valuation period. Specifically WRA selected 61 sales listed as unqualified.

All but four of the sales selected in the sample gave reasons that were clear and supportable. Four 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.
>
> The contractor has reviewed with the assessor any analysis indicating that sales data are inadequate, fail to reflect typical properties, or have been disqualified for insufficient cause. In addition, the contractor has reviewed the disqualified sales by assigned code.

If there appears to be any inconsistency in the coding, the contractor has conducted further analysis to determine if the sales included in that code have been assigned appropriately.

Conclusions

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

Recommendations

None

ECONOMIC AREA REVIEW AND EVALUATION

Methodology

Jefferson County has submitted a written narrative describing the economic areas that make up the county's market areas. Jefferson 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 Jefferson 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 2022 in Jefferson County. The review showed that subdivisions were discounted pursuant to the Colorado Revised Statutes in Article 39-1-103 (14) and by applying the recommended methodology in ARL Vol 3, Chap 4. Subdivision Discounting in the intervening year can be accomplished by reducing the absorption period by one year.

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

Conclusions

Jefferson 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.

Jefferson 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

Jefferson 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

Jefferson 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.

Jefferson 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
- 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.

Jefferson County submitted their personal property written audit plan and was current for the 2022 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:

- Accounts with omitted property
- Non-filing Accounts - Best Information Available

Jefferson 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

Jefferson County has employed adequate discovery, classification, documentation, valuation, and auditing procedures for their personal property assessment and is in statistical compliance with SBOE requirements.

Recommendations

None

WILDROSE AUDITOR STAFF

Harry J. Fuller, *Audit Project Manager*

Suzanne Howard, *Audit Administrative Manager*

Steve Kane, *Audit Statistician*

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

J. Andrew Rodriguez, *Field Analyst*

APPENDICES

WILDROSE
APPRAISAL, INCORPORATED

STATISTICAL COMPLIANCE REPORT
FOR JEFFERSON COUNTY
2022

I. OVERVIEW

Jefferson County is an urban county located along Colorado's Front Range. The county has a total of 224,473 real property parcels, according to data submitted by the county assessor's office in 2022. The following provides a breakdown of property classes for this county:
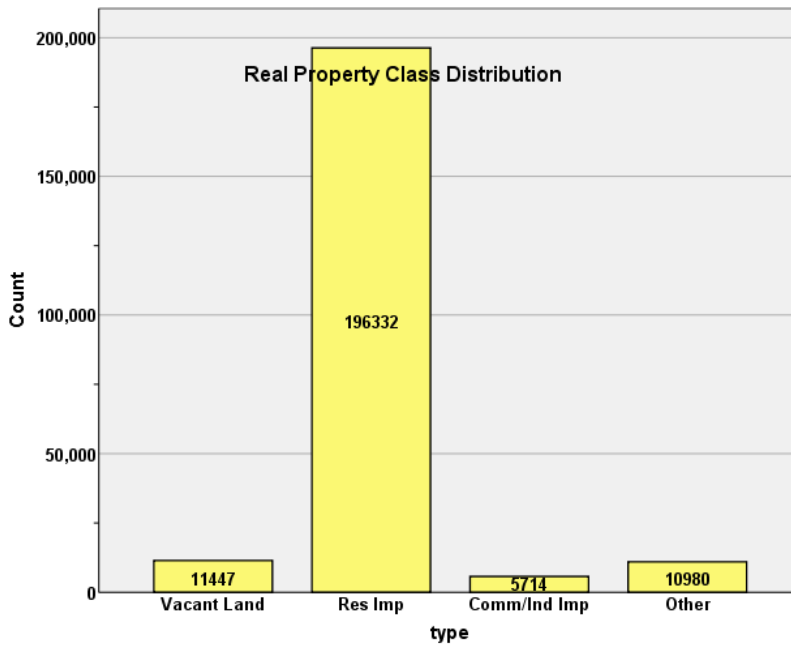
The vacant land class of properties was dominated by residential land. Residential lots (coded 100 and 1112) accounted for 77.3% of all vacant land parcels.

For residential improved properties, single family properties accounted for 91.1% of all residential properties.

Commercial and industrial properties represented a much smaller proportion of property classes in comparison. Commercial/industrial properties accounted for 2.5% of all such properties in this county.

II. DATA FILES

The following sales analyses were based on the requirements of the 2022 Colorado Property Assessment Study. Information was provided by the Jefferson Assessor's Office in June 2022. The data included all 5 property record files as specified by the Auditor.

III. RESIDENTIAL SALES RESULTS

There were 20,673 qualified residential sales in the 24 month period ending June 30, 2020. The sales ratio analysis results were as follows:

Median	**0.980**
Price Related Differential	**1.011**
Coefficient of Dispersion	**7.9**

We next stratified the sale ratio analysis by economic area and neighborhood. The minimum count for the neighborhood stratification is 50 sales. The following are the results of this stratification analysis:

Economic Area
Case Processing Summary

		Count	Percent
ECONAREA	1.00	2855	15.3%
	2.00	3669	19.7%
	3.00	4068	21.9%
	4.00	3572	19.2%
	5.00	1853	10.0%
	6.00	595	3.2%
	7.00	82	0.4%
	8.00	830	4.5%
	9.00	973	5.2%
	11.00	2	0.0%
	12.00	22	0.1%
	22.00	38	0.2%
	23.00	27	0.1%
	26.00	5	0.0%
	33.00	2	0.0%
	34.00	1	0.0%
	44.00	4	0.0%
	58.00	2	0.0%
	59.00	1	0.0%
Overall		18601	100.0%
Excluded		2072	
Total		20673	

Ratio Statistics for currtot / tasp

Group	Median	Price Related Differential	Coefficient of Dispersion
1.00	.973	1.002	.069
2.00	.973	1.011	.084
3.00	.972	1.011	.078
4.00	.992	1.005	.066
5.00	.962	1.005	.067
6.00	.974	1.003	.072
7.00	1.005	1.015	.084
8.00	.976	1.010	.100
9.00	.983	1.011	.087
11.00	.859	.993	.024

12.00	.996	.995	.038
22.00	.974	.999	.046
23.00	.989	1.001	.048
26.00	.944	1.048	.094
33.00	.996	1.018	.018
34.00	.990	1.000	.000
44.00	.957	.905	.139
58.00	.991	1.023	.059
59.00	.698	1.000	.000
Overall	.976	1.009	.076

Economic areas with sufficient sales were in compliance with SBOE sales ratio standards.

B. Neighborhoods with at least 50 sales
Ratio Statistics for currtot / tasp

Group	Median	Price Related Differential	Coefficient of Dispersion
101	.976	1.004	.042
1001	.990	1.000	.051
1002	.974	1.006	.072
1003	.972	.994	.090
1004	.960	.998	.069
1005	.977	1.001	.050
1006	.970	1.002	.050
1007	.966	1.002	.063
1008	.962	1.005	.065
1009	.974	1.003	.071
1010	.956	1.002	.053
1011	.951	1.004	.054
1012	.986	1.010	.063
1015	.963	1.009	.083
1016	.957	1.009	.073
1017	.956	1.001	.073
1906	.979	1.005	.051
1921	.993	1.000	.036
2002	.929	1.008	.077
2301	.979	1.006	.064
2302	.952	1.004	.063
2307	.969	1.014	.087
2311	.993	1.003	.058
2314	.983	1.006	.067
2318	1.000	1.002	.046
2319	.964	1.006	.069
2329	.968	1.014	.098
2337	.990	1.011	.071
2403	1.029	1.009	.080
2404	.997	1.007	.074
2405	.959	1.015	.095
2406	.965	1.020	.106
2410	.961	1.026	.097
2411	.958	1.015	.108
2412	.961	1.025	.109
2417	.989	1.014	.091
2420	1.009	1.005	.061
2424	1.001	1.012	.081
2936	**.911**	**1.007**	**.061**

2945	.987	1.010	.068
3001	.954	1.021	.124
3003	.997	1.018	.108
3004	.961	1.020	.123
3006	.957	1.027	.119
3007	.961	1.035	.112
3009	.970	1.021	.093
3010	.952	1.019	.102
3011	.967	1.006	.070
3012	.954	1.007	.067
3015	.965	1.008	.067
3016	1.004	1.007	.061
3017	1.004	1.004	.060
3019	.980	1.010	.072
3021	.997	1.007	.067
3022	**.984**	**1.096**	**.162**
3026	1.000	1.024	.082
3028	1.003	1.004	.057
3906	.990	1.002	.047
3908	.963	1.002	.054
3910	.922	1.002	.049
3911	.879	1.001	.037
3919	.967	1.001	.046
3924	.956	1.000	.044
3942	1.008	1.002	.042
4003	.999	1.009	.064
4005	1.031	1.001	.053
4006	1.009	1.003	.061
4009	1.000	.999	.056
4010	1.001	1.007	.068
4011	.978	1.011	.066
4013	1.005	1.003	.051
4015	.998	1.003	.051
4016	.969	.999	.071
4020	1.000	.998	.060
4021	1.011	.995	.062
4022	1.000	1.001	.072
4024	1.000	1.003	.052
4025	.986	1.000	.059
4026	1.006	1.003	.058
4029	1.002	1.000	.050
4030	.999	1.002	.051
4032	1.000	.997	.057
4034	.956	1.000	.037
4046	.956	1.044	.124
4912	.953	1.014	.069
4913	.956	.997	.065
4914	.990	1.002	.044
4918	.845	1.009	.072
5001	.978	1.009	.067
5006	.986	1.006	.065
5007	.979	1.008	.059
5010	.977	1.012	.095
5011	.956	1.007	.062
5901	**.921**	**1.008**	**.070**
6103	.993	1.002	.069
6104	.970	1.010	.076

6106	1.000	1.026	.089
6107	.990	1.003	.045
7013	1.008	1.009	.086
8001	.972	1.040	.112
8005	.982	1.014	.101
8009	.949	1.007	.068
8010	1.041	1.003	.070
8011	.976	1.010	.077
9024	.974	1.010	.071
9033	.957	1.010	.079
9043	.993	1.014	.083
9082	.949	1.020	.114
9114	.992	1.001	.083
9133	1.009	1.006	.068
9143	.956	1.027	.092
9152	.996	1.012	.087
Overall	.976	1.008	.075

The neighborhoods highlighted in red were out of the compliance range for either the sales ratio, the COD or both. Most were marginally out of range and would likely be in compliance with trimming, in our opinion.

In terms of overall and economic areas, 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:

Sales Ratio Distribution

Mean = .99
Std. Dev. = .118
N = 20,652
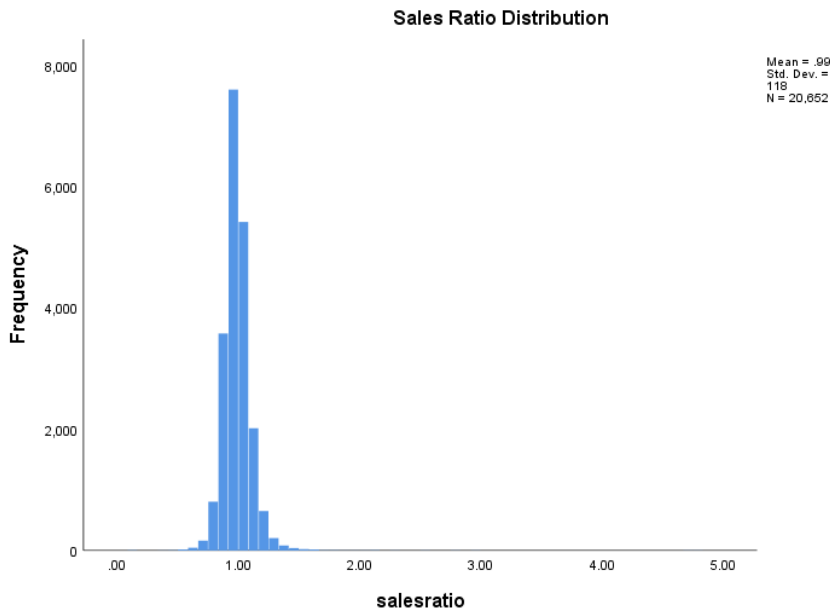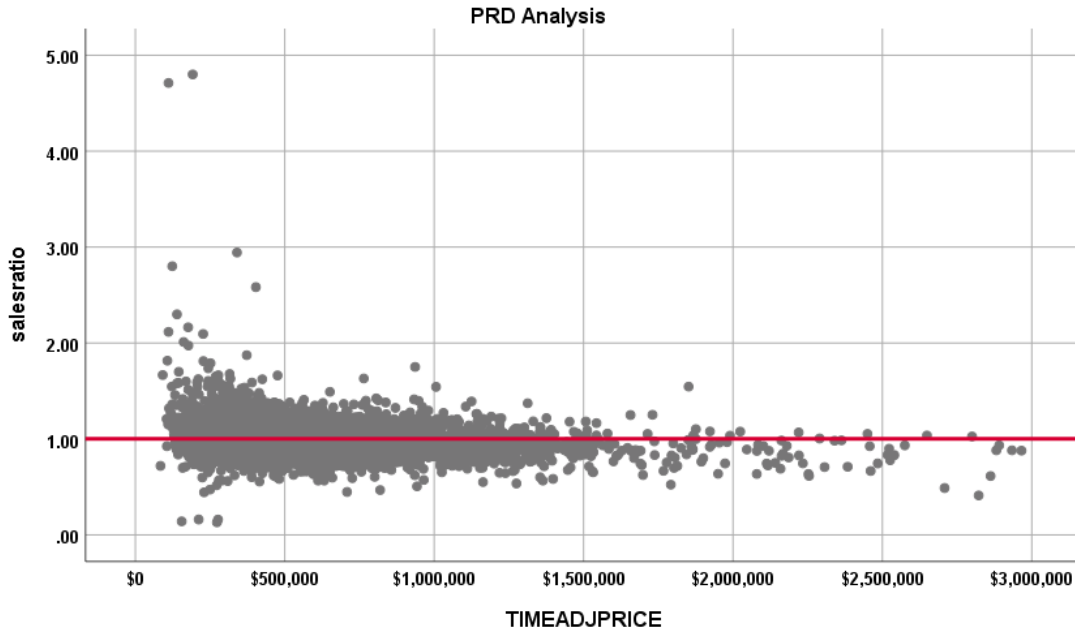
PRD Analysis

NOTE: SALES LIMITED TO LESS THAN $3,000,000.

The above graphs indicate that the distribution of the sale ratios was within state mandated limits.

Subclass 1212 PRD Analysis

We next analyzed residential properties identified as 1212 using the state abstract code system (Jefferson County uses the land code of 1112 for 1212 properties). 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
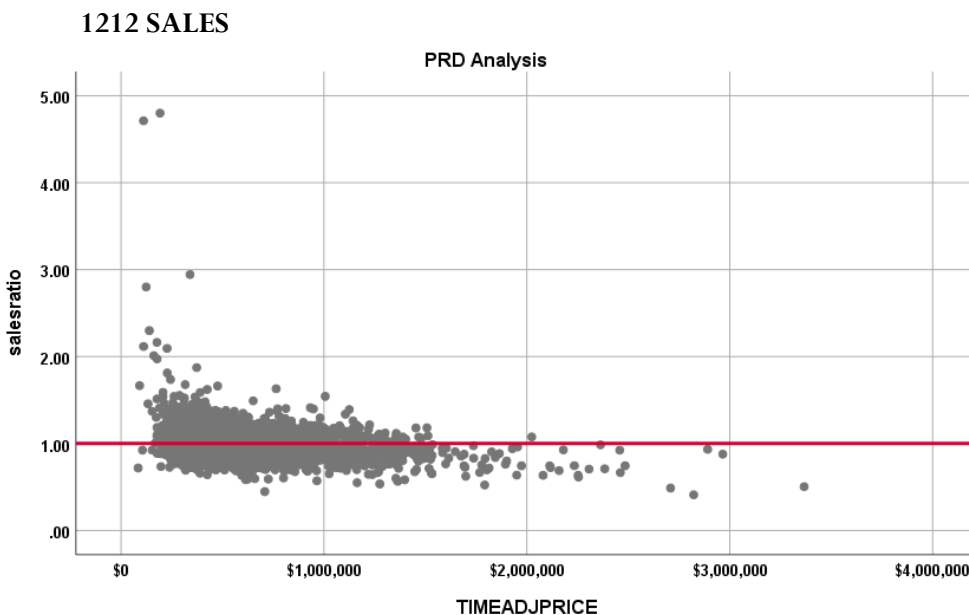
PRD Analysis

The Price-Related Differential (PRD) for 1212 sales is 1.008, which is within IAAO standards for the PRD. We also performed a regression analysis between the sales ratio and the assessors current value to further test for regressivity or progressivity in the residential sales valuation, as follows:

Coefficients[a]

Model		Unstandardized Coefficients B	Std. Error	Standardized Coefficients Beta	t	Sig.
1	(Constant)	.954	.003		370.728	.000
	CURRTOT	.000000056	.000	.092	11.701	.000

a. Dependent Variable: salesratio

The slope of the line at 0.000000056 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.

Case Processing Summary

		Count	Percent
SPRec	LT $200K	30	0.2%
	$200K to $300K	798	5.0%
	$300K to $400K	2872	17.9%
	$400K to $500K	5522	34.5%
	$500K to $600K	2992	18.7%
	$600K to $700K	1693	10.6%
	$700K to $800K	926	5.8%
	$800K to $900K	480	3.0%
	$900K to $1,000K	279	1.7%
	Over $1,000K	434	2.7%
Overall		16026	100.0%
Excluded		0	
Total		16026	

Ratio Statistics for CURRTOT / Tadj Price

Group	Median	Price Related Differential	Coefficient of Dispersion
LT $200K	1.183	1.030	.507
$200K to $300K	.988	1.003	.083
$300K to $400K	.984	1.000	.080
$400K to $500K	.983	1.000	.068
$500K to $600K	.971	1.000	.070
$600K to $700K	.974	1.000	.074
$700K to $800K	.970	1.000	.077
$800K to $900K	.965	1.000	.075
$900K to $1,000K	.943	1.000	.080
Over $1,000K	.896	1.013	.113
Overall	.976	1.008	.076

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

Residential Market Trend Analysis

We next analyzed the residential dataset using the 24-month sale period for any residual market trending and broken down by economic area, as follows:

Coefficients[a]

ECONAREA	Model		Unstandardized Coefficients B	Std. Error	Standardized Coefficients Beta	t	Sig.
1.00	1	(Constant)	.982	.003		304.765	.000
		SalePeriod	.000	.000	-.035	-1.846	.065
2.00	1	(Constant)	.993	.006		158.213	.000
		SalePeriod	-.001	.000	-.046	-2.818	.005
3.00	1	(Constant)	.991	.006		173.598	.000
		SalePeriod	-.001	.000	-.026	-1.647	.100
4.00	1	(Constant)	1.001	.003		332.069	.000
		SalePeriod	-.001	.000	-.041	-2.435	.015
5.00	1	(Constant)	.952	.004		247.082	.000
		SalePeriod	.001	.000	.069	2.989	.003
6.00	1	(Constant)	.995	.008		129.129	.000
		SalePeriod	-.002	.001	-.163	-4.029	.000
7.00	1	(Constant)	1.001	.020		49.924	.000
		SalePeriod	.002	.002	.117	1.053	.296
8.00	1	(Constant)	.971	.010		98.453	.000
		SalePeriod	.001	.001	.044	1.255	.210
9.00	1	(Constant)	.995	.008		131.994	.000
		SalePeriod	.000	.001	-.018	-.565	.572

a. Dependent Variable: salesratio

There was no residual significant market trending present in the sale ratio data for any of the economic areas; economic areas with statistically significant trends were not significant in terms of magnitude. We 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. The data was analyzed both as a whole and stratified by economic area and neighborhoods (with at least 40 sales), as follows:

Class Report

VALSF

sold	N	Median	Mean
UNSOLD	175659	$271	$286
SOLD	20671	$279	$295

Economic Area
Report
VALSF

ECONAREA	sold	N	Median	Mean
1.0	UNSOLD	24421	$253	$263
	SOLD	2855	$264	$273
2.0	UNSOLD	34361	$299	$307
	SOLD	3669	$317	$328
3.0	UNSOLD	34807	$270	$282
	SOLD	4068	$282	$290
4.0	UNSOLD	34411	$255	$267
	SOLD	3572	$267	$278
5.0	UNSOLD	9147	$254	$263
	SOLD	1853	$245	$253
6.0	UNSOLD	7400	$322	$339
	SOLD	595	$355	$364
7.0	UNSOLD	1172	$302	$320
	SOLD	82	$332	$339
8.0	UNSOLD	8252	$319	$335
	SOLD	829	$334	$352
9.0	UNSOLD	9086	$312	$324
	SOLD	972	$337	$349

Neighborhoods with at least 40 sales

Out of 134 residential neighborhoods with at least 40 sales, there were 5 neighborhoods (NBHDs 101, 2417, 3906, 6107)) that had differences of 10 percent or more between sold and unsold properties using the value per square foot comparison test and the median change in value comparison test.

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

IV. COMMERCIAL/INDUSTRIAL SALE RESULTS

There were 299 qualified commercial/industrial sales in the 24 month period ending June 30, 2020. 2 sales were trimmed using IAAO standards, resulting in a final count of 297 sales. The sales ratio analysis was analyzed as follows:

Median	**0.955**
Price Related Differential	**1.039**
Coefficient of Dispersion	**14.9**

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

Mean = .93
Std. Dev. = .207
N = 297

Commercial Sale Price by Sales Ratio
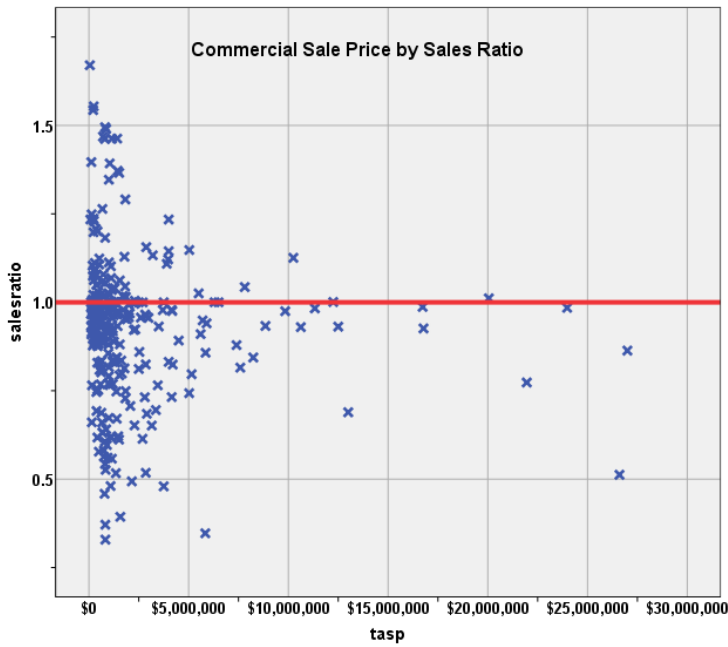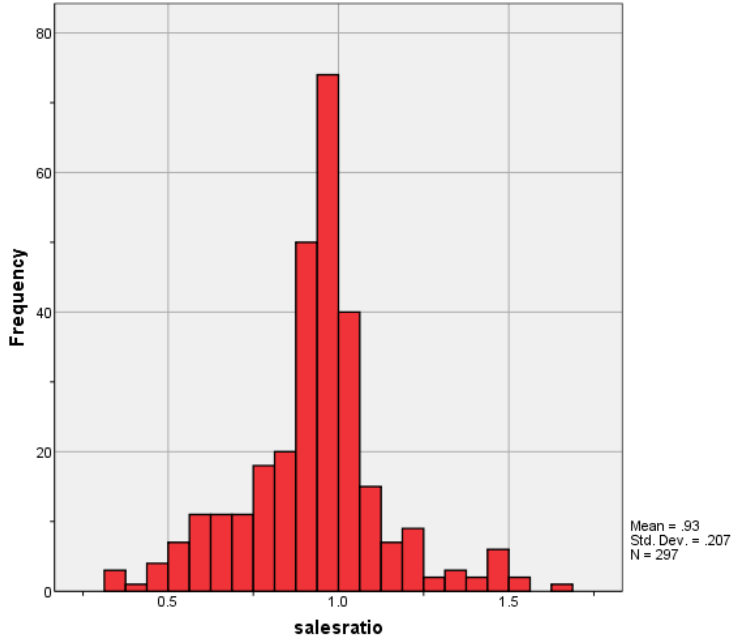
Commercial/Industrial Market Trend Analysis

The commercial/industrial sales were analyzed for residual marketing trending by examining the sale ratios across the 24 month sale period with the following results:

Coefficients[a]

Model		Unstandardized Coefficients		Standardized Coefficients		
		B	Std. Error	Beta	t	Sig.
1	(Constant)	.880	.024		36.090	.000
	SalePeriod	.004	.002	.137	2.369	.019

a. Dependent Variable: salesratio

Commercial Market Trend Analysis
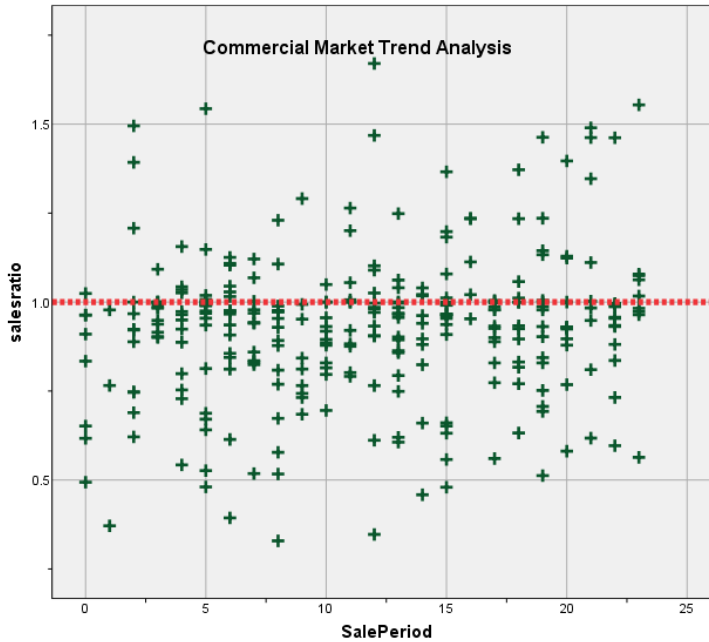
There was no residual market trending present in the commercial sale ratios. We concluded that the assessor has adequately considered market trending adjustments as part of the vacant land valuation.

Sold/Unsold Analysis

We compared the median actual value per square foot for 2022 for sold and unsold commercial properties to determine if they were valued consistently, as follows:

Report

VALSF

sold	N	Median	Mean
UNSOLD	5417	$146	$182
SOLD	297	$160	$181

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	.006	Retain the null hypothesis.

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

Report

VALSF

ABSTRIMP	sold	N	Median	Mean
2212.00	UNSOLD	1324	$176	$219
	SOLD	53	$233	$253
2215.00	UNSOLD	61	$103	$108
	SOLD	3	$90	$90
2220.00	UNSOLD	552	$105	$139
	SOLD	56	$128	$154
2230.00	UNSOLD	1176	$202	$236
	SOLD	53	$183	$199
2235.00	UNSOLD	712	$122	$135
	SOLD	42	$121	$127
2245.00	UNSOLD	505	$150	$156
	SOLD	27	$160	$167
3215.00	UNSOLD	104	$101	$103
	SOLD	10	$134	$156
3230.00	UNSOLD	788	$157	$159
	SOLD	52	$202	$180

Overall, the assessor has valued sold and unsold commercial properties consistently. While there was some difference at the subclass level, much of this difference was due to differences in size, age or quality.

V. VACANT LAND SALE RESULTS

There were 329 qualified vacant land sales for the 24 month period ending June 30, 2020. Using IAAO standards, we trimmed one sale, resulting in a total of 328 sales. The sales ratio analysis results were as follows:

Median	0.994
Price Related Differential	1.090
Coefficient of Dispersion	18.6

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:
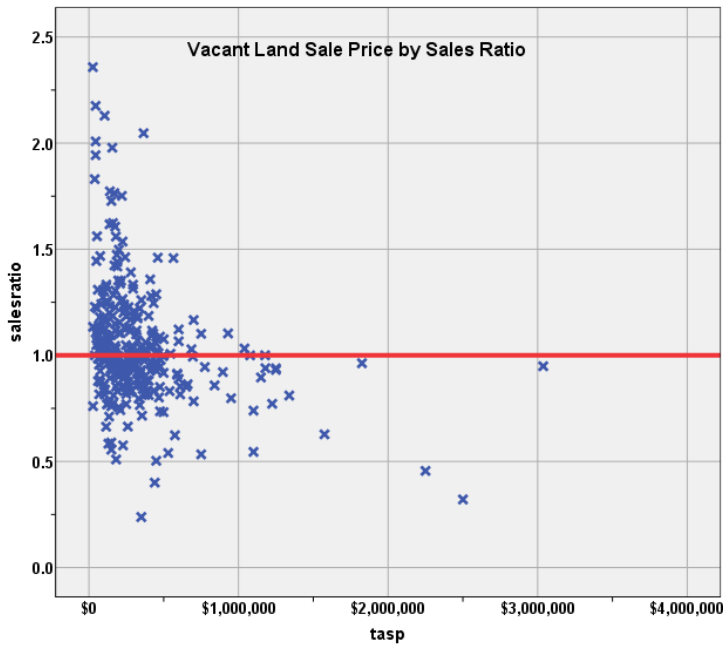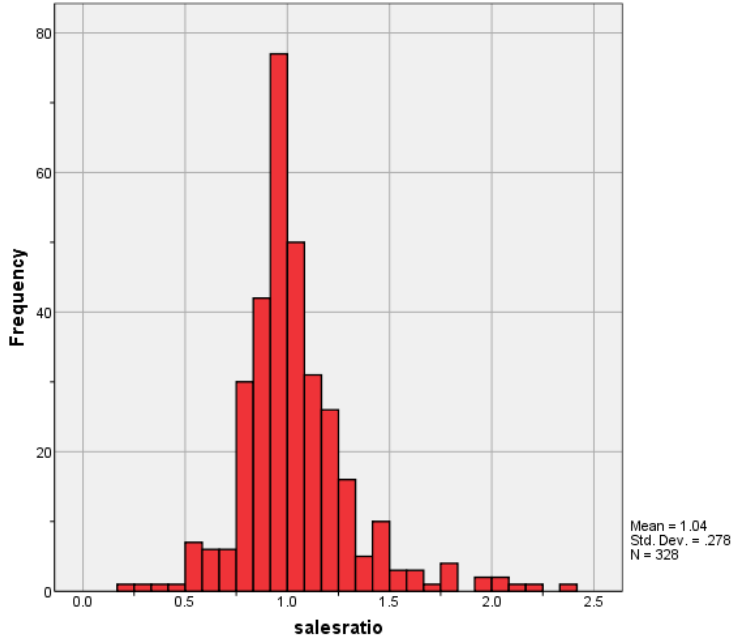
The above histogram indicates that the distribution of the vacant land sale ratios was within state mandated limits. No sales were trimmed.

Vacant Land Market Trend Analysis

We next analyzed the vacant land dataset using the 24-month sale period, with the following results:

Coefficients[a]

Model		Unstandardized Coefficients		Standardized Coefficients		
		B	Std. Error	Beta	t	Sig.
1	(Constant)	1.038	.030		35.097	.000
	SalePeriod	-7.044E-5	.002	-.002	-.032	.975

a. Dependent Variable: salesratio
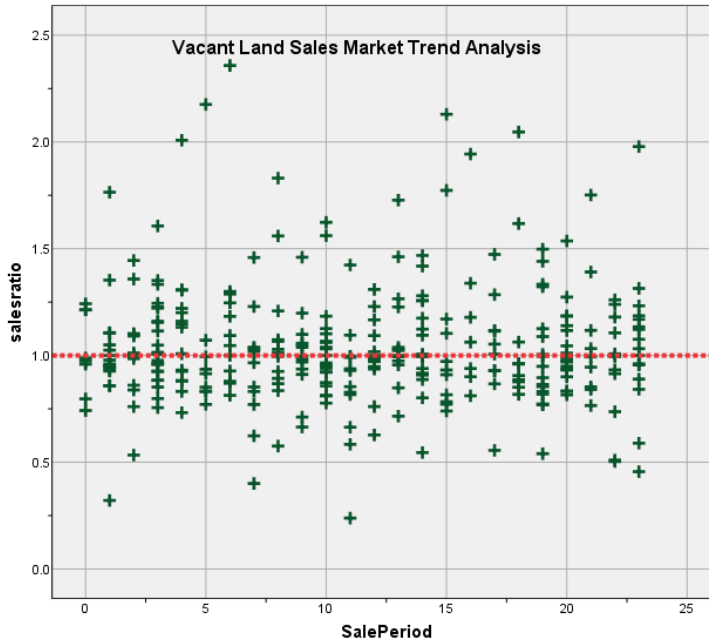
The above analysis indicated that there was no significant statistical trend. We therefore concluded that the assessor has adequately dealt with market trending for vacant land properties.

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	6742	1.09	1.20
SOLD	157	1.29	1.31

We next performed the same comparison analysis by subdivision with at least 3 sales. This indicated that when broken down by subdivision, there was no consistent pattern of sold vacant land parcels being adjusted at a greater rate than unsold properties. The following table was developed using subdivisions with at least 2 sales:

Report

DIFF

SUBDIVNO	sold	N	Median	Mean
100200	UNSOLD	10	1.17	1.17
	SOLD	2	.98	.98
108050	UNSOLD	1	1.00	1.00
	SOLD	2	1.20	1.20
163400	UNSOLD	6	1.23	1.19
	SOLD	2	1.24	1.24
210000	UNSOLD	1	1.00	1.00
	SOLD	2	1.08	1.08
278000	UNSOLD	17	.81	1.12
	SOLD	2	1.31	1.31
361635	UNSOLD	4	1.39	1.35
	SOLD	2	1.67	1.67
377400	UNSOLD	34	1.44	1.38
	SOLD	2	1.47	1.47
489800	UNSOLD	13	1.13	1.13
	SOLD	2	1.08	1.08
514600	UNSOLD	21	1.45	1.41
	SOLD	2	1.45	1.45
615125	UNSOLD	5	1.53	1.54
	SOLD	3	1.22	1.20
636005	UNSOLD	3	1.73	1.80
	SOLD	8	1.74	1.81

V. CONCLUSIONS

Based on this 2022 audit statistical analysis, 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
.	1.038	1.032	1.044	1.026	1.020	1.032	95.4%	1.039	1.033	1.045	.999	.092	13.0%
1.00	.977	.973	.980	.973	.970	.976	95.3%	.974	.971	.978	1.002	.069	9.0%
2.00	.978	.972	.985	.973	.969	.975	95.2%	.968	.964	.972	1.011	.084	20.2%
3.00	.983	.978	.989	.972	.969	.975	95.4%	.973	.969	.976	1.011	.078	18.7%
4.00	.994	.991	.998	.992	.989	.996	95.4%	.989	.985	.994	1.005	.066	9.5%
5.00	.962	.958	.966	.962	.957	.966	95.4%	.957	.952	.961	1.005	.067	8.9%
6.00	.969	.961	.977	.974	.967	.983	95.1%	.966	.957	.975	1.003	.072	10.4%
7.00	1.019	.996	1.041	1.005	.972	1.038	96.5%	1.003	.980	1.026	1.015	.084	10.2%
8.00	.982	.972	.992	.976	.967	.983	95.2%	.973	.962	.983	1.010	.100	14.6%
9.00	.991	.983	.999	.983	.974	.990	95.3%	.980	.972	.988	1.011	.087	12.4%

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

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
.931	.907	.955	.955	.933	.969	95.2%	.896	.854	.938	1.039	.149	22.2%

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.

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
1.038	1.007	1.068	.994	.972	1.006	95.9%	.952	.908	.995	1.090	.186	26.8%

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.

Subclass

Case Processing Summary

		Count	Percent
ABSTRIMP	.00	2	0.0%
	1212.00	18302	88.5%
	1215.00	194	0.9%
	1216.00	1	0.0%
	1220.00	67	0.3%
	1225.00	35	0.2%
	1230.00	2071	10.0%
	1277.00	1	0.0%
Overall		20673	100.0%
Excluded		0	
Total		20673	

Ratio Statistics for currtot / tasp

Group	Median	Price Related Differential	Coefficient of Dispersion	Coefficient of Variation Median Centered
.00	.452	.987	.118	16.8%
1212.00	.976	1.008	.075	14.8%
1215.00	.902	1.019	.115	20.4%
1216.00	.698	1.000	.000	.
1220.00	.970	1.002	.060	10.6%
1225.00	.990	1.025	.039	5.6%
1230.00	1.026	.999	.092	13.2%
1277.00	.770	1.000	.000	.
Overall	.980	1.011	.079	14.8%

Improvement Age

Case Processing Summary

		Count	Percent
AgeRec	0	2	0.0%
	Over 100	126	0.6%
	75 to 100	444	2.1%
	50 to 75	4732	22.9%
	25 to 50	9453	45.7%
	5 to 25	3491	16.9%
	5 or Newer	2425	11.7%
Overall		20673	100.0%
Excluded		0	
Total		20673	

Ratio Statistics for currtot / tasp

Group	Median	Price Related Differential	Coefficient of Dispersion	Coefficient of Variation Median Centered
0	.452	.987	.118	16.8%
Over 100	.923	1.021	.128	16.2%
75 to 100	.935	1.021	.127	18.3%
50 to 75	.974	1.011	.083	17.8%
25 to 50	.980	1.004	.072	14.4%
5 to 25	.994	1.019	.079	11.1%
5 or Newer	.978	1.023	.079	13.8%
Overall	.980	1.011	.079	14.8%

Improved Area

Case Processing Summary

		Count	Percent
ImpSFRec	0	2	0.0%
	LE 500 sf	45	0.2%
	500 to 1,000 sf	2732	13.2%
	1,000 to 1,500 sf	6815	33.0%
	1,500 to 2,000 sf	4970	24.0%
	2,000 to 3,000 sf	4719	22.8%
	3,000 sf or Higher	1390	6.7%
Overall		20673	100.0%
Excluded		0	
Total		20673	

Ratio Statistics for currtot / tasp

Group	Median	Price Related Differential	Coefficient of Dispersion	Coefficient of Variation Median Centered
0	.452	.987	.118	16.8%
LE 500 sf	.923	1.004	.112	15.0%
500 to 1,000 sf	.978	1.011	.085	12.4%
1,000 to 1,500 sf	.979	1.009	.079	16.6%
1,500 to 2,000 sf	.979	1.005	.073	10.5%
2,000 to 3,000 sf	.984	1.012	.076	16.8%
3,000 sf or Higher	.976	1.020	.090	15.4%
Overall	.980	1.011	.079	14.8%

Improvement Quality

Case Processing Summary

		Count	Percent
QUALITY		2	0.0%
	0	4	0.0%
	1	51	0.2%
	2	2928	14.2%
	3	12177	58.9%
	4	4708	22.8%
	5	783	3.8%

	6	20	0.1%
Overall		20673	100.0%
Excluded		0	
Total		20673	

Ratio Statistics for currtot / tasp

Group	Median	Price Related Differential	Coefficient of Dispersion	Coefficient of Variation Median Centered
	.452	.987	.118	16.8%
0	.954	.958	.119	17.4%
1	.948	1.017	.128	16.7%
2	.965	1.012	.086	22.8%
3	.982	1.008	.076	13.6%
4	.984	1.017	.078	11.7%
5	.986	1.026	.092	12.9%
6	.948	1.018	.140	20.6%
Overall	.980	1.011	.079	14.8%

Commercial Median Ratio Stratification

Sale Price

Case Processing Summary

		Count	Percent
SPRec	$25K to $50K	1	0.3%
	$50K to $100K	2	0.7%
	$100K to $150K	11	3.7%
	$150K to $200K	18	6.1%
	$200K to $300K	21	7.1%
	$300K to $500K	32	10.8%
	$500K to $750K	37	12.5%
	$750K to $1,000K	35	11.8%
	Over $1,000K	140	47.1%
Overall		297	100.0%
Excluded		0	
Total		297	

Ratio Statistics for currtot / tasp

Group	Median	Price Related Differential	Coefficient of Dispersion	Coefficient of Variation Median Centered
$25K to $50K	1.670	1.000	.000	.
$50K to $100K	1.100	1.018	.122	17.2%
$100K to $150K	.935	1.005	.122	21.3%
$150K to $200K	.981	.998	.044	7.3%
$200K to $300K	1.002	1.007	.129	20.7%
$300K to $500K	.945	1.006	.114	15.5%
$500K to $750K	.902	1.003	.144	20.2%
$750K to $1,000K	.928	.999	.229	31.8%
Over $1,000K	.954	1.019	.148	21.1%
Overall	.955	1.039	.149	21.8%

Subclass

Case Processing Summary

		Count	Percent
ABSTRIMP	2212.00	53	17.8%
	2215.00	3	1.0%
	2220.00	56	18.9%
	2225.00	1	0.3%
	2230.00	53	17.8%
	2235.00	42	14.1%
	2245.00	27	9.1%
	3215.00	10	3.4%
	3230.00	52	17.5%
Overall		297	100.0%
Excluded		0	
Total		297	

Ratio Statistics for currtot / tasp

Group	Median	Price Related Differential	Coefficient of Dispersion	Coefficient of Variation Median Centered
2212.00	.962	.979	.111	16.9%
2215.00	.961	.992	.017	3.2%
2220.00	.956	1.020	.107	17.5%
2225.00	.732	1.000	.000	.
2230.00	.881	1.162	.243	31.0%
2235.00	.868	.966	.156	20.1%
2245.00	.995	1.090	.150	25.1%
3215.00	.830	1.092	.216	30.7%
3230.00	.999	.960	.105	15.9%
Overall	.955	1.039	.149	21.8%

Improvement Age

Case Processing Summary

		Count	Percent
AgeRec	Over 100	5	1.7%
	75 to 100	9	3.0%
	50 to 75	52	17.5%
	25 to 50	116	39.1%
	5 to 25	103	34.7%
	5 or Newer	12	4.0%
Overall		297	100.0%
Excluded		0	
Total		297	

Ratio Statistics for currtot / tasp

Group	Median	Price Related Differential	Coefficient of Dispersion	Coefficient of Variation Median Centered
Over 100	.885	1.029	.125	17.8%
75 to 100	.876	.971	.132	19.0%
50 to 75	.898	1.020	.149	22.1%
25 to 50	.971	1.022	.148	22.2%
5 to 25	.966	1.087	.136	20.0%
5 or Newer	.983	1.091	.207	29.1%
Overall	.955	1.039	.149	21.8%

Improved Area

Case Processing Summary

		Count	Percent
ImpSFRec	LE 500 sf	1	0.3%
	500 to 1,000 sf	23	7.7%
	1,000 to 1,500 sf	28	9.4%
	1,500 to 2,000 sf	28	9.4%
	2,000 to 3,000 sf	30	10.1%
	3,000 sf or Higher	187	63.0%
Overall		297	100.0%
Excluded		0	
Total		297	

Ratio Statistics for currtot / tasp

Group	Median	Price Related Differential	Coefficient of Dispersion	Coefficient of Variation Median Centered
LE 500 sf	1.670	1.000	.000	.
500 to 1,000 sf	.966	1.039	.091	14.1%
1,000 to 1,500 sf	.973	1.025	.088	13.4%
1,500 to 2,000 sf	.968	1.056	.144	20.4%
2,000 to 3,000 sf	.956	1.100	.194	28.2%
3,000 sf or Higher	.949	1.031	.156	22.2%
Overall	.955	1.039	.149	21.8%

Improvement Quality

Case Processing Summary

		Count	Percent
QUALITY	2	4	1.3%
	3	242	81.5%
	4	50	16.8%
	6	1	0.3%
Overall		297	100.0%
Excluded		0	
Total		297	

Ratio Statistics for currtot / tasp

Group	Median	Price Related Differential	Coefficient of Dispersion	Coefficient of Variation Median Centered
2	.843	1.044	.061	7.9%
3	.956	1.006	.155	22.6%
4	.959	1.101	.120	17.4%
6	.512	1.000	.000	.
Overall	.955	1.039	.149	21.8%

Vacant Land Median Ratio Stratification

Sale Price

Case Processing Summary

		Count	Percent
SPRec	$25K to $50K	12	3.7%
	$50K to $100K	34	10.4%
	$100K to $150K	42	12.8%
	$150K to $200K	40	12.2%
	$200K to $300K	71	21.6%
	$300K to $500K	88	26.8%
	$500K to $750K	20	6.1%
	$750K to $1,000K	5	1.5%
	Over $1,000K	16	4.9%
Overall		328	100.0%
Excluded		0	
Total		328	

Ratio Statistics for currlnd / tasp

Group	Median	Price Related Differential	Coefficient of Dispersion	Coefficient of Variation Median Centered
$25K to $50K	1.337	.996	.342	41.9%
$50K to $100K	1.065	1.004	.123	16.3%
$100K to $150K	1.013	1.006	.223	32.3%
$150K to $200K	1.019	1.003	.236	32.8%
$200K to $300K	.985	1.003	.153	21.4%
$300K to $500K	.970	1.001	.138	22.0%
$500K to $750K	.899	1.000	.177	24.4%
$750K to $1,000K	.921	1.000	.085	12.5%
Over $1,000K	.913	1.039	.177	26.4%
Overall	.994	1.090	.186	28.3%

Subclass

Case Processing Summary

		Count	Percent
ABSTRLND	100.00	112	34.1%
	200.00	19	5.8%
	300.00	7	2.1%
	520.00	8	2.4%
	530.00	2	0.6%
	540.00	6	1.8%
	550.00	7	2.1%
	600.00	1	0.3%
	1112.00	147	44.8%
	1115.00	1	0.3%
	2112.00	4	1.2%
	2130.00	12	3.7%
	2135.00	2	0.6%
Overall		328	100.0%
Excluded		0	
Total		328	

Ratio Statistics for currlnd / tasp

Group	Median	Price Related Differential	Coefficient of Dispersion	Coefficient of Variation Median Centered
100.00	1.016	1.080	.194	30.0%
200.00	.978	1.013	.104	15.7%
300.00	1.007	1.068	.144	26.4%
520.00	1.038	.975	.172	24.9%
530.00	1.013	1.039	.060	8.4%
540.00	1.255	1.078	.210	24.6%
550.00	.977	1.030	.107	16.9%
600.00	1.458	1.000	.000	.
1112.00	.987	1.033	.190	28.7%
1115.00	1.229	1.000	.000	.
2112.00	.938	1.126	.175	38.0%
2130.00	.949	1.099	.159	24.2%
2135.00	.886	1.008	.129	18.2%
Overall	.994	1.090	.186	28.3%