DOUGLAS COUNTY

2021
DOUGLAS 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:

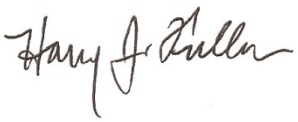
Wildrose Appraisal Inc.-Audit Division is pleased to submit the Final Reports for the 2021 Colorado Property Assessment Study.

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

TABLE OF CONTENTS

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.

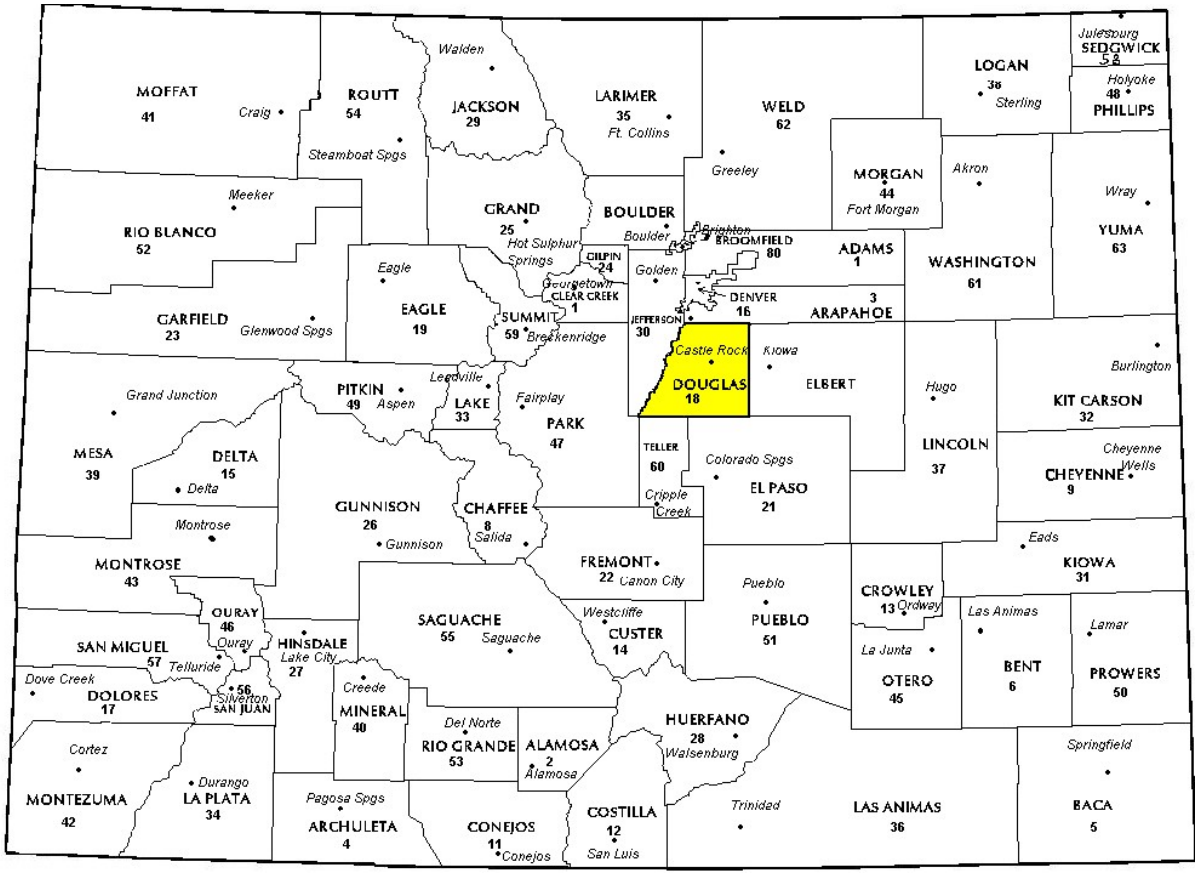
Statistical analysis is performed on vacant land, residential properties, commercial industrial properties, agricultural land, and personal property. The statistical study results are compared with State Board of Equalization compliance requirements and the manuals published by the State Property Tax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

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

REGIONAL/HISTORICAL SKETCH OF DOUGLAS COUNTY

Regional Information

Douglas 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

Douglas County has approximately 840.3 square miles and an estimated population of approximately 351,154 people with 339.7 people per square mile, according to the U.S. Census Bureau's 2020 estimated census data. This represents a 23.0 percent change from April 1, 2010 to July 1, 2019.

Douglas County was one of the original 17 counties created in the Colorado Territory by the Colorado Territorial Legislature on November 1, 1861. The county was named in honor of U.S. Senator Stephen A. Douglas of Illinois, who died five months before the county was created. The county seat was originally Franktown, but was moved to California Ranch in 1863, and then to Castle Rock in 1874. Although the county's boundaries originally extended eastward to the Kansas state border, in 1874 most of the eastern portion of the county became part of Elbert County.

Douglas County is the eighth most populous of the 64 counties of the State of Colorado. The county, sometimes nicknamed Dougco, is located midway between Colorado's two largest cities: Denver and Colorado Springs. The United States Census Bureau estimates that the county population was 280,621 in 2008, a 59.7% increase since U.S. Census 2000, making Douglas County one of the fastest growing counties in the United States. The county seat is Castle Rock, named after a small butte just north of the town.

Douglas County is lightly wooded, mostly with ponderosa pine, with broken terrain characterized by mesas and small streams. Cherry Creek and Plum Creek rise in Douglas County and flow north toward Denver and into the South Platte River. Both were subject to flash flooding in the past, Plum Creek being partially responsible for the Denver flood of 1965. Cherry Creek is now dammed.
(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
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 Douglas County are:

Douglas County Ratio Grid					
Property Class	Number of Qualified Sales	Unweighted Median Ratio	Price Related Differential	Coefficient of Dispersion	Time Trend Analysis
Commercial/Industrial	201	0.971	1.155	12.5	Compliant
Residential	18,665	0.978	1.006	4.6	Compliant
Vacant Land	421	0.992	1.055	16.5	Compliant

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

Douglas 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

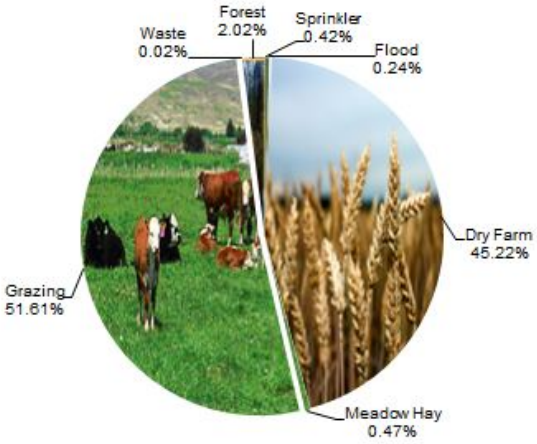
After applying the above described methodologies, it is concluded that Douglas County is reasonably treating its sold and unsold properties in the same manner.

Recommendations

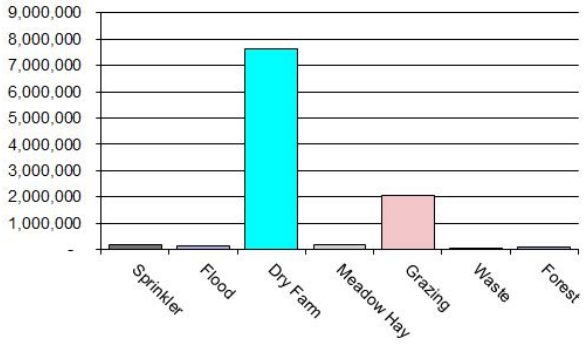
None

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:

Douglas 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	1,283	136.78	175,494	175,440	1.00
4117	Flood	730	191.19	139,567	140,088	1.00
4127	Dry Farm	137,873	55.43	7,642,375	7,614,860	1.00
4137	Meadow Hay	1,447	140.81	203,751	203,751	1.00
4147	Grazing	157,369	12.99	2,044,251	2,044,251	1.00
4177	Forest	6,157	12.66	77,932	77,932	1.00
4167	Waste	63	2.42	152	152	1.00
Total/Avg		**304,922**	**33.73**	**10,283,522**	**10,256,474**	**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

Douglas 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

Douglas 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

Douglas 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

Douglas 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 Douglas County. This study was conducted by checking selected sales from the master sales list for the current valuation period. Specifically WRA selected 60 sales listed as unqualified.

All of the sales in the unqualified sales sample had reasons that were clear and supportable.

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

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

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

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

Douglas County did not qualify for in-depth subclass analysis.

Conclusions

Douglas County appears to be doing an adequate job of verifying their sales. WRA agreed with the county's reason for disqualifying each of the sales selected in the sample. There are no recommendations or suggestions.

Recommendations

None

ECONOMIC AREA REVIEW AND EVALUATION

Methodology

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

Douglas 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.

Douglas 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

Douglas 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

Douglas 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.

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

- Public Record Documents
- MLS Listing and/or Sold Books
- Chamber of Commerce/Economic Development Contacts
- Local Telephone Directories, Newspapers or Other Local Publications
- Personal Observation, Physical Canvassing or Word of Mouth
- Questionnaires, Letters and/or Phone Calls to Buyer, Seller and/or Realtor

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.

Douglas 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
- Accounts with obvious discrepancies
- New businesses filing for the first time
- Accounts with greater than 10% change
- Incomplete or inconsistent declarations
- Accounts with omitted property
- Same business type or use

- Businesses with no deletions or additions for 2 or more years
- Non-filing Accounts - Best Information Available
- Accounts close to the $7,900 actual value exemption status
- Lowest or highest quartile of value per square foot
- Accounts protested with substantial disagreement

Douglas 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

Douglas 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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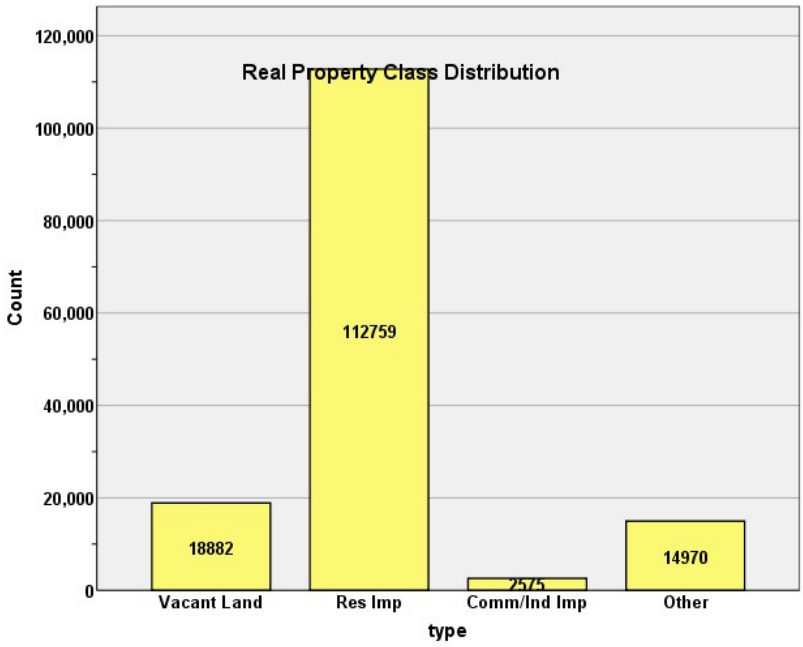
STATISTICAL APPENDIX

STATISTICAL COMPLIANCE REPORT
FOR DOUGLAS COUNTY
2021

I. OVERVIEW

Douglas County is a metropolitan county located along Colorado's Front Range urban corridor. The county has a total of 153,184 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 and 1112) accounted for over 92.9% of all vacant land parcels.

For residential improved properties, residential properties coded 1212 and 1213 accounted for 90.2% of all residential properties.

Commercial and industrial properties represented a much smaller proportion of property classes in comparison. Commercial/industrial properties accounted for 1.7% of all such properties in this county.

II. DATA FILES

The following sales analyses were based on the requirements of the 2021 Colorado Property Assessment Study. Information was provided by the Douglas 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 18,665 qualified residential sales for the 24-month sale period ending June 30, 2020. The sales ratio analysis results were as follows:

Median	**0.978**
Price Related Differential	**1.006**
Coefficient of Dispersion	**4.6**

Based on the Audit questionnaire filled out by the assessor (see below), the following geographic levels were used by the assessor to value residential, commercial and vacant land properties:

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

Economic Area

Case Processing Summary

		Count	Percent
ECONAREA	1.00	5732	33.0%
	2.00	4180	24.1%
	3.00	1059	6.1%
	4.00	5839	33.6%
	5.00	216	1.2%
	6.00	325	1.9%
	7.00	29	0.2%
Overall		17380	100.0%
Excluded		1285	
Total		18665	

Ratio Statistics for CURRTOT / TASP

Group	Median	Price Related Differential	Coefficient of Dispersion
1.00	.978	1.007	.043
2.00	.977	1.002	.046
3.00	.977	1.010	.051
4.00	.976	1.008	.044
5.00	.995	1.016	.077
6.00	1.002	1.013	.087
7.00	1.017	1.013	.126
Overall	.978	1.006	.046

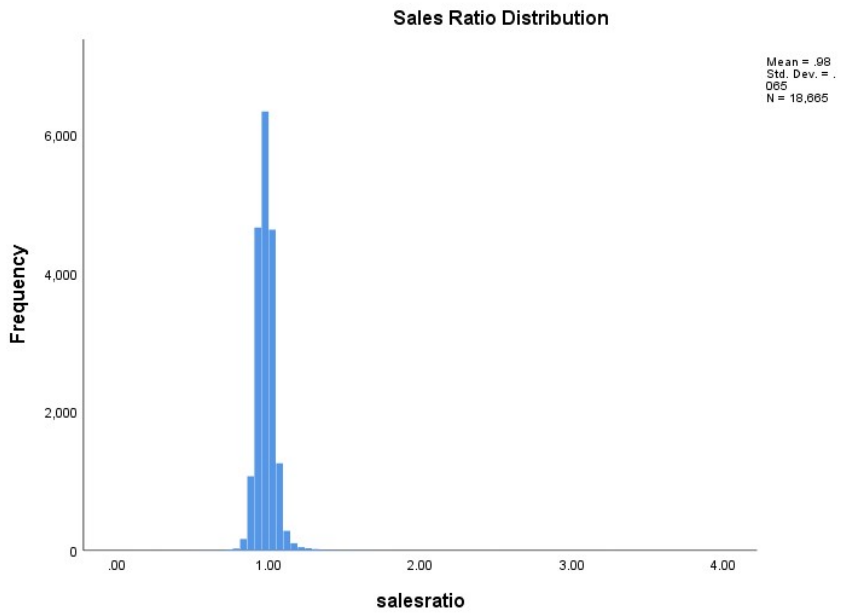
Neighborhoods with 25 or more sale

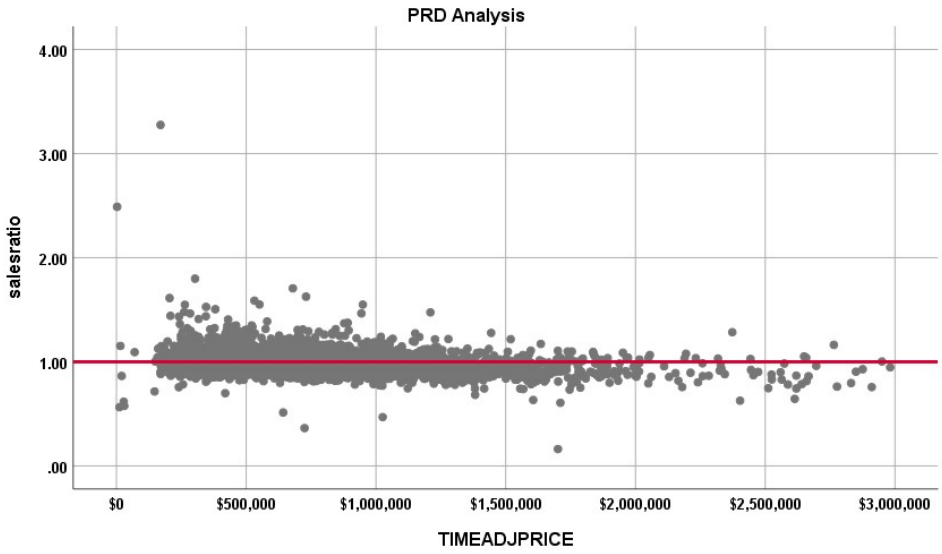
Ratio Statistics for CURRTOT / TASP

Group	Median	Price Related Differential	Coefficient of Dispersion
132	.977	1.002	.042
1BB	**.920**	**1.013**	**.076**
1CC	.980	1.007	.045
1DD	.977	1.001	.036
1EE	.977	1.002	.040

232	.974	1.005	.045
2AA	.977	1.013	.072
2BB	.977	1.003	.044
2CA	.979	1.003	.047
2CC	.978	1.002	.041
3AA	**.919**	**1.018**	**.083**
3CC	.973	1.034	.085
3DD	.980	1.004	.049
432	.974	1.001	.033
4AA	.983	1.015	.083
4BB	.979	1.005	.042
4CC	.976	1.002	.040
4DD	.976	1.004	.044
4EE	.976	1.002	.043
4FF	.962	1.002	.055
9AA	.966	1.008	.072
9BB	1.022	1.010	.076
9C1	.994	1.016	.071
9C2	1.015	1.028	.100
9CC	.983	1.014	.089
9DD	.993	1.024	.073
9EE	.952	1.013	.082
Overall	.978	1.005	.045

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. Two neighborhoods (out of 28) with at least 25 sales (Neighborhoods 1BB and 3AA) were outside of the standards for the median sales ratio, although these neighborhoods had two of the lowest sale totals among the neighborhoods. The following graphs describe further the sales ratio distribution for these properties:





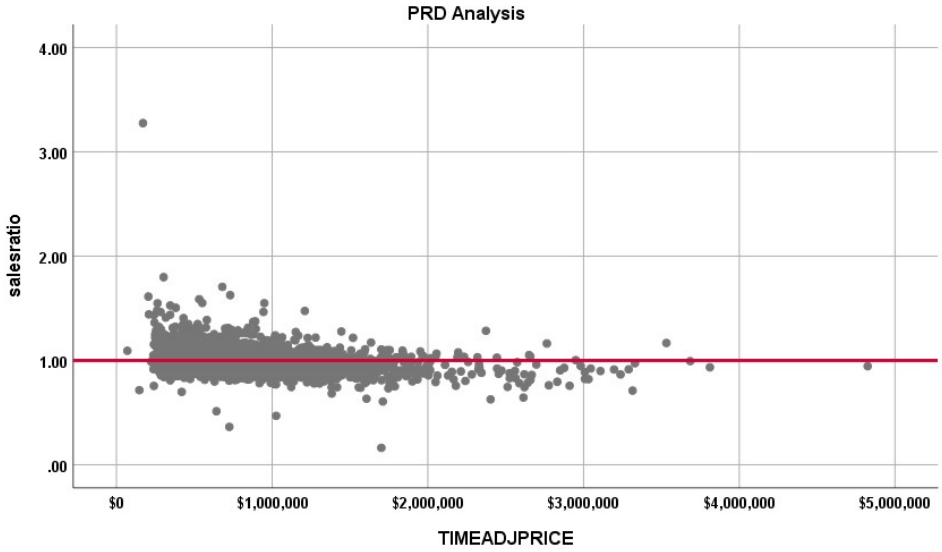
NOTE: SALES OVER $3,500,000 TRIMMED OUT IN ABOVE GRAPH

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

Subclass 1212 PRD Analysis

We next analyzed residential properties identified as 1112 using the state abstract code system (Douglas County used the predominant use land code 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



The Price-Related Differential (PRD) for 1212 sales is 1.005, 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	Std. Error	Standardized Coefficients Beta	t	Sig.
1	(Constant)	.982	.001		777.374	.000
	CURRTOT	-.0000000016	.000	-.006	-.796	.426

a. Dependent Variable: salesratio

The slope of the line at 0.0000000016 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 $300K	121	0.7%
	$300K to $400K	1963	11.3%
	$400K to $500K	5580	32.1%
	$500K to $600K	4225	24.3%
	$600K to $750K	3041	17.5%
	$750K to $1000K	1520	8.8%
	$1000K to $2000K	846	4.9%
	Over $2000K	71	0.4%
Overall		17367	100.0%
Excluded		0	
Total		17367	

Ratio Statistics for CURRTOT / TASP

Group	Median	Price Related Differential	Coefficient of Dispersion	Coefficient of Variation Median Centered
LT $300K	.998	1.009	.117	26.1%
$300K to $400K	.984	1.000	.043	6.3%
$400K to $500K	.984	1.000	.039	5.1%
$500K to $600K	.979	1.000	.040	5.3%
$600K to $750K	.968	1.000	.047	6.5%
$750K to $1000K	.962	1.000	.061	8.0%
$1000K to $2000K	.937	1.004	.075	10.3%
Over $2000K	.905	1.000	.097	12.9%
Overall	.978	1.005	.046	6.6%

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 stratified by economic area, as follows:

Coefficients[a]

ECONAREA	Model		Unstandardized Coefficients B	Unstandardized Coefficients Std. Error	Standardized Coefficients Beta	t	Sig.
.	1	(Constant)	.979	.004		270.431	.000
		SalePeriod	.000	.000	-.014	-.490	.624
1.00	1	(Constant)	.980	.001		658.351	.000
		SalePeriod	4.165E-5	.000	.005	.377	.706
2.00	1	(Constant)	.980	.002		541.389	.000
		SalePeriod	5.087E-5	.000	.006	.379	.705
3.00	1	(Constant)	.981	.004		252.699	.000
		SalePeriod	.000	.000	-.021	-.675	.500
4.00	1	(Constant)	.974	.001		674.601	.000
		SalePeriod	.000	.000	.049	3.719	.000
5.00	1	(Constant)	1.005	.015		66.156	.000
		SalePeriod	-.001	.001	-.061	-.893	.373
6.00	1	(Constant)	1.007	.018		56.403	.000
		SalePeriod	.001	.001	.020	.361	.718
7.00	1	(Constant)	.979	.054		17.974	.000
		SalePeriod	.003	.004	.136	.715	.481

a. Dependent Variable: salesratio

The above results indicated that there is no significant residual market trending for residential property sales when broken down by economic area. We therefore concluded that the assessor has adequately considered market trending in their residential valuations overall.

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 broken down by economic area and neighborhoods with at least 25 sales, as follows:

Report
VALSF

sold	N	Median	Mean
UNSOLD	96466	$234	$243
SOLD	18664	$235	$245

Report
VALSF

ECONAREA	sold	N	Median	Mean
1.00	UNSOLD	26630	$221	$231
	SOLD	5731	$227	$236
2.00	UNSOLD	31789	$246	$256
	SOLD	4180	$258	$269

3.00	UNSOLD	4134	$247	$264
	SOLD	1059	$239	$260
4.00	UNSOLD	22355	$217	$232
	SOLD	5839	$217	$231
5.00	UNSOLD	1884	$250	$257
	SOLD	216	$265	$269
6.00	UNSOLD	3056	$271	$279
	SOLD	325	$280	$287
7.00	UNSOLD	510	$247	$257
	SOLD	29	$291	$293

Report

VALSF

NBHD	sold	N	Median	Mean
132	UNSOLD	1090	$236	$233
	SOLD	269	$238	$233
1BB	UNSOLD	81	$324	$335
	SOLD	33	$381	$369
1CC	UNSOLD	4988	$222	$232
	SOLD	1835	$226	$234
1DD	UNSOLD	7882	$209	$215
	SOLD	1464	$216	$223
1EE	UNSOLD	9749	$228	$234
	SOLD	1865	$234	$240
232	UNSOLD	1989	$264	$273
	SOLD	300	$270	$279
2AA	UNSOLD	1982	$301	$314
	SOLD	501	$322	$335
2BB	UNSOLD	12137	$236	$244
	SOLD	1370	$244	$251
2CA	UNSOLD	956	$245	$269
	SOLD	97	$263	$288
2CC	UNSOLD	14669	$250	$255
	SOLD	1906	$257	$261
3AA	UNSOLD	64	$528	$523
	SOLD	26	$574	$574
3CC	UNSOLD	438	$314	$310
	SOLD	43	$318	$316
3DD	UNSOLD	3852	$240	$250
	SOLD	1050	$236	$246
432	UNSOLD	1458	$214	$227
	SOLD	327	$210	$222
4AA	UNSOLD	1267	$329	$340
	SOLD	245	$358	$371
4BB	UNSOLD	2687	$220	$232
	SOLD	1448	$211	$223
4CC	UNSOLD	4105	$206	$212
	SOLD	1098	$203	$212
4DD	UNSOLD	4780	$212	$220
	SOLD	1319	$223	$227
4EE	UNSOLD	6642	$217	$225
	SOLD	1247	$223	$228
4FF	UNSOLD	763	$230	$242
	SOLD	98	$223	$239
9AA	UNSOLD	795	$284	$301
	SOLD	86	$313	$321

9BB	UNSOLD	2187	$255	$264
	SOLD	197	$246	$263
9C1	UNSOLD	790	$214	$227
	SOLD	71	$229	$238
9C2	UNSOLD	630	$231	$243
	SOLD	55	$264	$261
9CC	UNSOLD	1633	$256	$267
	SOLD	134	$269	$283
9DD	UNSOLD	584	$307	$295
	SOLD	67	$308	$298
9EE	UNSOLD	361	$213	$222
	SOLD	42	$206	$228

The majority of residential neighborhoods had similar values per square foot for sold and unsold residential properties. The neighborhoods with significant differences then had their sold and unsold properties compared using the median percent change in value methods using valuation year 2018 and valuation year 2020, as follows:

Report
DIFF

NBHD	sold	N	Median	Mean
1BB	UNSOLD	45	1.0416	1.0962
	SOLD	25	1.0807	1.1002
1DD	UNSOLD	7833	1.0548	1.0582
	SOLD	1436	1.0603	1.0679
	Total	9269	1.0555	1.0597
1EE	UNSOLD	9567	1.0527	1.0535
	SOLD	1790	1.0628	1.0705
2AA	UNSOLD	1957	1.0698	1.0781
	SOLD	478	1.0713	1.0799
2CA	UNSOLD	956	1.0587	1.0632
	SOLD	97	1.0707	1.0809
3AA	UNSOLD	60	1.0980	1.1373
	SOLD	24	1.0975	1.1164
4AA	UNSOLD	1248	1.0526	1.0654
	SOLD	242	1.0816	1.0891
	Total	1490	1.0554	1.0693
4DD	UNSOLD	4552	1.0417	1.0447
	SOLD	1226	1.0501	1.0686
9AA	UNSOLD	774	1.1237	1.1298
	SOLD	85	1.1618	1.1774
9CC	UNSOLD	1624	1.1115	1.1262
	SOLD	134	1.1266	1.1386

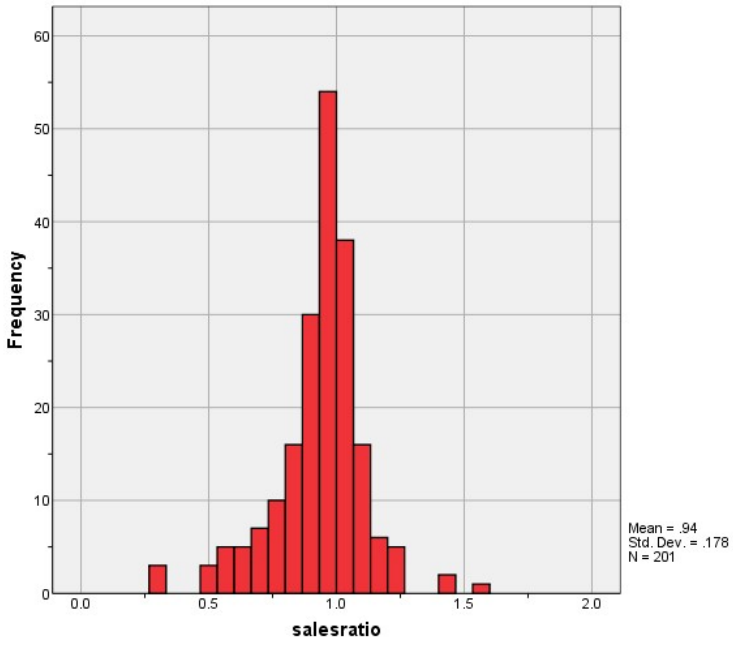
Based on these results, we concluded that the assessor valued sold and unsold residential properties consistently in 2021.

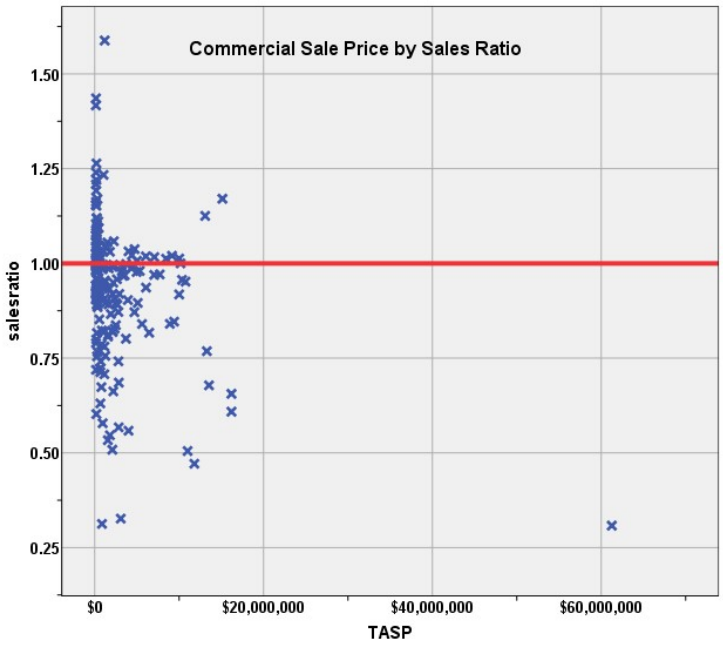
IV. COMMERCIAL/INDUSTRIAL SALE RESULTS

There were 201 qualified commercial and industrial sales for the 24-month sale period ending June 30, 2020. The sales ratio analysis results were as follows:

Median	**0.971**
Price Related Differential	**1.155**
Coefficient of Dispersion	**12.5**

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





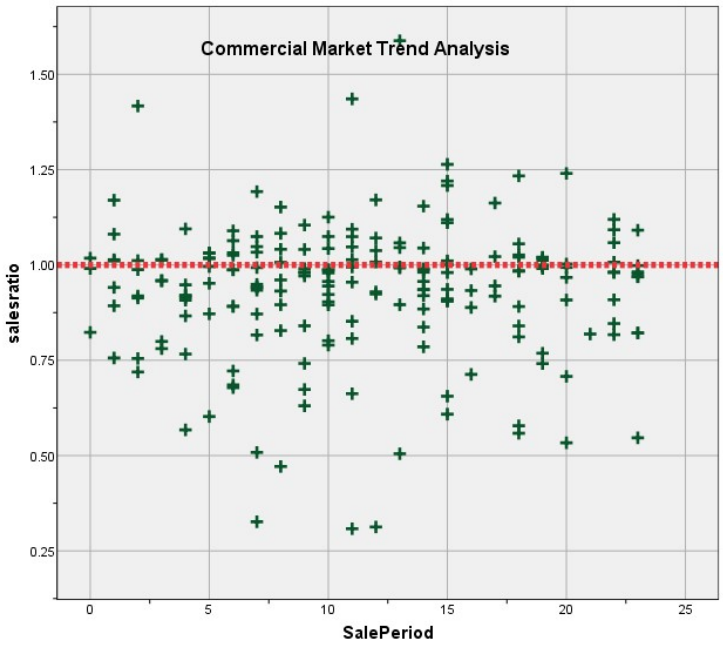
Commercial/Industrial Market Trend Analysis

The commercial/industrial sales were next analyzed, examining the sale ratios across the 24 month sale period with the following results:

Coefficients[a]

Model		Unstandardized Coefficients B	Unstandardized Coefficients Std. Error	Standardized Coefficients Beta	t	Sig.
1	(Constant)	.928	.026		35.741	.000
	SalePeriod	.001	.002	.025	.351	.726

a. Dependent Variable: salesratio



There was no residual market trending present in the commercial/industrial 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 valuation sold and unsold commercial properties using the median change in value method both overall and by subclass, as follows:

Report

DIFF

sold	N	Median	Mean
UNSOLD	2297	1.0625	1.1068
SOLD	192	1.1079	1.1842

Report
DIFF

ABSTRIMP	sold	N	Median	Mean
2212.00	UNSOLD	477	1.0645	1.1088
	SOLD	31	1.1600	1.2318
2215.00	UNSOLD	27	.9420	.9621
	SOLD	5	1.0000	.9768
2220.00	UNSOLD	204	1.0748	1.1424
	SOLD	16	1.2067	1.2708
2230.00	UNSOLD	443	1.0177	1.0409
	SOLD	21	1.0720	1.0636
2245.00	UNSOLD	192	1.0625	1.1279
	SOLD	15	1.1004	1.1742
3212.00	UNSOLD	168	1.1225	1.1340
	SOLD	11	1.2308	1.2927
3230.00	UNSOLD	324	1.0976	1.1651
	SOLD	78	1.0976	1.1675

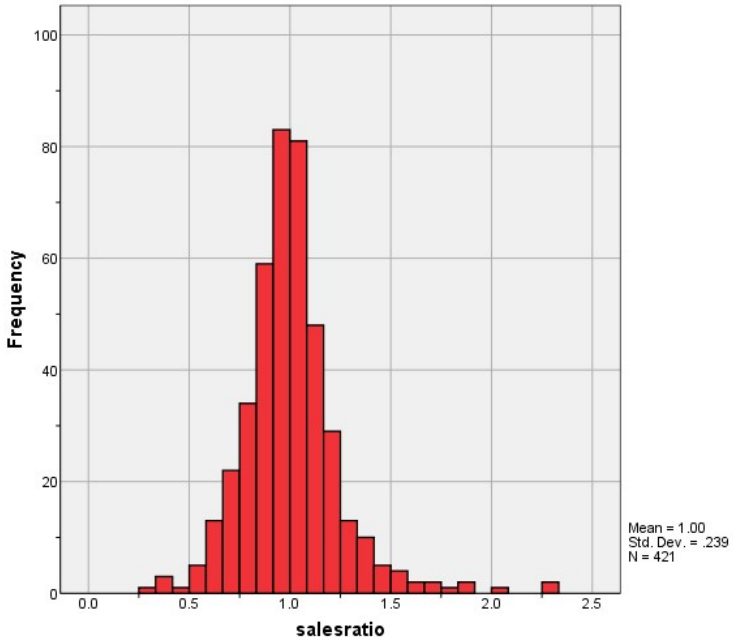
For the four commercial subclasses with a greater change in value for sold properties, they were newer, in superior condition and/or they were of superior quality overall. When these differences are considered, the above comparison analyses indicate that there is no consistent pattern of sold properties being valued more than unsold properties.

V. VACANT LAND SALE RESULTS

There were 421 qualified vacant land sales for the 24-month sale period ending June 30, 2020. The sales ratio analysis was analyzed as follows:

Median	**0.992**
Price Related Differential	**1.055**
Coefficient of Dispersion	**16.5**

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.

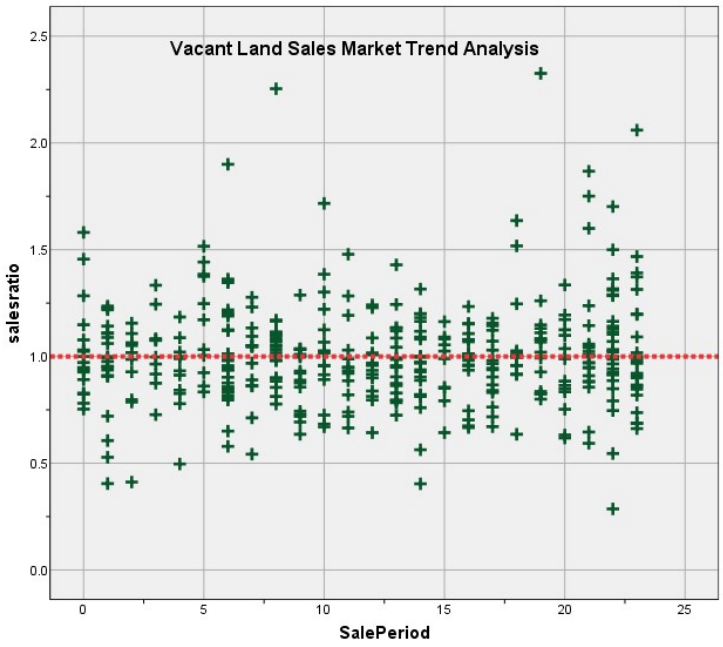
Vacant Land Market Trend Analysis

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

Coefficients[a]

Model		Unstandardized Coefficients B	Unstandardized Coefficients Std. Error	Standardized Coefficients Beta	t	Sig.
1	(Constant)	.984	.023		42.249	.000
	SalePeriod	.002	.002	.050	1.030	.304

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	10653	1.1250	1.1318
SOLD	409	1.1506	1.1669

Based on the above difference, we next compared sold and unsold vacant land properties stratified by subdivisions with at least 5 sales:

Report
DIFF

SUBDIVNO	sold	N	Median	Mean
0000051	UNSOLD	573	1.1466	1.1647
	SOLD	8	1.3378	1.2887
00026875	UNSOLD	11	1.1020	1.0985
	SOLD	6	1.0959	1.1039
00044700	UNSOLD	10	1.0378	1.0119
	SOLD	8	1.0429	1.0259
0123177	UNSOLD	32	1.3427	1.3217
	SOLD	5	1.3427	1.3900
0134957	UNSOLD	312	1.2371	1.2505
	SOLD	43	1.2371	1.2041
0136477	UNSOLD	72	1.2410	1.1909
	SOLD	19	1.2410	1.2148
0139865	UNSOLD	60	1.1636	1.1937
	SOLD	10	1.1636	1.1492
0139958	UNSOLD	10	1.5539	1.6029
	SOLD	5	1.5884	1.5173
0141307	UNSOLD	12	1.1425	1.0551
	SOLD	6	1.1527	1.2278
0144032	UNSOLD	22	1.5000	1.3678
	SOLD	5	1.1905	1.2160
0144862	UNSOLD	454	1.0000	1.0023
	SOLD	17	1.0000	1.0059
0146292	UNSOLD	14	1.0450	1.0529
	SOLD	6	1.0450	1.0817
0147369	UNSOLD	25	1.0313	1.0379
	SOLD	5	1.0450	1.1486
2002137766	UNSOLD	2	1.0000	1.0000
	SOLD	6	.9556	.9355
2005122094	UNSOLD	47	1.2318	1.2199
	SOLD	16	1.2627	1.2327
2006019898	UNSOLD	3	1.0000	1.0370
	SOLD	6	1.1153	1.2008
2006046645	UNSOLD	67	1.1453	1.1677
	SOLD	5	1.2076	1.1837
2006078510	UNSOLD	51	1.0927	1.0873
	SOLD	18	1.0627	1.0900
2018022022	UNSOLD	6	1.0117	1.0106
	SOLD	6	1.0108	1.0724

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

V. CONCLUSIONS

Based on this 2021 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
.	.977	.974	.981	.975	.973	.978	95.5%	.975	.972	.977	1.003	.039	6.8%
1.00	.981	.979	.982	.978	.977	.980	95.1%	.974	.967	.981	1.007	.043	5.9%
2.00	.981	.979	.983	.977	.975	.979	95.1%	.979	.972	.986	1.002	.046	6.1%
3.00	.979	.975	.983	.977	.972	.982	95.1%	.970	.964	.976	1.010	.051	7.0%
4.00	.978	.977	.980	.976	.975	.979	95.0%	.970	.966	.975	1.008	.044	6.0%
5.00	.994	.978	1.009	.995	.980	1.008	95.2%	.978	.960	.995	1.016	.077	11.9%
6.00	1.012	.994	1.030	1.002	.988	1.018	95.4%	.999	.986	1.013	1.013	.087	16.6%
7.00	1.010	.945	1.075	1.017	.903	1.090	97.6%	.998	.942	1.053	1.013	.126	16.8%

The confidenc e 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
.936	.911	.960	.971	.945	.987	95.2%	.810	.680	.939	1.155	.125	19.0%

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.

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
1.005	.982	1.027	.992	.970	1.000	95.9%	.952	.897	1.008	1.055	.165	23.8%

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.

Residential Median Ratio Stratification

Subclass

Case Processing Summary

		Count	Percent
ABSTRIMP	.00	2	0.0%
	600.00	1	0.0%
	1212.00	16120	86.4%
	1213.00	912	4.9%
	1213.50	1	0.0%
	1220.00	3	0.0%
	1225.00	7	0.0%
	1230.00	1285	6.9%
	1234.33	6	0.0%
	1240.00	1	0.0%
	1241.00	1	0.0%
	1245.50	219	1.2%
	1252.20	1	0.0%
	1256.67	71	0.4%
	1259.86	1	0.0%
	1262.25	17	0.1%
	1265.60	5	0.0%
	1267.83	1	0.0%
	1269.43	1	0.0%
	1272.30	1	0.0%
	1279.00	3	0.0%
	1570.33	1	0.0%
	1716.00	1	0.0%
	4277.00	1	0.0%
	4278.00	1	0.0%
	4278.33	2	0.0%
Overall		18665	100.0%
Excluded		0	
Total		18665	

Ratio Statistics for CURRTOT / TASP

Group	Median	Price Related Differential	Coefficient of Dispersion	Coefficient of Variation Median Centered
.00	.568	1.442	.715	101.1%
600.00	1.092	1.000	.000	.
1212.00	.978	1.005	.045	6.4%
1213.00	.974	1.003	.040	5.6%
1213.50	1.114	1.000	.000	.
1220.00	.858	1.005	.030	4.5%
1225.00	.919	1.039	.168	29.9%
1230.00	.975	1.003	.039	6.8%
1234.33	.903	1.014	.072	10.4%
1240.00	.552	1.000	.000	.
1241.00	.937	1.000	.000	.
1245.50	.989	1.018	.083	13.0%
1252.20	1.349	1.000	.000	.

1256.67	.994	1.021	.096	12.1%
1259.86	1.051	1.000	.000	.
1262.25	.951	1.033	.090	11.9%
1265.60	.978	1.057	.149	20.3%
1267.83	1.106	1.000	.000	.
1269.43	1.027	1.000	.000	.
1272.30	1.111	1.000	.000	.
1279.00	.756	.955	.094	15.6%
1570.33	.943	1.000	.000	.
1716.00	.880	1.000	.000	.
4277.00	.815	1.000	.000	.
4278.00	.363	1.000	.000	.
4278.33	.491	1.010	.045	6.3%
Overall	.978	1.006	.046	6.6%

Improvement Age

Case Processing Summary

		Count	Percent
AgeRec	.00	1	0.0%
	Over 100	14	0.1%
	75 to 100	7	0.0%
	50 to 75	59	0.3%
	25 to 50	3668	19.7%
	5 to 25	8685	46.5%
	5 or Newer	6231	33.4%
Overall		18665	100.0%
Excluded		0	
Total		18665	

Ratio Statistics for CURRTOT / TASP

Group	Median	Price Related Differential	Coefficient of Dispersion	Coefficient of Variation Median Centered
.00	.162	1.000	.000	.
Over 100	.921	.990	.086	12.2%
75 to 100	.943	1.006	.055	7.3%
50 to 75	.945	1.013	.086	15.1%
25 to 50	.979	1.005	.053	8.6%
5 to 25	.977	1.000	.045	6.4%
5 or Newer	.978	1.013	.042	5.4%
Overall	.978	1.006	.046	6.6%

Improved Area

Case Processing Summary

		Count	Percent
ImpSFRec	.00	1	0.0%
	LE 500 sf	11	0.1%
	500 to 1,000 sf	324	1.7%
	1,000 to 1,500 sf	2529	13.5%
	1,500 to 2,000 sf	4847	26.0%
	2,000 to 3,000 sf	7609	40.8%
	3,000 sf or Higher	3344	17.9%

Overall	18665	100.0%
Excluded	0	
Total	18665	

Ratio Statistics for CURRTOT / TASP

Group	Median	Price Related Differential	Coefficient of Dispersion	Coefficient of Variation Median Centered
.00	.162	1.000	.000	.
LE 500 sf	.919	1.090	.313	58.5%
500 to 1,000 sf	.973	1.002	.048	6.4%
1,000 to 1,500 sf	.970	1.002	.040	5.5%
1,500 to 2,000 sf	.978	1.002	.040	6.4%
2,000 to 3,000 sf	.981	1.005	.044	5.9%
3,000 sf or Higher	.976	1.010	.060	8.4%
Overall	.978	1.006	.046	6.6%

Improvement Quality

Case Processing Summary

		Count	Percent
QUALITY		1	0.0%
	Average	13548	72.6%
	Excellen	157	0.8%
	Fair	27	0.1%
	Good	3980	21.3%
	Low	7	0.0%
	Very Goo	945	5.1%
Overall		18665	100.0%
Excluded		0	
Total		18665	

Ratio Statistics for CURRTOT / TASP

Group	Median	Price Related Differential	Coefficient of Dispersion	Coefficient of Variation Median Centered
	.162	1.000	.000	.
Average	.977	1.004	.041	6.0%
Excellen	.996	1.016	.093	13.1%
Fair	.949	1.002	.070	9.0%
Good	.980	1.008	.054	7.1%
Low	1.030	1.048	.176	32.0%
Very Goo	.984	1.016	.072	9.5%
Overall	.978	1.006	.046	6.6%

Improvement Condition

Case Processing Summary

		Count	Percent
CONDITION		1	0.0%
	AA	1	0.0%
	Average	6719	36.0%
	Badly Worn	4	0.0%
	Excellent	1	0.0%
	Good	11933	63.9%
	Very Good	5	0.0%
	Worn Out	1	0.0%
Overall		18665	100.0%
Excluded		0	
Total		18665	

Ratio Statistics for CURRTOT / TASP

Group	Median	Price Related Differential	Coefficient of Dispersion	Coefficient of Variation Median Centered
	.162	1.000	.000	.
AA	1.017	1.000	.000	.
Average	.981	1.009	.046	6.5%
Badly Worn	1.212	.996	.147	19.7%
Excellent	.957	1.000	.000	.
Good	.976	1.004	.045	6.6%
Very Good	1.008	1.002	.019	2.6%
Worn Out	1.164	1.000	.000	.
Overall	.978	1.006	.046	6.6%

Commercial Median Ratio Stratification

Sale Price

Case Processing Summary

		Count	Percent
SPRec	$100K to $150K	16	8.0%
	$150K to $200K	24	11.9%
	$200K to $300K	38	18.9%
	$300K to $500K	16	8.0%
	$500K to $750K	8	4.0%
	$750K to $1,000K	10	5.0%
	Over $1,000K	89	44.3%
Overall		201	100.0%
Excluded		0	
Total		201	

Ratio Statistics for CURRTOT / TASP

Group	Median	Price Related Differential	Coefficient of Dispersion	Coefficient of Variation Median Centered
$100K to $150K	1.005	.999	.128	17.6%
$150K to $200K	1.029	1.005	.086	14.2%
$200K to $300K	.992	1.004	.071	9.9%
$300K to $500K	.984	.996	.085	10.6%
$500K to $750K	.797	1.004	.155	18.7%
$750K to $1,000K	.879	.993	.195	27.3%
Over $1,000K	.920	1.104	.146	21.2%
Overall	.971	1.155	.125	18.7%

Subclass

Case Processing Summary

		Count	Percent
ABSTRIMP	1712.00	1	0.5%
	1716.00	1	0.5%
	2088.86	1	0.5%
	2212.00	33	16.4%
	2215.00	5	2.5%
	2220.00	18	9.0%
	2221.00	2	1.0%
	2227.50	1	0.5%
	2230.00	21	10.4%
	2235.00	3	1.5%
	2245.00	15	7.5%
	2298.60	1	0.5%
	3212.00	12	6.0%
	3215.00	1	0.5%
	3230.00	82	40.8%
	9242.00	2	1.0%
	9251.00	1	0.5%
	9279.00	1	0.5%
Overall		201	100.0%
Excluded		0	
Total		201	

Ratio Statistics for CURRTOT / TASP

Group	Median	Price Related Differential	Coefficient of Dispersion	Coefficient of Variation Median Centered
1712.00	1.011	1.000	.000	.
1716.00	.840	1.000	.000	.
2088.86	.840	1.000	.000	.
2212.00	.949	1.073	.107	16.5%
2215.00	.678	1.042	.111	16.6%
2220.00	.983	1.370	.132	22.4%
2221.00	1.261	1.051	.260	36.7%
2227.50	.713	1.000	.000	.
2230.00	.811	1.043	.216	29.1%
2235.00	.955	1.078	.094	16.1%
2245.00	.924	1.006	.120	16.4%

2298.60	.807	1.000	.000	.
3212.00	1.004	.950	.076	14.5%
3215.00	.919	1.000	.000	.
3230.00	.993	1.021	.087	12.8%
9242.00	.937	1.000	.020	2.9%
9251.00	1.059	1.000	.000	.
9279.00	1.000	1.000	.000	.
Overall	.971	1.155	.125	18.7%

Improvement Age

Case Processing Summary

		Count	Percent
AgeRec	Over 100	1	0.5%
	75 to 100	8	4.0%
	50 to 75	3	1.5%
	25 to 50	20	10.0%
	5 to 25	100	49.8%
	5 or Newer	69	34.3%
Overall		201	100.0%
Excluded		0	
Total		201	

Ratio Statistics for CURRTOT / TASP

Group	Median	Price Related Differential	Coefficient of Dispersion	Coefficient of Variation Median Centered
Over 100	1.032	1.000	.000	.
75 to 100	1.015	1.056	.101	17.6%
50 to 75	.934	.948	.088	16.8%
25 to 50	.924	1.208	.151	23.4%
5 to 25	.933	1.150	.139	19.1%
5 or Newer	.991	1.136	.098	15.8%
Overall	.971	1.155	.125	18.7%

Improved Area

Case Processing Summary

		Count	Percent
ImpSFRec	LE 500 sf	3	1.5%
	500 to 1,000 sf	30	14.9%
	1,000 to 1,500 sf	54	26.9%
	1,500 to 2,000 sf	9	4.5%
	2,000 to 3,000 sf	9	4.5%
	3,000 sf or Higher	96	47.8%
Overall		201	100.0%
Excluded		0	
Total		201	

Ratio Statistics for CURRTOT / TASP

Group	Median	Price Related Differential	Coefficient of Dispersion	Coefficient of Variation Median Centered
LE 500 sf	.905	1.014	.082	14.8%
500 to 1,000 sf	1.005	1.011	.088	14.1%
1,000 to 1,500 sf	1.004	1.011	.089	12.1%
1,500 to 2,000 sf	.911	1.023	.135	17.5%
2,000 to 3,000 sf	.914	1.052	.190	27.7%
3,000 sf or Higher	.933	1.103	.142	20.9%
Overall	.971	1.155	.125	18.7%

Improvement Quality

Case Processing Summary

		Count	Percent
QUALITY	Average	114	56.7%
	Good	86	42.8%
	Very Goo	1	0.5%
Overall		201	100.0%
Excluded		0	
Total		201	

Ratio Statistics for CURRTOT / TASP

Group	Median	Price Related Differential	Coefficient of Dispersion	Coefficient of Variation Median Centered
Average	.980	1.020	.108	16.4%
Good	.969	1.292	.147	21.4%
Very Goo	.896	1.000	.000	.
Overall	.971	1.155	.125	18.7%

Improvement Condition

Case Processing Summary

		Count	Percent
CONDITION	Average	34	16.9%
	Good	167	83.1%
Overall		201	100.0%
Excluded		0	
Total		201	

Ratio Statistics for CURRTOT / TASP

Group	Median	Price Related Differential	Coefficient of Dispersion	Coefficient of Variation Median Centered
Average	.924	.998	.178	25.7%
Good	.981	1.202	.113	16.9%
Overall	.971	1.155	.125	18.7%

Vacant Land Median Ratio Stratification

Sale Price

Case Processing Summary

		Count	Percent
SPRec	LT $25K	43	10.2%
	$25K to $50K	46	10.9%
	$50K to $100K	36	8.6%
	$100K to $150K	49	11.6%
	$150K to $200K	32	7.6%
	$200K to $300K	66	15.7%
	$300K to $500K	91	21.6%
	$500K to $750K	34	8.1%
	$750K to $1,000K	11	2.6%
	Over $1,000K	13	3.1%
Overall		421	100.0%
Excluded		0	
Total		421	

Ratio Statistics for CURRLND / TASP

Group	Median	Price Related Differential	Coefficient of Dispersion	Coefficient of Variation Median Centered
LT $25K	1.021	.995	.218	31.1%
$25K to $50K	1.020	1.006	.122	18.6%
$50K to $100K	.963	.983	.294	44.6%
$100K to $150K	.989	1.012	.149	21.1%
$150K to $200K	.996	1.000	.110	14.0%
$200K to $300K	1.013	1.003	.170	22.1%
$300K to $500K	.958	1.001	.135	18.7%
$500K to $750K	.976	1.000	.126	18.1%
$750K to $1,000K	.884	1.004	.131	17.5%
Over $1,000K	.796	.944	.252	33.6%
Overall	.992	1.055	.165	24.1%

Subclass

Case Processing Summary

		Count	Percent
ABSTRLND	100.00	246	58.4%
	200.00	21	5.0%
	300.00	2	0.5%
	530.00	1	0.2%
	540.00	3	0.7%
	550.00	2	0.5%
	1112.00	125	29.7%
	1125.00	2	0.5%
	2112.00	4	1.0%
	2120.00	3	0.7%
	2130.00	8	1.9%
	2135.00	1	0.2%
	3112.00	2	0.5%

9159.00	1	0.2%
Overall	421	100.0%
Excluded	0	
Total	421	

Ratio Statistics for CURRLND / TASP

Group	Median	Price Related Differential	Coefficient of Dispersion	Coefficient of Variation Median Centered
100.00	1.000	1.034	.160	23.5%
200.00	.995	1.061	.193	29.0%
300.00	.616	.962	.345	48.8%
530.00	.911	1.000	.000	.
540.00	.924	1.004	.045	8.0%
550.00	1.084	1.000	.047	6.6%
1112.00	.972	1.024	.163	24.1%
1125.00	1.011	.870	.357	50.5%
2112.00	.848	1.338	.282	41.3%
2120.00	.968	1.044	.089	16.4%
2130.00	.906	1.032	.164	26.0%
2135.00	.753	1.000	.000	.
3112.00	.779	.960	.134	19.0%
9159.00	1.110	1.000	.000	.
Overall	.992	1.055	.165	24.1%